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FACULTY OF ARTS AND SOCIAL SCIENCE

Project Title: Academic self-efficacy, perfectionism, and perceived social support as predictors on academic procrastination among e-learning undergraduates in Malaysia during COVID-19 pandemic.

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ACADEMIC SELF-EFFICACY, PERFECTIONISM, AND PERCEIVED SOCIAL SUPPORT
AS PREDICTORS ON ACADEMIC PROCRASTINATION AMONG
E-LEARNING UNDERGRADUATES IN MALAYSIA DURING COVID-19 PANDEMIC.

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SUBMITTED IN
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ACADEMIC SELF-EFFICACY, PERFECTIONISM, AND PERCEIVED
SOCIAL SUPPORT ON ACADEMIC PROCRASTINATION

Academic Self-Efficacy, Perfectionism, and Perceived Social Support as Predictors
on Academic Procrastination among E-learning Undergraduates in Malaysia
during COVID-19 Pandemic.

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Universiti Tunku Abdul Rahman

This research project is submitted in partial fulfilment of the requirements for the
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APPROVAL FORM

This research paper attached hereto, entitled “Academic Self-Efficacy, Perfectionism and Perceived Social Support as Predictors on Academic Procrastination among E-Learning Undergraduates in Malaysia during COVID-19 Pandemic” prepared and submitted by “Chee Vane Yen, Foong Kar Whey, and Tay Xiao Ying” in partial fulfillment of the requirements for the Bachelor of Social Science (Hons) Psychology is hereby accepted.

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Abstract

The latest ongoing outbreak of the respiratory disease, COVID-19 brings global health in danger. Every university has taken action to transfer the physical learning mode to online learning mode to ensure education continuity. Thus, the current study was a cross sectional study aimed to investigate the predictive effect of academic self-efficacy, perceived social support and perfectionism (adaptive and maladaptive) on academic procrastination among e-learning undergraduates in Malaysia during COVID-19 pandemic. Social Cognitive Theory was used as the theoretical framework in the current study. A total of 177 participants were recruited by using purposive sampling method in which questionnaires were distributed via online platforms such as Facebook, WhatsApp and Instagram. 57.1% of the participants were females while 24.9% were males. 13% of them were Malays, 72.9% were Chinese, 12.4% were Indian and the remaining 1.7% were Kadazan and Melanau or Kanau. The instruments that were implemented in the current study were Level of Academic Self-Efficacy, Multidimensional Scale of Perceived Social Support (MSPSS), Almost Perfect Scale-Revised (APS-R) and Academic Procrastination Scale-Short Form (APS-S). The findings indicated that academic self-efficacy and adaptive perfectionism negatively predict academic procrastination while perceived social support and maladaptive perfectionism positively predict academic procrastination. The present study contributed more information and direction for the future studies to explore in the relevant topic. Relevant parties may also make use of the knowledge and information provided to implement effective and useful strategies to hinder the occurrence of academic procrastination.

Keywords: academic self-efficacy, perceived social support, adaptive perfectionism, maladaptive perfectionism, academic procrastination

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DECLARATION

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

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
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List of Abbreviations

Abbreviations

APS-R	Almost Perfect Scale-Revised
APS-S	Academic Procrastination Scale–Short Form
CMCO	Conditional Movement Control Order
COVID-19	Coronavirus Disease 2019
MCO	Movement Control Order
ODL	Online Distance Learning
RMCO	Recovery Movement Control Order
SCT	Social Cognitive Theory
SPSS	Statistical Package of Social Science
WHO	World Health Organization

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Chapter I

Introduction

Background of Study

The Coronavirus disease also known as COVID-19 is the latest ongoing outbreak of the respiratory disease which brings global health in danger. The onset of COVID-19 is started in Wuhan, China in the year of 2019 (Khan et al., 2019). According to Li et al. (2020), COVID-19 initially started via a zoonotic transmission at the seafood market at Wuhan and the subsequent outbreak is found through human-to-human transmission. This disease rapidly spreads from Wuhan to other places and even spreads to other countries. The World Health Organization (WHO) Emergency Committee announced that COVID-19 a global pandemic on 11th March 2020 due to the growing case rate at 118,000 cases of the COVID-19 virus in over 110 countries (Durcharme, 2020). On the 25th January 2020, there was the first confirmed case of COVID-19 detected in Malaysia whereby this started with three Chinese nationals who previously contacted a 66-year-old infected person in Singapore (Elengoe, 2020). The first death case in Malaysia was on 17th March 2020 (Yau et al., 2020). According to Tang et al. (2020) the reported confirmed cases of COVID-19 keep rising from the 14th March 2020. To date, there are 17105 new confirmed COVID-19 cases in Malaysia on 3rd of August 2021 (Ministry of Health Malaysia [MoH], 2021). Huang et al. (2020) stated that the symptoms of COVID-19 included fever, dry cough, and loss of taste or smell.

Malaysia's government has imposed a 14-day Movement Control Order (MCO) from 18th March 2020 to 31st March 2020 to prevent the situation from worsening (Prime Minister's Office

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of Malaysia, 2020). During the period of MCO, all mass movements and gatherings such as religious, sports, social and cultural activities were prohibited. According to “COVID-19 Malaysia Updates by MOH” (2020), Malaysians are also not allowed to travel overseas and for those who travelled back from overseas need to undergo a medical examination and self-quarantine for 14 days. Moreover, the operation of nurseries, government, and private schools are also prohibited during the MCO period. After the implementation of MCO, there are Conditional Movement Control Order (CMCO), Recovery Movement Control Order (RMCO) and Total Lockdown implemented in Malaysia. To date, there is a National Recovery Plan which is from 1st June 2021 to 29th June 2021. Here comes the changing of study mode of every student in Malaysia.

Every university has taken action to transfer the physical learning mode to online learning mode to ensure education continuity. Online Distance Learning (ODL) is a learning method whereby lecture classes, tutorial classes and course assessment are conducted through online platforms without any physical social interactions between lecturers and students (Allam et al., 2020). ODL is also interchangeable with the term e-learning (Keis et al., 2017) and virtual learning (Allam et al., 2020). These learning methods are often conducted through platforms such as Microsoft Teams, Zoom, Google Teams and other online platforms. According to Samat et al. (2020), ODL enhances the flexibility of students as they are now able to attend classes wherever they are. Students do not need to travel to their university and this also saves them time (Allam et al, 2020). Moreover, students are also able to learn and study at their own pace given that they can refer back to the lecture and tutorial classes recording any time they want. However, Daniel et al. (2020) stated that the COVID-19 pandemic brought a huge challenge to

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the education system. This is because online learning requires a high degree of students' self-motivation which is found lacking in learners (Ali, 2004).

However, there are difficulties for lecturers to monitor students' academic progress during online learning whereby students need to be self-monitoring their own performance. One of the main challenges that students need to cope with is academic procrastination as academic procrastination is a widespread problem behaviour among undergraduates (Zhang et al., 2018). According to Steel and Klingsieck (2016), academic procrastination is procrastination of the academic duties, tasks or activities. According to Fatimah et al. (2011), most of the university students admitted that they engaged in procrastination. During the pandemic, students tend to procrastinate their academic tasks with the reasons of the internet quota package, location of the house with poor internet access and the adaptation to new learning mode (Turmudi & Suryadi, 2021).

There is also research indicating that academic procrastination negatively impacts students on their course achievement in e-learning (You, 2015). As a result, the examination of the predictors of students' academic procrastination is worth to receive greater scholarly attention. In the research of Yee and Lai (2021), academic procrastination increases the risks of delayed graduation among university students. The skills and competencies of students are influenced by academic procrastination and this will prevent them from academic success.

Bandura (1997) defined academic self-efficacy as the students' belief that their ability to be successful in academic studies. The current study investigated how self-efficacy in academic related to academic procrastination. According to Hen et al. (2014), there are research findings

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suggesting that motivation variables such as self-efficacy are related to academic procrastination. Another research conducted stated that academic procrastination can be predicted through perception of academic self-efficacy (Kandemir, 2014a). Kandemir (2014a) explained that unrealistically trusting academic behaviour such as students will think that all homeworks can be easily completed may lead to procrastination in completing the duties. This is because self-efficacy plays an important role in preventing procrastination (Klassen et al., 2008).

In another perspective, social support is considered to have an influence on academic procrastination (Madjid et al., 2021). Perceived social support is defined as the availability of support resources when they are needed (Gulacti, 2010). There are three sources which provide different support under perceived social support which are family, friends and significant others (Zimet et al., 1988). There is research indicated that the level of academic procrastination could be reduced by perceiving social support from family, friends and the school (Madjid et al., 2021). Additionally, Erzen and Cikrikci (2018) stated that social support from family is a significant predictor toward academic procrastination. Most students stay at home during the MCO period to undergo their online learning whereas the effect of social support from family on academic procrastination needs to be discussed. In addition, perceived social support can be a direct predictor to academic procrastination. Students with poor relationships with parents tend to procrastinate more as they need to spend time on experiencing and solving the conflicts emotionally or physically.

Furthermore, educators agree that it is essential to reduce academic procrastination as it will lead to negative outcomes such as low academic performance and low life satisfaction (Kim

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& Seo, 2015; Ozer, 2011). There are many researchers who have linked academic procrastination with several factors such as personality types, motivation and self-regulation but less research focus on perfectionism (Aremu et al., 2011; Rakes et al., 2010). There are adaptive perfectionism and maladaptive perfectionism under perfectionism. They played different roles in academic procrastination whereby adaptive perfectionism is negative predictor while maladaptive perfectionism is considered as positive predictor toward academic procrastination (Shih, 2016). Capan (2010) stated that perfectionists have high standards for themselves and they tend to procrastinate because they do not believe that they can achieve the standard. Hence, the present study aims to examine the predictions of adaptive perfectionism and maladaptive perfectionism on online learning academic procrastination among undergraduates in Malaysia during COVID-19 pandemic.

Problem Statement

Since the Malaysian government introduced the movement control order (MCO), educational institutions have taken steps to ensure that students can continue learning even while staying at home. Both education institutions and students need to adapt to the new learning model which is online learning also known as e-learning. Distancing learning during the COVID-19 pandemic can contribute to academic delay (Jia et al., 2020). The COVID-19 epidemic, which necessitates online learning, seems to have boosted academic procrastination, despite the lack of solid data (Arifiana et al., 2020). According to García-Montalvo (2021), the issue of academic procrastination, especially young university students should be taken seriously and considered during the presence of the COVID-19 virus. Janssen (2015) reported that

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academic procrastination occurred among undergraduate students more than graduate and high school students. It was reported that “delaying behaviours” were predicted to affect 95% of pupils (Rabin et al., 2011). It is rather frequent among students, particularly in academics, and has a negative impact on their well-being and performance. It may also cause anxiety and emotional distress, lowering one's quality of life (Nayak & Shalini, 2019). In the long run, the procrastinator will be more dissatisfied. Procrastination has a negative impact on students' well-being due to low self-esteem which is related to their poor academic performance (Duru et al., 2017)

Academic self-efficacy relates to students' beliefs and attitudes about their capacities to succeed academically, as well as their belief in their capacity to complete academic assignments and understand the contents effectively (Bandura, 1997, Schunk et al., 2000). Dike et al. (2019) and Li et al. (2020) discovered a negative relationship between these two variables, which are academic self-efficacy and academic procrastination. In contrast, Zusya and Akmal (2016) found no significant relationship between these two variables, self-efficacy and academic procrastination among students, in their research. Meanwhile, Wessel et al. (2019) stated that active procrastination has a positive relationship with self-efficacy due to their confidence that they will finish the task even if they delay it. Previous above-mentioned studies have investigated the relationship between academic self-efficacy and academic procrastination. However, the predictive relationship between these two variables were not extensively studied (Hen et al., 2014; Liu et al., 2020).

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Furthermore, there are some research gaps that should be addressed. Social support can be one's feeling of comfort whether physically or mentally by gaining from people surrounded by the environment (Ferreira et al., 2019). In non-pandemic contexts, research has shown a negative correlation between social support and academic procrastination (Al-Rosyid, 2018; Sari & Fakhriddiana, 2019; Mohammadzadeh et al., 2021). To put it simply, more social support predicted less academic procrastination and vice versa. However, there is limited research about the role of perceived social support on academic procrastination during this lockdown period. People in Malaysia need to practice social isolation and social distancing by staying at home, minimizing travel, avoiding crowded places, practicing no-contact greetings, and physically distancing between individual to prevent the spread of COVID-19 (Nussbaumer et al., 2020, Pelikan et al., 2021).

According to Stoeber and Otto (2006), perfectionism is a multidimensional trait with two different dimensions: adaptive perfectionism and maladaptive perfectionism. According to Shim et al. (2016), perfectionism should boost student's academic engagement while developing student's academic procrastination when they have excessively high standards. According to Closson et al. (2017) and Raoof et al. (2019), there is no significant relationship between procrastination and student's academic procrastination. In contrast, Taluy (2020)'s research stands on a different line from previous above-mentioned statements. This study discovered that academic procrastination positively correlated with perfectionism among university students. Furthermore, adaptive perfectionism was shown to be a negative predictor of procrastination, while maladaptive perfectionism was discovered to be a positive predictor (Kurtovic et al., 2019). Due to the inconsistencies of the results, the current study is necessary to investigate the

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predictive role of these two types of perfectionism on academic procrastination among university students during this pandemic.

Other than that, the target sample of these studies which drew a relationship of student's academic self-efficacy or perfectionism on academic procrastination were insufficient to be generalised (Ghosh et al., 2017; Gungor, 2020; Malkoc et al., 2018; Wessel et al., 2019). However, enrolling students from the same institution (sample sampling pool) resulted in single-source bias, indicating that present study results are not generalizable (Shuen et al., 2021; Taluy, 2020). It was recommended additional research with a broader student population would assist to strengthen the study's findings (Dike et al., 2019; Ghosh et al., 2017). In other words, a wider range and variety of target sample students from different universities are needed to control the effect of the research design stage.

Self-efficacy was shown to be a negative predictor of procrastination among college students in a research by Ghosh et al. (2021). However, there are only limited studies that examined the predictive effect of self-efficacy, perfectionism and perceived social support on academic procrastination and these results may be non-applicable of the findings into Malaysia context (Al-Rosyid, 2018; Boriek, 2020; Kurtovic et al., 2019; Madjid et al., 2021). This strengthened the need to develop a conceptual model with the use of Bandura's Social Cognitive Theory particularly in the local context. Another cause for students displaying high levels of procrastination could be cultural influences on values (Hong et al., 2021; Uma et al., 2020). In other words, the suitability to apply these results in the non-Western context, such as Malaysia setting is still unclear. Therefore, in order to provide the public with more information about

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academic procrastination in Malaysia and to contribute to further studies, it is significant that a descriptive quantitative study is conducted to determine the predictors of academic procrastination among undergraduates during the virtual learning COVID-19 pandemic in Malaysia.

Research Questions

1. Does academic self-efficacy, perceived social support and adaptive perfectionism predict academic procrastination negatively among e-learning undergraduates in Malaysia during COVID-19 pandemic?
2. Does maladaptive perfectionism positively predict academic procrastination among e-learning undergraduates in Malaysia during COVID-19 pandemic?

Research Objective

1. To investigate the predictive effect of academic self-efficacy, perceived social support and perfectionism (adaptive and maladaptive) on academic procrastination among e-learning undergraduates in Malaysia during COVID-19 pandemic.

Hypotheses

H₁: Academic self-efficacy negatively predicts academic procrastination among e-learning undergraduates in Malaysia during COVID-19 pandemic.

H₂: Perceived social support negatively predicts academic procrastination among e-learning undergraduates in Malaysia during COVID-19 pandemic.

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H₃: Adaptive perfectionism negatively predicts academic procrastination among e-learning undergraduates in Malaysia during COVID-19 pandemic.

H₄: Maladaptive perfectionism positively predicts academic procrastination among e-learning undergraduates in Malaysia during COVID-19 pandemic.

Significance of Study

The current study aims to investigate the predictors, which are academic self-efficacy, perceived social support and perfectionism on academic procrastination among Malaysian undergraduates throughout the virtual learning of the COVID-19 pandemic. The findings of this study aims to fill the research gaps of the predictors on academic procrastination as most of the past research about academic procrastination were conducted before the pandemic and physical learning was still implemented back then. Additionally, majority of the past research was conducted in a different context and there are limited studies conducted in the non-western countries. Hence, the findings of this study could provide a clearer understanding of the predictors on academic procrastination in the Malaysian context. It could contribute to further studies and researchers who have interest in exploring this particular topic.

Furthermore, this study contributes and provides insight to the application of Social Cognitive Theory (SCT) in the field of academic procrastination. There are inadequate studies that applied the SCT in their research especially during the e-learning period of the pandemic. Meanwhile, studies that were done on academic procrastination throughout the pandemic period did not highlight the theory (e.g., Peixoto et al., 2021; Rahdadella & Latifah, 2020; Rahimi & Vallerand, 2021). Hence, the current study contributes theoretically as the application of SCT is

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expanded to explain the interaction between academic-self efficacy, perfectionism, social support and academic procrastination in this study.

The findings of this study could be beneficial to the society considering that all education institutions are required to implement ODL due to the ongoing COVID-19 pandemic and students are required to attend classes virtually. According to Suhadianto et al. (2021), the academic procrastination during COVID-19 has an effect on the individual's subjective well-being. Sulaiman and Hassan (2019) also stated that academic procrastination causes various negative effects on the physical and mental health of an individual. With the findings of this study, the awareness of the people towards academic procrastination can be raised and they would give more attention to this issue. Thus, the society can cooperate to develop interventions and approaches to reduce the issue in order to ensure the well-being of the people especially students who are undergoing a huge amount of stress.

Academic procrastination has been found to bring many negative effects such as academic misconducts (Patrzek et al., 2014) and poor academic performance (Rajapakshe, 2021). The findings of the present study might provide useful information for practical significance. The Ministry of Higher Education, universities and faculty management and educators such as lecturers and tutors are able to gain a clearer vision and idea on the predictors of academic procrastination. Therefore, effective and useful methods can be planned to control the academic procrastination of their students.

Moreover, the findings might have the potential to help students to determine their own level of self-efficacy and perfectionism pattern in learning. Students would be able to gain more understanding about themselves with the information that is found in the study. Through this

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study, they could become aware of their academic self-efficacy, social support and perfectionism which they can then make changes accordingly so that academic procrastination does not occur and hinder their learning process. By being aware of their pattern of perfectionism, they could either reach out for help to the school counsellors, lecturers and closed ones to seek support and try to modify their maladaptive perfectionism or maintain their adaptive perfectionism.

Additionally, the family members, friends and close ones of the student could provide support based on the findings of this study. They are expected to provide support by giving inputs, ideas, suggestions and assistance to the students in order for them to try harder in completing their academic tasks (Al-Rosyid, 2018).

Conceptual Definitions

Academic self-efficacy

Academic self-efficacy is a personal opinion that the student can effectively accomplish an academic task at expected levels (Schunk & Pajares, 2002; Tsai & Tsai, 2010). Academic self-efficacy was developed from Bandura's theory of self-efficacy. It refers to one's belief (conviction) that they can accomplish or achieve a particular academic goal or degree."

Perceived Social Support

Mohebi et al. (2018) describe social support as a psychological sense of belonging, acceptance, and help that enables people to deal better with stressful situations. According to Yildiz et al. (2017), social support refers to the elements or capacities that enable individuals to sustain themselves. As such, social support may be defined as the skills or situations that make people's lives easier in their social environment. Social support, in other words, is the

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instrumental and articulated reality or perception supplied by the community, social networks, and trustworthy relationships.

Perfectionism

Perfectionism has been identified as a personality characteristic linked with ambitions for flawlessness, excessively high standards, and the perception of one's conduct via a critical lens (Flett & Hewitt, 2002). Additionally, perfectionism is best defined as a multidimensional attitude (Hewitt et al., 2003). Whereas several models of perfectionism have proposed distinct dimensions, factor-analytic investigations have demonstrated that the theories' diverse dimensions constitute two higher-order components (Bieling et al., 2004; Frost et al., 1993; Hewitt & Flett, 1991). The two different factors were called adaptive perfectionism and maladaptive perfectionism. (Frost et al., 1993). Individuals with adaptive perfectionism focus on what they have accomplished rather than the gap between their high standards and their thoughts about their inability to achieve (Stoeber and Otto, 2006). Conversely, individuals with maladaptive perfectionism (Discrepancy) are anxious about making mistakes, sensitive to criticism, and have a tendency to ruminate on events (Hamachek, 1978).

Academic Procrastination

Academic procrastination is described as the deliberate postponement of academic work due to a fear of making mistakes, as well as delaying academic duties such as test preparation or assignment submission until the last moment (Milgram et al., 1998; Schouwenburg, 1995). According to Moonaghi et al. (2017), this form of procrastination is described as a persistent tendency to put off academic duties and is nearly always associated with anxiety.

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Operational Definitions

Academic self-efficacy

Level of Academic Self-Efficacy was developed by Sachitra and Bandara (2017) by adapting and modifying the instrument developed by Byrne (2014) and Matoti (2011). It consists of a total of 20 items questionnaire. Academic Self-efficacy includes students' confidence to ask and answer questions, attitude on seeking assistance from lecturers, ability to develop their own study plan, and willingness to participate in academic discussion and note-taking among classmates. It was formerly used to assess one's academic self-efficacy using a five-point Likert scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*). The higher scores refer to high academic self-efficacy and vice versa.

Perceived Social Support

The Multidimensional Scale of Perceived Social Support, developed by Zimet et al., (1988), was used to assess one's perceived social support in this research. It consists of a total of 12-item questionnaires and maintains a focus on three sources which are family, friends, and significant others. On a 7-point scale, the Likert scale runs from 1= very *strongly disagree* to 7= very *strongly agree*. Low support is classified as a score between 1 and 2.9 on the mean scale; moderate support is considered as a score between 3 and 5; and strong support is considered as a score between 5.1 and 7. The higher scores refer to high perceived social support and vice versa.

Perfectionism

The Almost Perfect Scale-Revised (APS-R) was developed by Slaney et al. (1996) and includes three dimensions which are high standards, order, and discrepancy. There are two types

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of perfectionism, including adaptive and maladaptive perfectionism. 23-item self-report questionnaire was aimed to assess and distinguish both adaptive and maladaptive aspects of perfectionism. On a 7-point scale, the Likert scale runs from 1= *strongly disagree* to 7= *strongly agree*. Standards and order scored high by both adaptive and maladaptive perfectionists, while Discrepancy only scored high by maladaptive perfectionists.

Academic Procrastination

Academic Procrastination Scale–Short Form (APS-S) created by McCloskey (2011) is a five-item Likert-type scale with anchors. The Likert range ranges from 1 (*Agree*) to 5 (*Disagree*) with 5 questions for the short version drawn from the 25-item full length scale. It is aimed to assess one’s level of academic procrastination. The higher the score on the scale, the greater the tendency to procrastinate on academic tasks (Yockey, 2016).

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Chapter II

Literature Review

Conceptualizing on Academic Procrastination

Academic procrastination has been describing the overall tendency to postpone academic tasks in an educational setting. Academic procrastination is defined as the tendency to delay academic related tasks with the feeling of anxiety (Balkis & Erdinc, 2017). Academic procrastination is the extent of this phenomenon among students, according to Abdi Zarrin and Gracia (2020), and the bad influence on their academic success requires further attention and research on this issue. It is a common issue among students, and many students must cope with it throughout their education, owing to the adverse effects, which include academic failure and decreased well-being (Balkis & Erdinc, 2017).

According to Zhang et al. (2018), academic procrastination is a common problem behavior among university students. University students' academic procrastination included working on and submitting assignments, studying for exams and other academic related duties. Afzal and Jami (2018) stated that procrastinators are people who have the intention to do any task, but they choose to delay or spend time in less important activities or pleasure. The prevalence of academic procrastination is high while one-fifth of the adult population reported that they are unable to keep pace with their daily homework (Abdi Zarrin & Gracia, 2020). Symptoms of academic procrastination are poor sleep, high levels of stress, delayed work owing to lack of time, inappropriate completion of assignments, bewilderment, self-blame, feelings of shame and inadequacy, low self-esteem, anxiety, and melancholy (Custer, 2018). Steel (2007)

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showed that 80 percent to 95 percent of pupils suffered from work issues related to procrastination.

Academic Procrastination in the context of Online Distance Learning (ODL)

Educational system in Malaysia has been affected due to the outbreak of COVID-19. Online Distance Learning (ODL) needs to be implemented to take the place of traditional physical learning due to the pandemic. There are students reported that they spend more time sleeping, using social media, gaming and procrastinating during online distance learning (Usher et al., 2021). According to Klingsleck et al. (2012), distance learning is connected with procrastination as distance learning requires more self-regulation than traditional university setting. In their research, they reported that the participants of distance university students consider their studies as part-time jobs while participants of traditional university students consider their studies as full-time jobs. However, in the COVID-19 pandemic, every student is required to practice online distance learning which they have no choice on selecting the study mode. Klingsleck et al. (2012) also stated that an unstructured learning environment will increase the chances of procrastination among students. At the same time, students need to integrate academic learning in the context of work and family concerns. During online distance learning, students need to guide themselves in their academic progress. Hussain and Sultan (2010) stated that lack of guidance and encouragement and inappropriate time management are considered as factors towards academic procrastination. Khoirunnisa et al. (2021) indicated that the use of the Internet in distance learning has the opportunity to be misused in accessing things that are irrelevant to academics. They stated that students who use the Internet for more than four hours

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tend to have higher academic procrastination compared with students who use the Internet for less than four hours.

In addition, academic procrastination brings negative impacts such as academic misconduct, academic achievement and others (Patrzek, 2015 & Haghani, 2014). Students with online distance learning faced unsuccessful time management behavior in assignments which they might have done the assignments in a rush before the deadline. This will lead them to submit an incomplete or poor-quality assignment (Yilmaz, 2017). According to Abdi Zarrin and Gracia (2020), academic procrastination will reduce the level of satisfaction on the individual's performance. However, people are fully aware of the negative impacts of the delay on academic responsibilities.

Conceptualizing on Academic Self-Efficacy

According to Bandura (1994), self-efficacy is people's belief that their capabilities to perform certain behavior successfully. People with low self-efficacy may avoid certain behavior while people with high self-efficacy sustain and heighten their behavior in facing difficulties. Self-efficacy has been defined in various ways, but (Bandura, 1977) defines it as a mix of self-confidence, self-reliance, and self-trust. Self-efficacy is about how well a person feels they will achieve the desired goal in a particular field (Bandura, 1977). It does not refer to how much a person likes themselves or how much they may like the work at hand. In education, self-efficacy is a significant contributing element to learners' success since it impacts learners' decisions and the courses of action they adopt (Malkoc & Kesen Mutlu, 2018).

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Academic self-efficacy is students' belief on their ability to perform academic related tasks successfully (Chu & Choi, 2005). Individuals with high self-efficacy willing to heighten their efforts when facing challenges and able to develop strategies against the challenges (Sirin, 2011). Moreover, students with high self-efficacy are more easily engaged in self-regulated learning and create constructive learning environments (Dale & Maria, 2016). For example, they will set their own goals, use the right learning strategies, monitor their own progress, reduce distractions and others.

Academic Self-Efficacy and Academic Procrastination

Klassen et al. (2008) stated that another key to understand academic procrastination is self-efficacy. The researchers explained that self-efficacy is a strong prediction on performance in academic settings as it is associated with the correspondence to the tasks and the level of specificity of the tasks. Ying and Lv (2012) also indicated that self-efficacy plays an important role in academic procrastination as self-efficacy determines the initial decision to perform a behavior. They explained that students with high self-efficacy are confident in their ability to complete academic tasks and deal better with challenges while students with low self-efficacy perceive academic tasks as difficult and avoid performing the tasks. Hence, the study stated that students with low self-efficacy are more likely to procrastinate in academic tasks.

Individuals' self-efficacy beliefs contribute to their exceptional performance by improving their dedication, effort, and perseverance (Pintrich, 2003). Learners with high self-efficacy attribute their failures to insufficient attempts rather than insufficient ability, whereas those with low self-efficacy attribute their failures to insufficient ability (Kurbanolu et al., 2010).

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As a result, self-efficacy can influence task selection and persistence while performing them. In other words, students who lack self-efficacy are more likely to avoid, postpone, and abandon their responsibilities (Bandura, 1997; Schunk & Ertmer, 2000).

Besides that, in Aydogan and Ozbay (2011), they studied students' preparation for university examination while the result showed that there is a negative relationship between academic self-efficacy and academic procrastination. The result is supported by Wu and Fan (2017) which explained that students with high self-efficacy are more likely to engage and put effort in academic tasks. Students can choose to fight or flight from their academic tasks. Fight refers to students coping with the challenges of academic tasks and completing the tasks while flight is when students avoid and delay in doing the tasks (Swaraswati et al., 2017).

On the other hand, Kandemir (2014a) stated that the influence power of self-efficacy on academic procrastination will be decreased due to other stronger variables on academic procrastination such as life satisfaction, self-regulation and others. Kandemir (2014b) indicated that there is a positive and significant relationship between academic self-efficacy and academic procrastination. In the research, he explained the result with unrealistic academic trusting behaviors. Unrealistic trusting behaviors refer to students who might feel that the academic tasks are easy to complete and delay in completing the tasks then end up with finishing the tasks in last minute time.

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Conceptualizing on Perceived Social Support

Social support is the social resources available when an individual is in need (Friedlander, 2007). Take it as an example, social support included advice, instruction, trust, shelter, companions and others. Additionally, several additional research indicates that perceptions of the assistance provided are more beneficial than the actual assistance received (Taylor et al., 2004). This is consistent with the findings of study conducted by Shumaker and Hills (Taylor et al., 2004), which indicated that receiving excessive social support when it is not required can increase stress. Perceived social support refers to the extent to which individuals received social support from various sources which are friends, family members and significant others (Zhao et al., 2021). Bukhari and Afzal (2017) explained individuals with feeling being supported develop a sense of being loved, cared and understood by their significant others. Zhao et al. (2021) also stated that perceived social support can improve individual ability to cope with stressful events in terms of cognitive, emotional and behavioural. The result is aligned with Yildiz and Karadas (2017) who explained that perceived social support will help individuals to cope with stressful events with a more positive evaluation. This means that students will view the stress from the tasks in a more positive view instead of being distressed.

Danielsen et al. (2010) explained that social support plays an important role in students' positive attitude towards school assignment. Social support is significantly associated with academic initiative. Academic initiative refers to students' experiences of goal setting, planning and effort on academic related tasks. Students who received support during their way of achieving their goals are happier and more motivated to attain the goals. Furthermore, Bukhari

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and Afzal (2017) stated that perceived social support is negatively associated with depression and anxiety. When students receive support from others, their emotional needs are being fulfilled. If they are unable to receive support from their friends, family members or significant others, there will be an increase in their depression, anxiety and stress level.

Perceived Social Support and Academic Procrastination

As mentioned above, perceived social support is when an individual receives social support from friends, family members or significant others (Zhao et al., 2021). Students with lack of social support from friends, family members and teachers reduced their risk taking (Al-Shagaheen, 2017). Social support is important for students no matter in terms of informational help or physical help. Social support can assist in solving students' problems and make them more eager to complete their tasks (Sari & Fakhruddiana, 2019). A high level of social support is able to motivate students to complete their academic tasks. On the other hand, the absence of social support will make students feel distressed and they will feel that they are unable to complete the tasks. Tuasikal and Patria (2019) stated that social support has a negative relationship with procrastination. This means that students with high social support tend to have low procrastination while students with low social support tend to have high procrastination in academic tasks. However, students with online learning have difficulty in receiving social support and identification of peers due to the far distance and lack of nonverbal communication cues (Broadbent, 2017).

According to studies (Kennedy et al., 1988; Wentzel, 1999), social support can impact students' procrastination when it comes to working on their final project. Parents, other family

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members, and peers' perceived social and emotional support is positively associated with students' motivation (Al-Rosyid, 2018). In addition, parent, peer, and other support may amplify the effect of stress on motivation through enhancing welfare (Wentzel, 1999).

Social support influences students' motivation to succeed academically by encouraging them to pursue socially worthwhile goals and ambitions (Ryan 2000, 2001; Wentzel 1998). Perceived social support leads to stronger motivation, psychological and physical well-being has an impact and prediction on academic performance (DeBerard et al., 2004; Dubow et al., 1991; Robbins et al. 2004).

According to Al-Rosyid (2018), students who delay (procrastinate) completing their final tasks require social support from their immediate environment. Students view perceived social assistance as "helpful" because they feel loved and accepted. Therefore, family, friends, peers, and the surrounding environment are expected to provide support in suggestions, recommendations, instructions, feedback, and assistance to assist them in completing the study they are undertaking within the predetermined time frame.

Erzen and Cikrikci (2018) stated that perceived social support from family plays an important role in predicting academic procrastination. According to Klink et al. (2008), they indicate that family support is a common reported source by undergraduate students in facing academic difficulties. Parents who are in the closest environment with students have an impact on the student's educational process (Anwar & Qonita, 2019). They also explained that parents can provide assistance, support and motivation to students in strengthening their abilities in academic. Support from parents can develop a good parent-child relationship while a good

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relationship can motivate the children. Anwar and Qonita (2019) explained that an increase in motivation will lead to a decrease in academic procrastination and vice versa.

During this pandemic, students tend to keep in touch with their friends through online platforms such as Facebook, Instagram, Telegram and others (Tan et al., 2021). Chen et al. (2016) indicated that peer is an important factor in understanding procrastination among undergraduate students. Sari and Fakhruddiana (2019) also revealed that students' tendency to procrastinate depends more on support from friends. This is explained with students with high social support tend to spend much time together with their friends. They discuss tasks, exchange information and complete their tasks together (Tuasikal & Patria, 2019).

Eggen et al. (2008) found that support from significant others is an essential source in social support. Additionally, Cutrona et al. (1994) stated that support from peers and romantic partners, but especially from parents, would improve well-being and thus contribute to the explained variance in academic performance. Parental support is believed to be the most influential, as it contributes to the development of a sense of self-worth and self-efficacy and enables the acquisition of skills and self-confidence necessary to master new situations and cope effectively with challenges (Cutrona et al. 1994; DuBois et al. 1994; Dubow et al. 1991; Levitt et al. 1994).

Conceptualizing on Perfectionism

Perfectionism is a personality trait characterised by an obsession with the pursuit and attainment of extremely high performance standards, as well as overly critical self-evaluation

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tendencies (Lo et al., 2019a; Stoeber, 2018). One of the most prevalent multidimensional ways to study perfectionism, according to Lo et al. (2019a), defines the concept as having both adaptive and maladaptive components (Stoeber & Otto, 2006).

According to Shih (2016), adaptive perfectionism sets high personal standards and aims for success while avoiding psychological distress. According to Arazzini and George-Walker (2014); Kanten and Yesltas (2015), adaptive perfectionism is related to positive affect, life satisfaction, psychological well-being, and conscientiousness. Several studies also stand in line by stating that adaptive perfectionism will bring out different positive consequences. These positive outcomes include factors like life satisfaction, resilience, extraversion, conscientiousness, self-efficacy, and academic success (Chang & Banks, 2004; Hicks & Wu, 2015). Such findings demonstrate that perfectionism is not just linked to "self-defeating" or "pathological" ideas, as previous research has suggested, but also to "adaptive" beliefs that have a "functional" role (Lo et al, 2019b; Park & Jeong, 2015).

According to Shih (2016), the distinction between adaptive and maladaptive perfectionism may primarily explain individual differences in self-regulatory approaches. Maladaptive perfectionism's behaviour is motivated by avoiding failure or mistake. Individuals who have maladaptive perfectionism tend to associate mistakes with failures and are concerned that failure will result in the loss of others' respect (Kawamura et al., 2002). Maladaptive perfectionists are prone to being too preoccupied with mistakes and interpreting them as failures due to their critical evaluation inclinations. According to Shih (2016), "maladaptive perfectionists" have been found to endorse a more significant number of beliefs related to

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excessive concern about mistakes, doubts about their abilities, self-criticism, high threat appraisal, poor self-esteem, and inferiority emotions (Lo et al., 2019b). Anxiety, depression, suicidality, and neuroticism have all been linked to maladaptive elements of perfectionism (Bieling et al., 2004; Rice et al., 2012). According to Shih (2016), maladaptive perfectionists are expected to procrastinate their work or job until the last minute. They were built on the idea of perfectionism as a multifaceted entity with both adaptive and maladaptive elements.

Perfectionism and Academic Procrastination

The discovery of two varieties of perfectionism has the potential to widen the academic view of perfectionism, which has previously been limited to its dysfunctional aspects (Bieling et al., 2004). Some studies stated that setting high personal standards demonstrates a positive attitude toward learning, which is linked to a preference for challenging tasks and a willingness to work hard (Blatt et al., 1976; Stoeber & Rambow, 2007). Shih (2016) claims that repeated self-criticism as a consequence of failures to meet previously set high standards may lead to emotions of shame, humiliation, and worthlessness, which can lead to procrastination (Dunkley et al., 2006). Students' attitudes toward academics may be influenced by their expectations of success or their fear of failure. Moreover, unpleasant reactions to mistakes may lead to avoidance behaviours such as academic procrastination (Solomon & Rothblum, 1984).

As previously stated, fear of failure and evaluation anxiety may cause students to delay beginning academic work, according to Shih (2016). Students' perfectionistic tendencies are likely to predict their tendencies to procrastinate in their academics (Burnam et al., 2014; Onwuegbuzie, 2000). According to Kurtovic et al. (2019), procrastination behaviour of

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perfectionists is due to them setting unrealistically high standards and believing these standards are unattainable. As a result, they are never happy with their performance or afraid of making a mistake and receiving negative feedback.

Adaptive perfectionism is thought to be associated with productive engagement, which may protect students from procrastination due to these traits (Burnam et al., 2014).

Perfectionists who are adaptive and "healthy" seek to accomplish. Rice and Ashby (2007) and Seo (2008) found that they are more successful at utilizing metacognitive and cognitive learning abilities, have better time management skills (Klibert et al., 2005), and have a high degree of self-efficacy (Locicero & Ashby, 2000). However, according to Kurtovic et al. (2019) adaptive aspects of perfectionism are either unrelated or adversely linked to procrastination.

Conversely, Kurtovic et al. (2019) stated procrastination is consistently linked to maladaptive components of perfectionism. Maladaptive perfectionists have high expectations in themselves; a strong sense of self-blame when they did not achieve their expectation or standard (Rice & Ashby, 2007). Diagnostic and continuous anxiety about errors, doubt about one's skills, emotions of guilt and humiliation are all examples of maladaptive, "unhealthy perfectionism" (Fedewa et al., 2005). They are motivated by a fear of failing and anxiety about what others would think if they fail to accomplish their goals. They also avoid certain circumstances, such as refusing to provide an answer unless they are confident of it, which causes them to postpone even more.

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Theoretical Framework

According to Social Cognitive Theory (SCT) by Bandura (1989), the theory describes that learning occurs with the reciprocal interaction between the person, environment and behaviour. The key concept of SCT is the triadic reciprocal determinism which explains and takes into account the other concepts of SCT such as self-efficacy, behavioural capability, observational learning, reinforcements, expectations and expectancies. The application of SCT has been widely used in various scenarios and fields; it has been used in perception of cheating (Burnett et al., 2016), human resource management (Voo et al., 2018), and consumer behaviour intentions (Young et al., 2005). It has also been used in academic procrastination (Bakar & Khan, 2016; Corkin et al., 2014; Kagen et al., 2010; Soysa & Weiss, 2014) and active procrastination (Liu et al, 2017).

The triadic reciprocal model revolves around three factors: personal factors (P), environmental factors (E) and behavioural factors (B). These three factors show reciprocal influences to each other. In other words, every one of these factors has an influence on the other but is also influenced by the other factors (Schunk & DiBenedetto, 2019). Although the factors all have a certain influence on one another, the factors may not influence one another equally nor does it happen all together at the same time (Bandura, 1989).

Personal factors refer to the affective component and cognitive component of an individual such as their feelings, emotions and thoughts. Lerner (1982) stated that physical characteristics of a person such as age, sex, race and appearance are also considered as personal factors. Meanwhile, environmental factors can be understood as the physical and social environment of the individual. According to Thorgensen (2010), environment variables can also

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be explained as factors that are physically external to the individual. For example, the access of certain facilities, presence of others and the belief of others. Behavioural factors are the actions that are done by the individual such as the effort exerted, strategies implemented and activities done.

The reciprocal interaction between the individual and their behaviour is influenced by their ideas, beliefs, feelings and actions. According to Bandura (1989), one's personal factors provide direction for the individual's behaviour. For instance, one's belief, expectation and experience affects how one acts and behaves. In the study by Burnett et al. (2016), SCT served as a guidance to their study whereby the behaviour of students (i.e., academic dishonesty) are influenced by the personal factors of students (i.e., beliefs, expectations, goals). Additionally, Luthans et al. (2012) also applied SCT in their study to explain the influence of psychological capital of students on academic performance. On the other hand, the actions and behaviours of an individual also plays a part in determining their thinking pattern, feelings and mood (Bandura, 1989). For instance, the performance (behavioural factor) of an individual affects the individual's sense of achievement (personal factor).

Besides that, the reciprocal causation between personal factors and environmental factors shows how personal characteristics, physical environments and social environment interact. Bandura (1986) mentioned that the presence and action of others contributes to the development and changes of an individual's beliefs, expectation and emotions through the process of modelling, instruction and social persuasion. The environmental cues such as atmosphere also affect the cognitive process and affective process of an individual. For instance, different types of music have different effects on one's cognitive and affective engagement (Hwang & Oh,

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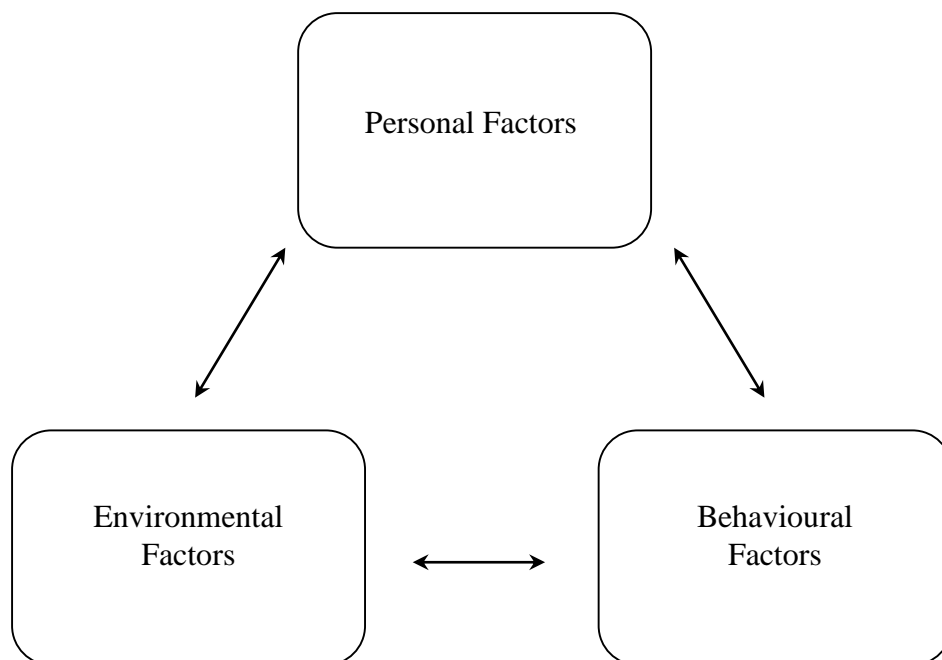
2020). Besides that, Lerner (1982) stated that the reaction of others depends on the personal factors of whom they are interacting with whereby the age, race, status and reputation of an individual could affect how they are treated and viewed by others.

Other than that, the reciprocal influence between environmental factors and behavioural factors are also a part of the model. The two factors affect one another very closely. For instance, the aspect of $E \rightarrow B$ can be seen when a lecturer asks the students to pay attention, the students then look to the white board while for $B \rightarrow E$, when the students raise their hand and say that they do not understand, the lecturer will explain again instead of continuing to the next chapter (Schunk, 1989). In the study of Corkin et al. (2014), they used SCT to describe the influence of classroom climates (i.e., support of instructor, academic press) on academic behaviour (i.e., academic procrastination); this shows the aspect of $E \rightarrow B$. Khudzari et al. (2019) also applied SCT to construe $E \rightarrow B$ whereby the syllabus, relevancy of assignments and comments of assignments influences student's failure. However, Bandura (1989) also stated that environmental aspects act as an influence only when being activated by specific behaviours; hence, the potential environment becoming the actual environment of an individual depends on how they behave. For instance, lecturers can only influence students if they attend the class (Bandura, 1989).

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Figure 2.1

SCT Framework



Conceptual Framework

In this research study, academic self-efficacy, perceived social support and perfectionism (adaptive, maladaptive) is hypothesized as predictors towards academic procrastination among virtual learning undergraduates in Malaysia. The current study builds on the SCT theory whereby academic self-efficacy and perfectionism are personal factors, perceived social support is an environmental factor and academic procrastination is the behavioural factor. One is predicted to have lower academic procrastination with higher academic self-efficacy, higher social support and adaptive perfectionism. Meanwhile, those with maladaptive perfectionism are predicted to be more likely to engage in academic procrastination. Hence, the application of SCT in the study

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is able to investigate whether academic self-efficacy, perfectionism and perceived social support predicts academic procrastination among undergraduate students involved in virtual learning in Malaysia.

SCT was integrated into this study as the variables of this study are related to the key concept of the SCT model. According to Schunk (2012), behavioural influences are the motivational outcomes such as choice of activities, effort and performance. Therefore, the behavioural factor in this study would be academic procrastination.

Academic self-efficacy and perfectionism are both understood as the personal factor (P) of the triadic reciprocal model. According to Schunk (2019), personal factors include the processes that assist in the initiation and sustain of motivational outcome. Sharma and Nasa (2014) stated that self-efficacy is defined as an individual's personal determination on their ability to complete a particular task. Malkoc and Mutlu (2018) has reported that academic self-efficacy has a significant inverse predicting effect on academic procrastination. Additionally, a negative relationship was found between academic self-efficacy and academic procrastination (Rajapakshe, 2021). Various studies have shown that there is an association between self-efficacy and academic procrastination (Bakar & Khan, 2016; Cerino, 2014).

According to Slaney et al. (2002), perfectionism refers to the high personal standards of an individual towards their performance. Therefore, perfectionism is also seen as a personal factor. Based on the studies done, a significant positive relationship was found between perfectionism and academic procrastination (Al-Rosyid, 2018; Ghosh & Roy, 2017; Jadidi et al., 2011). Moreover, a few studies have found a negative relationship between adaptive perfectionism and academic procrastination (Hicks & Wu, 2015; Shih, 2016). According to the

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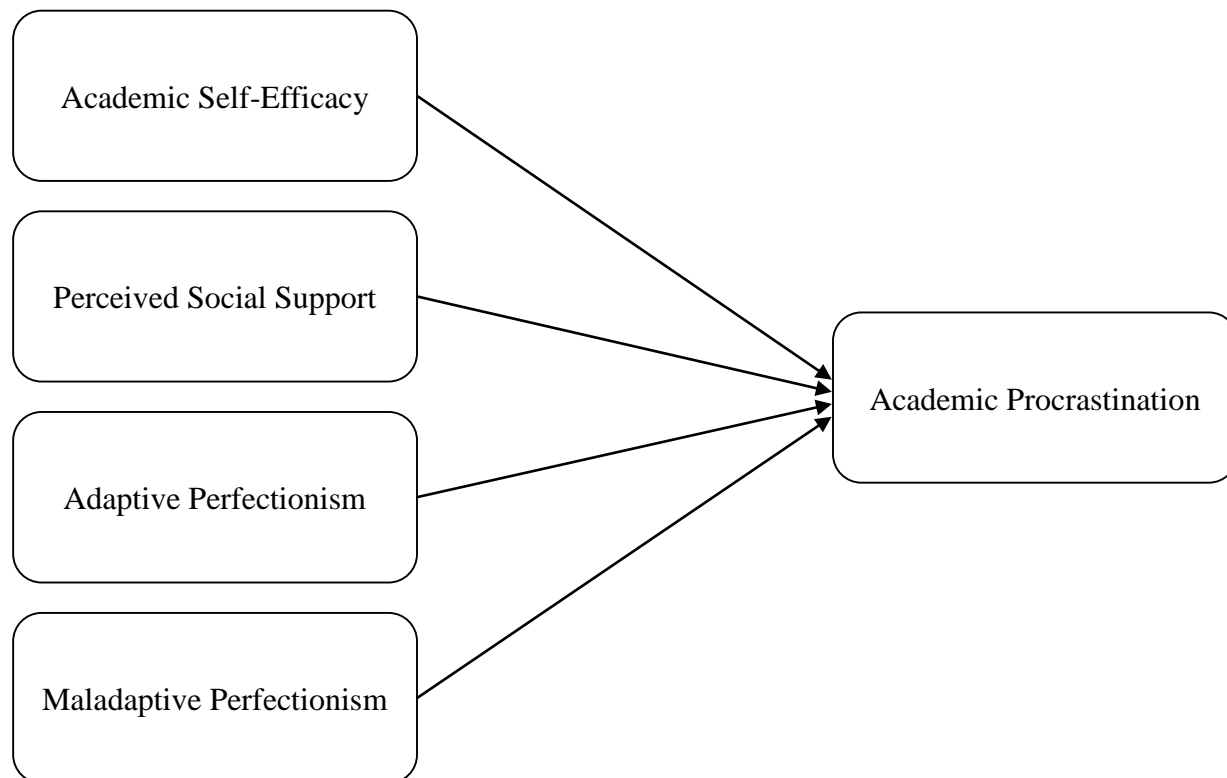
study done by Burnam et al. (2014), adaptive perfectionism was found to be significantly associated with various types of procrastination. The study also stated that those with adaptive perfectionism were less likely to display procrastination tendencies. Shih (2016) stated that maladaptive perfectionism was found to positively predict academic procrastination.

Next, perceived social support was understood as an environmental factor. Schunk (2012) stated that environmental factors around an individual could influence the motivational processes and outcomes. According to Al-Rosyid (2018), the significant effect found in the study can be used for the prediction of perceived social support on academic procrastination. Various studies have found a negative association between social support and academic procrastination (Sari & Fakhruddiana, 2019; Tuasikal & Patria, 2019).

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SOCIAL SUPPORT ON ACADEMIC PROCRASTINATION

Figure 2.2

Proposed Conceptual Framework



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Chapter III

Methodology

Research Design

The present study implemented a cross-sectional research design to study the predictive effect of academic self-efficacy, perceived social support, and perfectionism (adaptive and maladaptive) on online learning academic procrastination among undergraduates in Malaysia during the COVID-19 pandemic. According to Wang and Cheng (2020), conducting cross-sectional research is rather accessible, with lesser ethical difficulty and more cost effective. This research design was chosen because the present study was descriptive, often in the form of a survey or questionnaire. The goal is to describe a subgroup within a population (i.e., university student) in terms of an outcome (academic procrastination) and a set of predictive factors (i.e., academic self-efficacy, perfectionism, and perceived social support; Levin, 2006). Other than that, a cross-sectional study is effective, in which only a one-time point (COVID-19 pandemic period) was used to collect data on all variables. Furthermore, it was reported that ODL was implemented to guarantee academic continuity during the COVID-19 pandemic lockdown (Allam et al., 2020). This justifies the rationale of selecting this cross-sectional design.

In the current study, data were collected by using a quantitative and descriptive method by sending a self-report online survey. Quantitative research was chosen because of its systematicness. It follows certain guidelines including defining an objective, analyzing collected data and approaching findings of the study (Apuke & Oberiri, 2017). On the other hand, a descriptive research approach is used to describe the trends and variation in populations as an

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important component of the scientific process in general and education research in particular (A guide for researchers, 2017).

Sampling Method

The sampling method that was used in the present study was non-probability sampling. According to Ayhan (2011), non-probability sampling is selecting samples with subjective judgement and using convenience selection from the population. There are a few types of sampling methods under non-probability sampling while the one that suits the present study was purposive sampling, also known as judgmental sampling. Purposive sampling methods is when the researchers select samples that the participants possess the qualities required for the research (Etikan, 2016). For purposive sampling, the participants recruited are considered as the representative sample from the population. The participants' characteristic, capacity and willingness to participate in the research is important in purposive sampling (Rai & Thapa, 2015).

The inclusion criterion for participants in the present study were (1) aged 18 and above (2) pursuing bachelor's degree in Malaysia (3) having ODL and (4) Malaysian. According to Education Destination Malaysia. (n.d.) students studying bachelor's degree programmes were above the age of 18. Therefore, the participants' criterion for the present study were undergraduates who were above the age of 18 and having ODL in Malaysia. According to Acharya et al. (2013), purposive sampling method is a cost-saving and convenient sampling method. At the same time, the participants were selected as they appeared at the right time. Researchers are able to select participants analytically, logically and theoretically in purposive

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sampling (Berndt, 2020). Moreover, there were many past studies conducted during the COVID-19 pandemic were using purposive sampling methods (Alchamdani et al., 2020; Erol & Danyal, 2020; Prasad et al., 2020; Setyaningrum & Yanuarita, 2020).

Online questionnaires were used in the present study as online data collection is an economical way to collect data from a large population (Lefever et al., 2007). The present study used Qualtrics to collect data from the target participants who were undergraduates in Malaysia. During the period of data collection, Movement Control Order (MCO) was being implemented in every state (Ong, 2021). Thus, the present study used online data collection as the low accessibility due to social distancing restricted the researchers to implement paper-and-pencil survey. This is to prevent the physical interactions during data collection which will lead to an increase of risk infections (Ganasegeran et al., 2020).

Sample Size

The present study used G*Power computer software (Erdfelder et al., 1996) with version 3.1.9.4 to calculate the estimated minimum sample size. Faul et al. (2007) stated that G*Power is a statistical test that is commonly used in social and behavioral science. There are four input parameters included in the G*Power version 3.1.9.4 which are effect size, probability alpha error, statistical power and number of predictors. According to Cohen's effect size, f^2 refers to .02 as small, .15 as medium and .35 as large effect size (Cohen, 1988; Faul et al., 2009). The present study obtained an average effect size which was .53 by obtaining correlation coefficients of each variable's relationship according to .37 (*adaptive perfectionism*), .66 (*maladaptive perfectionism*), .23 (*academic self-efficacy*) and .87 (*perceived social support*) from past studies,

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then substitute them into Cohen f^2 formula (Walecka-Matyja, 2019; Huang, 2012; de la Vega et al., 2019; refer to Appendix B). Cohen f^2 formula is used to calculate effect size in a multiple regression model (Selya et al., 2012). The present study entered .05 for probability alpha error, .95 for statistical power and four for number of predictors. The total sample size calculated by G*Power computer software was at least 40 (refer to Appendix C).

Bodner (2006) indicated that one-third of the published research papers faced the problem of missing data, also known as incomplete data. In addition, Dong and Peng (2013) stated that the missing rate in behavioral science studies is around 15% to 20%. The occurrence of missing data is common and will lead to invalid conclusions (Kang, 2013; Peugh & Enders, 2004). The present study increased 40% of the targeted sample size to prevent the occurrence of lacking valid data (Salkind, 2012). Thus, the minimum sample size required for the present study was 56.

Participants and Location

The targeted participants were undergraduates aged 18 and above who were pursuing a bachelor's degree in Malaysia and having online learning. On the contrary, participants who aged below 18, not having online learning and not pursuing a bachelor's degree in Malaysia were excluded in the present study. Hence, a total of 177 undergraduate students, aged between 18 and 36 years old ($M= 21.57$ years old, $SD= 1.83$) who were undergoing online learning, participated in the present research. There were 76 (42.9%) males and 101 females (57.1%). Among the 177 participants, there were 23 Malays (13%), 129 Chinese (72.9%), 22 Indians (12.4%), 2 Kadazans (1.7%) and 1 Melanau (0.6%).

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The data collection for the present study was conducted throughout Malaysia. An online survey was sent to participants who met the criteria for the present study via online platforms such as Email, Microsoft Teams, Facebook, Whatsapp, Wechat and Instagram.

Procedures

Before initiating the data collection process for the current study, approval from UTAR Scientific and Ethical Review Committee (SERC) was obtained as the present study involved the use of human subjects (refer to Appendix D). Then, a pilot study of 30 participants was conducted. Browne (1995) mentioned that 30 participants were sufficient for a pilot study for survey research. According to van Teijlingen (2002), a pilot study is also referred to as a mini version of the full scale study which increases the likelihood of success of the main study. Through the pilot study, potential practical issues and problems of the research study can be identified. The analysis showed that the scales had a Cronbach's Alpha ranging from .87 to .96 which indicated a good reliability (refer to Appendix E).

Next, a web-based survey tool, Qualtrics was used to administer the survey. Firstly, the survey requested electronic informed consent from the participants, followed by their demographic information and details. Subsequently, the scales for academic self-efficacy, perfectionism (adaptive and maladaptive), perceived social support and academic procrastination were included. Participants were recruited through social media platforms such as Facebook, Instagram and WhatsApp. A brief introduction and the hyperlink of the study were sent to the participants through the mentioned platforms. The duration to complete the survey was about 10 to 20 minutes. Every collected response was kept confidential and private and was only used for

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educational purposes. After obtaining the targeted amount of responses, IBM SPSS version 23 was used to analyse and interpret the collected data.

Instruments

Academic self-efficacy

Level of academic self-efficacy was developed by Sachitra and Bandara (2017) by adapting and modifying the instrument developed by Byrne (2014) and Matoti (2011). The scale consists of 20 items. Academic self-efficacy includes students' confidence to ask and answer questions, attitude on seeking assistance from lecturers, ability to develop their own study plan, and willingness to participate in academic discussion and note-taking among classmates. It is used to measure one's academic self-efficacy based on a five-point Likert scale, from 1 (*strongly disagree*) to 5 (*strongly agree*). The higher scores refer to high academic self-efficacy and vice versa. The internal reliability of the academic self-efficacy scale in this research was good, with a Cronbach's alpha of above 0.84. Examples of items in this scale are:

1. I respond to questions asked in lectures.
2. I meet the deadlines for my assignments.
3. I express my opinion when I do not understand the lectures.

Perceived Social Support

In present study, Multidimensional scale of perceived social support which consists of 12 items created by Zimet et al. (1988) used to measure one's perceived social support. Three

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sources are used to assess the perceived sufficiency of social support: family (items 3, 4, 8, and 11), friends (items 6, 7, 9, and 12), and significant others (items 1, 2, 5, and 10). On a 7-point scale, the Likert scale runs from 1= *very strongly disagree* to 7= *very strongly agree*. The scoring of perceived social support from each subscale is obtained by summing up the score of each item, then divided by four. The final score of MSPSS is obtained by summing up the score of each item, then divided by 12. Any mean scale score between 1 and 2.9 could be considered low support; a score between 3 and 5 could be considered moderate support; and a score between 5.1 and 7 could be considered high support. The higher scores refer to high perceived social support and vice versa. The three subscales show an excellent internal consistency: family ($\alpha = .92$), friend ($\alpha = .95$), significant others ($\alpha = .92$). The internal reliability of the perceived social support scale in this research was excellent, with the overall score of the entire scale with Cronbach's alpha of 0.90. Examples of items in this scale are:

1. I get the emotional help & support I need from my family.
2. I can count on my friends when things go wrong.
3. I have a special person who is a real source of comfort to me.

Perfectionism

The Almost Perfect Scale-Revised (APS-R) which consists of 23 items was developed by Slaney et al. (1996). It was created to assess and distinguish both adaptive perfectionism and maladaptive perfectionism. APS-R consists of three subscales, which are high standards (items 1, 5, 8, 12, 14, 18 and 22), order (items 2, 4, 7 and 10), and discrepancy (items 3, 6, 9, 11, 13, 15,

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16, 17, 19, 20, 21 and 23). On a 7-Likert scale (1= “*strongly disagree*” to 7 = “*strongly agree*”).

Standards and order scored high by adaptive perfectionists, while discrepancy only scored high by maladaptive perfectionists. According to Sastre et al. (2016), the three subscales show a good internal consistency: high standards ($\alpha = .75$), order ($\alpha = .81$), discrepancy ($\alpha = .88$). The internal reliability of the perfectionism scale in this research was excellent, with a Cronbach's alpha of above 0.92. Examples of items in this scale are:

1. I have high standards for my performance at work or at school.
2. I have high expectations for myself.
3. I have a strong need to strive for excellence.

Academic Procrastination

Academic Procrastination Scale–Short Form (APS-S) created by McCloskey (2011) is a five-item Likert-type scale with anchors. The Likert range ranges from 1 (*Agree*) to 5 (*Disagree*) with 5 items for the short version drawn from the 25-item full length scale. It is aimed to assess one’s level of academic procrastination. The higher the score on the scale, the greater the tendency to procrastinate on academic tasks (Yockey, 2016). The internal reliability of the academic procrastination scale in this research was good, with a Cronbach's alpha of above 0.87. Examples of items in this scale are:

1. I put off projects until the last minute.
2. I know I should work on schoolwork, but I just don’t do it.

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3. I get distracted by other, more fun, things when I am supposed to work on schoolwork.

Data Analyses

IBM SPSS version 23 was used to analyse all the collected data. However, data cleaning was first performed by removing invalid responses. This is to ensure that there were no missing values, blank responses and irrelevant responses. A total of 213 responses were collected and after data cleaning, 18 responses were removed as some of the participants did not fulfil the research requirement in which some were not Malaysian or undergraduates. A few responses were also removed due to incomplete responses. Furthermore, another 18 cases were removed after being found as univariate outliers. Hence, 177 responses remained and served as the final sample for data analysis.

Descriptive statistics were also collected and analyzed; this consisted of the demographic information of participants such as age, gender, race, institution and academic level. In the present study, multiple linear regression (MLR) was used to investigate the influence of academic self-efficacy, perceived social support, and perfectionism (adaptive and maladaptive) on academic procrastination. Before proceeding to data analyses and interpretation, assumptions testing was conducted. Both assumptions for normality and assumptions for multiple linear regression were examined.

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Assumption for Normality

There are few assumptions for normality to ensure the distribution's degree of normality from the data set gathered. These assumptions consist of histogram, probability-probability plot (P-P plot), skewness, kurtosis and Kolmogorov-Smirnov (K-S) test.

According to Marshall and Samuels (2017), histogram is a graphical method that estimates the shape of the distribution. Barton (2014) stated that it is safe to assume that the data is normally distributed if the histogram is approximately bell-shaped. Besides that, P-P Plot is a visual display that assesses how closely both the observed and expected set lies to one another (Mishra et al., 2019). The study also mentioned that when most of the observed data fall closely to the diagonal line, normality is indicated.

According to Wijekularathna (2019), skewness is a symmetry measure in a probability density around its mean while kurtosis is understood as a measure of the peakedness in a probability density for a random variable. The acceptable range for both skewness and kurtosis values are ± 2 (Garson, 2012). Lastly, Mishra et al. (2019) stated that K-S test is applied for those with a sample size more than 50 and the data is assumed to be normally distributed when $p > 0.05$.

Assumptions for Multiple Linear Regression

The first assumption for MLR is multivariate outliers. Influential cases are examined to check if there were any cases that exert undue influence over the parameters of a model. The three residual statistics used for this assumption are Cook's distance, Leverage, and Mahalanobis distance. Cook's distance measures the overall influence of a case on the model. According to

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Cook and Weisberg (1982), a case could be an outlier when the Cook's distance is larger than one. Additionally, Leverage which is also referred to as hat values examines the influence of the observed value of the outcome variable over the predicted value. Hoaglin and Welsch (1978) mentioned that cases with values that are double of the Leverage's value should be investigated whereas Stevens (1992) suggested that cases with the value larger than three times of Leverage's value should be investigated instead. Moreover, Mahalanobis Distance measures the distance from the means of the predictor variables. The conservative cutoff-point for samples of 100 and 500 are values >15 and >25 respectively.

Multicollinearity is also one of the assumptions for MLR. It is a concern associated with the high strength of association among predictors in a research (Arslan & Billor, 2000). The two measures used to identify collinearity are tolerance and variance inflation factor (VIF). Tolerance examines the amount of variability of a predictor apart from being explained by other predictors. Syah et al. (2019) stated that values that are greater than .10 are accepted. Thus, small tolerance values can be understood as an indication of high collinearity. Meanwhile, VIF measures how much the variances of the estimated regression coefficients are inflated compared to when the independent variables are not linearly related. It is the inverse of tolerance value and high VIF value is an indication of collinearity issues. The cutoff threshold for VIF is 10; hence, to avoid the collinearity issues, the value must be not more than 10 (Maxwell et al., 2019; Syah et al., 2019).

Besides that, independence of errors emphasizes that the residual terms for any two observations should be uncorrelated and independent. This assumption is assessed by using Durbin Watson which assesses the presence of correlation among the residual (Jain et al., 2018).

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According to Flatt and Jacobs (2019), it is ideal for the value to be close to 2. Values that are smaller than one or greater than three violate the assumption.

Lastly, the final assumption is normality of residual, linearity of residual and homoscedasticity. According to Osborne and Waters (2002), normality of residual, linearity of residual, and homoscedasticity of residual are not violated if the scatterplots are distributed randomly and evenly. It can also be observed according to the shape of the distribution whereby a rectangular shape should be formed (Flatt & Jacobs, 2019).

Chapter IV

Results

Normality Assumptions

Univariate Outliers

In the current study, univariate outliers were determined through boxplot. A total of 18 cases were found as univariate outliers and removed (refer to Appendix F).

Histogram

A visual inspection on the histograms of academic self-efficacy, perceived social support and perfectionism (adaptive and maladaptive) found that the histograms for each of the variables were approximately normally distributed, signifying a good normality (see Appendix G).

P-P Plots

The P-P plots of each distribution were found with most of the observed data falling closely on the diagonal line which indicates a good normality of each variable (refer to Appendix G).

Skewness and Kurtosis Values

According to Table 4.1, it can be seen that the skewness and kurtosis values of each variable is within the acceptable range of -2 and +2 (Garson, 2012). Therefore, the assumption for normality for both skewness and kurtosis were met.

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Table 4.1

Skewness and Kurtosis

Variable	Skewness Value	Kurtosis Value
Academic self-efficacy	.123	.053
Perceived social support	.024	-.426
Adaptive perfectionism	-.237	-.471
Maladaptive perfectionism	.033	-.340
Academic procrastination	.163	-.676

Kolmogorov-Smirnov (K-S) Test

Mishra et al. (2019) stated that the data are assumed to be normally distributed when the results show a non-significant p -value ($p > 0.05$). Table 4.2 showed the results of the K-S test for all variables. Academic self-efficacy, perceived social support and maladaptive perfectionism were found to be significantly normal while adaptive perfectionism and academic procrastination were significantly non-normal.

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Table 4.2

Kolmogorov-Smirnov (K-S) Test

Variables	Sig.
Academic self-efficacy	.054
Perceived social support	.200
Adaptive perfectionism	.005
Maladaptive perfectionism	.200
Academic procrastination	.048

Summary

The five indicators of normality show that there were no violations in histogram, P-P plots, skewness and kurtosis except for the K-S test. According to Peat (2005), the K-S test is highly sensitive to extreme values. Hence, it has been suggested that it should not be solely used for normality assumptions due to its low power (Ghasemi & Zahediasl, 2012). Furthermore, since the other four indicators of normality show no violation, it can be concluded that the normality assumption for all variables were met.

Assumptions for Multiple Linear Regression

Type of Variables

In multiple linear regression, variables in the study should be in metrics form. As each of the variables in the present study were continuous variables, this assumption was met.

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Multivariate outliers

After conducting analysis through SPSS, it was found that there were a total of 6 cases that were potentially multivariate outliers as these cases exceeded the standard deviation of two. The cases were then investigated according to the rule of thumb of Cook's distance (Cook & Weisberg, 1982), Mahalanobis Distance (Barnett & Lewis, 1978) and Leverage (Stevens, 1992); the calculated leverage value for the present study was 0.056 by using the calculation of $\frac{2(p+1)}{n}$. According to Table 4.3, none of the cases were removed as all of the cases were within the benchmark of the residual statistics. All the cases were all included in the data analysis as they do not exert undue influence over the model parameters.

Table 4.3

Multivariate Outlier Test

Case	Mahalanobis Distance	Cook's Distance	Centered Leverage Value
24	6.05312	.04581	.03439
44	3.79741	.02627	.02158
81	2.10301	.01900	.01195
98	1.36324	.01255	.00775
127	.59136	.01144	.00336
151	2.54377	.01984	.01445

Multicollinearity

In multiple linear regression, multicollinearity must be checked to ensure that there are no high correlations between the predictors. In order to check for this assumption, Tolerance and

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VIF were used. According to Table 4.4, there is a low intercorrelation between predictors and multicollinearity was not observed in the present study.

Table 4.4

Tolerance and VIF Values

Variable	Tolerance	VIF
Academic self-efficacy	.794	1.259
Perceived social support	.780	1.282
Adaptive perfectionism	.569	1.757
Maladaptive perfectionism	.677	1.478

Note. Dependent variable = Academic procrastination

Independent of Error

Based on Table 4.5, the value of Durbin-Watson is within the suggested range of one to three. The value is also close to 2 which indicates congruent to the assumption and variables are independent to one another. Therefore, the assumption was met.

Table 4.5

Durbin-Watson Test

Model	Durbin-Watson
1	2.105

Note. Dependent variable = Academic procrastination

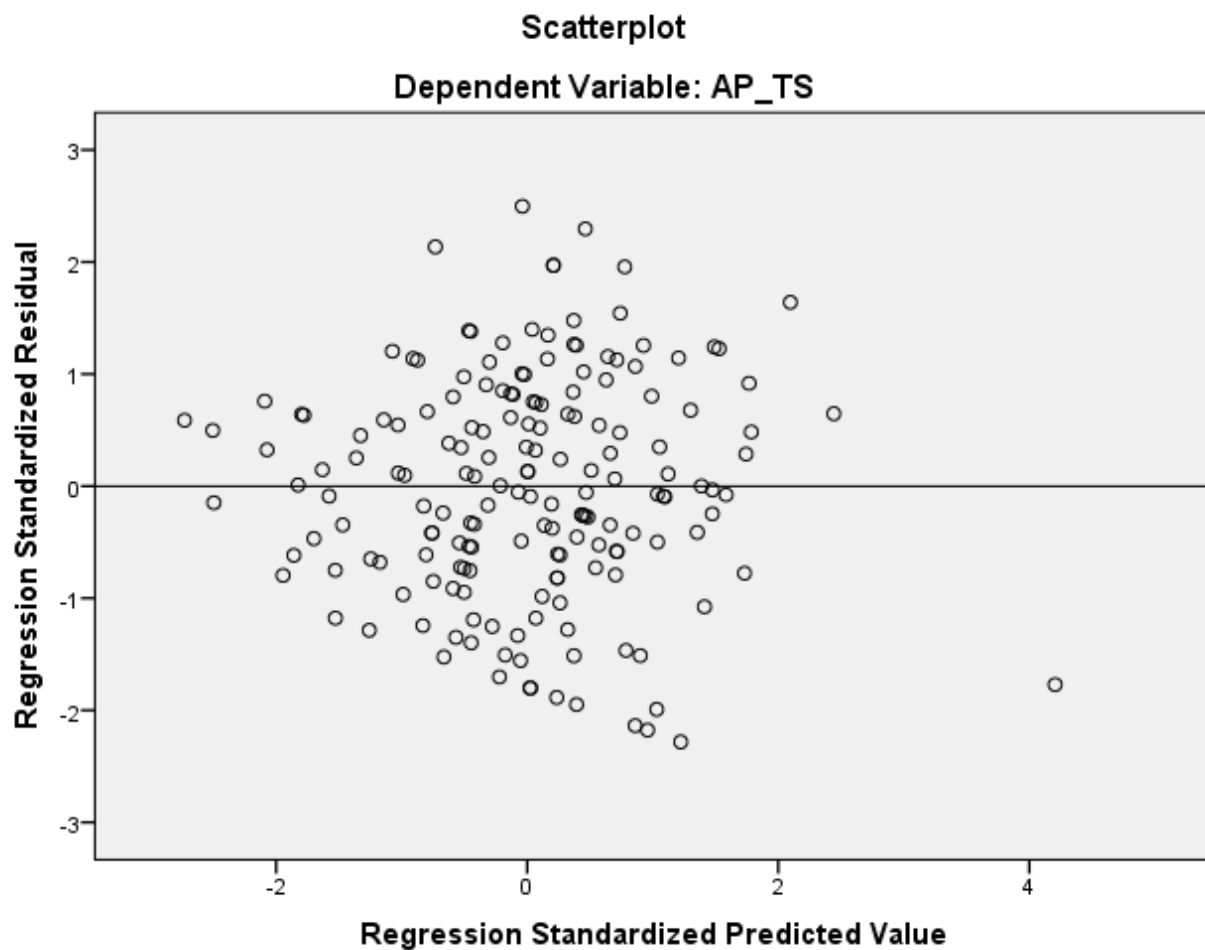
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Linearity of residual, normality of residual, and homoscedasticity

As it can be seen from Figure 4.1, the scatterplots showed that the residuals were randomly and evenly distributed around the horizontal line. Thus, the assumption for normality of residuals, linearity of residuals and homoscedasticity were met.

Figure 4.1

Scatterplot of Standardized Predicted Value and Standardized Residual



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Descriptive Statistics

The final sample consisted of 177 participants in which 57.1% were females ($n= 101$) while 24.9% were males ($n= 76$). 13% were Malays ($n= 23$), 72.9% were Chinese ($n= 129$), 12.4% were Indian ($n= 22$) and the remaining 1.7% were Kadazan and Melanau/ Kanau ($n= 3$). The age of the participants ranged from 18 to 36 ($M= 21.57$, $SD= 1.83$).

Table 4.6

Demographic Information of Participants and Variables

Variable	n	%	<i>M</i>	<i>SD</i>
Age			21.57	1.83
Sex				
Male	76	42.9		
Female	101	57.1		
Race				
Malay	23	13.0		
Chinese	129	72.9		
Indian	33	12.4		
Others	3	1.7		
Religion				
Muslim	24	13.6		
Buddhist	104	58.8		
Christian	30	16.9		
Hindu	14	7.9		

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Table 4.6 (continued)

Demographic Information of Participants and Variables

Variable	n	%	<i>M</i>	<i>SD</i>
Others	5	2.8		
Main Variables				
Academic self-efficacy	177		76.38	9.34
Perceived social support	177		5.22	.86
Adaptive perfectionism	177		55.80	8.65
Maladaptive perfectionism	177		56.55	11.19

Multiple Linear Regression Analysis

As all of the assumptions showed no violation, multiple linear regression was used to assess if academic self-efficacy, perceived social support, adaptive perfectionism and maladaptive perfectionism significantly predicts academic procrastination. The model was statistically significant, $F(4, 172) = 7.100, p < .001$ and accounted for 12.2% of the variance. Furthermore, it was found that academic self-efficacy ($\beta = -.209, p < .05$), perceived social support ($\beta = .171, p < .05$), adaptive perfectionism ($\beta = -.352, p < .001$) and maladaptive perfectionism ($\beta = .252, p < .05$) significantly predicted academic procrastination. Hence, each of the hypotheses were supported except hypothesis two due to inconsistent direction. The findings of the present study indicated that perceived social support was a significant predictor, but it positively predicts academic procrastination. Meanwhile, the remaining three variables (academic self-efficacy, adaptive perfectionism, maladaptive perfectionism) were found to be

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significant predictors towards academic procrastination. Academic self-efficacy and adaptive perfectionism negatively predicts while maladaptive perfectionism positively predicts

Table 4.7

Result of Regression Model

	<i>df</i>	F	Sig.	Adjusted R Square
Regression	4	7.100	.000	.122
Residual	172			
Total	176			

Note. Dependent variable = academic procrastination. Predictors = academic self-efficacy, perceived social support, adaptive perfectionism, maladaptive perfectionism.

Table 4.8

Coefficients Table of Multiple Linear Regression

Model	Std. β	<i>t</i>	Sig.
1 (Constant)		6.336	.000
Academic self-efficacy	-.209	-2.640	.009
Perceived social support	.171	2.133	.034
Adaptive perfectionism	-.352	-3.760	.000
Maladaptive perfectionism	.252	2.936	.004

Note. Dependent variable = Academic Procrastination

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Summary of Results

Table 4.9

Summary of Results

Hypotheses	Decision
H ₁ : Academic self-efficacy negatively predicts academic procrastination among e-learning undergraduates in Malaysia during COVID-19 pandemic.	Supported
H ₂ : Perceived social support negatively predicts academic procrastination among e-learning undergraduates in Malaysia during COVID-19 pandemic.	Not supported
H ₃ : Adaptive perfectionism negatively predicts academic procrastination among e-learning undergraduates in Malaysia during COVID-19 pandemic.	Supported
H ₄ : Maladaptive perfectionism positively predicts academic procrastination among e-learning undergraduates in Malaysia during COVID-19 pandemic.	Supported

Chapter V

Discussion

H₁: Academic self-efficacy negatively predicts academic procrastination among e-learning undergraduates in Malaysia during COVID-19 pandemic.

The hypothesis is supported in the present study. The results indicate that people with high academic self-efficacy are more likely to have low academic procrastination. It is consistent with past studies which claimed that academic self-efficacy has a negative relationship with academic procrastination (Gungor, 2020; Klassen et al., 2008; Li et al., 2020; Ying & Lv, 2012). Ying and Lv (2012) explained that people with high levels of academic procrastination have lower academic self-efficacy compared with people with low levels of academic procrastination. This is because academic self-efficacy is the perception of people's skills and knowledge that lead people's effort to work on academic tasks (Kandemir, 2014). People with high academic self-efficacy will believe that they have the ability to finish the academic tasks while people with low academic self-efficacy will feel incapability to complete the academic tasks. Even though a person does not possess the skills or knowledge required for completing the academic tasks, the person might have high self-efficacy believing he or she can complete the tasks and perceive him or herself as a skilled person (Gungor, 2020).

Besides that, Dike and Emmanuel (2019) also found that academic self-efficacy has a significant negative relationship with academic procrastination. Low self-efficacy is the tendency to have an inadequate level of ability, while this will affect the beginning and maintaining of effort to complete academic tasks (Arias-Chavez et al., 2020). It is necessary to stress that a

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greater self-efficacy of a student will lead to a greater impulse to complete the academic tasks instead of procrastinating the tasks.

The result of the present study is in line with Swaraswati et al. (2017) which stated that academic self-efficacy significant negatively predicts academic procrastination. The researchers explained that students with a high level of academic self-efficacy will have more intrinsic motivation to sustain the effort in completing the academic tasks. On the other hand, students with low academic self-efficacy tend to depend on others and lack the initiative to finish the tasks, they then eventually procrastinate the tasks. Hence, academic self-efficacy determined the students' initiative to accomplish the academic tasks or procrastinating them. An increase in academic self-efficacy will promote educational progress (Peguero & Shaffer, 2015).

H₂: Perceived social support negatively predicts academic procrastination among e-learning undergraduates in Malaysia during COVID-19 pandemic.

However, the outcome of the present study did not support the hypothesis that perceived social support negatively predicts academic procrastination among e-learning undergraduates in Malaysia during COVID-19 pandemic. The present study found that perceived social support positively predicts academic procrastination. The finding was inconsistent with the past studies which supported that perceived social support negatively predicts academic procrastination (Sari & Fakhruddiana, 2019; Yang et al., 2021).

The inconsistency of the finding with past studies might be due to social loafing. Ferrari and Pychyl (2012) explained that social loafing is decreasing effort when working in groups where individual effort is not identified. There is a tendency to have dependency on others and

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leads to the problem of free riding on group based academic tasks. Procrastinators might feel that others will provide assistance while completing the task even they delay in the last moment. Eventually, this will lead to uneven contribution to the group-based academic tasks, and they take credit for others' effort in completing the tasks. Mihelic and Culiberg (2019) indicated that procrastination is one of the negative consequences of social loafing. Individual who invested less effort and engaged in low task visibility, perform more social loafing (Chiu et al., 2020).

In the other hand, Chiu et al. (2020) also indicated that there is also situation in which individual who invested more effort and engaged in high task visibility, demonstrate more social loafing. This is because they feel unfair since they put more effort in a tasks compared with others while sharing the same achievement. As a result, social loafing might be one of the reasons that the hypothesis of perceived social support negatively predicts academic procrastination was not supported by the results of the present study.

H₃: Adaptive perfectionism negatively predicts academic procrastination among e-learning undergraduates in Malaysia during COVID-19 pandemic.

The findings of the present study had supported the hypothesis that adaptive perfectionism negatively predicts academic procrastination. It is consistent with past studies which have similar results which support that adaptive perfectionism negatively predicts academic procrastination (Akpur & Yurtseven, 2019; Chang, 2014; Harrison, 2014). The results of the present study indicate that adaptive perfectionists are less likely to procrastinate in academic tasks. This is because adaptive perfectionists will find ways to cope with the difficulties that they faced in academic tasks. They tend to face the difficulties with great effort and persistence rather than procrastinating the academic tasks (Razmi et al., 2020).

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Moreover, adaptive perfectionists will set high standards for themselves, do things in an organized way and actively acquire for resources to succeed (Alshehri, 2020). Alshehri (2020) also stated that they will set high standards for themselves because they know that they are highly adaptable. If they realise that they are unable to achieve the high standards set, they will adjust the standards to make them more attainable. Jadidi et al. (2011) stated that adaptive perfectionists are more likely to engage in positive behaviour which actively seek improvement and learning opportunities. They are motivated by mastering certain skills or ability whereby they choose to be prepared in advance rather than procrastinating the tasks due to the obstacles met. Adaptive perfectionists will feel satisfied when they are actively and capable in solving problems (Pearlman-Avni et al., 2019). Hence, an adaptive perfectionist is less likely to procrastinate in academic tasks.

H₄: Maladaptive perfectionism positively predicts academic procrastination among e-learning undergraduates in Malaysia during COVID-19 pandemic.

The last hypothesis of the present study was supported by the result which indicated that maladaptive perfectionism positively predicts academic procrastination. It is supported by past studies that had the similar results indicating that maladaptive perfectionists will be more likely to procrastinate academic responsibilities (Chang, 2014; Naz et al., 2021; Shih, 2017). Naz et al. (2021) explained that maladaptive perfectionists are individuals with irrational high standards and feel stress when unable to meet the standards. This means that maladaptive perfectionists will feel stress and tend to delay in completing the academic tasks when they face any obstacles in the process to finish the tasks. They tend to overly focus on the mistakes (Chang, 2014).

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Maladaptive perfectionists have more worries about the tasks compared with adaptive perfectionists (Feng et al, 2018).

In addition, Harrison (2014) supported that maladaptive perfectionism has a positive relationship with academic procrastination. The researcher stated that maladaptive perfectionists will have higher stress levels and higher levels of incapability. Kurtovic et al. (2019) also claimed that maladaptive perfectionism positively predicts procrastination. Maladaptive perfectionists tend to set unrealistic high standards, feel inadequate in accomplishing the standard and feel guilt and shame. These characteristics will lead them to have academic procrastination. The results of the present study were supported by Cam and Ogulmus (2021) who said that maladaptive perfectionists tend to delay academic tasks as they fear failure and excessively concern about how others view them. They postpone the initiative effort in finishing the tasks unless they have full confidence. Cam and Ogulmus (2021) also indicated that maladaptive perfectionism increases academic procrastination. Therefore, maladaptive perfectionists are more likely to delay their academic tasks due to the characteristics that they possess.

Implications

Theoretical Implications

The theory that was used in the current study was SCT by Bandura (1989) to investigate the predictive effects of academic self-efficacy, perceived social support and perfectionism (adaptive and maladaptive) on academic procrastination. Based on the findings, it showed that academic self-efficacy and adaptive perfectionism negatively predicts academic procrastination

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while perceived social support and maladaptive perfectionism positively predicts academic procrastination. It was found that all the predictors significantly predict academic procrastination; however, one of the predictors- perceived social support, was inconsistent with the theory in the present study context. Thus, this study may serve as a reference for future research whereby future studies may investigate the possible reasons of the inconsistency. Future researchers may also apply SCT and further investigate possible factors that could predict academic procrastination. By applying the SCT, the variables in the current study can also be explained well in the context of e-learning during COVID-19 in Malaysia. Hence, the current study may help to expand perspectives and contribute insights towards the application of SCT as the findings supported the theoretical literature.

Practical Implications

The findings of the present study are able to raise the awareness and enhance the knowledge of the public, especially the students, family members, and peers towards academic self-efficacy, social support, perfectionism and academic procrastination. Students can make use of these findings to improve their level of academic self-efficacy to prevent academic procrastination. For instance, they could participate in activities such as workshops, talks, and programmes that are applicable and suitable for the situation and courses. Besides that, students with maladaptive perfectionism could contact their institution's counsellor to seek support and modify their pattern of perfectionism and also to cope with the distorted thoughts by replacing them with healthy ones. Meanwhile, those with adaptive perfectionism could continue to maintain it. Furthermore, the close ones of the student such as family members and peers should

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remind and call out the student if it is noticed that they often engage in signs of maladaptive perfectionism. This will help the student to realize their situation and take action accordingly.

Other than that, family members, friends, and significant ones of the student should provide an appropriate amount of social support instead of offering excessive support. All these parties should not overly provide assistance, guidance, and inputs which could cause the student to be overly dependent on them. Additionally, the students themselves should be careful at selecting and managing their social support in which they need to control and restrict the excessive relaxation time spent with their close ones and not completing their academic tasks.

The Ministry of Higher Education, universities along with faculty management and educators (i.e., lecturers and tutors) should cooperate to plan and carry out the necessary strategies to hinder the student's academic procrastination. Relevant parties could launch or conduct campaigns, workshops and talks such as tackling topics and courses, self-directed learning, and identifying perfectionism patterns to equip students with the skills to improve themselves and also to understand themselves better. Furthermore, these parties can spread awareness of this issue through various platforms including social media platforms and encourage the public to put a stop to this phenomenon.

Limitations of Study

There are a few weaknesses in the present study that must be addressed. The present study's weakness was the time required to complete the online survey was prolonged due to the survey's length. This may cause participants to lose patience and exit the online survey midway through. In this situation, participants may become bored and select an answer without

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thoroughly reading the questions. This will affect the data's validity. Researchers received many feedbacks from participants, stating that our survey was too lengthy and the questions were boring.

Moreover, one of the weaknesses of this study is that a self-reporting questionnaire was used in the present study. As a result, the responses from the participants may not be strictly honest, resulting in response bias. This is because some participants answer the questionnaire based on social desirability or offer responses that researchers may seek since they are uninterested in participating in the study. According to Paulhus (1991), social desirability refers to the desire to feel good, even if the response does not entirely represent a person's opinion. In other words, instead of offering their true answer, people prefer to provide answers that are acceptable to the public, which eventually influences the accuracy of the findings. For example, if asked whether asking help from a lecturer is needed, they will say yes. Therefore, even if their initial response is no, most participants' chance to answer yes is higher than no since it is the accepted answer in society. This bias can lead to false self-reporting and so impact the outcome of the present study.

Thirdly, the present study recruited a small sample size issue. There were a total of 177 participants recruited for the present research. The heterogeneity of data might be restricted; perhaps the majority of them were Chinese. As a result, the findings of the present study may not be suitable to represent the entire population in Malaysia. When the statistical analysis is performed, small sample size may diminish the power of the study and the actual effect.

Fourthly, the limitation of the present study was that researchers used a cross-sectional research approach to conduct this study. This approach allowed all of the variables in the present

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study to be assessed at one time. However, three variables (academic self-efficacy, perceived social support, and perfectionism), as well as academic procrastination, may vary over time due to instability of implementation for reducing COVID-19 cases. For instance, When the COVID-19 cases were under control after numerous types of lockdown, some institutions or industries began to transition to semi-physical classes and work from the office in the middle of the year 2021. As a result, because the cross-sectional research approach was only used to detect the prevalence of an occurrence at a certain period, the cause and effect relationship between the variables may not be identified.

Lastly, another weakness discovered in the present study was that the racial ratio was not proportional. The majority of responders (72.9 percent) were Chinese. The current study's majority of participants were Chinese, resulting in a disproportionate population ratio. In comparison to the Chinese, data and information on other races were insufficiently collected. As a result, the present study's findings may not be generalizable to other races in Malaysia, as the current study's findings may only apply to Chinese people. The current study's racial imbalance might result in prejudice. This disparity was because the purpose of the current study was not to analyze racial differences in academic procrastination or other factors. Hence this issue did not affect the current study. Future studies focusing on racial differences should ensure that the sample gathered is proportional to the races.

Recommendations of Study

The way to overcome the weakness of participants not willing to continue to do the questionnaire is to design questions as basic as possible to avoid boredom, which will reduce

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participants' interest in participating in the study. Furthermore, participants more readily understand basic questions, which helps reduce errors in answering the questionnaire if they misread the content of the questions. When designing the questionnaire, Sahlqvist et al. (2011) recommended that shortening it would enhance the response rate. A shorter questionnaire will take up less time for the participants, making it more convenient and easy to finish the survey.

According to Nederhof (1985), there are seven strategies for overcoming social desirability bias, including self-administration of questionnaires, proxy participants, and so on. In addition to the seven strategies listed above, using a social desirability bias scale can address this problem (Pontes et al., 2014). Another option to circumvent this constraint is to emphasize privacy and secrecy before participants begin answering the questionnaire (Larson, 2018). It is critical to keep participants' identities private, so they do not have to worry about their identity being revealed or being criticized for a socially desirable answer.

Moreover, future research should be conducted to increase the number of participants to boost the importance of the findings and produce more statistical power, increasing the actual effect of statistical analysis. In order to get more participants, researchers can provide some reinforcements or motivation for them to participate in the study. Such as rewards, certificates and so on. Adopting a shorter yet trustworthy questionnaire while performing the study to optimize the response rate can also serve as a negative reinforcement for participants to join the study.

Regarding the proportionate race ratio, it is suggested that future research collects data and information from the races equally so that the conclusions may be extrapolated to other races. Furthermore, stratified random sampling is recommended for collecting proportional races

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since it includes separating the population into distinct subgroups or strata with standard features such as race. As a result, future researchers will randomly choose final samples proportionally from each grouping (Acharya et al., 2013). Furthermore, future research can focus on Malaysia's minority ethnic groups such as Melanau, Kadazans, and Bumiputra to better understand their academic self-efficacy, perceived social support, and perfectionism, as diverse cultures adopt distinct lifestyles.

Conclusion

In conclusion, the present study has achieved the objectives to study the predictive effect of academic self-efficacy, perceived social support, and perfectionism (adaptive and maladaptive) on academic procrastination among online learning undergraduates in Malaysia during the COVID-19 pandemic. The results showed that academic self-efficacy and adaptive perfectionism negatively predicted academic procrastination while maladaptive perfectionism and perceived social support positively predicted academic procrastination. The result of the present study indicates that people with high academic self-efficacy believe they can achieve academic tasks. In contrast, people with low academic self-efficacy believe they are incapable of completing academic tasks. This will have more intrinsic motivation to sustain the effort in completing the academic tasks. Besides that, the explanation for the negative relationship between adaptive perfectionists with academic procrastination is due to the fact that instead of delaying academic assignments, they face challenges with considerable effort and determination (Razmi et al., 2020). In contrast, maladaptive perfectionists tend to put off academic work (academic procrastination) because they establish unrealistically high standards, feel inadequate in meeting those standards, are afraid of failure, and are too concerned with how others see them.

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Furthermore, perceived social support positively predicted academic procrastination in the present study. However, it was not matched with the initial hypotheses, which stated that it is not supported in the present study. It can be explained by the phenomena of social loafing in which individual effort is not identified.

The present study provided new information about relevant factors about academic self-efficacy, perceived social support, and perfectionism (adaptive and maladaptive) among undergraduate students to raise awareness on the issue of academic procrastination when teaching methods turn into online distance learning (ODL). Students can utilize these findings to boost their academic self-efficacy and avoid academic procrastination. Furthermore, students with maladaptive perfectionism should seek guidance from their institution's counselor in order to improve their pattern of perfectionism and cope with the erroneous ideas by replacing them with healthy ones. Meanwhile, people who have adaptive perfectionism may be able to maintain it. Aside from that, family members, friends, and significant others of the student should provide sufficient social support rather than excessive assistance. Most importantly, The Ministry of Higher Education, universities, faculty management, and educators (i.e., lecturers and tutors) should work together to develop and carry out an action to reduce student academic procrastination by spreading awareness through social media platforms to stop this phenomenon.

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References

- Abdi Zarrin, S., & Gracia, E. (2020). Prediction of academic procrastination by fear of failure and self-regulation. *Educational Sciences: Theory and Practice*, 20(3), 34-43.
<http://dx.doi.org/10.12738/jestp.2020.3.003>
- Abdollahi, A., Maleki Farab, N., Panahipour, S., & Allen, K. A. (2020). Academic hardiness as a moderator between evaluative concerns perfectionism and academic procrastination in students. *The Journal of Genetic Psychology*, 181(5), 365–374.
<https://doi.org/10.1080/00221325.2020.1783194>
- Acharya, A. S., Prakash, A., Saxena, P., & Nigam, A. (2013). Sampling: Why and how of it. *Indian Journal of Medical Specialties*, 4(2), 330-333.
<https://doi.org/10.7713/ijms.2013.0032>
- Afzal, S., & Jami, H. (2018). Prevalence of academic procrastination and reasons for academic procrastination in university students. *Journal of Behavioural Sciences*, 28(1), 51-69.
<https://www.prdb.pk/article/prevalence-of-academic-procrastination-and-reasons-for-acade-8348>
- Akpur, U., & Yurtseven, N. (2019). Structural relationships between academic motivation, procrastination and perfectionism: A modelling study. *Cumhuriyet International Journal of Education*, 8(1), 95–112. <https://doi.org/10.30703/cije.452633>
- Alchamdani, A., Fatmasari, F., Anugrah, E. R., Sari, N. P., Putri, F., & Astina, A. (2020). The impact of Covid-19 pandemic on online learning process in the college at Southeast

ACADEMIC SELF-EFFICACY, PERFECTIONISM, AND PERCEIVED
SOCIAL SUPPORT ON ACADEMIC PROCRASTINATION

Sulawesi. *Jurnal Kesehatan Lingkungan*, 12(1si), 129-136.

<http://dx.doi.org/10.20473/jkl.v12i1si.2020.129-136>

Ali, A. (2004). Issues & challenges in implementing e-learning in Malaysia. Retrieved January, 18, 2008. <https://core.ac.uk/download/pdf/298086577.pdf>

Allam, S. N. S., Hassan, M. S., Mohideen, R. S., Ramlan, A. F., & Kamal, R. M. (2020). Online distance learning readiness during COVID-19 outbreak among undergraduate students. *International Journal of Academic Research in Business and Social Sciences*, 10(5), 642–657. <https://doi.org/10.6007/ijarbss/v10-i5/7236>

Al-Rosyid, M. H. (2018). Self-efficacy, perceived social support, and academic procrastination on final semester student of University X. *International Journal of Research Publications*, 15(1), 1–9. <https://ijrp.org/paper-detail/39>

Al-Shagaheen, E. (2017). Academic procrastination and its relationship with self-efficiency and test-anxiety among Mu'tah University students in Jordan. *International Journal of Novel Research in Humanity and Social Sciences*, 4(2), 43-51.

<https://www.noveltyjournals.com/upload/paper/Academic%20Procrastination-1001.pdf>

Alshehri, A. S. (2020). The impact of perfectionism trait on anxiety and academic procrastination among international Saudi Arabian students studying in United States Universities. *Indian Journal of Science and Technology*, 13(23), 2282–2293.

<https://doi.org/10.17485/ijst/v13i23.657>

ACADEMIC SELF-EFFICACY, PERFECTIONISM, AND PERCEIVED
SOCIAL SUPPORT ON ACADEMIC PROCRASTINATION

- Anwar, Z., & Qonita, F. I. (2019). Parent's expectation and academic procrastination of college student. *Proceedings of the 4th ASEAN Conference on Psychology, Counselling, and Humanities (ACPCH 2018)*. Published. <https://doi.org/10.2991/acpch-18.2019.74>
- Apuke, O. D. (2017). Quantitative research methods: A synopsis approach. *Kuwait Chapter of Arabian Journal of Business and Management Review*, 6(11), 40–47.
<https://doi.org/10.12816/0040336>
- Arazzini Stewart, M., & de George-Walker, L. (2014). Self-handicapping, perfectionism, locus of control and self-efficacy: A path model. *Personality and Individual Differences*, 66, 160–164. <https://doi.org/10.1016/j.paid.2014.03.038>
- Aremu, A. O., Williams, T. M., & Adesina, F. (2011). Influence of academic procrastination and personality types on academic achievement and efficacy of in-school adolescents in Ibadan. *IFE Psychologia: An International Journal*, 19(1), 93-113.
<https://doi.org/10.4314/ifep.v19i1.64591>
- Arias-Chávez, D., Ramos-Quispe, T., Villalba-Condori, K., & Cangalaya-Sevillano, L. M. L. M. (2020). Self-efficacy and academic procrastination: A study conducted in university students of Metropolitan Lima. *International Journal of Innovation, Creative and Change*, 11, 374-390. https://ijicc.net/images/vol11iss10/111034_Ch%C3%A1vez_2020_E_R.pdf
- Arifiana, I. Y., Rahmawati, H., Hanurawan, F., & Eva, N. (2020). Stop academic procrastination during COVID 19: Academic procrastination reduces subjective well-being. *KnE Social Sciences*, 4(15), 312-325. <https://doi.org/10.18502/kss.v4i15.8220>

ACADEMIC SELF-EFFICACY, PERFECTIONISM, AND PERCEIVED
SOCIAL SUPPORT ON ACADEMIC PROCRASTINATION

Arslan, O., & Billor, N. (2000). Robust liu estimator for regression based on an m-estimator.

Journal of Applied Statistics, 27(1), 39–47. <https://doi.org/10.1080/02664760021817>

Ayhan, H. Z. (2011). Non-probability sampling survey methods. *International Encyclopedia of*

Statistical Science, 979–982. https://doi.org/10.1007/978-3-642-04898-2_41

Bakar, Z. A., & Khan, M. U. (2016). Relationships between self-efficacy and the academic procrastination behaviour among university students in Malaysia: A general perspective.

Journal of Education and Learning, 10(3), 265–274.

<https://doi.org/10.11591/edulearn.v10i3.3990>

Balkis, M., & Erdinç, D. U. R. U. (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.

<http://dx.doi.org/10.14204/ejrep.41.16042>

Bandura, A. (1986). *Social foundations of thought and action: A social cognitive theory*.

Prentice-Hall, Inc.

Bandura, A. (1989). Social cognitive theory. In R. Vasta (Ed.), *Six theories of child development*,

Annals of child development 6, 1-60. Greenwich, CT: JAI Press.

<https://www.uky.edu/~eushe2/Bandura/Bandura1989ACD.pdf>

Bandura, A. (1994). Self-efficacy. In V. S. Ramachaudran (Ed.), *Encyclopedia of human*

behavior 4, 71-81. New York: Academic Press.

<https://www.uky.edu/~eushe2/Bandura/Bandura1994EHB.pdf>

ACADEMIC SELF-EFFICACY, PERFECTIONISM, AND PERCEIVED
SOCIAL SUPPORT ON ACADEMIC PROCRASTINATION

Bandura, A. (1997). *Self-efficacy: The exercise of control*. W H Freeman.

<https://doi.org/10.5860/choice.35-1826>

Barnett, V., & Lewis, T. (1978). *Outliers in statistical data*. Wiley.

Barton, B., & Peat, J. (2014). *Medical statistics: A guide to spss, data analysis and critical appraisal*. John Wiley & Sons.

Berndt, A. E. (2020). Sampling methods. *Journal of Human Lactation*, 36(2), 224-226.

<https://doi.org/10.1177/0890334420906850>

Bhardwaj, P. (2019). Types of sampling in research. *Journal of the Practice of Cardiovascular Sciences*, 5(3), 157–163. https://doi.org/10.4103/jpcs.jpcs_62_19

Bieling, P. J., Israeli, A. L., & Antony, M. M. (2004). Is perfectionism good, bad, or both? Examining models of the perfectionism construct. *Personality and Individual Differences*, 36(6), 1373–1385. [https://doi.org/10.1016/s0191-8869\(03\)00235-6](https://doi.org/10.1016/s0191-8869(03)00235-6)

Blackler, K. (2011). *The effect of adaptive perfectionism, maladaptive perfectionism, and feedback on procrastination behaviour* [Doctoral dissertation, Queen's University].

<https://central.bac->

[lac.gc.ca/.item?id=MR76944&op=pdf&app=Library&oclc_number=1019463156](https://central.bac-lac.gc.ca/.item?id=MR76944&op=pdf&app=Library&oclc_number=1019463156)

Blatt, S. J., D’Afflitti, J. P., & Quinlan, D. M. (1976). Experiences of depression in normal young adults. *Journal of Abnormal Psychology*, 85, 383– 389.

<https://doi.org/10.1037/0021-843X.85.4.383>

ACADEMIC SELF-EFFICACY, PERFECTIONISM, AND PERCEIVED
SOCIAL SUPPORT ON ACADEMIC PROCRASTINATION

- Bodner, T. E. (2006). Missing data: Prevalence and reporting practices. *Psychological Reports*, 99(3), 675-680. <https://doi.org/10.2466/PRO.99.3.675-680>
- Boriek, E. R. (2020). The predictive ability of self-efficacy and social support expectations of procrastination for students who are late for their studies at King Saud University. *Journal of Al-Quds Open University for Educational & Psychological Research & Studies*, 11(32), 13. <https://doi.org/10.33977/1182-011-032-014>
- Broadbent, J. (2017). Comparing online and blended learner's self-regulated learning strategies and academic performance. *The Internet and Higher Education*, 33, 24-32. <https://doi.org/10.1016/j.iheduc.2017.01.004>
- Browne, R. H. (1995). On the use of a pilot sample for sample size determination. *Statistics in Medicine*, 14(17), 1933–1940. <https://doi.org/10.1002/sim.4780141709>
- Bugajski, A., Frazier, S. K., Moser, D. K., Lennie, T. A., & Chung, M. (2019). Psychometric testing of the multidimensional scale of perceived social support in patients with comorbid COPD and heart failure. *Heart & Lung*, 48(3), 193–197. <https://doi.org/10.1016/j.hrtlng.2018.09.014>
- Bukhari, S. R., & Afzal, F. (2017). Perceived social support predicts psychological problems among university students. *The International Journal of Indian Psychology*, 4(2), 18-27. <https://www.researchgate.net/publication/334363673>

ACADEMIC SELF-EFFICACY, PERFECTIONISM, AND PERCEIVED
SOCIAL SUPPORT ON ACADEMIC PROCRASTINATION

Burka, J. B., & Yuen, L. M. (1983). *Procrastination: Why you do it, what to do about it*.

https://librarysearch.rgu.ac.uk/permalink/44RGU_INST/11hq2ls/alma9910025906885046

[36](#)

Burnam, A., Komarraju, M., Hamel, R., & Nadler, D. R. (2014). Do adaptive perfectionism and self-determined motivation reduce academic procrastination? *Learning and Individual Differences, 36*, 165–172. <https://doi.org/10.1016/j.lindif.2014.10.009>

Burnett, A. J., Enyeart Smith, T. M., & Wessel, M. T. (2016). Use of the social cognitive theory to frame university students' perceptions of cheating. *Journal of Academic Ethics, 14*(1), 49–69. <https://doi.org/10.1007/s10805-015-9252-4>

Burns, L. R., & Fedewa, B. A. (2005). Cognitive styles: Links with perfectionistic thinking. *Personality and Individual Differences, 38*(1), 103–113.

<https://doi.org/10.1016/j.paid.2004.03.012>

Byrne, M., Flood, B., & Griffin, J. (2014). Measuring the academic self-efficacy of first-year accounting Students. *Accounting Education, 23*(5), 407–423.

<https://doi.org/10.1080/09639284.2014.931240>

Cam, Z., & Ogulmus, S. (2021). Testing of a model on the school burnout among high school students and exploring the model's prediction level of grade retention. *International Journal of Curriculum and Instruction, 13*(2), 950-985.

<https://files.eric.ed.gov/fulltext/EJ1291685.pdf>

ACADEMIC SELF-EFFICACY, PERFECTIONISM, AND PERCEIVED
SOCIAL SUPPORT ON ACADEMIC PROCRASTINATION

- Çapan, B. E. (2010). Relationship among perfectionism, academic procrastination and life satisfaction of university students. *Procedia-Social and Behavioral Sciences*, 5, 1665-1671. <https://doi.org/10.1016/j.sbspro.2010.07.342>
- Cazan, Ana-Maria. (2016). Almost perfect scale - validity of a perfectionism scale on a Romanian university sample. *Romanian Journal of Experimental Applied Psychology*, 7(1), 367–371. <https://doi.org/10.15303/rjeap.2016.si1.a79>
- Cerino, E. S. (2014). Relationships between academic motivation, self-efficacy, and academic procrastination. *Psi Chi Journal of Psychological Research*, 19(4), 156–163. <https://doi.org/10.24839/2164-8204.jn19.4.156>
- Chakraborty, R., & Chechi, V. (2019, April). *Validation of the revised academic procrastination scale short form in the Indian context*. Volatile Consumer Behavior and Marketing, Phagwara, Punjab, India. https://www.researchgate.net/publication/339602865_Validation_of_the_Revised_Academic_Procrastination_Scale_Short_Form_in_the_Indian_Context
- Chang, E. C., Watkins, A., & Banks, K. H. (2004). How adaptive and maladaptive perfectionism relate to positive and negative psychological functioning: Testing a stress-mediation model in black and white female college students. *Journal of Counseling Psychology*, 51(1), 93–102. <https://doi.org/10.1037/0022-0167.51.1.93>

ACADEMIC SELF-EFFICACY, PERFECTIONISM, AND PERCEIVED
SOCIAL SUPPORT ON ACADEMIC PROCRASTINATION

- Chang, H. K. (2014). The relationship between perfectionism, anxiety, and academic procrastination in college students. *Psychology Student Research Journal*, 2, 6-13.
[https://scholarworks.lib.csusb.edu/cgi/viewcontent.cgi?referer=https://scholar.google.com/
&httpsredir=1&article=1001&context=psr-journal#page=9](https://scholarworks.lib.csusb.edu/cgi/viewcontent.cgi?referer=https://scholar.google.com/&httpsredir=1&article=1001&context=psr-journal#page=9)
- Chen, B. B., Shi, Z., & Wang, Y. (2016). Do peers matter? Resistance to peer influence as a mediator between self-esteem and procrastination among undergraduates. *Frontiers in psychology*, 7, 1529. <https://doi.org/10.3389/fpsyg.2016.01529>
- Chiu, S. I., Chen, T. Y., Chang, T. L., & Chen, C. Y. (2020). Procrastination, dependence and social loafing: comparison in high/low task visibility between active/passive procrastinators. *International Journal of Psychiatry Research*, 3(2), 1-11.
<https://doi.org/10.33425/2641-4317.1058>
- Chu, A. H. C., & Choi, J. N. (2005). Rethinking procrastination: Positive effects of “active” procrastination behavior on attitudes and performance. *The Journal of Social Psychology*, 145, 245-263. <https://doi.org/10.3200/SOCP.145.3.245-264>
- Closson, L. M., & Boutilier, R. R. (2017). Perfectionism, academic engagement, and procrastination among undergraduates: The moderating role of honors student status. *Learning and Individual Differences*, 57, 157–162.
<https://doi.org/10.1016/j.lindif.2017.04.010>
- Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd ed.). Erlbaum.
<https://doi.org/10.4324/9780203771587>

ACADEMIC SELF-EFFICACY, PERFECTIONISM, AND PERCEIVED
SOCIAL SUPPORT ON ACADEMIC PROCRASTINATION

Cook, R. D., & Weisberg, S. (1982). *Residuals and influence in regression*. Chapman & Hall.

<https://hdl.handle.net/11299/37076>

Corkin, D. M., Yu, S. L., Wolters, C. A., & Wiesner, M. (2014). The role of the college classroom climate on academic procrastination. *Learning and Individual Differences*, 32,

294–303. <https://doi.org/10.1016/j.lindif.2014.04.001>

COVID-19 Malaysia Updates by MOH. (2020). Ministry of Health Malaysia. [https://covid-](https://covid-19.moh.gov.my/faqsop/sop-perintah-kawalan-pergerakan-pkp)

[19.moh.gov.my/faqsop/sop-perintah-kawalan-pergerakan-pkp](https://covid-19.moh.gov.my/faqsop/sop-perintah-kawalan-pergerakan-pkp)

Daniel, S. J. (2020). Education and the COVID-19 pandemic. *Prospects*, 49(1–2), 91–96.

<https://doi.org/10.1007/s11125-020-09464-3>

Danielsen, A. G., Wiium, N., Wilhelmsen, B. U., & Wold, B. (2010). Perceived support provided by teachers and classmates and students' self-reported academic initiative. *Journal of*

school psychology, 48(3), 247–267. <https://doi.org/10.1016/j.jsp.2010.02.002>

de la Vega, R., Molton, I. R., Miró, J., Smith, A. E., & Jensen, M. P. (2019). Changes in perceived social support predict changes in depressive symptoms in adults with physical disability. *Disability and Health Journal*, 12(2), 214–219.

<https://doi.org/10.1016/j.dhjo.2018.09.005>

Dike, I., & Emmanuel, S. O. (2019). Study on conscientiousness, academic self-efficacy and self-esteem predictive power on academic procrastination among counselling students.

Psychocentrum Review, 1(2), 69–78. <https://doi.org/10.30998/pcr.1281>

ACADEMIC SELF-EFFICACY, PERFECTIONISM, AND PERCEIVED
SOCIAL SUPPORT ON ACADEMIC PROCRASTINATION

Dong, Y., & Peng, C. Y. J. (2013). Principled missing data methods for researchers.

SpringerPlus, 2(1), 1-17. <https://doi.org/10.1186/2193-1801-2-222>

Ducharme, J. (2020, March 11). *World Health Organization declares COVID-19 a 'Pandemic.'*

Here's what that means. Time. <https://time.com/5791661/who-coronavirus-pandemic-declaration/>

Dunkley, D. M., Blankstein, K. R., Masheb, R. M., & Grilo, C. M. (2006). Personal standards and evaluative concerns dimensions of “clinical” perfectionism: A reply to Shafran et al. (2002, 2003) and Hewitt et al. (2003). *Behaviour Research and Therapy*, 44(1), 63–84.

<https://doi.org/10.1016/j.brat.2004.12.004>

Duru, E., & Balkis, M. (2017). Procrastination, self-esteem, academic performance, and well-being: A moderated mediation model. *International Journal of Educational Psychology*,

6(2), 97. <https://doi.org/10.17583/ijep.2017.2584>

Education Destination Malaysia. (n.d.). *Everything you need to know about Pre-University | essential guide.* <https://educationdestinationmalaysia.com/essential-guide/malaysia/pre-university>

Education structure in Malaysia, levels of education in Malaysia. (n.d.).

MalaysiaEducation.Info. <https://www.malaysiaeducation.info/education-system/education-structure-in-malaysia.html>

ACADEMIC SELF-EFFICACY, PERFECTIONISM, AND PERCEIVED
SOCIAL SUPPORT ON ACADEMIC PROCRASTINATION

- Eggens, L., Van der Werf, M. P. C., & Bosker, R. J. (2008). The influence of personal networks and social support on study attainment of students in university education. *Higher Education*, 55(5), 553–573. <https://doi.org/10.1007/s10734-007-9074-4>
- Elengoe, A. (2020). COVID-19 outbreak in Malaysia. *Osong Public Health and Research Perspectives*, 11(3), 93–100. <https://doi.org/10.24171/j.phrp.2020.11.3.08>
- Erdfelder, E., Faul, F., & Buchner, A. (1996). GPOWER: A general power analysis program. *Behavior Research Methods, Instruments, & Computers*, 28(1), 1-11. <https://doi.org/10.3758/BF03203630>
- Erol, K., & Danyal, T. (2020). Analysis of distance education activities conducted during COVID-19 pandemic. *Educational Research and Reviews*, 15(9), 536–543. <https://doi.org/10.5897/err2020.4033>
- Erzen, E., & Çikrikci, Ö. (2018). The role of school attachment and parental social support in academic procrastination. *Turkish Journal of Teacher Education*, 7(1), 17-27. https://www.researchgate.net/publication/329124290_The_Role_of_School_Attachment_and_Parental_Social_Support_in_Academic_Procrastination
- Etikan, I. (2016). Comparison of convenience sampling and purposive sampling. *American Journal of Theoretical and Applied Statistics*, 5(1), 1. <https://doi.org/10.11648/j.ajtas.20160501.11>

ACADEMIC SELF-EFFICACY, PERFECTIONISM, AND PERCEIVED
SOCIAL SUPPORT ON ACADEMIC PROCRASTINATION

- Farran, B. (2004). *Predictors of academic procrastination in college students* (Doctoral dissertation, ProQuest Information & Learning). <https://www.worldcat.org/title/predictors-of-academic-procrastination-in-college-students/oclc/56052972>
- Faul, F., Erdfelder, E., Buchner, A., & Lang, A. G. (2009). Statistical power analyses using G* Power 3.1: Tests for correlation and regression analyses. *Behavior research methods*, *41*(4), 1149-1160. <https://doi.org/10.3758/BRM.41.4.1149>
- 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>
- Feng, Y., Huang, X., & Liu, S. (Eds.). (2018). *Research on academic procrastination among OEC students* (Vol. 163). Atlantis Press. <https://doi.org/10.2991/meici-18.2018.168>
- Ferrari, J. R., & Pychyl, T. A. (2012). "If I wait, my partner will do it: " The role of conscientiousness as a mediator in the relation of academic procrastination and perceived social loafing. *North American Journal of Psychology*, *14*(1), 13–24. https://www.researchgate.net/publication/276354196_If_I_Wait_My_Partner_Will_Do_It_The_Role_of_Conscientiousness_as_a_Mediator_in_the_Relation_of_Academic_Procrastination_and_Perceived_Social_Loafing
- Ferreira, S., Magalhães, E., & Prioste, A. (2020). Social support and mental health of young people in residential care: A qualitative study. *Anuario de Psicología Jurídica*, *30*(1), 29–34. <https://doi.org/10.5093/apj2019a12>

ACADEMIC SELF-EFFICACY, PERFECTIONISM, AND PERCEIVED
SOCIAL SUPPORT ON ACADEMIC PROCRASTINATION

- Flatt, C., & Jacobs, R. L. (2019). Principle assumptions of regression analysis: Testing, techniques, and statistical reporting of imperfect data sets. *Advances in Developing Human Resources*, 21(4), 484–502. <https://doi.org/10.1177/1523422319869915>
- Flett, G. L., & Hewitt, P. L. (2002). *Perfectionism: Theory, research, and treatment*. American Psychological Association. <https://doi.org/10.1037/10458-000>
- Friedlander, L. J., Reid, G. J., Shupak, N., & Cribbie, R. (2007). Social support, self-esteem, and stress as predictors of adjustment to university among first-year undergraduates. *Journal of College Student Development*, 48(3), 259–274. <https://doi.org/10.1353/csd.2007.0024>
- Frost, R. O., Heimberg, R. G., Holt, C. S., Mattia, J. I., & Neubauer, A. L. (1993). A comparison of two measures of perfectionism. *Personality and Individual Differences*, 14(1), 119–126. [https://doi.org/10.1016/0191-8869\(93\)90181-2](https://doi.org/10.1016/0191-8869(93)90181-2)
- Frost, R. O., Marten, P., Lahart, C., & Rosenblate, R. (1990). The dimensions of perfectionism. *Cognitive Therapy and Research*, 14(5), 449–468. <https://doi.org/10.1007/BF01172967>
- Ganasegeran, K., Ch'ng, A. S. H., & Looi, I. (2020). COVID-19 in Malaysia: Crucial measures in critical times. *Journal of Global Health*, 10(2). <https://doi.org/10.7189/jogh.10.020333>
- García-Montalvo, G. O. (2021). Academic procrastination in university and COVID-19. *International Journal of Latest Research in Humanities and Social Science (IJLRHSS)*, 4(2), 142-143. <http://www.ijlrhss.com/paper/volume-4-issue-2/20-HSS-953.pdf>

ACADEMIC SELF-EFFICACY, PERFECTIONISM, AND PERCEIVED
SOCIAL SUPPORT ON ACADEMIC PROCRASTINATION

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

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

Ghasemi, A., & Zahediasl, S. (2012). Normality tests for statistical analysis: A guide for Non-Statisticians. *International Journal of Endocrinology and Metabolism*, 10(2), 486–489.

<https://doi.org/10.5812/ijem.3505>

Ghosh, R., & Roy, S. (2017). Relating multidimensional perfectionism and academic procrastination among Indian university students. *Gender in Management: An International Journal*, 32(8), 518–534.

<https://doi.org/10.1108/gm-01-2017-0011>

Ghosh, S., & Vohra, N. (2021). Procrastination and anxiety among Indian college students: The role of perceived parenting styles, locus of control and self efficacy, 1-56.

<https://doi.org/10.31234/osf.io/wbf5v>

Gülaçtı, F. (2010). The effect of perceived social support on subjective well-being. *Procedia-Social and Behavioral Sciences*, 2(2), 3844-3849.

<https://doi.org/10.1016/j.sbspro.2010.03.602>

Gungor, A. Y. (2020). The relationship between academic procrastination, academic self-efficacy, and academic achievement among undergraduates. *Oltu Beşeri ve Sosyal Bilimler Fakültesi Dergisi*, 1(1), 57-68.

<https://dergipark.org.tr/en/download/article-file/1184560>

ACADEMIC SELF-EFFICACY, PERFECTIONISM, AND PERCEIVED
SOCIAL SUPPORT ON ACADEMIC PROCRASTINATION

- Haghani, H. (2014). The relationship between academic procrastination, academic achievement, and self-efficacy in nursing students of Tehran University of medical sciences. *Iranian Journal of Medical Education*, 14(1), 32-40. <http://ijme.mui.ac.ir/article-1-2911-en.html>
- Hall, D., & Buzwell, S. (2012). The problem of free-riding in group projects: Looking beyond social loafing as reason for non-contribution. *Active Learning in Higher Education*, 14(1), 37–49. <https://doi.org/10.1177/1469787412467123>
- Hamachek, D. E. (1978). Psychodynamics of normal and neurotic perfectionism. *Psychology: A Journal of Human Behavior*, 15(1), 27–33.
- Harrison, J. (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
- Hen, M., & Goroshit, M. (2014). Academic self-efficacy, emotional intelligence, GPA and academic procrastination in higher education. *Eurasian Journal of Social Sciences*, 2(1), 1-10. <https://doi.org/10.1177/0022219412439325>
- Hewitt, P. L., & Flett, G. L. (1991). Perfectionism in the self and social contexts: Conceptualization, assessment, and association with psychopathology. *Journal of Personality and Social Psychology*, 60(3), 456–470. <https://doi.org/10.1037/0022-3514.60.3.456>

ACADEMIC SELF-EFFICACY, PERFECTIONISM, AND PERCEIVED
SOCIAL SUPPORT ON ACADEMIC PROCRASTINATION

- Hicks, R. E., & Fiona Meng Yao, W. (2015). Psychological capital as mediator between adaptive perfectionism and academic procrastination. *Global Science and Technology Forum Journal of Psychology*, 2(1), 34-40.
<http://dl6.globalstf.org/index.php/jpsych/article/view/1369>
- Hoaglin, D. C., & Welsch, R. E. (1978). The hat matrix in regression and ANOVA. *American Statistician*, 32(1), 17–22. <https://doi.org/10.1080/00031305.1978.10479237>
- Hong, J. C., Lee, Y. F., & Ye, J. H. (2021). Procrastination predicts online self-regulated learning and online learning ineffectiveness during the Coronavirus lockdown. *Personality and individual differences*, 174, 110673. <https://doi.org/10.1016/j.paid.2021.110673>
- Huang, C. (2012). Gender differences in academic self-efficacy: A meta-analysis. *European Journal of Psychology of Education*, 28(1), 1–35. <https://doi.org/10.1007/s10212-011-0097-y>
- Huang, C., Wang, Y., Li, X., Ren, L., Zhao, J., Hu, Y., Zhang, L., Fan, G., Xu, J., Gu, X., Cheng, Z., Yu, T., Xia, J., Wei, Y., Wu, W., Xie, X., Yin, W., Li, H., Liu, M., ...Cao, B. (2020). Clinical features of patients infected with 2019 novel coronavirus in Wuhan, China. *The Lancet*, 395(10223), 497–506. [https://doi.org/10.1016/s0140-6736\(20\)30183-5](https://doi.org/10.1016/s0140-6736(20)30183-5)
- Hussain, I., & Sultan, S. (2010). Analysis of procrastination among university students. *Procedia Social and Behavioral Sciences*, 5, 1897-1904.
<https://doi.org/10.1016/j.sbspro.2010.07.385>

ACADEMIC SELF-EFFICACY, PERFECTIONISM, AND PERCEIVED
SOCIAL SUPPORT ON ACADEMIC PROCRASTINATION

- Hwang, A. H. C., & Oh, J. (2020). Interacting with background music engages e-customers more: The impact of interactive music on consumer perception and behavioral intention. *Journal of Retailing and Consumer Services*, 54, 1-15.
<https://doi.org/10.1016/j.jretconser.2019.101928>
- Jadidi, F., Mohammadkhani, S., & Tajrishi, K. Z. (2011). Perfectionism and academic procrastination. *Procedia Social and Behavioral Sciences*, 30, 534–537.
<https://doi.org/10.1016/j.sbspro.2011.10.104>
- Jain, A., Tripathi, S., Dwivedi, H. D., & Saxena, P. (2018). Forecasting price of cryptocurrencies using tweets sentiment analysis. *2018 Eleventh International Conference on Contemporary Computing (IC3)*. Published. <https://doi.org/10.1109/ic3.2018.8530659>
- Janssen, J. (2015). Academic procrastination: Prévalence among high school and undergraduate students and relationship to academic achievement.
https://scholarworks.gsu.edu/epse_diss/103/
- Jia, J., Jiang, Q., & Lin, X. H. (2020). Academic anxiety and self-handicapping among medical students during the COVID-19 pandemic: A moderated mediation model. *Research Square*, 1-22. <https://doi.org/10.21203/rs.3.rs-77015/v1>
- Kağan, M., ÇAkır, 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.org/10.1016/j.sbspro.2010.03.292>

ACADEMIC SELF-EFFICACY, PERFECTIONISM, AND PERCEIVED
SOCIAL SUPPORT ON ACADEMIC PROCRASTINATION

- Kandemir, M. (2014a). Reasons of academic procrastination: Self-regulation, academic self-efficacy, life satisfaction and demographics variables. *Procedia-Social and Behavioral Sciences*, 152, 188-193. <https://doi.org/10.1016/j.sbspro.2014.09.179>
- Kandemir, M. (2014b). The predictors of academic procrastination: Responsibility, attributional styles regarding success/failure, and beliefs in academic self-efficacy. *Education & Science/Egitim ve Bilim*, 39(171), 99-114.
<http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.887.2417&rep=rep1&type=pdf>
- Kang, H. (2013). The prevention and handling of the missing data. *Korean Journal of Anesthesiology*, 64(5), 402. <https://doi.org/10.4097/kjae.2013.64.5.402>
- Kanten, P., & Yesiltas, M. (2015). The effects of positive and negative perfectionism on work engagement, psychological well-being and emotional exhaustion. *Procedia Economics and Finance*, 23, 1367–1375. [http://dx.doi.org/10.1016/S2212-5671\(15\)00522-5](http://dx.doi.org/10.1016/S2212-5671(15)00522-5)
- Karimi Moonaghi, H., & Baloochi Beydokhti, T. (2017). Academic procrastination and its characteristics: A Narrative Review. *Future of medical education journal*, 7(2), 43-50.
<https://doi.org/10.22038/fmej.2017.9049>
- Kawamura, K. Y., Frost, R. O., & Harmatz, M. G. (2002). The relationship of perceived parenting styles to perfectionism. *Personality and Individual Differences*, 32(2), 317–327.
[https://doi.org/10.1016/S0191-8869\(01\)00026-5](https://doi.org/10.1016/S0191-8869(01)00026-5)
- Keis, O., Grab, C., Schneider, A., & Öchsner, W. (2017). Online or face-to-face instruction? A qualitative study on the electrocardiogram course at the university of ULM to examine

ACADEMIC SELF-EFFICACY, PERFECTIONISM, AND PERCEIVED
SOCIAL SUPPORT ON ACADEMIC PROCRASTINATION

why students choose a particular format. *Medical Education Online*, 17, 1–8.

<https://doi.org/10.1186/s12909-017-1053-6>

Keogh, K. M., Smith, S. M., White, P., McGilloway, S., Kelly, A., Gibney, J., & O'Dowd, T.

(2011). Psychological family intervention for poorly controlled type 2 diabetes. *The American journal of managed care*, 17(2), 105-113.

<https://pubmed.ncbi.nlm.nih.gov/21473660/>

Khan, S., Ali, A., Siddique, R., & Nabi, G. (2020). Novel coronavirus is putting the whole world on alert. *Journal of Hospital Infection*, 104(3), 252-253.

<https://doi.org/10.1016/j.jhin.2020.01.019>

Khoirunnisa, R. N., Jannah, M., Dewi, D. K., & Satiningsih, S. (2021). Prokrastinasi akademik mahasiswa tingkat akhir pada masa pandemi COVID-19. *Jurnal Psikologi Teori dan*

Terapan, 11(3), 278-292. <http://dx.doi.org/10.26740/jptt.v11n3.p278-292>

Khudzari, J. M., Halim, S. A. A., Lokman, N., & Othman, S. (2019). Social cognitive theory (SCT) and students' failure in bachelor of corporate administration programme. *Asian*

Journal of University Education, 15(3), 151–162.

<https://doi.org/10.24191/ajue.v15i3.7566>

Kim, K. R., & Seo, E. H. (2015). The relationship between procrastination and academic performance: A meta-analysis. *Personality and Individual Differences*, 82, 26-33.

<https://doi.org/10.1016/j.paid.2015.02.038>

ACADEMIC SELF-EFFICACY, PERFECTIONISM, AND PERCEIVED
SOCIAL SUPPORT ON ACADEMIC PROCRASTINATION

- Klassen, R. M., Krawchuk, L. L., & Rajani, S. (2008). Academic procrastination of undergraduates: Low self-efficacy to self-regulate predicts higher levels of procrastination. *Contemporary Educational Psychology*, 33(4), 915-931.
<https://doi.org/10.1016/j.cedpsych.2007.07.001>
- Klibert, J. J., Langhinrichsen-Rohling, J., & Saito, M. (2005). Adaptive and maladaptive aspects of self-oriented versus socially prescribed perfectionism. *Journal of College Student Development*, 46(2), 141–156. <https://doi.org/10.1353/csd.2005.0017>
- Klingsieck, K. B., Fries, S., Horz, C., & Hofer, M. (2012). Procrastination in a distance university setting. *Distance Education*, 33(3), 295–310.
<https://doi.org/10.1080/01587919.2012.723165>
- Klink, J. L., Byars-Winston, A., & Bakken, L. L. (2008). Coping efficacy and perceived family support: potential factors for reducing stress in premedical students. *Medical Education*, 42(6), 572-579. <https://doi.org/10.1111/j.1365-2923.2008.03091.x>
- Kurbanoglu, N. I., & Akim, A. (2010). The relationships between university students' Chemistry laboratory anxiety, attitudes, and self-efficacy beliefs. *Australian Journal of Teacher Education*, 35(8). <https://doi.org/10.14221/ajte.2010v35n8.4>
- Kurtovic, A., Vrdoljak, G., & Idzanovic, A. (2019). Predicting procrastination: The role of academic achievement, self-efficacy and perfectionism. *International Journal of Educational Psychology*, 8(1), 1-26. <https://doi.org/10.17583/ijep.2019.2993>

ACADEMIC SELF-EFFICACY, PERFECTIONISM, AND PERCEIVED
SOCIAL SUPPORT ON ACADEMIC PROCRASTINATION

- Larson, R. B. (2018). Controlling social desirability bias. *International Journal of Market Research*, 61(5), 534–547. <https://doi.org/10.1177/1470785318805305>
- Lefever, S., Dal, M., & Matthíasdóttir, S. (2007). Online data collection in academic research: Advantages and limitations. *British Journal of Educational Technology*, 38(4), 574–582. <https://doi.org/10.1111/j.1467-8535.2006.00638.x>
- Lerner, R. M. (1982). Children and adolescents as producers of their own development. *Developmental Review*, 2(4), 342–370. [https://doi.org/10.1016/0273-2297\(82\)90018-1](https://doi.org/10.1016/0273-2297(82)90018-1)
- Levin, K. A. (2006). Study design III: Cross-sectional studies. *Evidence-Based Dentistry*, 7(1), 24–25. <https://doi.org/10.1038/sj.ebd.6400375>
- Li, L., Gao, H., & Xu, Y. (2020). The mediating and buffering effect of academic self-efficacy on the relationship between smartphone addiction and academic procrastination. *Computers & Education*, 159, 1-11. <https://doi.org/10.1016/j.compedu.2020.104001>
- Li, Q., Guan, X., Wu, P., Wang, X., Zhou, L., Tong, Y., & Feng, Z. (2020). Early transmission dynamics in Wuhan, China, of novel coronavirus–infected pneumonia. *New England Journal of medicine*. <https://doi.org/10.1056/nejmoa2001316>
- Liimatta, P. O. (2021). *The relationship between living situation, in person and online social support and academic procrastination during the COVID-19 pandemic* (Bachelor's thesis, University of Twente). http://essay.utwente.nl/87361/1/Liimatta_BA_Faculty%20of%20Behavioural%2C%20Management%20and%20Social%20Sciences.pdf

ACADEMIC SELF-EFFICACY, PERFECTIONISM, AND PERCEIVED
SOCIAL SUPPORT ON ACADEMIC PROCRASTINATION

Liu, G., Cheng, G., Hu, J., Pan, Y., & Zhao, S. (2020). Academic self-efficacy and postgraduate procrastination: A moderated mediation model. *Frontiers in Psychology, 11*.

<https://doi.org/10.3389/fpsyg.2020.01752>

Liu, W., Pan, Y., Luo, X., Wang, L., & Pang, W. (2017). Active procrastination and creative ideation: The mediating role of creative self-efficacy. *Personality and Individual Differences, 119*, 227–229.

<https://doi.org/10.1016/j.paid.2017.07.033>

Illam, S. N. S., Hassan, M. S., Mohideen, R. S., Ramlan, A. F., & Kamal, R. M. (2020). Online distance learning readiness during covid-19 outbreak among undergraduate students.

International Journal of Academic Research in Business and Social Sciences, 10(5), 642-657. <https://doi.org/10.6007/ijarbss/v10-i5/7236>

Lo, A., & Abbott, M. J. (2019a). Affective, cognitive, and behavioural responses to repeatedly demanding performance expectations across adaptive and maladaptive dimensions of perfectionism. *Canadian Journal of Behavioural Science / Revue canadienne des sciences du comportement, 51*(4), 278–289. <https://doi.org/10.1037/cbs0000144>

Lo, A., & Abbott, M. J. (2019b). Self-concept certainty in adaptive and maladaptive perfectionists. *Journal of Experimental Psychopathology, 10*, 1–12.

<http://dx.doi.org/10.1177/2043808719843455>

LoCicero, K. A., & Ashby, J. S. (2000). Multidimensional perfectionism in middle school age gifted students: A comparison to peers from the general cohort. *Roeper Review, 22*(3),

182–185. <https://doi.org/10.1080/02783190009554030>

ACADEMIC SELF-EFFICACY, PERFECTIONISM, AND PERCEIVED
SOCIAL SUPPORT ON ACADEMIC PROCRASTINATION

- Luthans, B. C., Luthans, K. W., & Jensen, S. M. (2012). The impact of business school students' psychological capital on academic performance. *Journal of Education for Business*, 87(5), 253–259. <https://doi.org/10.1080/08832323.2011.609844>
- Madjid, A., Prayogo, D., & Shodiq, S. F. (2021). Academic procrastination among students: The influence of social support and resilience mediated by religious character. *Jurnal Cakrawala Pendidikan*, 40(1). <https://doi.org/10.21831/cp.v40i1.34641>
- Malkoç, A., & Kesen Mutlu, A. (2018). Academic self-efficacy and academic procrastination: Exploring the mediating role of academic motivation in Turkish university students. *Universal Journal of Educational Research*, 6(10), 2087–2093. <https://doi.org/10.13189/ujer.2018.061005>
- Marshall, E., & Samuels, P. (2017, November). *Checking normality for parametric tests*. ResearchGate. <https://doi.org/10.13140/RG.2.2.33314.94405>
- Matoti, S. N. (2011). Measuring the academic self-efficacy of students at a South African higher education institution. *Journal of Psychology in Africa*, 21(1), 151–154. <https://doi.org/10.1080/14330237.2011.10820442>
- Maxwell, O., Chukwudike, C. N., Chinedu, O. V., Valentine, C. O., & Paul, O. C. (2019). Comparison of different parametric methods in handling critical multicollinearity: Monte Carlo simulation study. *Asian Journal of Probability and Statistics*, 3(2), 1–16. <https://doi.org/10.9734/ajpas/2019/v3i230085>

ACADEMIC SELF-EFFICACY, PERFECTIONISM, AND PERCEIVED
SOCIAL SUPPORT ON ACADEMIC PROCRASTINATION

McCloskey, J. D. (2011). *Finally, my thesis on academic procrastination* (Master's thesis).

ProQuest, UMI Dissertations Publishing. <https://rc.library.uta.edu/uta-ir/handle/10106/9538>

Mihelič, K. K., & Culiberg, B. (2019). Reaping the fruits of another's labor: The role of moral meaningfulness, mindfulness, and motivation in social loafing. *Journal of Business Ethics*, *160*(3), 713-727. <https://doi.org/10.1007/s10551-018-3933-z>

Milgram, N. N., Mey-Tal, G., & Levison, Y. (1998). Procrastination, generalized or specific, in college students and their parents. *Personality and Individual Differences*, *25*(2), 297-316. [https://doi.org/10.1016/S0191-8869\(98\)00044-0](https://doi.org/10.1016/S0191-8869(98)00044-0)

Mishra, P., Gupta, A., Pandey, C., Singh, U., Sahu, C., & Keshri, A. (2019). Descriptive statistics and normality tests for statistical data. *Annals of Cardiac Anaesthesia*, *22*(1), 67–72. https://doi.org/10.4103/aca.aca_157_18

Mohammadzadeh, M., Eftekhar Soadi, Z., Bakhtiarpour, S., & Joharifard, R. (2021). Investigate the moderating role of mobile phone dependency in the model of predicting subjective vitality based on perceived social support and Alexithymia mediated by academic procrastination. *Psychological Methods and Models*, *11*(42), 115–131. http://jpmm.miau.ac.ir/article_4593.html?lang=en

Mohebi, S., Parham, M., Sharifirad, G., Gharlipour, Z., Mohammadbeigi, A., & Rajati, F. (2018). Relationship between perceived social support and self-care behavior in type 2

ACADEMIC SELF-EFFICACY, PERFECTIONISM, AND PERCEIVED
SOCIAL SUPPORT ON ACADEMIC PROCRASTINATION

diabetics: A cross-sectional study. *Journal of education and health promotion*, 7, 48.

https://doi.org/10.4103/jehp.jehp_73_17

National Center for Education Evaluation and Regional Assistance: *Descriptive analysis in education: A guide for researchers*. (2017). ERIC. <https://ies.ed.gov/ncee/pubs/20174023/>

Nayak, S. G. (2019). Impact of procrastination and time-management on academic stress among undergraduate nursing students: A cross sectional study. *International Journal of Caring Sciences*, 12(3).

http://www.internationaljournalofcaringsciences.org/docs/18_nayak_original_12_3.pdf

Naz, S., Hassan, G., & Luqman, M. (2021). Influence of perfectionism and academic motivation on academic procrastination among students. *Journal of Educational Sciences & Research*, 8(1), 13-20. <https://doi.org/10.52587/jesar.08.01.01>

Nederhof, A. J. (1985). Methods of coping with social desirability bias: A review. *European Journal of Social Psychology*, 15(3), 263–280. <https://doi.org/10.1002/ejsp.2420150303>

Nussbaumer-Streit, B., Mayr, V., Dobrescu, A. I., Chapman, A., Persad, E., Klerings, I., Wagner, G., Siebert, U., Christof, C., Zachariah, C., & Gartlehner, G. (2020). Quarantine alone or in combination with other public health measures to control COVID-19: A rapid review. *Cochrane Database of Systematic Reviews*, 1–75.

<https://doi.org/10.1002/14651858.cd013574>

Ong, E. (2021). [Updated] Complete list of official nationwide MCO & EMCO SOP 202.

KLOOK. <https://www.klook.com/en-MY/blog/malaysia-pkpp/>

ACADEMIC SELF-EFFICACY, PERFECTIONISM, AND PERCEIVED
SOCIAL SUPPORT ON ACADEMIC PROCRASTINATION

Onwuegbuzie, A. J. (2000). Academic procrastinators and perfectionistic tendencies among graduate students. *Journal of Social Behavior & Personality, 15*(5), 103–109.

https://www.researchgate.net/publication/291767868_Academic_Procrastinators_and_Perfectionistic_Tendencies_among_Graduate_Students

Osborne, J. W., & Waters, E. (2002). Four assumptions of multiple regression that researchers should always test. *Practical Assessment, Research, and Evaluation, 8*(2), 1-5.

<http://ericae.net/pare/getvn.asp?v=8&n=2>

Park, H. J., & Jeong, D. Y. (2015). Psychological well-being, life satisfaction, and self-esteem among adaptive perfectionists, maladaptive perfectionists, and nonperfectionists. *Personality and Individual Differences, 72*, 165–170.

<http://dx.doi.org/10.1016/j.paid.2014.08.031>

Patrzek, J., Sattler, S., van Veen, F., Grunschel, C., & Fries, S. (2015). Investigating the effect of academic procrastination on the frequency and variety of academic misconduct: A panel study. *Studies in Higher Education, 40*(6), 1014-1029.

<https://doi.org/10.1080/03075079.2013.854765>

Paulhus, D. L. (1991). Measurement and Control of Response Bias. *Measures of Personality and Social Psychological Attitudes, 17–59*. [https://doi.org/10.1016/b978-0-12-590241-](https://doi.org/10.1016/b978-0-12-590241-0.50006-x)

[0.50006-x](https://doi.org/10.1016/b978-0-12-590241-0.50006-x)

ACADEMIC SELF-EFFICACY, PERFECTIONISM, AND PERCEIVED
SOCIAL SUPPORT ON ACADEMIC PROCRASTINATION

Pearlman-Avni, S., & Harduf, R. (2019). Procrastination, perfectionism, and locus-of-control in academic settings. *Special School, LXXX(2)*, 108–124.

<https://doi.org/10.5604/01.3001.0013.1973>

Peat, J. (2005). *Medical statistics: A guide to data analysis and critical appraisal*. BMJ Publishing Group.

Peguero, A. A., & Shaffer, K. A. (2015). Academic self-efficacy, dropping out, and the significance of inequality. *Sociological Spectrum, 35(1)*, 46-64.

<https://doi.org/10.1080/02732173.2014.978428>

Peixoto, E. M., Pallini, A. C., Vallerand, R. J., Rahimi, S., & Silva, M. V. (2021). The role of passion for studies on academic procrastination and mental health during the COVID-19 pandemic. *Social Psychology of Education, 24(3)*, 877–893.

<https://doi.org/10.1007/s11218-021-09636-9>

Pelikan, E. R., Lüftenegger, M., Holzer, J., Korlat, S., Spiel, C., & Schober, B. (2021). Learning during COVID-19: the role of self-regulated learning, motivation, and procrastination for perceived competence. *Zeitschrift für Erziehungswissenschaft, 24(2)*, 393-418.

<https://doi.org/10.1007/s11618-021-01002-x>

Peugh, J. L., & Enders, C. K. (2004). Missing data in educational research: A review of reporting practices and suggestions for improvement. *Review Of Educational Research, 74(4)*, 525-

556. <https://doi.org/10.3102/00346543074004525>

ACADEMIC SELF-EFFICACY, PERFECTIONISM, AND PERCEIVED
SOCIAL SUPPORT ON ACADEMIC PROCRASTINATION

Pontes, H. M., Király, O., Demetrovics, Z., & Griffiths, M. D. (2014). The conceptualisation and measurement of DSM-5 internet gaming disorder: The development of the IGD-20 Test.

PLoS ONE, 9(10). <https://doi.org/10.1371/journal.pone.0110137>

Prasad, J. S., Sewda, A., & Shiv, D. G. (2020). Assessing the knowledge, attitude and practices of students regarding the COVID-19 pandemic. *Journal of Health Management*, 22(2),

281-290. <https://doi.org/10.1177/0972063420935669>

Prime Minister's Office of Malaysia. (2020). *Movement control order: FAQ & info*.

<https://www.pmo.gov.my/2020/03/movement-control-order-faq-info/>

Rabin, L. A., Fogel, J., & Nutter-Upham, K. E. (2010). Academic procrastination in college students: The role of self-reported executive function. *Journal of Clinical and*

Experimental Neuropsychology, 33(3), 344–357.

<https://doi.org/10.1080/13803395.2010.518597>

Rahdadella, D., & Latifah, M. (2020). Academic procrastination during the COVID-19 pandemic: The role of student's self-control, parenting style, and family factors.

Department of Family and Consumer Sciences, Faculty of Human Ecology, IPB

University, 92, 92–100. <https://ikk.fema.ipb.ac.id/wp-content/uploads/2021/01/2020->

[ISFCI-PROCEEDING.pdf#page=100](https://ikk.fema.ipb.ac.id/wp-content/uploads/2021/01/2020-ISFCI-PROCEEDING.pdf#page=100)

Rahimi, S., & Vallerand, R. J. (2021). The role of passion and emotions in academic

procrastination during a pandemic (COVID-19). *Personality and Individual Differences*,

179(4), 110852. <https://doi.org/10.1016/j.paid.2021.110852>

ACADEMIC SELF-EFFICACY, PERFECTIONISM, AND PERCEIVED
SOCIAL SUPPORT ON ACADEMIC PROCRASTINATION

Rai, N., & Thapa, B. (2015). A study on purposive sampling method in research. *Kathmandu: Kathmandu School of Law.*

https://www.academia.edu/28087388/A_STUDY_ON_PURPOSIVE_SAMPLING_METHOD_IN_RESEARCH

Rajapakshe, W. (2021). The impact of academic procrastination, self-efficacy, and motivation on academic performance: Among undergraduates in non-state universities in Sri Lanka. *Asian Journal of Education and Social Studies, 14*(3), 25–38.

<https://doi.org/10.9734/ajess/2021/v14i330356>

Rakes, G. C., & Dunn, K. E. (2010). The impact of online graduate students' motivation and self-regulation on academic procrastination. *Journal of interactive online learning, 9*(1).

<http://www.ncolr.org/jiol/issues/pdf/9.1.5.pdf>

Raof, K., Khademi Ashkzari, M., Naghsh, Z. (2019). Relationship between perfectionism and academic procrastination; The mediating role of academic self-efficacy, self-esteem and academic self-handicapping. *The Journal of New Thoughts on Education, 15*(1), 207-236.

<https://doi.org/10.22051/jontoe.2017.14118.1684>

Razmi, M. H., Jabbari, A. A., & Fazilatfar, A. M. (2020). Perfectionism, self-efficacy components, and metacognitive listening strategy use: A multicategorical multiple mediation analysis. *Journal of Psycholinguistic Research, 49*(6), 1047-1065.

<https://doi.org/10.1007/s10936-020-09733-4>

ACADEMIC SELF-EFFICACY, PERFECTIONISM, AND PERCEIVED
SOCIAL SUPPORT ON ACADEMIC PROCRASTINATION

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>

Rice, Kenneth. G., & Ashby, J. S. (2007). An efficient method for classifying perfectionists. *Journal of Counseling Psychology*, 54(1), 72–85. [https://doi.org/10.1037/0022-](https://doi.org/10.1037/0022-0167.54.1.72)

[0167.54.1.72](https://doi.org/10.1037/0022-0167.54.1.72)

Rothblum, E. D., Solomon, L. J., & Murakami, J. (1986). Affective, cognitive, and behavioral differences between high and low procrastinators. *Journal of counseling psychology*,

33(4), 387. <https://doi.org/10.1037/0022-0167.33.4.387>

Sachitra, V., & Bandara, U. (2017). Measuring the academic self-efficacy of undergraduates: The role of gender and academic year experience.

<https://doi.org/10.5281/zenodo.1132491>

Sahlqvist, S., Song, Y., Bull, F., Adams, E., Preston, J., Ogilvie, D., & iConnect Consortium.

(2011). Effect of questionnaire length, personalisation and reminder type on response rate to a complex postal survey: Randomised controlled trial. *BMC Medical Research*

Methodology, 11(1), 62. <https://doi.org/10.1186/1471-2288-11-62>

Salkind, N. J. (2012). *Exploring research* (8th ed.). Pearson Education Inc.

https://repository.dinus.ac.id/docs/ajar/Neil_J._Salkind_2012_-_Exploring_Research_.pdf

ACADEMIC SELF-EFFICACY, PERFECTIONISM, AND PERCEIVED
SOCIAL SUPPORT ON ACADEMIC PROCRASTINATION

- Samat, M. F., Awang, N. A., Hussin, S. N. A., & Mat Nawi, F. A. (2020). Online distance learning amidst COVID-19 pandemic among university students. *Asian Journal of University Education*, 16(3), 220. <https://doi.org/10.24191/ajue.v16i3.9787>
- Sari, W. L., & Fakhruddiana, F. (2019). Internal locus of control, social support and academic procrastination among students in completing the thesis. *International Journal of Evaluation and Research in Education (IJERE)*, 8(2), 363-368. <https://doi.org/10.11591/ijere.v8i2.17043>
- Sastre-Riba, S., Pérez-Albéniz, A., & Fonseca-Pedrero, E. (2016). Assessing perfectionism in children and adolescents: Psychometric properties of the Almost Perfect Scale Revised. *Learning and Individual Differences*, 49, 386–392. <https://doi.org/10.1016/j.lindif.2016.06.022>
- Schouwenburg, H. C. (1995). Academic procrastination. *Procrastination and Task Avoidance*, 71–96. https://doi.org/10.1007/978-1-4899-0227-6_4
- Schunk, D. H. & Maria K. D. (2016). Self-efficacy theory in education. In Wentzel, K. R., & Miele, D. B. (Eds.), *Handbook of motivation at school* (pp. 34-54). Routledge Handbooks Online. <https://doi.org/10.4324/9781315773384>
- Schunk, D. H. (1989). Social cognitive theory and self-regulated learning. *Self-Regulated Learning and Academic Achievement*, 83–110. https://doi.org/10.1007/978-1-4612-3618-4_4

ACADEMIC SELF-EFFICACY, PERFECTIONISM, AND PERCEIVED
SOCIAL SUPPORT ON ACADEMIC PROCRASTINATION

Schunk, D. H. (2012). Social cognitive theory. *APA Educational Psychology Handbook, Vol 1: Theories, Constructs, and Critical Issues*, 101–123. <https://doi.org/10.1037/13273-005>

Schunk, D. H., & DiBenedetto, M. K. (2019). Motivation and social cognitive theory. *Contemporary Educational Psychology*, 60, 1-10.
<https://doi.org/10.1016/j.cedpsych.2019.101832>

Schunk, D. H., & Ertmer, P. A. (2000). Self-regulation and academic learning: Self-efficacy enhancing interventions. *In Handbook of self-regulation* (pp. 631-649). Academic Press.
<https://psycnet.apa.org/record/2001-01625-018>

Schunk, D. H., & Pajares, F. (2002). The development of academic self-efficacy. *In Development of achievement motivation*, 15-31. Academic Press.
<https://doi.org/10.1016/B978-012750053-9/50003-6>

Selya, A. S., Rose, J. S., Dierker, L. C., Hedeker, D., & Mermelstein, R. J. (2012). A Practical Guide to Calculating Cohen's f^2 , a Measure of Local Effect Size, from PROC MIXED. *Frontiers in Psychology*, 3. <https://doi.org/10.3389/fpsyg.2012.00111>

Seo, E. H. (2008). Self-efficacy as a mediator in the relationship between self-oriented perfectionism and academic procrastination. *Social Behavior and Personality: An International Journal*, 36(6), 753–764. <https://doi.org/10.2224/sbp.2008.36.6.753>

Setyaningrum, W., & Yanuarita, H. A. (2020). Pengaruh COVID-19 terhadap kesehatan mental masyarakat di Kota Malang. *Jurnal Ilmu Sosial dan Pendidikan*, 4(4).
<http://dx.doi.org/10.36312/jisip.v4i4.1580>

ACADEMIC SELF-EFFICACY, PERFECTIONISM, AND PERCEIVED
SOCIAL SUPPORT ON ACADEMIC PROCRASTINATION

- Sharma, H. L., & Nasa, G. (2014). Academic self efficacy: A reliable predictor of educational performances. *British Journal of Education*, 2(3), 57–64.
https://www.researchgate.net/publication/322790291_Academic_Self_Efficacy_A_reliable_Predictor_of_Educational_Performances
- Shih, S. S. (2017). Factors related to Taiwanese adolescents' academic procrastination, time management, and perfectionism. *The Journal of Educational Research*, 110(4), 415-424.
<https://doi.org/10.1080/00220671.2015.1108278>
- Shim, S. S., Rubenstein, L. D., & Drapeau, C. W. (2016). When perfectionism is coupled with low achievement: The effects on academic engagement and help seeking in middle school. *Learning and Individual Differences*, 45, 237–244.
<https://doi.org/10.1016/j.lindif.2015.12.016>
- Shuen, N. S., Goonesinghe, V. U., Chua, D. W. L., Sreedran, D., Jayaram, S., & Weeraratne, L. D. (2021). Procrastination and achievement motivation among undergraduate medical students during COVID-19 pandemic in Malaysia. *Advances in Applied Psychology*, 4(1), 15–23. <http://www.aiscience.org/journal/paperInfo/aap?paperId=5310>
- 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

ACADEMIC SELF-EFFICACY, PERFECTIONISM, AND PERCEIVED
SOCIAL SUPPORT ON ACADEMIC PROCRASTINATION

- Slaney, R. B., & Ashby, J. S. (1996). Perfectionists: Study of a criterion group. *Journal of Counseling and Development*, 74(4), 393-398. <https://doi.org/10.1002/j.1556-6676.1996.tb01885.x>
- Solomon, L. J., & Rothblum, E. D. (1984). Academic procrastination: Frequency and cognitive-behavioral correlates. *Journal of Counseling Psychology*, 31(4), 503–509. <https://doi.org/10.1037/0022-0167.31.4.503>
- Soysa, C. K., & Weiss, A. (2014). Mediating perceived parenting styles–test anxiety relationships: Academic procrastination and maladaptive perfectionism. *Learning and Individual Differences*, 34, 77–85. <https://doi.org/10.1016/j.lindif.2014.05.004>
- Stevens, J. P. (1992). *Applied multivariate statistics for the social sciences*. Routledge.
- Stoeber, J. (2018). The psychology of perfectionism: An introduction. In *The Psychology of Perfectionism: Theory, Research, Applications* (pp. 3–16). Routledge. https://www.academia.edu/30730268/The_psychology_of_perfectionism_An_introduction_2018
- Stoeber, J., & Otto, K. (2006). Positive conceptions of perfectionism: Approaches, evidence, challenges. *Personality and social psychology review*, 10(4), 295-319. https://doi.org/10.1207/s15327957pspr1004_2
- Stoeber, J., & Rambow, A. (2007). Perfectionism in adolescent school students: Relations with motivation, achievement, and well-being. *Personality and Individual Differences*, 42(7), 1379–1389. <https://doi.org/10.1016/j.paid.2006.10.015>

ACADEMIC SELF-EFFICACY, PERFECTIONISM, AND PERCEIVED
SOCIAL SUPPORT ON ACADEMIC PROCRASTINATION

- Suhadianto, S., Arifiana, I. Y., Rahmawati, H., Hanurawan, F., & Eva, N. (2021). Stop academic procrastination during COVID 19: Academic procrastination reduces subjective well-being. *KnE Social Sciences*, 4(15), 312–325. <https://doi.org/10.18502/kss.v4i15.8220>
- Sulaiman, F., & Hassan, M. M. (2019). A pilot study of the relationship between parenting style and academic procrastination among final year students of faculty of human ecology, Universiti Putra Malaysia (UPM). *Malaysian Journal of Social Sciences and Humanities (MJSSH)*, 4(7), 152–167. <https://doi.org/10.47405/mjssh.v4i7.314>
- Suwinyattichaiorn, T., & Johnson, Z. D. (2020). The impact of family and friends social support on latino/a First-Generation college students' perceived stress, depression, and social isolation. *Journal of Hispanic Higher Education*, 1538192720964922. <https://doi.org/10.1177/1538192720964922>
- Swaraswati, Y., Winarno, A. R. D., & Goeritno, H. (2017). *Academic procrastination of undergraduate students: The role of academic self-efficacy and the big five personality traits*. Atlantis Press. <https://doi.org/10.2991/icset-17.2017.122>
- Syah, L. Y., Nafsiah, S. N., & Saddhono, K. (2019). Linear regression statistic from accounting information system application for employee integrity. *Journal of Physics: Conference Series*, 1339, 1–7. <https://doi.org/10.1088/1742-6596/1339/1/012131>
- Taluy, N. (2020). Academic procrastination and Self-Handicapping as mediators for the effect of perfectionism on academic achievement. In G. K. Yaynevi (Ed.), *Academic Studies in Social, Human and Administrative Sciences – II* (pp. 281–310). Gece Publishing.

ACADEMIC SELF-EFFICACY, PERFECTIONISM, AND PERCEIVED
SOCIAL SUPPORT ON ACADEMIC PROCRASTINATION

- Tan, R. D. A., Pañares, E. J. A., Pañares, F. J. A., Pagonzaga, E. D., Jumawid, J. A. M., Hinampas, R. T., & Tan, D. A. (2021). Investigating the effects of social media on students' academic performance and well-being during the pandemic. *International Journal of Scientific & Technology Research*, 10(7), 145–151. <http://www.ijstr.org/final-print/jul2021/Investigating-The-Effects-Of-Social-Media-On-Students-Academic-Performance-And-Well-being-During-The-Pandemic.pdf>
- Tang, K. H. D. (2020). Movement control as an effective measure against Covid-19 spread in Malaysia: an overview. *Journal of Public Health*, 1-4. <https://doi.org/10.1007/s10389-020-01316-w>
- Thøgersen, J., & Grønhøj, A. (2010). Electricity saving in households—A social cognitive approach. *Energy Policy*, 38(12), 7732–7743. <https://doi.org/10.1016/j.enpol.2010.08.025>
- Tsai, M.J., & Tsai, C.C. (2010). Junior high school students' Internet usage and self-efficacy: A re-examination of the gender gap. *Computers and Education*, 54(4), 1182-1192. <https://doi.org/10.1016/j.compedu.2009.11.004>
- Tuasikal, R. F., & Patria, B. (2019). Role of social support and self-concept clarity as predictors on thesis writing procrastination. *Journal of Psychology and Instruction*, 3(3), 76-82. <http://dx.doi.org/10.23887/jpai.v3i3.23169>
- Turmudi, I., & Suryadi, S. (2021). Manajemen perilaku prokrastinasi akademik mahasiswa selama pembelajaran daring. *Al-Tazkiah: Jurnal Bimbingan dan Konseling Islam*, 10(1), 39-58. <https://journal.uinmataram.ac.id/index.php/altazkiah/article/view/3423/1512>

ACADEMIC SELF-EFFICACY, PERFECTIONISM, AND PERCEIVED
SOCIAL SUPPORT ON ACADEMIC PROCRASTINATION

Uma, E., Lee, C., Shapiai, S. H. B. M., Binti Mat Nor, A., Soe, H. K., & Varghese, E. (2020).

Academic procrastination and self-efficacy among a group of dental undergraduate students in Malaysia. *Journal of Education and Health Promotion*, 9(1), 326.

https://doi.org/10.4103/jehp.jehp_195_20

Usher, E. L., Golding, J. M., Han, J., Griffiths, C. S., McGavran, M. B., Brown, C. S., &

Sheehan, E. A. (2021). Psychology students' motivation and learning in response to the shift to remote instruction during COVID-19. *Scholarship of Teaching and Learning in Psychology*.

<https://doi-org.libezp2.utar.edu.my/10.1037/stl0000256>

van Teijlingen, E., & Hundley, V. (2002). The importance of pilot studies. *Nursing Standard*,

16(40), 33–36. <https://doi.org/10.7748/ns2002.06.16.40.33.c3214>

Voo, I. C., Soehod, K., & Choi, S. L. (2018). Applying social cognitive theory to HRM practices,

HR roles, and firm performance. *Proceedings of the International Conference on Industrial Engineering and Operations Management*, 2220–2226.

<http://ieomsociety.org/forefront/ViewPaper.php?PaperID=4309>

Wałęcka-Matyja, K. (2019). Predictive role of retrospective assessment of parental attitudes of

fathers vs. perfectionism and self-esteem of women in early adulthood. *Psychiatria*

Polska, 53(2), 325–339. <https://doi.org/10.12740/pp/89639>

Wang, X., & Cheng, Z. (2020). *Cross-sectional studies*. *Chest*, 158(1), S65–S71.

<https://doi.org/10.1016/j.chest.2020.03.005>

ACADEMIC SELF-EFFICACY, PERFECTIONISM, AND PERCEIVED
SOCIAL SUPPORT ON ACADEMIC PROCRASTINATION

- Wessel, J., Bradley, G. L., & Hood, M. (2019). Comparing effects of active and passive procrastination: A field study of behavioral delay. *Personality and Individual Differences*, 139, 152-157. <https://doi.org/10.1016/j.paid.2018.11.020>
- Wijekularathna, D. K., Manage, A. B. W., & Scariano, S. M. (2019). Power analysis of several normality tests: A Monte Carlo simulation study. *Communications in Statistics - Simulation and Computation*, 1–17. <https://doi.org/10.1080/03610918.2019.1658780>
- World Health Organization. (2020, January 5). *Pneumonia of unknown cause—China: Disease outbreak news*. <https://www.who.int/emergencies/disease-outbreak-news/item/2020-DON229>
- Wu, F., & Fan, W. (2017). Academic procrastination in linking motivation and achievement-related behaviours: A perspective of expectancy-value theory. *Educational Psychology*, 37(6), 695-711. <https://doi.org/10.1080/01443410.2016.1202901>
- Yang, X., Zhu, J., & Hu, P. (2021). Perceived social support and procrastination in college students: A sequential mediation model of self-compassion and negative emotions. *Current Psychology*. Published. <https://doi.org/10.1007/s12144-021-01920-3>
- Yau, E. K. B., Ping, N. P. T., Shoesmith, W. D., James, S., Hadi, N. M. N., & Loo, J. L. (2020). The behaviour changes in response to COVID-19 pandemic within Malaysia. *The Malaysian Journal of Medical Sciences: MJMS*, 27(2), 45. <https://doi.org/10.21315/mjms2020.27.2.5>

ACADEMIC SELF-EFFICACY, PERFECTIONISM, AND PERCEIVED
SOCIAL SUPPORT ON ACADEMIC PROCRASTINATION

- Yee, X.-P. & Chooi-Seong Lai. (2021). Relationship between academic motivation and procrastination among students at a private university college in Kuala Lumpur. Unpublished. <https://doi.org/10.13140/RG.2.2.27913.9>
- Yildiz, M. A., & Karadas, C. (2017). Multiple mediation of self-esteem and perceived social support in the relationship between loneliness and life satisfaction. *Journal of Education and Practice*, 8(3), 130-139. <https://files.eric.ed.gov/fulltext/EJ1131544.pdf>
- 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), 146-157. <https://doi.org/10.11114/jets.v5i9.254>
- Ying, Y., & Lv, W. (2012). A study on higher vocational college students' academic procrastination behavior and related factors. *International Journal of Education and Management Engineering*, 2(7), 29-35. <https://doi.org/10.5815/ijeme.2012.07.05>
- Yockey, R. D. (2016). Validation of the short form of the academic procrastination scale. *Psychological Reports*, 118(1), 171–179. <https://doi.org/10.1177/0033294115626825>
- You, J. W. (2015). Examining the effect of academic procrastination on achievement using LMS data in e-learning. *Journal of educational technology & society*, 18(3), 64-74. <https://eric.ed.gov/?id=EJ1070043>

ACADEMIC SELF-EFFICACY, PERFECTIONISM, AND PERCEIVED
SOCIAL SUPPORT ON ACADEMIC PROCRASTINATION

- Young, H. N., Lipowski, E. E., & Cline, R. J. (2005). Using social cognitive theory to explain consumers' behavioral intentions in response to direct-to-consumer prescription drug advertising. *Research in Social and Administrative Pharmacy, 1*(2), 270–288.
<https://doi.org/10.1016/j.sapharm.2005.03.011>
- Zhang, Y., Dong, S., Fang, W., Chai, X., Mei, J., & Fan, X. (2018). Self-efficacy for self-regulation and fear of failure as mediators between self-esteem and academic procrastination among undergraduates in health professions. *Advances in Health Sciences Education, 23*(4), 817-830. <https://doi.org/10.1007/s10459-018-9832-3>
- Zhao, C., Xu, H., Lai, X., Yang, X., Tu, X., Ding, N., Lv, Y., & Zhang, G. (2021). Effects of online social support and perceived social support on the relationship between perceived stress and problematic smartphone usage among Chinese undergraduates. *Psychology Research and Behavior Management, 14*, 529–539. <https://doi.org/10.2147/prbm.s302551>
- Zimet, G. D., Dahlem, N. W., Zimet, S. G., & Farley, G. K. (1988). The multidimensional scale of perceived social support. *Journal of Personality Assessment, 52*, 30-41.
https://doi.org/10.1207/s15327752jpa5201_2
- Zusya, A. R., & Akmal, S. Z. (2016). The relationship of academic self-efficacy with academic procrastination on students who are completing their thesis. *Psymphatic: Jurnal Ilmiah Psikologi, 3*(2), 191-200. <https://doi.org/10.15575/psy.v3i2.900>

ACADEMIC SELF-EFFICACY, PERFECTIONISM, AND PERCEIVED SOCIAL SUPPORT ON ACADEMIC PROCRASTINATION

Appendixes

Appendix A

Questionnaires



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Default Question Block

Personal Data Protection Statement

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

Notice:

1. The purposes for which your personal data may be used are inclusive but not limited to:-

- For assessment of any application to UTAR
- For processing any benefits and services
- For communication purposes
- For advertorial and news
- For general administration and record purposes
- For enhancing the value of education
- For educational and related purposes consequential to UTAR
- For the purpose of our corporate governance
- For consideration as a guarantor for UTAR staff/ student applying for his/her scholarship/ study loan

2. Your personal data may be transferred and/or disclosed to third party and/or UTAR collaborative partners including but not limited to the respective and appointed

ACADEMIC SELF-EFFICACY, PERFECTIONISM, AND PERCEIVED SOCIAL SUPPORT ON ACADEMIC PROCRASTINATION

outsourcing agents for purpose of fulfilling our obligations to you in respect of the purposes and all such other purposes that are related to the purposes and also in providing integrated services, maintaining and storing records. Your data may be shared when required by laws and when disclosure is necessary to comply with applicable laws.

3. Any personal information retained by UTAR shall be destroyed and/or deleted in accordance with our retention policy applicable for us in the event such information is no longer required.

4. UTAR is committed in ensuring the confidentiality, protection, security and accuracy of your personal information made available to us and it has been our ongoing strict policy to ensure that your personal information is accurate, complete, not misleading and updated. UTAR would also ensure that your personal data shall not be used for political and commercial purposes.

Consent Form for Research Participation and Personal Data Protection

Title of Project: Academic self-efficacy, perceived social support and perfectionism as predictors in academic procrastination among e-learning undergraduates in Malaysia during COVID-19 pandemic.

This research has obtained ethical clearance from the UTAR Scientific and Ethical Review Committee. If you encounter any issues while answering this online survey, feel free to email the researcher at karwhey@1utar.my.

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

I understand I have been asked to take part in the research project specified above by UTAR students for the purpose of their course assignment for UAPZ 3023 FINAL YEAR PROJECT II. I have had the project explained to me, and I have read the Explanatory Statement, which I keep for my records.

I understand that:

ACADEMIC SELF-EFFICACY, PERFECTIONISM, AND PERCEIVED SOCIAL SUPPORT ON ACADEMIC PROCRASTINATION

- I will be asked to complete a questionnaire about "Academic self-efficacy, perceived social support and perfectionism as predictors in academic procrastination among e-learning undergraduates in Malaysia during COVID-19 pandemic."
- My participation is voluntary, that I can choose not to participate in part or all of the project, and that I can withdraw at any stage of the project without being penalized or disadvantaged in any way
- I may ask at any time for my data to be withdrawn from the project
- No information I have provided that could lead to the identification of any other individual will be disclosed in any reports on the project, or to any other party
- I will remain anonymous at all times in any reports or publications from the project
- It is my sole responsibility to look after my own safety for the above project. In the event of any misfortune or accidental injury involving me, whether or not due solely to personal negligence or otherwise, I hereby declare that UTAR shall not be held responsible.

By submitting this form I hereby authorize and consent to UTAR processing (including disclosing) my personal data and any updates of my information, for the purposes and/or for any other purposes related to the purpose. I acknowledge that if I do not consent or subsequently withdraw my consent to the processing and disclosure of my personal data, UTAR will not be able to fulfill their obligations or to contact me or to assist me in respect of the purposes and/or for any other purposes related to the purpose.

Acknowledgment of Personal Data Protection Notice

- I have been notified by you and that I hereby understood, consented and agreed per UTAR above notice.
- I disagree, my personal data will not be processed.

Section A: Demographic Information

Kindly complete the following questions regarding your general demographic. It will be kept strictly confidential.

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Are you a Malaysian:

- Yes
 No

Age:

(Note: only for participants aged above 18 years old)

Sex:

- Male
 Female

Race:

- Malay
 Chinese
 Indian
 Others (please specify)

ACADEMIC SELF-EFFICACY, PERFECTIONISM, AND PERCEIVED
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Religion:

- Muslim
 Buddhist
 Christian
 Hindu
 Others (please specify)

Are you currently pursuing a Bachelor's Degree in Malaysia?

- Yes
 No

Which institution are you studying at? (e.g. UTAR)

Current trimester: (e.g. Y1T2)

Is your current mode of study E-learning?

- Yes

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No

Section B: Level of Academic Self-Efficacy

Please read each of the following statement and choose an answer that best describes you.

	Strongly Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Strongly agree
I ask questions in lectures	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I respond to questions asked in lectures	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I draw up a study plan	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I ask for help from my lecturers	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I write up additional notes	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I plan my time for examinations	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I ask for help from my friends when I have issues in subjects matters	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I produce my best work in examinations	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I engage in academic discussions with my friends	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I make sense of feedback on my assignments	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I explain subject matters to my friends	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I make a good attempt to answer questions in advance	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I meet the deadlines for my assignments	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

ACADEMIC SELF-EFFICACY, PERFECTIONISM, AND PERCEIVED SOCIAL SUPPORT ON ACADEMIC PROCRASTINATION

	Strongly Disagree	Somewhat disagree	Neither agree nor disagree	Somewhat agree	Strongly agree
I make an attempt to meet the deadline for group assignments	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I pay attention during every lecture	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I express my opinion when I do not understand the lectures	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel nervous when I am doing presentations	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I come forward to do presentation in group assignments	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I feel confident that I can complete the degree within 4 years	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I make sense of feedback on my examinations	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Section C: Perceived Social Support

We are interested in how you feel about the following statements. Read each statement carefully. Indicate how you feel about each statement

	Very Strongly Disagree	Strongly Disagree	Mildly Disagree	Neutral	Mildly Agree
There is a special person who is around when I am in need	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
There is a special person with whom I can share joys and sorrows	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My family really tries to help me	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I get the emotional help & support I need from my family	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

ACADEMIC SELF-EFFICACY, PERFECTIONISM, AND PERCEIVED
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I have a special person who is a real source of comfort to me	<input checked="" type="radio"/> Very Strongly Disagree	<input type="radio"/> Strongly Disagree	<input type="radio"/> Mildly Disagree	<input type="radio"/> Neutral	<input type="radio"/> Mildly Agree
My friends really try to help me	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I can count on my friends when things go wrong	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I can talk about my problems with my family	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I have friends with whom I can share my joys and sorrows	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
There is a special person in my life who cares about my feelings	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My family is willing to help me make decisions	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I can talk about my problems with my friends	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Section D: APS-R

The following items are designed to measure attitudes people have towards themselves, their performance, and towards others. There are not right or wrong answers. Please respond to all of the items. Use your first impression and do not spend too much time on individual items in responding.

	Strongly Disagree	Disagree	Slightly Disagree	Neutral	Slightly Agree
I have high standards for my performance at work or at school	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am an orderly person	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I often feel frustrated because I can't meet my goals	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Neatness is important to me	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
If you don't expect much out of yourself, you will never succeed.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

ACADEMIC SELF-EFFICACY, PERFECTIONISM, AND PERCEIVED SOCIAL SUPPORT ON ACADEMIC PROCRASTINATION

	Strongly Disagree	Disagree	Slightly Disagree	Neutral	Slightly Agree
My best just never seems to be good enough for me	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I think things should be put away in their place	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I have high expectations for myself	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I rarely live up to my high standards	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I like to always be organized and disciplined	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Doing my best never seems to be enough	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I set very high standards for myself	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am never satisfied with my accomplishments	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I expect the best from myself	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I often worry about not measuring up to my own expectations	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
My performance rarely measures up to my standards	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am no satisfied even when I know I have done my best	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I try to do my best at everything I do	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am seldom able to meet my own high standards of performance	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I am hardly even satisfied with my performance	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I hardly even feel that what I've done is good enough	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I have a strong need to strive for excellence	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I often feel disappointment after completing a task because I know I could have done better	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Section E: Academic Procrastination

How much do you, yourself agree to the following statements?

Disagree Slightly Disagree Neutral Slightly Agree Agree

ACADEMIC SELF-EFFICACY, PERFECTIONISM, AND PERCEIVED
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	Disagree	Slightly Disagree	Neutral	Slightly Agree	Agree
I put off projects until the last minute	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I know I should work on schoolwork, but I just don't do it	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I get distracted by other, more fun, things when I am supposed to work on schoolwork	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
When given an assignment, I usually put it away and forget about it until it is almost due	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
I frequently find myself putting important deadlines off	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

We thank you for your time spent taking this survey.

Your response has been recorded.

ACADEMIC SELF-EFFICACY, PERFECTIONISM, AND PERCEIVED
SOCIAL SUPPORT ON ACADEMIC PROCRASTINATION

Appendix B

Total Effect Size Calculation

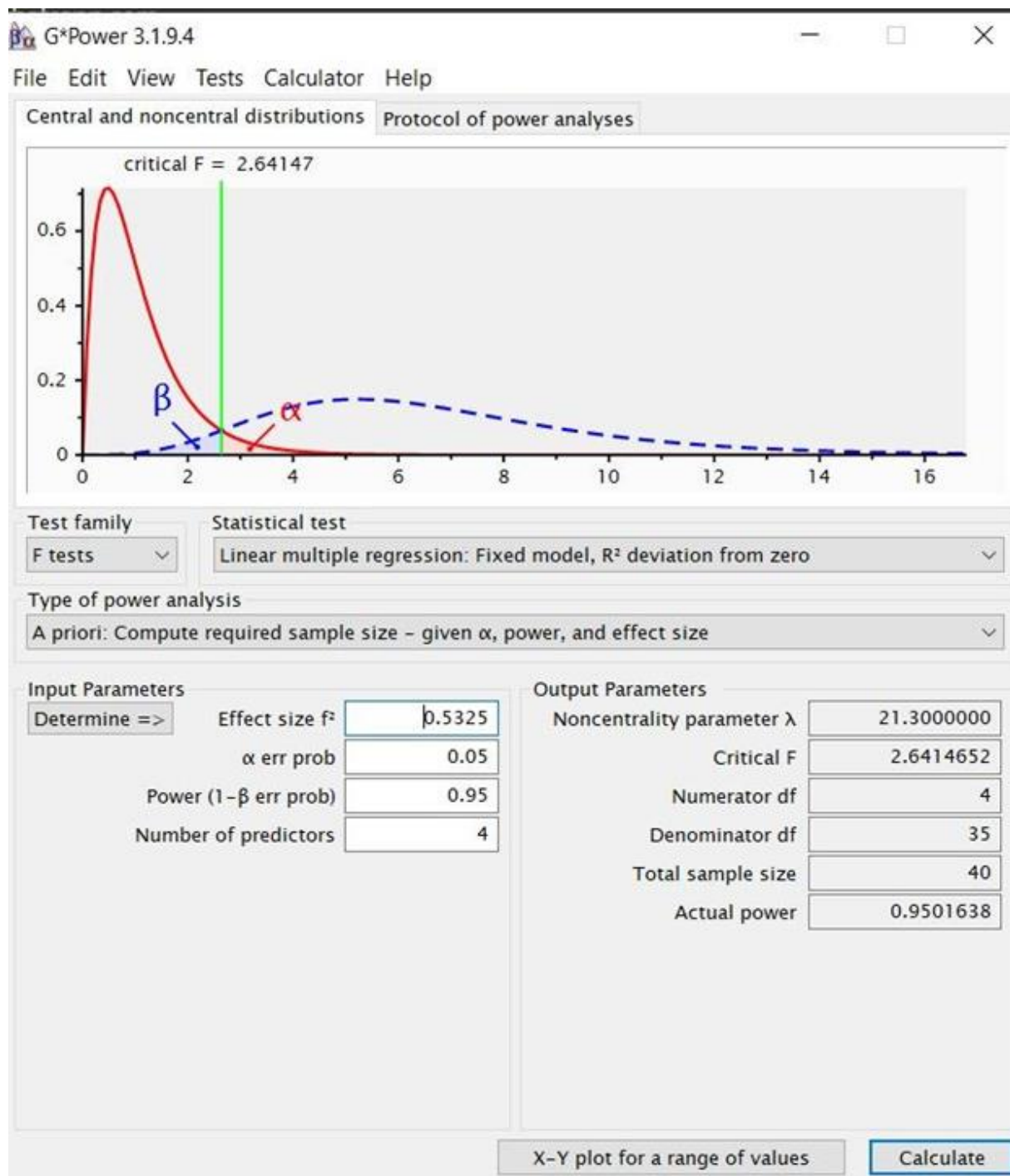
Total effect size

$$f^2 = \frac{0.37+0.66+0.23+0.87}{4} = 0.53$$

ACADEMIC SELF-EFFICACY, PERFECTIONISM, AND PERCEIVED
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Appendix C

G*Power Sample Size Calculation for Multiple Linear Regression



ACADEMIC SELF-EFFICACY, PERFECTIONISM, AND PERCEIVED SOCIAL SUPPORT ON ACADEMIC PROCRASTINATION

Appendix D

Ethical Approval for Research Project



UNIVERSITI TUNKU ABDUL RAHMAN

Wholly Owned by UTAR Education Foundation (Company No. 578227-M)

Re: U/SERC/223/2021

4 October 2021

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

Dear Dr Pung,

Ethical Approval For Research Project/Protocol

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

The details of the research projects are as follows:

No	Research Title	Student's Name	Supervisor's Name	Approval Validity
1.	The Influence of Sensation Seeking Behavior and Social Media Addiction on Happiness among Young Adults in Malaysia	1. Ashwinie Nair a/p Sridharan Nair 2. Maria Peter a/p Micheal 3. Titus a/l David Rasahpandy	Ms Sarvarubini a/p Nainee	4 October 2021 - 3 October 2022
2.	Academic Self-Efficacy, Perceived Social Support and Perfectionism as Predictors in Academic Procrastination among E-learning Undergraduates in Malaysia during COVID-19 Pandemic	1. Chee Vane Yen 2. Foong Kar Whey 3. Tay Xiao Ying	Ms T'ng Soo Ting	
3.	A Study of The Relationship Between Perceived Stress, Sleep Quality and Life Satisfaction Among Malaysian Working Adults During Covid-19 Pandemic Outbreak	1. Chin Kah Leng 2. Kuganeswari a/p Muthu 3. Tan Cher Shan	Dr Gan Su Wan	
4.	The Mediating Role of Self-esteem in The Relationship Between Parenting Style and Academic Dishonesty Among Undergraduates in Malaysia	1. Khoo Zhi Yin 2. Melanie Soo Yu Teng 3. Ong Li Ying	Pn Natasha Amira Binti Hushairi	
5.	A Study of the Effects of Fear of Covid-19, Locus of Control, and Gender on Depression among Undergraduates in Malaysia	1. H'ng Zhuang Hang 2. Wong Ker Yin 3. Yan Chiow Yee	Dr Pung Pit Wan	

Kampar Campus : Jalan Universiti, Bandar Barat, 31900 Kampar, Perak Darul Ridzuan, Malaysia
Tel (605) 468 8888 Fax: (605) 466 1313
Sungai Long Campus : Jalan Sungai Long, Bandar Sungai Long, Cheras, 43000 Kajang, Selangor Darul Ehsan, Malaysia
Tel (603) 9086 0288 Fax: (603) 9019 8868
Website: www.utar.edu.my



ACADEMIC SELF-EFFICACY, PERFECTIONISM, AND PERCEIVED SOCIAL SUPPORT ON ACADEMIC PROCRASTINATION

The conduct of this research is subject to the following:

- (1) The participants' informed consent be obtained prior to the commencement of the research;
- (2) Confidentiality of participants' personal data must be maintained; and
- (3) Compliance with procedures set out in related policies of UTAR such as the UTAR Research Ethics and Code of Conduct, Code of Practice for Research Involving Humans and other related policies/guidelines.
- (4) Written consent be obtained from the institution(s)/company(ies) in which the physical or/and online survey will be carried out, prior to the commencement of the research.

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

Thank you.

Yours sincerely,



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

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



ACADEMIC SELF-EFFICACY, PERFECTIONISM, AND PERCEIVED
SOCIAL SUPPORT ON ACADEMIC PROCRASTINATION**Appendix E****Pilot Study: Reliability Statistics**

Perceived Social Support

Cronbach's Alpha	N of Items
.946	20

Academic Self-Efficacy

Cronbach's Alpha	N of Items
.962	12

Perfectionism

Cronbach's Alpha	N of Items
.951	23

Academic Procrastination

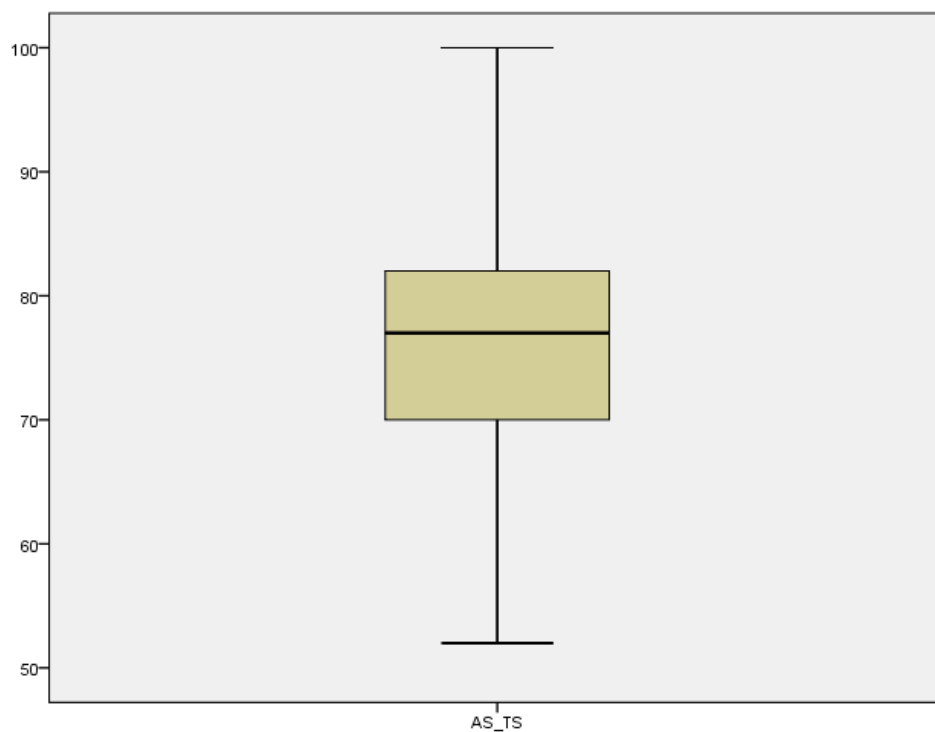
Cronbach's Alpha	N of Items
.872	5

ACADEMIC SELF-EFFICACY, PERFECTIONISM, AND PERCEIVED
SOCIAL SUPPORT ON ACADEMIC PROCRASTINATION

Appendix F

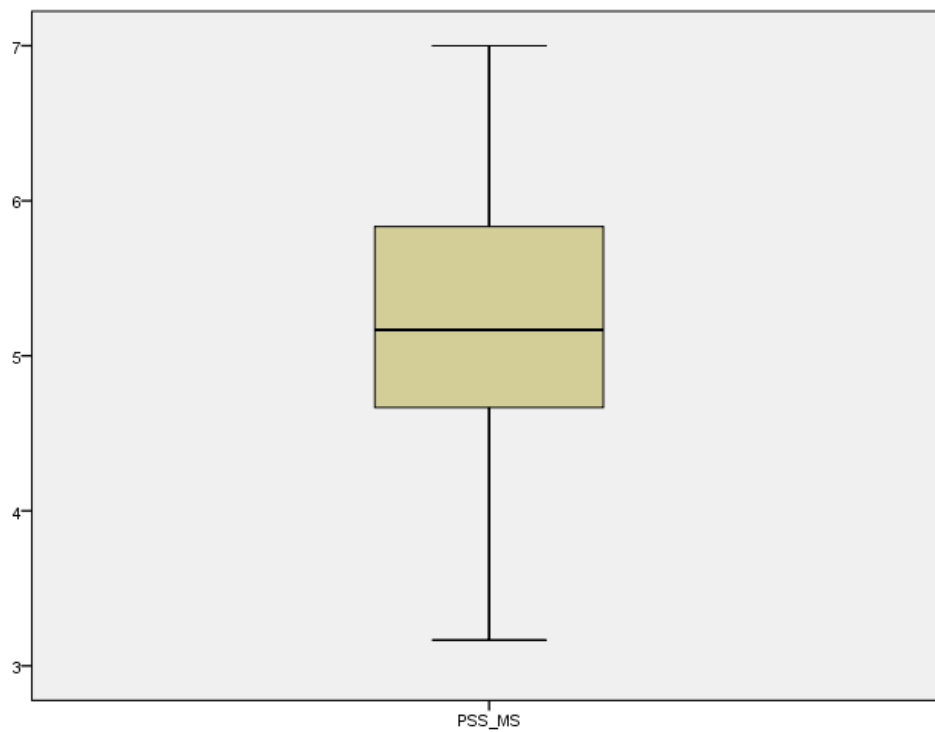
Boxplot After Univariate Outlier Cleaning

Academic Self-Efficacy



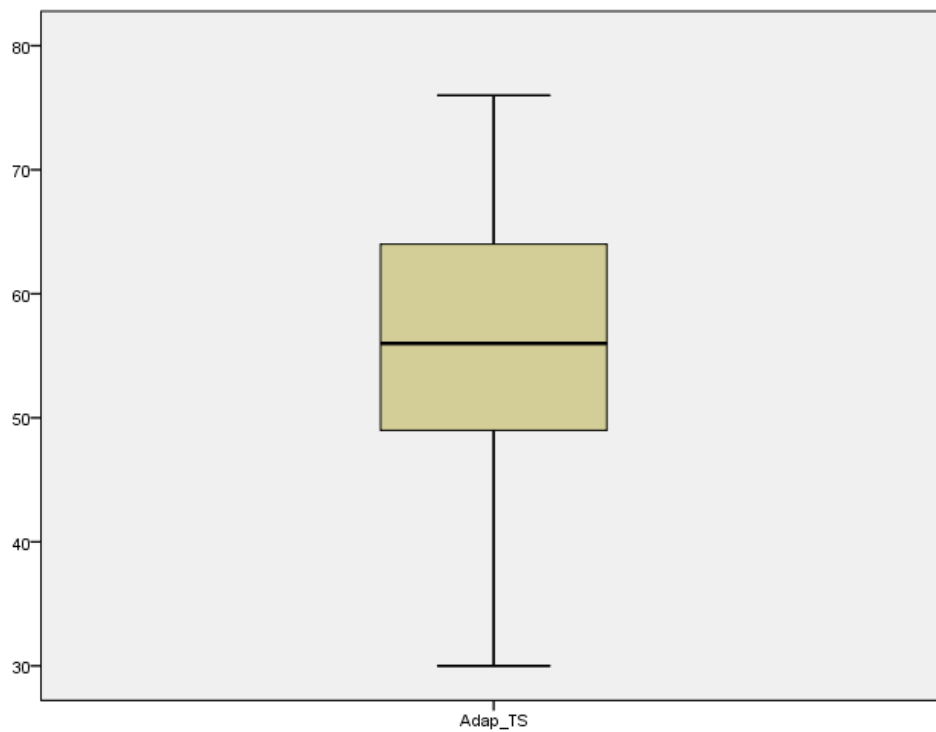
ACADEMIC SELF-EFFICACY, PERFECTIONISM, AND PERCEIVED SOCIAL SUPPORT ON ACADEMIC PROCRASTINATION

Perceived Social Support



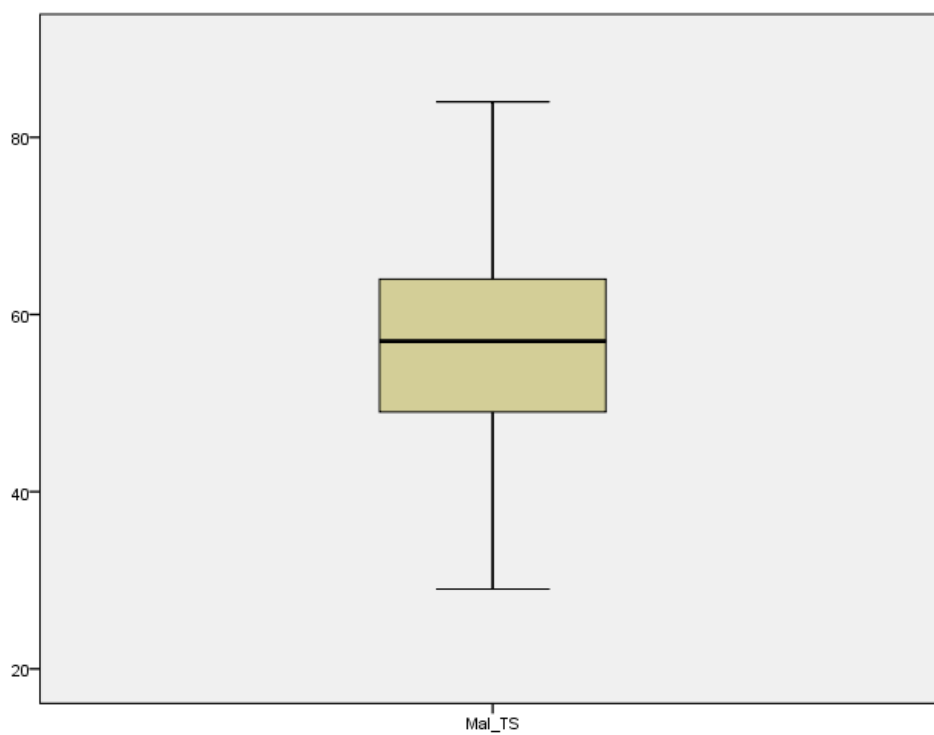
ACADEMIC SELF-EFFICACY, PERFECTIONISM, AND PERCEIVED
SOCIAL SUPPORT ON ACADEMIC PROCRASTINATION

Adaptive Perfectionism



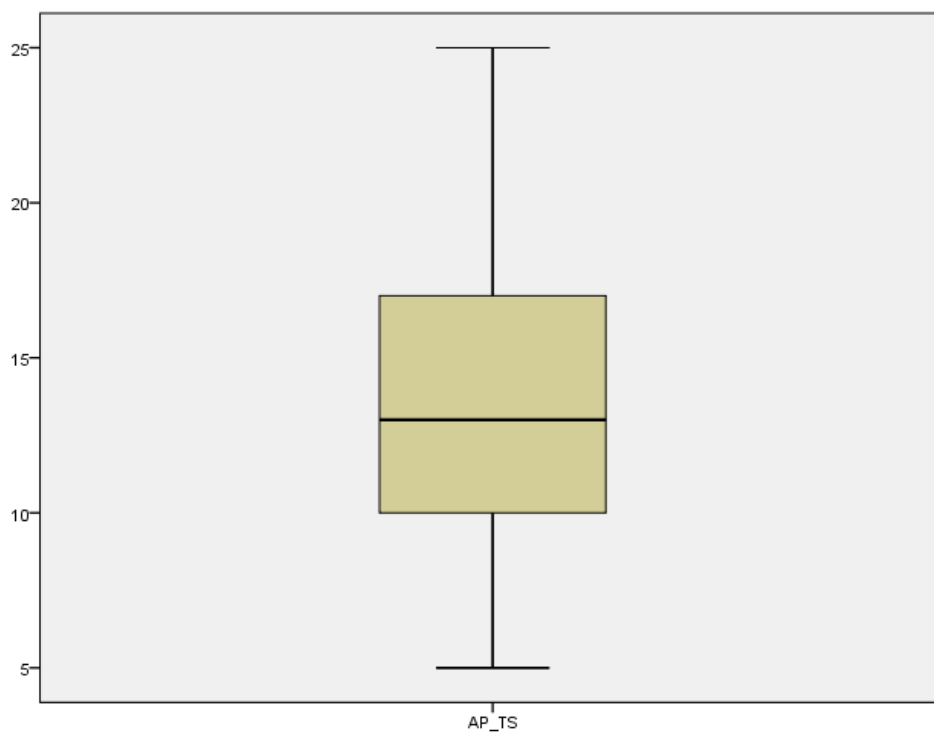
ACADEMIC SELF-EFFICACY, PERFECTIONISM, AND PERCEIVED
SOCIAL SUPPORT ON ACADEMIC PROCRASTINATION

Maladaptive Perfectionism



ACADEMIC SELF-EFFICACY, PERFECTIONISM, AND PERCEIVED
SOCIAL SUPPORT ON ACADEMIC PROCRASTINATION

Academic Procrastination

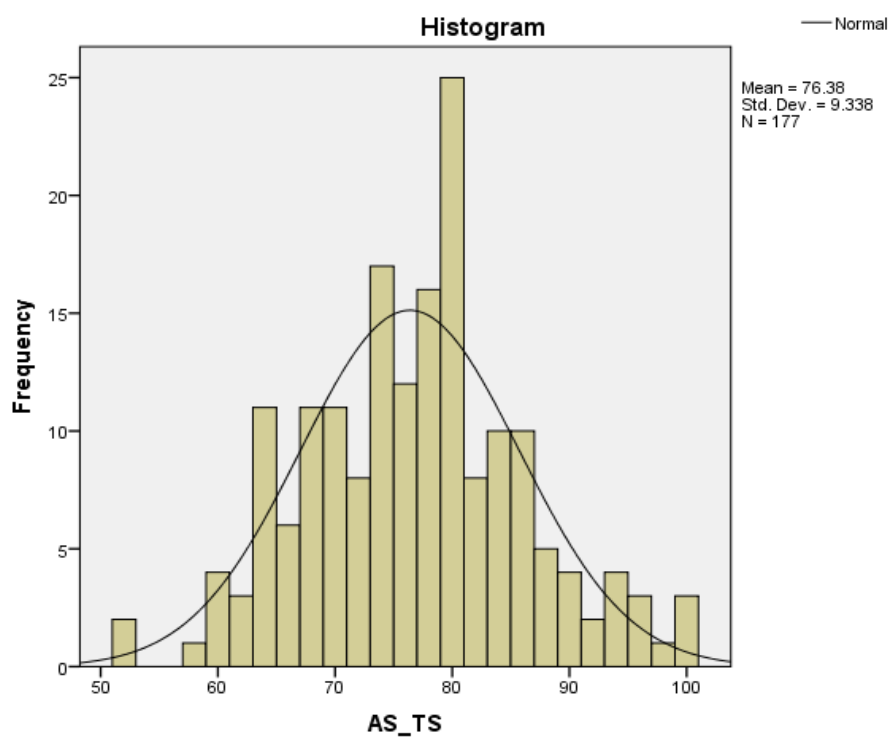


ACADEMIC SELF-EFFICACY, PERFECTIONISM, AND PERCEIVED
SOCIAL SUPPORT ON ACADEMIC PROCRASTINATION

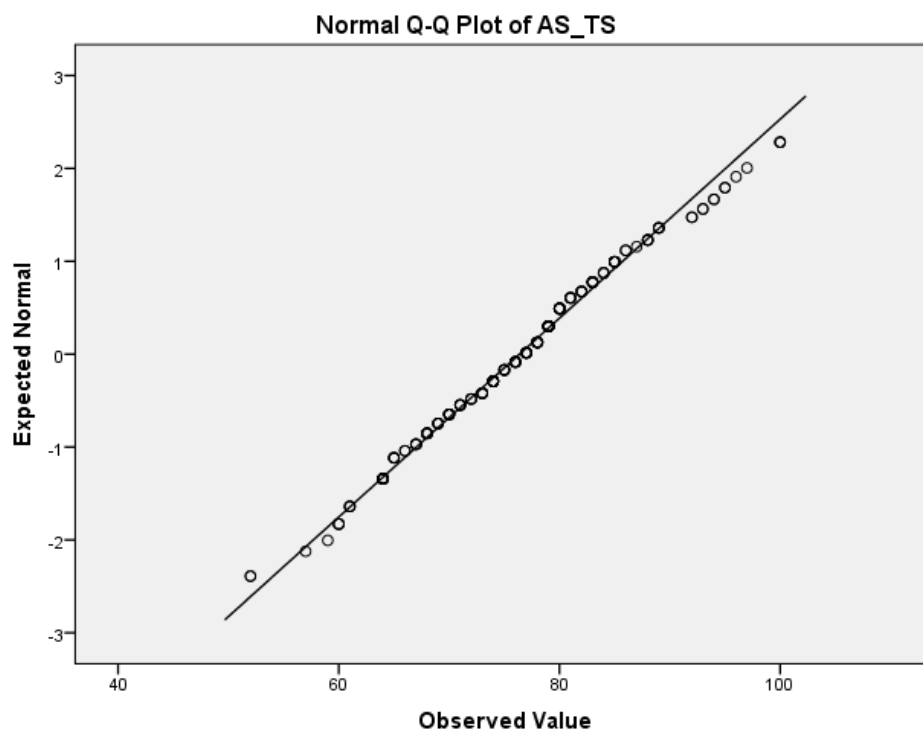
Appendix G

Histogram and P-P Plots

Academic Self-Efficacy

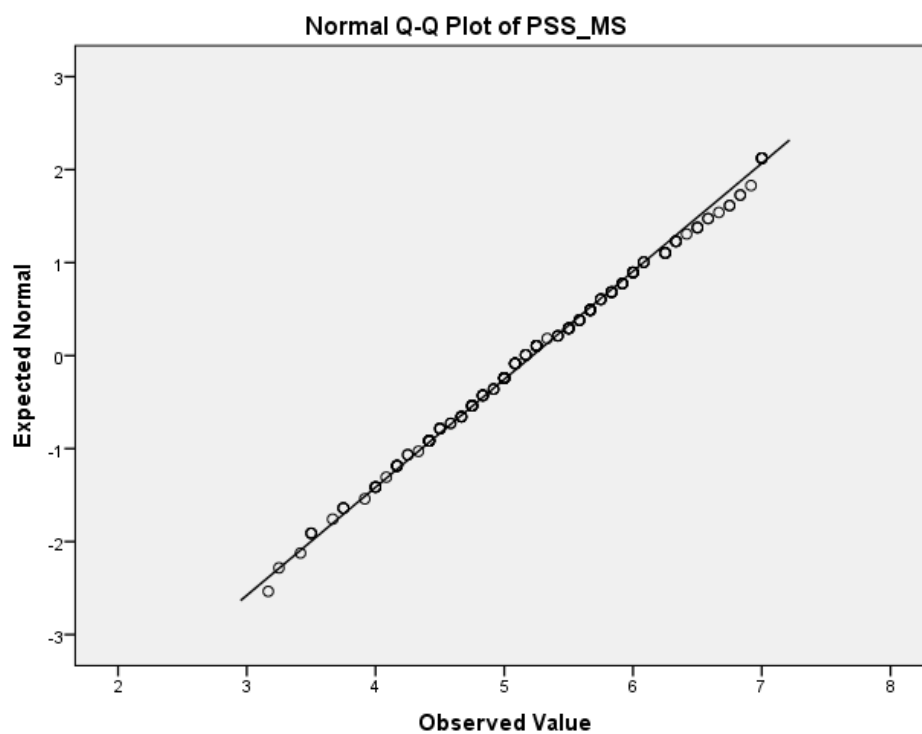
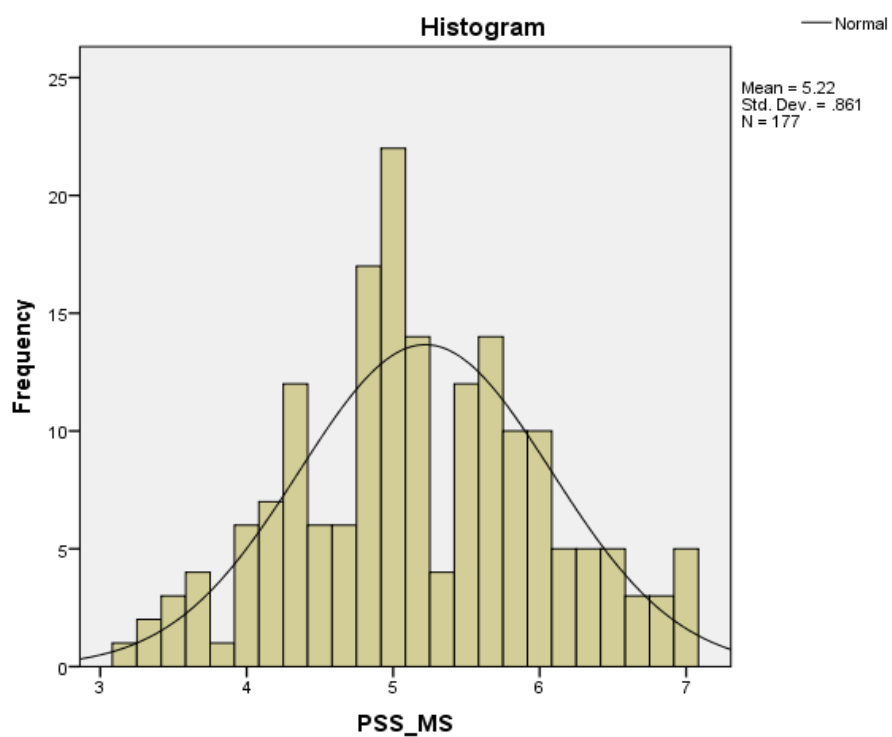


ACADEMIC SELF-EFFICACY, PERFECTIONISM, AND PERCEIVED
SOCIAL SUPPORT ON ACADEMIC PROCRASTINATION



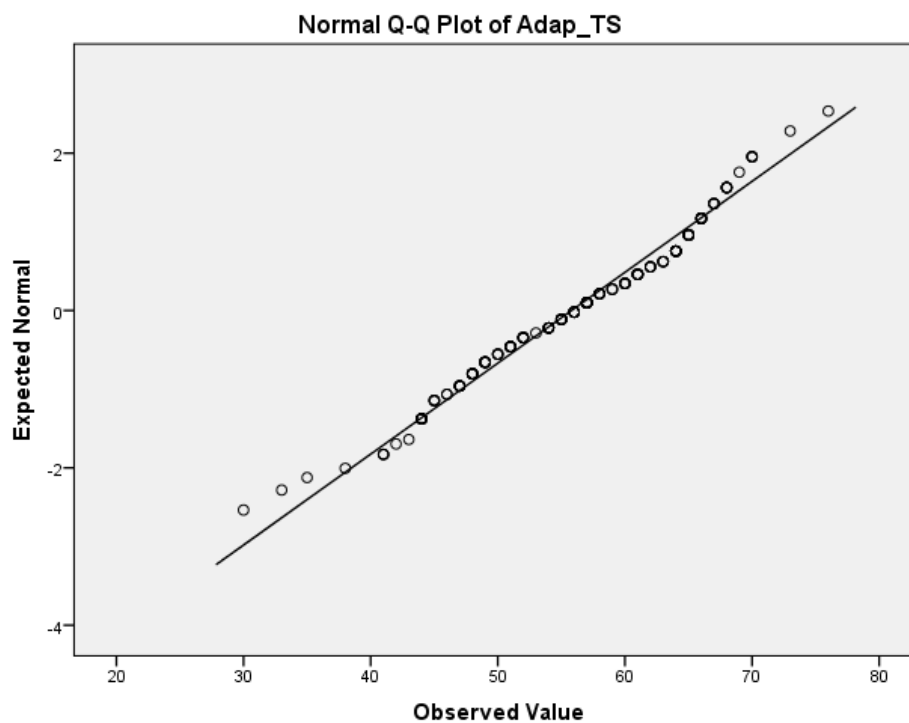
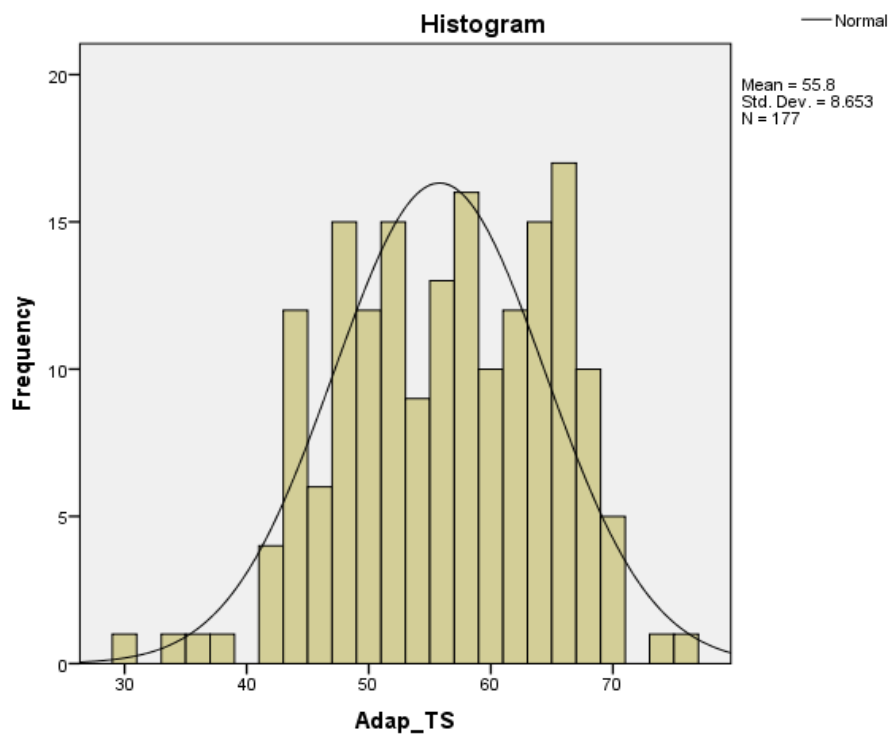
ACADEMIC SELF-EFFICACY, PERFECTIONISM, AND PERCEIVED SOCIAL SUPPORT ON ACADEMIC PROCRASTINATION

Perceived Social Support



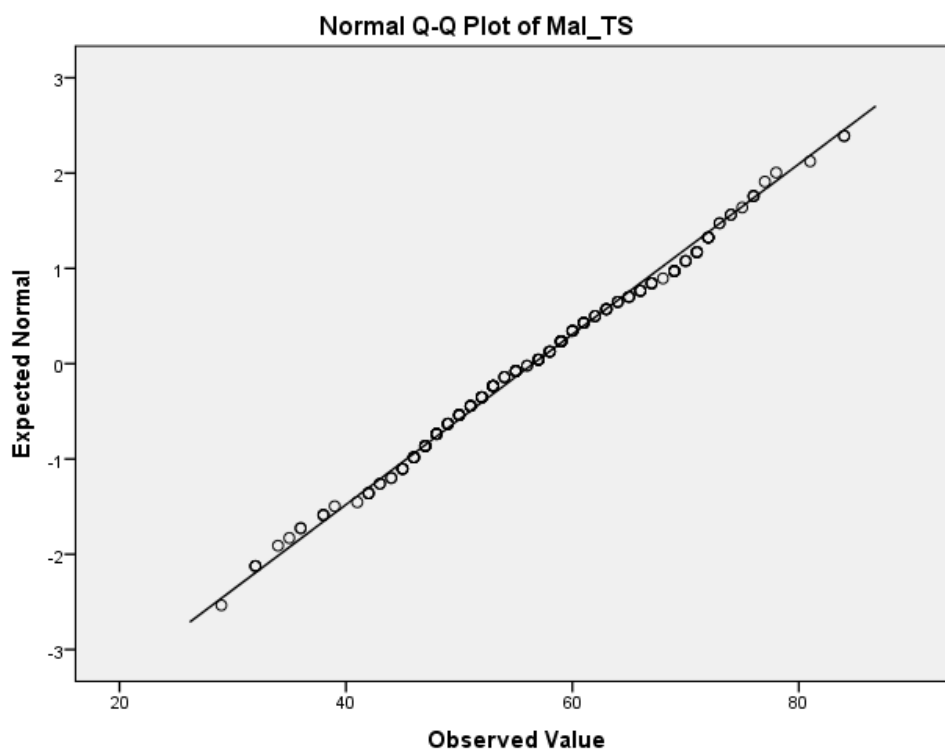
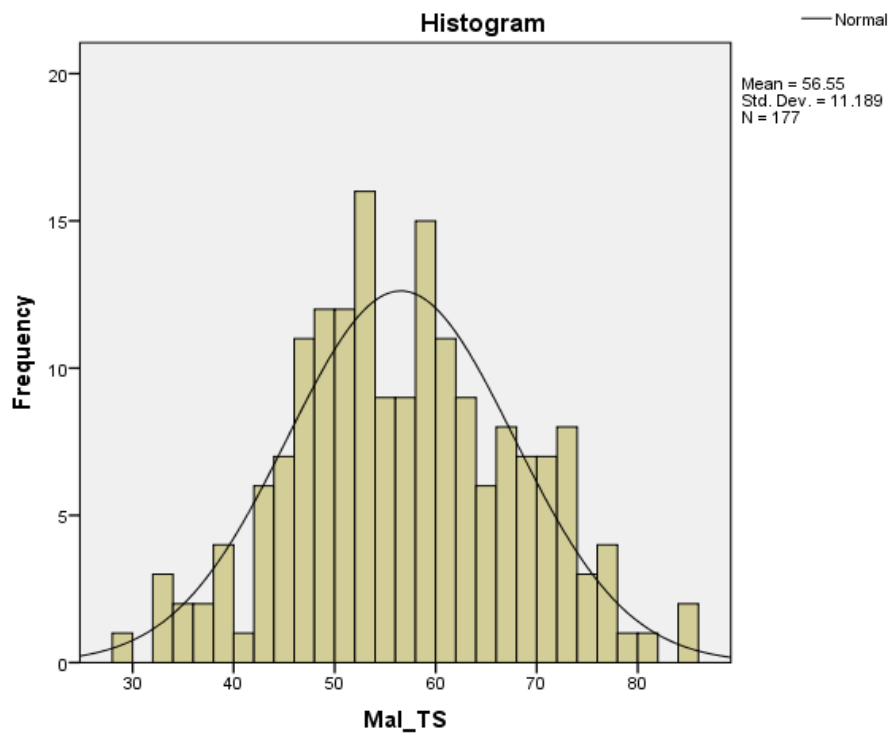
ACADEMIC SELF-EFFICACY, PERFECTIONISM, AND PERCEIVED SOCIAL SUPPORT ON ACADEMIC PROCRASTINATION

Adaptive Perfectionism



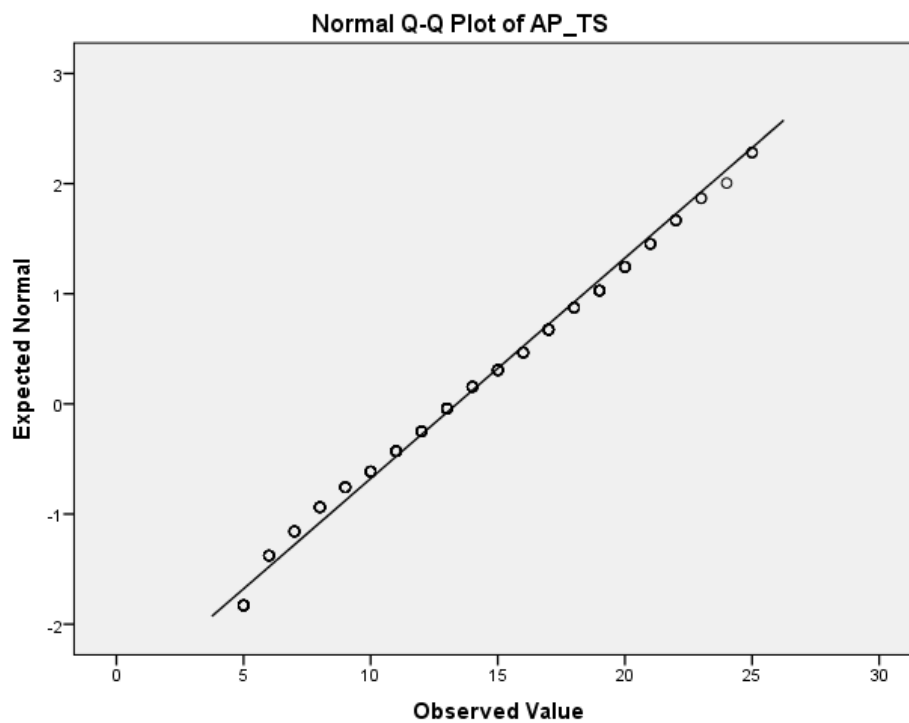
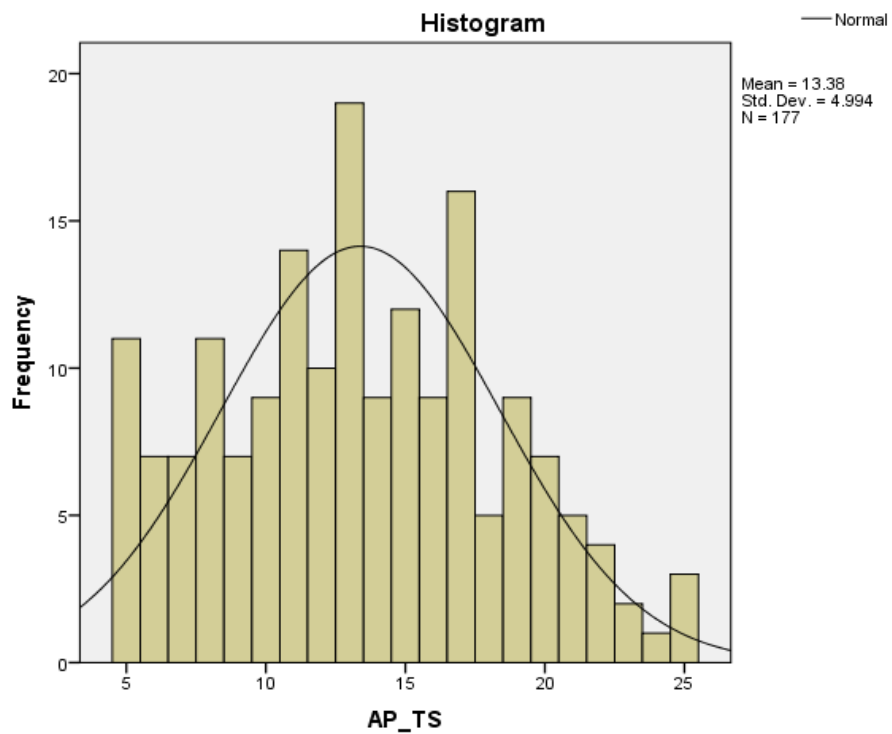
ACADEMIC SELF-EFFICACY, PERFECTIONISM, AND PERCEIVED SOCIAL SUPPORT ON ACADEMIC PROCRASTINATION

Maladaptive Perfectionism



ACADEMIC SELF-EFFICACY, PERFECTIONISM, AND PERCEIVED SOCIAL SUPPORT ON ACADEMIC PROCRASTINATION

Academic Procrastination



ACADEMIC SELF-EFFICACY, PERFECTIONISM, AND PERCEIVED
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Appendix H

Kolmogorov-Smirnov (K-S) Test for Each Distribution

Tests of Normality

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
AS_TS	.067	177	.054	.990	177	.265
PSS_MS	.056	177	.200	.990	177	.236
Adap_TS	.083	177	.005	.980	177	.011
Mal_TS	.059	177	.200	.993	177	.516
AP_TS	.067	177	.048	.976	177	.004

*. This is a lower bound of the true significance.

a. Lilliefors Significance Correction

ACADEMIC SELF-EFFICACY, PERFECTIONISM, AND PERCEIVED
SOCIAL SUPPORT ON ACADEMIC PROCRASTINATION

Appendix I

MLR Assumptions

Variance Inflation Factor (VIF) Values and Tolerance Values

Coefficients^a

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)	21.745	3.432		6.336	.000	14.971	28.520		
AS_TS	-.112	.042	-.209	2.640	.009	-.196	-.028	.794	1.259
PSS_MS	.989	.464	.171	2.133	.034	.074	1.905	.780	1.282
Adap_TS	-.203	.054	-.352	3.760	.000	-.310	-.097	.569	1.757
Mal_TS	.113	.038	.252	2.936	.004	.037	.188	.677	1.478

a. Dependent Variable: AP_TS

Durbin-Watson Test

Model Summary^a

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.376 ^a	.142	.122	4.680	2.105

a. Predictors: (Constant), Mal_TS, AS_TS, PSS_MS, Adap_TS

b. Dependent Variable: AP_TS

ACADEMIC SELF-EFFICACY, PERFECTIONISM, AND PERCEIVED
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Appendix J

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