



RELATIONSHIP BETWEEN ACADEMIC PROCRASTINATION, COPING AND SENSE OF  
COHERENCE AMONG UNDERGRADUATES IN MALAYSIA

LEELA A/P MURUGAN

LOO LING QIAN

TAN MAN TING

BACHELOR OF SOCIAL SCIENCE (HONS) PSYCHOLOGY

FACULTY OF ARTS AND SOCIAL SCIENCE

UNIVERSITI TUNKU ABDUL RAHMAN

MAY 2021

### ACKNOWLEDGEMENTS

The completion of the Final Year Project report would not have been possible without the support, assistance, and guidance of many people along the way. We did like to express our appreciation to the few people who have helped us in this project.

First and foremost, we would like to express our heartfelt gratitude to our supervisor, Dr Siah Poh Chua. He had offered professional advice, kindness, support, and patience throughout the project's completion process. All of his feedback and suggestions were extremely valuable to us, which played a significant role in improving our work quality.

We are deeply grateful to our parents and family members for their kind support in term of psychological for us while we completing this research. Furthermore, we valued the opportunity provided by the university to learn and experience the process of conducting research during our final year of our Bachelor of Social Science (HONS) in Psychology.

We would also like to thank all of the respondents for taking their precious time to complete our survey. We would not be able to complete this research without all of the assistance and support we have received. Thank you very much to everyone who was involved.

LEELA A/P MURUGAN

LOO LING QIAN

TAN MAN TING

**APPROVAL FORM**

This research paper attached here, entitled “Relationship between Academic Procrastination, Coping and Sense of Coherence among Undergraduates in Malaysia” prepared and submitted by Leela A/P Murugan, Loo Ling Qian and Tan Man Ting in partial fulfillment of the requirements for the Bachelor of Social Science (Hons) Psychology is hereby accepted.

Signature:  \_\_\_\_\_

Date: 16 Aug 2021

Supervisor

Dr. Siah Poh Chua

### Abstract

Academic procrastination is a serious issue among Malaysian undergraduates. The present study aimed to examine the relationship between academic procrastination, coping and sense of coherence among Malaysian undergraduates as well as to determine the significant predictor of academic procrastination. Using a quantitative, descriptive and cross-sectional research design with purposive sampling method, 99 respondents ( $n=99$ ), aged 19 to 24 ( $M = 22.36$ ;  $SD = 1.28$ ) were recruited for the actual study despite from 30 respondents for the pilot study with the same data collection procedure, sending Qualtrics online survey throughout social networking sites within Malaysian context. The study's inclusive criterion was Malaysian undergraduates aged 18 to 24 while the exclusive criterion was international students. Measurements included self-reported Orientation to Life Questionnaire (SOC-13), Brief-COPE and Aitken Procrastination Inventory. Pearson correlation showed academic procrastination was negatively associated with emotion-focused and problem-focused coping, but positively associated with avoidant coping. Academic procrastination was negatively correlated with sense of coherence. Sense of coherence was positively associated with emotion-focused and problem-focused coping, but negatively correlated with avoidant coping. Multiple Linear Regression indicated avoidant coping (consistent to previous studies which stated students who applied avoidant coping tended to procrastinate) and sense of coherence with item-10 deleted (new findings in the present study) significantly predicted academic procrastination. Limited study in Malaysia context motivated further research within this topic and to adopt suitable measure to deal with academic procrastination.

*Keywords:* Academic procrastination, coping, sense of coherence, Malaysian undergraduates

**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 praised, electronic or personal.

Name : LEELA A/P MURUGAN


Student ID : 18AAB06408

Signed :           *Leela Murugan*          

Date : 16<sup>th</sup> AUGUST 2021

Name : Loo Ling Qian


Student ID : 16AAB07332

Signed :                     

Date : 16<sup>th</sup> AUGUST 2021

Name : TAN MAN TING

Student ID : 18AAB06850

Signed :                     

Date : 16<sup>th</sup> AUGUST 2021

**Table of Contents**

	Page
Abstracts	III
Declaration	V
List of Tables	XI
List of Figures	XII
Chapters	
I. Introduction	1
Background	1
Problem Statement	4
Research Objectives	6
Research Questions	6
Hypothesis	7
Significance of the Study	8
Conceptual Definition	9
Operational Definition	10
II. Literature Review	11
Academic Procrastination	11
Coping	12

Sense of Coherence	13
Academic Procrastination and Coping Among	
Undergraduate Students	14
Academic Procrastination and Sense of	
Coherence among Undergraduate Students	16
Coping and Sense of Coherence Among	
Undergraduate Students	19
Academic Procrastination, Coping and	
Sense of Coherence among Undergraduates	22
Transactional Theory of Stress and Coping (TTSC)	25
Personality-Coping-Outcome Theory	27
Conceptual Framework	29
III Methodology	31
Research Design	31
Sampling Procedures	31
Sampling Methods	31
Research Location	32
Ethical Clearance Approval	32
Sample Size	33
Research Sample	33

Data Collection and Test Administration Procedure	34
Instruments	35
Demographic Information	35
Orientation to Life Questionnaire (SOC-13)	36
Brief-COPE	36
Aitken Procrastination Inventory (API)	37
Pilot Test	37
V. Results	38
Descriptive Statistics	38
Data Cleaning	39
Assumption of Normality	39
Missing Data	40
Reliability	40
Inferential Statistics	41
Academic Procrastination and Coping	41
Academic Procrastination and Sense of Coherence	42
Coping and Sense of Coherence	43
Assumption of Multiple Linear Regression	43
Independence of Errors	43
Normality of Residuals, Linearity of Residuals and	
Homoscedasticity	44
Test of Multivariate Outlier and Influential Cases	44



Multiple Linear Regression (MLR) Analysis	44
Multiple Linear Regression Analysis for the Regression Model	44
Assumption of Multicollinearity	45
Multiple Linear Regression Analysis of the Variables Predicting Academic Procrastination	45
VI. Discussion and Conclusion	47
Discussion	47
Academic Procrastination and Coping among Undergraduates in Malaysia	47
Academic Procrastination and Sense of Coherence among Undergraduates in Malaysia	49
Coping and Sense of Coherence among undergraduates in Malaysia	50
Significant Predictors of Academic Procrastination Among Undergraduates In Malaysia	51
Implications	53
Limitations	54
Recommendation	55
Conclusion	56
References	58

Appendix A	G Power Sample Size Calculation	74
Appendix B	Instruments	75
Appendix C	Sample of Online questionnaire	80
Appendix D	Originality Report FYP 1	90
Appendix E	Originality Report FYP 2	96
Appendix F	SPSS Output: Frequency Table for Demographic Information	104
Appendix G	SPSS Output: Cronbach's Alpha of Brief-COPE (Emotion-Focused Coping)	106
Appendix H	SPSS Output: Cronbach's Alpha of Brief-Cope (Problem-Focused Coping)	107
Appendix I	SPSS Output: Cronbach's Alpha of Brief-Cope (Avoidant Coping)	108
Appendix J	SPSS Output: Cronbach's Alpha of Orientation to Life Questionnaire (SOC-13)	109
Appendix K	SPSS Output: Cronbach's Alpha of Aitken Procrastination Scale (API)	110
Appendix L	SPSS Output: Skewness and Kurtosis Value	111
Appendix M	SPSS Output: Correlations among Variables	112

PROCRASTINATION, COPING AND SENSE OF COHERENCE	x
Appendix N SPSS Output: Scatterplot	113
Appendix O SPSS Output: Casewise Diagnostics and Summaries	114
Appendix P SPSS Output: Regression	119

**List of Tables**

Table		Page
1	Descriptive Statistics for Participants 'Age, Gender, Ethnicity, Nationality and State	39
2	Skewness and Kurtosis Values	40
3	Reliability of Academic Procrastination, Coping and Sense of Coherence	41
4	Pearson Correlation between Academic Procrastination and Coping	42
5	Pearson Correlation between Academic Procrastination and Sense of Coherence	42
6	Pearson Correlation between Coping and Sense of Coherence	43
7	Model Summary of Predictors	44
8	ANOVA Table for the Regression Model	45
9	Hierarchical Multiple Linear Regression Analysis for Variables Predicting Academic Procrastination	46

**List of Figure**

Figure		Page
1	Relationship between Academic Procrastination, Coping and Sense of Coherence among Undergraduates in Malaysia	29
2	Prediction on Significant Predictor of Academic Procrastination	29

# PROCRASTINATION, COPING AND SENSE OF COHERENCE

## Chapter 1

### Introduction

#### Background

Procrastination impacts millions of human-being and it is an adverse issue that regularly brings many negative effects to an individual's productivity, performance and also well-being (Esmaeili & Monadi, 2016). According to Yilmaz (2017), general procrastination refers to an individual intentionally and habitually postpones performing tasks due to insufficient motivation or readiness to begin the tasks. Procrastination also presents in numerous circumstances which include academic, decisional, neurotic or compulsive procrastination and it depends on an individual's cognitive, emotive or behavioural elemental basic (Badri Gargari et al., 2011).

When it comes to study life, the most generally known type of procrastination among the student population is academic procrastination. Academic procrastination was defined as postponing or delaying academic responsibilities and tasks such as exam preparation, homework completion, and administrative affairs regarding school and duty attendance due to some reasons (Sirin, 2011). Academic procrastination among undergraduates is considered as a chronic issue and they usually like to delay their academic tasks until the last moment, thus they are not able to complete academic tasks within a specific desired time frame (Barnová & Krásna, 2019).

Therefore, academic procrastination views as a serious problem among undergraduates that has attracted a large number of researchers to investigate in this field in recent years. Also, academic procrastination is perceived as a bad habit and it is interpreted as a behavioural problem that may bring a lot of negative consequences for students such as

poor academic performance, dependence and inactive participation in class activities (Esmaeili & Monadi, 2016).

A past research study reported that over 80% of undergraduates engaged in academic procrastination, among which 50% of them were heavy procrastinators (Yilmaz, 2017). Furthermore, according to Ajayi (2020), past research revealed that about 40% to 60% of college students frequently engaged in procrastination in completing academic tasks. Also, past research studies indicated that American college students were reported to have approximately 95% of academic procrastination rates, among them at least 46% of the students informing that they procrastinated on academic tasks at least half of the time. It was estimated that 50% to 80% of students studying in college have moderate or severe levels of academic procrastination. Besides, almost all procrastinators reported that they yearn to lessen their procrastination behaviour. As a result, since academic procrastination became a prevalent phenomenon among the students' population, thus it is necessary to conduct a systematic research that examines to what extent procrastination impact on students' academic achievement negatively and the most important is to explore possible methods and solutions in order to minimize academic procrastination (Gustavson & Miyake, 2017).

In this day and age, according to Irfan et al. (2015) a considerable number of students falling through their academic performance in school due to the improper attitude of giving up easily, as a result, cause them to feel frustrated. Therefore, many researchers are interested in examining factors that cause some of the students to stop putting effort once they encounter educational obstacles. On the other hand, researchers also wonder whether some of the students possess some utilization ways or characteristics, therefore behave well in academic performance. Personality traits exerted an effect on students' coping ability in order to cope with all stressful situations in university life.

Sense of coherence (SoC) is the confidence of an individual to manage issues that are happening in any situation (Williams & Katirai, 2018). Sense of coherence associated with personality traits consists of three elements which are comprehensibility, manageability and meaningfulness that play an important role to buffer stress and it is linked to some adaptive coping and eventually produce positive outcomes (Mowlaie et al., 2016). Moreover, an individual with a sense of coherence is able to manage stress and make good use of their own resources then apply them to cope with stressful situations, thus it allows an individual to develop effective coping and problem-solving skills (Williams & Katirai, 2018). According to Jakovljevic (2018), people with higher level of comprehensibility are linked to higher level of well-being and life satisfaction. The same goes for people with high level of manageability and also meaningfulness. In addition, people with a strong sense of coherence can recognize the uniqueness of each situation that he or she encounters and utilize a flexible style of coping to deal with stressors (Luibl et al., 2020).

Coping refers to the cognitive and behavioural effort that an individual exerts in order to cope with stressful circumstances (Lin & Yusoff, 2013). Three types of coping style been studied the most which are problem-focused coping, emotion-focused coping and avoidance coping and research reveals that part of the coping strategies are not only aid in reducing an individual's stress, but also cultivate positive outcomes for an individual, whereas some of the coping strategies worsen an individual to become more stressful and exert negative outcomes to an individual (Smith et al., 2015).

In conclusion, there are some different factors that contribute to academic procrastination among undergraduates but in this present study aims to determine the relationship between academic procrastination, coping and sense of coherence among undergraduates in Malaysia. Past research stated that people with a high sense of coherence will exert better coping skills and result in satisfactory outcomes. Also, research reveals that



people adopting a particular kind of coping style will produce different immediate outcomes. All of these factors play an important role in contributing to the academic procrastination issue as an immediate outcome to the present study. As a result, it is a need to examine whether coping or a sense of coherence contributes to academic procrastination significantly among undergraduates in Malaysia.

### **Problem Statement**

According to Kandemir (2014), past research study shows that out of 291 students in a study group, 46% of them engage in procrastination in completing their research paper, 28% for exam preparation, 30% of students procrastinate in weekly reading homework, 23% in attendance, 11% in carrying out administrative duty and 10% of them procrastinate in general school activities. Moreover, according to Mahasneh et al. (2016), past research indicated that an equal number of 95% of American college students intentionally postpone either to begin or to complete their assigned academic tasks and responsibilities. In addition, among them up to 70% of students often engage in academic procrastination. As a result, academic procrastination among undergraduates had led to some damaging outcomes on academic performance and also influenced an individual's psychological states (He, 2017). Students may turn into a depressed state with low mood and confront with low self-confidence that leads to a poor learning outcome and also unsatisfactory academic achievement (Hussain & Sultan, 2010).

Sense of coherence is said to be a predictor to predict academic procrastination among undergraduates in Malaysia in the present study. By referring to Chu et al. (2016), during the childhood and also early adulthood period, a sense of coherence was reinforced the most. Therefore, it is noticeable that undergraduates are under the categories of early adulthood where a sense of coherence is able to develop comprehensively.

As undergraduates just begin with their new journey of university life, they step out from their own comfort zone where they are familiar with, then enrolled into an environment that is occupied with various demands, therefore undergraduates would have a high tendency to encounter countless barriers and also some developmental issues. In particular, academic difficulties and challenges are the main source of stress that provokes an undergraduate's sense of coherence.

Boness (2011) emphasized that there is a relationship between sense of coherence and student's well-being. In addition, it was said that individuals with a high level of sense of coherence possess high confidence and can react to various challenging situations more flexibly, therefore manage to enhance coping strategies indirectly and the quality of life of the students (Mayer & Boness, 2011). On the other hand, there is only a small amount of studies that have been conducted with this targeted topic (sense of coherence) and it is seldom promoted in education settings (Lindström & Eriksson, 2011). As a result, to be linked with the present study, a sense of coherence can be used to predict academic procrastination as an immediate outcome of the study.

It was found that coping are related to academic procrastination among undergraduates. Every single individual can adopt a variety of coping strategies or coping styles in order to cope with their negative emotional state and life issues (Kasi et al., 2012). Therefore, the effectiveness of the use of coping on an individual can be different and it might be influenced by other factors such as sense of control on the stressor, insufficient coping resources, and the nature of outcomes (Smith et al., 2015). In other words, different coping styles resulted in different outcomes.

According to what has been discussed up to this point, academic procrastination has brought numerous negative repercussions that can disrupt a student's academic everyday

life. This circumstance heightened the importance of doing research among undergraduates. However, the majority of research undertaken to expose the phenomenon of undergraduates' academic procrastination were not conducted in Malaysia. The majority of the literature came from foreign countries such as Iran, Turkey, and the United States. There was indeed a scarcity of research on academic procrastination among undergraduates within Malaysia context. As a result, the present study aims to investigate the relationship between academic procrastination, coping and sense of coherence among Malaysian undergraduates. In addition, the impacts of coping and sense of coherence on academic procrastination will be investigated as an undergraduate's sense of coherence to be said can exert an influential effects on academic procrastination as well as undergraduates' coping strategies or coping style used.

### **Research Objectives**

RO1: To determine the relationship between academic procrastination and coping among undergraduates in Malaysia.

RO2: To examine the relationship between academic procrastination and sense of coherence among undergraduates in Malaysia.

RO3: To find out the relationship between coping and sense of coherence among undergraduates in Malaysia.

RO4: To determine whether avoidant coping is the significant predictor of academic procrastination among undergraduates in Malaysia.

### **Research Questions**

RQ1: What is the relationship between academic procrastination and coping among undergraduates in Malaysia?

RQ2: What is the relationship between academic procrastination and sense of coherence among undergraduates in Malaysia?

RQ3: What is the relationship between coping and sense of coherence among undergraduates in Malaysia?

RQ4: Is avoidant coping the significant predictor of academic procrastination among undergraduates in Malaysia?

### **Hypothesis**

H1a: Academic procrastination is negatively correlated with problem-focused coping among undergraduates in Malaysia

H1b: Academic procrastination is positively correlated with emotion-focused coping among undergraduates in Malaysia

H1c: Academic procrastination is positively correlated with avoidant coping among undergraduates in Malaysia

H2: Academic procrastination is negatively associated with sense of coherence among undergraduates in Malaysia

H3a: Problem-focused coping is positively correlated with sense of coherence among undergraduates in Malaysia

H3b: Emotion-focused coping is negatively correlated with sense of coherence among undergraduates in Malaysia

H3c: Avoidant coping is negatively correlated with sense of coherence among undergraduates in Malaysia

H4: Avoidant coping is a significant predictor of academic procrastination among undergraduates in Malaysia

### **Significance of the Study**

This study aims to find out how coping, sense of coherence and academic procrastination are associated among undergraduates in Malaysia. To deal with educational responsibilities and behavior, it is essential to find out the relevant aspects that impact students to carry out certain negative academic behavior such as procrastination. Addressing limited research on this area in the Malaysian context, this study aims to increase understanding on how coping styles and sense of coherence influence academic procrastination which could result in increased academic stress and reduced life satisfaction with a representative sample of Malaysian undergraduate students. Hence, this study provides an insight into the Malaysian undergraduate population about the importance of their coping strategies in shaping righteous academic behavior from dysfunctional behavior.

Lazarus and Folkman 's Transactional Theory of Stress and Coping (1987) did not include personality into their model, however, it is important to include personality as a variable in this model as personality reflects human's unique way of cognitive, affective and behavioral processes. Big Five Personality traits were mostly applied in previous researches in terms of personality. Limited research has presented a gap for the present study because there was limited study addressing how the sense of coherence could make a difference in academic procrastination. Nonetheless, sense of coherence is applied to this study because individuals' perception of stress-coping capacity can predict academic behavior such as procrastination, hence it could be one of the strengths of the current study.

Considering the high level of academic procrastination would have societal consequences such as academic stress and even more severe than that, it is essential to

understand the causes of academic procrastination to acknowledge the risk populations. Hence, it helps an individual to become alert and explore to regulate himself or herself to tackle the situation. Therefore, this study provides in-depth knowledge to carry out further study or to explore solutions in order to solve the problems.

Besides, this study may be helpful for educational professionals to explore the phenomenon of academic procrastination among Malaysian university students and work upon this area to find out more related causes that influence academic procrastination. With the relevant findings, the professionals can come out with an appropriate plan to assist students to deal with their academic delaying behavior which could further enhance their educational performance and well-being.

### **Conceptual Definition**

***Academic Procrastination***- unavoidable and perpetual desire for a student to delay academic-related exercises. It is postponed of academic work that must be finished or the inability to finish an assigned academic assignment within the expected time (Bojuwoye, 2019).

***Coping Style***- psychological and physical efforts utilized because of outside or inner demands that the individual considered to be a danger to their welfare. (Freire et al., 2020)

***Sense of Coherence***- one's capacity to adapt to stressful circumstances with resilience, assuming life as something significant and manageable (Xerfan, 2018)

***Undergraduate Students***- the person who pursuing their first degree either in college or university (Cambridge dictionary, n.d.).

**Operational Definition**

***Academic Procrastination-*** Academic procrastination referred to respondents score on Atiken's Academic Procrastination Inventory. A higher score corresponded to a high level of procrastination

***Coping Style-*** Coping style referred to respondents' score on the Brief Cope Inventory. Brief Cope Inventory measured three components of coping which are problem-focused coping, emotion-focused coping and avoidant coping.

***Sense of Coherence-*** Sense of Coherence of respondents will be measured by using the shorter version of the Sense of Coherence scale which is known as SOC-13 scale. It is measured by three important aspects which are comprehensibility, manageability, and meaningfulness and participants are often categorized into groups with low, moderate and high sense of coherence.

***Undergraduate students-*** Undergraduate students were the target population of this study. Undergraduates who aged 18-24 were recruited for this study. Moreover, the undergraduate students from various higher institutions of Peninsular Malaysia were enlisted to respond to the questionnaires.

## Chapter 2

### Literature Review

#### Academic Procrastination

Procrastination was defined as the willingness of an individual to postpone certain intended tasks without anticipating the negative outcomes of the delay (Klingsieck, 2013). Similarly, Zakeri et al. (2013) defined procrastination as behaviour that hinders someone from conducting daily function by delaying, extending or prolonging the engagement with the task. Zakeri et al. (2013) further defined academic procrastination as an unwise behaviour involving the postponement of academic assignments or functions throughout the process until the last minute or even worse until missing the deadline.

Compared to the past, procrastination phenomenon has become more prevalent among undergraduates nowadays. University students are often involved in procrastination when they are dealing with assignments, revisions and examinations (Sirin, 2011). Ozer et al.'s work (as cited in Jiao et al., 2011) emphasized that 52% of their respondents were analyzed as active individuals in delaying academic tasks. A syndrome called Student Syndrome is introduced and related to academic procrastination when a student plans to or will only take the initiative to involve himself or herself in a certain academic task just in time before it is due which could result in stress and anxiety (Hooda & Saini, 2016).

Procrastination has attracted more researchers' interests as it turns out to be a universal phenomenon and comes out with negative outcomes among students such as poor academic performance and low level of well-being (Balkis & Duru, 2017). Rozental and Carlbring (2014) stated academic delaying behaviour could be linked to subjective discomfort in terms of social issues, mental health problems and financial constraints.



Contrastly, Steel's work as cited in Rice et al. (2012) stated that procrastination may adversely affect task performance, however, it would result in temporary stress reduction beyond the present. Rice et al. (2012) further explained, even though there could be underlying optimistic aspects, educational delaying behaviour tend to make trouble especially when the students are occupied with different assignments and due dates, hence the emotional relief is no longer there. Balkis and Duru (2017) conducted a quantitative study among 441 Turkish university students and results indicated a negative correlation between academic procrastination and academic life satisfaction, thus the researchers suggested to deal and cope with procrastination to improve students' well-being. Although literature relating to the negative outcomes of procrastination is discussed, there is still an arise in procrastination behaviour across multiple contexts. Thus, it is essential to recognize and point out various factors that contribute to procrastination behaviour.

### **Coping**

Coping refers to the cognitive and behavioural effort that an individual made to dispose of stress (Lin & Yusoff, 2013). According to Kenneth Matheny and his team, coping is defined as any effort that is either healthy or unhealthy and conscious or unconscious to weaken or get rid of stressors. Moreover, human-being also attempt to manage the stressors to become less hurtful (Baqutayan, 2015).

In our daily life, almost every single person encounters stress from time to time in terms of challenges to achieve goals, exam preparation, racing against time, or having a strong desire to be successful in life could be the stressors for modern human-beings (Onen & Ulusoy, 2015). Therefore, people tend to employ a range of coping strategies to cope with a variety of stressful situations as well as what Lazarus and Folkman (1984) have investigated and introduced that there are two main components of coping which humans commonly

adopting. Lazarus and team categorized it under two coping styles which are (1) problem-focused coping and (2) emotion-focused coping (Roncaglia, 2014).

Problem-focused coping also known as task-oriented coping which are efforts made aiming to alter or eliminate the stressful situation by adopting problem-solving skills, decision-making skills or directly approaching the source of stress while emotion-focused coping also known as emotion-oriented coping are attempts made to reduce or regulate psychological anxieties, sometimes it just by altering the meaning of stressful event cognitively, in fact, it does not make the situation better (Baqtayan, 2015).

On the other hand, there is another type of coping style named avoidant coping. Avoidant coping is a form of defensive regulation in which individuals tend to neglect, distort or even escape from the stressful demand. Instead, approach coping is a cognitive, emotional and behavioural alternation to the stressful situation which can be achieved through active coping, reception and cognitive reinterpretation (Pour et al., 2016).

### **Sense of Coherence**

According to Super et al. (2015), Sense of Coherence (SoC) is a center build of the salutogenic model that focuses around the sources of well-being and health as opposed to illness while as indicated by Mayer and Oosthuizen (2020) where they studied to explore perspectives of leaders on sense of coherence, compassionate love and coping by using qualitative research and used sampling methods such as purposeful sampling and snowball sampling that consisted of 22 individuals (9 females and 13 males) and used the questionnaires included questions referring to sense of coherence, coping, leadership and compassionate love, and their studied concluded that well-being and health are created through sense of coherence.

In addition, sense of coherence is a worldwide life direction that underpins people in comprehensibility, manageability and meaningfulness which prompting consistent congruence and congruity inside a person. Comprehensibility alludes to one's comprehension of the world based on the capacity to handle common and uncommon stimuli as ordered, organized and consistent. On the other hand, manageability, refer to how one adapts to difficulties and whether one accepts that difficulties can be overcome and solved by using resources while meaningfulness identifies with how an individual is motivated through the building of meaning throughout everyday life and the degree to which life makes sense (Mayer & Oosthuizen, 2020).

Chu et al. (2016), stated that a high sense of coherence shields individuals from stress by the manner in which they see life functions as challenges but not warning (sense of meaningfulness), happening for a reason that can be explained (sense of comprehensibility) and that, regardless of whether not under their very own control, they can be a guide of by some other resources available to them as opposed to feeling overpowered and powerless (sense of manageability). According to Mayer & Boness, 2012, the more articulated a person's sense of coherence, the healthier an individual is. According to Mowlaie et al. (2016), sense of coherence acts as a buffering factor for pressure and dysfunctional behavior.

### **Academic Procrastination and Coping among Undergraduate Students**

There is a study between coping style and academic procrastination which is related to the topic of “Effects of coping styles and gender on academic procrastination among university students”. In the research study, a total number of 310 participants from the University of Mashhad, Iran was recruited through multi-stage cluster sampling that included 153 female students and 157 male students. Among them, 149 students are from the course of humanities and 151 students from the course of engineering. Lay’s Academic Procrastination

Inventory was used to measure academic procrastination and Parker & Endler's Coping Inventory for Stressful Situation (CISS) was used to measure coping styles among university students via self-reported paper and pencil survey. In turn, in order to measure the coping styles of the students, they were being categorized into three categories which are task-oriented coping, emotion-oriented coping and avoidance-oriented coping based on the grades scored. The findings of the study show that out of 310 university students, students who applied emotion-oriented coping methods were linked to a large amount of average academic procrastination (103 students) while the least were students who utilized task-oriented coping methods (148 students). University students who utilized avoidance-oriented coping method consist of 59 students (Sepehrian & Lotf, 2011). Research also examines the meaningfulness of procrastination amount based on the three coping styles which are task-oriented coping, emotion-oriented coping and avoidance-oriented coping. The finding shows that there is a meaningful difference between academic procrastination and task-oriented coping, while difference between academic procrastination and emotion-oriented coping also avoidance-oriented coping (Sepehrian & Lotf, 2011).

Next, according to the past research, researchers working on analyze the predictive power level of academic self-efficacy, self-esteem and coping with stress on academic procrastination among university students. A relational screening model was used in the research study. A total number of 374 students which consist of 99 male and 265 female from the Education Faculty of Kirikkale University in Turkey was recruited via the sampling method. Used measurements included Aitken Academic Procrastination Scale developed by Aitken (1982) and Coping with Stress Scale developed by Ozbay (1993). The finding shows that active planning coping with stress skills explained academic procrastination negatively and significantly while bio-chemical avoidance strategies explained academic procrastination positively and significantly (Kandemir et al., 2014). The study indicated that students who

utilized avoidance coping skills engage more in academic procrastination and students who utilized planning skills engage less in academic procrastination.

There is also a research study conducted at the same location at Kirikkale University, Turkey. This study aimed to examine to what extent of coping with stress, internet addiction and academic motivation contribute to academic procrastination among university students. A relational survey model was used in the study. A total number of 407 university students from the Faculty of Education and Faculty of Sciences and Letters at Kirikkale University which recruited 85 males and 322 females. Aitken Academic Procrastination Scale developed by Aitken (1982) and Coping with Stress Scale developed by Ozbay (1993) was used in the study to gather data. In this research study, dimensions of emotional-operational and also bio-chemical avoidance were found to be linked with academic procrastination. Therefore, the result shows that emotional-operational and bio-chemical avoidance skills predict academic procrastination positively and in a meaningful way (Kandemir, 2014).

From the literature review, different researchers utilized different data collection tools to measure coping and also academic procrastination among university students. Also, some researchers categorize coping into the three (3) coping styles and some of the researchers remain it as coping strategies by not grouping it into a coping style. Nevertheless, some similarities found in the literature review are university students who adopted task-oriented coping are less likely to engage in academic procrastination. Conversely, university students who are more likely to engage in academic procrastination are usually adopted with avoidance coping or emotion-oriented coping in life in order to cope with stressful situations.

### **Academic Procrastination and Sense of Coherence among Undergraduate Students**

Academic procrastination has become a familiar phenomenon in the university student population. Literature reviewed that personality traits were significantly correlated

with academic procrastination (Capan, 2010; Kagan et al., 2010; Karatas, 2015). Five factor version of personality traits were commonly adopted in former studies concerned with academic procrastination. Karatas (2015) studied the relationship between types of personality, educational procrastination and performance among a random sample of 475 Turkish university students from Yildiz Technical University. The undergraduate sample of 161 females and 314 males answered the survey with a 40-item, 7-point Likert scaling Personality Test Based on Adjectives (PTBA) and modified-cum-translated version of 14-item, 5-point Likert scale from original Academic Procrastination Scale (APS). Results showed that educational procrastination was negatively and significantly associated with conscientiousness, extraversion, neuroticism and agreeableness.

Similarly, a research found a remarkable inverse relationship between extroversion, responsibility and personal attribute with academic procrastination. It was carried out to determine the connection between types of personality, perfectionism, an obsessive-compulsive attribute with educational delaying behaviour among 265 undergraduate students in Turkey using the modified Turkish version of Aitken Academic Procrastination Scale, Multidimensional Perfectionism Scale, Padua Inventory and Five Factor Model Personality Scale. The researchers further explained that five factor personality traits are essential elements to determine educational procrastination (Kagan et al., 2010).

Contrastly, the results from the above studies were not consistent with a research conducted by Abdul Kader and Saad (2015) among 120 Egyptian male university students from Zagazig Faculty of Education which implemented a convenience sampling method with a 40-item, 7-point-Likert Personality Test Based on Adjective Scale and 25-item, 5-point-Likert Academic Procrastination Scale. The researchers analyzed that the correlation between five factor personality traits (Open to Experience, Conscientiousness, Extraversion, Agreeableness, Neuroticism) and academic procrastination was not significant (Abdul Kader

& Saad, 2015). In addition, Lai et al. (2015) conducted a survey study to explore the relationship between personality traits and educational procrastination among a convenience sample of 148 Malaysian university students including 52 males and 96 females. The self-reported survey with 100-item, 5-point-Likert Leonard Personality Inventory and 20-item, 5-point-Likert General Procrastination Scale were implemented. Results indicated that overall personality traits including Openness, Analytical, Decisiveness, Neutral and Relational traits were not significantly correlated with educational procrastination and the correlation between them was very low.

Doing article search across Google Scholar search engine with the keywords “Academic Procrastination and Sense of Coherence among University Students”, it showed about 12000 results but the sense of coherence has come into almost no awareness on its direct relationship with academic procrastination especially among university students. To date, personality traits such as perfectionism and five factor personality traits have been arguably found significantly associated with academic procrastination (Kagan et al., 2010; Karatas, 2015), but the sense of coherence is lack of journal research on its direct relationship with academic procrastination among university students. As such, the indirect relationship between academic procrastination and sense of coherence among university students has been explored. A conference paper stated that the sense of coherence significantly and negatively predicted academic procrastination among 160 Iran high school students using the qualitative research method (Sheykhangafshe et al., 2019). Supportingly, Eckert et al. (2016) conducted cross-sectional survey research among 172 students in Germany and indicated that emotion regulation elements such as comprehensibility, self-support and stressor confrontation were negatively correlated with educational delaying behaviour. As such, the ability to comprehend and manage emotions could be adhered with people’s capacity to cope with

stressful experiences, therefore it strengthens the possibility of sense of coherence in correlating to or predicting educational behaviour such as academic procrastination.

Hussain and Sultan (2010) carried out a survey study among a random sample of 500 Pakistanis students from Master level and 40 university teachers of Islamia University of Bahawalpur using a self-developed 5-point Likert scaling questionnaire which was validated from a pilot study. It was emphasized that excessive workload and insufficient task coordination concurrently resulted in academic stress and delaying behaviour as students hesitated to manage their academic tasks (Hussain & Sultan, 2010). Per se, students who procrastinate do not see the tasks understandable, they are reluctant to manage the resistance and to make the tasks meaningful. As such, to have a trait of sense of coherence could have a significant impact on the cognitive, affective and behavioural aspects of a student.

Considering the results derived from the discussed literature, it is feasible that sense of coherence is connected with academic procrastination. In the present study, we are interested to explore the relationship between academic procrastination and sense of coherence among university students.

### **Coping and Sense of Coherence among Undergraduate Students**

Sense of coherence helps people for pay attention to their adapting or coping styles and causes people to remain healthy in distressing circumstances (Mayer et al., 2019). Terelak and Budka (2014) expressed that sense of coherence components, for example, manageability, meaningfulness and comprehensibility related positively with problem-focused coping and adversely to emotion-focused coping and avoidance coping. They conducted a study about sense of coherence and styles of coping in obesity by using 63 participants (31 obese respondents while 32 normal weight respondents) at Polish which recruited by using convenience sampling and used SOC 29-items scale, Coping Inventory for Stressful Situations (CISS) and self-made Biometrics Survey.



However, Mowlaie et al., (2016) studied the relationship of personal intelligence whether it mediates the relationships of sense of coherence and self-compassion by using a convenience sample of 370 Iranian medical and used SOC 13-items scale, Self-Compassion Scale, Penn State Worry Scale and Personal Intelligence Test. Their study concluded that sense of coherence which consisted of three elements such as meaningfulness, comprehensibility and manageability will obstruct psychological maladjustment and causes people to adapt within a complex, worldwide and intercultural settings by using their personal intelligence rather than coping styles.

On the other hand, according to Abu-Kaf & Khalaf (2020), a high sense of coherence impacts positively on performance, accomplishment, achievement and the capacity to handle conflicts by using the avoidant and active coping style for females and active coping style for the male to overcome the stress. Their study explored the roles of sense of coherence and coping strategies in the connection between acculturative pressure and depressive signs among 170 Arab undergraduates from northern and central Israel by used a cross-sectional research design and also used SOC 13-items scale, the COPE-Short Form scale and the Center for Epidemiological Studies Depression Scale (CES-D).

In addition, Chu et al. (2016) studied by using Chinese university students at China which consisted of 1853 students to investigate the impacts of differed socio-demographic, lifestyles related factors on students' level of sense of coherence by using the Leipzig Short Scale (SOC-L9) and Cohen's 14-item Perceived Stress Scale (PSS-14). Their study concluded that the relationship between low stress and high sense of coherence as high sense of coherence person will deal with upsetting circumstances by control their feelings in the circumstance which is known as emotion-focused coping.

However, according to Krok (2016), emotion-focused coping style, for example, let out the negative emotions in a forceful way and self-accusing is negatively connected with

sense of coherence however problem-focused coping style, for example, arranging, good reevaluation of a circumstance positively connected with sense of coherence. Krok (2016) conducted his study about sense of coherence and the connection between the religious and coping styles by using Polish older adults which consisted of 212 older adults (118 women and 94 men) which recruited by using a random sample and also used three scales which were Religious Meaning System Questionnaire, SOC-29 items scale and the Coping Inventory for Stressful Situations (CISS).

Besides that, Konaszewsk et al. (2019) carried out their study about resilience, sense of coherence and self-efficacy as indicators of stress coping style among university students in Finland which consisted of 551 female students and 84 male students which recruited by using convenience sampling. They concluded that sense of coherence related negatively to avoidance coping. On the other hand, according to Krok (2016), avoidance coping is positively related to sense of coherence.

Moreover, Super et al. (2015) conducted research for increased understanding of the mechanisms underlying sense of coherence by using past researcher studies where they concluded that sense of coherence mirrors a coping ability of individuals to manage regular daily existence stressors. A high level of sense of coherence should empower an individual to apply a wide scope of adapting techniques flexibly. People whose sense of coherence is high are able to evaluate the surrounding world properly. They react to a stressor by actively accepting that the assets they have are important and will permit them to conquer challenges. sense of coherence enhances a person's ability to handle daily stressors, and people with high sense of coherence can avoid stressors (Super et al., 2015).

According to Hochwalder and Saied (2018) conduct research regarding the relation between sense of coherence and daily hassles among university students by using 258 female students and 136 male students from a university of Sweden where they partook in a survey

by reacting to a questionnaire that was intended to evaluate some demographic factors, sense of coherence and daily hassle by using SOC-27 items scale and Daily Hassle scale.

Hochwalder and Saied (2018) proposed that university students with high sense of coherence experienced fewer daily hassles than students with low sense of coherence and experienced the problems as less compelled as students with high sense of coherence can defeat stressors effectively and evaluate appraise stimuli as less distressing.

Furthermore, sense of coherence is thought to be identified with how well individuals figure out about how to adapt to stressors, where stressors are characterized as "demands that tax or surpass the assets of the systems" (Patel & Chaudhari, 2014). All the more explicitly, it is proposed that an individual with a high sense of coherence ought to have the option to evade stressors better than an individual with a low sense of coherence. Additionally, an individual with a high sense of coherence ought to evaluate stressors as less distressing than an individual with a low sense of coherence and an individual with a high sense of coherence ought to have the option to figure out how to adapt effectively to a stressor than an individual with a low sense of coherence (Hochwalder & Saied, 2018).

In spite of the fact that findings are conflicting, because of different samples and coping measures utilized, these outcomes feature the relationship between sense of coherence and coping. There is a lack of research about how sense of coherence related to coping styles by using university students as the sample of their study.

### **Academic Procrastination, Coping and Sense of Coherence among Undergraduate Students**

Academic procrastination among undergraduate students at present has become more serious, Ozer et al.'s work (as cited in Jiao et al., 2011) found that 52% of their respondents were categorized as active individuals in procrastinating. It is intriguing to explore the important aspects of students' delaying behaviour in their academic life psychologically. As

mentioned in the above literature, findings from the study of Kandemir et al. (2014) explained that Turkish undergraduate students with avoidant-coping were more likely to lean towards educational tasks delay but organized and proactive students were less likely to show procrastination behaviour. Correspondingly, Irfan et al. (2015) found that avoidant coping strategies were positively associated and problem-focused coping strategies were negatively correlated with academic procrastination among undergraduates. Accordingly, students with poor coping strategies and capacity are more likely to procrastinate in their study, and vice-versa. It can be explained that students with good coping strategies and capacity are able to understand and overcome stress in their academic life to tackle negative educational outcomes such as academic procrastination.

Apart from that, Five Factor personality traits have been found significantly associated with academic procrastination in Turkish context (Karatas, 2015; Kagan et al., 2010). Even so, studies of Abdul Kader and Saad (2015) in Egypt, as well as Lai et al. (2015) in Malaysia, did not support the above studies, indicating there was an insignificant and low association between five factor personality traits and academic procrastination, as previously indicated. In 2018, there was a study arguing that the relationship between the personality traits in the version of Five Factor and sense of coherence were convergent. The online survey was conducted among 1088 Japanese youths including 528 males and 560 females using the Japanese version of the 7-point Likert scaling Orientation to Life Questionnaire with 29 items to measure sense of coherence and 7-point Likert scaling Ten-Item Personality Inventory to measure personality traits. It was analyzed that openness, conscientiousness, extroversion, agreeableness were positively associated but neuroticism was negatively related to sense of coherence. The intersection ratio was around 36%, so there was still obvious dissimilarities between these two variables (Kase et al., 2018). Nevertheless, the traits sense of coherence could be one of the significant variables linked to academic procrastination.

Antonovsky's work (as cited in Abu-Kaf & Khalaf, 2020) stated that sense of coherence equipped people with ways to develop coping skills effectively in stress management. Williams and Katirai (2018) also emphasized that sense of coherence helps people to tackle stress as well as allowing them to cope and solve the problems effectively. Regarding the above literature, sense of coherence was found positively associated with problem-focused coping as well as negatively associated with emotion-focused and avoidant coping in the Polish context (Terelak & Budka, 2014). Surprisingly, it was in contrast to the study of Krok (2016) which examined that sense of coherence was negatively corresponded to emotion-focused and positively correlated with problem-focused coping among Polish older adults. As such, the sample, context and methodology of researches contributed to the contradictory findings.

Performing journal article search across Google Scholar search engine with the keywords "Academic Procrastination, Coping Strategies and Sense of Coherence among University Students", it came out about 16000 results and there was no journal article studying exactly the same topic with the present study. The present study initiated the attentiveness to examine the relationship between academic procrastination, coping and sense of coherence among university students as well as whether coping strategies or sense of coherence is a significant predictor of academic procrastination. It can be hypothesized that students with good coping strategies and sense of coherence are able to comprehend and manage stress along their academic study to overcome poor educational outcomes such as procrastination.

Along the process for students to carry out procrastination behaviour, personality traits and coping strategies do matter. However, sometimes personality is not directly linked to academic delaying behaviour but depends on what kind of coping strategies the students apply. Employing the theory of personality-coping-outcome, it explained that personality

alters coping strategies which then further affects the outcomes (Xu et al., 2017). To illustrate, sense of coherence could make some impacts on coping strategies resulting in an academic outcome such as academic procrastination.

### **Transactional Theory of Stress and Coping (TTSC)**

Transactional theory of stress and coping (TTSC) developed by Lazarus and Folkman (1987) strived to explain stress in a dynamic process. Stress is a relational concept and it is not some particular kind of environmental stimulation nor a specific pattern of human response that defined stress. Instead, it is a transactional approach that indicating stress as a process that implicates consecutive relationships and adjustments between individuals and their environment (Krohne, 2001).

Moreover, according to Berjot and Gillet (2011), the term “Psychological Stress” proposed by Lazarus and Folkman (1984) refers to a specific relationship between the person and their environment that an individual appraises taxingly and also due to the demands beyond one’s accessible coping resources, thus the person may turn to jeopardize his or her well-being.

Cognitive appraisal and coping act as two core components that undergo any psychological stress model and it act as a mediator of stressful person-environment relation and the immediate outcome (Krohne, 2001). Cognitive appraisal refers to how an individual perceives an event or a particular circumstance, assessment to what extent the event is considered as stressful and their perception on the possible effect of an event which is related to their personal objective and resources (Alhurani et al., 2018). There are two basic forms of cognitive appraisal namely, primary appraisal and secondary appraisal. Primary appraisal refers to an individual's initial evaluation on whether the stressor is applicable or irrelevant, threatening or encouraging to an individual (Silinda, 2018). In turn, there are three elements

proposed by Lazarus and Folkman which are harm, threat, and challenges that need to be evaluated. Harm refers to psychological impairment or deprivation that has been made. Threat refers to the prediction of harm that might have a negative influence on one's well-being whereas challenged results from an individual possessing confidence and paying attention to success, social remuneration and value on personal growth (Krohne, 2001). Secondary appraisal refers to an individual's coping response to control or prevent from harm or to cope with the situation depending on the availability of coping resources such as social support, perceived control and tools (Berjot & Gillet, 2011). General speaking, primary appraisal followed by the secondary appraisal, at first individual tends to identify the stressor as either encouraging or threatening for them, followed by coping option of an individual developed based on the coping resources that they possess.

Coping plays an important role in the stress model. Folkman et al. (1986) defined coping as an individual regularly changing cognitive and behavioural endeavor to tolerate or to manage with particular external or internal demands that perceive as taxing or beyond one's coping resources. According to Folkman and his team, there are two main functions of coping. Firstly, coping serves as a way to regulate difficult emotions or reduce psychological anxieties resulting from stressful situations. Thus, it is known as emotion-focused coping. Secondly, coping serves as a way to alter the stressful person-environment issue that causes an individual to turn into stress by adopting a direct approach. Therefore, this coping style is known as problem-focused coping. In turn, once an individual adopts coping in order to cope with stressful situations, the immediate outcome will be produced. Moreover, it depends on what form of coping style an individual uses and the coping style used has a significant influence on the outcome in terms of satisfactory or unsatisfactory. The immediate outcome is defined as an individual's judgement to what extent the encounter or issues were tackled successfully (Folkman et al., 1986). As different types of coping lead to different outcomes,

some result in positive outcomes and some will result in negative outcomes. In spite of the fact that both coping styles are used to cope with the stressful circumstances, however, by adopting the coping style of an individual to cope with stressful situations still dependent on how an individual appraises the situation as either a threat, challenge or harm (Berjot & Gillet, 2011).

To relate with the present study regarding coping and academic procrastination among undergraduates, we implicate coping style used by undergraduates can influence and predict the immediate outcome which is academic procrastination positively or negatively. Literature reviews that by utilized avoidant coping and emotion-focused coping, it predicts academic procrastination as an immediate outcome positively while undergraduates who utilized problem-focused coping predicts academic procrastination negatively.

### **Personality-Coping-Outcome Theory**

The personality-coping-outcome theory stated that when one experiences unpleasant circumstances, personality impacts one's coping style differently, which thusly further influences one's adjustment outcomes (Xu et al., 2017). In the event that an individual has a high procrastinator trait which is one of the character trademark among students, they seem to utilize an ineffective coping style. For instance, in academic settings, past research stated that 23 to 95 percent of students from higher institutions experience the effects of procrastination (Boysan & Kiral, 2016).

A considerable group of exploration has discovered that procrastination is related to coping. Ferrari and Diaz-Morales (2014) conducted a study about procrastination and psychological health coping by using 104 psychology students (80 women and 24 men) at a public university in Spain. They recruited participants randomly and used the Adult Inventory of Procrastination scale (AIP) and Self-Regulation Inventory-Short (SRI-S) scale. They



discovered that procrastinators reported lower positive behaviors or actions and were more averse to convey emotions and needs contrasted with non-procrastinators, showing that procrastinators were bound to embrace passive coping when encountered stress. Moreover, a meta-analysis proposed that procrastination was adversely connected with adapting coping and positively connected with maladaptive coping (Sirois & Kitner, 2015).

On the other hand, an individual with high sense of coherence which is also a trait of personality will utilize diverse coping styles when under upsetting circumstances. Individuals with strong sense of coherence, in general, will see stress in a positive angle and being more prepared to deal with pressure (Drageset et al., 2014). According to Konaszewski (2016), high sense of coherence is be connected with having high self-efficacy, an internal locus of control and active coping styles, for example, problem-focused coping and negative related with emotion-focused coping. Konaszewski (2016) conducted his study about sense of coherence and stress-related coping styles among maladaptive youth by using 184 teenagers in Poland which was recruited randomly and using the SOC 29-items and the Coping Inventory for Stressful Situations (CISS) scale.

Similarly, Nahlen and Saboonchi (2010) shown that the lower the sense of coherence, the higher the inclination to apply emotion-focused coping such as without control expresses negative emotions or self-fault. According to Konaszewsk et al. (2019), high sense of coherence is adversely connected with avoidant coping. Terelak and Budka (2014) stated that high sense of coherence correlated positively with the problem-focused coping, and negatively with the emotion-focused coping and avoidant coping style.

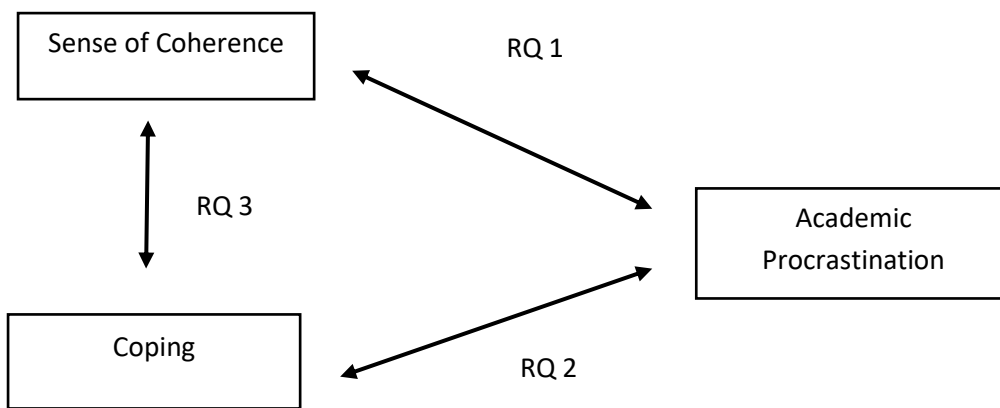
All in all, as stated by personality-coping-outcome theory when a person encounters stressful situations they tend to use a different coping style which mainly influences by their

personality traits such as sense of coherence and procrastination and also influence a person's adjustment outcomes such as how they react or adjust themselves to the situations.

**Conceptual Framework**

**Figure 1**

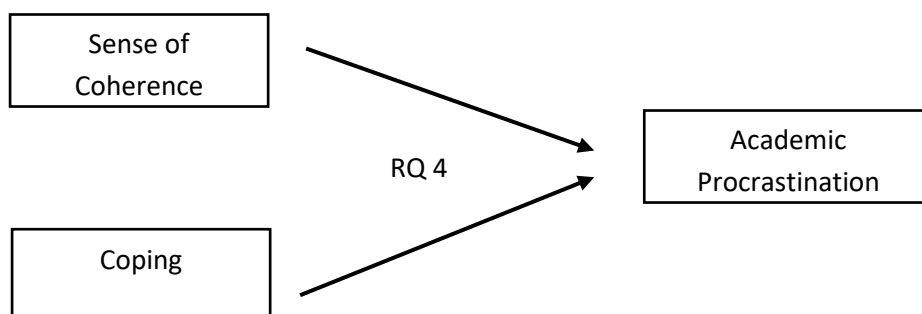
*Relationship between Academic Procrastination, Coping and Sense of Coherence among Undergraduates in Malaysia*



*Note.* Figure 1 demonstrates a conceptual framework that was proposed to examine the relationship between academic procrastination and coping (RQ1), to examine the relationship between academic procrastination and sense of coherence (RQ2) and to examine the relationship between coping and sense of coherence (RQ3).

**Figure 2**

*Prediction on Significant Predictor of Academic Procrastination*



*Note.* Figure 2 shows a conceptual framework that was proposed to examine whether coping or sense of coherence is a significant predictor of academic procrastination.

## **Chapter 3**

### **Methodology**

#### **Research Design**

The present study implemented quantitative, descriptive and cross-sectional research design to study the relationship between academic procrastination, coping and sense of coherence in the undergraduate population. A quantitative study was conducted to measure the variables and analysed data in a statistical way while co-relational research was applied to describe the phenomenon and correlations between variables. The cross-sectional study was implemented, as data was only collected once, it was both time and cost effective. Besides, this research design was suitable to explain and predict the phenomenon between variables among the selected population (Shaughnessy et al., 2009). A self-administered online survey method was created via Qualtrics and the responses were collected throughout Malaysia. Due to the Coronavirus pandemic period, social distancing has been encouraged, thus it was thoughtful to use an online survey to avoid social contact. Besides, it was environmental-friendly and it could reach the respondents more efficiently. Data obtained from the study were anonymous, and it has been solely used for academic purposes under respondents' consent.

#### **Sampling Procedures**

##### ***Sampling Method***

In the present study, purposive sampling was used to recruit undergraduates in Malaysia. Purposive sampling technique is a non-random technique which the researchers choose the information required. In addition, purposive sampling technique was utilized as it included the identification and determination of individuals that were capable and

knowledgeable in the field of applicable interests and it would help the research (Etikan et al., 2016). Random sampling did not adopt in this study as it was difficult to acquire the name list of all the students from all public and private universities in Malaysia and if the sampling method was adopted, challenges might be encountered to approach each chosen respondent too. Online data collection was selected as it has been demonstrated to be cost effective and allowed easy access to relevant populations (i.e., undergraduates), who were the target population in the present study. In addition, by utilizing an online data collection technique, this assists researchers in obtaining data from undergraduates that came from various states in Malaysia.

### ***Research Location***

An online self-reported questionnaire was generated by using Qualtrics online survey platform. Qualtrics online anonymous link was distributed personally and publicly to reach respondents by using various social networking sites and messaging app such as WeChat, WhatsApp, Messenger and Instagram as well as shared on Facebook groups for data collection purpose by the researchers. With this method, the present study is expected to recruit respondents from all around Malaysia, which including Peninsular Malaysia, Sabah, and Sarawak.

### ***Ethical Clearance Approval***

Various key ethical consideration need to be addressed in research such as the privacy of respondents, consent from respondents to participate in research and the confidentiality of information given (Yip et al., 2016). The researcher has created an ethical approval letter in order to seek approval from the University Scientific and Ethical Committee before proceed to data collection. Reference number of the approval letter was obtained from the committee

which is U/SERC/212/2020. After gaining approval, researchers are allowed to distribute the self-reported online questionnaire and began the journey of data collection.

### **Sample Size**

The sample size was calculated by using G\*Power (Faul et al., 2007). For multiple regression, G\*Power reported a sample size of 85 with given ( $f^2 = .15$ ,  $\alpha = .05$ , power = .80 and number of predictors = 4). According to Cohen (1992), a medium effect of .15 is noticeable to the naked eye of a careful observer. Moreover, power was conventionally set at .80 which stated that a study investigating a true effect will correctly reject the null hypothesis 80% of the time and will report a false negative in the remaining 20% of cases (Cohen, 1992). Furthermore, setting alpha to .05 was to limit the amount of type I errors that made to 5% (Cohen, 1992). In addition, 4 predictors were used for this study which were three types of coping styles (problem-focused coping, emotion-focused coping and avoidant coping) and sense of coherence. To conclude, a minimum number of 85 samples were required in this study, however we have recruited 99 samples.

### ***Research Sample***

Sample of the present study were undergraduates from public and private universities or colleges in Malaysia. According to the statistic from Ministry of Higher Education (MOHE) (2018), it stated that there were a total of 1,695,852 undergraduate students in the year of 2018. Data of 99 Malaysian undergraduates were collected ( $n=99$ ), aged between 19-24 years old ( $M=22.36$ ,  $SD=1.28$ ) in Malaysia. The sample consisted 24 (24.2%) males and 75 (75.8%) females, including 23 Malays, 65 Chinese and 11 Indians.

### **Data Collection and Test Administration Procedure**

Approval from both supervisor and the University Scientific and Ethical Committee were required and obtained before data collection. Afterward, pilot test was conducted prior to the actual data collection with the sample of 30. The same data collection procedure applied to both pilot and actual study.

As the present study was using purposive sampling method, so respondents recruited must met the inclusion criteria. Inclusion criteria were Malaysian undergraduates aged between 18 to 24 years old, and must be studied in local universities and colleges (public and private) while international undergraduates will be omitted from the present study as an exclusion criteria. Malaysia education structure which included 6 years of primary education, 5 years of secondary education, 1 till 2 years of pre-tertiary education and 3 till 4 years of tertiary education, therefore the age ranged from 18 to 24 years old was suggested.

Self-reported online questionnaire was created via Qualtrics online survey platform, thus an anonymous link was generated. The link was distributed personally and also publicly to reach potential participants. Data collection process started with distributing the Qualtrics online anonymous link personally to a group of known persons such as our close friends who were eligible participants by using several social networking sites and messaging app such as Instagram, Messenger, Wechat and WhatsApp as well as shared it publicly on Facebook groups in order to recruit more qualified participants in public and gather data by researchers.

Initially, participants were presented with an informed consent after successfully accessing the online self-reported questionnaire. The purpose of the study, volunteer participation without coercion, and assurance of participant confidentiality will be informed. Participants will also be notified that they reserved the right to withdraw from the study at any point of time without any prejudice and penalty charge. In addition, inclusion criteria for

qualified participants in the present study were communicated. After the participants have confirmed their consent, participants progressed on to the online self-reported questionnaire, which were divided into four sections. Section A featured a demographic profile of the participants, followed by section B which has items to gauge academic procrastination. Section C, in which the items of questionnaire assessed the coping styles of participants. Lastly, section D which consists of items to assess sense of coherence.

After the researchers finished the data collection, participants' personal particulars and the data given will be kept privately and confidentially. It was strictly used for academic research purpose only. Data collection period of the present study started from 26 May 2021 to 20 June 2021. In addition, participants' involvement was entirely voluntary, and without any monetary incentives to participate in the present study.

Data was then extracted from Qualtrics. Data cleaning was performed and there was no missing data found in the present study. Descriptive, correlation and multiple linear regression analysis were conducted by using IBM SPSS Statistics Version 23.0. Pearson Product-Moment Correlation (PPMC) was measured to determine the research questions 1, 2 and 3 while Multiple Linear Regression (MLR) was computed to determine the research question 4.

## **Instruments**

### ***Demographic information***

Before responding to items on questionnaire, demographic information (age, gender, ethnicity, nationality, state of the country, name of university) of targeted participants were gathered. A total number of six closed-ended questions were presented in this section.



***Orientation to Life Questionnaire (SOC-13)***

The Orientation to Life Questionnaire (SOC-13) was a shortened version of the original SOC-29 developed by Antonovsky (1987). It aimed to assess sense of coherence of an individual about their perspective of life as comprehensible, manageable, and meaningful. It consists of a total of 13 items to measure the three sub-dimensions of sense of coherence which were manageability (4 items), comprehensibility (5 items) and meaningfulness (4 items). 7-point Likert scale ranged from 1 (*very rarely or never*) to 7 (*very often*) was used to measure all items. Five items were the reversed items (item-1, item-2, item-3, item-7, item-10). Past research study that used SOC-13 measuring scale reported Cronbach's alpha reliability ranged between .70 to .92 and it was shown to be a valid and reliable scale (Opheim et al., 2014). Total score ranged between 13 and 91 points and the total scores were used as the scoring method. A higher score indicated a higher sense of coherence and vice-versa.

***Brief-COPE***

Brief-COPE developed by Carver (1997) was a shortened version of the original COPE Inventory (Carver et al., 1989). It was a multi-dimensional self-reported questionnaire that consists of 28 items to examine both effective and ineffective coping strategies in order to cope with stressful life situations. Brief-COPE inventory with 14 subscales consists of only 2 items per subscale. 4-point Likert scale ranged from 1 (*I haven't been doing this at all*) to 4 (*I've been doing this a lot*) was used to measure all items and no reversed items were found.

All the coping strategies were categorized into 3 coping styles which were emotion-focused coping (emotional support, positive reframing, acceptance, religion, humor), problem-focused coping (active coping, planning, instrumental support) and avoidant coping (venting, denial, substance use, behavioral disengagement, self-distraction, self-blame) based

on the three-category model of Brief-Cope established by Cooper and his team (Su et al., 2015). Emotion-focused coping consists of ten items (item-5, item-12, item-15, item-17, item-18, item-20, item-22, item-24, item-27, item-28). Problem-focused coping consists of six items (item-2, item-7, item-10, item-14, item-23, item-25). Avoidant coping consists of twelve items (item-1, item-3, item-4, item-6, item-8, item-9, item-11, item-13, item-16, item-19, item-21, item-26). Past research study adopted brief-COPE measuring scale to measure the three coping style reported with the Cronbach's alpha of .72 for emotion-focused coping, .84 for problem-focused coping and .75 for avoidant coping (Cooper et al., 2008). The total score calculated by summing up all the scores according to the coping style.

### ***Aitken Procrastination Inventory (API)***

Aitken Procrastination Inventory developed by Aitken (1982) was a 19-item self-reported questionnaire used to assess chronic academic procrastinators and academic non-procrastinators among students. It had a good reliability with the Cronbach's alpha of .89 (Kandemir et al., 2014). 5-point Likert scale ranged from 1 (*False*) to 5 (*True*) were used to measure all items. Nine items were reversed items (item-2, item-4, item-7, item-11, item-12, item-14, item-16, item-17, item-18). A total score ranged from 19 to 95 points and it was calculated by summing up all the scores. A high score indicated high academic procrastination among students and vice-versa.

### **Pilot Test**

In pilot test, the Cronbach's alpha value reported .79 for academic procrastination, .72 for emotion-focused coping, .65 for problem-focused coping, .77 for avoidant coping and .74 for sense of coherence. However, the Cronbach's alpha value for sense of coherence can be improved by removing the item-10. Thus, the Cronbach's alpha value was found increased to .82.

## Chapter 4

### Results

The findings and analysis are based on descriptive statistics and inferential statistics, which are the two key components of the quantitative research study. For descriptive analysis, statistical data regarding participants' demographic variables, including age, gender, ethnicity, nationality, and state of the participants were presented by using the total number and percentage. On the other hand, statistical data for both independent and dependent variable were presented by using inferential analysis. As a result, Pearson correlation and multiple regression were used to analyze the statistical results of independent variables (emotion-focused coping, problem-focused coping, avoidant coping and sense of coherence) and the dependent variable (academic procrastination) by using SPSS software.

#### Descriptive Statistics

Table 1 presented a total number of 99 participants were recruited from different states of Malaysia (Johor, Kedah, Malacca, Negeri Sembilan, Pahang, Perak, Perlis, Penang, Selangor, Sarawak, Terengganu, and Kuala Lumpur) with 100% of response rate in the present study. Female participants accounted for the majority ( $n = 75$ ; 75.8%), followed by male participants ( $n = 24$ , 24.2%). Among ages ( $M = 22.36$ ;  $SD = 1.28$ ), most participants were aged 23 ( $n = 28$ ; 28.3%) followed with aged 22 ( $n = 26$ ; 26.3%), aged 24 ( $n = 21$ ; 21.2%), aged 21 ( $n = 18$ ; 18.2%), aged 19 ( $n = 4$ ; 4.0%), and aged 20 ( $n = 2$ ; 2.0%).

In addition, the present study stand from majority of Chinese participants ( $n = 65$ ; 65.7%) followed by Malay participants ( $n = 23$ ; 23.2%), and Indian participants ( $n = 11$ ; 11.1%). All of the participants are Malaysian ( $n = 99$ ; 100.0%).

**Table 1**

*Descriptive Statistics for Participants 'Age, Gender, Ethnicity, Nationality and State in Malaysia*

Age	<i>n</i>	Gender	<i>n</i>	Ethnicity	<i>n</i>	Nationality	<i>n</i>	State	<i>n</i>
19	4	Male	24	Malay	23	Malaysian	99	Johor	17
20	2	Female	75	Chinese	65			Kedah	6
21	18			Indian	11			Malacca	6
22	26							Negeri Sembilan	4
23	28							Pahang	3
24	21							Perak	10
								Perlis	1
								Penang	7
								Selangor	25
								Sarawak	7
								Terengganu	2
								Kuala Lumpur	11

*Note.* *n*=number of participants

**Data Cleaning**

***Assumption of Normality for all Variables using Skewness and Kurtosis Values (n=99)***

The values of Skewness and Kurtosis lied between -2 to +2 were acceptable (Garson, 2012). Table 2 presented the values of skewness and kurtosis for all variables lied between -2 and +2, indicating this assumption of normality was not violated.

**Table 2***Skewness and Kurtosis Values*

Variable	Skewness	Kurtosis
Academic Procrastination	.11	.42
Emotion-focused coping	.09	.40
Problem-focused coping	-.63	.75
Avoidant coping	.33	-.47
Sense of Coherence (item 10 deleted)	-.58	1.36

***Missing Data***

After data cleaning by using SPSS software, there was no missing data found in the present study. Hence, the data was further analyzed. Statistics also showed that there was no outliers.

***Reliability***

The findings showed that the reliability Cronbach's Alpha values of academic procrastination, emotion-focused coping, problem-focused coping, avoidant coping and sense of coherence (item 10 deleted) were .79, .72, .68, .73, .74 respectively (see Table 3), indicating acceptable range of reliability. For sense of coherence, the reliability for the separated components of sense of coherence was relatively low, and sense of coherence (overall) was .66, indicating a low range of reliability. For instance, sense of coherence (overall) instead of separated components has been used in previous studies with accepted range of reliability from .80 to .85 (Abu-Khaf & Kalaf, 2020; Mowlaie et al., 2017). However, the reliability has increased to .74 after deleting item 10 in the present study. Hence, sense of coherence was revised as an overall variable with item 10 deleted. Low internal consistency with other items of scale indicated that item-10 did not measure the same concept or

construct (Tavakol & Dennick, 2011). Nevertheless, for problem-focused coping, there was no much difference after deleting the items, so its reliability remained .68.

**Table 3**

*Reliability of Academic Procrastination, Coping and Sense of Coherence*

Reliability Statistics		
Variables	Cronbach's Alpha	<i>n</i> of items
Academic Procrastination	.79	19
Emotion-focused coping	.72	10
Problem-focused coping	.68	6
Avoidant coping	.73	12
Sense of coherence (item 10 deleted)	.74	12

*Note.* *n*=number of items

**Inferential Statistics**

***Academic Procrastination and Problem-focused Coping***

H1a: Academic procrastination is negatively correlated with problem-focused coping among undergraduates in Malaysia.

H1b: Academic procrastination is positively correlated with emotion-focused coping among undergraduates in Malaysia.

H1c: Academic procrastination is positively correlated with avoidant coping among undergraduates in Malaysia.

The correlation between academic procrastination and coping was computed using Pearson Correlation. Table 4 showed that academic procrastination was negatively correlated with emotion-focused coping,  $r(97) = -.21, p = .021$ , and problem-focused coping  $r(97) = -.30, p = .001$ , but positively correlated with avoidant coping,  $r(97) = .28, p = .003$ , among undergraduates in Malaysia.

**Table 4**

*Pearson Correlation between Academic Procrastination and Coping*

		Emotion- focused coping	Problem- focused coping	Avoidant coping
Academic Procrastination	Pearson Correlation	-.21*	-.30**	.28**
	Sig. (1-tailed)	.021	.001	.003
	<i>n</i>	99	99	99

*Note.* \* $p < .05$ ; \*\* $p < .01$ ,  $n$  = number of participants

***Academic Procrastination and Sense of Coherence***

H2: Academic procrastination is negatively associated with sense of coherence among undergraduates in Malaysia.

Pearson Correlation was computed to determine the correlation between academic procrastination and sense of coherence. Table 5 presented that academic procrastination was negatively associated with sense of coherence among undergraduates in Malaysia,  $r(97) = -.42, p < .001$ .

**Table 5**

*Pearson Correlation between Academic Procrastination and Sense of Coherence*

		Sense of coherence (item 10 deleted)
Academic Procrastination	Pearson Correlation	-.42**
	Sig. (1-tailed)	<.001
	<i>n</i>	99

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

***Coping and Sense of Coherence***

H3a: Problem-focused coping is positively correlated with sense of coherence among undergraduates in Malaysia.

H3b: Emotion-focused coping is negatively correlated with sense of coherence among undergraduates in Malaysia.

H3c: Avoidant coping is negatively correlated with sense of coherence among undergraduates in Malaysia.

The correlation between coping and sense of coherence was computed using Pearson Correlation. Table 6 presented that sense of coherence was positively correlated with emotion-focused coping,  $r(97) = .13, p = .101$ , and problem-focused coping  $r(97) = .26, p = .004$ , but negatively correlated with avoidant coping,  $r(97) = -.37, p < .001$ , among undergraduates in Malaysia.

**Table 6**

*Pearson Correlation between Coping and Sense of Coherence*

		Emotion- focused coping	Problem- focused coping	Avoidant coping
Sense of coherence (item 10 deleted)	Pearson Correlation	.13	.26**	-.37**
	Sig. (1-tailed)	.101	.004	<.001
	<i>n</i>	99	99	99

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

**Assumption of Multiple Linear Regression**

***Independence of Errors***



The concept for independence of errors suggested that the residuals produced from the sample were independent by the term itself and not corresponded to each other. Field (2009) suggested the Durbin-Watson values which lied between 1 to 3 conforming the assumption, and the value closer to 2 was considered congruent to serve the basic for the rule of thumb. The value of Durbin-Watson was presented as 2.04 in Table 7, indicating no strong correlation between the residuals and no violation regarding this assumption.

**Table 7**

*Model Summary of Predictors*

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.51	.26	.21	7.61	2.04

*Note.* Dependent variable: Academic Procrastination

***Normality of Residuals, Linearity of Residuals and Homoscedasticity***

The scatterplot (see Appendix N) from the study indicated that residuals were normally distributed, hence the assumption of normality of the residuals was not violated. The scatterplot showed almost linear in shape and it also showed roughly equal variances among the residuals, thus the assumptions of the linearity of the residuals and homoscedasticity were also not violated.

***Test of Multivariate Outlier and Influential Cases***

The scatterplot (see Appendix N) and casewise diagnostic table (see Appendix O) showed case 15 and case 21 out of  $\pm 2SD$ , but they were not considered as outlier for the Mahalanobis Distance, Cook’s Distance and Centred Leverage Value (see Appendix O) were not violated (Cook & Weisberg, 1982; Stevens, 2002).

**Multiple Linear Regression (MLR) Analysis**

***Multiple Linear Regression Analysis for the Regression Model***

Multiple linear regression was performed to analyze whether emotion-focused coping, problem-focused coping, avoidant coping and sense of coherence significantly predicted academic procrastination among Malaysian undergraduates. The results showed that the regression model was statistical significant,  $F(6, 92) = 5.41, p < .001$  and it accounted for 26% of variances (See Table 8), indicating large effect size (Cohen, 1988).

**Table 8**

*ANOVA Table for the Regression Model*

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1882.28	6	313.71	5.41	<.001
	Residual	5331.56	92	57.95		
	Total	7213.84	98			

*Note.  $R^2 = .26, Adjusted R^2 = .21$*

***Assumption of Multicollinearity***

The value of the tolerance showed that a predictor’s amount of variability was not explained by other predictors. Hair et al. (2010) stated that high tolerance value which exceeded .1 indicated low collinearity as well as low Variation Inflation Factor value which was below 10 indicated no violation of multicollinearity. The output data revealed all the predictors’ value of tolerance exceeded .1 as well as Variation Inflation Factor values were below 10 (see table 9), hence there was no violation of multicollinearity assumption, indicating no strong association between all the predictors.

***Multiple Linear Regression Analysis of the Variables Predicting Academic Procrastination***

H4: Avoidant coping significantly predicted academic procrastination among undergraduates in Malaysia.

Table 9 showed the first step, model 1 which entered the gender and age as controlled variables, however gender ( $\beta = -.04, p = .685$ ) and age ( $\beta = .04, p = .706$ ) were found as insignificant variables in the present study. In the second step, model 2 included emotion-focused, problem-focused and avoidant coping as well as the sense of coherence (item-10 deleted). Avoidant coping ( $\beta = .24, p = .025$ ) was found significantly and positively predicted academic procrastination while sense of coherence with item-10 deleted ( $\beta = -.27, p = .010$ ) was found significantly and negatively predicted academic procrastination. In contrast, emotion-focused coping ( $\beta = -.13, p = .351$ ), problem-focused coping ( $\beta = -.18, p = .17$ ) were found as insignificant negative predictors of academic procrastination.

**Table 9**

*Hierarchical Multiple Linear Regression Analysis for Variables Predicting Academic Procrastination*

Step	Predictor variable	$\beta$	t	p	F	df	Tolerance	VIF
	Constant		3.94	.000	5.41	(2,96)		
1	Gender	-.04	-.41	.685			.97	1.03
	Age	.04	.38	.706			.94	1.06
	Constant		3.94	.000	5.41	(6,92)		
	Gender	-.04	-.41	.685			.97	1.03
2	Age	.04	.38	.706			.94	1.06
	Emotion-focused coping	-.13	-.94	.351			.45	2.24
	Problem-focused coping	-.18	-1.38	.170			.49	2.04
	Avoidant coping	.24	2.27	.025			.71	1.42
	Sense of coherence (item 10 deleted)	-.27	-2.65	.010			.76	1.32

*Note.* Dependent variable: Academic procrastination

## Chapter 5

### Discussion and Conclusion

#### Academic Procrastination and Coping among Undergraduates in Malaysia

H1a: Academic procrastination is negatively correlated with problem-focused coping among undergraduates in Malaysia.

H1b: Academic procrastination is positively correlated with emotion-focused coping among undergraduates in Malaysia.

H1c: Academic procrastination is positively correlated with avoidant coping among undergraduates in Malaysia

The current study found that there was a significant negative relationship between problem-focused coping and academic procrastination which supported the proposed H1a hypothesis. The finding was consistent with previous studies by Beleaua & Cocorada (2016), which found that students with a higher problem-focused coping tend to perform less procrastination. Moreover, the result of the current study also can be supported by the previous study of Klingsieck (2018) which stated that procrastination can be considered as an ineffective way to deal with stress as it employs a maladaptive coping style (avoidant coping) rather than an adaptive coping style (problem-focused coping). As it is important to stress the importance of a task and also regulate the belief of those tasks can be completed effectively by using a problem-focused coping style. In addition, it reduce the likelihood of postponing a task among individuals by using the problem-focused coping style in facing stressors (Sirois & Kitner, 2015). Therefore, by adopting a proper problem-focused coping style was manage to lower procrastination due to the capability of an individual to face and handle challenging circumstances.

Surprisingly, the findings of the current study revealed that there was a significant and negative relationship between emotion-focused coping and academic procrastination

which did not support the proposed H1b hypothesis. The finding of the negative relationship between emotion-focused coping and academic procrastination was inconsistent with the past finding of Sepehrian & Lotf (2011) which showed that emotion-focused coping is positively correlated with academic procrastination. The inconsistency might be explained by the fact that emotion-focused coping, such as seeking social support, is a sort of external resource that a person can utilise to combat their procrastination habit (Madjid et al., 2017). The most important social support comes from one's family, particularly from one's parents (Lowe & Dotterer, 2018). Both parents play an important role in students' psychological adjustment during the transition to attend lectures. Parents' educational practises develop a culture, therefore influencing their children's learning styles (Juszczyk & Kim, 2017). Also, the student's environment influences whether he or she is disciplined or procrastinates when dealing with academic work. Thus, social support, which is a part of an emotion-focused coping style, is required to provide children with an atmosphere that is conducive for their education. So, it is not surprising that emotion-focused coping style does not have a positive correlation with procrastination.

Furthermore, present study indicated that there was a significant positive correlation between avoidant coping and procrastination which supported the proposed hypothesis which was H1c. This result was consistent with the previous study of Shih, 2019 which stated that avoidant coping will be implemented by passive procrastinators. This finding was also similar to the past study of Kandemir et al. (2014) which found that students who adopted avoidant coping style to manage with stress were more likely to engage in academic procrastination as students who applied avoidant coping to handle academic problems tend to display behaviors which in general more passive, depressed, anxious, and suppressed such as to procrastinate on homework and refrain from participating in-class activities (Shih, 2019). In other words, problem-focused coping may reduce students' proclivity to procrastinate,

whereas an avoidant coping may increase their proclivity to procrastinate. Leszko (2020) also mentioned about the practice of avoidant coping style, which individuals used to avoid stress from academic expectations by procrastinating on homework and test preparation. The more one put off dealing with the issue, the more out of control it grew. People with limited problem-solving capabilities will rather avoid issues than solve it, which resulting the problem being delayed as much as possible.

### **Academic Procrastination and Sense of Coherence among Undergraduates in Malaysia**

H2: Academic procrastination is negatively associated with sense of coherence among undergraduates in Malaysia

The finding indicated that negative correlation between academic procrastination and sense of coherence which supported the proposed hypothesis. The negative correlation between academic procrastination and sense of coherence revealed that undergraduates with a high sense of coherence were less likely to procrastinate in their lives. The result is consistent with the past finding of the Sheykhangafshe et al., 2019, which found that people with a higher sense of coherence procrastinate less because they take more responsibility for their life events and handle them well without delaying it. Furthermore, Eckert et al. (2016) concluded that a sense of coherence is negatively related to academic delaying behaviour. As a result, the ability to comprehend and manage emotions could be associated with people's ability to cope with stressful experiences, so it strengthens the possibility of the sense of coherence is negatively correlating or predicting educational behavior such as academic procrastination. Furthermore, an individual with a high sense of coherence perceives situations and social environments, as well as the demands that come with them as less stressful, which explains the negative correlation between academic procrastination and sense of coherence, as academic procrastinators perceive their academic demands, such as doing assignments as stressful (Ojo, 2019).

**Coping and Sense of Coherence among Undergraduates in Malaysia**

H3a: Problem-focused coping is positively correlated with sense of coherence among undergraduates in Malaysia.

H3b: Emotion-focused coping is negatively correlated with sense of coherence among undergraduates in Malaysia.

H3c: Avoidant coping is negatively correlated with sense of coherence among undergraduates in Malaysia

The present study indicated that problem-focused coping was positively correlated with sense of coherence among undergraduates in Malaysia which supported the proposed H3a hypothesis. This finding was consistent with the previous study of Krok (2016) which indicated that university students with a high sense of coherence respond to stressors by using problem-focused coping strategies such as planning, positive re-interpretation of a situation, or active problem-solving behavior. Furthermore, Super et al., 2015 stated that individuals with a high sense of coherence are able to evaluate their surroundings properly by responding to a stressor with an active coping strategy which under problem-solving coping.

In addition, the present study indicated that emotion-focused coping was positively correlated with sense of coherence among undergraduates in Malaysia which did not support the proposed H3b hypothesis. The present study's finding was inconsistent with Abu-Kaf & Khalaf (2020) which stated that emotion-focused coping has a negative correlation with sense of coherence. One possible explanation for this inconsistency is cultural differences, as there have been few studies examining the relationship between sense of coherence and coping style in Asia, particularly in Malaysia. Furthermore, Evans (2010) claims that different people require different coping mechanisms due to their cultural background and non-identical stressors perceived by the individual. Hence, based on personal perception in the current study, emotion-focused coping style may be viewed differently in every culture.

Cultural aspects play a role in how different coping styles suit an individual and increase their sense of coherence as Chu et al., 2016 discovered that students who have learnt to manage their own emotional reactions by seeking emotional support had a greater chance of developing their "stress tolerance" and "optimism" in life. It has also been reported that emotional support from one's social circle was positively associated with the development of a sense of coherence in adolescence as adolescence who employ emotion-coping style typically perceived stress as something that can be handle by seeking social support.

Moreover, the findings from the present study also indicated that avoidant coping style was negatively correlated with sense of coherence among undergraduates in Malaysia which supported the proposed H3c hypothesis. The result is consistent with others past finding as according to Terelak and Budka (2014), it stated that sense of coherence is negatively correlated with avoidance coping, which is a type of defensive regulation in which individuals tend to ignore, distort, or even escape from the stressful demand, which is common among individual who have a low sense of coherence and believe they are unable to handle or cope with the stress in their life as they fail to view stress as something that can be overcome, as for them stress is something that are unstructured, unordered and inconsistent.

#### **Significant Predictors of Academic Procrastination among Undergraduates in Malaysia**

H4: Avoidant coping is a significant predictor of academic procrastination among undergraduates in Malaysia

Avoidant coping style was a positive and significant predictor of academic procrastination among undergraduates in Malaysia compared to other coping style which supported the hypothesis 4. The finding was supported by previous studies which stated that procrastination serves as a mechanism to avoid and escape from self-awareness (Irfan et al., 2015). Besides that, Shamel & Nayeri (2021) stated that when a person used avoidant coping style, they tend to divert their attention away from the stressful situations and the person



prefer to ignore the issue without solving it for a period of time in order to decrease anxiety. As a result, those students who like to procrastinate create even more issues for themselves. So, it's possible to explain that academic responsibilities such as completing assignments might create stress and drive students to employ an avoidant coping strategy in order to escape from those stresses. Moreover, a person that exhibited avoidant coping styles and subsequently procrastinate due to the environmental factor, aversion to the task, worry about failure, depression or mood-related factors that cause them to have insufficient time to complete the task (Irfan et al., 2015). Thus, it can be concluded that avoidant coping style was the positive predictor of academic procrastination.

According to the results, sense of coherence was significantly and negatively correlated to procrastination. According to Colomer-Perez et al., 2019, an individual with a strong sense of coherence is more likely to understand the nature and dimensions of an acute or chronic stressor, such as stressful academic situations, as something with which they can cope. They view stressful situations as manageable instead of procrastinating or avoiding unpleasant circumstances. According to Moonaghi & Beydokhti (2017), procrastinators have the characteristic of postponing the completion of activities, projects, and assignments unnecessarily because they ignore project deadlines when they are in stressful situations, implying that procrastinators lack of the ability to view stressors as something that can be managed. Individuals with a high sense of coherence were entirely opposed to the typical procrastinator since individuals with high sense of coherence generally able to manage tasks well, particularly on time, and they are able to cope and adapt to stressful situations. Therefore, it is possible to conclude that the sense of coherence was significantly and negatively correlated with academic procrastination.

### **Implications**

The results and findings indicated that personality and the type of coping style use influenced an individual's behavior significantly. The findings supported with the personality-coping-outcome theory and it were applicable and useful to the present study, indicated that when an individual experiencing unpleasant circumstances, personality able to influences an individual's coping style dissimilarly, which therefore effects one's adjustment outcomes further. In the present study, the findings revealed that an individual's sense of coherence (personality) has an impact on the coping style used, therefore resulting in different academic procrastination outcomes among Malaysian undergraduates.

The findings also supported with the Transactional Theory of Stress and Coping (TTSC) which mentioned that stress is an unpleasant circumstances and it act as an arousal to trigger coping, also it based on how an individual appraise stress therefore adopting different types of coping, and it will leads to different outcomes. In the present study, coping been categorized into 3 coping style which are emotion-focused coping, problem-focused coping and avoidant coping. The study shown that undergraduates who adopted avoidant coping style have a significant positive relationship with academic procrastination while undergraduates who adopted emotion-focused coping and problem-focused coping have a significant negative relationship with academic procrastination.

As a result, the present study may be used as a source of information for the future research study as there were just a limited research study that explored at this topic especially in Malaysia context. In addition, some of the research findings of the present study are similar to the past research findings. For example, there was a significant positive relationships between avoidance coping and academic procrastination. However, in contrast with prior study, the present study found that there was a significant negative relationship between emotion-focused coping and academic procrastination. Thus, this present study

allows future researcher to go in-depth and further investigate among the relationship between emotion-focused coping and academic procrastination.

Also, since academic procrastination has been considered as a serious phenomenon among undergraduates, and the present study revealed that coping is important to reduce academic procrastination. As a result, university play an important role to conduct more coping-related workshop to introduce and teach undergraduates about problem-focused and also emotion-focused coping methods and strategies use in order to cope with academic task, thus lessen procrastination. Furthermore, the university counsellor can indeed assist undergraduates who are mild or severe academic procrastinators in adjusting and tackling their academic task procrastination issues, and together to develop a set of useful coping strategies that can be applied to that specific undergraduate in order to reduce academic procrastination. Lastly, the university also can initiate positive and supportive teaching and learning atmosphere as well as advocate incorporating stress coping and emotional regulation training programme to enhance the level of sense of coherence among undergraduates in Malaysia as sense of coherence do influence undergraduates' academic procrastination outcome significantly.

### **Limitations**

Still, there were some limitations found in the present study to be made accountable for consideration. The first limitation examined from the study was the sampling technique, although the data was collected using purposive sampling technique throughout Malaysia tertiary education institutions. There was still a challenge that the findings from the present study sample might not represent the population of the undergraduates. Therefore, bias should be eliminated in order to generalize the findings. Besides, the recruited respondents was 99, it might be a relatively small sample size although it was calculated that 85 sample was needed using G\*Power calculation.

In addition, the data was collected through self-report online survey which might increase the challenge of fraudulent answers being collected as the respondents might not provide the accurate information which might lead to result bias. Meanwhile, their non-verbal behaviour could not be observed as well. To add on, as the survey was shared via social media such as Facebook, Whatsapp, Messenger and Instagram which were commonly assessed by Malaysian undergraduates nowadays, it was still a limitation that there were some minorities who never surf social media.

Given the results showing avoidant coping and sense of coherence significantly predicted academic procrastination, there were lack of previous research studies regarding the whole topic on academic procrastination, coping and sense of coherence among Malaysian undergraduates. As discussed in literature review, there was no journal article conducting the same subject matter literally with the present study searching across Google Scholar database. Therefore, it limited us from getting adequate literatures to support our research findings.

### **Recommendations**

Indicating there is still room for improvement, it is recommended to apply probability sampling such as random sampling in the future regarding the same area of research study, assuming every undergraduate has an equal chance to be chosen and make up an unbiased sample. Taking sample size into account, it is also suggested to collect a relatively larger sample size from G\*Power calculation to enhance the reliability of the research.

Due to limited studies and the findings only showed avoidant coping and sense of coherence as significant predictors, it is recommended to include other predictors such as grit personality, stress and peer influence to further the scope of the present study as well as to provide implications for future research. Besides, non-Malaysian undergraduates contributed also to the population of undergraduates in Malaysia. It is proposed to the future researchers to include non-Malaysian undergraduates in their studies along with the comparison between

Malaysian and non-Malaysian undergraduates in Malaysia regarding their attitude towards academic procrastination. Different cultural backgrounds embrace different perceptions and behaviours towards academic procrastination.

Reckon with current pandemic situation, despite online survey, online interview could be implemented to collect more in-depth information from the respondents regarding the vulnerability towards academic procrastination. Other than that, it could also provide insights for the researchers in regard to individual differences concerning the relevant factors in their procrastinating attitude.

It is highly encouraged that an individual should maintain a good management of time or tasks instead of using negative coping skills. Thus, it should start from education no matter from family or institutional settings, and restructure the thoughts of the individuals to complete tasks within the time frame in addition to reduce procrastination practice, as a saying goes to “Never put off today’s work for tomorrow”.

### **Conclusion**

In conclusion, the present study aimed to examine the relationship between academic procrastination, coping and sense of coherence among Malaysian undergraduates. Results indicated avoidant coping and sense of coherence (item-10 deleted) had significant predicting effect on academic procrastination among Malaysian undergraduates, contrary to emotion-focused coping and problem-focused coping. Meanwhile, gender and age were found as non-significant variables influencing academic procrastination. Apart from that, academic procrastination was found negatively associated with emotion-focused and problem-focused coping, but positively associated with avoidant coping among Malaysian undergraduates. Furthermore, there was a negative correlation between academic procrastination and sense of coherence among Malaysian undergraduates. Sense of coherence was positively associated

with emotion-focused and problem-focused coping, but negatively associated with avoidant coping among undergraduates in Malaysia.

The findings were consistent to previous studies stated that students used to apply avoidant or negative coping skills in their studies, resulting in procrastination. However, there was limited study found for the present literal topic and the findings only showed avoidant coping and sense of coherence significant predicted academic procrastination, it is recommended to study whether grit personality, stress and peer influence could predict academic procrastination. Therefore, it helps to provide for other researchers to further their studies and narrow down the scope to focus on the significant predictors as well as to make some contributions to the future research.

Moreover, the findings could also provide insight to educational settings, the relevant parties could adopt suitable measures to handle the procrastination issue and educate the students from the beginning of their formal education. Besides, the present study could also awaken the awareness of the students about their procrastinating behaviour, therefore it could help them to acknowledge their intention and modify their behaviour. Good, better, best, never let it rest, until your good is better and your better is best.

### References

- Abdul Kader, F. A. H., & Saad, M. A. E. (2015). Academic procrastination and five factor personality traits among college students. *International Journal of Psycho-educational Sciences*, 4(2), 10-15.  
<https://www.journals.lapub.co.uk/index.php/perr/article/view/241>
- Abu-Kaf, S., & Khalaf, E. (2020). Acculturative stress among Arab students in Israel: The roles of sense of coherence and coping strategies. *International Journal of Environmental Research and Public Health*, 17(14), 1-19.  
<https://doi.org/10.3390/ijerph17145106>
- Ajayi, O. S. (2020). Academic self-efficacy, gender and academic procrastination. *Epiphany*, 13(1). <https://doi.org/10.21533/epiphany.v13i1.324>  
<http://epiphany.ius.edu.ba/index.php/epiphany/article/view/324/210>
- Alhurani, A. S., Dekker, R., Ahmad, M., Miller, J., Yousef, K. M., Abdulqader, B., Salami, I., Lennie, T. A., Randall, D. C., Moser, D. K. (2018). Stress, cognitive appraisal, coping, and event free survival in patients with heart failure. *Heart & Lung: The Journal of Critical Care*, 47(3), 205–210.  
<https://doi.org/10.1016/j.hrtlng.2018.03.008>
- Badri, G. R., Sabouri, H., Norzad, F. (2011). Academic procrastination: The relationship between causal attribution styles and behavioral postponement. *Iranian Journal of Psychiatry and Behavioral Sciences*, 5(2), 76-82.  
<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3939975/>
- Balkis, M., & Duru, E. (2017). Gender differences in the relationship between academic procrastination, satisfaction with academic life and academic performance.

*Electronic Journal of Research in Educational Psychology*, 15(1), 105-125.

<https://doi.org/10.14204/ejrep.41.16042>

Barnová, S., & Krásna, S. (2019). Academic procrastination - One of the barriers in lifelong learning. *Online Journal for Research and Education*, 13(1), 8-12.

[https://www.researchgate.net/publication/330345583\\_Academic\\_Procrastination\\_-\\_One\\_of\\_the\\_Barriers\\_in\\_Lifelong\\_Learning/citation/download](https://www.researchgate.net/publication/330345583_Academic_Procrastination_-_One_of_the_Barriers_in_Lifelong_Learning/citation/download)

Baqutayan, S. M. S. (2015). Stress and coping mechanisms: A historical overview.

*Mediterranean Journal of Social Sciences*, 6(2), 479-488.

<https://doi.org/10.5901/mjss.2015.v6n2s1p479>

Beleaua, R-E., & Cocorada, E. (2016). Procrastination, stress and coping in students and employees. *Romanian Journal of Experimental Applied Psychology*, 7(1), 191-195.

<https://doi:10.15303/RJEAP.2016.SII.A40>

Berjot, S., & Gillet, N. (2011). Stress and coping with discrimination and stigmatization.

*Frontiers in Psychology*, 2(1), 1-13. <https://doi.org/10.3389/fpsyg.2011.00033>

Brief-COPE. (n.d.). <https://novopsych.com.au/assessments/brief-cope/>

Bojuwoye, O. (2019). Causes of academic procrastination among high school pupils with learning disabilities in Ilorin, Kwara State, Nigeria. *International Journal of Technology and Inclusive Education*, 8(1), 1404-1409.

<https://doi.org/10.20533/ijtie.2047.0533.2019.0171>

Boysan, M., & Kiral, E. (2016). Associations between procrastination, personality, perfectionism, self-esteem and locus of control. *British Journal of Guidance & Counselling*, 45(3), 284-296. <https://doi.org/10.1080/03069885.2016.1213374>



Cambridge Dictionary. <https://dictionary.cambridge.org/>

- Capan, B. E. (2010). Relationship among perfectionism, academic procrastination and life satisfaction of university students. *Procedia Social and Behavioral Sciences*, 5(1), 1665–1671. <https://doi.org/10.1016/j.sbspro.2010.07.342>
- Chu, J. J., Khan, M. H., Jahn, H. J., & Kraemer, A. (2016). Sense of coherence and associated factors among university students in China: Cross-sectional evidence. *BMC Public Health*, 336 (2016), 1-11. <https://doi.org/10.1186/s12889-016-3003-3>
- Cohen, J. (1992). A power primer. *Psychological Bulletin*, 112(1), 155–159. <https://doi.org/10.1037/0033-2909.112.1.155>
- Cohen, J. (1988). *Statistical Power Analysis for the Behavioral Sciences* (2nd edition). Lawrence Erlbaum Associates. <http://www.utstat.toronto.edu/~brunner/oldclass/378f16/readings/CohenPower.pdf>
- Colomer-Pérez, N., Paredes-Carbonell, J. J., & Sarabia-Cobo, C. (2019). Sense of coherence, academic performance and professional vocation in certified nursing assistant students. *Nurse Education Today*, 79(1), 8-13. <https://doi.org/10.1016/j.nedt.2019.05.004>
- Cook, R. D., & Weisberg, S. (1982). *Residuals and influence in regression* (7th edition). Pearson. <https://conservancy.umn.edu/handle/11299/37076>
- Cooper, C., Katona, C., & Livingston, G. (2008). Validity and reliability of the brief COPE in carers of people with dementia: the LASER-AD study. *The Journal of Nervous and Mental Disease*, 196(11), 838–843. <https://doi.org/10.1097/NMD.0b013e31818b504c>

- Drageset, J., Espehaug, B., Hallberg, I. R., & Natvig, G. K. (2014). Sense of coherence among cognitively intact nursing home residents - A five-year longitudinal study. *Aging & Mental Health, 18*(7), 889-896.  
<https://doi.org/10.1080/13607863.2014.896866>
- Eckert, M., Ebert, D. D., Lehr, D., Sieland, B., & Berking, M. (2016). Overcome procrastination: Enhancing emotion regulation skills reduce procrastination. *Learning and Individual Differences, 52*(1), 10-18.  
<https://doi.org/10.1016/j.lindif.2016.10.001>
- Esmaili, N., & Monadi, M. (2016). Identifying the causes of academic procrastination from the perspective of male middle school male students. *International Journal of Humanities and Cultural Studies, 0*(0), 2464–2487.  
<https://www.ijhcs.com/index.php/ijhcs/article/view/2742>
- Etikan, I., Musa, S. A., & Alkassim, R. S. (2016). Comparison of convenience sampling and purposive sampling. *American Journal of Theoretical and Applied Statistics, 5*(1), 1-4. doi:10.11648/j.ajtas.20160501.11
- Evans, W. P., Marsh, S. C., & Weigel, D. J. (2010). Promoting adolescent sense of coherence: Testing models of risk, protection, and resiliency. *Journal Community Applied Social Psychology, 20*(1), 30–43. <https://doi.org/10.1002/casp.1002>
- Faul, F., Erdfelder, E., Lang, A. G., & Buchner, A. (2007). G\* Power 3: A flexible statistical power analysis program for the social, behavioral, and biomedical sciences. *Behavior Research Methods, 39*(2), 175-191. <https://doi.org/10.3758/BF03193146>

Ferrari, J. R., & Díaz-Morales, J. F. (2014). Procrastination and mental health coping: A brief report related to students. *Individual Differences Research*, 12(1), 8-11.

[https://www.academia.edu/13713750/Procrastination\\_and\\_mental\\_health\\_coping\\_a\\_brief\\_report\\_related\\_to\\_students](https://www.academia.edu/13713750/Procrastination_and_mental_health_coping_a_brief_report_related_to_students)

Field, A.P. (2009). *Discovering statistics using SPSS: And sex and drugs and rock 'n' roll* (3rd edition). Sage Publication.

<file:///C:/Users/User/Downloads/DISCOVERINGSTATISTICS.pdf>

Flett, G. L., Stainton, M., Hewitt, P., Sherry, S., & Lay, C. (2012). Procrastination automatic thoughts as a personality construct: An analysis of the procrastinatory cognitions inventory. *Journal of Rational-Emotive & Cognitive-Behavior Therapy*, 30(4), 223–236. <https://doi.org/10.1007/s10942-012-0150-z>

Folkman, S., Lazarus, R. S., Dunkel-Schetter, C., DeLongis, A., Gruen, R. J. (1986).

Dynamics of a stressful encounter: Cognitive appraisal, coping, and encounter outcomes. *Journal of Personality and Social Psychology*, 50(5), 992–1003.

<https://doi.org/10.1037/0022-3514.50.5.992>

Freire, C., Ferradas, M. D. M., Regueiro, B., Rodríguez, S., Valle, A., & Nunez, J. C. (2020).

Coping strategies and self-efficacy in university students: A person-centered approach. *Frontiers in Psychology*, 11(841),

<https://doi.org/10.3389/fpsyg.2020.00841>

Garson, G. D. (2012). *Testing statistical assumptions*. Statistical Associates Publishing.

<http://www.statisticalassociates.com/assumptions.pdf>

- Germano, D., Dip, G., & Coun. (n.d.). Quality of life and sense of coherence in people with arthritis. <http://www.acqol.com.au/uploads/theses/thesis-germano-d.pdf>
- Gustavson, D. E., & Miyake, A. (2017). Academic procrastination and goal accomplishment: A combined experimental and individual differences investigation. *Learning and Individual Differences*, 54, 160–172. <https://doi.org/10.1016/j.lindif.2017.01.010>  
[https://www.researchgate.net/publication/313452052\\_Academic\\_Procrastination\\_and\\_Goal\\_Accomplishment\\_A\\_Combined\\_Experimental\\_and\\_Individual\\_Differences\\_Investigation](https://www.researchgate.net/publication/313452052_Academic_Procrastination_and_Goal_Accomplishment_A_Combined_Experimental_and_Individual_Differences_Investigation)
- Hair, J. F., Black, W. C., Babin, B. J., Anderson, R. E., & Tatham, R. L. (2010). *Multivariate data analysis*. Pearson Education.  
<https://www.drnishikantjha.com/papersCollection/Multivariate%20Data%20Analysiss.pdf>
- Harrison, J., & Walsh, M. (2014). Academic procrastination: The roles of self-efficacy, perfectionism, motivation, performance, age and gender.  
[https://esource.dbs.ie/bitstream/handle/10788/2130/ba\\_harrison\\_j\\_2014.pdf?sequence=1&isAllowed=y](https://esource.dbs.ie/bitstream/handle/10788/2130/ba_harrison_j_2014.pdf?sequence=1&isAllowed=y)
- He, S. (2017). A multivariate investigation into academic procrastination of university students. *Open Journal of Social Sciences*, 5(10), 12–24.  
<https://doi.org/10.4236/jss.2017.510002>
- Hochwalder, J., & Saied, V. (2018). The relation between sense of coherence and daily hassles among university students. *Health Psychology and Behavioral Medicine*, 6(1), 329–339. <https://doi.org/10.1080/21642850.2018.1538802>

- Hooda, M., & Saini, A. (2016). Academic procrastination: A critical issue for consideration. *Indian Journal of Applied Research*, 6(8), 98-99.  
[https://www.researchgate.net/publication/327337740\\_Academic\\_Procrastination\\_A\\_Critical\\_Issue\\_for\\_Consideration](https://www.researchgate.net/publication/327337740_Academic_Procrastination_A_Critical_Issue_for_Consideration)
- Hussain, I., & Sultan, S. (2010). Analysis of procrastination among university students. *Procedia - Social and Behavioral Sciences*, 5(1), 1897–1904.  
<https://doi.org/10.1016/j.sbspro.2010.07.385>
- Irfan, S., Khizar, U., Murtaza, S., Iftakhar, I. (2015). Relationship among personality traits, procrastination and coping strategies. *International Journal of Advance Research*, 3(11), 184-193. [https://www.journalijar.com/uploads/601\\_IJAR-7506.pdf](https://www.journalijar.com/uploads/601_IJAR-7506.pdf)
- Jakovljevic, M. (2018). Empathy, sense of coherence and resilience: Bridging personal, public and global mental health and conceptual synthesis. *Psychiatria Danubina*, 30(4), 380-384. <https://doi.org/10.24869/psyd.2018.380>
- Jiao, Q. G., DaRos-Voseles, D. A., Collins, K. M. T., & Onwuegbuzie, A. J. (2011). Academic procrastination and the performance of graduate-level cooperative groups in research methods courses. *Journal of the Scholarship of Teaching and Learning*, 11(1), 119-138.  
[https://www.researchgate.net/publication/265282850\\_Academic\\_procrastination\\_on\\_the\\_performance\\_of\\_graduate\\_level\\_cooperative\\_groups\\_in\\_research\\_methods\\_courses](https://www.researchgate.net/publication/265282850_Academic_procrastination_on_the_performance_of_graduate_level_cooperative_groups_in_research_methods_courses)
- Juszczyk, S., & Kim, Y. (2017). Impact of culture on education in Poland and South Korea: A comparative analysis. *The New Educational Review*, 48(2), 132–143.  
<https://doi.org/10.15804/tner.2017.48.2.10>

Kagan, M., Cakir, O., İlhan, T., & Kandemir, M. (2010). The explanation of the academic procrastination behaviour of university students with perfectionism, obsessive–compulsive and five factor personality traits. *Procedia Social and Behavioral Sciences*, 2(2), 2121–2125. <https://doi:10.1016/j.sbspro.2010.03.292>

Kandemir, M. (2014). Predictors of academic procrastination: Coping with stress, internet addiction and academic motivation. *World Applied Sciences Journal*, 32(5), 930-938. <https://www.semanticscholar.org/paper/Predictors-of-Academic-Procrastination%3A-Coping-with-Kandemir/6f17b207a5b497778f6febba258cf58a7d8fad4>

Kandemir, M., İlhan, T., Ozpolat, A. R., Palanci, M. (2014). Analysis of academic self-efficacy, self-esteem and coping with stress skills predictive power on academic procrastination. *Educational Research and Reviews*, 9(5), 146-152. <https://doi.org/10.5897/err2014.1763>

Karatas, H. (2015). Correlation among academic procrastination, personality traits and academic achievement. *Anthropologist*, 20(1-2), 243-255. [https://www.researchgate.net/publication/286778727\\_Correlation\\_among\\_Academic\\_Procrastination\\_Personality\\_Traits\\_and\\_Academic\\_Achievement](https://www.researchgate.net/publication/286778727_Correlation_among_Academic_Procrastination_Personality_Traits_and_Academic_Achievement)

Kase, T., Ueno, Y., & Oishi, K. (2018). The overlap of sense of coherence and the Big Five personality traits: A confirmatory study. *Health Psychology Open*, 5(2), 1-4. <https://doi:10.1177/2055102918810654>

Kasi, P. M., Naqvi, H. A., Afghan, A. K., Khawar, T., Khan, F. H., Khan, U. Z., Khuwaja, U. B., Kiani, J., Khan, H. M. (2012). Coping styles in patients with anxiety and depression. *ISRN Psychiatry*, 2012, 1-7. <https://doi.org/10.5402/2012/128672>

- Klingsieck, K. B. (2013). Procrastination. When good things don't come to those who wait. *European Psychologist, 18*(1), 24-34. [https://doi: 10.1027/1016-9040/a000138](https://doi.org/10.1027/1016-9040/a000138)
- Konaszewski, K. (2016). Sense of coherence and stress-coping styles in the group of maladjusted youth. *Polish Journal of Social Rehabilitation, 12*(2016), 155-164. <https://doi.org/10.22432/pjsr.2016.12.11>
- Konaszewski, K., Kolemba, M., & Niesiobedzka, M. (2019). Resilience, sense of coherence and self-efficacy as predictors of stress coping style among university students. *Current Psychology: A Journal for Diverse Perspectives on Diverse Psychological Issues, 1*(1), 1-11. <https://doi.org/10.1007/s12144-019-00363-1>
- Krohne, H. W. (2001). Stress and coping theory. *International Encyclopedia of the Social and Behavioral Sciences, 22*(1), 15163-15170. <https://doi.org/10.1016/b0-08-043076-7/03817-1>
- Krok, D. (2016). Sense of coherence mediates the relationship between the religious meaning system and coping styles in Polish older adults. *Aging & Mental Health, 20*(10), 1002–1009. <https://doi.org/10.1080/13607863.2015.1056772>
- Keenan, A. P., & Stevens, J. P. (2016). *Applied multivariate statistics for the social sciences*. (6th ed.). Routledge. <http://docshare02.docshare.tips/files/31719/317194846.pdf>
- Lai, C. S., Ahmad Badayai, A. R., Chandrasekaran, K., Lee, S. Y., & Kulasingam, R. (2015). An explanatory study on personality traits and procrastination among university students. *American Journal of Applied Psychology, 4*(3), 21-26. [https://doi: 10.11648/j.ajap.s.2015040301.14](https://doi.org/10.11648/j.ajap.s.2015040301.14)

- Leszko, M., Iwanski, R., & Jarzebinska, A. (2020). The relationship between personality traits and coping styles among first-time and recurrent prisoners in Poland. *Frontiers Psychology, 10*(2969), 1-8. <https://doi.org/10.3389/fpsyg.2019.02969>
- Lin, H. J., & Yusoff, M. S. B. (2013). Psychological distress, sources of stress and coping strategy in high school students. *International Medical Journal (1994), 20*(6), 1-6. [https://www.researchgate.net/publication/259186979\\_Psychological\\_Distress\\_Sources\\_of\\_Stress\\_and\\_Coping\\_Strategy\\_in\\_High\\_School\\_Students](https://www.researchgate.net/publication/259186979_Psychological_Distress_Sources_of_Stress_and_Coping_Strategy_in_High_School_Students)
- Lindström, B., & Eriksson, M. (2011). From health education to healthy learning: Implementing salutogenesis in educational science. *Scandinavian Journal of Public Health, 39*(6), 85–92. <https://doi.org/10.1177/1403494810393560>
- Lowe, K., & Dotterer, A. M. (2018). Parental involvement during the college transition: A review and suggestion for its conceptual definition. *Adolescent Research Review, 3*(1), 29–42. <https://doi.org/10.1007/s40894-017-0058-z>
- Luibl, L., Traversari, J., Paulsen, F., Scholz, M., Burger, P. (2020). Resilience and sense of coherence in first year medical students – A cross-sectional study. *BMC Medical Education, 21* (142), 1-10. <https://doi.org/10.1186/s12909-021-02571-5>
- Madjid, A., Sutoyo, D. A., & Shodiq, S. F. (2017). Academic procrastination among students: The influence of social support and resilience mediated by religious character. *Jurnal Cakrawala Pendidikan, 40*(1), 56-69. <https://doi.org/10.21831/cp.v40i1.34641>
- Mahasneh, A. M., Bataineh, O. T., Al-Zoubi, Z. H. (2016). The relationship between academic procrastination and parenting styles among Jordanian undergraduate



university students. *The Open Psychology Journal*, 9(1), 25–34.

<https://doi.org/10.2174/1874350101609010025>

Mayer, C. H., & Boness, C. (2011). Interventions to promoting sense of coherence and transcultural competences in educational contexts. *International Review of Psychiatry*, 23(6), 516-524. <https://doi.org/10.3109/09540261.2011.637906>

Mayer, C. H., Louw, L., & Ohe, H. V. D. (2019). Sense of coherence in Chinese and German students. *Journal of Interdisciplinary Health Sciences*, 24(2019), 1-11. <https://doi.org/10.4102/hsag.v24i0.1151>

Mayer, C. H., & Oosthuizen, R. M. (2020). Sense of coherence, compassionate love and coping in international leaders during the transition into the fourth industrial revolution. *International Journal of Environmental Research and Public Health*, 17(8), 1-18. <https://doi.org/10.3390/ijerph17082829>

Ministry of Higher Education. (2018). *Statistik Pendidikan Tinggi 2018*.

<https://www.moe.gov.my/muat-turun/laporan-dan-statistik/pendidikan-tinggi/buku-perangkaan/2018-10/2401-statistik-pendidikan-tinggi-2018-bab-1-pdf/file>

Moonaghi, H. K., & Beydokhti, T. H. (2017). Academic procrastination and its characteristics: A narrative review. *Future of Medical Education Journal*, 7(2), 43-50. <https://doi:10.22038/fmej.2017.9049>

Mowlaie, M., Mikaeili, N., Aghababaei, N., Ghaffari, M., & Pouresmali, A. (2017). The relationships of sense of coherence and self-compassion to worry: The mediating role of personal intelligence. *Current Psychology: A Journal for Diverse*

*Perspectives on Diverse Psychological Issues*, 36(3), 630–636. <https://doi.org/10.1007/s12144-016-9451-1>

Nahlen, C., & Saboonchi, F. (2010). Coping, sense of coherence and the dimensions of affect in patients with chronic heart failure. *European Journal of Cardiovascular Nursing*, 9(2), 118–125. <https://doi.org/10.1016/j.ejcnurse.2009.11.006>

Ojo, A. A. (2019). The impact of procrastination on students academic performance in secondary schools. *International Journal of Sociology and Anthropology Research*, 5(1), 17-22. <https://www.eajournals.org/wp-content/uploads/The-Impact-of-Procrastination-on-Students-Academic-Performance-in-Secondary-Schools.pdf>

Onen, A. S., & Ulusoy, F. M. (2015). Investigating of the relationship between pre-service teachers' self-esteem and stress coping attitudes. *Procedia-Social and Behavioral Sciences*, 186(1), 613-617. <https://doi.org/10.1016/j.sbspro.2015.04.194>

Opheim, R., Fagermoen, M. S., Jelsness-Jørgensen, L. P., Bernklev, T., & Moum, B. (2014). Sense of coherence in patients with inflammatory bowel disease. *Gastroenterology Research and Practice*, 2014(1), 1-9. <http://doi.org/10.1155/2014/989038>

Patel, M. P., & Chaudhari, A. D. (2014). Sports for positive mental health: A comparative study of mental health among individual athletes, team athletes and non-athletes. *The International Journal of Indian Psychology*, 1(4), 34-43. <https://doi.org/10.25215/0104.022>

Pour, E. S., Mohaddes, G. P., Pour, F. R., Talebi, G. (2016). The relationship between coping styles with stress and positive and negative affects with academic procrastination in

- students. *International Journal of Humanities and Social Sciences*, 1(1), 1851-1864.  
<https://www.semanticscholar.org/paper/The-Relationship-between-Coping-Styles-with-Stress-Pour-Mohaddes/6cebc26d1d02b60c66fdc85215cb91870153a22c>
- Rice, K. G., Richardson, C. M. E., & Clark, D. (2012). Perfectionism, procrastination and psychological distress. *Journal of Counseling Psychology*, 59(2), 288-302.  
<https://doi.org/10.1037/a0026643>
- Roncaglia, I. (2014). Coping styles: A better understanding of stress and anxiety in individuals with autism spectrum conditions through sport and exercise models. *Psychological Thought*, 7(2), 134-143. <https://doi.org/10.5964/psyct.v7i2.115>
- Rozental, A., & Carlbring, P. (2014). Understanding and treating procrastination: A review of a common self-regulatory failure. *Psychology*, 5(13), 1488-1502.  
<http://dx.doi.org/10.4236/psych.2014.513160>
- Sepehrian, F., & Lotf, J. J. (2011). The effects of coping styles and gender on academic procrastination among university students. *Journal of Basic and Applied Scientific Research*, 1(12), 2987-2993. <https://www.semanticscholar.org/paper/The-Effects-of-Coping-Styles-and-Gender-on-Academic-sepehrian-Lotf/a7446bc275a488d93dfce2d7753a3c11322ff316#citing-papers>
- Shamel, S., & Nayeri, M. (2021). Investigating the relationship between self-esteem and stress coping styles with students' procrastination. *Brazilian Journal of Education, Technology and Society*, 14(1), 151-157. <http://doi.org/10.14571/brajets.v14.n1>
- Shaughnessy, J. J., Zechmeister, E. B. & Zexhmeister, J. (2009). *Research method in psychology* (8th ed.). McGraw-Hill Higher Companies, Inc.

Sheykhangafshe, F. B., Shabahang, R., Chirani, B. M., & Gholizadeh, N. (2019, February).

The role of parenting styles and sense of coherence in the prediction of educational procrastination [Paper presentation]. *The First Conference of Professional*

*Researchers in Counseling and Psychology*,

Iran.[https://www.researchgate.net/publication/332172002\\_The\\_Role\\_of\\_Parenting\\_styles\\_and\\_Sense\\_of\\_Coherence\\_in\\_the\\_Prediction\\_of\\_Educational\\_Procrastination](https://www.researchgate.net/publication/332172002_The_Role_of_Parenting_styles_and_Sense_of_Coherence_in_the_Prediction_of_Educational_Procrastination)

Shih, S-S. (2019). An examination of academic coping and procrastination from the self-

determination theory perspective. *Journal of Education and Human Development*,

8(1), 57-68. <https://doi.org/10.15640/jehd.v8n1a8>

Silinda, F. T. (2018). A transactional approach to predicting stress experienced when writing

dissertations. *South African Journal of Psychology*, 49(3), 417–429.

<https://doi.org/10.1177/0081246318801733>

Şirin, E. F. (2011). Academic procrastination among undergraduates attending school of

physical education and sports: Role of general procrastination, academic motivation and academic self-efficacy. *Educational Research and Reviews*, 6(5), 447-455.

[https://academicjournals.org/article/article1379690340\\_Sirin.pdf](https://academicjournals.org/article/article1379690340_Sirin.pdf)

Sirois, F., & Kitner, R. (2015). Less adaptive or more maladaptive? A meta-analytic

investigation of procrastination and coping. *European Journal of Personality*, 29(4),

433-444. <http://doi.org/10.1002/per.1985>

Smith, M. M., Saklofske, D. H., Keefer, K. V., Tremblay, P. F. (2015). Coping strategies and

psychological outcomes: the moderating effects of personal resiliency. *The Journal*

*of Psychology*, 150(3), 318-332. <https://doi.org/10.1080/00223980.2015.1036828>

Su, X., Lau, J. T., Mak, W. W., Choi, K., Feng, T., Chen, X., Liu, C., Liu, J., Liu, D., Chen, L., Song, J., Zhang, Y., Zhao, G., Zhu, Z., & Cheng, J. (2015). A preliminary validation of the Brief COPE instrument for assessing coping strategies among people living with HIV in China. *Infectious Diseases of Poverty*, 4(1).  
<https://doi.org/10.1186/s40249-015-0074-9>

Super, S., Wagemakers, M. A. E., Picavet, H. S. J., Verkooijen, K. T., & Koelen, M. A. (2015). Strengthening sense of coherence: Opportunities for theory building in health promotion. *Health Promotion International*, 31(4), 869–878.  
<https://doi.org/10.1093/heapro/dav071>

Terelak, J. F., & Budka, A. (2014). Sense of coherence and styles of coping stress in obesity. *The Polish Journal of Aviation Medicine and Psychology*, 20(2), 17-24.  
<https://doi.org/10.13174/pjamp.20.02.2014.2>

Williams, C., & Katirai, M. (2018). The relationship between sense of coherence and rumination. *Journal of Public Health Issues and Practices*, 2(1).  
<https://doi.org/10.33790/jphip1100110>

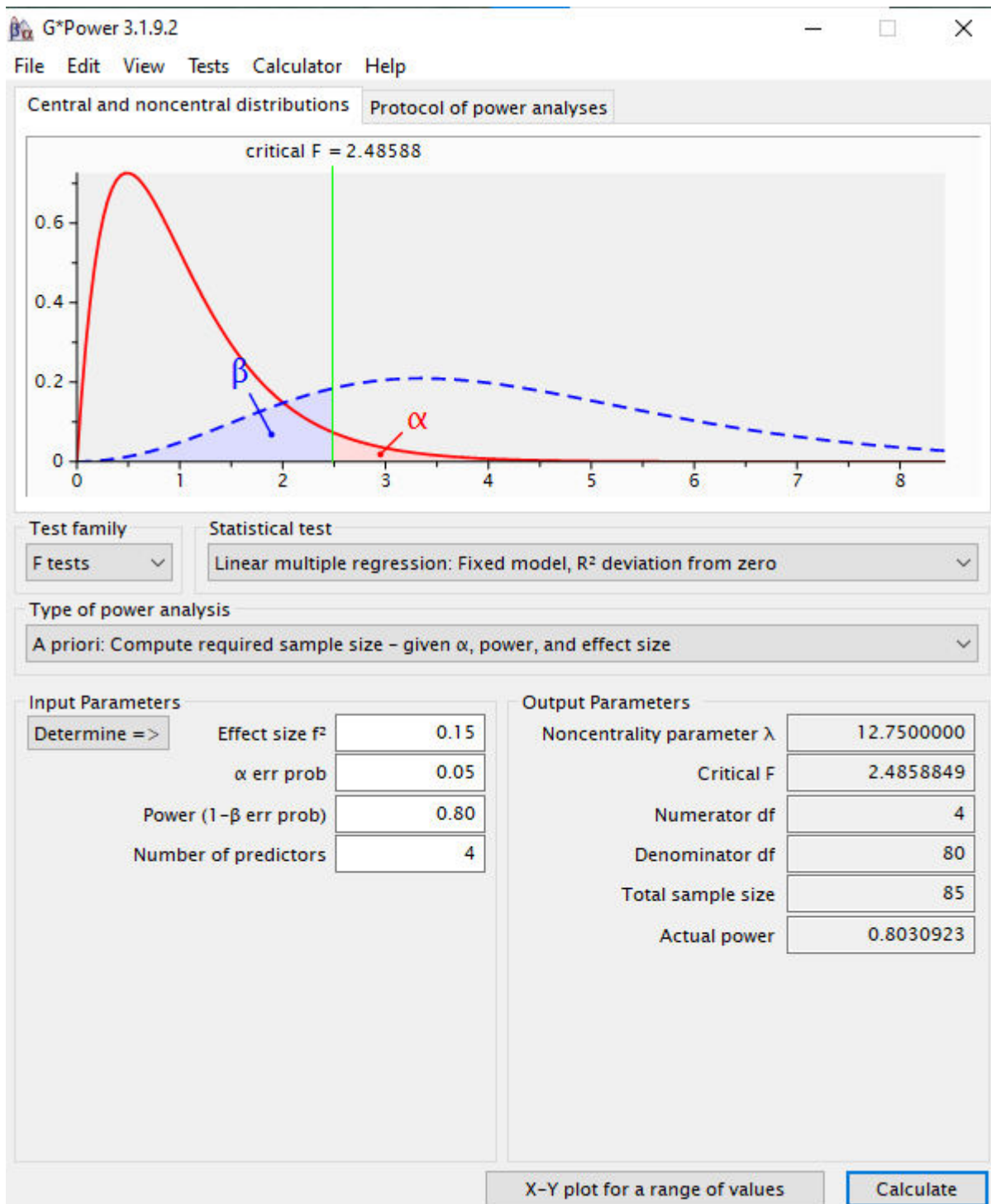
Xerfan, J. (2013). The meaning of sense of coherence in transcultural management: A salutogenetic perspective on interactions in a selected South African business organization. *International Journal of Culture and Mental Health*, 7(4), 465-466.  
<https://doi.org/10.1080/17542863.2013.775784>

Xu, L., Liu, R. D., Ding, Y., Mou, X., Wang, J., & Liu, Y. (2017). The mediation effect of coping style on the relations between personality and life satisfaction in Chinese adolescents. *Frontiers in psychology*, 8(1076), 1-13.  
<https://doi.org/10.3389/fpsyg.2017.01076>

- Yilmaz, M. B. (2017). The relation between academic procrastination of university students and their assignment and exam performances: The situation in distance and face-to-face learning environments. *Journal of Education and Training Studies*, 5(9), 146. <https://doi.org/10.11114/jets.v5i9.2545>
- Yip, C., Han, N. L. R., Sng, B. L. (2016). Legal and ethical issues in research. *Indian Journal of Anaesthesia*, 60(9), 684-688. <https://doi.org/10.4103%2F0019-5049.190627>
- Zakeri, H., Esfahani, B. N., & Razmjooee, M. (2013). Parenting styles and academic procrastination. *Procedia Social and Behavioral Science*, 84(1), 57-60. <https://doi:10.1016/j.sbspro.2013.06.509>

Appendix A

G Power Sample Size Calculation



Appendix B

Instruments

*Aitken Procrastination Scale (API)*

**For each of the items below, please indicate the extent to which the statement is more or less FALSE (1) or TRUE (5) of you. Read each statement carefully ; remember, there are no right or wrong answers.**

False 1	Mostly false 2	Sometimes false/sometimes true 3	Mostly true 4	True 5
1.	I delay starting things until the last minute.		1 2 3 4 5	
2.	I'm careful to return library books on time.		1 2 3 4 5	
3.	Even when I know a job needs to be done, I never want to start it straight away.		1 2 3 4 5	
4.	I keep my assignments up to date by doing my work regularly from day to day.		1 2 3 4 5	
5.	If there were a workshop offered that would help me learn not to put off starting my work, I would go.		1 2 3 4 5	
6.	I am often late for my appointments and meetings.		1 2 3 4 5	
7.	I use the vacant hours between classes to get started on my evening's work.		1 2 3 4 5	
8.	I delay starting things so long I don't get them done by the deadline.		1 2 3 4 5	
9.	I am often frantically rushing to meet deadlines.		1 2 3 4 5	
10.	It often takes me a long time to get started on something.		1 2 3 4 5	
11.	I don't delay when I know I really need to get the job done.		1 2 3 4 5	
12.	If I had an important project to do, I'd get started on it as quickly as possible.		1 2 3 4 5	
13.	When I have a test scheduled soon, I often find myself working on other jobs when a deadline is near.		1 2 3 4 5	
14.	I often finish my work before it is due.		1 2 3 4 5	
15.	I get right to work at jobs that need to be done.		1 2 3 4 5	
16.	If I have an important appointment, I make sure the clothes I want to wear are ready the day before.		1 2 3 4 5	
17.	I arrive at college appointments with plenty of time to spare.		1 2 3 4 5	
18.	I generally arrive on time to class.		1 2 3 4 5	
19.	I overestimate the amount of work I can do in a given amount of time.		1 2 3 4 5	



*Brief-COPE*



NovoPsych

**Brief-COPE (Brief-COPE)**

**Instructions:**

The following questions ask how you have sought to cope with a hardship in your life. Read the statements and indicate how much you have been using each coping style.

		I haven't been doing this at all	A little bit	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 make 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 feelings 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

		I haven't been doing this at all	A little bit	A medium amount	I've been doing this a lot
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	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

*Orientation to Life Questionnaire (SOC-13)*

**ORIENTATION TO LIFE QUESTIONNAIRE**

Here is a series of questions relating to various aspects of our lives. Each question has seven possible answers. Please mark the number which expresses your answer, with numbers 1 and 7 being the extreme answers. If the words under 1 are right for you, circle 1; if the words under 7 are right for you, circle 7. If you feel differently, circle the number which best expresses your feeling. Please give only one answer to each question.

1. Do you have the feeling that you don't really care about what goes on around you?

1	2	3	4	5	6	7
very seldom or never						very often

2. Has it happened in the past that you were surprised by the behavior of people whom you thought you knew well?

1	2	3	4	5	6	7
never happened						always happened

3. Has it happened that people whom you counted on disappointed you?

1	2	3	4	5	6	7
never happened						always happened

4. Until now your life has had:

1	2	3	4	5	6	7
no clear goals or purpose at all						very clear goals and purpose

5. Do you have the feeling that you're being treated unfairly?

1	2	3	4	5	6	7
very often						very seldom or never

6. Do you have the feeling that you are in an unfamiliar situation and don't know what to do?

1	2	3	4	5	6	7
very often						very seldom or never

2

7. Doing the things you do every day is:

1	2	3	4	5	6	7
a source of deep pleasure and satisfaction						a source of pain and boredom

8. Do you have very mixed-up feelings and ideas?

1	2	3	4	5	6	7
very often						very seldom or never

9. Does it happen that you have feelings inside you would rather not feel?

1	2	3	4	5	6	7
very often						very seldom or never

10. Many people - even those with a strong character - sometimes feel like sad sacks (losers) in certain situations. How often have you felt this way in the past?

1	2	3	4	5	6	7
never						very often

11. When something happened, have you generally found that:

1	2	3	4	5	6	7
you overestimated or underestimated its importance						you saw things in the right proportion

12. How often do you have the feeling that there's little meaning in the things you do in daily life?

1	2	3	4	5	6	7
very often						very seldom or never

13. How often do you have feelings that you're not sure you can keep under control?

1	2	3	4	5	6	7
very often						very seldom or never

## Appendix C

## Sample of Online questionnaire

## Questionnaire (Online Survey)



**UNIVERSITI TUNKU ABDUL RAHMAN**  
**FACULTY OF ARTS AND SOCIAL SCIENCE (FAS)**  
**BACHELOR OF SOCIAL SCIENCE (HONS) PSYCHOLOGY**  
**UAPZ3023 Final Year Project II**  
**Year 3 Trimester 3**  
**(202105)**

**Introduction**

The questionnaire is designed to find out the relationship between academic procrastination, coping and sense of coherence among undergraduates in Malaysia. This study is done to fulfil the requirements of subject UAPZ 3023 Final Year Project II. In order to collect the required information, your participation in this research study is highly appreciated.

**Procedures**

The questionnaire consists of 4 sections A to D and you will be asked to fill in your demographic details in the first section, follow by completing the questionnaire which consists of 60 questions. You will take approximately 10-15 minutes to complete this survey.

**Participation**

Your participation in this study is voluntary. You may choose not to participate or to withdraw from the study at any point of time without any prejudice and penalty charged. Your responses will be coded numerically in the research assignment for the research interpretation.

**Confidentiality**

All the information that you provided will be solely used for academic purposes and it will be kept privately and confidentially. The data of the research will neither be revealed to the third party nor used for any other purposes other than the study.

**Contact Information**

If you have any queries concerning the research, please do not hesitate to contact Leela A/P Murugan at [muruganleela8.lm@utar.my](mailto:muruganleela8.lm@utar.my).

Herewith, I confirm that I have read and understood the information above and stating that I am Malaysian undergraduates aged from 18 to 24 years old study in the local universities.

- Yes, I consent.
- No, I do not consent.

## Section A- Demographic information

1. Please state your age below.

\_\_\_\_\_

2. Please select your gender

Male

Female

3. Please select your ethnicity

Malay

Indian

Chinese

Others: \_\_\_\_\_

4. Please select your nationality

Malaysian

Non-Malaysian

5. Please state which state are you from?

Johor

Kedah

Kelantan

Malacca

Negeri Sembilan

Pahang

Perak

Perlis

Penang

Selangor

Sabah

Sarawak

Terengganu

Kuala Lumpur

Putrajaya

Labuan

6. Please state which university are you from?

\_\_\_\_\_

### Section B- How do you perform academic behavior?

The following items are designed to access academic procrastinators and academic non-procrastinators among students. It is important that your answers be true and accurate for you. From 1 (*False*) to 5 (*True*), **circle a number** that best describes your answer to each question. There are no right or wrong answers.

False	Mostly false	Sometimes false/ Sometimes true	Mostly true	True
1	2	3	4	5

<b>1</b>	<b>I delay starting things until the last minute.</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
<b>2</b>	I'm careful to return library books on time.	1	2	3	4	5
<b>3</b>	Even when I know a job needs to be done, I never want to start it straight away.	1	2	3	4	5
<b>4</b>	I keep my assignments up to date by doing my work regularly from day to day.	1	2	3	4	5
<b>5</b>	If there were a workshop offered that would help me learn not to put off starting my work, I would go.	1	2	3	4	5
<b>6</b>	I am often late for my appointments and meetings.	1	2	3	4	5
<b>7</b>	I use the vacant hours between classes to get started on my evening's work.	1	2	3	4	5
<b>8</b>	I delay starting things so long I don't get them done by the deadline.	1	2	3	4	5
<b>9</b>	I am often frantically rushing to meet deadlines.	1	2	3	4	5
<b>10</b>	It often takes me a long time to get started on something.	1	2	3	4	5
<b>11</b>	I don't delay when I know I really need to get the job done.	1	2	3	4	5
<b>12</b>	If I had an important project to do, I'd get started on it as quickly as possible.	1	2	3	4	5
<b>13</b>	When I have a test scheduled soon, I often find	1	2	3	4	5



	myself working on other jobs when a deadline is near.					
<b>14</b>	I often finish my work before it is due.	1	2	3	4	5
<b>15</b>	I get right to work at jobs that need to be done.	1	2	3	4	5
<b>16</b>	If I have an important appointment, I make sure the clothes I want to wear are ready the day before.	1	2	3	4	5
<b>17</b>	I arrive at college appointments with plenty of time to spare.	1	2	3	4	5
<b>18</b>	I generally arrive on time to class.	1	2	3	4	5
<b>19</b>	I overestimate the amount of work I can do in a given amount of time.	1	2	3	4	5

### Section C- How do you cope with your problems?

Read each item and **circle a number** that best describes on how you cope with hardship in your life rating from 1 (*I haven't been doing this at all*) to 4 (*I've been doing this a lot*). There are no right or wrong answers.

<b>I haven't been doing this at all</b>	<b>A little bit</b>	<b>A medium amount</b>	<b>I've been doing this a lot</b>
<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>

<b>1</b>	<b>I've been turning to work or other activities to take my mind off things.</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>
<b>2</b>	I've been concentrating my efforts on doing something about the situation I'm in.	1	2	3	4
<b>3</b>	I've been saying to myself "this isn't real".	1	2	3	4
<b>4</b>	I've been using alcohol or other drugs to make myself feel better.	1	2	3	4
<b>5</b>	I've been getting emotional support from others.	1	2	3	4
<b>6</b>	I've been giving up trying to deal with it.	1	2	3	4
<b>7</b>	I've been taking action to try to make the situation better.	1	2	3	4
<b>8</b>	I've been refusing to believe that it has happened.	1	2	3	4
<b>9</b>	I've been saying things to let my unpleasant feelings escape.	1	2	3	4
<b>10</b>	I've been getting help and advice from other people.	1	2	3	4
<b>11</b>	I've been using alcohol or other drugs to help me get through it.	1	2	3	4
<b>12</b>	I've been trying to see it in a different light, to make it seem more positive.	1	2	3	4
<b>13</b>	I've been criticizing myself.	1	2	3	4
<b>14</b>	I've been trying to come up with a strategy about what to do.	1	2	3	4
<b>15</b>	I've been getting comfort and understanding from someone.	1	2	3	4
<b>16</b>	I've been giving up the attempt to cope.	1	2	3	4
<b>17</b>	I've been looking for something good in what is happening.	1	2	3	4
<b>18</b>	I've been making jokes about it.	1	2	3	4
<b>19</b>	I've been doing something to think about it less, such as going	1	2	3	4

	to movies, watching TV, reading, daydreaming, sleeping, or shopping.				
<b>20</b>	I've been accepting the reality of the fact that it has happened.	1	2	3	4
<b>21</b>	I've been expressing my negative feelings.	1	2	3	4
<b>22</b>	I've been trying to find comfort in my religion or spiritual beliefs.	1	2	3	4
<b>23</b>	I've been trying to get advice or help from other people about what	1	2	3	4
<b>24</b>	I've been learning to live with it.	1	2	3	4
<b>25</b>	I've been thinking hard about what steps to take.	1	2	3	4
<b>26</b>	I've been blaming myself for things that happened.	1	2	3	4
<b>27</b>	I've been praying or meditating.	1	2	3	4
<b>28</b>	I've been making fun of the situation.	1	2	3	4

**Section D- How do you view your coping capacity?**

Circle a number that best describes how you perceived various aspect of life as comprehensible, manageable, and meaningful rating from 1 (*very rarely or never*) to 7 (*very often*). There are no right or wrong answers.

1. Do you have the feeling that you don't really care about what goes on around you?

1	2	3	4	5	6	7
very seldom or never						very often

2. Has it happened in the past that you were surprised by the behaviour of people whom you thought you knew well?

1	2	3	4	5	6	7
never						very often

3. Has it happened that people whom you counted on disappointed you?

1	2	3	4	5	6	7
never						always happened

4. Until now your life has had:

1	2	3	4	5	6	7
no clear goals or purpose at all						very clear goals and purpose

5. Do you have the feeling that you're being treated unfairly?

1	2	3	4	5	6	7
very often						very seldom or never

6. Do you have the feeling that you are in an unfamiliar situation and don't know what to do?

1	2	3	4	5	6	7
very often						very seldom or never

7. Doing the things you do every day is:

1	2	3	4	5	6	7
a source of deep pleasure and satisfaction						a source of pain and boredom

8. Do you have very mixed-up feelings and ideas?

1	2	3	4	5	6	7
very often						very seldom or never

9. Does it happen that you have feelings inside you would rather not feel?

1	2	3	4	5	6	7
very often						very seldom or never

10. Many people - even those with a strong character - sometimes feel like sad sacks (losers) in certain situations. How often have you felt this way in the past?

1	2	3	4	5	6	7
very Often						very seldom or never

11. When something happened, have you generally found that:

1	2	3	4	5	6	7
you overestimated or underestimated						you saw things in the right

its importance

proportion

12. How often do you have the feeling that there's little meaning in the things you do in daily life?

1                    2                    3                    4                    5                    6                    7

very  
often

very  
seldom  
or never

13. How often do you have feelings that you're not sure you can keep under control?

1                    2                    3                    4                    5                    6                    7

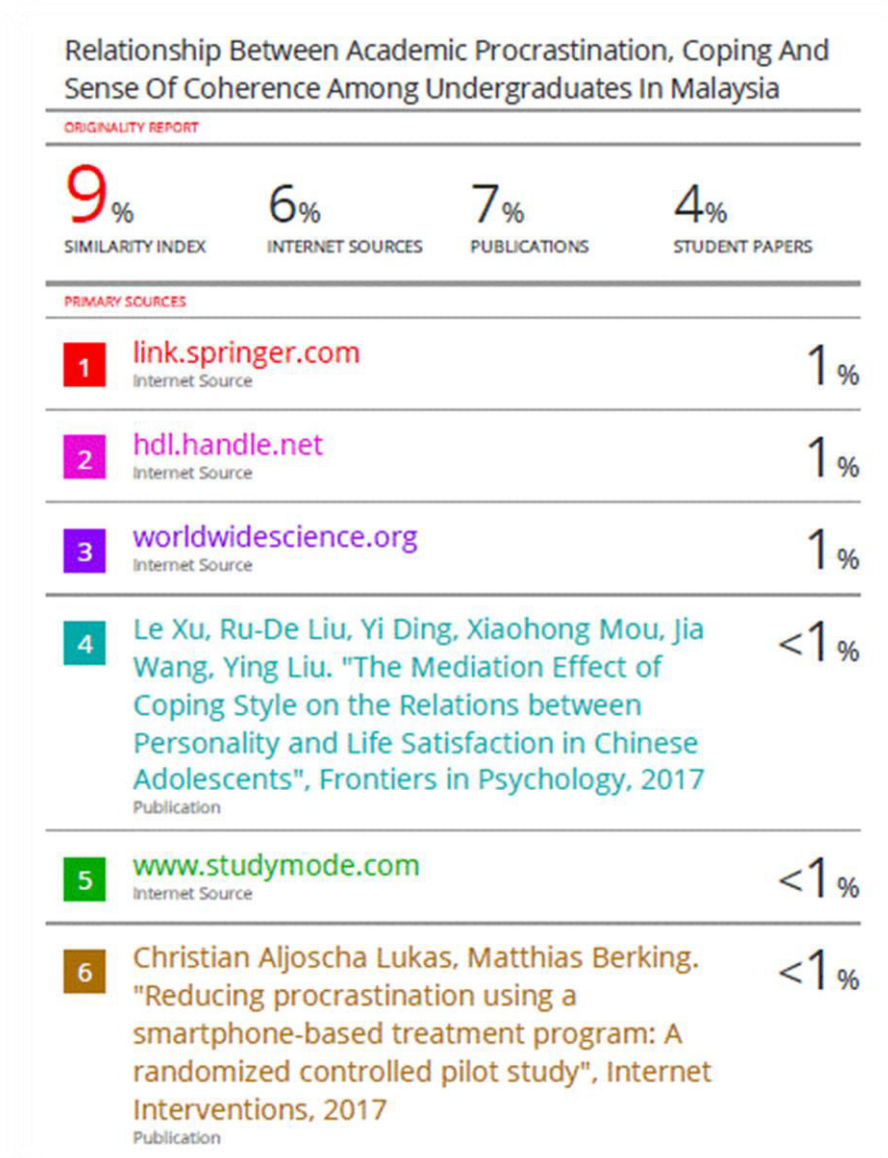
very  
often

very  
seldom  
or never

**THANK YOU FOR YOUR PARTICIPATION.**

Appendix D

Originality Report FYP 1



7	Robert T. Croyle. "Appraisal of health threats: Cognition, motivation, and social comparison", Cognitive Therapy and Research, 1992 <small>Publication</small>	<1 %
8	academicjournals.org <small>Internet Source</small>	<1 %
9	www.researchgate.net <small>Internet Source</small>	<1 %
10	Submitted to essex <small>Student Paper</small>	<1 %
11	Igor Kardum, Nada Krapić. "Personality traits, stressful life events, and coping styles in early adolescence", Personality and Individual Differences, 2001 <small>Publication</small>	<1 %
12	Dariusz Krok. "Sense of coherence mediates the relationship between the religious meaning system and coping styles in Polish older adults", Aging & Mental Health, 2015 <small>Publication</small>	<1 %
13	Submitted to Eastern Mediterranean University <small>Student Paper</small>	<1 %
14	He, F.X.. "Perceived acculturative stress and sense of coherence in Chinese nursing	<1 %



students in Australia", Nurse Education Today, 201205 Publication		
15	Submitted to Coventry University Student Paper	<1 %
16	Submitted to Help University College Student Paper	<1 %
17	"Poster and oral presentations (In alphabetical order by first author)", Psychology & Health, 2009 Publication	<1 %
18	Catherine Prentice, Susan Zeidan, Xuequn Wang. "Personality, trait EI and coping with COVID 19 measures", International Journal of Disaster Risk Reduction, 2020 Publication	<1 %
19	Submitted to HELP UNIVERSITY Student Paper	<1 %
20	Hasida Ben-Zur, Keren Michael. "Burnout, Social Support, and Coping at Work Among Social Workers, Psychologists, and Nurses", Social Work in Health Care, 2007 Publication	<1 %
21	Submitted to La Trobe University Student Paper	<1 %
22	Submitted to uu Student Paper	<1 %

**23** Debra S Burns, Anthony N Meadows, Sandra Althouse, Susan M Perkins, Larry D Cripe. "Differences between Supportive Music and Imagery and Music Listening during Outpatient Chemotherapy and Potential Moderators of Treatment Effects", *Journal of Music Therapy*, 2018  
Publication <1%

**24** Karol Konaszewski, Marcin Kolemba, Małgorzata Niesiołędzka. "Resilience, sense of coherence and self-efficacy as predictors of stress coping style among university students", *Current Psychology*, 2019  
Publication <1%

**25** Miri Cohen, Hasida Ben-Zur, Michal J. Rosenfeld. "Sense of coherence, coping strategies, and test anxiety as predictors of test performance among college students.", *International Journal of Stress Management*, 2008  
Publication <1%

**26** Alexandra Main, Qing Zhou, Yue Ma, Linda J. Luecken, Xin Liu. "Relations of SARS-related stressors and coping to Chinese college students' psychological adjustment during the 2003 Beijing SARS epidemic.", *Journal of Counseling Psychology*, 2011  
Publication <1%

27	<a href="http://ir.uiowa.edu">ir.uiowa.edu</a> Internet Source	<1 %
28	<a href="http://scholar.uwindsor.ca">scholar.uwindsor.ca</a> Internet Source	<1 %
29	<a href="http://textroad.com">textroad.com</a> Internet Source	<1 %
30	Jean M. Edwards, Katrina Trimble. "Anxiety, coping and academic performance", <i>Anxiety, Stress &amp; Coping</i> , 1992 Publication	<1 %
31	<a href="http://digital.library.unt.edu">digital.library.unt.edu</a> Internet Source	<1 %
32	<a href="http://my.ksu.edu">my.ksu.edu</a> Internet Source	<1 %
33	<a href="http://repository.nwu.ac.za">repository.nwu.ac.za</a> Internet Source	<1 %
34	Glory N. Amadi, Demaro E. Taiwo. "Relationship between Personality Traits and Academic Underachievement among Students in Ekeremor and Yenagoa Local Government Areas of Bayelsa State, Nigeria", <i>Asian Journal of Education and Social Studies</i> , 2019 Publication	<1 %
35	O Sarid, O Anson, A Yaari, M Margalith. "Coping styles and changes in humoural	<1 %

reaction during academic stress", Psychology,  
Health & Medicine, 2004

Publication

---

<b>36</b>	<b>epdf.tips</b> Internet Source	<1%
<b>37</b>	<b>journals.sagepub.com</b> Internet Source	<1%

---

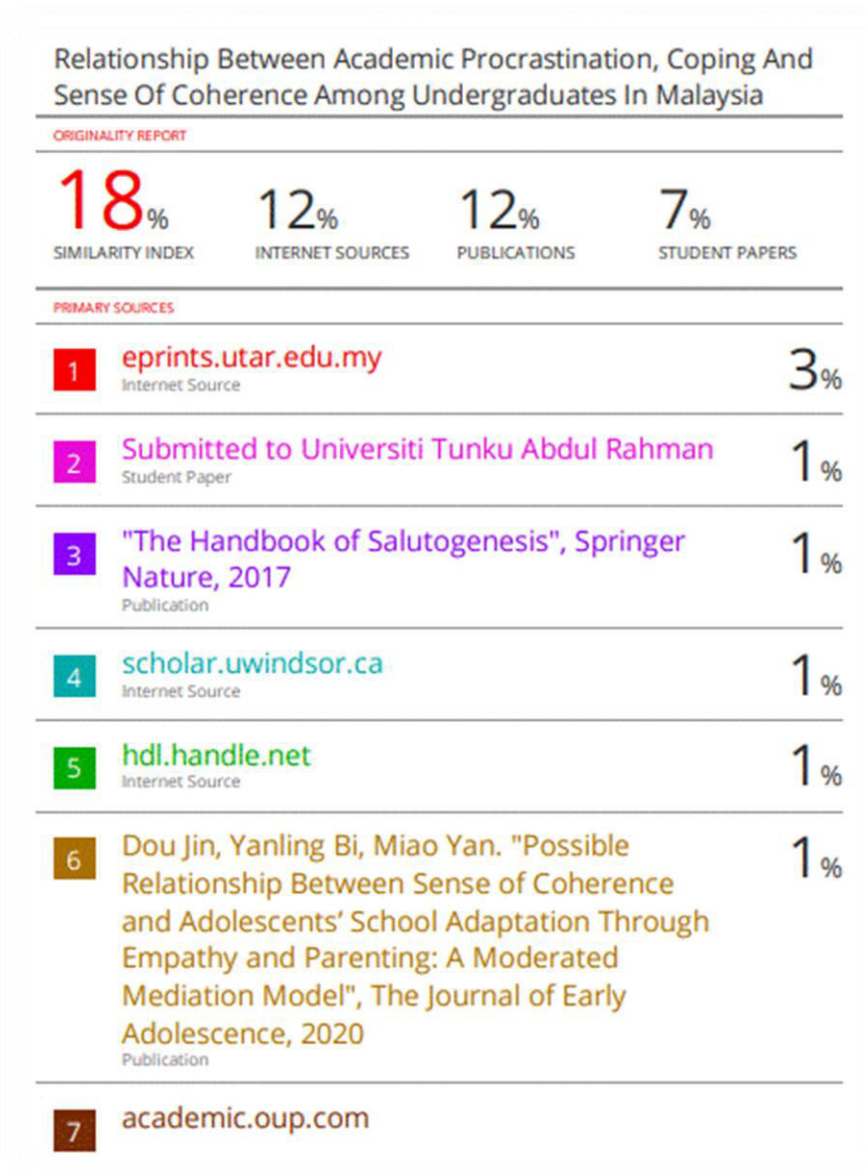
Exclude quotes On

Exclude matches < 8 words

Exclude bibliography On

Appendix E

Originality Report FYP 2



	Internet Source	<1 %
8	J. Paul Grayson. "Sense of Coherence, Problem Freedom and Academic Outcomes of Canadian Domestic and International Students", Quality in Higher Education, 2007 Publication	<1 %
9	Submitted to City University of Hong Kong Student Paper	<1 %
10	Submitted to University of Teesside Student Paper	<1 %
11	Rothmann, S., and P. Van Rensburg. "Psychological strengths, coping and suicide ideation in the South African Police Services In The North West Province", SA Journal of Industrial Psychology, 2002. Publication	<1 %
12	Edina Yi-Qin Tan, Vania T. Yip, Kim Lian Rolles-Abraham. "Benefit-finding and self-compassion promote psychological well-being in caregivers of individuals with mental illness: a cross-sectional study", Cold Spring Harbor Laboratory, 2021 Publication	<1 %
13	Lukas Fourie. "A model of work wellness for non-professional counsellors in South Africa", Stress and Health, 02/2008	<1 %

Publication		
14	Submitted to University of Leeds Student Paper	<1 %
15	etd.aau.edu.et Internet Source	<1 %
16	ourspace.uregina.ca Internet Source	<1 %
17	www.avntf-evntf.com Internet Source	<1 %
18	www.tandfonline.com Internet Source	<1 %
19	www.yumpu.com Internet Source	<1 %
20	Kirk, R.E.. "Effect magnitude: A different focus", Journal of Statistical Planning and Inference, 20070501 Publication	<1 %
21	Herbst, Lettie, Sanet Coetzee, and Deléne Visser. "Personality, sense of coherence and the coping of working mothers", SA Journal of Industrial Psychology, 2007. Publication	<1 %
22	eis.hu.edu.jo Internet Source	<1 %
23	theses.dur.ac.uk Internet Source	<1 %

		<1 %
24	Melis Bilibani, Emilija Stoimenova Canevska, Nada Pop-Jordanova. "Psychosomatic Tendencies, Coping Styles and Locus of Control Among Young Adults", PRILOZI, 2020 Publication	<1 %
25	Thomas E. Oxman, Mark T. Hegel, Jay G. Hull, Allen J. Dietrich. "Problem-solving treatment and coping styles in primary care for minor depression.", Journal of Consulting and Clinical Psychology, 2008 Publication	<1 %
26	eprints.gla.ac.uk Internet Source	<1 %
27	Submitted to The University of Manchester Student Paper	<1 %
28	Submitted to Universiti Teknologi Malaysia Student Paper	<1 %
29	Submitted to University of Santo Tomas Student Paper	<1 %
30	Camilla Jensen, Nasra Kara. "Trade Policy Review - Malaysia 2010", The World Economy, 2011 Publication	<1 %
31	Submitted to University of Abertay Dundee	



	Student Paper	<1 %
32	Submitted to London School of Business and Finance Student Paper	<1 %
33	<a href="http://bmcpshology.biomedcentral.com">bmcpshology.biomedcentral.com</a> Internet Source	<1 %
34	karimzade, Atefe, and mohammad ali besharat. "An investigation of the Relationship Between Personality Dimensions and Stress Coping Styles", <i>Procedia - Social and Behavioral Sciences</i> , 2011. Publication	<1 %
35	Submitted to Macquarie University Student Paper	<1 %
36	<a href="http://link.springer.com">link.springer.com</a> Internet Source	<1 %
37	<a href="http://orca.cf.ac.uk">orca.cf.ac.uk</a> Internet Source	<1 %
38	<a href="http://e.bangor.ac.uk">e.bangor.ac.uk</a> Internet Source	<1 %
39	<a href="http://library.kisiiuniversity.ac.ke:8080">library.kisiiuniversity.ac.ke:8080</a> Internet Source	<1 %
40	<a href="http://ri.ues.edu.sv">ri.ues.edu.sv</a> Internet Source	<1 %

41	<a href="http://www.sec.gov">www.sec.gov</a>	<1 %
Internet Source		
42	<a href="http://www.semanticscholar.org">www.semanticscholar.org</a>	<1 %
Internet Source		
43	Charles S. Carver, Jennifer Connor-Smith. "Personality and Coping", Annual Review of Psychology, 2010	<1 %
Publication		
44	Donald T. Stuss. "Traumatic brain injury", Current Opinion in Neurology, 2011	<1 %
Publication		
45	Finkelstein, RÃ©mi, Jale Minibas-Poussard, and Marina Bastounis. "The moderating role of seeking social support on coping styles and perceptions of organizational justice: A study with French and Turkish students", Social Behavior and Personality An International Journal, 2009.	<1 %
Publication		
46	Latzer, Y., R. Katz, and K. Berger. "Psychological Distress Among Sisters of Young Females With Eating Disorders: The Role of Negative Sibling Relationships and Sense of Coherence", Journal of Family Issues, 2013.	<1 %
Publication		

47	<p>M. Anthony Machin, P. Nancey Hoare. "The role of workload and driver coping styles in predicting bus drivers' need for recovery, positive and negative affect, and physical symptoms", <i>Anxiety, Stress &amp; Coping</i>, 2008</p> <p><small>Publication</small></p>	<1 %
48	<p>Nancy Zook, Marilyn C. Welsh, Vanessa Ewing. "Performance of Healthy, Older Adults on the Tower of London Revised: Associations with Verbal and Nonverbal Abilities", <i>Aging, Neuropsychology, and Cognition</i>, 2006</p> <p><small>Publication</small></p>	<1 %
49	<p><a href="http://etheses.whiterose.ac.uk">etheses.whiterose.ac.uk</a></p> <p><small>Internet Source</small></p>	<1 %
50	<p><a href="http://waberconference.com">waberconference.com</a></p> <p><small>Internet Source</small></p>	<1 %
51	<p>Anita Whiting, Naveen Donthu, Andrew M. Baker. "Investigating the immediate and long-term effects of job stressors on frontline service employees", <i>International Journal of Research in Marketing</i>, 2011</p> <p><small>Publication</small></p>	<1 %
52	<p>Vickie Pasterski, Carlo L. Acerini, David B. Dunger, Ken K. Ong, Ieuan A. Hughes, Ajay Thankamony, Melissa Hines. "Postnatal penile growth concurrent with mini-puberty predicts later sex-typed play behavior: Evidence for</p>	<1 %

neurobehavioral effects of the postnatal androgen surge in typically developing boys",  
Hormones and Behavior, 2015

Publication

53	<a href="http://digital.library.unt.edu">digital.library.unt.edu</a> Internet Source	<1 %
54	<a href="http://erepository.uonbi.ac.ke">erepository.uonbi.ac.ke</a> Internet Source	<1 %
55	<a href="http://researchportal.port.ac.uk">researchportal.port.ac.uk</a> Internet Source	<1 %
56	<a href="http://www.mdpi.com">www.mdpi.com</a> Internet Source	<1 %

Exclude quotes  On      Exclude matches  < 8 words  
 Exclude bibliography  On

Appendix F

SPSS Output: Frequency Table for Demographic Information

**Age of respondent**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	19	4	4.0	4.0	4.0
	20	2	2.0	2.0	6.1
	21	18	18.2	18.2	24.2
	22	26	26.3	26.3	50.5
	23	28	28.3	28.3	78.8
	24	21	21.2	21.2	100.0
	Total	99	100.0	100.0	

**Gender of respondent**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	24	24.2	24.2	24.2
	Female	75	75.8	75.8	100.0
	Total	99	100.0	100.0	

**Ethnicity of respondent**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Malay	23	23.2	23.2	23.2
	Chinese	65	65.7	65.7	88.9
	Indian	11	11.1	11.1	100.0
	Total	99	100.0	100.0	

**Nationality of respondent**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Malaysian	99	100.0	100.0	100.0

**State of the respondent**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Johor	17	17.2	17.2	17.2
	Kedah	6	6.1	6.1	23.2
	Malacca	6	6.1	6.1	29.3
	Negeri Sembilan	4	4.0	4.0	33.3
	Pahang	3	3.0	3.0	36.4
	Perak	10	10.1	10.1	46.5
	Perlis	1	1.0	1.0	47.5
	Penang	7	7.1	7.1	54.5
	Selangor	25	25.3	25.3	79.8
	Sarawak	7	7.1	7.1	86.9
	Terengganu	2	2.0	2.0	88.9
	Kuala Lumpur	11	11.1	11.1	100.0
	Total	99	100.0	100.0	

Appendix G

SPSS Output: Cronbach's Alpha of Brief-COPE (Emotion-Focused Coping)

**Case Processing Summary**

		N	%
Cases	Valid	99	100.0
	Excluded <sup>a</sup>	0	.0
	Total	99	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
.717	.721	10

Appendix H

SPSS Output: Cronbach's Alpha of Brief-Cope (Problem-Focused Coping)

**Case Processing Summary**

		N	%
Cases	Valid	99	100.0
	Excluded <sup>a</sup>	0	.0
	Total	99	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
.676	.679	6



Appendix I

SPSS Output: Cronbach's Alpha of Brief-Cope (Avoidant Coping)

**Case Processing Summary**

		N	%
Cases	Valid	99	100.0
	Excluded <sup>a</sup>	0	.0
	Total	99	100.0

**Reliability Statistics**

Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
.726	.729	12

Appendix J

SPSS Output: Cronbach's Alpha of Orientation to Life Questionnaire (SOC-13)

**Case Processing Summary**

		N	%
Cases	Valid	99	100.0
	Excluded <sup>a</sup>	0	.0
	Total	99	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
.662	.657	13

SPSS Output: Cronbach's Alpha of Orientation to Life Questionnaire (Item-10 Deleted)

**Case Processing Summary**

		N	%
Cases	Valid	99	100.0
	Excluded <sup>a</sup>	0	.0
	Total	99	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
.741	.744	12

Appendix K

SPSS Output: Cronbach's Alpha of Aitken Procrastination Scale (API)

**Case Processing Summary**

		N	%
Cases	Valid	99	100.0
	Excluded <sup>a</sup>	0	.0
	Total	99	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
.786	.774	19

Appendix L

SPSS Output: Skewness and Kurtosis Value

		Statistics				
		Aitken Procrastinatio n Scale	Emotion- Focused Coping	Problem- Focused Coping	Avoidant Coping	SOC-13 (Item-10 deleted)
N	Valid	99	99	99	99	99
	Missing	0	0	0	0	0
Mean		49.4040	25.9192	16.7980	25.5152	46.2020
Std. Error of Mean		.86229	.48321	.31749	.51495	.90874
Median		49.0000	26.0000	17.0000	25.0000	47.0000
Mode		45.00 <sup>a</sup>	26.00	17.00	23.00	48.00 <sup>a</sup>
Std. Deviation		8.57966	4.80789	3.15898	5.12370	9.04183
Variance		73.611	23.116	9.979	26.252	81.755
Skewness		.110	.088	-.631	.331	-.579
Std. Error of Skewness		.243	.243	.243	.243	.243
Kurtosis		.416	.402	.751	-.469	1.358
Std. Error of Kurtosis		.481	.481	.481	.481	.481
Range		49.00	27.00	18.00	25.00	54.00
Minimum		29.00	11.00	6.00	16.00	12.00
Maximum		78.00	38.00	24.00	41.00	66.00
Percentiles	25	44.0000	23.0000	15.0000	21.0000	41.0000
	50	49.0000	26.0000	17.0000	25.0000	47.0000
	75	56.0000	29.0000	19.0000	30.0000	52.0000

a. Multiple modes exist. The smallest value is shown

Appendix M

SPSS Output: Correlations among Variables

**Correlations**

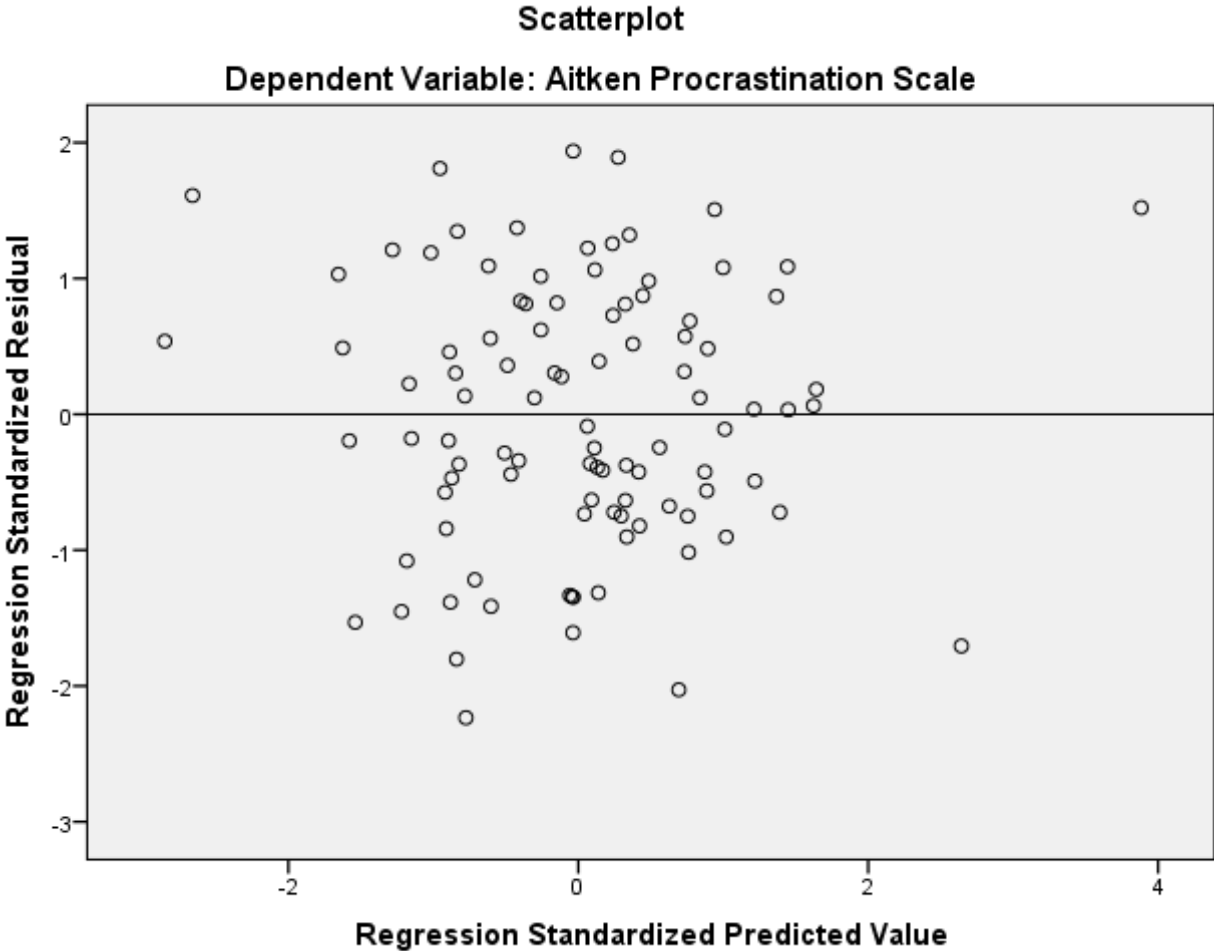
		Aitken Procrastination Scale	Emotion-Focused Coping	Problem-Focused Coping	Avoidant Coping	SOC-13 (Item-10 deleted)	Age of respondent	Gender of respondent
Aitken Procrastination Scale	Pearson Correlation	1	-.205*	-.302**	.276**	-.420**	-.066	-.075
	Sig. (1-tailed)		.021	.001	.003	.000	.257	.229
	N	99	99	99	99	99	99	99
Emotion-Focused Coping	Pearson Correlation	-.205*	1	.690**	.320**	.129	.139	.119
	Sig. (1-tailed)	.021		.000	.001	.101	.085	.121
	N	99	99	99	99	99	99	99
Problem-Focused Coping	Pearson Correlation	-.302**	.690**	1	.132	.264**	.081	.046
	Sig. (1-tailed)	.001	.000		.096	.004	.212	.325
	N	99	99	99	99	99	99	99
Avoidant Coping	Pearson Correlation	.276**	.320**	.132	1	-.367**	-.124	-.049
	Sig. (1-tailed)	.003	.001	.096		.000	.111	.314
	N	99	99	99	99	99	99	99
SOC-13 (Item-10 deleted)	Pearson Correlation	-.420**	.129	.264**	-.367**	1	.131	.026
	Sig. (1-tailed)	.000	.101	.004	.000		.098	.400
	N	99	99	99	99	99	99	99
Age of respondent	Pearson Correlation	-.066	.139	.081	-.124	.131	1	.106
	Sig. (1-tailed)	.257	.085	.212	.111	.098		.148
	N	99	99	99	99	99	99	99
Gender of respondent	Pearson Correlation	-.075	.119	.046	-.049	.026	.106	1
	Sig. (1-tailed)	.229	.121	.325	.314	.400	.148	
	N	99	99	99	99	99	99	99

\*. Correlation is significant at the 0.05 level (1-tailed).

\*\* . Correlation is significant at the 0.01 level (1-tailed).

Appendix N

SPSS Output: Scatterplot



Appendix O

SPSS Output: Casewise Diagnostics and Summaries

**Casewise Diagnostics<sup>a</sup>**

Case Number	Std. Residual	Aitken Procrastination Scale	Predicted Value	Residual
15	-2.028	37.00	52.4411	-15.44110
21	-2.234	29.00	46.0062	-17.00624

a. Dependent Variable: Aitken Procrastination Scale

**Case Summaries<sup>a</sup>**

	Case Number	Mahalanobis Distance	Cook's Distance	Centered Leverage Value
1	1	3.24660	.00309	.03313
2	2	4.58026	.00218	.04674
3	3	3.03223	.00452	.03094
4	4	7.79245	.00023	.07951
5	5	11.52232	.00029	.11757
6	6	5.93411	.00154	.06055
7	7	2.32187	.00199	.02369
8	8	17.98207	.05023	.18349
9	9	9.63902	.01282	.09836
10	10	4.90804	.00175	.05008
11	11	8.94207	.00232	.09125
12	12	6.60406	.03364	.06739
13	13	11.62633	.02499	.11864
14	14	4.28428	.00116	.04372

15	15	2.37363	.02163	.02422
16	16	8.38373	.03340	.08555
17	17	1.35309	.00003	.01381
18	18	.90068	.00090	.00919
19	19	3.61012	.01044	.03684
20	20	12.40127	.00003	.12654
21	21	10.47500	.10697	.10689
22	22	1.69163	.00232	.01726
23	23	3.39619	.00013	.03465
24	24	5.07879	.00093	.05182
25	25	4.82942	.00001	.04928
26	26	.72928	.00293	.00744
27	27	8.81414	.00511	.08994
28	28	2.39689	.00356	.02446
29	29	4.95553	.00167	.05057
30	30	1.75040	.00228	.01786
31	31	2.62318	.01070	.02677
32	32	.81019	.00180	.00827
33	33	3.63955	.00044	.03714
34	34	4.57342	.00070	.04667
35	35	5.24193	.00329	.05349
36	36	8.65971	.01410	.08836
37	37	4.16592	.00395	.04251
38	38	2.16125	.00103	.02205
39	39	6.77755	.01983	.06916
40	40	5.10845	.00237	.05213



41	41	7.05324	.00020	.07197
42	42	8.67457	.00697	.08852
43	43	3.58381	.01667	.03657
44	44	2.40237	.00033	.02451
45	45	5.40698	.01244	.05517
46	46	10.48481	.00302	.10699
47	47	6.30319	.00101	.06432
48	48	3.58637	.01269	.03660
49	49	3.78808	.01151	.03865
50	50	7.26142	.00968	.07410
51	51	7.62915	.01232	.07785
52	52	4.32803	.00896	.04416
53	53	4.28789	.00484	.04375
54	54	7.74338	.00077	.07901
55	55	3.26290	.02422	.03329
56	56	11.43131	.00464	.11665
57	57	10.97369	.04103	.11198
58	58	10.58192	.00582	.10798
59	59	6.83093	.00051	.06970
60	60	4.15278	.00887	.04238
61	61	2.82301	.00459	.02881
62	62	5.76486	.02060	.05883
63	63	10.51677	.05586	.10731
64	64	4.08812	.00026	.04172
65	65	3.81293	.00076	.03891
66	66	3.41019	.00820	.03480

67	67	8.91687	.00273	.09099
68	68	4.31301	.00344	.04401
69	69	3.15221	.02471	.03217
70	70	3.50220	.00027	.03574
71	71	4.82771	.01836	.04926
72	72	6.39830	.02955	.06529
73	73	7.34562	.00134	.07496
74	74	5.70490	.00203	.05821
75	75	3.28528	.00998	.03352
76	76	5.37394	.00799	.05484
77	77	9.12011	.00062	.09306
78	78	1.54322	.00678	.01575
79	79	4.45113	.02888	.04542
80	80	7.47653	.00767	.07629
81	81	2.11988	.00056	.02163
82	82	5.54668	.01053	.05660
83	83	6.51835	.00422	.06651
84	84	16.20371	.04395	.16534
85	85	1.75927	.00225	.01795
86	86	18.74397	.13122	.19126
87	87	14.00407	.02114	.14290
88	88	6.34754	.00302	.06477
89	89	2.04016	.01541	.02082
90	90	2.87162	.00202	.02930
91	91	1.52212	.00696	.01553
92	92	5.77218	.02400	.05890

93		93	6.27566	.00644	.06404
94		94	19.44242	.10995	.19839
95		95	2.09902	.00106	.02142
96		96	7.38143	.00006	.07532
97		97	6.78391	.00203	.06922
98		98	2.98904	.00994	.03050
99		99	4.66859	.01651	.04764
Total	N		99	99	99

a. Limited to first 100 cases.

Appendix P

SPSS Output: Regression

**Model Summary<sup>b</sup>**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.511 <sup>a</sup>	.261	.213	7.61260	2.040

a. Predictors: (Constant), SOC-13 (Item-10 deleted), Gender of respondent, Age of respondent, Emotion-Focused Coping, Avoidant Coping, Problem-Focused Coping

b. Dependent Variable: Aitken Procrastination Scale

**ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	1882.280	6	313.713	5.413	.000 <sup>b</sup>
	Residual	5331.558	92	57.952		
	Total	7213.838	98			

a. Dependent Variable: Aitken Procrastination Scale

b. Predictors: (Constant), SOC-13 (Item-10 deleted), Gender of respondent, Age of respondent, Emotion-Focused Coping, Avoidant Coping, Problem-Focused Coping

**Coefficients<sup>a</sup>**

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)	60.916	15.475		3.936	.000	30.182	91.650		
	Age of respondent	.234	.619	.035	.378	.706	-.996	1.464	.939	1.064
	Gender of respondent	-.739	1.815	-.037	-.407	.685	-4.343	2.865	.968	1.033
	Emotion-Focused Coping	-.224	.239	-.126	-.937	.351	-.699	.251	.447	2.236
	Problem-Focused Coping	-.481	.348	-.177	-1.382	.170	-1.172	.210	.489	2.043
	Avoidant Coping	.406	.179	.242	2.274	.025	.051	.760	.707	1.415
	SOC-13 (Item-10 deleted)	-.258	.098	-.272	-2.646	.010	-.452	-.064	.760	1.315

a. Dependent Variable: Aitken Procrastination Scale

**Collinearity Diagnostics<sup>a</sup>**

Model	Dimension	Eigenvalue	Condition Index	Variance Proportions						
				(Constant)	Age of respondent	Gender of respondent	Emotion-Focused Coping	Problem-Focused Coping	Avoidant Coping	SOC-13 (Item-10 deleted)
1	1	6.841	1.000	.00	.00	.00	.00	.00	.00	.00
	2	.056	11.069	.00	.00	.52	.02	.01	.14	.03
	3	.050	11.663	.00	.00	.28	.00	.02	.13	.24
	4	.030	15.138	.01	.01	.09	.13	.16	.10	.09
	5	.012	24.015	.04	.08	.08	.02	.05	.41	.62
	6	.009	27.060	.00	.01	.03	.81	.74	.11	.00
	7	.001	68.928	.95	.90	.00	.03	.01	.11	.02

a. Dependent Variable: Aitken Procrastination Scale

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

**UAPZ 3023 Final Year Project II**

**Quantitative Research Project Evaluation Form**

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

Project Title: Relationship Between Academic Procrastination, Coping And Sense Of Coherence Among Undergraduates In Malaysia	
Supervisor: Dr Siah Poh Chua	
Student's Name:	Student's ID
1. Leela A/P Murugan	1.18AAB06408
2. Loo Ling Qian	2.16AAB07332
3. Tan Man Ting	3. 18AAB06850

**INSTRUCTIONS:**

Please score each descriptor based on the scale provided below:

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

<b>1. ABSTRACT (5%)</b>	<b>Max Score</b>	<b>Score</b>
a. State the main hypotheses/research objectives.	5%	
b. Describe the methodology: <ul style="list-style-type: none"> <li>• Research design</li> <li>• Sampling method</li> <li>• Sample size</li> <li>• Location of study</li> <li>• Instruments/apparatus/outcome measures</li> <li>• Data gathering procedures</li> </ul>	5%	
c. Describe the characteristics of participants.	5%	
d. Highlight the outcomes of the study.	5%	
e. Conclusions, implications, and applications.	5%	
<b>Sum</b>	25%	/25%
<b>Subtotal (Sum/5)</b>	5%	/5%
Remark:		
<b>2. METHODOLOGY (25%)</b>	<b>Max Score</b>	<b>Score</b>
a. Research design/framework: <ul style="list-style-type: none"> <li>• For experiment, report experimental manipulation, participant flow, treatment fidelity, baseline data, adverse events and side effects, assignment method and implementation, masking. (*if applicable with the study design)</li> <li>• For non-experiment, describe the design of the study and data used.</li> </ul>	5%	
b. Sampling procedures: <ul style="list-style-type: none"> <li>• Justification of sampling method/technique used.</li> <li>• Description of location of study.</li> <li>• Procedures of ethical clearance approval. (Provide reference number of approval letter)</li> </ul>	5%	
c. Sample size, power, and precision: <ul style="list-style-type: none"> <li>• Justification of sample size.</li> <li>• Achieved actual sample size and response rate.</li> <li>• Power analysis or other methods (if applicable).</li> </ul>	5%	
d. Clear explanation of data collection procedures: <ul style="list-style-type: none"> <li>• Inclusion and exclusion criteria</li> <li>• Procedures of obtaining consent</li> <li>• Description of data collection procedures</li> <li>• Provide dates/duration of recruitment repeated measures or follow-up.</li> <li>• Agreement and payment (if any)</li> </ul>	5%	
e. Explanation of instruments/questionnaire used: <ul style="list-style-type: none"> <li>• Description of instruments</li> </ul>	5%	

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

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



**\*\*\*Overall Comments:**

---

---

---

---

---

**Signature:** \_\_\_\_\_

**Date:** \_\_\_\_\_

**Notes:**


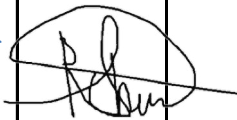

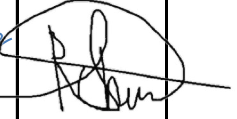
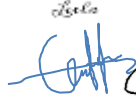
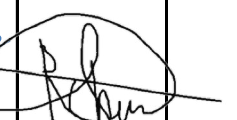
1. **Subtotal:** The sum of scores for each assessment criterion
2. **FINAL MARK/TOTAL:** The summation of all subtotal score
3. Plagiarism is **NOT ACCEPTABLE**. Parameters of originality required and limits approved by UTAR are as follows:
  - (i) **Overall similarity index is 20% or below**, and
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

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

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

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

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

Action Plan of UAPZ 3023 (group-based) Final Year Project II for Jan & May trimester						
Supervisee's Name:		Leela A/P Murugan, Loo Ling Qian, Tan Man Ting				
Supervisor's Name:		Dr. Siah Poh Chua				
Task Description	Duration	Date/Time	Supervisee's Signature	Supervisor's Signature	Supervisor's Remarks	Next Appointment Date/Time
Methodology, Data Collection & Data Analysis	W1-W2	11/06/2021	 ting			29/06/2021
Finding & Analysis	W3-W6	29/06/2021	 ting			13/07/2021
Discuss Findings & Analysis with Supervisor		13/07/2021				20/07/2021
Amending Findings & Analysis						
Discussion & Conclusion	W7-W9	20/07/2021	 ting			03/08/2021
Discuss Discussion & Conclusion with Supervisor		03/08/2021				
Amending Discussion & Conclusion						
Submission of first draft*	Monday of Week 10	submit the first draft to Turnitin.com to check similarity rate				
Amendment	W10					
Submission of final FYP (FYP I + FYP II)*	Monday of W11	final submission to supervisor				
Oral Presentation		Oral Presentation Schedule will be released and your supervisor will inform you				

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

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

**FACULTY/INSTITUTE\* OF ARTS AND SOCIAL SCIENCE**  
**UNIVERSITI TUNKU ABDUL RAHMAN**

Date: 16/8/2021

**SUBMISSION OF FINAL YEAR PROJECT**

It is hereby certified that Leela A/P Murugan (ID No: 18AAB06408 )  
has completed this final year project entitled "Relationship Between  
Academic Procrastination, Coping And Sense Of Coherence Among  
Undergraduate In Malaysia" under the supervision of Dr Siah Poh Chua (Supervisor)  
from the Department of Psychology and Counselling, Faculty of Arts and Social  
Science

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

Yours truly,

*Leela*

Name: Leela A/P Murugan

*\*Delete whichever not applicable*

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

**FACULTY/INSTITUTE\* OF ARTS AND SOCIAL SCIENCE**  
**UNIVERSITI TUNKU ABDUL RAHMAN**

Date: 16/8/2021

**SUBMISSION OF FINAL YEAR PROJECT**

It is hereby certified that Loo Ling Qian (ID No: :16AAB07332) has completed this final year project entitled "Relationship Between Academic Procrastination, Coping And Sense Of Coherence Among Undergraduate In Malaysia" under the supervision of Dr Siah Poh Chua (Supervisor) from the Department of Psychology and Counselling, Faculty of Arts and Social Science

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

Yours truly,



\_\_\_\_\_  
Name: Loo Ling Qian

*\*Delete whichever not applicable*

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

**FACULTY/INSTITUTE\* OF ARTS AND SOCIAL SCIENCE**  
**UNIVERSITI TUNKU ABDUL RAHMAN**

Date: 16/8/2021

**SUBMISSION OF FINAL YEAR PROJECT**

It is hereby certified that Tan Man Ting (ID No: 18AAB06850 )  
has completed this final year project entitled "Relationship Between  
Academic Procrastination, Coping And Sense Of Coherence Among  
Undergraduate In Malaysia" under the supervision of Dr Siah Poh Chua (Supervisor)  
from the Department of Psychology and Counselling, Faculty of Arts and Social  
Science

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

Yours truly,



\_\_\_\_\_  
Name: Tan Man Ting

*\*Delete whichever not applicable*

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



**FACULTY OF ARTS AND SOCIAL SCIENCE**

<b>Full Name(s) of Candidate(s)</b>	1. Leela A/P Murugan 2. Loo Ling Qian 3. Tan Man Ting
<b>ID Number(s)</b>	1. 18AAB06408 2. 16AAB07332 3. 18AAB06850
<b>Programme / Course</b>	PY
<b>Title of Final Year Project</b>	Relationship Between Academic Procrastination, Coping And Sense Of Coherence Among Undergraduates In Malaysia

Similarity	Supervisor's Comments (Compulsory if parameters of originality exceeds the limits approved by UTAR)
<b>Overall similarity index: <u>18</u> %</b>  <b>Similarity by source</b> Internet Sources: <u>12</u> % Publications: <u>12</u> % Student Papers: <u>7</u> %	
<b>Number of individual sources listed of more than 3% similarity: <u>0</u></b>	
<b>Parameters of originality required and limits approved by UTAR are as follows:</b> (i) Overall similarity index is 20% and below, and (ii) Matching of individual sources listed must be less than 3% each, and (iii) Matching texts in continuous block must not exceed 8 words <i>Note: Parameters (i) – (ii) shall exclude quotes, bibliography and text matches which are less than 8 words.</i>	

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

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



Signature of Supervisor

Name: SIAH POH CHUA

Date: 13 Aug 2021

Signature of Co-Supervisor

Name: \_\_\_\_\_

Date: \_\_\_\_\_