THE RELATIONSHIP BETWEEN STUDY-LIFE BALANCE AND ACADEMIC PERFORMANCE IN HIGHER EDUCATION

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TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

LIST OF ABBREVIATIONS

ANOVA	Analysis of Variance
AP	Academic Performance
CGPA	Cumulative Grade Point Average
IBM	The International Business Machines Corporation
MLR	Multiple Linear Regression
OLS	Ordinary Least-Squares
QS	Quacquarelli Symonds
SDT	Self-Determination Theory
SH	Study Hour
SLB	Study-Life Balance
SPSS	Statistical Package for the Social Sciences
SS	Social Support
THE	Times Higher Education
UTAR	Universiti Tunku Abdul Rahman
W	Workload
WLB	Work-Life Balance

LIST OF APPENDICES

PREFACE

This project partially fulfils our academic journey of studying for a Bachelor of Business Administration (Hons) at Universiti Tunku Abdul Rahman (UTAR), a leading institution in Malaysia known for its rigorous academic standards and diverse student population. It gives us great pleasure to present the final year project report entitled 'The Relationship Between Study-Life Balance (SLB) and Academic Performance Among (AP) Higher Education Students.' as well as represents a collective dedicated research and effort for several months in completing the report.

The project's inspiration is to examine the relationship between the elements of study-life balance and academic performance among higher education students. The elements of study-life balance, which are the independent variables being concerned throughout the report, are study hours, workloads, and social support, while academic performance is the dependent variable in the report.

Human labour is essential in the effort for a country's economic development. Recognizing this, the government of Malaysia has been actively contributing resources and attention to the educational system within the country. With the encouragement of the respective authorities, the enrolment rate of higher education has increased over the years. As a result, the competition within the industry among the students rises, creating an issue of study-life imbalance due to the stress arising from the intense competition. Moreover, due to the COVID-19 pandemic, the brick-and-mortar learning mode has shifted to a hybrid mode, leading to an unhealthy lifestyle for students who cannot separate their personal lives from academic demands.

With such significance within the study-life balance, we aim to determine the elements of study-life balance that potentially impact academic performance among higher education students. We will also provide recommendations to students, university authorities, and the government on the mechanism, which includes strategies, policies, and support systems that can be implemented to enhance academic achievement while ensuring study-life balance.

The research report consists of five (5) chapters. Chapter 1 contains a brief overview of the research background, an explanation of the significance of the study, and the development of research aims and hypotheses. An exhaustive literature review and analysis follow this in Chapter 2, which also covers vital theories used in the research, such as Self-Determination Theory (SDT) and Buffering Effect Theory. Chapter 3 describes the study technique, emphasizing the quantitative approach and the potential benefits of including qualitative methods in future investigations. Chapter 4 contains the descriptive analysis, which provides an overview of survey respondents' demographic backgrounds. Inferential analysis was conducted using the Pearson Correlation Coefficient and Multiple Regression Analysis to reveal substantial correlations between independent and dependent variables. The findings in Chapter 5 highlight the relevance of study hours, workload management, and social support in impacting academic success.

However, it is important to note that there are limitations throughout the research report. These include sampling constraints, which may have influenced the generalizability of the findings; limited considerations of variables, which may have affected the comprehensiveness of the study; and the use of a specific statistical analytics mechanism, which may have influenced the interpretation of the data. The targeted questionnaire survey respondents of this report are mainly focused on the students of Universiti Tunku Abdul Rahman (UTAR), either Kampar Main Campus or Sungai Long Campus. In addition, the findings obtained showed that the current three independent variables evaluated in the report have a limited explanation of academic performance. Thus, future research should discover more variables to extend the understanding of the topic. Lastly, the statistical analytics tool used in the current research report is based on the Statistical Package for the Social Sciences (SPPS) software.

Lastly, we hope this project report contributes valuable insights into study-life balance and academic performance in higher education and inspires further research and improvement in this crucial area.

ABSTRACT

This study delves into the complex interplay between study-life balance factors and academic performance among higher education students. The primary objective is to investigate the impact of study hours, workload, and social support on academic achievement within the context of higher education. By examining these variables, the study aims to contribute to the existing knowledge regarding the factors that influence students' academic success.

A quantitative research approach was employed to achieve this objective. The study utilized statistical tools such as Pearson Correlation Coefficient and Multiple Regression Analysis to analyse the relationships between study hours, social support, workloads, and academic performance. The research involved a sample of higher education students, and data collection was conducted through structured questionnaires. The collected data were then analysed using SPSS software, allowing for a comprehensive examination of the variables under study.

The findings of this study revealed significant correlations between study hours, workload, social support, and academic performance among higher education students. Notably, study hours emerged as a significant predictor of academic success, followed by social support and workloads. These results shed light on the critical role of effective time management, workload management strategies, and social support systems in enhancing student performance in higher education settings.

In conclusion, this study contributes valuable insights into the factors influencing academic performance among higher education students. The findings underscore the importance of promoting study-life balance through strategies that optimize study hours, manage workloads effectively, and provide adequate social support to students. Furthermore, future research directions may include exploring additional variables and employing mixed methods approaches to gain a more nuanced understanding of study-life balance dynamics and their implications for academic outcomes.

CHAPTER 1 INTRODUCTION

1.0 Introduction

In this chapter, an overview of the study regarding the background, definition of the terms and variables, and statement of the research problems will be provided. Besides, a brief introduction of the research objectives to be achieved, research questions to be answered, and hypotheses to be tested.

1.1 Research Background

From psychological literature, *stress* is defined as any situation where the demands placed on an individual or a social system, either from internal or from the environment, surpass their available resources for adaptation (Ramachandiran & Dhanapal, 2018). The internal factors are usually high self-imposed expectations, worry about the future, personality, extra-curriculum, and poor time management (Lin & Yang, 2021; Noman et al., 2021). The internal factors that cause stress are usually controllable and known as optional stress. In contrast, external factors can be further delved into two categories: academic pressure and environmental pressure. The specific strain of academic stress involves students feeling overwhelmed by their academic responsibilities and struggling to meet the demands and standards necessary for satisfactory achievement (de la Fuente et al., 2020). As an illustration, assignment deadlines for university students, workloads, and tests are academic pressures that are generally unavoidable (Yikealo et al., 2018).

Balancing these stressors with one's personal life is crucial. Therefore, the concept of study-life balance is remarkable in the higher education sector, especially after the outbreak of the COVID-19 pandemic (Šestanović & Siddiqui, 2021). It is a matter of self-regulation to control the balance between personal life and academic activities (Beatson et al., 2021).

In the present time, the challenges of effectively navigating day-to-day routines between academic and non-academic activities among tertiary education scholars are omnipresent. The struggle for balance is exaggerated by the proliferation of academic demands. The rise in challenges is a result of several common factors, which are a heavier academic workload, new terrain, social change, and lack of social support (Bhat & Sheikh, 2023; Doble & Supriya, 2011).

The seemingly negative consequence of this study-life imbalance that is it leads to stress, fatigue, and pressure on the university students, which are significantly more advanced than history (Hatcher & Hwang, 2020; Kumar & Chaturvedi, 2018). Moreover, academic achievement has become a focal point due to its direct impact on the employment rate in the country and creating intensified pressure on tertiary students (Razak et al., 2019).

The term study-life balance (SLB) has been newly introduced compared to work-life balance (WLB). Through this research, the term "study-life balance" is defined as a partition between a student's time and focus between his studies and other exertions, such as leisure activities and extracurricular activities, and the way a student's study and personal life affect or interfere with each other either in positive or negative (Aprilinda et al., 2020; Berry & Hughes, 2020; Hatcher & Hwang, 2020; Hendriks, 2020).

In this current study, "Work/Study-life" represents the connection between academic responsibilities and the student's private life, which varies for each person (Kumar & Chaturvedi, 2018). "*Life*" is outlined as "Everything not related to work.", such as the non-academic elements of personal life, as an illustration, recreation, entertainment, and family (Aprilinda et al., 2020; Bardoel et al., 2008; Guest, 2002; Martinez et al., 2013). "*Balance*" is a state of satisfactory equilibrium between different roles in an individual's life (Drago, 2007).

Maintaining a healthy study-life balance is of paramount importance as poor time management will affect one's academic results. Studies have found that excessive time spent on employment will cause students to be absent from lecture class, be

inactive to engage in socializing, increase stress levels, and have difficulty attempting tasks and assignments on time (Curtis & Shani, 2002).

Furthermore, constant exposure to stress can contribute to several adverse outcomes. Students who experience ongoing stress are more likely to adopt unhealthy coping strategies. For example, they increase the possibility of adopting poor eating habits, smoking, alcohol, and drug abuse, all of which are attempts to manage their stress. In some extreme cases, students may even attempt suicide or contemplate with the drive of overwhelming stress (Hendriks, 2020).

Time is a sacrificial resource. However, college students are still confronted with multiple requirements in this current era. These include academic commitments, extracurricular activities, part-time work, and extramural engagements. Students struggle with studying to achieve high scores on exams, handle tasks and assignments on time, meet parental expectations, prepare for well-paying career opportunities, and maintain a high social status (Hendriks, 2020; Kumar & Chaturvedi, 2018).

Extracurricular activities are academic or non-academic activities administered by universities but not part of the grading system (Seow & Pan, 2014). While there is evidence that participation in extracurricular activities contributes to personal growth development, academic achievement, and psychological and behavioural attitudes (Feldman & Matjasko, 2005). Therefore, this engages students in extracurricular activities while drawing away some of their time to fulfil academic demands.

Additionally, university students tend to encounter financial challenges, thus causing them to compete in time-consuming activities such as family, studies, part-time work, hobbies, and socializing (Beatson et al., 2021; Donnelly et al., 2019; Salamonson et al., 2020). The research claimed that students involved in part-time work usually fail in their academic studies frequently, resulting in repeating the course as well as withdrawing from the university (Lopez-Mayan, 2018).

Extramural activities are engagement outside school or at home, also known as leisure time (Hagger & Chatzisarantis, 2012). Participation in playing video games, shopping, and dining out, which are examples of recreational activities, can help to relieve academic-related tension and develop interpersonal relationships (Zhang & Zheng, 2017). According to a study, being absent from extramural activities will result in a sense of disaffiliation and isolation in students' university life and, as a result, impact a higher chance of failure in their studies (Tinto, 2017).

Due to the multiple demands placed on tertiary students, they are subjected to stress and pressure to allocate their time, which subsequently causes low levels of learning in their academics (Beatson et al., 2021; Zhang & Zheng, 2017). Furthermore, research validates that stress is a driving force that leads to depression and anxiety. It is undeniable that students will encounter various mental health outcomes in the long term if balancing is beyond their control (Sprung & Rogers, 2020).

Since the late 20th century, participation in higher education has subsequently widened and become more diverse. Compared to earlier, participation in tertiary education is more open-minded, for example, with a wide range of ages, varied ethnic backgrounds, and linguistic variety, and a majority of students are the first-in-family pursuing higher education (Salamonson et al., 2020). Therefore, the competition in the sector is rival and highly intense (Hendriks, 2020). Thus, increasing stress in excellent academic performance.

Furthermore, the lockdown during outbreaks of the COVID-19 pandemic has shifted the learning environment from brick-and-mortar to virtual platforms and surged the development of "hybrid" learning models (Šestanović & Siddiqui, 2021). Besides, the advancement of technology has now made differentiated online learning the norm in this era (Berry & Hughes, 2020). Students are available to work anytime and anywhere, creating work without borders (Soares et al., 2022). Although online education provides a wealth of information and saves time, there is research shows that boundaryless work will impact an unhealthy work-life balance (Sonnentag et al., 2010).

Even though their general awareness of the significance of study-life balance has arisen, there is a lack of understanding about the specific link between study-life balance and academic performance (Hendriks, 2020). Hence, this strand of research aims to develop a theoretical framework for study-life balance and to help identify the elements that can be considered to improve academic performance.

The purpose of this research study is mainly to assess the relationship between study-life balance and academic performance. Besides, this current study aims to develop an understanding of how the variables influence each other. Moreover, this study research can provide insight and serve as a reference for university students and higher education authorities to make changes to improve both study-life balance and academic performance. The university's students can create an awareness of components that help to improve academic performance, while the government agencies can receive input for the implementation of policies and structures that are more appropriate for students.

1.2 Problem Statement

Malaysia's education system has garnered significant attention from the government for decades. The government allocates substantial financial investments aimed at facilitating students to access low-cost and affordable public education, including primary, secondary, and higher education (Faek, 2023).

Specifically, the higher education industry can contribute 70% of the gross domestic product (GDP) to Malaysia (Ministry of Education Malaysia, 2020). The industry nurtures a pool of talented professionals, builds human resources, and supports economic prosperity (A Glance at the Malaysian Education System, 2022). The enrolment rate in higher education institutions has been increasing over the decade (Ministry of Higher Education Malaysia, 2022).

Besides, the number of female students is significantly higher than that of male students (Times Higher Education World University Rankings, 2023), which has

changed the demographic landscape and increased the intensity of competition in the environment. Moreover, an online or hybrid learning instrument has created the issue of study-life imbalance. Additionally, there is a clear trend of increasing numbers of students attempting suicide due to stress, study-life imbalance, and work-life conflicts (Hatcher & Hwang, 2020). In short, a study-life balance is essential for a high degree of academic success. The news released showed that there was an 81% suicide rate increment as compared to the record (Ishak, 2022).

Academic performance is denoted as students' capability to meet their academic demands and responsibilities, and the measurement of their achievement in different subjects is based on objective instruments. For example, the current grade point average (CGPA) and course final grades were derived from final examinations and coursework (Farb & Matjasko, 2012; Maqableh et al., 2021). In addition, higher academic performance is ratified, which will enhance the employment rate in the country (Razak et al., 2019).

Academic performance is influenced by various factors. One of the factors is study hours, referring to the number of times spent on academic-related endeavours (Lee et al., 2011; Nonis & Hudson, 2010).
The non-academic activities include leisure activities, such as playing video games, social events or interactions, sports, part-time work, and others. On the other hand, academic activities include attending classes, preparing for lectures or examinations, and other activities (Kennett et al., 2019). The efficacy of the time spent on learning and studying is also a consideration that affects students' academic performance (Nonis & Hudson, 2006). There are different views on the relationship between study hours and academic performance. Some researchers show a negative relationship between time spent on academic activities and academic performance (Hovdhaugen, 2015). However, some researchers have suggested that there is a positive association between time spent on academic activities and academic performance (Baliyan & Khama, 2020; Kennett et al., 2019).

Furthermore, workloads are also an essential factor that impacts academic performance. Research by Ragheb and McKinney (as cited in Chotratanakamol, 2023) stated that academic demands relate to the state in which students face

difficulty in completing tasks within a given period and the occurrence of time management problems on the part of their teachers. Besides, university students' workloads include mastering knowledge, reviewing to score on the examination, and writing papers (Yang et al., 2021). Some researchers have found that there is a significant relationship between workload and academic performance (Chotratanakamol et al., 2023; Knoster & Goodboy, 2020). However, some researchers have argued that workloads that create short-term pressures will boost productivity, but excessive workloads decrease productivity and affect academic performance (Le Fevre et al., 2003; Sarid et al., 2004).

Besides, social support plays a crucial role in academic performance, which generally falls into two categories: social support from family members, peers, and friends and support from institutions such as the faculty, lecturer, tutor, classmate, and others (Martinez et al., 2013). Social support is defined as the social and psychological support that an individual has received or felt in their daily environment, for example, assisting, caring, and respecting others (Li et al., 2018). Most of the researchers have found a result in their studies that social support has a powerful impact on academic performance (Chotratanakamol et al., 2023; Kumar & Chaturvedi, 2018; Li et al., 2018). On the contrary, the result of the study shows a partial relationship between academic performance and social influence (Razak et al., 2019).

The interest in the work-life balance concept first arose in the context of the demographic changes associated with the increasing number of female workers in the workplace (Martinez et al., 2013). There have been various studies conducted regarding work-life-balance in different settings, such as among accounting students (Beatson et al., 2021), first-year university students (Soares et al., 2022), engineering students (Kumar & Chaturvedi, 2018), and doctoral students (Martinez et al., 2013). In addition, the research regarding study-life balance is limited and has not been widely discovered in the past as compared to work-life balance (Hendriks, 2020).

The primary purpose of conducting this research study is to fulfil the shortcomings by collecting data, developing a theoretical framework, and providing an

understanding by examining the relationship between study-life balance and academic performance.

1.3 Research Objective(s)

1.3.1 General Research Objective

The major objective of this research study is to investigate the relationship between study-life balance and academic performance.

1.3.2 Specific Research Objectives

a) To examine the relationship between study hours and academic performance among higher education students.

b) To examine the relationship between workload and academic performance among higher education students.

c) To examine the relationship between social support and academic performance among higher education students.

d) To examine the relationship between study hours, workloads, social support, and academic performance among higher education students.

1.4 Research Question(s)

According to the research objectives, we constructed the study's questions:

1.4.1 General Research Question

What is the relationship between study-life balance and academic performance among higher education students?

1.4.2 Specific Research Questions

a) Is there any relationship between study hours and academic performance among higher education students?

b) Is there any relationship between workload and academic performance among higher education students?

c) Is there any relationship between social support and academic performance among higher education students?

d) Is there any relationship between study hours, workload, social support, and academic performance among higher education students?

1.5 Hypotheses of Study

H1: There is a significant relationship between study hours and academic performance among higher education students.

H2: There is a significant relationship between workload and academic performance among higher education students.

H3: There is a significant relationship between social support and academic performance among higher education students.

1.6 Significance of Study

The imbalance between learning and personal life affects the individual's well-being and causes a variety of mental, behavioural, and physical health problems (Hendriks, 2020; Sprung & Rogers, 2020). For example, an individual will attempt suicide, feel depressed, or suffer from other mental illnesses (Hatcher & Hwang, 2020). Furthermore, the study-life imbalance will put students under pressure and thus expose them to alcohol and drug abuse (Hendriks, 2020). The increment in the suicide rate has raised the awareness of the Ministry of Health in Malaysia (Ishak, 2022).

Through the research findings, study performance is explored as an element that is a significant concern for tertiary education students. They discovered various types of stress and pressure regarding their study performance. As an illustration, they feel compelled to outdo others and want to do so, especially after reviewing alums' achievements and success and preparation for future career opportunities with good performance in their studies (Doble & Supriya, 2011; Hendriks, 2020).

The study of the relationship between study-life balance and academic performance gives an insight into the relationships between these variables. This study sheds light on how effective time management or the allocation of time between academic and non-academic activities can affect one's academic performance. The concepts of study-life balance provide a framework to investigate the relationship between study hours, workloads, social supports, and academic performance among university scholars. This evaluation is made possible by highlighting the importance of equilibrium between students' personal lives and academic endeavours.

The practical importance of the study of the relationship between study-life balance and academic performance lies in emphasizing educational policies, institutional practices, and student support services. Institutions and the Ministry of Health can gain a better understanding of the importance of study-life balance and thus allow them to schedule study hours and workloads. As a result, it promotes a healthier

lifestyle with equilibrium between students' personal lives and academic activities and enhances academic performance.

Understanding the impact of social support on educational success creates an opportunity for educators and higher education authorities, such as the Ministry of Higher Education Malaysia and the Ministry of Health Malaysia, to proactively design and provide appropriate support structures, programs, and resources—for example, mentorship programs, counselling, seminars, talks, and workshops. Furthermore, faculty and higher education authorities can create a harmonious environment and culture conducive to students' academic outcomes. The knowledge and understanding become invaluable assets, assisting tertiary students in managing their time and meeting their balance.

The investigation of the relationship between study-life balance and academic performance is essential for future research. The outcome of the study will provide some insights and information that will serve as a future reference for researchers in study-life balance and academic performance projects. Researchers can use these findings as a helpful resource in preparing their study. Further evaluation can be made about the optimal distribution of weekly study hours, the volume of workloads, and different forms of social support.

1.7 Chapter Layout

There are three chapters will be included in this research paper proposal:

Chapter 1: Introduction

In this chapter, the research background will be explained generally and deeply discussed in the problem statement. Research objectives, research questions, and hypotheses of the study will be mentioned. Lastly, the significance of conducting this research is also deliberated in this chapter.

Chapter 2: Literature Review

This chapter serves as the foundation for the hypotheses that are briefly proposed in Chapter 1. In this chapter, a review of the related variables and theories related to the research will be included. Moreover, a conceptual framework will be proposed for the study and followed by the hypothesis's development, which discusses the proposed hypotheses in detail.

Chapter 3: Research Methodology

In this chapter, the procedures for conducting the research will be illustrated. The research design, data collection methods, sampling design, research instruments, construct measurement, and techniques of data analysis will be discussed.

1.8 Chapter Summary

In conclusion, the topic that will be studied is the relationship between study-life balance and academic performance, evaluating what and how variables can affect each other. Moreover, the overview, historical background, and problem statement are included in this chapter for the research study. Lastly, this chapter emphasizes the research purpose of the study, which is to fill the research gap and provide an understanding of study-life balance and academic performance to academicians and practitioners who would like to improve study-life balance and academic performance. This research will be described in more detail in Chapter 2.

CHAPTER 2 LITERATURE REVIEW

2.0 Introduction

Chapter 1 discussed the overview introduction of study-life balance and academic performance of higher education students. Chapter 2 is a literature review of our research topic consisting of many findings and studies from various parties. This research has proposed a Self-Determination Theory and Buffering Effect Theory to relate academic performance and the three factors that may affect student's academic performance: study hours, workload, and social support. This chapter will discuss the conceptual frameworks and hypothesis development.

2.1 Theory

There are two theories have been used in this research, which are the self-determination theory and the buffering effect theory.

2.1.1 Self-Determination Theory

The study begins by implementing the Self-Determination Theory (SDT). The Self-Determination Hypothesis (SDT) is a psychological hypothesis that spotlights people's intrinsic mental requirements and their inspiration to address those issues. As indicated by SDT, individuals have three essential psychological requirements. One is autonomy, the need to feel in charge of one's own decision. Additionally, competence is the need to feel proficient and successful in managing the environment. Thirdly, relatedness is the need to feel associated with others and have significant connections (Ryan & Deci, 2000).

SDT places people in a position where they are bound to be persuaded and take part in exercises when these three essential requirements are fulfilled. When people experience autonomy, competence, and relatedness in their exercises, they are bound to have characteristic inspiration, which implies they participate in those exercises for the intrinsic fulfilment they give, as opposed to outer rewards or strain. They contended that an apparent imbalance in the satisfaction of autonomy, competence, and relatedness would bring about job clashes or stress and, consequently, diminished prosperity (Sheldon & Niemiec, 2006). Thus, an individual whose degree of need fulfilment adjusted would encounter a more elevated level of prosperity than a similar generally speaking level individual of fulfilment. An inconsistent dissemination or high fluctuation among the singular requirements' fulfilment suggests that high fulfilment of one need cannot make up for a low degree of fulfilment of another need (Kloos et al., 2019).

Based on the research of Legault (2017), it could contain explicit data about SDT and its application to the scholarly setting. These sources could expand on how autonomy, competence, and relatedness are assumed to contribute to students' inspiration, prosperity, and academic performance.

Referring to Britton et al. (2011), analyse work-life balance, fun activities, and satisfaction among academics in the advanced education area. While these sources centre around employees, their discoveries may be pertinent to understudies too. If students, similar to scholastics, face difficulties in offsetting their academic responsibilities with individual life, it can affect their inspiration, prosperity, and scholarly execution, lining up with SDT standards.

SDT focuses on different types of motivation. Motivation is much needed for a student to achieve their targeted academic performance. Under SDT, there are a few types of motivation. One of them is intrinsic motivation. Students who are naturally propelled are bound to be interested, constant, and imaginative in their way of getting the hang of, prompting better academic performance. Secondly, extrinsic motivation includes

participating in an action to achieve outside rewards or avoid discipline. While outside rewards like grades or recognition can help improve behaviour, the objective is to incorporate these inspirations to align with individual qualities and interests. When extrinsic motivation becomes more incorporated, it can emphatically impact academic performance. The third type is demotivation, the most critical type everyone should consider as students face difficulties in this phase. Demotivation addresses an absence of inspiration or a sensation of powerlessness regarding a student. Demotivated students will probably perform poorly academically, as they miss the mark on the drive to participate in the educational experience (Ryan & Deci, 2000).

In this manner, the requirements for autonomy, competence, and relatedness cannot be dependably fulfilled without procuring moral excellence, understanding, and capacities. SDT offers solid observational help for the exemplary thought of relying on belonging and exercising ethics. SDT upholds the possibility of carrying on with an honourable existence and a blissful life. However, one does not bother to be a righteous scholar to see the value of the significance of independent and self-embraced moral inspiration. Comparatively to authority inspiration with regards to individual learning, independent moral inspiration is more self-supporting (Weinstein & Ryan, 2010).

2.1.2 Buffering Effect Theory

Buffering effect theory is a theory that can be related to social support. It can guide the explanation of the relationship between social support and students' academic performance. Based on this theory, social support performs as a defence against the adverse effects of stress and increases an individual's mental and physical health in stressful and challenging circumstances (Vasquez et al., 2016). The buffering effect theory is that in the context of students' academic effort, a solid network of social supports

can reduce the adverse effects of stress, promote mental health, engagement, and motivation, and lead to improved students' overall academic performance (Thoits, 2011). In addition, buffering effect theory provides a conceptual framework to explain how social support functions as a defence against the negative effects of academic stress. While researching the relationship between social support and stress reduction, this model proposes insights regarding how social networks strengthen the capacity of students.

Social support from friends and family has been demonstrated in this research to perform as a defence in reducing the harmful impact of academic stress on students' mental health, which is vital in the school environment. Among them, social support acts as a defence against stress-related implications. Another study discovered that social support from friends and teachers positively impacts students' academic engagement and academic achievement (Oberle & Schonert-Reichl, 2016). It shows that social support acts as a defence against academic displeasure and low performance. It also guides the theory that while reducing the expectations on academics, then social support can increase academic success.

Apart from that, a study has discovered that perceived social support may forecast students' academic performance and buffered stress's adverse effects. The research results demonstrate the buffer effect concept, indicating that students who are encouraged are more unlikely to experience the adverse effects of stress on their academic performance. Based on the research of Vasquez et al. (2016) found a relationship between social support and academic performance in low-income students. It was explained that higher levels of social support are related to more extraordinary achievement in school, acting as a buffer against the stress that students from low-income families commonly experience.

Aside from that, there is evidence that a sense of belonging, which is frequently linked with social support, is able to enhance children's adaptability and academic achievement. Tinto (2017) has shown that, when

conducting educational organization research, students who had a sense of belonging and connection to their friends and instructors were likelier to stay on track with their education and succeed in higher academics. It is aligned with the buffer effect theory, which argues that a positive environment can lead to a positive effect, such as motivating students. The concept of elasticity is emphasized in the buffering effect theory. Based on the research of Thoits (2011) stated that he supports this theory by emphasizing that social support generates a sense of belonging and emotional well-being, boosting an individual's ability to recover from setbacks and adversities. Students who feel supported by their social networks are more likely to demonstrate resilience in the face of academic problems, preserving their desire and ambition to succeed.

2.2 Independent Variable & Dependent Variable

This literature consists of three independent variables, which are study hours, workload, and social support, and one dependent variable, which is academic performance.

2.2.1 Study Hours

A "*study hour*" alludes to an assigned timeframe, typically enduring an hour, during which an individual devotes themselves to engaged and thought learning or considering (Logunmakin, 2001). This time is typically saved for academic pursuits like perusing, auditing notes, tackling issues, or leading exploration. The objective of a review hour is to establish an organized and continuous climate that advances compelling learning and maintenance of data. It is usual for students, experts, and people seeking personal growth to designate review hours as a feature of their everyday practice to upgrade their insight and abilities in a specific subject or field. These days, individuals have been progressively competitive since their

student days because of the immense population base when they apply for a more elevated level of everyday schedule work.

The work can be reflected by the commitment of students in school and the degrees of commitment can be assessed from the amount of time spent on scholastics. Learning takes time, and educational plans are intended to give students chances to master during classes and during time for self-review (Logunmakin, 2001). Academic performance will be better as additional time is spent on learning.

Many studies have been completed to concentrate on study time behaviour and student accomplishment. The new ones incorporate that of Logunmakin (2001). They generally concurred that study time influences a solid relationship with the academic performance of students. At the same time, different specialists like Adeyemo (2005) reasoned that students' academic performance was the result of a mix of the review time conduct and different variables in any course of study. Adeyemo (2005) explicitly thought that study time is an activity beyond simply perusing for delight. Concentrate on time issues related to the understudy's commitment to homework, tasks, perusing, and note taking, concentrate on period technique, understudies' focus in assessment, and educators' consultancy administrations required this review.

In short, all studies regarding study hours obtained the same result, which shows that study hours are positively correlated with academic performance. In other words, we can conclude that the more the study hours are organized, the better the academic performance will be.

The adaptability of a university climate and opportunity can destroy students who have not mastered the ability to use time productively (Razali et al., 2018). Instructive establishments ought to plan the courses to guarantee student commitment and productive use of time (Miertschin et al., 2015). Understudies face day-to-day difficulties in students' academic lives, such as academic pressure and relational connections, and are requested to

concentrate on meetings appropriately, using time productively, and using survival techniques (Lin & Yang, 2021). Wasteful use of time productively without legitimate direction and guidance could result in a diminishing of students' academic performance (Hensley et al., 2018). University organizations ought to construct a durable procedure to foster an understudy's impression of time significance and usage in a productive way (Alghaswyneh & Basri, 2015). Instructors should focus on further developing their time usage abilities as they influence students' academic performance (Kayode & Ayodele, 2015).

2.2.2 Workload

A *workload* alludes to how much work should be finished within a particular timeframe. It incorporates different undertakings, exercises, and obligations that people, groups, or frameworks are liable for executing to accomplish specific goals. The workload can differ concerning its intricacy, volume, and the assets expected to finish it. Weighty workloads can cause actual difficulties and block students from taking part in proactive tasks essential for keeping a sound way of life (Rummell & Joyce, 2010). Despite the significant effect of responsibility on students' lives, we did not track down an unmistakable or predictable definition of student responsibility (Gerrard et al., 2017).

University students have various kinds of workloads, which can differ in light of their courses, projects, and individual timetables. There are not many sorts of workloads that depict precisely how a student is impacted by it. One of them is schoolwork and tasks. Professors give students homework and assignments to practice what they have realized. These can be composing papers, tackling issues, doing projects, or doing different errands that incorporate cut-off times, which compels the understudy to run for them. Rather than these, a bunch of projects where students sometimes need to cooperate in gatherings to finish projects, assisting them with figuring out

how to team up and share thoughts. Simultaneously, everybody's collaboration is vital to completing the task on time. The review has demonstrated that tests are one of the most troublesome responsibilities that students have. Students must read up for and take tests to show what they have realized, including checking on notes, contemplating, and getting ready for various sorts of tests. For specific projects, students could have to explore unambiguous themes such as tracking down data, dissecting it, and making reports or introductions (Smith, 2019).

In addition, after concentrating on the stage, the student's tremendous responsibility is to find an internship or work. A few students could have entry-level positions or work encounters connected with their field of study. An internship or work can be an essential method for mastering pragmatic abilities. University life is not just about scholastics. Students could likewise be associated with clubs, sports, or exercises that add to their responsibility. Students who attempt to acquire will figure out for part-opportunity occupations. A few students work temporary responsibilities to help themselves while considering, which adds to their responsibility yet also assists them with dealing with their funds and using time productively. Dealing with this large number of errands demands great using time productively and concentrating on abilities. Students need to track down ways of adjusting their responsibilities and individual lives (Smith, 2019).

University students must genuinely find harmony between their various errands, manage their time well, and request help if they feel overwhelmed. Every understudy's responsibility can be unique, so it's fundamental to sort out what works best for them.

2.2.3 Social Support

Social support includes emotional, psychological, and practical assistance obtained through social networks (Cohen, 2004). It is the perception that

one is cared for, appreciated, and part of a supportive group, according to Schwarzer & Buchwald (2004). Social support can be vocal, nonverbal, or material, and it makes people feel understood, safe, and connected (Cohen, 2004). It is not only the support that builds a sense of belonging, but it also promotes personal growth and adaptability.

There are five different types of social support: emotional support, instrumental support, informational support, appraisal support, and companionship support. Different types of social support have dissimilar advantages for an individual's well-being and coping skills. First is emotional support. It offers individuals comfort, empathy, and understanding during distress (Bolger et al., 2000). This type of social support fosters emotional connection and reassures people that their feelings are being acknowledged, which can promote a sense of belonging and emotional stability. According to (Thoits, 2011), instrumental support gives practical assistance and resources to those experiencing obstacles, addressing tangible requirements such as financial assistance, transportation, or childcare. This type of social support helps to reduce stress by minimizing actual burdens.

When individuals need to make informed decisions and face challenging situations, information support is available through advice, information, or guidance. This type of support helps to solve problems by increasing self-control and self-efficacy. According to Uchino (2011), appraisal assistance includes providing feedback, validation, and examination of people's thoughts and feelings to help them acquire perspective on their experiences and emotions. Another social support that is needed to promote emotional regulation and self-awareness through the validation of a person's emotions is appraisal support. Spending time together, participating in shared activities, and providing social interaction are all examples of companionship support (Perlman & Peplau, 1981). Therefore, when individuals create a sense of connection and belonging, they can reduce their loneliness and isolation.

Steinberg and Darling (1994) have underlined the importance of social support in encouraging pupils. When students receive encouragement, compassion, and acknowledgment from their families, instructors, and classmates, they feel more appreciated and inspired to perform well academically. According to the buffering effect theory, social support serves as a protective element, preventing hazardous levels of stress from impairing academic performance (Li et al., 2018). Students' academic goals, commitment, and overall well-being have been linked to parental, instructor, and peer-motivating impacts (Safree & Adawiah, 2021).

Apart from that, it is theorized that social support acts as a buffer against the harmful influence of stressors on academic achievement. According to the buffering effect hypothesis, persons experiencing high-stress events can benefit from social support as a protective resource (Miloseva et al., 2017). Research by Vasquez (2016) has shown that high levels of social support have been demonstrated to predict academic success, especially among low-income kids. This assistance can keep emotional arousal from reaching dangerous levels, minimizing burnout and its harmful consequences on academic performance (Li et al., 2018). A strong social support network can help students navigate difficult situations with reduced psychological distress. Students are less likely to abandon their studies when they feel encouraged and valued by their peers (Tinto, 2017). Therefore, social support can help students stay focused on their academic aspirations.

Furthermore, social support promotes the confidence and ability of students and enables them to perform intellectual work. Positive interactions with tutors and learning communities have improved individual learning, learning quality, and overall academic persistence (Tinto, 2017). Students who feel caring, have customized connections, and are available from university teachers do better academically in this situation. Those students with a strong support network are more able to recognize their potential to participate actively in their learning and feel in control of their academic challenges.

In addition, interactions with peers are potent in the academic setting. Positive peer relationships in extracurricular activities and learning communities have been proven in studies to improve commitment, motivation, and involvement in academic pursuits (Safree & Adawiah, 2021; Tinto, 2017). Peer support promotes a sense of connection among students, and it can enhance their academic experience through the connection. The connections can reduce students' feelings of isolation and establish a collaborative learning environment, which can lead to improved overall academic performance.

2.2.4 Academic Performance

Academic performance refers to measuring the ability of students to complete their studies and using final course grades and grade point averages to do assessments (Carroll & Garavalia, 2004). Fenollar et al. (2007) comprehensively investigate the elements that contribute to academic achievement among university students. As the dependent variable, academic performance is a significant indicator of students' achievements and success in the educational system. Based on the research, Masud and Ahmad (2014) stated that learning attainment is defined as the development and demonstration of competencies, skills, and abilities required for successful participation in educational activities and eventual application to real-world settings. *Academic achievement* can also be defined as active participation and involvement in educational activities such as attendance, classroom participation, and participation in a variety of learning experiences that contribute to a comprehensive assessment of a student's overall performance (Alyahyan & Düştegör, 2020). According to Afzal et al. (2010), academic performance may also involve students' ability to persevere in learning, overcome obstacles, and demonstrate resilience in the face of failures, indicating their dedication to learning and achievement. According to Alyahyan and Düştegör (2020), academic performance is often characterized as measurable outcomes in a student's education, such

as grades, test scores, and overall learning outcomes. Hence, it reflects how well students have mastered the curriculum and demonstrates how well they have mastered the subject. This definition is suitable for our research purpose.

Apart from that, there are two measurements of academic performance: continuous assessment and CGPA. Continuous assessment is a part of the examination of students' academic performance. It is easier for educators to track students' study progress and let students know what areas they need to pay more attention to in future studies. Continuous assessment also can test student's ability and understanding of a specific subject or course. Based on the research of Alyahyan and Düştegör (2020), continuous assessment also allows teachers to tailor their teaching approaches to the specific needs of their pupils, resulting in more effective learning results. According to Afzal et al. (2010), continuous assessment is designed to provide educators with an overview of student progress, learning outcomes, a better understanding of students' strengths and weaknesses, and the areas that can improve in the future. This approach provides an opportunity for students to train to develop critical thinking, problem-solving, and self-directed learning (Afzal et al., 2010).

Furthermore, the cumulative grade point average (CGPA) is an exam result that measures a student's overall performance in a few semesters or courses. It takes into account the grades and credits connected with each course. CGPA helps students to compare and contrast their previous results with existing results. It also helps the school's Department of Education employees in making few decisions on scholarships and honours programs.

Aside from that, academic achievement will affect the enrolment rate. Students with flying colour results have a better chance to choose or choose from the better institutions. For instance, a student who gets 10As has a higher chance of entering matriculation, and they can get a government-sponsored scholarship. According to studies, students with excellent test scores, outstanding grades, and participation in extracurricular activities and

honours courses indicate a dedication to learning and independence, increasing their chances of college admission (Brew et al., 2021). As everyone knows, having excellent academic performance and getting good results can enhance opportunities for career advancement. Candidates with an outstanding academic record are frequently preferred by employers. Higher levels of education, including degrees, can lead to higher salaries, employment security, and professional development (Brew et al., 2021).

The following essential aspect of academic performance is that it can improve self-confidence and self-worth when achieving academic success. When students achieve high academic performance, it will deliver an impression of personal success and generate confidence that can be used in both occupational and private circumstances. Academically successful students have higher self-esteem (Brew et al., 2021). Academic achievers are more likely to be given leadership responsibilities and to participate in professional development programs. According to Brew et al. (2021), outstanding academic performance positions students as prospective leaders and contenders for advancement in a variety of businesses. Academic success enables students with the abilities, expertise, and commitment necessary to pursue continuous learning and personal development. A solid academic foundation promotes ongoing intellectual development and adaptation to a changing environment. Next, academic performance will be affected by the allocation of time and energy to academics. Based on the research of Fenollar et al. (2007) stated that students who spend more time studying and doing assignments will perform better academically. The students whose active involvement in the learning process promotes comprehension and retention of material will get higher grades and academic scores.

2.3 Proposed theoretical/ conceptual framework.

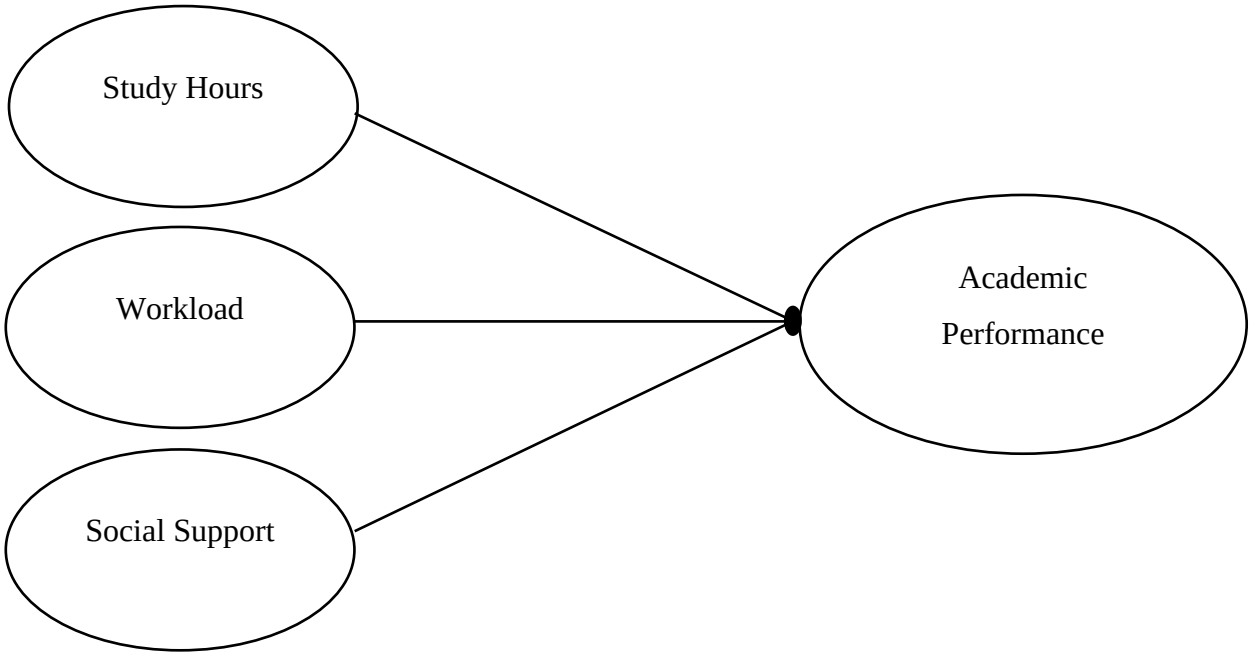

Figure 2.3: Conceptual Framework

Based on Figure 2.3, there are three factors, which are study hours, workload, and social support, that affect the academic performance of higher education students. This research purpose is to investigate the relationship between independent variables and dependent variable which are the factors that affect the academic performance of higher education students.

2.4 Hypothesis Development

2.4.1 The relationship between study hours and academic performance

The connection between study hours and academic performance is a perplexing and complex subject. There is a positive connection between how much time a student spends contemplating and their academic performance. However, this relationship is affected by a few factors. While there is, for the most part, a positive connection between study hours and

academic performance, it's essential to underline the nature of the study, individual contrasts, and different impacting factors.

Learning takes time, and educational plans are intended to furnish students with unique chances to master the material during classes and during time for self-review. It is viewed as the fact that as additional time is spent on learning, execution will be better. Study habits are the leading indicator of academic performance, and worldwide research has uncovered that study propensities influence academic performance (Kyauta & Dachia, 2018).

Simultaneously, students are brimming with disarray about their future professional advancement during the student time frame. They might invest energy in their leisure activities to find future objectives. This could make them adjust the time distribution among leisure activities and get the hang of it, bringing about issues such as grade decline because of nonsensical time designation. Issues with school execution can prompt more issues, for example, family clashes or loss of learning interest. Whether the speculation of study time is connected with academic performance is a questionable issue.

The exploration shows that academic performance has a positive relationship with study time, and students with low execution particularly increment their exhibitions with an expanded concentration on time (Spitzer, 2022). In this article, in light of his decisions, breaking down the further effect as the study time continues expanding, attempting to track down the restriction of the time speculation.

As per SDT, if students meet their psychological requirements (autonomy, competence, and relatedness), they will have more assimilated inspiration, which thus will lead them to perform better. Students who acquire independence support from their folks meet their essential mental necessities and feel that they are equipped, which is to the theory. As opposed to the theory, in any case, high saw skill does not carry more assimilated inspiration to the students in this study. Students with high

apparent capability levels will generally carry on a feeling of responsibility. (Nishimura & Joshi, 2021)

H1: There is a significant relationship between study hours and academic performance among higher education students.

2.4.2 The relationship between workload and academic performance

The connection between workload and academic performance is a mind-boggling and complex one, impacted by different factors like the singular's capacities, time usage abilities, learning style, and individual conditions (Smith, 2019). A moderate workload can frequently emphatically influence academic performance. It can advance dynamic commitment with the material, support decisive reasoning, and upgrade the maintenance of data. Notwithstanding, an unnecessary workload can prompt burnout, stress, and decreased mental execution, eventually influencing scholarly accomplishment.

Based on the outcome, it can be defined that there is a positive and massive connection between workload and academic student performance. The positive and massive connection can make sense regarding how workload affects academic students' performance since they cannot deal with their workload admirably, causing them to fail to ensure all their work is done. Subsequently, for part-time students, the outcomes are enormous. Workload influences part-time students' performance since they frequently feel depleted while doing the tasks as well as setting themselves up for last because of a furious day at the office during the daytime, which makes them unable to focus on the night day to finish their academic stuff. Related to that, they cannot perform their tasks very well but are required to create quality tasks for the evaluation. As a result, this will impact their outcome in specific semesters.

Few factors affected the relationship between workload and academic performance. Various examinations have shown that an exorbitant workload can prompt mental over-burden, adversely influencing students' data handling and understanding skills (Smith, 2019). When students are overpowered with tasks and coursework, their capacity to participate in profound learning and decisive reasoning might be lessened. Furthermore, psychological factors also play a huge role. High workload has been related to increased stress, nervousness, and burnout among students (Ullah et al., 2011). This emotional strain can bring down student's psychological prosperity and affect their inspiration to succeed academically. Other than that, physiological factors drawn-out openness to weighty workloads can prompt rest unsettling influences, diminished active work, and disturbed dietary patterns. Such physiological variables can add to weariness and decreased mental working, eventually influencing academic performance. Another factor is academic performance. The effect of workload on academic performance is not uniform across all understudies. A few examinations propose that moderate degrees of workload can upgrade learning results by advancing using time effectively and obligation (Schulte-Frankenfeld & Trautwein, 2022).

The connection between workload and academic performance is multifaceted and impacted by mental and physiological elements. While moderate degrees of workload can be gainful for cultivating mastering and time usage abilities, exorbitant workloads can bring about unfortunate results, including mental over-burden, stress, and disabled academic performance. Educators, foundations, and policymakers must find some harmony between workload assumptions and student well-being, considering individual contrasts and offering sufficient help components to assist students with dealing with their academic requests effectively.

H2: There is a significant relationship between workload and academic performance among higher education students.

2.4.3 The relationship between social support and academic performance

Social support, commonly characterized as the assistance and emotional sustenance supplied by family, friends, and peers, has been demonstrated to influence academic success significantly. A few studies have been conducted to investigate the relationship between social support and students' academic performance. Past research discovered that students who have strong social networks have lower stress levels and better mental health. Hence, it can increase the probability of achieving academic success. This relationship uses the buffering effect theory because it provides social support that people can use as a defence against the negative effects of stress.

According to research, students who perceive robust social support systems have lower stress levels and higher emotional well-being. Hamaideh (2009) has promoted the buffering effect theory by determining a relationship between a robust social support system and reduced student stress. Therefore, it can help them concentrate on their studies and achieve good academic results. Based on the buffering effect theory has stated that social supports perform as a protective buffer against stressors and challenges. Students are more likely to feel motivated and capable of dealing with the obstacles of their academic burden when they feel supported by their social networks (Jenkins-Guarnieri & Wright, 2015). They can achieve academic success while having a positive relationship. Based on the research of Vasquez et al. (2016) and Li et al. (2018) have stated that high levels of social support can predict academic performance in students from low-income homes. When students face stress in their study progress due to heavy workloads and competition, this kind of stress will lead to students not performing well academically. Solid relationships provide

psychological advantages to reduce the negative impacts of stress and create an atmosphere for students to focus on their studies.

Aside from that, students feel like they belong and are connected to their academic environment while they have social support. It can promote a healthy environment by promoting engagement and participation in educational activities while connecting with friends, teachers, and mentors. Students with positive social connections and ties in their academic community are more likely to attend classes regularly, participate in discussions, and seek assistance when needed (Liu et al., 2014; Deci & Ryan, 2000). The positive social connections in schools could improve the engagement and participation of students, which reflects the buffering effect theory's protecting impact. Based on research, Yeh and Inose (2003) stated that the key elements that predict academic distress and academic performance are social support and a sense of solid connection. A sense of belonging provides emotional value for students and protects them from the adverse effects of stress by applying buffering effect theory. The perception of belonging promotes students' mental wellness. Nevertheless, it offers the buffering effect theory by decreasing feelings of loneliness and increasing students' overall participation and navigation.

Apart from that, social support can directly impact students' learning motivation by influencing their self-efficacy beliefs. When students receive motivation and positive feedback from social support, their self-efficacy and confidence level will be increased. They can develop a sense of ability and confidence in their talents. Therefore, students will be more motivated to learn and have the power to achieve academic success (Jenkins-Guarnieri & Wright, 2015). Steinberg and Darling (1994) stated that support networks are a way to increase students' motivation and their commitment to learning because active students can bear the challenges of academic stress, known as the buffering effect theory. Thus, social support can also increase students' motivation, which aligns with the buffering effect theory. Based on previous findings have strongly emphasized that the significance of social support can increase the desire of students to gain more knowledge.

H3: There is a significant relationship between social support and academic performance among higher education students.

2.5 Chapter Summary

In a nutshell, this chapter summarizes the findings and studies related to academic performance and the factors, which are study hours, workload, and social support. This literature review provides a better understanding of these findings and studies. This research has found that there are many factors that will affect student's academic performance, especially for students who are engaged in part-time jobs, internships, extracurricular activities, and personal obligations. Additionally, this chapter discusses the Self-Determination Theory and the Buffering Effect Theory. As a result, we will utilize an acceptable research approach and explain it in the following chapter to elucidate the relationship between study-life balance and academic performance. The sampling method will be discussed in more detail in Chapter 3.

CHAPTER 3: RESEARCH METHODOLOGY

3.0 Introduction

The methodology and procedures used in the research are detailed in Chapter 3. The research design, sample methodology, data collection technique, and suggested analysis tool will all be thoroughly covered in this paper. Additionally, the data will be processed, and an interpretation will be provided based on the examination of the independent and dependent factors. The concluding section of this chapter will assert a summary.

3.1 Research Design

The research paper is a fundamental research technique that aids in broadening the boundaries of knowledge. The methods used for this research are quantitative business research approaches. According to Apuke's (2017) study, quantitative research quantifies and analyses variables to get findings. It entails the use of numerical data and statistical tools to analyse that data to provide answers to queries like who, how much, what, where, when, how many, and how. It is also referred to as a technique for analysing data in numerical form to understand a problem or phenomenon. The study also demonstrates four categories into which quantitative approaches can be placed: survey research, correlational research, experimental research, and causal-comparative research.

This work uses a causal research design as its methodology. Finding the causes and effects between the independent factors (study-life balance) and the dependent variables (academic success) is the goal of causal research. Explanatory study, sometimes referred to as causal research, is carried out to determine the scope and type of cause-and-effect interactions. It is possible to do a causal study to evaluate how particular changes would affect prevailing norms, various processes, and more. (Dudovskiy, 2022).

3.2 Sampling Design

Sampling is the process of selecting a subset of the intended audience for a research study. Most research initiatives use a smaller group for data collection because it is hard to enlist the participation of the entire population of interest. Data can often be gathered faster and for less money by sampling from the population rather than attempting to contact every member of the community (Turner, 2020).

3.2.1 Target Population

The population that will be studied and conclusions drawn from for the intervention is known as the target population. The characteristics of the target population and any subgroups must be stated in depth when conducting cost-effectiveness research (Barnsbee et al., 2018). Our target audience will be UTAR students, who will all participate in this study regardless of their enrolment in the locations of campus, departments, or semesters. According to Mr. Wong Chee Wee, Director of the Division of Admissions and Credit Evaluation, there are 18,200 students enrolled at UTAR.

We chose UTAR because UTAR is a non-profit private institution that provides high-quality education at a reasonable cost. The university currently offers 138 academic programs from Foundation Studies to Bachelor's, Postgraduate Diploma, Master's, and PhD degrees in the fields of Accounting, Business and Economics, Actuarial Science, Mathematics and Process Management, Agriculture and Food Science, Arts, Social Sciences and Education, Creative Industries and Design, Engineering and Built Environment, Information and Communication Technology, Life and Physical Sciences, and Medicine and Health Sciences (Introduction, n.d.). Furthermore, it was ranked #301-350 in the Times Higher Education (THE)

Asia University Rankings for 2023 and #174 in the Quacquarelli Symonds (QS) Asia University Ranking for 2023. UTAR was also ranked #301-400 in the Times Higher Education (THE) Impact Rankings for 2023 and #86 for SDG4: Quality Education in the Times Higher Education (THE) Impact Rankings for 2023. Moreover, guided by its vision to be a global university of educational excellence, UTAR is widely regarded as one of the fastest-growing private higher education institutions in the country, with phenomenal growth in all aspects of its development since its inception and has made impressive strides in establishing a strong reputation as a comprehensive university dedicated to achieving excellence in teaching and research (Why UTAR, n.d.).

In addition, UTAR has fostered a robust research culture among staff and students. To achieve research excellence at UTAR, the necessary system and infrastructure have been developed. For example, the university has built several research centres, each with cutting-edge facilities and technology pertinent to a particular field of study. These centres provide an ideal environment for teachers and students to conduct extensive research and cooperate on projects. UTAR also includes contemporary laboratories that facilitate experimental research in areas such as science, engineering, technology, and social sciences, giving students hands-on experience and practical skills.

Additionally, the institution has significantly invested in IT infrastructure, including high-speed internet access, research databases, and software tools for data analysis and simulation. Besides, UTAR offers funding and research grants to help faculty and students pursue research projects and platforms for interdisciplinary collaboration, industry partnerships, and international research collaborations, which facilitate knowledge exchange and networking opportunities. These projects demonstrate UTAR's commitment to creating a culture of research excellence and innovation among its academics and students (Why UTAR, n.d.).

3.2.2 Sampling Frame and Sampling Location

A sample can be taken from the population, which is a list of components. Every unit from the sampling frame has an equal chance of being chosen and showing up in a simple random sample. The sampling frame is a collection of units (Sampling Frame, n.d.). Our research focuses on students at the UTAR Kampar and Sungai Long campuses. However, due to privacy considerations, we do not have access to a list of registered students at UTAR, so the sample frame for our study remains unknown. The UTAR Kampar Campus and Sungai Long Campus are the sites of the sample. As mentioned above, we chose UTAR because it was ranked #301-350 in the Times Higher Education (THE) Asia University Rankings for 2023 and #174 in the Quacquarelli Symonds (QS) Asia University Ranking for 2023. UTAR was also ranked #301-400 in the Times Higher Education (THE) Impact Rankings for 2023 and #86 for SDG4: Quality Education in the Times Higher Education (THE) Impact Rankings for 2023. These rankings of UTAR show that it is one of the top universities in Malaysia.

Furthermore, UTAR has fostered a robust research culture among staff and students and has developed the necessary system and infrastructure (Why UTAR, n.d.). Additionally, we selected UTAR as the sampling location because it may be more morally acceptable. Participants may feel more comfortable discussing sensitive personal information with peers from their academic community if the research incorporates such information.

3.2.3 Sampling Technique

Probability and non-probability are the two sampling techniques. Random selection is a critical component of probability sampling, enabling robust statistical conclusions about the entire group to be drawn. Non-probability sampling entails non-random selection based on practicality or other factors, making it simple to gather data. We employ convenience sampling, a non-

probability sampling, to find our target respondents because there is no list of UTAR students. There is no way to know if the sample is representative of the population, even though this is an easy and economical technique to gather early data (McCombes, 2023). We send our questionnaire to the UTAR students who are our responders via email, Microsoft Teams, and WhatsApp, as well as ask them to fill the questionnaires physically through the QR code that we generate for the questionnaires in the canteens of UTAR as a result of using this sample strategy.

3.2.4 Sampling Size

The number of subjects involved in a sample size is referred to as the sample size in market research. A set of people chosen from the general community who are thought to be a representative sample size for that particular study is referred to as the sample size (What is sample size, 2023). Using an online sample size calculator with a 95% confidence level, we determine that the sample size is 377 individuals from a population of 18200. The sample size decision depends on how confident one wants to be that the actual mean falls within the margin of error. A 5% margin of error, also known as a confidence interval, is expressed in terms of mean numbers (Determining sample size: how to ensure you get the correct sample size, n.d.). In an article, Dr. Wan Nor Arifin wrote, he introduced a web-based sample size calculator that can calculate the sample sizes of four crucial coefficients. He also demonstrates how to use the calculator for each coefficient (Arifin, 2018). This demonstrates the dependability of the calculator.

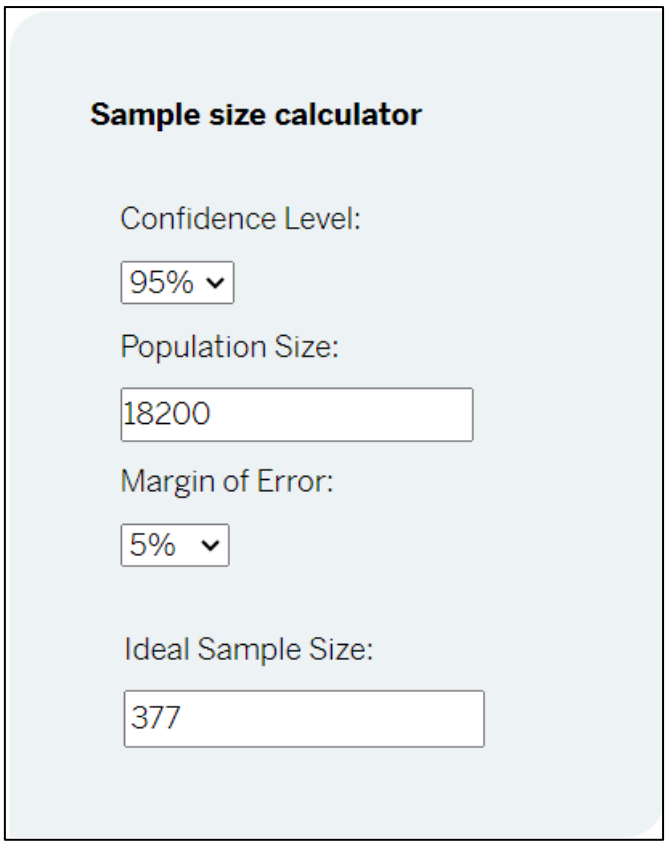

Figure 3.2: Online Sample Size Calculator. Adapted from Determining sample size (n.d.). *Qualtrics*.

3.3 Data Collection Methods

Primary data will be gathered in this study to conduct further data analysis and ascertain the cause-and-effect relationship between the variables. Primary data is information that has been first-hand collected by researchers, such as surveys, interviews, and experiments created specifically to comprehend and address the current study problem. A survey is frequently used as a primary data collection method in business research. With a survey, researchers can rapidly and conveniently collect lots of data from participants in a non-threatening manner (Wagh, 2023). Since UTAR students are the intended respondents, our major data is gathered through noninteractive media techniques and provided online or via electronic surveys using "Google Form" connections. Hence, we will use Gmail, Microsoft Teams, and WhatsApp to send the Google Form to UTAR students, and

we will ask UTAR students to fill in the questionnaires through the QR code we generated for the questionnaires physically in the canteens of UTAR.

3.4 Proposed Analysis Tool

In our research, IBM SPSS Statistics is the suggested analysis tool. It is a robust platform for statistical software. Users may easily gain meaningful insights from their data thanks to its user-friendly interface and extensive feature set. High accuracy and good decision-making are ensured by advanced statistical techniques. From data management and preparation to analysis and reporting, every stage of the analytics lifecycle is covered (IBM SPSS Statistics, n.d.).

3.4.1 Descriptive Analysis

Descriptive analysis involves rearranging, organizing, and modifying data to produce meaningful information about the supplied data. The conversion of raw data into a form will make it simple to grasp and analyse. Descriptive analysis is also a sort of data analysis that aids in accurately describing, displaying, or summarising data points so that patterns may appear that satisfy all of the data's requirements. It is one of the most crucial processes in the examination of statistical data. It provides an analysis of the distribution of data, aids in detecting errors and outliers, and enables spotting patterns between variables, preparing for future statistical analysis (Rawat, 2021).

Section A (Demographics) of the survey will be analysed using descriptive analysis. The data in this section is suitable to be presented in bar charts, pie charts, and histograms.

3.4.2 Inferential Analysis

Inferential statistics is a robust method for inferring information about large groups of people from data from a small sample. Researchers can estimate the probability of various events and test their hypotheses about the population using inferential statistics, which also uses statistical models. In statistical analysis, it is crucial to distinguish between category and numerical data because the former involves clearly defined categories or labels, and the latter refers to quantifiable amounts (Al Masud, n.d.).

In this research, surveys that evaluate the dependent variable (Academic performance) and independent variables (Study hour, workload, and social support) are in interval scale. Therefore, multiple regression analysis is performed as the dependent variable, and independent variables are metrics.

Several explanatory variables are combined in a statistical process called multiple linear regression (MLR), also referred to as multiple regression. Modelling the linear relationship between the explanatory (independent) factors and response (dependent) variables is the aim of multiple linear regression. Because multiple regression takes into account several explanatory variables, it can be thought of as an extension of ordinary least-squares (OLS) regression. The formula of multiple regression analysis is as follows:

$y = a + b_1(x_1) + b_2(x_2) + b_3(x_3)$

y represent dependent variable, a represent y-intercept (constant term), b_n represent the coefficient of each independent variables and x_n represent independent variables (Hayes, 2023).

3.5 Chapter Summary

In short, this chapter briefly describes the research design of this study, the reason we chose UTAR as the location where we collect data, the technique we use to collect the data, the sample size we choose, and the analysis tool we use once we collect the data.

CHAPTER 4: RESEARCH RESULT

4.0 Introduction

This chapter will include the demographic analysis results, reliability tests for the entire study, Pearson Correlation Analysis, and Multiple Regression Analysis. It is based on data collected and compiled from a primary survey of 377 respondents at Universiti Tunku Abdul Rahman (UTAR). The questionnaire findings were analysed as the reliability of each independent and dependent variable using the Statistical Package for the Social Sciences (SPSS).

4.1 Descriptive Analysis

4.1.1 Respondent Demographic Profile

4.1.1.1 Age

Table 4.1.1.1

Descriptive Analysis for Age

Age	Frequency	Percentage (%)	Cumulative frequency	Cumulative frequency (%)
18 – 20	155	41.1	155	41.1
21 – 25	207	54.9	362	96
25 and above	15	4	377	100

Note. Adapted from SPSS software.

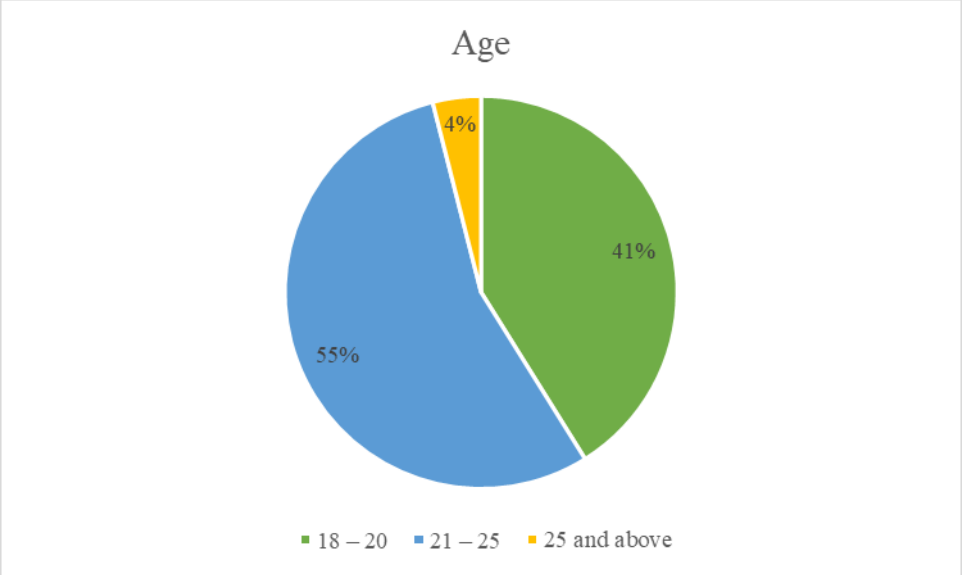

Figure 4.1.1.1. Descriptive Analysis for Age. Adapted from Google Forms.

According to Table 4.1.1.1, the age of the respondents who completed the questionnaire. A total of 377 respondents have participated. The questionnaire was completed by 155 (41.1%) persons aged 18–20, 207 (54.9%) people aged 21–25, and 15 (4%) people aged 25 and above. Most respondents are aged 21 to 25.

4.1.1.2 Gender

Table 4.1.1.2

Descriptive Analysis for Gender

Gender	Frequency	Percentage (%)	Cumulative frequency	Cumulative frequency (%)
Male	182	48.3	182	48.3
Female	195	51.7	377	100

Note. Adapted from SPSS software.

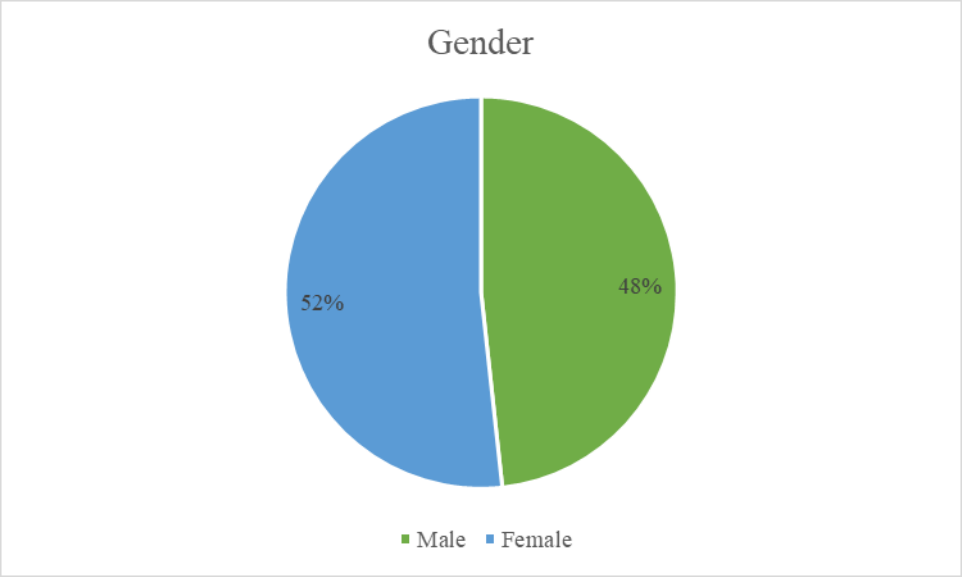

Figure 4.1.1.2. Descriptive Analysis for Gender. Adapted from Google Forms.

Table 4.1.1.2 indicates the gender of the questionnaire respondents. There are 182 male respondents (48.3%) and 195 female respondents (51.7%), indicating that the majority of respondents are women.

4.1.1.3 Educational Background

Table 4.1.1.3

Descriptive Analysis for Educational Background

Educational background	Frequency	Percentage (%)	Cumulative frequency	Cumulative frequency (%)
Foundation	69	18.3	69	18.3
Undergraduates	271	71.9	340	90.2
Master	31	8.2	371	98.4
PhD	6	1.6	377	100

Note. Adapted from SPSS software.

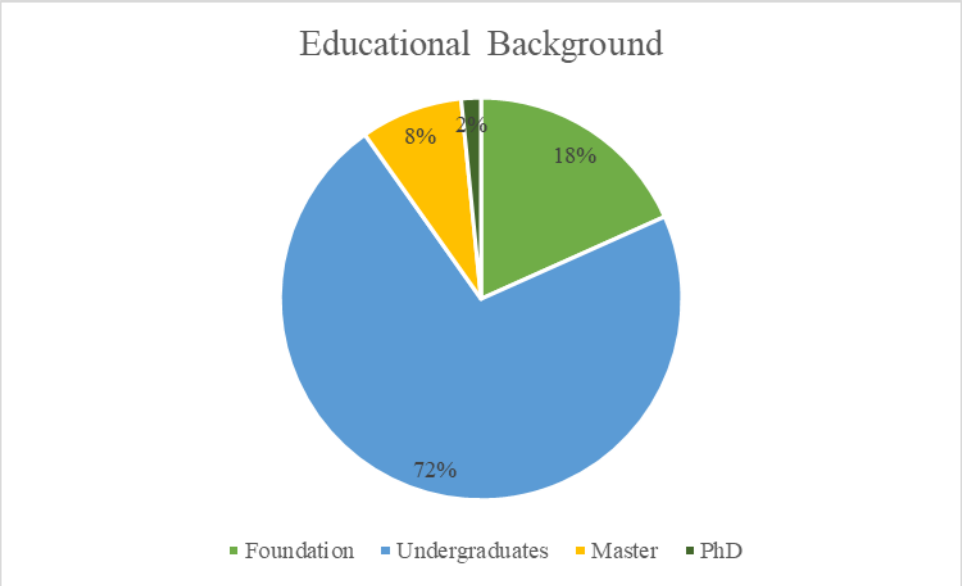

Figure 4.1.1.3. Descriptive Analysis for Educational Background. Adapted from Google Forms.

Table 4.1.1.3 depicts the respondents' educational backgrounds. There are 69 (18.3%) respondents in foundation, 271 (71.9%) in undergraduate, 31 (8.2%) in Master's, and 6 (1.6%) in PhD. Thus, the majority of respondents are undergraduate students.

4.1.1.4 Faculty

Table 4.1.1.4

Descriptive Analysis for Faculty

Faculty	Frequency	Percentage (%)	Cumulative frequency	Cumulative frequency (%)
FBF	70	18.7	70	18.7
FAS	26	6.9	96	25.6
FICT	76	20.2	172	45.8

FEGT	7	1.9	179	47.7
ICS	30	8	209	55.7
FSc	77	20.4	286	76.1
CFS	50	13.3	336	89.4
FCI	20	5.5	356	94.9
FAM	12	3.3	368	98.2
LKC FES	9	2.4	377	100

Note. Adapted from SPSS software.

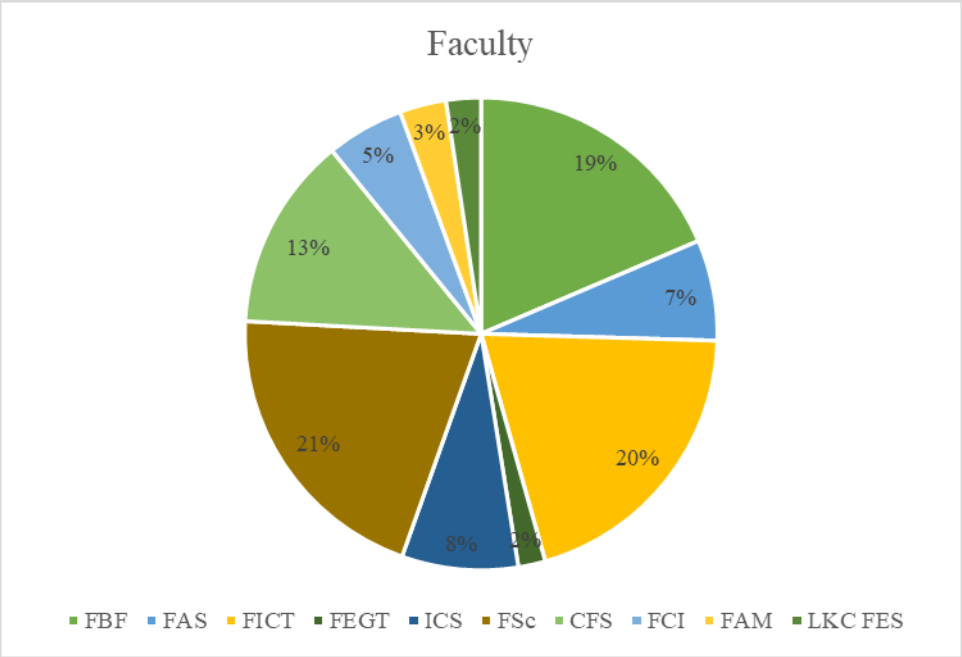

Figure 4.1.1.4. Descriptive Analysis for Faculty. Adapted from Google Forms.

Table 4.1.1.4 displays the responders' faculty. Because this question is a short-response question, there may be multiple types of answers with the same meaning, and we have already summarised the facts shown above. There are 70 (18.7%) responders from Faculty of Business and Finance (FBF), 26 (6.9%) responders from Faculty of Arts and Social Science (FAS), 76 (20.2%) responders from Faculty of Information and Communication Technology (FICT), 7 (1.9%) responders from Faculty of Engineering &

Green Technology (FEGT), 30 (8%) responders from Institute of Chinese Studies (ICS), 77 (20.4%) responders from Faculty of Science (FSc), and 50 (13.3%) responders from Centre for Foundation Studies (CFS), 12 (3.3%) responders from Faculty of Accountancy and Management (FAM) and 9 (2.4%) from the Lee Kong Chian Faculty of Engineering and Science. By this, the majority of the respondents are from FICT.

4.1.1.5 Year of Study

Table 4.1.1.5

Descriptive Analysis for Year of Study

Year of study	Frequency	Percentage (%)	Cumulative frequency	Cumulative frequency (%)
Year 1	155	41.1	155	41.1
Year 2	81	21.5	236	62.6
Year 3	126	33.4	362	96
Year 4	13	3.4	375	99.4
Ex-Student	2	0.6	377	100

Note. Adapted from SPSS software.

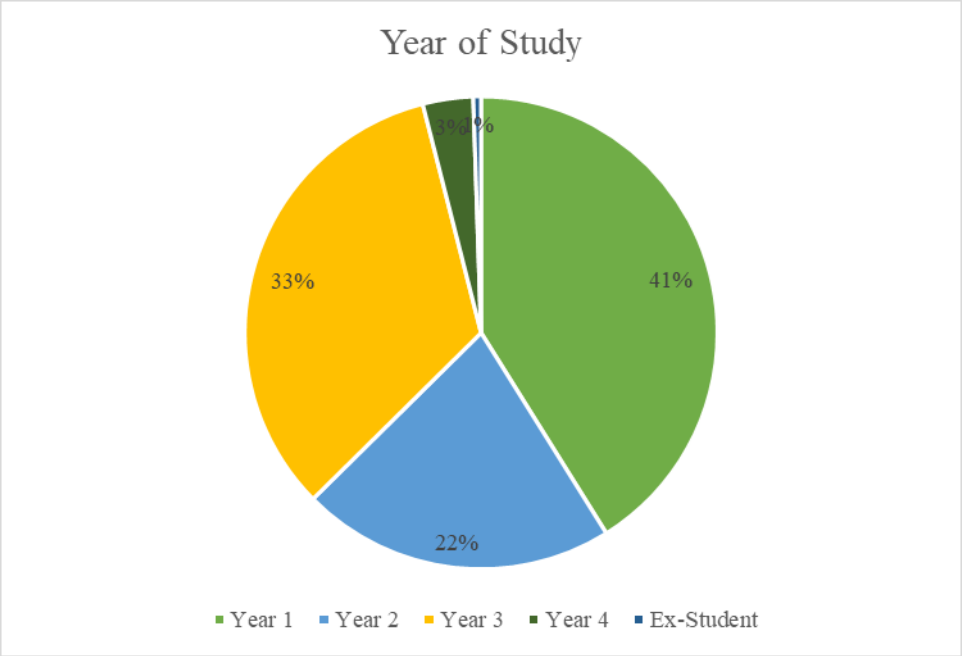

Figure 4.1.1.5. Descriptive Analysis for Year of Study. Adapted from Google Forms.

Table 4.1.1.5 displays the respondents' years of study at UTAR. The info above has already been summarised by us. There are 155 (41.1%) Year 1 students, 81 (21.5%) Year 2 students, 126 (33.4%) Year 3 students, 13 (3.4%) Year 4 students, and 2 (0.6%) ex-UTAR students. According to Figure 4.1.1.5, the majority of the respondents are Year 1 students.

4.1.1.6 Course Program

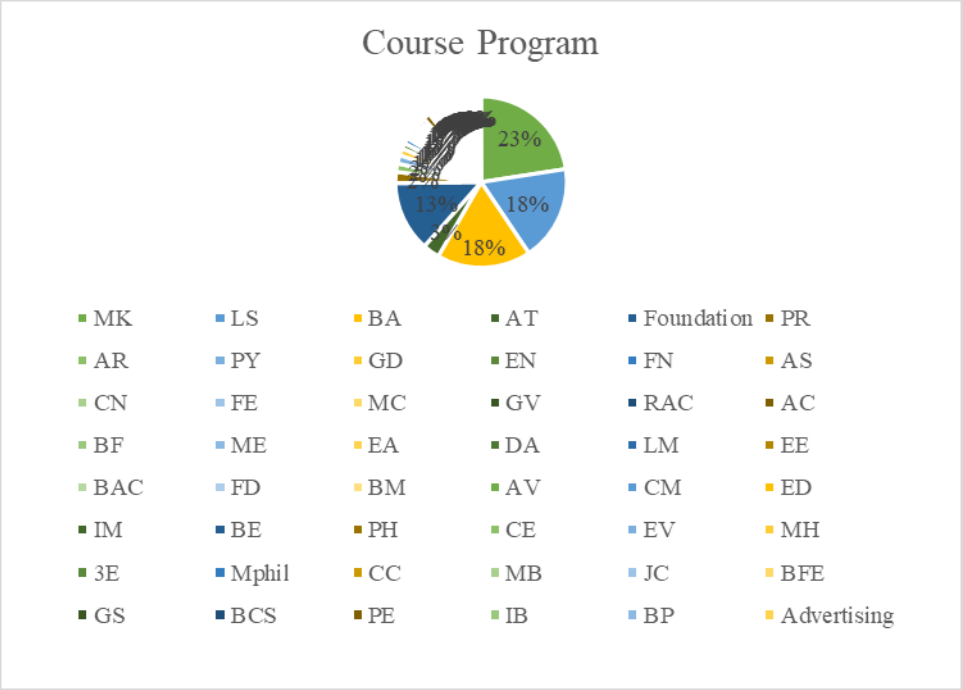

Figure 4.1.1.6. Descriptive Analysis for Course Program. Adapted from Google Forms.

Table 4.1.1.6 (see Appendix C) depicts the responders' course programme. There are 85 (22.5%) respondents from the MK course, 68 (18%) from the LS course, 67 (17.8%) from the BA course, 12 (3.2%) from the AT course, 50 (13.3%) from the foundation, and 8 (2.1%) from the PR course. The respondents for the AR and PY courses are the same, with 6 (1.6%) respondents each. The respondents for the GD and AC courses are the same, with 5 (1.3%) respondents each. The responders for the EN and FN courses are the same, with 4 (1.1%) responders each; the responders for the AS, CN, FE, MC, GV, RAC, and EA courses are the same, with 3 (0.8%) responders each. The responders for the BF, ME, and DA courses are the same, with 2 (0.5%) responders each, and the remaining courses had one respondent (0.3%) each. According to Figure 4.1.1.6, most respondents are from the MK course.

4.1.1.7 CGPA

Table 4.1.1.7

Descriptive Analysis for CGPA

CGPA	Frequency	Percentage (%)	Cumulative frequency	Cumulative frequency (%)
Below 2.0	1	0.3	1	0.3
2.0 – 2.5	39	10.3	40	10.6
2.6 – 3.0	97	25.7	137	36.3
3.1 – 3.5	141	37.4	278	73.7
3.6 – 4.0	99	26.3	377	100

Note. Adapted from SPSS software.

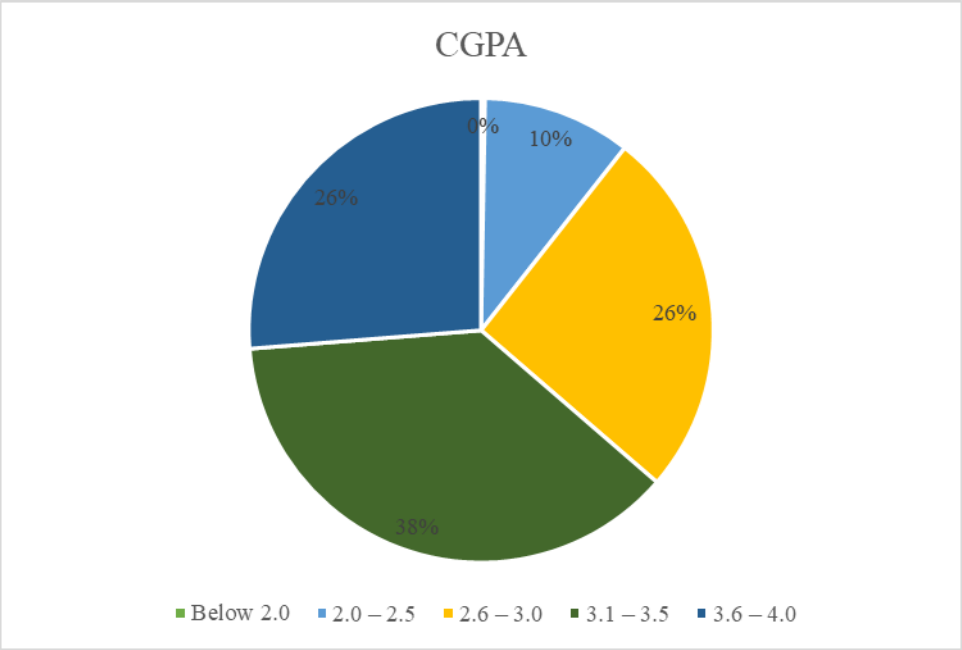

Figure 4.1.1.7. Descriptive Analysis for CGPA. Adapted from Google Forms.

Table 4.1.1.7 displays the responders' CGPAs. There are 1 (0.3%) respondent with a CGPA of less than 2.0, 39 (10.3%) with a CGPA of 2.0 - 2.5, 97 (25.7%) with a CGPA of 2.6 - 3.0, 141 (37.4%) with a CGPA of 3.1 - 3.5, and 99 (26.3%) with a CGPA of 3.6 - 4.0. According to Figure 4.1.1.7, most respondents have CGPAs ranging from 3.1 to 3.5.

4.1.2 Central Tendencies Measurement of Constructs

According to the Australian Bureau of Statistics (n.d.), a measure of central tendency (also known as a measure of centre or central placement) is a summary measure that aims to characterize an entire data collection by assigning a single value to the middle or centre of its distribution. SPSS will be used to calculate the mean. The mean score for the questionnaire will be calculated using five interval-scaled constructs. For example, academic achievement is measured using a five-point Likert scale: 1 = strongly disagree (SD), 2 = disagree (D), 3 = neutral (N), 4 = agree (A), and 5 = strongly agree (SA). All data is received from respondents and converted to percentages.

4.1.2.1 Academic Performance

The statement "I have learned how to do my coursework efficiently." gets the highest mean (4.1353). There are 41.91% of respondents who agree with this statement, 37.67% who strongly agree, 16.98% who are neutral, 3.18% who disagree, and 0.27% who strongly disagree with it.

"I feel competent in conducting my course assignment." is the second-ranked statement, with a mean of 3.9151. 36.87% of respondents are neutral about this remark, 35.81% highly agree with it, 23.87% agree with it, 2.92% disagree with it, and 0.53% strongly disagree with it.

The third-ranked statement is "I am confident I have adequate academic skills and abilities.", with a mean of 3.8143. 68.7% of respondents agree with this statement, 18.57% are neutral with it, 8.75% strongly agree with it, 3.18% disagree with it, and 0.8% strongly disagree with it.

The last ranked statement is "I have performed academically as I anticipated I would." which has a mean of 3.5889. There are 43.24% of responders neutral with this statement, 41.91% agree with it, 10.88% strongly agree with it, 3.18% disagree with it, and 0.8% strongly disagree with it (see Appendix D).

4.1.2.2 Study Hour

The top-ranked statement is "An hour of study time can only be effective during revision time," with a mean of 4.2255. 57.82% of respondents strongly agree with this statement, 17.24% agree with it, 15.65% are neutral with it, 8.22% disagree with it, and 1.06% strongly disagree with it.

The second-ranked statement is "Longer study time always results in impressive academic performance," which has a mean of 3.8833. 44.03% of respondents agree with this statement, 29.71% strongly agree with it, 14.06% neutral with it, 9.28% disagree with it, and 2.92% strongly disagree with it.

The third-ranked statement is "Length of study time does not affect my academic performance," with a mean of 3.8435. 35.01% of respondents agree with this statement, 33.69% strongly agree with it, 16.45% neutral with it, 11.67% disagree with it, and 3.18% strongly disagree with it.

The fourth-ranked statement is, "I can only assimilate when I read up to an hour." With a mean of 3.4881, 45.09% of respondents agree with the statement, 38.73% are neutral with it, 7.43% disagree with it, 7.16% strongly agree with it, and 1.59% strongly disagree with it.

The last ranked statement is "Although I study for a longer time duration, I always achieve poor performance in my academics." which has a mean of 3.4642. There are 34.22% responders neutral with the statement, 23.87% strongly agree with it, 23.08% agree with it, 13.26% disagree with it, and 5.57% strongly disagree with it (see Appendix E).

4.1.2.3 Workload

The top-ranked statement is "How much did the task require you to monitor your performance (i.e., ensure you were performing at specific levels)?" with a mean of 4.3050. There are 54.38% of respondents strongly disagree with the statement, 24.14% agree with it, 19.36% are neutral with it, 1.86% disagree with it, and 0.27% strongly disagree with it.

The second-ranked statement is "How much mental and perceptual activity was required (e.g., thinking, deciding, calculating, remembering, looking, searching, etc.)?" with a mean of 4.2467. There are 43.34% of respondents strongly agree with the statement, 39.79% agree with it, 15.65% neutral with it, 1.06% disagree with it, and 0.27% strongly disagree with it.

The third-ranked statement is "How frustrated (e.g., insecure, discouraged, irritated, stressed, and annoyed) versus satisfied (e.g., secure, gratified, content, relaxed and complacent) did you feel during the task?" which with a mean of 4.0292. There are 46.68% of respondents agree with the statement, 30.5% strongly agree with it, 18.83% are neutral with it, 3.18% disagree with it, and 0.8% strongly disagree with it.

The fourth-ranked statement is "How hard did you have to work (mentally and physically) to accomplish your level of performance?" with a mean of 3.9310. There are 36.34% of respondents strongly agree with the statement, 35.28% are neutral with it, 24.67% agree with it, 3.18% disagree with it, and 0.53% strongly disagree with it.

The fifth-ranked statement is "How successful do you think you were in accomplishing the tasks?" with a mean of 3.8515. There are 70.03% of respondents who agree with the statement, 16.98% who are neutral with it, 9.55% who strongly agree with it, 2.92% who disagree with it, and 0.53% who strongly disagree with it.

The sixth-ranked statement is "How much did you have to control your emotions (e.g., anger, joy, disappointment)?" which has a mean of 3.7984. There are 39.26% of respondents agree with the statement, 27.59% are neutral with it, 25.2% strongly agree with it, 6.1% disagree with it, and 1.86% strongly disagree with it.

The last ranked statement is "How much time pressure did you feel due to the rate or pace at which the tasks or task elements occurred?" with a mean of 3.6233. There are 46.05% of respondents who agree with the statement, 38.73% are neutral with it, 10.08% strongly agree with it, 3.71% disagree with it, and 0.53% strongly disagree with it (see Appendix F).

4.1.2.4 Social Support

The top-ranked statement is "There is a special person in my life who cares about my feelings." with a mean of 4.1406. There are 41.11% of respondents agree with the statement, 39.26% strongly agree with it, 15.65% neutral with it, 2.39% disagree with it, and 1.59% strongly disagree with it.

The second-ranked statement is "There is a special person with whom I can share joys and sorrows." which has a mean of 3.8886. There are 67.9% agree with the statement, 13.79% are neutral with it, 13.53% strongly agree with it, 3.45% disagree with it, and 1.33% strongly disagree with it.

The third-ranked statement is "There is a special person who is around when I am in need." which has a mean of 3.8753. There are 67.64% of respondents who agree with the statement, 14.06% who are neutral with it, 13.53% who strongly agree with it, 2.39% who disagree with it, and another 2.39% who strongly disagree with it.

The fourth-ranked statement is "I can talk about my problems with my friends." which with a mean of 3.8515. There are 41.11% responders neutral

with the statement, 33.42% strongly agree with it, 22.28% agree with it, 2.39% disagree with it, and 0.8% strongly disagree with it.

The last ranked statement is "I get the emotional help and support I need from my family." which has a mean of 3.7825. There are 37.14% of respondents who agree with the statement, 34.75% who are neutral with it, 23.87% who strongly agree with it, 2.39% who strongly disagree with it, and 1.86% who disagree with it (see Appendix G).

4.2 Scale Measurement

4.2.1 Reliability Test

Table 4.2.1

Cronbach's Alpha Reliability Analysis

Variables	**Topics**	**Coefficient Alpha value**	**No. of items**
Dependent	Academic Performance	0.709	4
Independent	Study Hour	0.701	5
Independent	Workload	0.732	7
Independent	Social Support	0.747	5

Note. Adapted from SPSS software.

Table 4.2.1 displays the reliability test results for the dependent and independent variables. The goal of the reliability test is to ensure that the questions are accurate and consistent. There are 377 sets of questionnaires delivered to target respondents; nevertheless, the sample size for this

research is 377 samples, which will be tested for the reliability of the questions.

Table 4.2.2

Cronbach's Alpha Level of Reliability Table

Cronbach's Alpha score	**Level of reliability**
0.0 – 0.20	Less Reliable
> 0.20 – 0.41	Rather Reliable
> 0.40 – 0.60	Quite Reliable
> 0.60 – 0.80	Reliable
> 0.80 – 1.00	Very Reliable

Note. From Ahdika, A. (2017). *Improvement of quality, interest, critical, and analytical thinking ability of students through the application of Research Based Learning (RBL) in introduction to stochastic processes subject.* Research Gate.

According to Table 4.2.2, academic performance (dependent variable), study hour (independent variable), workload (independent variable), and social support (independent variable) are all reliable, with Cronbach's Alpha values ranging from 0.60 to 0.80, which are 0.709, 0.701, 0.732, and 0.747. These variables, which include academic performance (dependent variable), study hour (independent variable), workload (independent variable), and social support (independent variable), have very close Coefficient Alpha values, with study hour having the lowest.

4.3 Inferential Analysis

In the study, with the available data collected, inferential analysis is employed to conclude the characteristics of the population. Additionally, it examines the individual variables and their relationships with one another. In this research, there

are three independent variables (study hours, social support, workloads) and one dependent variable (academic performance). Multiple Regression Analysis is applied in the research to explore the impact of independent variables on the dependent variable. In this methodology, the understanding of how variations in the dependent variable are influenced by multiple independent variables is clarified.

4.3.1 Multiple Regression Analysis

Table 4.3.1.1

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the estimate
1	.599[a]	.359	.354	.47179

a. Predictors: (Constant), Social Support, Study Hours, Workloads

b. Dependent Variable: Academic Performance

Note. Adapted from SPSS software.

Table 4.3.1.2

Pearson Correlation Coefficient

Coefficient range	Strength
± 0.91 to ± 1.00	Very strong
± 0.71 to ± 0.90	High
± 0.41 to ± 0.70	Moderate
± 0.21 to ± 0.40	Small but definite relationship
0.00 to ± 0.20	Slight, almost negligible

Note. From Hair, J., Money, A., Samouel, P., & Page, M. (2007). *Research methods for business*. John Wiley & Sons, Inc.

The R-value represents the correlation coefficient between the dependent variable and the independent variables. According to Table 4.3.1.1 Model Summary, the correlation coefficient (R-value) between the dependent variable and independent variables is 0.599. From this R value given, a conclusion can be drawn that there is a positive and moderate correlation between the dependent variable (academic performance) and the independent variables (study hours, social support, and workloads).

The R square reflects the degree or percentage by which the independent variables may explain the variations in the dependent variable. Based on Table 4.3.1.1 Model Summary, the independent variables (study hours, social support, and workloads) in this study collectively explain 35.9% of the variations in the dependent variable (academic performance). However, 64.1% (100% - 35.9%) of the data is unexplained in this study. To clarify further, other additional crucial factors that have yet to be considered in this study could enhance the understanding of academic performance.

Table 4.3.1.3

ANOVA[b]

Model		**Sum of Squares**	**df**	**Mean Square**	**F**	**Sig.**
1	Regression	46.439	3	15.480	69.544	.000[a]
	Residual	83.026	373	.223		
	Total	129.465	376			

a. Predictors: (Constant), Social Support, Study Hours, Workloads

b. Dependent Variable: Academic Performance

Note. Adapted from SPSS software.

The confidence level used in this research is 95%, with an Alpha value of 0.05. The significance of the hypotheses proposed in Chapter 1 is determined by comparing P-values with the Alpha value. According to Table 4.3.1.3 ANOVA, the significant P-value of 0.000 is less than the

Alpha value of 0.05, indicating that the F-statistic is significant. This supports the fact that the model in this study serves as a valuable descriptor of the relationship between the dependent and predictor variables. Thus, the independent variables (social support, study hours, and workloads) are significant in explaining the variance in academic performance among higher education students. The alternate hypothesis is supported.

Table 4.3.1.4

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	**Std. Error**	**Beta**		
1	(Constant)	1.132	.205		5.520	.000
	Study Hours	.300	.044	.357	6.881	.000
	Workloads	.139	.067	.121	2.082	.038
	Social Support	.268	.048	.273	5.630	.000

a. Dependent Variable: Academic Performance

Note. Adapted from SPSS software.

According to Table 4.3.1.4 Coefficients, the outcomes reveal that the independent variables (study hours, social supports) are significant predictors of academic performance among higher education students. This is evident from the p-values of study hours and social supports, which are both 0.000, lower than the Alpha value of 0.05. Moreover, workloads have a p-value of 0.038, which is lower than the Alpha value of 0.05. Therefore, the independent variable (workloads) is also significant in predicting academic performance among higher education students.

4.3.1.1 Hypotheses of the Study

H1: There is a significant relationship between study hours and academic performance among higher education students.

According to Table 4.3.1.4 Coefficient, study hours are significant in predicting the dependent variable for this study. This is because the p-value for study hours is 0.000, which is less than the Alpha value of 0.05. Thus, the hypothesis (H1) is accepted.

H2: There is a significant relationship between workload and academic performance among higher education students.

According to Table 4.3.1.4 Coefficient, workloads are significant predictors of the dependent variable for this study. This is because the p-value for workloads is 0.038, which is lower than the Alpha value of 0.05. Hence, the hypothesis (H2) is accepted.

H3: There is a significant relationship between social support and academic performance among higher education students.

According to Table 4.3.1.4 Coefficient, social support is significant in predicting the dependent variable for this study. This is because the p-value for social support is 0.000, which is less than the Alpha value of 0.05. Therefore, the hypothesis (H3) is accepted.

4.3.1.2 Interpretation

Table 4.3.1.4 Coefficients show the contribution level of each independent variable to the prediction of academic performance among higher education students. Study hours contribute the most to the variation in the dependent variable (academic performance), with a Beta value (under standardized coefficients) of 0.357, compared to other predictor variables (workload and

social support). This indicates that study hours make the most vital unique contribution to explaining the variation in academic performance when controlling for the variance explained by all other predictor variables in the model.

Additionally, social support is the second-highest contributor to the variation of the dependent variable (academic performance), with a Beta value (under standardized coefficients) for this predictor variable, which is the second highest, 0.273, compared to other predictor variables. This implies that social supports make the second most decisive unique contribution to explain the variation in the dependent variable (academic performance) when the variance explained by all other predictor variables in the model is controlled.

Lastly, the workload is the predictor variable that contributes the least to the variation of the dependent variable (academic performance) because its Beta value (under standardized coefficients) for this predictor variable is the smallest, which is 0.121 if compared to other predictors (study hours and social supports). This means that workloads make the most negligible contribution to explaining the variation in the dependent variable (academic performance) when the variance explained by all other predictor variables in the model is controlled.

4.3.1.3 Recommendation

Based on the results above, the institutions, educators, and higher education authorities should prioritize monitoring the study hours of higher education students to increase their academic performance because the study hours indicate a significant result, and it is the highest contributor to academic performance as compared to the others. Rather than that, social support is another factor that the parties should consider, as the result shows that it makes a significant, moderate contribution to academic performance. Finally, the workloads faced by higher education students should also be

considered, although the variable is slightly significant in terms of academic performance.

Regression Equation

y = a + b1 (x1) + b2 (x2) + c3 (x3)

y = Dependent variable (Academic Performance)

x1 = Independent variable 1 (Study hours)

x2 = Independent variable 2 (Workloads)

x3 = Independent variable 3 (Social Supports)

a = Constant value

Academic performance = 1.132 + 0.300 (Study hours) + 0.139 (Workloads) + 0.268 (Social Supports)

4.3.2 Pearson Correlation Coefficient

A Pearson Correlation Coefficient indicates the direction, strength, and significance of bivariate correlations among variables measured at the interval or ratio level.

Table 4.3.2.1

The Result of Pearson Correlation Coefficient Analysis

		AP	SH	W	SS
AP	Pearson Correlation	1.000	.508**	.477**	.438**
	Sig. (2-tailed)		.000	.000	.000
	N	377.000	377	377	377
SH	Pearson Correlation	.508**	1.000	.602**	.287**
	Sig. (2-tailed)	.000		.000	.000
	N	377	377.000	377	377
W	Pearson Correlation	.477**	.602**	1.000	.516**

	Sig. (2-tailed)	.000	.000		.000
	N	377	377	377.000	377
SS	Pearson Correlation	.438**	.287**	.516**	1.000
	Sig. (2-tailed)	.000	.000	.000	
	N	377	377	377	377.000

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

Note. Adapted from SPSS software.

Table 4.3.2.2

Pearson Correlation Coefficient

Coefficient range	**Strength**
± 0.91 to ± 1.00	Very strong
± 0.71 to ± 0.90	High
± 0.41 to ± 0.70	Moderate
± 0.21 to ± 0.40	Small but definite relationship
0.00 to ± 0.20	Slight, almost negligible

Note. From Hair, J., Money, A., Samouel, P., & Page, M. (2007). *Research methods for business*. John Wiley & Sons, Inc.

4.3.2.1 Study Hours and Academic Performance

Direction

According to Table 4.3.2.1, the Pearson Correlation Coefficient Analysis results show a positive relationship between study hours and academic performance because the correlation coefficient has a positive value. The study hours variable has a 0.508 correlation with academic performance. Consequently, academic performance tends to be high when perceived study hours are high.

Strength

By referring to Table 4.3.2.2, Pearson Correlation Coefficient, the value of this correlation coefficient 0.508 falls under the coefficient ranges from ±0.41 to ±0.70. Hence, the relationship between study hours and academic performance is moderate.

Significance

The relationship between study hours and academic performance is significant. This is evidenced by the p-value of 0.000, which is less than the Alpha value of 0.05.

4.3.2.2 Workloads and Academic Performance

Direction

From the results obtained from Table 4.3.2.1, the Pearson Correlation Coefficient Analysis indicated a positive relationship between workloads and academic performance because of the positive value of 0.477 for the correlation coefficient. As a result, when perceived workloads are high, academic performance is high.

Strength

The value of this correlation coefficient of 0.477 falls within the coefficient range from ±0.41 to ±0.70. Hence suggesting that the strength of the relationship between workloads and academic performance is moderate.

Significance

The relationship between workloads and academic performance is significant. This is because the p-value of 0.000 is less than the Alpha value of 0.05.

4.3.2.3 Social Supports and Academic Performance

Direction

According to Table 4.3.2.1, The Result of Pearson Correlation Coefficient Analysis, the relationship between social support and academic performance is positive because the correlation coefficient has a positive value. The social support variable has a 0.438 correlation with academic performance. Thus, academic performance will be high when perceived social support is high.

Strength

The value of this correlation coefficient of 0.438 falls under the coefficient range from ±0.41 to ±0.70 by cross-checking with Table 4.3.2.2, Pearson Correlation Coefficient. Therefore, the relationship between social support and academic performance is moderate.

Significance

The relationship between social support and academic performance is significant. This is due to the p-value of 0.000 being lesser than the Alpha value of 0.05.

4.4 Chapter Summary

The data were gathered from questionnaires, which were analysed in this chapter. First, descriptive analysis is described, followed by demographic analysis of target respondents to understand their background and characteristics, as well as central tendencies measurement of constructs and data mean value. Second, the reliability test for this research is examined. Finally, Pearson Correlation and Multiple Regression Analysis are calculated and analysed. Chapter 5 will include additional discussion.

CHAPTER 5 DISCUSSION AND CONCLUSION

5.0 Introduction

The last chapter will cover the statistical analysis in greater detail, including a summary of descriptive and inferential analyses. It will also discuss the implications of the large study presented based on the statistics, as well as the limitations and recommendations for this study. Finally, an overall conclusion to this research study will be proposed.

5.1 Discussion of Major Findings

Table 5.1

Summary of the Results from Hypothesis Testing

	P-value R-value	Conclusion
H1: There is a significant relationship between study hours and academic performance among higher education students.	p = 0.0001 r = 0.508	H1 is supported
H2: There is a significant relationship between workload and academic performance among higher education students.	p = 0.0001 r = 0.477	H2 is supported
H3: There is a significant relationship between social support and academic performance among higher education students.	p = 0.0001 r = 0.438	H3 is supported

5.1.1 Study Hours

H1: There is a significant relationship between study hours and academic performance among higher education students.

The hypothesis tested the relationship between study hours and academic performance among higher education students. As the results show, the p-value is 0.0001 and the R-value is 0.508 which has shown a significant positive relationship. The study hours increase, academic performance also increases. However, as mentioned in the previous chapters, study hours may have some interrelated causes to achieve academic performance.

Unquestionably, the relationship between study hours and academic performance among higher education students has been a subject of interest in scholastic examinations. In this review, the creators led a meta-examination, which includes deliberately checking on and dissecting the consequences of different existing investigations on a specific subject. By discovering different examinations, meta-investigations can make more robust decisions about the connection between study hours and academic performance (Smith, 2019).

Self-determination theory (SDT) states that people are innately roused to seek exercises that satisfy their mental requirements for independence, skill, and relatedness (Deci & Ryan, 2000). In advanced education, the connection between study hours and academic execution can be grasped from the perspective of SDT. As per SDT, when students see independence in their learning, they are bound to participate in exercises that help their academic objectives wilfully (Deci et al., 1991). Given their advantages and needs, this independence permits students to manage their study ways of behaving, including the distribution of study hours.

Besides, SDT proposes that ability is essential for keeping up with inborn inspiration (Deci & Ryan, 2000). When students see themselves as equipped

to dominate academic material through their study endeavours, they are bound to put time and exertion into their examinations, prompting work on academic execution. In this way, the connection between study hours and academic execution is intervened by students' convictions in their skill to accomplish wanted mastering results.

Also, SDT underscores the significance of relatedness, or the need to feel associated with others, in a rousing way of behaving (Deci & Ryan, 2000). In advanced education, relatedness can appear through solid associations with friends, teachers, and academic counsellors. When students feel upheld and associated with their academic climate, they are bound to participate in helpful study ways of behaving, which can emphatically affect their academic exhibition.

5.1.2 Workload

H2: There is a significant relationship between workload and academic performance among higher education students.

The hypothesis tested the relationship between workload and academic performance among higher education students. The output was a p-value of 0.0001, where the R-value was 0.477, which shows a slight decrease compared to the previous result. Results indicate a slight drop in the relationship between workload and academic performance.

This study gives observational proof supporting the thought that a higher workload is related to lower academic performance among higher education students. It highlights the significance of considering workload management procedures and support in instructive settings to advance student achievement. Findings propose that extreme workload might reduce students' capacity to dispense adequate time and mental assets to their

examinations, consequently compromising scholastic accomplishment. (Thompson et al., 2018)

In the domain of advanced education, the connection between responsibility and academic execution can be examined through the structure of Self-Determination Theory (SDT). SDT sets that people are characteristically persuaded to be involved in exercises that fulfil their basic mental requirements for independence, ability, and relatedness (Deci & Ryan, 2000).

While considering responsibility, which incorporates the volume and intricacy of academic errands and obligations doled out to students, SDT recommends that the view of independence assumes an urgent part. Students who feel a feeling of independence in dealing with their responsibility, for example, having the opportunity to pick when and how to move toward their tasks — are bound to feel naturally roused to draw in with their academic undertakings. This independence permits students to direct their endeavours in a way that aligns with their advantages and learning styles.

Besides, SDT stresses the significance of capability in encouraging characteristic inspiration (Deci & Ryan, 2000). Students who see themselves as equipped to handle their responsibilities are bound to move toward academic errands with certainty and perseverance. As they effectively explore through testing tasks and obligations, their feeling of ability is supported, further powering their inspiration to perform well academically.

Moreover, SDT highlights the meaning of relatedness, or the need to feel associated with others, in persuading conduct (Deci & Ryan, 2000). Responsibility and relatedness can be developed through steady associations with friends, teachers, and academic counsellors. When students feel a sense of having a place and backing inside their academic local area, they are bound to drive forward by requesting responsibilities and looking for help when required, eventually improving their academic execution.

5.1.3 Social Support

H3: There is a significant relationship between social support and academic performance among higher education students.

The hypothesis indicated that there is a relationship between social support and academic performance among higher education students. Based on the generated result, the R-value obtained in this research for social support is 0.438. This figure represents a positive yet less-than-positive relationship between social support and academic performance. Social support also plays a role in academic performance.

Referring to the researchers Johnson et al. (2020), this study proves the positive effect of social support on academic performance among higher education students. It features the significance of encouraging strong connections inside scholastic settings to advance students' achievement and prosperity. This longitudinal review researches the connection between social support and higher-education students' academic performance. Information was gathered from 600 college understudies across numerous disciplines at a huge college. Proportions of social support, including apparent help from family, companions, and the workforce, were evaluated toward the start of the semester. At the same time, scholarly execution was estimated by utilizing GPA toward the end of the semester. Results demonstrate a huge positive connection between, by and large, friendly help and higher education students.

As per SDT, when understudies see a steady and sustaining social climate inside their local academic area, they are bound to encounter natural inspiration toward their academic interests (Deci et al., 1991). Steady connections encourage a feeling of association and belongingness, thus upgrading understudies' inspiration to connect effectively in their

examinations. Understudies who feel upheld by their friends and teachers are bound to show more prominent constancy, versatility, and exertion in their academic undertakings, finally prompting them to work on academic execution.

Moreover, SDT accentuates the significance of independence in driving inspiration and execution. Social support can work with independence by giving understudies the consolation and resources expected to explore academic difficulties freely. When understudies feel engaged in coming to significant conclusions about their academic objectives and study systems, they are bound to encounter a feeling of responsibility and command over their way of learning, prompting improved academic execution.

Also, social support adds to understudies' feeling of skill by giving input, consolation, and insistence on their capacities. When understudies get approval and acknowledgment for their academic accomplishments from their interpersonal organization, they are bound to foster a positive self-idea and trust in their capacities, which subsequently supports their academic presentation.

5.2 Implications of the Study

According to the results of the research, the significant relationship between study hours (independent variable) and academic performance (dependent variable) among higher education students is more compared to workload (independent variable) and social support (independent variable). This is because academic performance also increases when the study hours increase automatically. This study gives experimental proof supporting the thought that study hours decidedly impact academic performance among higher education students. It highlights the importance of using time effectively and concentrating on propensities to make academic performance more effective (Johnson, 2023). From this, we can discover that study hours are essential for achieving good academic performance. By

allocating enough time to study, students engage themselves to acquire knowledge, develop skills, and others. More than that, regular study sessions help students to practice and refine critical skills.

Other than that, workload (independent variable) is very closely related to academic performance (dependent variable). The workload for a student can be classified as assignments, mid-terms, quizzes, and others. The workload a student has during their study period impacts their ability to achieve academic performance. As Thompson et al. (2018) mentioned, workload plays an intensive role in a student's daily life. They also mentioned that higher workload intensity will lower the academic performance among undergraduate students. This relationship needs a correct management method to optimize learning and achievement. Accomplishing harmony between workload and academic performance requires cautious preparation, association, and self-care. By defining sensible objectives, focusing on undertakings, and looking for help when required, students can deal with their responsibilities while keeping up with their prosperity and academic achievement. Besides, educational institutions play a critical part in supporting students by offering assets like advisees, coaching administrations, and emotional wellness backing to assist students with flourishing amid their responsibility requests.

Lastly, the relationship between social support and academic performance among higher education students. The connection between social support and academic execution among higher education students is a subject of critical interest in educational exploration. As indicated by a longitudinal report by Johnson et al. (2020), social support from different sources, including family, companions, and personnel, has been found to impact academic execution decidedly. For example, supportive associations with loved ones can offer close-to-home consolation, inspiration, and common-sense help, upgrading students' versatility and prosperity notwithstanding academic stressors. Also, positive connections with employees, such as tutoring, prompting, and academic support, add to students' feelings of having a place and academic commitment, eventually cultivating higher degrees of accomplishment.

5.3 Limitations of Study

The current study aimed to explore the relationship between the balance of students' academic, personal lives and academic performance. While the research has provided valuable insights, it is essential to acknowledge certain limitations that may affect the generalizability and comprehensiveness of the findings.

One significant limitation of this study is the limited sample, which is used as the source of the data. The study subjects were mainly UTAR students, which may result in confining the findings' relevance to a broader general context. Different schools can have distinct characteristics, resources, and demographics of students, which may affect the correlation between study-life balance and academic performance.

Another limitation of this study involves a particular group of variables that the research is focusing on concerning study-life balance. The current study only focused on the relationship between study-life balance and academic performance. However, the research evidence indicates that there might be other variables that can affect study-life balance and academic performance as well as their relationship by intervening. The current study has overlooked those confounding and control variables. Hence, future researchers should focus on understanding the relationship between these two variables in a broader context and should try to develop a more comprehensive research framework.

In addition, the method used here was only quantitative. On the one hand, quantitative methodology ensures objectivity and empirical accuracy, yet the lack of depth and contextuality of the qualitative approach remains to be discussed. The connection between the work-life balance and academic performance, as well as the factors that affect the relationship between those, was investigated by the study using a quantitative method, and the qualitative sides of the relationship were ignored. More encompassing research might include mixed methods research in which researchers could combine both data types. Quantitative data could be used through the administration of surveys, and qualitative data could be collected

through focus groups and individual interviews. In addition, the study outcome depends on the results of the self-reporting data, to which the risk of response bias cannot be excluded. This is because some participants will answer the questions based on their social expectations or unconsciously, and they will give wrong replies regarding their study-life balance and good results in the studies.

In summary, the study has some methodological limitations, such as sample selection, design, data collection method, and theoretical limitations, which have been discussed above. The limitations of the current study are acknowledged, but they do not detract from its significance but merely provide a platform for future research.

5.4 Recommendations for Future Study

By acknowledging the limitations of the study, this section offers some recommendations for future research. The suggestions aim to address the limitations identified in the current study and further deepen the understanding of the complex interplay between study-life balance and academic performance.

First of all, to ensure the data collected is of higher quality, future studies should include diversified categories of respondents derived from various educational institutions that take into account their specifications in cultures, resources, and student demographics. The inclusion of different samples of the population will aid the study to gain more accurate findings that can be generally applied to explain the relationship between study-life balance and academic achievement over different contexts. Furthermore, the current study had time and resource limitations, which caused the cross-sectional design to be selected, which has some inherent methodological flaws. Future studies are recommended to opt for the longitudinal design instead of the cross-sectional design, and they should also carry out research based on humans. The longitudinal studies may enable the researchers to gain tremendous valuable information about how such balance elements evolve and their influence on academic performance. Through such an approach, the researchers will

find modifications in study habits, life commitments, and academic outcomes, thereby helping to create a more comprehensive outlook on the cause and effect.

Apart from that, performing the quantitative analysis reduces the research scope. Thus, future researchers are recommended to use the quantitative results to complement the findings of this research. Moreover, mixed methods involving both quantitative and qualitative approaches should be used in further research. The use of qualitative methods, such as interviews and focus groups, can expose the experiences of students and provide a better understanding of the deep hurling forces behind the struggle of young adults to balance learning and life. Drawing together qualitative feedback with quantitative outcomes will often reflect a much better (thereby) comprehensive picture of the phenomenon. Quantitative data may give helpful information on the degrees of how students perceive study and life balance and, consequently, serve as a tool for determining the areas that may not be considered during the quantification.

Aside from that, the current study recommends that future researchers should try to expand the scope of variables considered in the study by exploring additional factors that may influence study-life balance and academic performance. Theses could include aspects such as socio-economic background, family support, mental health, and motivation. A more comprehensive set of variables will contribute to a richer and more nuanced analysis of the complex relationships involved.

5.5 Chapter Summary

In conclusion, study hours, workload, and social support all have a significant impact on university students' academic performance. This study provides evidence to support all the hypotheses. On the other hand, the findings of this study could serve as a guideline or reference for future research in this field.

References

A glance at the Malaysian education system. (2022, May 12). StudyMalaysia.Com. https://studymalaysia.com/education/higher-education-in-malaysia/a-glance-at-the-malaysian-education-system

Adeyemo, C. (2005). Test anxiety, cognitions, study habits and academic performance: A perspective study. *Advances in Test Anxiety Research*, 7(2), 21-41.

Afzal, H., Ali, I., Aslam Khan, M., & Hamid, K. (2010). A study of university students' motivation and its relationship with their academic performance. *International Journal of Business and Management*, 5(4). doi:10.5539/ijbm.v5n4p80

Ahdika, A. (2017). Improvement of quality, interest, critical, and analytical thinking ability of students through the application of research based learning (RBL) in introduction to stochastic processes subject. *International Electronic Journal of Mathematics Education, 12*(2), 167-191.

Al Masud, A. (n.d.). Inferential statistics: Definition, types + examples. *QuestionPro*. https://www.questionpro.com/blog/inferential-statistics/#:~:text=Inferential%20statistics%20is%20a%20powerful,their%20ideas%20about%20the%20population

Alghaswyneh, O. F. M., & Basri, W. S. (2015). The role of time management and its impact on students' academic achievement. *International Research Journal of Finance and Economics, 136*, 117-125.

Alyahyan, E., & Düştegör, D. (2020). Predicting academic success in higher education: Literature review and best practices. *International Journal of Educational Technology in Higher Education, 17*(1). doi:10.1186/s41239-020-0177-7

Aprilinda, J., Susyana, F. I., Fauziah, A. N., Anisa, N. S., & Buana, D. M. A. (2020). *Work-life balance in higher education: Literature review and future agenda* (Vol. 63, Issue 3) [Bachelor's thesis, Widyatama University]. www.solidstatetechnology.us

Apuke, O. D. (2017). Quantitative research methods: A synopsis approach. *Kuwait Chapter of Arabian Journal of Business and Management Review, 33*(5471), 1-8.

Arifin, W. N. (2018). A web-based sample size calculator for reliability studies. *Education in Medicine Journal, 10*(3).

Australian Bureau of Statistics. (n.d.). *Measures of central tendency*. https://www.abs.gov.au/statistics/understanding-statistics/statistical-terms-and-concepts/measures-central-tendency#:~:text=A%20measure%20of%20central%20tendency,or%20centre%20of%20its%20distribution.

Baliyan, S. P., & Khama, D. (2020). How distance to school and study hours after school influence students' performance in Mathematics and English: A comparative analysis. *Journal of Education and E-Learning Research*, *7*(2), 209–217. https://doi.org/10.20448/journal.509.2020.72.209.217

Bardoel, E. A., de Cieri, H., & Santos, C. (2008). A review of work-life research in Australia and New Zealand. *Asia Pacific Journal of Human Resources*, *46*(3), 316–333. https://doi.org/10.1177/1038411108095762

Barnsbee, L., Barnett, A. G., Halton, K., & Nghiem, S. (2018). Cost-effectiveness. *Mechanical Circulatory and Respiratory Support* (pp. 749–772). Elsevier Inc. https://doi.org/10.1016/B978-0-12-810491-0.00024-2

Beatson, N. J., de Lange, P., & Oosthuizen, H. (2021). A question of balance: Study–work–life, perspectives from accounting students. *Pacific Accounting Review*, *33*(3), 257–273. https://doi.org/10.1108/PAR-09-2020-0137

Berry, G. R., & Hughes, H. (2020). Integrating work–life balance with 24/7 information and communication technologies: The experience of adult students with online learning. *American Journal of Distance Education*, *34*(2), 91–105. https://doi.org/10.1080/08923647.2020.1701301

Bhat, S. A., & Sheikh, B. A. (2023). Study life balance of college students: Evidence from higher education sector of UT of Jammu and Kashmir. *Journal of Learning and Educational Policy*, *03*(03), 2799–1121. https://doi.org/10.55529/jlep.33.37.41

Bolger, N., Zuckerman, A., & Kessler, R. C. (2000). Invisible support and adjustment to stress. *Journal of Personality and Social Psychology, 79*(6), 953-961.

Brew, E. A., Nketiah, B., & Koranteng, R. (2021). A literature review of academic performance, an insight into factors and their influences on academic outcomes of students at senior high schools. *Open Access Library Journal*, *8*(6), 1-14. https://doi.org/10.4236/oalib.1107423

Britton, P. C., Patrick, H., Wenzel, A., & Williams, G. C. (2011). Integrating motivational interviewing and self-determination theory with cognitive behavioral therapy to prevent suicide. *Cognitive and Behavioral Practice*, *18*(1), 16-27. https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5070475/

Carroll, C. A., & Garavalia, L. S. (2004). factors contributing to the academic achievement of pharmacy students: Use of the goal-efficacy framework. *American Journal of Pharmaceutical Education, 68*(4), 88. doi:10.5688/aj680488

Chotratanakamol, K., Bhanthumnavin, D. L., Bhanthumnavin, D. E., Kosol, M., Pimthong, S., & Kleebbua, C. (2023). The nomological model of study-life balance in Thai university students. *The Journal of Behavioral Science (TJBS), 18*(2), 116–135.

Cohen, S. (2004). Social relationships and health. *American Psychologist, 59*(8), 676–684. doi:10.1037/0003-066x.59.8.676

Curtis, S., & Shani, N. (2002). The effect of taking paid employment during term-time on students' academic studies. *Journal of Further and Higher Education*, *26*(2), 129–138. https://doi.org/10.1080/03098770220129406

de la Fuenta, J., Peralta-Sánchez, F. J., Martínez-Vicente, J. M., Sander, P., Garzón-Umerenkova, A., & Zapata, L. (2020). Effects of self-regulation vs. external regulation on the factors and symptoms of academic stress in undergraduate students. *Frontiers in Psychology, 11*. https://doi.org/10.3389/fpsyg.2020.01773

Deci, E. L., & Ryan, R. M. (2000). The "what" and "why" of goal pursuits: Human needs and the self-determination of behavior. *Psychological Inquiry, 11*(4), 227-268.

Deci, E. L., Vallerand, R. J., Pelletier, L. G., & Ryan, R. M. (1991). Motivation and education: The self-determination perspective. *Educational Psychologist, 26*(3&4), 325-346. https://sdtheory.s3.amazonaws.com/SDT/documents/1991_DeciVallerandPelletierRyan_EP.pdf

Determining sample size: How to make sure you get the correct sample size. (n.d.). Qualtrics. https://www.qualtrics.com/au/experience-management/research/determine-sample-size/

Doble, N., & Supriya, M. V. (2011). Student life balance: Myth or reality? *International Journal of Educational Management*, *25*(3), 237–251. https://doi.org/10.1108/09513541111120088

Donnelly, D. P., Kovar, S. E., & Fisher, D. G. (2019). The mediating effects of time management on accounting students' perception of time pressure, satisfaction with the major, and academic performance. *Journal of Accounting and Finance*, *19*(9), 46–63.

Drago, R. W. (2007). Striking a balance: Work, family, life. *Journal of Marriage and Family*, 1089–1090.

Dudovskiy, J. (2022). *The ultimate guide to writing a dissertation in business studies: A step-by-step assistance (6th edition)*. Business Research Methodology.

Faek, R. (2023, January 6). *Education in Malaysia*. World Education News Reviews (WENR). https://wenr.wes.org/2023/01/education-in-malaysia-2

Farb, A. F., & Matjasko, J. L. (2012). Recent advances in research on school-based extracurricular activities and adolescent development. *Developmental Review*, *32*(1), 1–48. https://doi.org/10.1016/j.dr.2011.10.001

Feldman, A. F., & Matjasko, J. L. (2005). The role of school-based extracurricular activities in adolescent development: A comprehensive review and future directions. *Review of Educational Research*, *75*(2), 159–210. http://rer.aera.net

Fenollar, P., Román, S., & Cuestas, P. J. (2007). University students' academic performance: An integrative conceptual framework and empirical analysis. *British Journal of Educational Psychology*, *77*(4), 873–891. doi:10.1348/000709907x189118

Gerrard, D., & Newfield, K., & Balouchestani Asli, N., & Variawa, C. (2017, June), *Are Students Overworked? Understanding the Workload Expectations and*

Realities of First-Year Engineering Paper presented at 2017 ASEE Annual Conference & Exposition, Columbus, Ohio. doi:10.18260/1-2--27612

Guest, D. E. (2002). Perspectives on the study of work-life balance. *Social Science Information, 41*(2), 255–279. https://doi.org/10.1177/053901840204100 2005

Hagger, M. S., & Chatzisarantis, N. L. D. (2012). Transferring motivation from educational to extramural contexts: A review of the trans-contextual model. *European Journal of Psychology of Education, 27*(2), 195–212. https://doi.org/10.1007/s10212-011-0082-5

Hair, J., Money, A., Samouel, P., & Page, M. (2007). *Research methods for business*. John Wiley & Sons, Inc.

Hamaideh, S. H. (2009). Stressors and reactions to stressors among university students. *International Journal of Social Psychiatry, 57*(1), 69–80. doi:10.1177/0020764009348442

Hatcher, R., & Hwang, Y. (2020). Optimizing study-life balance within higher education: A comprehensive literature review. *International Convergence Management Association, 8*(2), 1–12. https://doi.org/10.20482/jemm.2020. 8.2.1

Hayes, A. (2023). *Multiple Linear Regression (MLR) definition, formula, and example*. Investopedia. https://www.investopedia.com/terms/m/mlr.asp

Hendriks, J. (2020). *Exploring study-life balance of students and their perceptions of an engagement app* [Bachelor's thesis, University of Twente]. essay.utwente.nl

Hensley, L. C., Wolters, C. A., Won, S., & Brady, A. C. (2018). Academic probation, time management, and time use in a college success course. *Journal of College Reading and Learning, 48*(2), 105-123. https://www.tandfonline.com/doi/abs/10.1080/10790195.2017.1411214

Hovdhaugen, E. (2015). Working while studying: The impact of term-time employment on dropout rates. *Journal of Education and Work, 28*(6), 631–651. https://doi.org/10.1080/13639080.2013.869311

IBM SPSS statistics. (n.d.). International Business Machines Corporation (IBM). https://www.ibm.com/products/spss-statistics

Introduction. (n.d.). Universiti Tunku Abdul Rahman. https://utar.edu.my /Introduction.php

Ishak, M. (2022, September 10). 81 per cent increase in suicide cases last year. *New Straits Times*. https://www.nst.com.my/news/nation/2022/09/830215/81-cent-increase-suicide-cases-last-year

Johnson, D. A. (2023). The effects of participation in collegiate football on the time management behavior and academic performance of college students. *McNair Scholars Research*. https://scholarworks.harding.edu/mcnair-research/29

Johnson, M., Smith, D., & Adams, S. (2020). Social support and academic performance among higher education students: A longitudinal study. *Journal of Educational Psychology, 48*(4), 562-578.

Kayode, G. M., & Ayodele, J. B. (2015). Impacts of teachers' time management on secondary school students' academic performance in Ekiti State, Nigeria. *International Journal of Secondary Education, 3*(1), 1-7.

Kennett, D. J., Reed, M. J., & VandenBerg, T. R. (2019). The importance of perceived university-life balance, hours per week engaged in academic activities, and academic resourcefulness. *Teaching and Learning Inquiry, 7*(1), 136–153. https://doi.org/10.20343/teachlearninqu.7.1.9

Kloos, N., Trompetter, H. R., Bohlmeijer, E. T., & Westerhof, G. J. (2019). Longitudinal associations of autonomy, relatedness, and competence with the well-being of nursing home residents. *The Gerontologist, 59*(4), 635-643.

Knoster, K. C., & Goodboy, A. K. (2020). A conditional process model of academic demands and student learning. *Communication Education, 69*(3), 335–355. https://doi.org/10.1080/03634523.2020.1713387

Kumar, K., & Chaturvedi, R. (2018). An empirical study of social support, stress and life satisfaction among engineering graduates: Mediating role of perceived work/study life balance. *International Journal of Happiness and Development, 4*(1), 25. https://doi.org/10.1504/ijhd.2018.090489

Kyauta, A. M. A., & Dachia, A. D. (2018). Study habits and academic performance among students of Umar Suleiman College of Education, Gashua, Yobe State, Nigeria. *KIU Journal of Humanities, 3*(1), 187-195.

Le Fevre, M., Matheny, J., & Kolt, G. S. (2003). Eustress, distress, and interpretation in occupational stress. *Journal of Managerial Psychology*, *18*(7), 726–744. https://doi.org/10.1108/02683940310502412

Lee, Y.-J., Chao, C.-H., & Chen, C.-Y. (2011). The influences of interest in learning and learning hours on learning outcomes of vocational college students in Taiwan: Using a teacher's instructional attitude as the moderator. *Global Journal of Engineering Education, 13*(3), 140–153.

Legault, L. (2017). Self-determination theory. *Encyclopedia of Personality and Individual Differences*, 1–9. Springer International Publishing. https://doi.org/10.1007/978-3-319-28099-8_1162-1

Li, J., Han, X., Wang, W., Sun, G., & Cheng, Z. (2018). How social support influences university students' academic achievement and emotional exhaustion: The mediating role of self-esteem. *Learning and Individual Differences, 61*, 120–126. https://doi.org/10.1016/j.lindif.2017.11.016

Lin, F., & Yang, K. (2021). The external and internal factors of academic burnout. *Proceedings of the 2021 4th International Conference on Humanities Education and Social Sciences (ICHESS 2021), 615*. 1815–1821.

Lin, N., Woelfel, M. W., & Light, S. C. (1985). The buffering effect of social support subsequent to an important life event. *Journal of Health and Social Behavior, 26*(3), 247-263.

Liu, W. C., Wang, C. K. J., Kee, Y. H., Koh, C., Lim, B. S. C., & Chua, L. (2013). College students' motivation and learning strategies profiles and academic achievement: A self-determination theory approach. *Educational Psychology, 34*(3), 338–353. doi:10.1080/01443410.2013.785067

Logunmakin, G. F. (2001). Predicting the academic success of students from diverse populations. *Journal of College Student Retention, 2*(4), 295-311.

Maqableh, M., Jaradat, M., & Azzam, A. (2021). Exploring the determinants of students' academic performance at university level: The mediating role of internet usage continuance intention. *Education and Information Technologies, 26*(4), 4003–4025. https://doi.org/10.1007/s10639-021-10453-y

Martinez, E., Ordu, C., Sala, M. R. Della, & Mcfarlane, A. (2013). Striving to obtain a school-work-life balance: The full-time doctoral student. *International Journal of Doctoral Studies, 8,* 39–59.

Masud, H., Thurasamy, R., & Ahmad, M. S. (2014). Parenting styles and academic achievement of young adolescents: A systematic literature review. *Quality & Quantity, 49*(6), 2411–2433. doi:10.1007/s11135-014-0120-x

McCombes, S. (2023). *Sampling methods: Types, techniques & examples*. Scribbr. https://www.scribbr.com/methodology/sampling-methods/

Md Yasin, M. A. S., & Dzulkifli, M. A. (2021). The relationship between social support and academic achievement. *International Journal of Humanities and Social Science, 1*(5). https://www.ijhssnet.com/journals/Vol._1_No._5;_May_2011/31.pdf

Miertschin, S. L., Goodson, C. E., & Stewart, B. L. (2015). Time management skills and student performance in online courses. *American Society for Engineering Education,* 26-1585.

Miloseva, L., Vukosavljevic-Gvozden, T., Richter, K., Milosev, V., & Niklewski, G. (2017). Perceived social support as a moderator between negative life events and depression in adolescence: Implications for prediction and targeted prevention. *EPMA Journal, 8*(3), 237–245. doi:10.1007/s13167-017-0095-5

Ministry of Education Malaysia. (2020). *Way forward for private higher education institutions: Education as an industry (2020 - 2025)*. www.moe.gov.my

Ministry of Higher Education Malaysia. (2022). *Higher education report: Malaysia*. https://whec2022.net/resources/Country%20report%20-%20Malaysia.pdf

Nishimura, M., & Joshi, A. (2021). Self-determination theory and the happiness and academic achievement of students at a women's university. *Psychological studies, 66*(2), 139-153.

Noman, M., Kaur, A., & Nafees, N. (2021). Covid-19 fallout: Interplay between stressors and support on academic functioning of Malaysian university students. *Children and Youth Services Review, 125*. https://doi.org/10.1016/j.childyouth.2021.106001

Nonis, S. A., & Hudson, G. I. (2006). Academic performance of college students: Influence of time spent studying and working. *Journal of Education for Business, 81*(3), 151–159. https://doi.org/10.3200/JOEB.81.3.151-159

Nonis, S. A., & Hudson, G. I. (2010). Performance of college students: Impact of study time and study habits. *Journal of Education for Business, 85*(4), 229–238. https://doi.org/10.1080/08832320903449550

Oberle, E., & Schonert-Reichl, K. A. (2016). Stress contagion in the classroom? The link between classroom teacher burnout and morning cortisol in elementary school students. *Social Science & Medicine, 159*, 30-37.

Perlman, D., & Peplau, L. A. (1981). Toward a social psychology of loneliness. In S. Duck & R. Gilmour (Eds.), *Personal relationships 3: Personal relationships in disorder* (Vol. 3, pp. 31–56). Academic Press. https://www.researchgate.net/publication/284034168

Ramachandiran, M., & Dhanapal, S. (2018). Academic stress among university students: A quantitative study of Generation Y and Z's perception. *Pertanika Journal Social Sciences & Humanities, 26*(3), 2115–2128.

Rawat, A. S. (2021). *An overview of descriptive analysis*. Analytics Steps. https://www.analyticssteps.com/blogs/overview-descriptive-analysis

Razak, W. M. W. A., Baharom, S. A. S., Abdullah, Z., Hamdan, H., Aziz, N. U. A., & Anuar, A. I. M. (2019). Academic performance of university students: A case in a higher learning institution. *KnE Social Sciences, 3*(13), 1294. https://doi.org/10.18502/kss.v3i13.4285

Razali, S. N. A. M., Rusiman, M. S., Gan, W. S., & Arbin, N. (2018). The impact of time management on students' academic achievement. *Journal of Physics: Conference Series 995*. https://iopscience.iop.org/article/10.1088/1742-6596/995/1/012042/pdf

Rummell, C. M., & Joyce, N. R. (2010). “So wat do u want to wrk on 2day?”: The ethical implications of online counseling. *Ethics & Behavior, 20*(6), 482–496. https://doi.org/10.1080/10508422.2010.521450

Ryan, R. M., & Deci, E.L. (2000). Self-determination theory and facilitation of intrinsic motivation, social development and well-being. *American Psychology, 55*(1), 68–78.

Safree, M. A., & Adawiah, M. (2021). The relationship between social support and academic achievement. *International Journal of Humanities and Social Science, 1*(5). https://www.ijhssnet.com/journals/Vol._1_No._5;_May_2011/31.pdf

Salamonson, Y., Roach, D., Crawford, R., McGrath, B., Christiansen, A., Wall, P., Kelly, M., & Ramjan, L. M. (2020). The type and amount of paid work while studying influence academic performance of first year nursing students: An inception cohort study. *Nurse Education Today, 84*. https://doi.org/10.1016/j.nedt.2019.104213

Sampling frame. (n.d.). Statistics.com. https://www.statistics.com/glossary/sampling-frame/

Sarid, O., Anson, O., Yaari, A., & Margalith, M. (2004). Academic stress, immunological reaction, and academic performance among students of nursing and physiotherapy. *Research in Nursing and Health*, *27*(5), 370–377. https://doi.org/10.1002/nur.20028

Schulte‐Frankenfeld, P. M., & Trautwein, F. M. (2022). App‐based mindfulness meditation reduces perceived stress and improves self‐regulation in working university students: A randomised controlled trial. *Applied Psychology: Health and Well‐Being, 14*(4), 1151-1171. https://iaap-journals.onlinelibrary.wiley.com/doi/pdf/10.1111/aphw.12328

Schwarzer, C., & Buchwald, P. (2004). Social Support. *Encyclopedia of Applied Psychology*, 435–441.

Seow, P. S., & Pan, G. (2014). A literature review of the impact of extracurricular activities participation on students’ academic performance. *Journal of Education for Business*, *89*(7), 361–366. https://doi.org/10.1080/08832323.2014.912195

Šestanović, A., & Siddiqui, M. (2021). Study-life balance and mature students in higher education during the Covid-19 pandemic: The case of Oxford Business College, United Kingdom. *European Journal of Education Studies, 8*(11). https://doi.org/10.46827/ejes.v8i11.3975

Sheldon, K. M., & Niemiec, C. P. (2006). It's not just the amount that counts: Balanced need satisfaction also affects well-being. *Journal of Personality and Social Psychology, 91*(2), 331–341. https://doi.org/10.1037/0022-3514.91.2.331

Smith, A. P. (2019). Student workload, wellbeing and academic attainment. In *Human Mental Workload: Models and Applications: Third International Symposium, H-WORKLOAD 2019, Rome, Italy, November 14–15, 2019, Proceedings 3* (pp. 35-47). Springer International Publishing.

Smith, J., Johnson, E., & Lee, S. (2019). The relationship between study hours and academic performance among higher education students: A meta-analysis. *Journal of Educational Psychology, 45*(2), 210-225.

Soares, S. R., Gruber, M. E., Schmidt, K. M., & Hancock, P. A. (2022). An analysis of school-life balance in university students in the context of Covid-19 lockdowns. *Proceedings of the Human Factors and Ergonomics Society Annual Meeting, 66*(1), 1320–1324. https://doi.org/10.1177/1071181322661433

Sonnentag, S., Binnewies, C., & Mojza, E. J. (2010). Staying well and engaged when demands are high: The role of psychological detachment. *Journal of Applied Psychology, 95*(5), 965–976. https://doi.org/10.1037/a0020032

Spitzer, M. W. H. (2022). Just do it! Study time increases mathematical achievement scores for grade 4-10 students in a large longitudinal cross-country study. *European Journal of Psychology of Education, 37*(1), 39-53.

Sprung, J. M., & Rogers, A. (2020). Work-life balance as a predictor of college student anxiety and depression. *Journal of American College Health, 69*(7), 775–782. https://doi.org/10.1080/07448481.2019.1706540

Steinberg, L., & Darling, N. (1994). The broader context of social influence in adolescence. In R. K. Silbereisen, & E. Todt (Eds.), *Adolescence in context: The interplay of family, school, peers, and work in adjustment*. New York: Springer-Verlag, Inc.

Thoits, P. A. (2011). Mechanisms linking social ties and support to physical and mental health. *Journal of Health and Social Behavior, 52*(2), 145-161.

Thompson, R., Wilson, D., & Garcia, J. (2018). The impact of workload on academic performance: A longitudinal study of higher education students. *Educational Psychology Review, 32*(3), 410-426.

Times Higher Education world university rankings. (2023). Times Higher Education. https://www.timeshighereducation.com/world-university-rankings/universiti-tunku-abdul-rahman-utar

Tinto, V. (2017). Through the eyes of students. *Journal of College Student Retention: Research, Theory and Practice*, *19*(3), 254–269. https://doi.org/10.1177/1521025115621917

Turner, D. P. (2019). Sampling Methods in Research Design. *The Journal of Head and Face Pain*, *60*(1), 8–12. https://doi.org/10.1111/head.13707

Uchino, B. N. (2011). Social support and health: A review of physiological processes potentially underlying links to disease outcomes. *Journal of Behavioral Medicine, 29*(4), 377-387.

Ullah, R., Richardson, J. T., & Hafeez, M. (2011). Approaches to studying and perceptions of the academic environment among university students in Pakistan. *Compare: A Journal of Comparative and International Education, 41*(1), 113-127. https://www.tandfonline.com/doi/abs/10.1080/03057921003647065

Vasquez, A. C., Patall, E. A., Fong, C. J., Corrigan, A. S., & Pine, L. (2015). Parent autonomy support, academic achievement, and psychosocial functioning: A meta-analysis of research. *Educational Psychology Review*, *28*(3), 605–644. doi:10.1007/s10648-015-9329-z

Wagh, S. (2023, April 18). *Public health research guide: Primary & secondary data definitions*. Benedictine University Library. https://researchguides.ben.edu/c.php?g=282050&p=4036581

Weinstein, N., & Ryan, R. M. (2010). When helping helps: autonomous motivation for prosocial behavior and its influence on well-being for the helper and recipient. *Journal of Personality and Social Psychology, 98*(2), 222.

What is sample size? (2023). Omniconvert. https://www.omniconvert.com/what-is/sample-size/

Why UTAR? (n.d.). Universiti Tunku Abdul Rahman. https://study.utar.edu.my/why-utar.php

Yang, C., Chen, A., & Chen, Y. (2021). College students' stress and health in the COVID-19 pandemic: The role of academic workload, separation from school, and fears of contagion. *PLoS ONE, 16*(2), 1–16. https://doi.org/10.1371/journal.pone.0246676

Yeh, C. J., & Inose, M. (2003). International students' reported English fluency, social support satisfaction, and social connectedness as predictors of acculturative stress. *Counselling Psychology Quarterly, 16*(1), 15–28. doi:10.1080/0951507031000114058

Yikealo, D., Yemane, B., & Karvinen, I. (2018). The level of academic and environmental stress among college students: A case in the college of education. *Open Journal of Social Sciences, 06*(11), 40–57. https://doi.org/10.4236/jss.2018.611004

Zhang, J., & Zheng, Y. (2017). How do academic stress and leisure activities influence college students' emotional well-being? A daily diary investigation. *Journal of Adolescence, 60*, 114–118. https://doi.org/10.1016/j.adolescence.2017.08.003

Appendix A

Questionnaire survey

The Relationship between Study-Life Balance and Academic Performance

Good day, we are the final year of undergraduate students of Bachelor of Business Administration (Honours) in Univerisiti Tunku Abdul Rahman (UTAR) Kampar Campus who currently are conducting the Final Year Project (FYP) entitled “The relationship between study-life balance and academic performance"

This survey form is consisted of 5 part. Section A (Demographic Questions) will require you to choose the most suitable answer that best describe yourself relevant to the situation from multiple choices. Whereas Section B (Dependent Variable), Section C, Section D, and Section E (Independent Variables) will require you to choose from Likert Scale, where 1-Strongly Disagree, 2-Disagree, 3- Neutral, 4-Agree and 5-Strongly Agree.

Kindly answer ALL questions and provide accurate answers in this survey. All information and data collected will be used solely for academic research and will be kept confidential. We would greatly appreciate your participation in this research project.

For any further inquiries, please contact at siaoweing@1utar.my

Email

_____

PERSONAL DATA PROTECTION STATEMENT

Please be informed that in accordance with Personal Data Protection Act 2010 (“PDPA”) which came into force on 15 November 2013, University 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 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:

1. By submitting this form you hereby authorise and consent to us processing (including disclosing) your personal data and any updates of your information, for the purposes and/or for any other purposes related to the purpose.

2. If you do not consent or subsequently withdraw your consent to the processing and disclosure of your personal data, UTAR will not be able to fulfill our obligations or to contact you or to assist you in respect of the purposes and/or for any other purposes related to the purpose.

3. You may access and update your personal data by writing to us at siaoweing@1utar.my

Acknowledgment of Notice

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

Section A: Demographics

1. Age
   - 18 - 20
   - 21 - 25
   - 25 and above

2. Gender
   - Male
   - Female

3. Educational Background
   - Foundation
   - Undergraduates
   - Master
   - PhD
   - Other: _____

4. Faculty
   - Faculty of Business and Finance (FBF)
   - Faculty of Arts and Social Science (FAS)
   - Faculty of Information and Communication Technology (FICT)
   - Faculty of Engineering and Green Technology (FEGT)
   - Institute of Chinese Studies (ICS)
   - Faculty of Science (FSc)
   - Centre for Foundation Studies (CFS)
   - Other: _____

5. Year of Study
   - Year 1
   - Year 2
   - Year 3
   - Year 4
   - Other: _____

6. Course Program (E.g.: BA/MK/LS)

   _____

7. CGPA
   - Below 2.0
   - 2.0 - 2.5
   - 2.6 - 3.0
   - 3.1 - 3.5
   - 3.6 - 4.0

Section B: Academic Performance

1. I am confident I have adequate academic skills and abilities.
   - Strongly Disagree
   - Disagree
   - Neutral
   - Agree
   - Strongly Agree

2. I feel competent in conducting my course assignment.
   - Strongly Disagree
   - Disagree
   - Neutral
   - Agree
   - Strongly Agree

3. I have learned how to do my coursework efficiently.
   - Strongly Disagree
   - Disagree
   - Neutral
   - Agree
   - Strongly Agree

4. I have performed academically as I anticipated I would.
   - Strongly Disagree
   - Disagree
   - Neutral
   - Agree
   - Strongly Agree

Section C: Study Hour

1. An hour study time can only be effective during revision time.
   - Strongly Disagree
   - Disagree
   - Neutral
   - Agree
   - Strongly Agree

2. Longer study time always result in impressive academic performance.
   - Strongly Disagree
   - Disagree
   - Neutral
   - Agree
   - Strongly Agree

3. I can only assimilate when I read up to an hour time.
   - Strongly Disagree
   - Disagree
   - Neutral
   - Agree
   - Strongly Agree

4. Length of study time does not affect my academic performance.
   - Strongly Disagree
   - Disagree
   - Neutral
   - Agree
   - Strongly Agree

5. Although I study for longer time duration, yet I always achieve poor performance in my academics.
   - Strongly Disagree
   - Disagree
   - Neutral
   - Agree
   - Strongly Agree

Section D: Workload

1. How successful do you think you were in accomplishing the tasks?
   - Strongly Disagree
   - Disagree
   - Neutral
   - Agree
   - Strongly Agree

2. How much mental and perceptual activity was required (e.g. thinking, deciding, calculating, remembering, looking, searching, etc.)?
   - Strongly Disagree
   - Disagree
   - Neutral
   - Agree
   - Strongly Agree

3. How much time pressure did you feel due to the rate or pace at which the tasks or task elements occurred?
   - Strongly Disagree
   - Disagree
   - Neutral
   - Agree
   - Strongly Agree

4. How much did you have to control your emotions (e.g., anger, joy disappointment)?
   - Strongly Disagree
   - Disagree
   - Neutral
   - Agree
   - Strongly Agree

5. How much did the task require you to monitor your performance (i.e., ensure you were performing at specific levels)?
   - Strongly Disagree
   - Disagree
   - Neutral
   - Agree
   - Strongly Agree

6. How hard did you have to work (mentally and physically) to accomplish your level of performance?
   - Strongly Disagree
   - Disagree
   - Neutral
   - Agree
   - Strongly Agree

7. How frustrated (e.g., insecure, discouraged, irritated, stressed, and annoyed) versus satisfied (e.g., secure, gratified, content, relaxed and complacent) did you feel during the task?
   - Strongly Disagree
   - Disagree
   - Neutral
   - Agree
   - Strongly Agree

Section E: Social Support

1. There is a special person who is around when I am in need.
   - Strongly Disagree
   - Disagree
   - Neutral
   - Agree
   - Strongly Agree

2. There is a special person with whom I can share joys and sorrows.
   - Strongly Disagree
   - Disagree
   - Neutral
   - Agree
   - Strongly Agree

3. There is a special person in my life who cares about my feelings.
   - Strongly Disagree
   - Disagree
   - Neutral
   - Agree
   - Strongly Agree

4. I can talk about my problems with my friends.
   - Strongly Disagree
   - Disagree
   - Neutral
   - Agree
   - Strongly Agree

5. I get the emotional help & support I need from my family.
   - Strongly Disagree
   - Disagree
   - Neutral
   - Agree
   - Strongly Agree

Appendix B

SPSS Result

```
COMPUTE AP=MEAN(AP1,AP2,AP3,AP4).
EXECUTE.
COMPUTE SH=MEAN(SH1,SH2,SH3,SH4,SH5).
EXECUTE.
COMPUTE W=MEAN(W1,W2,W3,W4,W5,W6,W7).
EXECUTE.
COMPUTE SS=MEAN(SS1,SS2,SS3,SS4,SS5).
EXECUTE.
REGRESSION
  /MISSING LISTWISE
  /STATISTICS COEFF OUTS R ANOVA
  /CRITERIA=PIN(.05) POUT(.10)
  /NOORIGIN
  /DEPENDENT AP
  /METHOD=ENTER SH W SS.
```

Regression

Notes

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Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on cases with no missing values for any variable used.
Syntax		REGRESSION /MISSING LISTWISE /STATISTICS COEFF OUTS R ANOVA /CRITERIA=PIN(.05) POUT(.10) /NOORIGIN /DEPENDENT AP /METHOD=ENTER SH W SS.
Resources	Processor Time	0:00:00.047
	Elapsed Time	0:00:00.078
	Memory Required	2364 bytes
	Additional Memory Required for Residual Plots	0 bytes

```
[DataSet0]
```

Variables Entered/Removed[b]

Model	Variables Entered	Variables Removed	Method
1	SS, SH, W[a]	.	Enter

a. All requested variables entered.

b. Dependent Variable: AP

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.599[a]	.359	.354	.47179

a. Predictors: (Constant), SS, SH, W

ANOVA[b]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	46.439	3	15.480	69.544	.000[a]
	Residual	83.026	373	.223		
	Total	129.465	376			

a. Predictors: (Constant), SS, SH, W

b. Dependent Variable: AP

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.132	.205		5.520	.000
	SH	.300	.044	.357	6.881	.000
	W	.139	.067	.121	2.082	.038
	SS	.268	.048	.273	5.630	.000

a. Dependent Variable: AP

```
RELIABILITY
  /VARIABLES=AP1 AP2 AP3 AP4
  /SCALE('AP') ALL
  /MODEL=ALPHA.
```

Reliability

Notes

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	Matrix Input	Matrix Input
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the procedure.
Syntax		RELIABILITY /VARIABLES=AP1 AP2 AP3 AP4 /SCALE('AP') ALL /MODEL=ALPHA.
Resources	Processor Time	0:00:00.000
	Elapsed Time	0:00:00.000

```
[DataSet0]
```

Scale: AP

Case Processing Summary

		N	%
Cases	Valid	377	100.0
	Excluded[a]	0	.0
	Total	377	100.0

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

Reliability Statistics

Cronbach's Alpha	N of Items
.709	4

```
RELIABILITY
  /VARIABLES=SH1 SH2 SH3 SH4 SH5
  /SCALE('SH') ALL
  /MODEL=ALPHA.
```

Reliability

Notes

Output Created		2024-03-14T14:46:35.979
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	Weight	<none>
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	Matrix Input	Matrix Input
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the procedure.
Syntax		RELIABILITY /VARIABLES=SH1 SH2 SH3 SH4 SH5 /SCALE('SH') ALL /MODEL=ALPHA.
Resources	Processor Time	0:00:00.015
	Elapsed Time	0:00:00.016

```
[DataSet0]
```

Scale: SH

Case Processing Summary

		N	%
Cases	Valid	377	100.0
	Excluded[a]	0	.0
	Total	377	100.0

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

Reliability Statistics

Cronbach's Alpha	N of Items
.701	5

```
RELIABILITY
  /VARIABLES=W1 W2 W3 W4 W5 W6 W7
  /SCALE('W') ALL
  /MODEL=ALPHA.
```

Reliability

Notes

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	Matrix Input	Matrix Input
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the procedure.
Syntax		RELIABILITY /VARIABLES=W1 W2 W3 W4 W5 W6 W7 /SCALE('W') ALL /MODEL=ALPHA.
Resources	Processor Time	0:00:00.016
	Elapsed Time	0:00:00.015

```
[DataSet0]
```

Scale: W

Case Processing Summary

		N	%
Cases	Valid	377	100.0
	Excluded[a]	0	.0
	Total	377	100.0

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

Reliability Statistics

Cronbach's Alpha	N of Items
.732	7

```
RELIABILITY
  /VARIABLES=SS1 SS2 SS3 SS4 SS5
  /SCALE('SS') ALL
  /MODEL=ALPHA.
```

Reliability

Notes

Output Created		2024-03-14T14:47:12.315
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	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	377
	Matrix Input	Matrix Input
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the procedure.
Syntax		RELIABILITY /VARIABLES=SS1 SS2 SS3 SS4 SS5 /SCALE('SS') ALL /MODEL=ALPHA.
Resources	Processor Time	0:00:00.032
	Elapsed Time	0:00:00.015

```
[DataSet0]
```

Scale: SS

Case Processing Summary

		N	%
Cases	Valid	377	100.0
	Excluded[a]	0	.0
	Total	377	100.0

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

Reliability Statistics

Cronbach's Alpha	N of Items
.747	5

```
CORRELATIONS
  /VARIABLES=AP SH W SS
  /PRINT=TWOTAIL NOSIG
  /STATISTICS DESCRIPTIVES
  /MISSING=PAIRWISE.
```

Correlations

Notes

Output Created		2024-03-14T14:49:49.813
Comments		
Input	Active Dataset	DataSet0
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	377
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics for each pair of variables are based on all the cases with valid data for that pair.
Syntax		CORRELATIONS /VARIABLES=AP SH W SS /PRINT=TWOTAIL NOSIG /STATISTICS DESCRIPTIVES /MISSING=PAIRWISE.
Resources	Processor Time	0:00:00.000
	Elapsed Time	0:00:00.000

[DataSet0]

Descriptive Statistics

	Mean	Std. Deviation	N
AP	3.8634	.58679	377
SH	3.7809	.69943	377
W	3.9693	.51167	377
SS	3.9077	.59713	377

Correlations

		AP	SH	W	SS
AP	Pearson Correlation	1.000	.508**	.477**	.438**
	Sig. (2-tailed)		.000	.000	.000
	N	377.000	377	377	377
SH	Pearson Correlation	.508**	1.000	.602**	.287**
	Sig. (2-tailed)	.000		.000	.000
	N	377	377.000	377	377
W	Pearson Correlation	.477**	.602**	1.000	.516**
	Sig. (2-tailed)	.000	.000		.000

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

Correlations

		AP	SH	W	SS
W	N	377	377	377.000	377
SS	Pearson Correlation	.438**	.287**	.516**	1.000
	Sig. (2-tailed)	.000	.000	.000	
	N	377	377	377	377.000

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

Appendix C

Descriptive Analysis for Course Program

Course program	Frequency	Percentage (%)	Cumulative frequency	Cumulative frequency (%)
MK	85	22.5	85	22.5
LS	68	18	153	40.5
BA	67	17.8	220	58.3
AT	12	3.2	232	61.5
Foundation	50	13.3	282	74.8
PR	8	2.1	290	76.9
AR	6	1.6	296	78.5
PY	6	1.6	302	80.1
GD	5	1.3	307	81.4
EN	4	1.1	311	82.4
FN	4	1.1	315	83.5
AS	3	0.8	318	84.3
CN	3	0.8	321	85.1
FE	3	0.8	324	85.9
MC	3	0.8	327	86.7
GV	3	0.8	330	87.5
RAC	3	0.8	333	88.3
AC	5	1.3	338	89.6
BF	2	0.5	340	90.1
ME	2	0.5	342	90.7

EA	3	0.8	345	91.5
DA	2	0.5	347	92
LM	1	0.3	348	92.3
EE	1	0.3	349	92.5
BAC	1	0.3	350	92.8
FD	1	0.3	351	93.1
BM	1	0.3	352	93.3
AV	1	0.3	353	93.6
CM	1	0.3	354	93.9
ED	1	0.3	355	94.1
IM	1	0.3	356	94.4
BE	1	0.3	357	94.6
PH	1	0.3	358	94.9
CE	1	0.3	359	95.2
EV	1	0.3	360	95.4
MH	1	0.3	361	95.7
3E	1	0.3	362	96
Mphil	1	0.3	363	96.2
CC	1	0.3	364	96.5
MB	1	0.3	365	96.8
JC	1	0.3	366	97
BFE	1	0.3	367	97.3
GS	1	0.3	368	97.6
BCS	1	0.3	369	97.8

PE	1	0.3	370	98.1
IB	1	0.3	371	98.4
BP	1	0.3	372	98.6
Advertising	1	0.3	373	98.9
PA	1	0.3	374	99.2
AG	1	0.3	375	99.4
DT	1	0.3	376	99.7
-	1	0.3	377	100

Note. Table 4.1.1.6: Descriptive Analysis for Course Program. Adapted from SPSS software.

Appendix D

Central Tendencies Measurement of Constructs: Academic Performance

Academic performance	Percentage (%)					Mean	Rank
	SD	D	N	A	SA		
I am confident I have adequate academic skills and abilities.	0.7958	3.1830	18.5676	68.7003	8.7533	3.8143	3
I feel competent in conducting my course assignment.	0.5305	2.9178	36.8700	23.8727	35.8090	3.9151	2
I have learned how to do my coursework efficiently.	0.2653	3.1830	16.9761	41.9098	37.6658	4.1353	1
I have performed academically as I anticipated I would.	0.7958	3.1830	43.2361	41.9098	10.8753	3.5889	4

Note. Table 4.1.2.1 Central Tendencies Measurement of Constructs: Academic Performance. Adapted from SPSS software.

Appendix E

Central Tendencies Measurement of Constructs: Study Hour

Study hour	Percentage (%)					Mean	Rank
	SD	D	N	A	SA		
An hour study time can only be effective during revision time.	1.0610	8.2228	15.6499	17.2414	57.8249	4.2255	1
Longer study time always result in impressive academic performance.	2.9178	9.2838	14.0584	44.0318	29.7082	3.8833	2
I can only assimilate when I read up to an hour time.	1.5915	7.4271	38.7268	45.0928	7.1618	3.4881	4
Length of study time does not affect my academic performance.	3.1830	11.6711	16.4456	35.0133	33.6870	3.8435	3
Although I study for longer time duration, yet I always achieve poor performance in my academics.	5.5703	13.2626	34.2175	23.0769	23.8727	3.4642	5

Note. Table 4.1.2.2 Central Tendencies Measurement of Constructs: Study Hour. Adapted from SPSS software.

Appendix F

Central Tendencies Measurement of Constructs: Workload

Workloads	Percentage (%)					Mean	Rank
	SD	D	N	A	SA		
How successful do you think you were in accomplishing the tasks?	0.5305	2.9178	16.9761	70.0265	9.5491	3.8515	5
How much mental and perceptual activity was required (e.g. thinking, deciding, calculating, remembering, looking, searching, etc.)?	0.2653	1.0610	15.6499	39.7878	43.2361	4.2467	2
How much time pressure did you feel due to the rate or pace at which the tasks or task elements occurred?	0.5305	3.7135	38.7268	46.9496	10.0796	3.6233	7
How much did you have to control your emotions (e.g., anger, joy disappointment)?	1.8568	6.1008	27.5862	39.2573	25.1989	3.7984	6
How much did the task require you to monitor your performance (i.e., ensure you were performing at specific levels)?	0.2653	1.8568	19.3634	24.1379	54.3767	4.3050	1

How hard did you have to work (mentally and physically) to accomplish your level of performance?	0.5305	3.1830	35.2785	24.6684	36.3395	3.9310	4
How frustrated (e.g., insecure, discouraged, irritated, stressed, and annoyed) versus satisfied (e.g., secure, gratified, content, relaxed and complacent) did you feel during the task?	0.7958	3.1830	18.8329	46.6844	30.5040	4.0292	3

Note. Table 4.1.2.3 Central Tendencies Measurement of Constructs: Workload. Adapted from SPSS software.

Appendix G

Central Tendencies Measurement of Constructs: Social Support

Social support	Percentage (%)					Mean	Rank
	SD	D	N	A	SA		
There is a special person who is around when I am in need.	2.3873	2.3873	14.0584	67.6393	13.5279	3.8753	3
There is a special person with whom I can share joys and sorrows.	1.3263	3.4483	13.7931	67.9045	13.5279	3.8886	2
There is a special person in my life who cares about my feelings.	1.5915	2.3873	15.6499	41.1141	39.2573	4.1406	1
I can talk about my problems with my friends.	0.7958	2.3873	41.1141	22.2812	33.4218	3.8515	4
I get the emotional help & support I need from my family.	2.3873	1.8568	34.7480	37.1353	23.8727	3.7825	5

Note. Table 4.1.2.4 Central Tendencies Measurement of Constructs: Social Support. Adapted from SPSS software.