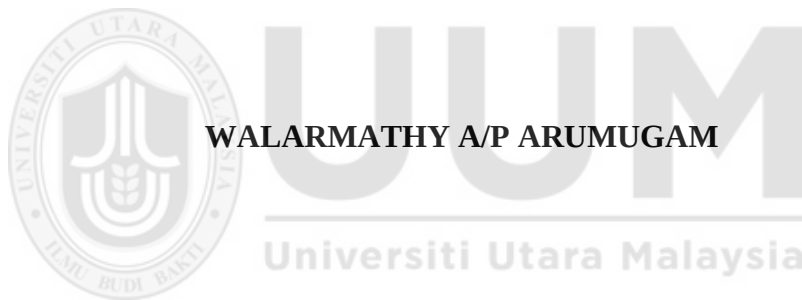


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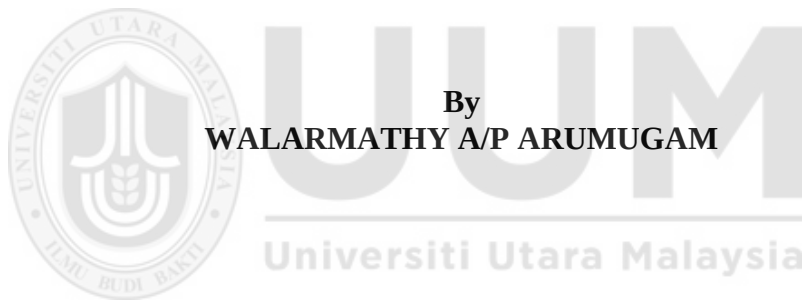
**FACTORS INFLUENCING STRESS AMONG POSTGRADUATE
STUDENTS AT UNIVERSITI UTARA MALAYSIA**



WALARMATHY A/P ARUMUGAM

**MASTER OF SCIENCE (MANAGEMENT)
UNIVERSITI UTARA MALAYSIA
2025**

**FACTORS INFLUENCING STRESS AMONG POSTGRADUATE
STUDENTS AT UNIVERSITI UTARA MALAYSIA**



**By
WALARMATHY A/P ARUMUGAM**

**Thesis Submitted to
College of Business,
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**Pusat Pengajian Pengurusan
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ABSTRACT

The academic experience of postgraduate students is full of challenges which can potentially push the boundaries of acceptable stress levels. In turn, excessive stress can affect academic productivity and wellbeing. This study investigates the reason(s) for stress among postgraduate students from Universiti Utara Malaysia (UUM) that are related to their academic environment, social life, and physical attributes. This research draws on the Transactional Model of Stress and Coping propounded by Lazarus and Folkman in 1984 which bases its approach on cognitive appraisal and coping strategies as the central pillars for dealing with stress. A quantitative approach was used, and data were gathered using a structured survey questionnaire from the sample population of 200 postgraduate students. Stress and its determinants were analyzed using descriptive statistics, Pearson's correlation, and multiple regression analyses. Stressors stemming from coursework, research, and engagement with supervisors have been associated with the highest levels of stress. Other social aspects, such as relationships with peers, family, and finances also impact well-being significantly. In addition, sleep deprivation, exhaustion, and other health issues exacerbate stress even more. These results imply that not only academic pressure, but also students' perceptions and coping strategies play a role in stress. This aids in further understanding the wellbeing of postgraduate students and emphasizes the importance of universities devising specific support strategies. Universities need to develop clear policies for providing academic guidance, as well as promoting healthy coping mechanisms for dealing with stress, including timely mental health treatment. If these stressors are properly addressed, universities will create a supportive educational climate, increase student retention rates, as well as improve academic performance.

Keywords: Postgraduate students; Academic stress; Cognitive appraisal; Mental; Higher education.

ABSTRAK

Pengalaman akademik pelajar pascasiswazah penuh dengan cabaran yang boleh mendorong tahap tekanan melebihi had yang boleh diterima. Tekanan yang berlebihan boleh menjejaskan produktiviti akademik dan kesejahteraan pelajar. Kajian ini menyelidik punca tekanan dalam kalangan pelajar pascasiswazah di Universiti Utara Malaysia (UUM) yang berkaitan dengan persekitaran akademik, kehidupan sosial, dan faktor fizikal mereka. Kajian ini berasaskan Model Transaksional Tekanan dan Daya Tindak yang dikemukakan oleh Lazarus dan Folkman pada tahun 1984, yang menekankan penilaian kognitif dan strategi daya tindak sebagai elemen utama dalam menangani tekanan. Pendekatan kuantitatif digunakan dalam kajian ini, dan data dikumpulkan melalui soal selidik berstruktur daripada 200 pelajar pascasiswazah. Tekanan dan faktor-faktor penentunya dianalisis menggunakan statistik deskriptif, korelasi Pearson, dan analisis regresi berganda. Tekanan tertinggi berpunca daripada beban kerja kursus, penyelidikan, dan interaksi dengan penyelia. Faktor sosial lain, seperti hubungan dengan rakan sebaya, keluarga, dan kewangan, turut memberi kesan ketara terhadap kesejahteraan pelajar. Selain itu, kurang tidur, keletihan, dan masalah kesihatan lain meningkatkan lagi tahap tekanan. Hasil kajian ini menunjukkan bahawa bukan sahaja tekanan akademik, tetapi juga persepsi dan strategi daya tindak pelajar memainkan peranan dalam tekanan yang dialami. Ini membantu pemahaman yang lebih mendalam mengenai kesejahteraan pelajar pascasiswazah serta menekankan kepentingan universiti dalam merangka strategi sokongan yang khusus. Universiti perlu membangunkan dasar yang jelas untuk menyediakan bimbingan akademik dan menggalakkan mekanisme daya tindak yang sihat, termasuk rawatan kesihatan mental yang tepat pada masanya. Jika tekanan ini ditangani dengan baik, universiti dapat mewujudkan persekitaran pembelajaran yang lebih menyokong, meningkatkan kadar pengekalan pelajar, serta memperbaiki prestasi akademik.

Kata kunci: Pelajar pascasiswazah; Tekanan akademik; Penilaian kognitif; Kesejahteraan mental; Pendidikan tinggi

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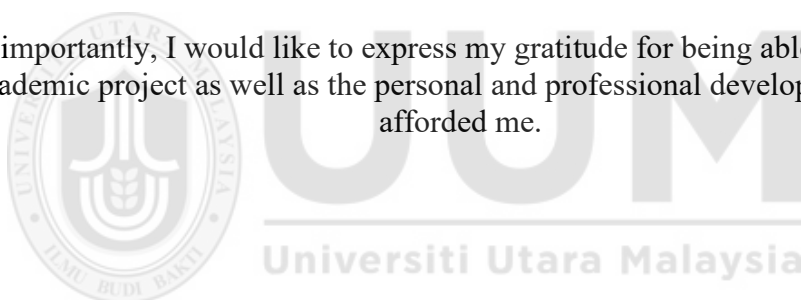


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CHAPTER ONE

INTRODUCTION

1.1 Introduction

This research looks into the aspects that cause stress among postgraduate students of University Utara Malaysia (UUM) including social psychological, academic and physical factors related to stress. The intention of this study is to help in the formulation of stress management strategies that are specific to the needs and circumstances of student postgraduates so as to enhance their educational experience. This chapter describes the background of the study, statement of the problem, the objectives of the research and questions, the significance of the study, limitations, operational definitions and arrangement of the thesis.

1.2 Background of Study

Recently, the research on students in higher education institutions across the world, their mental health and well-being, has become the focus of attention of many researchers, educators and policymakers. Stress is part and parcel of day to day life; however, that particular stress takes its toll in an academic setting where students feel pressure to perform, pursue their future careers and grow as individuals. In such circumstances, stress manifests particularly in the university context, where undergraduate and postgraduate students are compelled to first adjust to foreign cultures and societies and then achieve high levels of performance in their academic work (Al-Qahtani & Alsubaie, 2020; Hossain et al., 2022).

Postgraduate students have different experiences from the undergraduate ones, additional stress is mostly because of having more work overload, more emphasis on research engagement and responsibilities towards family, studies and sometimes work. Students are required to constantly participate in conducting individual scientific studies, academic publications as well as professional activities with strict deadlines which are often overwhelming both physically and emotionally. Additionally, other forms of social stress due to cultures or relationships with colleagues, supervisors and students also add other dimensions to stress (Liang, Liu & Zhao).

Many graduates are subjected to intense academic pressure that is often related to with poor sleeping habits and lack of exercise due to the strenuous nature of their postgraduate studies. It has already been documented that this has negative repercussions for their well-being and their studies (Yoo & Marshall, 2021; Saleem et al., 2022; Peng et al., 2022).

As opposed to studies in America or Europe that do not provide a global outlook, Malaysia is a country that provides them, due to being influenced by Western cultures while also retaining their own, thus offering a rich cultural tapestry. UUM is such a university that embodies these characteristics, students from different cultural, academic, and social backgrounds come together to build a university that promotes academic religious prosperity. UUM's commitment to students' research higher education strategies ensures they promote academic output and thus achieve diversity in postgraduate students. It is, therefore, helpful to analyze how Stress levels are triggered amidst students of the postgraduate programs at UUM. This creates a context that allows for the in-depth analysis of the relationship between social, academic, and physical factors. These congruent factors move in tangent to academic performance as

envisioned in the pressure of the postgraduate programs in line with the global values of research (Byrom et al., 2020).

Gaining insights into the pervasive pressure and stress experienced by students pursuing postgraduate education is the ultimate goal. This is because global standards such as those espoused in UUM seek to create a holistic approach to student life that goes beyond academics, so a focus on social parameters is equally important. The aim of this research is, therefore, to seek determinants of stress among postgraduate students at UUM that include specifically social factors than other factors, describing their individual relevance.

The findings of this research will help design effective support services and stress management programs tailored to the specific needs of the postgraduate community; this will also help in the continuous enhancement of student support within UUM.

1.3 Problem Statement

Although students are becoming more aware of mental health issues, there does not seem to be relevant literature written on what influences stress on postgraduate students in Malaysia. Most of the existing studies have dealt with stress and other aspects within undergraduate scope or rather, student stress generally without differentiating the levels of study. Most existing studies, such as Li et al. (2023), have focused on the impact of academic stress on the performance of university students in general, often without distinguishing between undergraduate and postgraduate populations. Such studies draw attention to undergraduate stressors, but do not speak to the particular stressors that postgraduate students encounter. This is concerning since there are distinct issues faced by postgraduate students which may be wholly

different from those faced by undergraduates. For instance, postgraduate students are often tasked with the expectations of being able to carry out independent research and make publication of their findings as well as their contribution to an academic field all of which can be quite heavy to handle without stress. This oversight might account for the relative neglect of research concentrating on postgraduate students, which is indispensable for elucidating the particular stressors and exploring ways to manage them (Mofatteh, 2020).

On top of the academic demands, postgraduate students have different social and personal roles which add to the level of stress they experience. Whereas most undergraduate students are relatively younger, many postgraduate students are older and possibly have other commitments such as a family or a job. These new pressures tend to come at a point where prior research concerning academic expectations does not capture. In addition, the process of getting accustomed to graduate studies usually includes moving to a new location, socialising, and coping with vague academic norms and expectations related to studying. Such changes may evoke stress, anxiety, and even isolation—concerns that most university systems, which are tailored towards undergraduate students, do not adequately consider (Saleem et al., 2022).

The case of Universiti Utara Malaysia (UUM) has not yet been documented in the available scholarly works, and this research intends to bridge this gap by investigating the primary social, academic, and physical stressors impacting the University Utara Malaysia's postgraduate students. Understanding these stressors is critical for developing mechanisms to mitigate them for enhanced wellbeing among students. It would mean, for instance, that in the event academic workload is seen as a critical stressors, universities could place structures allowing postgraduate students to have

flexible time lines, boost their academic assistance programs or have stress management workshops targeted for postgraduate students. In the same vein, if such social variables are established to be important, then efforts could be made to enhance peer support networks and initiatives to improve the integration of postgraduate students socially (Lisnyj et al., 2021).

Grasping the particular stressors that postgraduate students at UUM go through is not only relevant in the context of enhancing the student welfare but also stands to benefit the academic atmosphere as a whole. It illustrates that when students experience stress, this is likely to hamper their ability to perform well in academics, contribute positively or even take pleasure in their studies which would consequently lead to increased drop out rates and reduced academic performance. It is possible to diminish stress at its root and thus foster an environment conducive to education which not only produces good academic results but is beneficial to the students. This research is thus not only concerned with problems identification but rather how these issues can be addressed using reasonable strategies which can be applied in enhancing the postgraduate experience among students undertaking such courses at UUM.

1.4 Research Objectives

- i To identify the relationship between level of stress and postgraduate students at UUM.
- ii To examine the relationship between social factors and stress levels among postgraduates students at UUM.
- iii To determine the relationship between academic factors and student stress at UUM.

- iv To evaluate the relationship between physical factors and stress level among postgraduate students at UUM.

1.5 Research Questions

- i Does level of stress have relationship with postgraduate students at UUM?
- ii Does social factors have relationship with stress level among postgraduate students?
- iii Does academic factors have relationship with stress level among postgraduate students?
- iv Does physical factors have relationship with stress level among postgraduate students?

1.6 Significance of the Study

This research is important in the sense that it endeavors to comprehensively depict the stress of postgraduate students at University Utara Malaysia (UUM) as well as establish what precisely stresses them. Theoretically, it also adds to the literature by considering social, academic and physical stressors inherent to postgraduate students; a group which has been studied less often. From the practical perspectives, the findings will assist university administration and faculty in formulating appropriate remedial strategies such as stress workshops, improved support services, and mentorship programs with prime objective of helping students cope with stress early on. The study also seeks to increase the academic staff of UUM's awareness on some of these stressors to enable them play the role of informal counselors so as to enhance students' mental health. In conclusion, this research intends to promote a highly educative and

supportive environment which optimizes the mental and emotional and academic aspects of students.

1.7 Scope of the Study

The purpose of this study is to determine the stress level among University Utara Malaysia postgraduate students, with an emphasis on determining and examining the many factors that influence their stress levels. The following dimensions will be included in the study's scope are population and sample and key stress factor. Key stress factor include social factor, academic factor and physical factor.

1.8 Definition of Key Terms

Table 1.1
Operational Definition

1.7.1 Stress	Stress is the body's reaction to any change that requires an adjustment or response. The body reacts to these changes with physical, mental, and emotional responses (American Psychological Association, 2022).
1.7.2 Social Factor	Social stressors are defined as behaviors and situations, social in nature, that are related to physical and psychological strain (Taylor, 2020).
1.7.3 Academic Factor	Academic performance or "academic achievement" is the extent to which a student, teacher or institution has attained their short or long-term educational goals (Kassaw & Demareva, 2023).
1.7.4 Physical Factor	In a medical or biological context stress is a physical, mental, or emotional factor that causes bodily or mental tension (National Institute of Mental Health, 2021).

1.9 The Organisation of the Study

This thesis is structured into five main chapters. Chapter One provides an introduction to the study. In this chapter, the study is presented in terms of its background, problem statement, aims and objectives, research, significance of the study, delimitations of the study, definition of key concepts and terms, and structure of the whole thesis. Chapter Two presents a review of relevant literature on stress among postgraduate students, specifically examining social, academic, and physical factors. The chapter also includes relevant theoretical perspectives and past empirical studies that support the research. Chapter Three details the research methodology which comprises research design, models of the studies, population and sampling, instruments used, data collection and such like analyses methods.

Chapter Four presents the results and discussion of the study. It commences profusely with descriptive analysis, which is alongside correlation analysis focused on the interrelations among stress and its independent variables, then culminating in multiple regression analysis aimed at pinpointing the major predictors of stress. The results are deliberated concerning the available literature and their theoretical assumptions. Lastly, chapter five offers the conclusion and proposes recommendations. This chapter highlights the major findings, their anticipated theoretical and practical impacts, the identified gaps within the study, and suggestions regarding further research and institutional policies concerning the management of stress among postgraduate students. Each chapter is designed in a sequential manner so as to address understanding of the factors that contribute to stress at the postgraduate level.

CHAPTER TWO

LITERATURE REVIEW

2.1 Introduction

In this chapter, literature addressing the stress phenomenon of postgraduate students will be reviewed with reference to the context of University Utara Malaysia (UUM). Research has demonstrated that stress is common amongst students in higher education, impacting their mental health, academic performance as well as overall welfare. More of the postgraduate students on the other hand go through a relatively different level of stress owing to the academic, social and physical aspects of their studies. The review is structured in three sections which includes social factors, academic factors and physical factors all of which accentuate the stress levels of the postgraduate students. The chapter will further review a relevant theory related to the analysis of stress factors. This is pivotal in comprehending the issues at hand and coming up with solutions that help in stress management specifically for postgraduate students who struggle with this issue.

2.2 Stress

Stress, that has been the topic of many studies in the spheres of psychology and education as well as medicine, is an emotional and physiological response to activities which are regarded as being challenging. Stress may be defined as the response of the organism by contraction of a range of systems, structures and processes such as physical, mental, emotional and other stress (Siddiqui et al., 2021). In the academic pursuits, which include postgraduate studies, stress can be said to be the result of a

combination of scholastic, social, and private life stressors. Stresses for this group of students stem, among other factors, from various academic requirements such as time constraints for assignment completion, high academic achievement, and a high volume of assignments relative to personal level of endurance (Byrom et al., 2020).

Research has shown that postgraduate students, unlike their undergraduate counterparts, suffer additional stress due to the more complex and independent nature of studies. Original Research, publication and authorship as well as building up complex academic relationships with supervisors and colleagues are considered as part of the many postgraduate programs (Yoo & Marshall, 2021). Such a requirement for autonomy can lead to excessive stress since post-graduate students inevitably have to take charge of their time, resources and the completion of projects without most of the structured framework provided to undergraduates (Saleem et al., 2022). Academic pressures notably increase student stress owing to the need to complete a thesis and undertake research publications. Postgraduate students, as years of study progress, report experiencing heightened stress consistently (Siddiqui et al., 2021).

In addition to academic obligations, postgraduate students are usually the ones who have extra commitments beyond academics such as family and employment. These aspects create a very intricate set of stressors, especially in the case of grown-up students who may also be working, or taking care of dependents, or have other personal responsibilities (Hossain et al., 2022). In contrast to younger undergraduates who might be mostly concerned with academic work, postgraduate students always have to endure multiple roles which cause more stress and lead to feeling overwhelmed (Mofatteh, 2020).

Postgraduate students are known to endure chronic stress which negatively affects their cognitive performance. Stress has been shown to result in cognitive deficits such as difficulty concentrating, memory problems, and poor capacity to collect and recall information which impacts negatively on the students' performance in academics (Byrom et al., 2020). Female students form a considerable proportion of those enrolled in higher education indicating their rising participation and achievement in educational activities. They can not avoid stress which is strongly correlated to anxieties, depression or burnout that can worsen their academic output productivity and or their psychosocial well-being (Byrom et al., 2020). Also, it is common that individuals will complain of sleep problems, headaches, reduced immunity, or even any other stress-associated body ailments (Peng et al., 2022). Those two aspects of health, mental and physical, show a relationship that accentuates the need to identify and deal with stress among postgraduate students.

Despite the expansion of student mental health awareness in Malaysia, most of the studies are more focused on undergraduates than on postgraduate students and their distinct challenges (Al-Qahtani & Alsubaie, 2020). This study, therefore, fills a crucial void in knowledge by examining the origins and the impact of stress at postgraduate level at University Utara Malaysia (UUM) specifically looking into the academic, social and physical stress causing components in this population. It is important to understand the determinants as it will help in devising stress management strategies to improve perinatal students' academic achievements and overall well-being in postgraduate environments (Hossain et al., 2022).

2.3 Social Factors

The postgraduate students' stress levels are susceptible to social interactions and their effect has an adverse impact on their academic, psychological, and overall health well-being. In an academic setting, social stressors may include peers and peers-support, spouse or children, faculty members and supervisors, and even friends (Allen et al, 2020). Strong evidence has been established that students with little social support are extremely susceptible to high stress levels due to social deprivation which leads to loneliness and feelings of inadequacy (Hossain et al., 2022). Having a postgraduate supervisor may be beneficial for building professional networks and receiving feedback, but can also create challenges. Although the drawbacks exist, they are outweighed by the benefits when students are willing to participate in professional settings. Millyquad and Marshall (2021) suggest that students tend to look forward to academic networking and mentorship to enable their advancement, which could, however, also be burdensome in terms of stress due to conflict, miscommunication, and ambiguous expectations.

Changing from undergraduate to postgraduate studies can cause the disruption of some existing social connections and support networks, as students have to relocate to new places. This is even more profound in the case of international students, who have to immerse in a completely different sociocultural sphere besides studying. The process of internalization and externalization of new social and contextual layers can become problematic, especially in the case of students who have to deal with language and culture, which inhibit their acculturation in the host society (Saleem et al., 2022). Furthermore, students with communication issues regarding their peers or supervisors

are highly likely to report feelings of loneliness which in turn, has a negative correlation with stress and academic success (Al-Qahtani & Alsubaie, 2020).

It has been established by studies that social connections can help to alleviate the effects of stress, offering both emotional and instrumental assistance to students in the face of academic as well as personal difficulties (Peng et al., 2022) respectively. A similar study reported by Alotaibi et al. (2020) also pointed out the fact that stress was lower and satisfaction with the academic career was higher among postgraduate students who possessed considerable social support. Having friends who are also in the same course as well as having social support can provide a sense of motivation and common goals which makes one more resistant to stress. On the other hand, such students who have disturbed relationships with adherents or supervisors will most likely have difficulties in stress management owing to the fact that these adverse situations will create a feeling of fragmentation and isolation (Siddiqui et al., 2021).

Also, family support is important in determining the levels of postgraduate student stress; student who has are from close knitted family tend to be less stressed because family members offer emotional support as well as financial and logistical assistance. (Byrom et al., 2020). However, the expectation to conform to family standards and the responsibility of meeting family duties particularly in the case of students who are trying to balance schooling and family tasks also adds stress to their lives (Mofatteh, 2020).

Thus, social factors are also pertinent to the level of stress experienced by postgraduate students given that a number of social stressors are likely to be encountered in addition to the academic ones. Social support, along with peer relations, school settings, and

family expectations play a significant role in addressing social integration issues and controlling stress within hectic postgraduate academic situations (Hossain et al., 2022).

2.4 Academic Factors

Academic factors emerge as one of the biggest causes of stress for postgraduate students, caused by the multitude of requirements of the academic program, the pressure to produce work, and the overall desire to succeed academically. It has been shown that postgraduates do, however, face academic challenges that undergraduates do not, in that they are often required to undertake self-directed research and are expected to possess the ability and willingness to publish as well as participate in the studies of their research (Siddiqui et al., 2021). Such academic requirements pose stress, thus creating an atmosphere of monotony and rigorous workloads, which in most cases comprises of tight timelines in regards to work submission and meeting authority figures in regards to performance (Byrom et al., 2020).

Most of the postgraduate students experience high work-related stress because of the workload in terms of heavy coursework and the requirements for timely research. Asturias et al. (2021), while conducting their research, established that postgraduate students find themselves in stressful situations primarily because of deadlines involved in the completion of the course components, research output, and teaching. Such overlapping challenges tend to result in the problem of prioritization, thus over-encumbering the student and affecting their academic performance overall. This is also compounded by the need to produce quality research and publish in reputable papers, a lot of students seem to believe that their academic advancement is stagnant and their chances of getting a job is severely limited (Yoo & Marshall, 2021).

A considerable amount of academic pressure is exerted on postgraduate students as a result of their connection with supervisors. Supervisors' help is important for postgraduates, who need assistance in formulating research questions, conducting data analysis, or developing a thesis. However, students' awareness or anticipation of professional support from their supervisors, as well as of constructive criticism, may give rise to noticeable stress in students (Saleem et al., 2022). Similarly, research conducted by Alotaibi et al. (2020) demonstrates that students in a close and supportive relationship with their supervisors report the lowest stress levels, whereas students with conflicting relationships do not get the necessary help and support, making it very difficult for them to deal with study stress. This stresses the need for having effective interactions in the supervisor-student dyads so as to manage any possible stress, because constructive interactions will increase students' capabilities to deal with academic challenges.

Moreover, work overload and academic performance have also been associated with adverse consequences including anxiety, depression, and even feeling burned out. For instance, Wong et al. (2023) revealed that greater levels of academic work involve even more stress as these students are always under pressure to perform. And Al-Garni et al. (2023) confirm this when they state that students who have high academic demands could not be able to cope with their mental health and academic performance appearing to go hand in hand. For such postgraduate students there are particularly high risks; these students spend prolonged periods of time in stressful academic situations increasing their chances of exposure to mounting stressors and potential for academic burnout, and decrease in general output (Hossain et al., 2022).

As a final point, the findings highlight the fact that workload, research demands, and the graduated nature of the supervisory relationship are among the main academic-related stressors experienced by postgraduate students. It is critical to comprehend how these academic factors contribute towards stress in order to provide recommendations on the ways in which stress in postgraduate students can be reduced and how they can cope with their workload and academic obligations in a more efficient manner (Mofatteh, 2020).

2.5 Physical Factors

As in undergraduates, it appears postgraduate students are also stricken by various physical and psychological stressors stemming from their academics that invariably affect their performance and quality of life. Long study hours, lack of sleep and physical activity are cited as leading the postgraduate students to net deficits in health. These not only affect the health of students but further incurs additional psychological cost of stress that creates a compounding effect of physical and mental stress (Byrom et al., 2020). Further studies indicate that physical health problems of fatigue, headaches, and gut issues are characteristic of students attending to heavy academic work, thus weakening their overall stress management capacity (Peng et al., 2022).

The level of sleep quality is one of the worrisome physical factors that seem to increase stress among postgraduate students. According to Alhusseini et al. (2022), individuals who were scored poorly in the quality of their sleep were also reported to experience the presence of stress, anxiety, and even depression. It also enhances the argument by the fact that irregular or less sleep impacts the ability of an individual to carry out cognitive processes making it even more difficult for students to concentrate properly, grasp concepts, and perform optimally in their studies. Late-night studies and stress

that leads to insomnia are some of the factors that lead to poor sleep hygiene, which further create a cycle because deprived sleep may result in poor performance both in academics and mentally for students (Alotaibi et al., 2020).

Sleep is not the only requirement for maintaining stress levels, other lifestyle factors such as regular physical activity and nutrition are essential as well in postgraduate students. It has also been observed that engaging in physical activity is effective as an anti-stressor as it helps to release endorphins, which are useful in enhancing the moods and reducing anxiety (Asturias et al., 2021). A majority of postgraduate students, however, experience difficulty in keeping up with an exercise regimen due to academic commitments as a result stress may increase. Bad eating routines such as missed meals or eating fast food in a rush because of lack of time may also adversely impact the physical and mental health of students further impacting their stress tolerance (Saleem et al., 2022).

Stress among postgraduate students can also be a product of certain environmental conditions. Examples of these conditions are noise, accessibility of study areas and other campus resources. According to Hossain et al. (2022), students in an environment that was less disruptive and stimulating were able to study without stress because studying did not require much demand. In contrast, students with less than ideal conditions to live or to study reported that they were unable to cope with the academic work that was expected of them due to stress and factors affecting their time management.

Even so, previous findings add to the emerging notion of a dual burden of depression among students and suggest that sleep and habits like activities that prepare the active student woman and post graduate student are among social determinants of health. The

correlation between sleep and depression has been well documented however it is important to highlight the social determinants which perhaps have a greater bearing on the mental wellbeing of students. (Mofatteh 2020).

2.6 Hypothesis Devolpment

2.6.1 The relationship between social factor and stress

A great body of empirical research has been dedicated to the examination of the relationship between stress and its determinants—social, academic, and physical—in relation to postgraduate students' well-being. What has remained consistent in social factors studies was the fact that those with strong social ties tended to be among the low stress levels. For instance, families within cohesive networks put stress due to objectives in perspective, whereby Peng et al. (2022) observed that students with good friends and family reported lesser stress. In the same manner, Allen et al. (2020) discovered that the students who had conflicts in their social networks, especially their supervisors or other faculty member social relationships, would exhibit a higher stress level and lower academic satisfaction. These results further emphasize the role of social networks in the lowering of such stressors especially within an academic context where interaction between students and their peers and supervisors is instrumental.

H1: There is a significant relationship between social factors and stress among postgraduates students at the university

2.6.2 The relationship between academic factor and stress

Based on the relevant literature, postgraduate students have been reported to experience stress due to heavy workloads and the pressure to perform to set expectations and standards. For the sake of better performance, students began to combine courses, research work and deadlines, and in this connection, Scholarly work by Wong et al. (2023) established that academic engaging worked towards an elevation of stress levels. Based on a more recent study of Asturias et al. (2021) high levels of perceived academic stress also makes students more likely to experience a lack of motivation and low productivity which typically leads to burnout. Hence, these academic stressors severely affect the wellbeing of students and suggest the need for focused interventions in the form of academic support services targeted at stress management and academic workload.

H2: There is a significant relationship between academic factors and stress among postgraduates students at the university

2.6.3 The relationship between physical factor and stress

Other than workload, physical factors also include poor sleeping habits that have been identified as a cause of stress among students. They explain that poor living standards and sleep equilibrium can magnify stress and tilt the balance of students towards ineffective performance in meeting academic and social demands. For instance, Alhusseini et al. (2022), found that there is a relationship between lack of sleep, higher levels of stress and anxiety, and impaired cognitive functioning which all in the long run affect students' academic performances negatively. This is consistent with Byrom et al. (2020), who explain that students who exercised regularly and had proper

nutrition reported significantly lower levels of stress and had an overall mental well-being. Outlined in these studies about students and stress, becomes critical when managing stress and it is prudent to further encourage such healthy living habits as a strong focus in stress management programs.

H3: There is a significant relationship between physical factors and stress among postgraduates students at the university

2.7 Theoretical Framework

Analyzing the stressors of postgraduate students necessitates a theoretical approach that encapsulates the complexities linking the individual to his environment. This particular study employs Lazarus and Folkman's Transactional Model of Stress and Coping (1984), a psychological approach that explains 'the process of stress management is based on the individual's assessment of the situation' as it is one of the most used frameworks. According to the model, stress is incurred upon self when there is a gap between the resources offered to a person and the expectation placed upon a person to utilise that resource. At the same time, post graduate students deal with a plethora of stressors, such as, academic, social, and even self care. This would suggest that the model is relevant when trying to understand stress, as well as coping strategies within this population.

The Transactional Model of Stress and Coping operates on base of two essential processes which are cognitive appraisal and coping. Cognitive appraisal describes the process through which a person understands or evaluates a situation and determines whether it is stressful. This goes on in two levels, primary appraisal, and secondary appraisal (Lazarus & Folkman, 1984). In the primary appraisal, people address

whether an event is stressfully relevant, benign-positive, or an irrelevant event. If it is considered stressful, a further distinction is made as to whether it constitutes a challenge, a threat, or a potential loss. In the secondary appraisal, people evaluate the resources they have to respond to the stressor. Those that believe they have inadequate coping resources will feel a higher level of stress which can result in psychosomatic and emotional distress.

Postgraduate students often have to deal with stressors which require them to constantly evaluate and adjust themselves accordingly. Coping challenges that revolve around thesis writing, publications, course work, and research do foster an environment of threat or challenge (Asturias et al., 2021) . Students, who lack sufficient resources like time, academic support, or money, and are unable to cope, become more stressed (Byrom et al., 2020). On the other hand, students who consider stress to be a challenge and assume that they have the necessary resources to cope with it tend to manage stress more effectively.

The second major component of the Transactional Model of Stress and Coping is coping techniques, which can be analyzed in terms of emotion-focused coping and problem-focused coping (Lazarus & Folkman, 1984). As the term suggests, problem-focused coping refers to actions taken to manage the source of stress. For instance, one can employ effective time management, academic planning, and guidance from peers, as well as additional resources from the university (Saleem et al., 2022). Numerous postgraduate students intend to use alongside academic counseling and constructive study scheduling in order to minimize academic stress.

Regarding emotion-focused coping mechanisms, these strategies are especially useful when one is not in control over the stressor and accepts the situation as it is. These

methods consist of actively seeking social support, rest, or reinterpretation of the stressors to less harmful metaphors (Peng et al., 2022). Surprisingly, the postgraduate students dealt with the academic and personal stress by social support networks from their families, peers, and even faculty mentors. (Lisnyj et al., 2021). Students mostly focus on seeking support from peers socially compensating for their lack of control over the stressors. An example would be when one faces unreasonable delays and bad interactions with supervisors, often termed as gatekeepers to their academic success.

The Transactional Model of Stress and Coping is important for this study because it accounts for the differences in stress levels among postgraduate students who experience the same academic pressure. Folkman and Lazarus' (1985) model illustrates that stress is a subjective phenomenon and that people react depending on their cognitive appraisal of the situation and their coping strategies. High research expectations, for example, may be viewed as an opportunity for academic growth by some students, while they could also be viewed as an overwhelming burden which leads to anxiety or emotional distress. This model also helps to clarify why some postgraduate students manage to demonstrate resilience to burnout or stress-related health problems while others struggle with it.

There is ample evidence to suggest that academic facets add to the stress of postgraduate students. Research shows that postgraduate students have a heavier academic load, more complex research prerequisites, and greater self-study expectations than undergraduates, all of which make stress levels. The Transactional Model of Stress and Coping explains a lack of coping focused, problem-solving strategies such as effective time management or academic planning indicate an increased vulnerability to stress (Hossain et al., 2022). Proactive copers, on the other

hand, who seek out help from other faculty members, participate in peer study sessions or attend research skills workshops are more likely to manage academic stress.

It can aid in the analysis of the influence of social aspects on the level of stress. Many postgraduate students feel stress due to social isolation, inadequate peer support, and the distance in the supervisor-student working relationship (Alotaibi et al., 2020). According to the Transactional Model of Stress and Coping, students that utilize emotion-focused coping like reaching out for emotional support to family, friends, or utilizing university counseling services are more successful in managing stress (Mofatteh, 2020). This reveals the fact that to solve the problem of postgraduate student stress, social support is very important.

Additionally, elements like lack of sleep, bad lifestyle choices, and minimum physical activity all impacts stress management. Alhusseini et al. (2022), argue that people facing extreme exhaustion, both mentally and physically, severely lack resources to cope with the struggle, which is explained by The Transactional Model of Stress and Coping (2010). Studies claim that students with adequate sleep, exercise, and proper diet are capable of formulating adaptive coping strategies (Peng et al., 2022). Therefore, as part of the stress management schemes, universities should start integrating initiatives that promote overall wellbeing.

The relevance of this model to the current study is further strengthened by evidence which shows that stress is not only determined by external demands, but shaped by the perceptions and coping strategies employed by subjects. As the model suggests, students who are able to apply coping strategies report feeling less stress compared to their peers who do not apply such strategies and are overworked (Byrom et al., 2020). This has critical consequences to the policies and strategies many institutions of higher

learning would like to implement to alleviate stress. The institutions can assist postgraduate students by providing counseling services on stress, mental health, mentorship services, and academic workshops that encourage problem-focused coping and emotion-focused coping.

In summary, the Transactional Model of Stress and Coping by Lazarus and Folkman gives context on the experience of stress among postgraduate students from University Utara Malaysia. The model operationalizes theory through cognitive appraisal, coping strategies, and social support as elements for stress management. Using this model, the current study seeks to address the gap of understanding the interplay of social, academic, and physical factors that are triggers of stress among postgraduate students to suggest interventions that can address their as well with the findings aiding the increasing concern in research of mental of higher education students and the policies for supporting the academic community better.

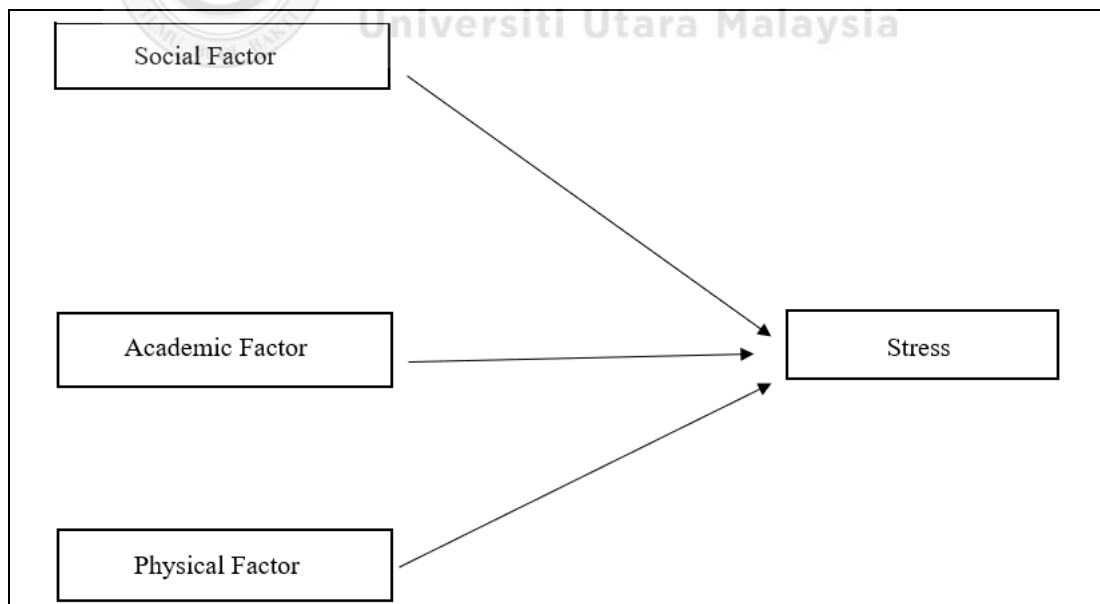


Figure 2.1
Research Framework for Study

2.8 Summary of Chapter

In Chapter two, the researcher focused on previous empirical works which investigated various key factors associated with stress which postgraduate students experience and grouped them into three sections including: stress as related to social factors, stress as related to academic factors and stress as related to physical factors. It was established that Social Factors as peer relationships, family assistance, or the student's cooperation/ support from supervisors considerably impacted students' work as stress management. The academic factors which included work pressure, stresss of research expectations, and provision of supervisory support were also recognized as apparent stressors since graduate education is intensive. Physical factors enlisted include health habits, sleeping habits, and environmental conditions, which were studied as well, but with an emphasis on aggravating stress. Also, this chapter focused on the theory of stress with the transactional model of stress and coping as the one selected to serve as the framework for the study owing to the emphasis placed on cognitive appraisal and coping strategies. Subsequently, Chapter Three explains the approach that was taken in the research process for this case study. Such as, the research design, sampling techniques, data collection techniques, and data analysis procedures, all of which were necessary since they gave an organized way of dealing with the variables that cause stress among postgraduate students at University Utara Malaysia.

CHAPTER THREE

RESEARCH METHODOLOGY

3.1 Introduction

The objective of this research is to delve into the relationships between social, academic, and physical circumstances and stress among university postgraduate students. In particular, it looks into the relations with peers; the relationships with supervisors; the academic variables related to workload and research activity; and the lifestyle ones, such as health, how they influence stress levels in this group. The type of this research is descriptive and correlational, and uses a cross-sectional survey design approach in which a questionnaire is administered online to collect data from postgraduate students on the stated research variables. The analysis provided statistical correlation coefficients for each independent variable correlating with stress which gives a better understanding of what causes the stress for a postgraduate student. In view of the above, the present study attempts to address the gaps and thereby contributing to the development of various effective stress management techniques which are needed in an academic environment.

3.2 Research Design

This study adopts a cross-sectional study to assess the effect of social, academic and physical independent variables on stress as a dependent variable among postgraduate students. The cross-section design was adopted since it permitted collection of data at a single point in time to show the current stress levels and stressors among the targeted students. It is suitable for achieving the objectives in that, it provides a way of

establishing relationships amongst variables within a particular population without the need of a sequential study which takes time and resources.

In order to streamline the process of data collection and enhance its pin point and precision, the study administered the survey measures through Google Forms. Using Google Forms makes the survey quicker and easier allowing graduate students to complete the survey at their own convenience. Google Forms was used because of its ease of use and access, suitability to different types of devices so that participants would fill the questionnaire without any geographical and logistical constraints.

The gathered data in this research was analyzed using SPSS (Statistical Package for the Social Sciences) as one of the tools. SPSS is popularly accepted in quantitative research owing to its statistical analytical capabilities with the use of large data with precision and accuracy. Descriptive statistics were used to analyze the demographic characteristics of the respondents in relation to their social and economic status. Moreover, the correlation and regression statistical tests have also been used to analyze the relationship between the independent and dependent variables enabling the researcher to make sense of the data.

3.3 Measurement of Variables/Instrumentations

The instrument, for example, is a measuring tool, questionnaires or scales designed to obtain data on topics of interest to the research.

Table 3.1
Construct and Sources of the Instrument

Variable	Cronbach's Alpha	Instrument
Social Factor	0.79	Ahmad. M. Thawabieh and Lama. M. Qaisy(2012) 7 items scale Likert scale that range from 1=strongly disagree to 5=strongly agree
Academic Factor	0.84	Ahmad. M. Thawabieh and Lama. M. Qaisy(2012) 13 items scale Likert scale that range from 1=strongly disagree to 5=strongly agree
Physical Factor	0.83	Ahmad. M. Thawabieh and Lama. M. Qaisy(2012) 11 items scale Likert scale that range from 1=strongly disagree to 5=strongly agree
Stress	0.87	Perceived Stress Scale by Sheldon Cohen 10 items scale Likert scale range from 0=never to 4=very often

3.4 Data Collection

The current research is based on data obtained through an online survey it conducted using a structured questionnaire administered to graduate students. The strategies to be used in gathering the information were outlined in the previous sections ensuring that the information obtained would be accurate and representative of the target population.

To begin with, the questionnaire was constructed using validated scales specifically aimed at accomplishing the purpose of the study which was to determine how social, academic and physical environments relate to stress levels. The completed questionnaire was thereafter placed on Google Forms owing to its convenience and ease of use to the respondents who were able to take the survey from their homes at their own time.

According to Krejcie and Morgan (1970), the target sample size of 200 was estimated using their recommended population and sample size table which is relevant and useful in various population sizes. This sample size was chosen in order to maximize the statistical strength of the study and to minimize the hurdles associated with its data collection. It is possible to increase reliability and generalizability by having a larger sample size and for a study with the target population as postgraduate students in a University 200 responses will give an excellent dataset for good statistical analyses.

To study the target population, the researcher used institution email listings and social media pages of postgraduate students at the university to share the link of the survey. Potential participants were also sent an invitation specifying the aims of the study and instructions for completion of the survey, with the link remaining open for a certain number of days in order to motivate participants to take part.

With regards to the ethical issues of the investigation, it was emphasized to participants that their responses would be treated in the manner that no one is able to tell who gave which response and they were each told to answer the questionnaire on their own. After the data collection period, the data provided by the respondents were analyzed. When analyzing the responses, incomplete responses were deleted so as to arrive at a clean data set ready for analysis. A total of 200 completed responses were obtained which were analyzed using the SPSS software with descriptive and inferential analysis being the focus of the analysis in determining the variables' relationships.

3.4.1 Closed-ended Questions

The types of questions when the available choices were predefined are the so-called closed ended questions where a respondent is limited to a pre-coded choice only (Mathers et al, 2007). Self-contained closed questions are often highly structured. This is the case because they tend to produce frequencies which can be statistically treated and analyzed and are less time-consuming to analyze and code than analyses based on descriptions of people in their own words (Cohen, et al., 2011). The comparison of respondents from different groups in the sample is also possible (Cohen et al., 2011). With respect to the current investigation's closed-ended questions' advantages it may be pointed out that they provided particular response options and thus all participants responded in the same terms. These questions are not open-ended, which must contain special instructions, therefore answers to them are also more focused than to the above two questioned and in that sense more consistent understanding of the question and the required answer can be expected by the respondent (Colosi, 2006). Therefore, closed questions are used in the present study as they permitted the researcher to elicit frequencies on the career choice determinants which were straightforward to interpret.

3.5 Population and Sampling

This section describes the target population and sampling methods used in this study, providing a rationale for the sample size, sampling technique, and unit of analysis.

3.5.1 Population

The population that is the focus of this study are postgraduate students at University Utara Malaysia. These students were chosen because they encounter extra stressors that undergraduates do not have, including greater academic workload, pressure to conduct research, and the need to juggle between studies and family. Each postgraduate student is the unit of analysis for this research because the research seeks to know the feelings of every student about stress and the reasons behind such feelings. As Sekaran (2000) explains, population is the unit(s) or event(s) that a researcher hopes to study in detail and in this case, is focused on the experiences of postgraduate students in relation to the wider population of academics. The exact figure of how many postgraduate students there are at the university was however not stated in the study but it is understood to be quite enough so as to provide for a reasonable sample that is likely to reflect this population.

3.5.2 Sample Size

For the purpose of this research, this study used a sample size of 200 postgraduate students. Krejcie and Morgan (1970) provided specific guidelines that have been followed in this study. They are credited with developing a table that is universally applicable for determining the sample size required for a specified range of populations. It is acceptable that for larger populations a sample size of 200 is enough

to provide reliable statistics and achieve generalizability with an acceptable level of error. According to Evans (2000), the number of cases studied in a sample will affect the level of accuracy of research findings, with a satisfactory compromise of a sample of 200 being that, allowing for reasonable statistical tests, conducted practically without too much strain.

Respondents in this research were selected through the random sampling technique. The method was chosen because random sampling guarantees that every postgraduate student in the defined population has the same opportunity to be chosen, thus reducing sample selection bias and improving the sample representativeness. In the random sampling described by Frerichs (2008), individuals in a population are chosen in a random way, using either a cell-phone number generator or a random number table, so that everyone stands a chance of being selected. It is for this reason that random sampling is appropriate for this study as it elicits varying views on stressors and hence the findings; will be applicable to the wider population of postgraduate students. Another benefit of random sampling is that it enhances external validity whereby the study's outcome is representative of different aspects within the students of the university, their areas of study, physical and social attributes and even experiential factors

3.6 Techniques of Data Analysis

This study employed the Statistical Package for Social Sciences (SPSS) in the analysis of the data collected. It is most appropriate to consider SPSS due to its reliability, flexibility, and frequency of employment in quantitative research, which requires an appraisal of levels or relationships of more than two variables. There is no expectation that the target sample size of 200 complete responses will be met hence 200

questionnaires augmented by additional ones will be given as a way of addressing the problem of non-responses and incomplete responses. However, only fully completed questionnaires will be used in the analysis of the final data so as to uphold the quality and accuracy of the data collected.

The data analysis will be analytical in three stages: first stage is descriptive analysis, which aims at giving a summary of the characteristics of the participants of the study, followed by Pearson correlation analysis which aims at exploring the strength of linear relationship of the study variables, and finally multiple regression analysis which aims at assessing the net effects of independent variables on stress.

3.6.1 Descriptive Analysis

Applying descriptive functions will summarize the key features of the sample with objectives such as central measures (mean, median) and dispersion measures (standard deviation, variance). In this study, descriptive statistics will be employed in order to analyze demographic variables – age, gender, education level, income level – and render the profile of the respondents. This first stage of the analysis will provide the necessary overview as regards the profile of the sample and establish relationships among the demographic variables so as to prepare the grounds for addressing the research questions.

3.6.2 Pearson Correlation Analysis

The inter-dependency of social, academic and physical impact factors and stress, viewed as dependent variable of the study, will be established using Pearson correlation. As stated by Coakes et al. (2006), correlation analysis is a method of

measuring how strong the relationship is and which way it goes between two continuous variables. Quantifying the username data factors with Pearson correlation, the aim of the study will be to show whether each type of factor has a significant association with level of stress. This explanation will first of all help specify the prediction based on an understanding of whether each individual impact factor is related to stress or not, as well as to its degree.

3.6.3 Multiple Linear Regression Analysis

Using multiple linear regression analysis, the study seeks to measure the effect that social, academic and physical factors have on postgraduate students' stress levels. It also involves the assessment of more than one independent variable at a time with the aim of finding out their effect on the dependent variable. According to Coakes (2006), multiple regression belongs to the family of correlation family of analysis but adds onto it the perspective of external influences providing additional contextual information about each of the predictors and how it relates with the dependent variable.

To the end of interaction of more than two variables which are stress—dependent, multiple regression analysis will be great for the determination of the extent to which social variables, academic variables and physical variables contribute to the variance of the dependent variable stress in the proposed study model. This way the researcher will be able to appreciate the magnitude and significance of factors' impact on stress when all three factors are modeled together. As noted by Hair & Anderson (2010), multiple regression is quite useful in studies with more than one independent variable since it determines the individual contribution of each independent variable and assists in the identification of the key contributors. Outlined in this way, it will assist in designing interventions because it shows determinants that should be emphasized in

stress measures in academic institutions or regions and the resources that need to be concentrated more in academic institutions regions.

3.7 Summary of the Chapter

In Chapter three, the research methodology related to the association existing between social, academic and physical variables and stress experienced by postgraduate students, was reviewed. In this chapter the research design, population and sample, data collection and tools for data analysis have been explained in detail. Statistical Package for Social Science (SPSS) will be used to carry out descriptive analysis, Pearson's correlation, and multiple regression analysis in which demographic information, interrelationship between variables of the study and moderating effect of the variables on stress will be covered. These methodological steps serve to enhance valid and reliable sources of assumptions that can provide useful evidence to assist in addressing the problem of stress in academic environments.

CHAPTER FOUR

RESULTS AND DISCUSSION

4.1 Introduction

This chapter discusses the results of the research, focusing on the interaction of social, academic, and physical factors with regard to postgraduate students stress levels at University Utara Malaysia (UUM). What follows is a clear presentation of results in a frame that is designed to fit the objectives of the study and the hypotheses which were proposed at the beginning of the study. The chapter begins with descriptive analysis, which generally provides a detailed profile of the respondents by the demographic characteristics. This is followed by Pearson correlation analysis which looks at the degree and the direction of the association between the independent variables: social, academic, and physical factors and the dependent variable which is stress. Lastly, the results of the multiple linear regression analysis are subjected to tests of significance in order to explain the joint relationship of the independent variables and the dependent variable, that is the level of stress and the best predictors of stress. With the help of these analyses the chapter is intended to further articulate the factors that lead to stress experiences among postgraduate students with an aspect of further expanding the discourse on stress management in educational contexts. The findings lay the basis of the discussions and recommendations which are aimed at reducing stress levels while promoting the general welfare of postgraduate students.

4.2 Descriptive Analysis

4.2.1 Demographic Variable

Descriptive statistics were used to depict the sample profile demographic data. The variables included gender, age, year of study, study term, marital status, program of study, and study funding. Each of the demographic variables is, in turn, discussed below with relevant visual displays for better understanding.

4.2.1.1 Gender

With respect to the gender distribution, 63.5% of the respondents were females, while 36.5% were males which shows that there are more female students pursuing postgraduate programs. This larger number of female students corroborates the trend of growing number of women pursuing higher education in Malaysia.

Table 4.1
Gender Distribution of Respondents

Gender	Frequency	Percentage
1.Male	73	36.5
2.Female	127	63.5
Total	200	100.0

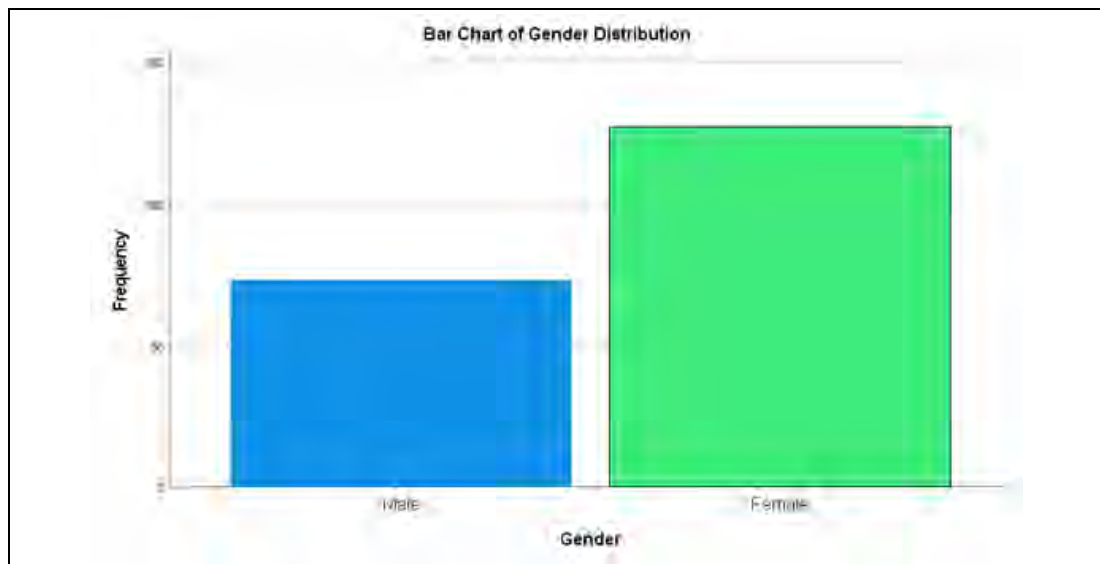


Figure 4.1
Bar Chart of Gender Distribution

4.2.1.2 Age

The majority of the respondents were aged between 28 and 32 years (33.5%), followed by those aged between 23 and 27 years (25%). Age above 43 was reported by a smaller number of participants (7%). This distribution suggest that UUM postgraduate students are of early to mid career or work prospects.

Table 4.2
Age Distribution of Respondent

Age	Frequency	Percentage
1.23 – 27	50	25.0
2.28 – 32	67	33.5
3.33 – 37	39	19.5
4.38 – 42	30	15.0
5.43 and above	14	7.0
Total	200	100

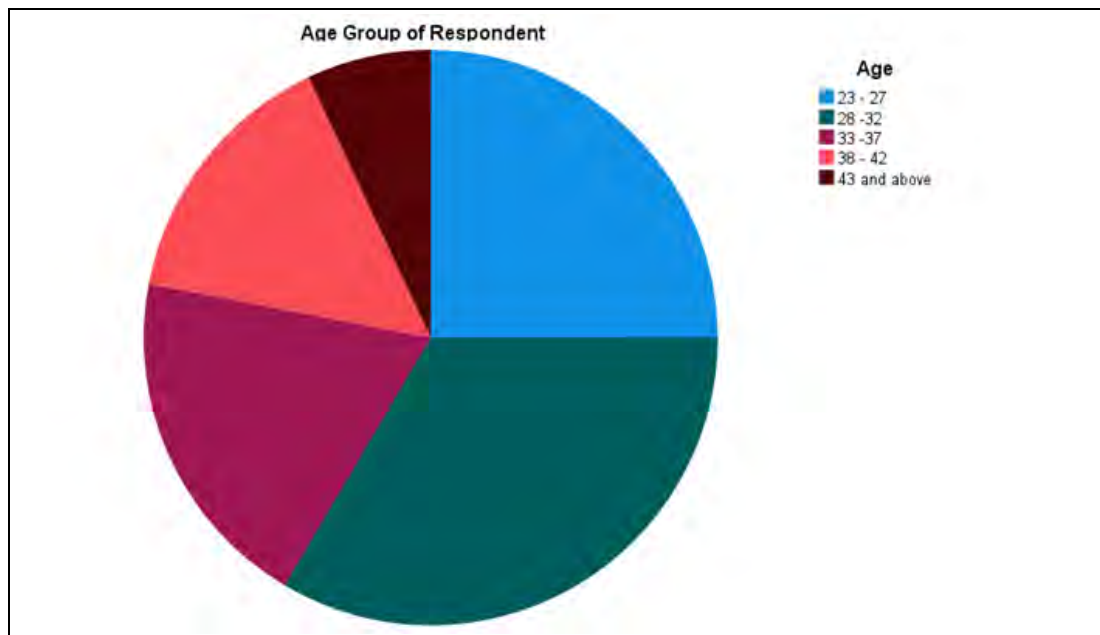


Figure 4.2
Age Distribution of Respondent

4.2.1.3 Year of Study

The distribution of the student population across the various academic years was skewed towards the third year where the majority (30%) were located. Students in the first year constituted 28.5%, whereas those in the fourth year and above were the least represented at 15.5%. The distribution of the respondents indicates a good coverage of all the stages of the postgraduate education.

Table 4.3
Year of Study Distribution of Respondents

Year of Study	Frequency	Percentage
1.First Year	57	28.5
2.Second Year	52	26.0
3.Third Year	60	30.0
4.Fourth Year and Above	31	15.5
Total	200	100

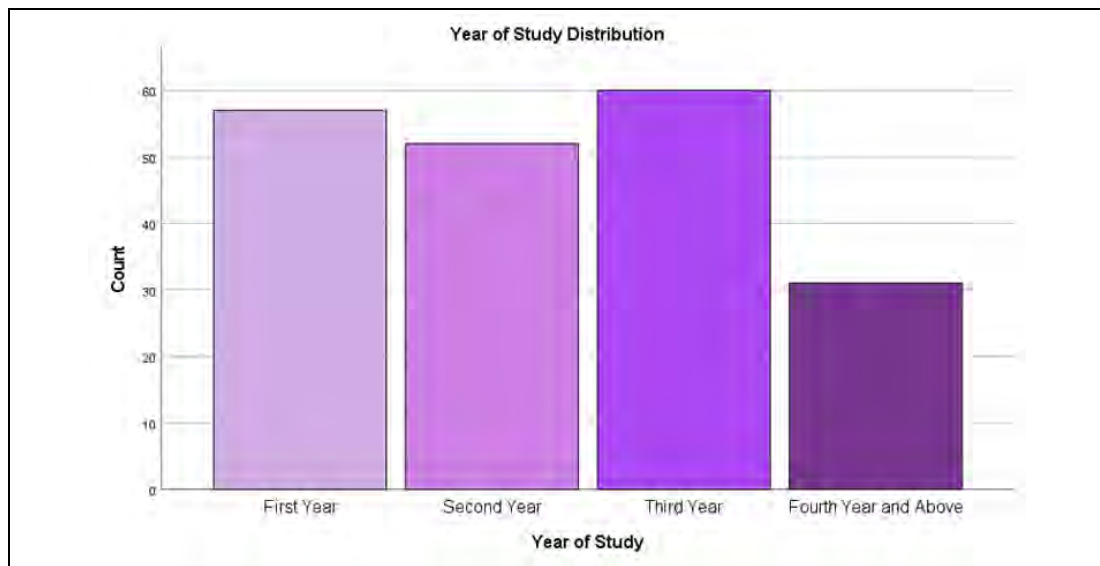


Figure 4.3
Year of Study Distribution of Respondents

4.2.1.4 Study Term

The proportion of part-time students (51.5%) slightly exceeds that of full time students (48.5%) This highlights the flexibility associated with postgraduate programmes which is critical for working students. This equilibrium emphasises that at UUM, there are other clients who combine work and their other commitments with education.

Table 4.4
Study Term Distribution of Respondents

Study Term	Frequency	Percentage
1.Part Time	103	51.5
2.Full Time	97	48.5
Total	200	100

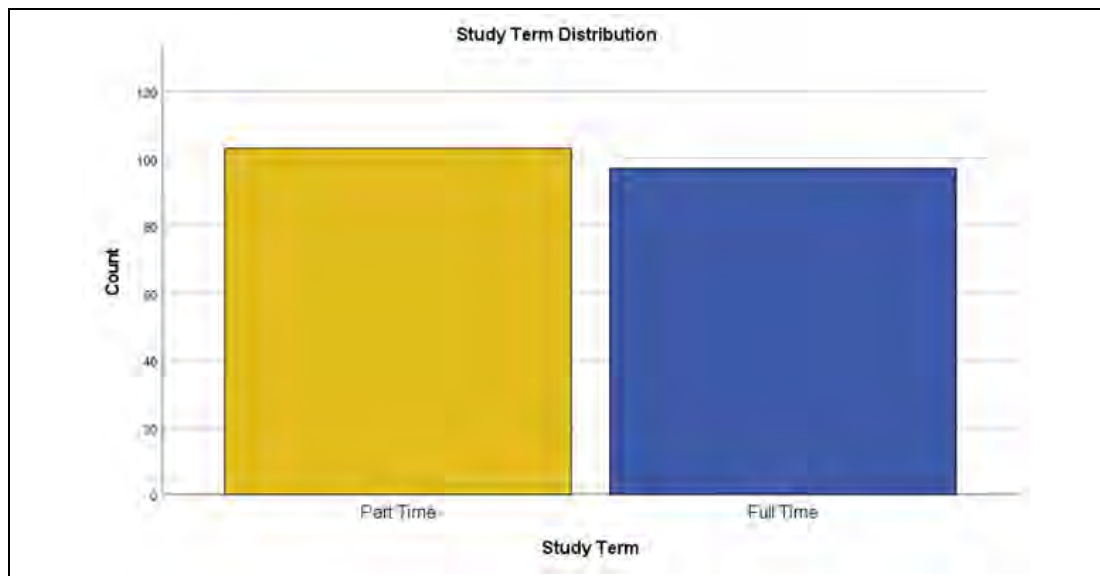


Figure 4.4
Study Term Distribution of Respondents

4.2.1.5 Marital Status

The majority of respondents (65.5%) were single, while 33.5% were married. Respondents who identified as 'others' were very few and only accounted for 1%. Such a demographic feature indicates the different life cycles of postgraduate students who in many instances combine education with family life.

Table 4.5
Marital Status Distribution of Respondents

Marital Status	Frequency	Percentage
1.Single	131	65.5
2.Married	67	33.5
3.Others	2	1.0
Total	200	100

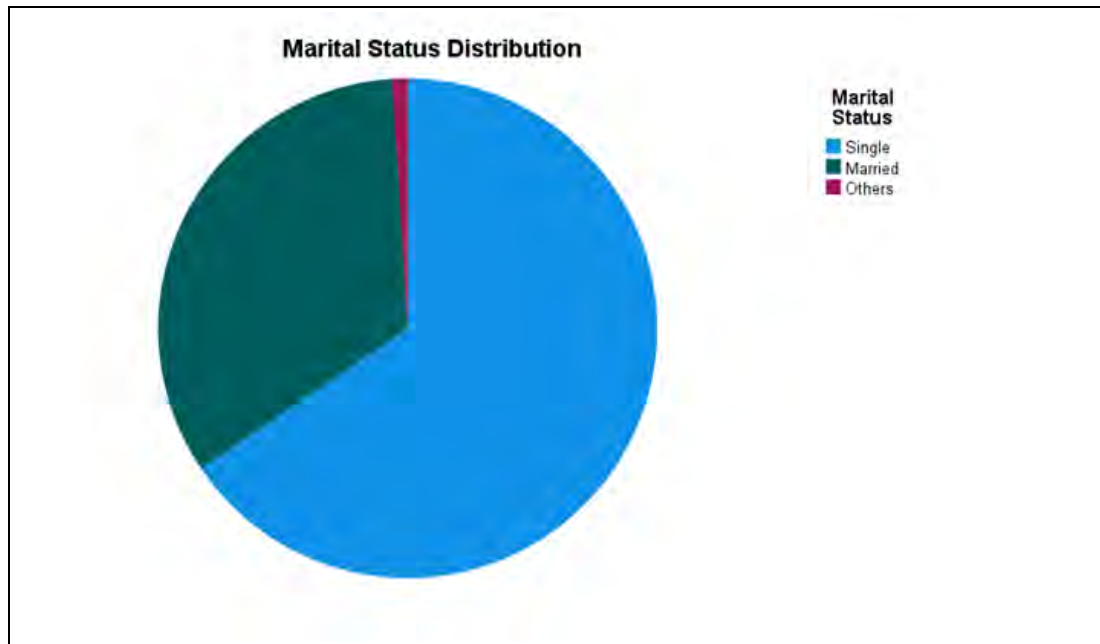


Figure 4.5
Marital Status Distribution of Respondents

4.2.1.6 Program of Study

The program that most of the respondents indicated was in the Master's in Science (Management) (38%) followed by those who enrolled in the Master's in Finance (18%). Smaller proportions were enrolled in programs such as International Business, and in Human Resource Management. This distribution depicts a well-known trend in postgraduate education whereby management related programs are in great demand.

Table 4.6
Program of Study Distribution of Respondents

Program of Study	Frequency	Percentage
1.Accounting	4	2.0
2.Finance	9	4.5
3.Human Resource Management	3	1.5
4.International Accounting	1	0.5
5.International Business	2	1.0
6.Management Science	11	5.5

Program of Study	Frequency	Percentage
7.Masters in Finance	36	18.0
8.Masters in Human Resource Management	2	1.0
9.Masters in International Accounting	19	9.5
10.Masters in International Accreditation	2	1.0
11.Masters in International Business	26	13.0
12.Masters in Islamic Finance & Banking	3	1.5
13.Masters in Public Management	2	1.0
14.1Masters in Science (Management)	76	38.0
15.PhD	4	2.0
Total	200	100

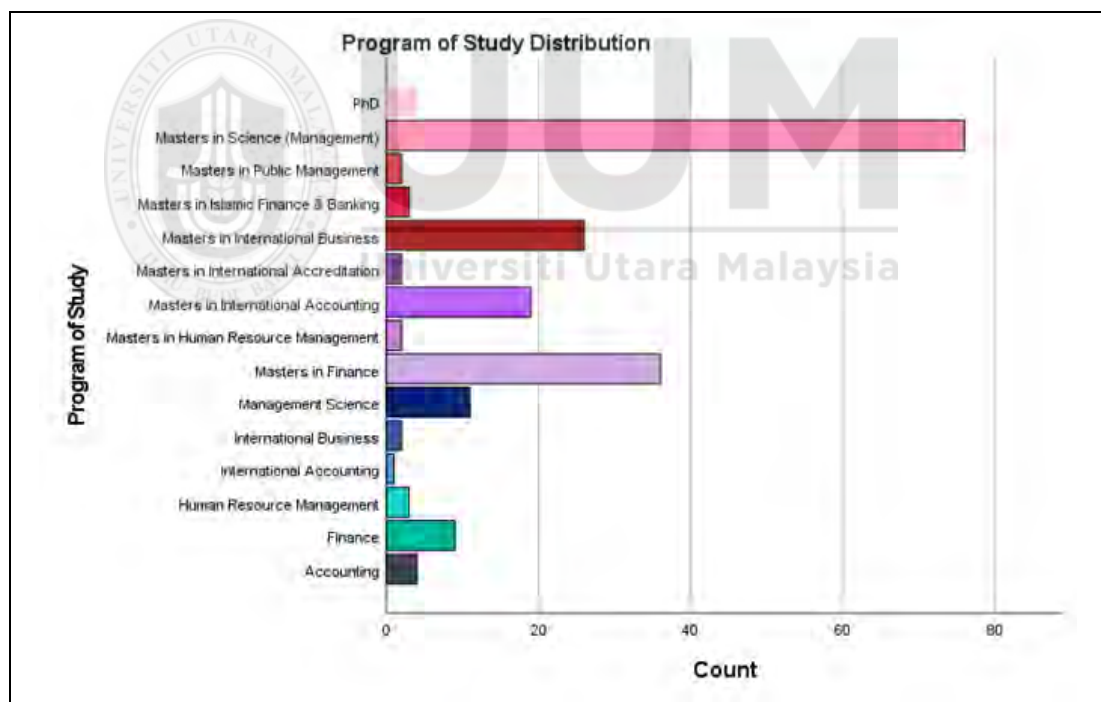


Figure 4.6
Program of Study Distribution of Respondents

4.2.1.7 Study Funding

The most prevalent source of finance were self-funds at 57.5% with company support coming second at 25%. Other sources were loans and scholarships which represented

the smallest ratios, suggesting an inclination to the use of personal or family means to finance education

Table 4.7
Study Funding Disribution of Respondents

Study Funding	Frequency	Percentage
1.EPF/KWSP	3	1.5
2.Family	50	25.0
3.Family & Self-Funding	2	1.0
4.Loan	12	6.0
5.Office Scholarship	7	3.5
6.PTPTN	1	0.5
7.PTPTN & Self-Funding	2	1.0
8.PTPTN & Office Scholarship	1	0.5
9.Scholarship	4	2.0
10.Self-Funding	115	57.5
11.Sponsorship	1	0.5
12.Not Applicable	2	1.0
2.Family	50	25.0
Total	200	100

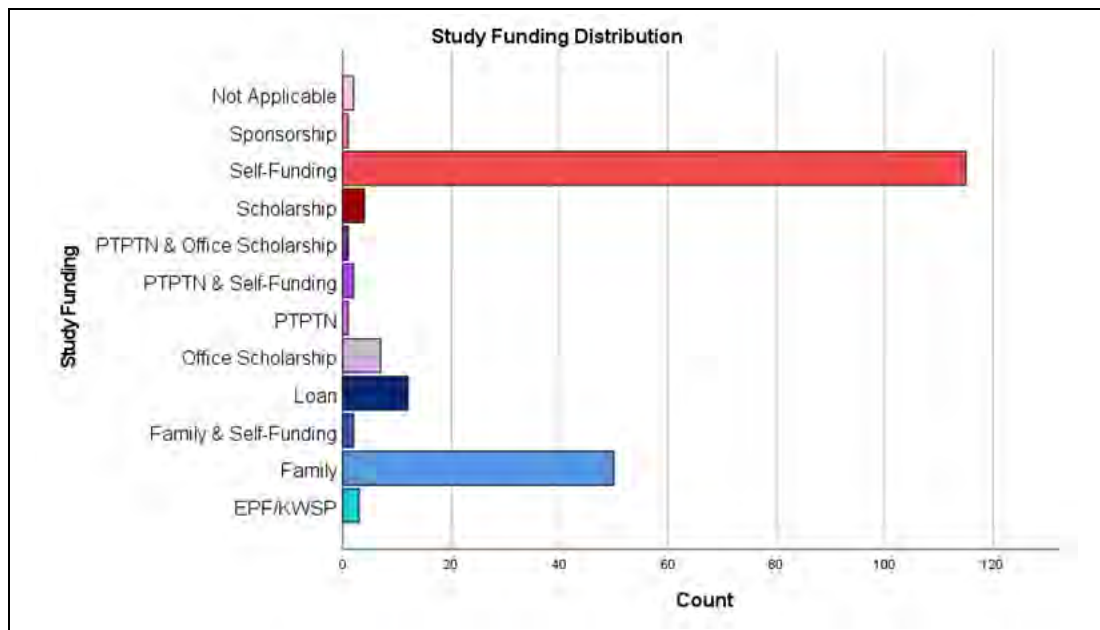


Figure 4.7
Study Funding Distribution of Respondents

4.2.2 Reliability Analysis Table

Table 4.8
Reliability Statistics

Scale	Cronbach's Alpha	N of Items	Status
Stress (DV)	.811	10	Good
Social Factor (IV1)	.974	7	Good
Academic Factor (IV2)	.930	13	Good
Physical Factor (IV3)	.727	11	Good

The reliability analysis of the stress scale along with Social Factor, Academic Factor, and Physical Factor scales provides vital information about the internal consistency of the study's measurement tool. Researchers used Cronbach's Alpha as their statistical tool to determine the degree of interrelatedness among groups of items. This study's analysis serves to confirm construct measurement coherence and stability which forms the basis of psychological and social science research. The findings from all four scales demonstrate robustness and generalizability due to the consistent analysis of 200 valid

cases without excluding any data. Researchers consider a sample size of 200 adequate for internal consistency analysis because it ensures the responses collected are both representative and complete.

The stress scale includes 10 items which demonstrated a Cronbach's Alpha value of .811. The obtained Cronbach's Alpha score shows the Stress scale falls within the "good" range of accepted standards which demonstrates that the scale items are properly inter-correlated and successfully represent the Stress construct. When Cronbach's Alpha scores over .8 it shows that the survey items function effectively and produce reliable responses across various participants. The findings confirm this scale's reliability for Stress measurement research particularly within educational, health and workplace evaluation contexts. The instrument's section demonstrates dependable results for inferential analysis because respondents show consistent understanding and interpretation of Stress-related survey questions.

The Social Factor scale reached an outstanding Cronbach's Alpha value of .974 using just seven items. The excellent reliability shown here brings up a potential issue of item redundancy. In psychometric research, reliability scores exceeding .95 can indicate that certain items share too much in wording or substance which leads to inflated reliability measures. The Social Factor scale remains a highly robust and consistent tool for evaluating social influences or support systems despite potential concerns about redundancy. The Social Factor scale demonstrates uniform responses as participants interpret questions on social interactions and peer support or societal pressure in the same way. The scale shows high dependability for future studies investigating connections between social environments and psychological outcomes like Stress or motivation.

The scale measuring academic factors which consists of 13 items achieved a Cronbach's Alpha of .930 indicating excellent reliability. The items assessing academic Stressors demonstrate strong internal consistency with related constructs. The scale demonstrates high reliability in measuring various academic challenges including workload management and examination demands. The internal consistency of this scale remains strong despite containing more items than comparable scales which shows that each component meaningfully supports the construct. This scale demonstrates reliability which makes it suitable for academic Stress research in student populations or educational institutions that study the impact of academic burden on mental health and academic performance.

The Physical Factor scale which includes 11 items demonstrated a Cronbach's Alpha of .727. This scale has the lowest score but maintains an acceptable reliability level since it exceeds the .70 threshold standard for exploratory research. The moderate Alpha value suggests that the items within this scale display less cohesion compared to other scales because interpretations of "physical factors" could include diverse elements such as sleep, exercise, diet, physical health, and energy levels. Researchers should analyze item-total correlations for this scale to identify less consistent items and to explore possible revisions or eliminations that could enhance reliability. Despite its current Alpha value the scale remains functional for analytical purposes especially when used for exploratory or descriptive research.

The reliability analysis demonstrates that all four scales maintain internal consistency which makes them appropriate for quantitative research applications. The differences in Cronbach's Alpha scores indicate the complex and specific nature of the measured constructs. Researchers can trust the results from STRESS, Social Factor, and

Academic Factor scales because they demonstrate strong to excellent reliability which supports advanced statistical analysis through regression, structural equation modeling or factor analysis. Although its consistency is lower than other measures the Physical Factor scale can still function and indicates areas for enhancement in later versions of the survey tool. Researchers should recognize that while high internal consistency is advantageous it must be considered alongside content validity. When values reach extreme levels they can create redundancy between items which diminishes data depth and risks simplifying complex constructs.

The full validity of all cases ($N = 200$) without any data exclusion across scales confirms the results' integrity. Complete responses from all participants on each scale remove missing data bias and enhance findings' overall relevance. Maintaining a consistent sample size across all scales establishes a stable foundation for comparison which minimizes variability that inconsistent response rates or missing data might create.

These findings provide practical value to researchers, educators, psychologists, and health professionals who need reliable tools to assess abstract concepts such as Stress, social influence, academic pressure, and physical well-being. The results demonstrate that this instrument functions reliably within these research contexts allowing for sound decision-making and intervention strategies. When academic and social factors significantly impact student Stress levels researchers must accurately measure these constructs to support programmatic modifications and institutional reforms.

The SPSS reliability output proves that the study's measurement tool achieves both statistical validity and practical usability. The internal consistency of all four measurement scales falls between acceptable to excellent levels based on Cronbach's

Alpha scores which range from .727 to .974, thereby proving the measurement tool effectively captures essential psychological and environmental factors. Further analyses can move forward with confidence since the constructs show reliable measurement while future research should work to improve the Physical Factor scale until its reliability meets that of the other constructs.

4.2.3 Descriptive Statistics for Other Variables

This section of the report describes the descriptive statistics of the key variables in this study, which are: stress, social factors, academic factors and physical factors. It shows the values of minimum, maximum, mean and standard deviation for all variables and includes graphical descriptions for clarity.

Table 4.9
Descriptive Statistics Table for Key Variables

	Min	Max	Mean	Std. Deviation
1.Stress	1.00	4.60	2.9985	0.41280
2.Social Factor	2.14	4.71	3.3900	0.24752
3.Academic Factor	1.00	5.00	2.6788	0.56434
4.Physical Factor	1.00	3.73	2.3059	0.44041

4.2.3.1 Stress

The analysis of the descriptors shows that, on average, stress among postgraduate students is 2.9985 with a standard deviation of 0.41280. The lowest score is 1.00 while the highest score is 4.60; this shows that on average, students do experience stress but a little bit moderate. This stresses the divergence in the degree of stress suffered by the

respondents. Figure 4.8 illustrates the incorporation of responses of students with their relative mean. The Figure shows the distribution of the reported stress levels.

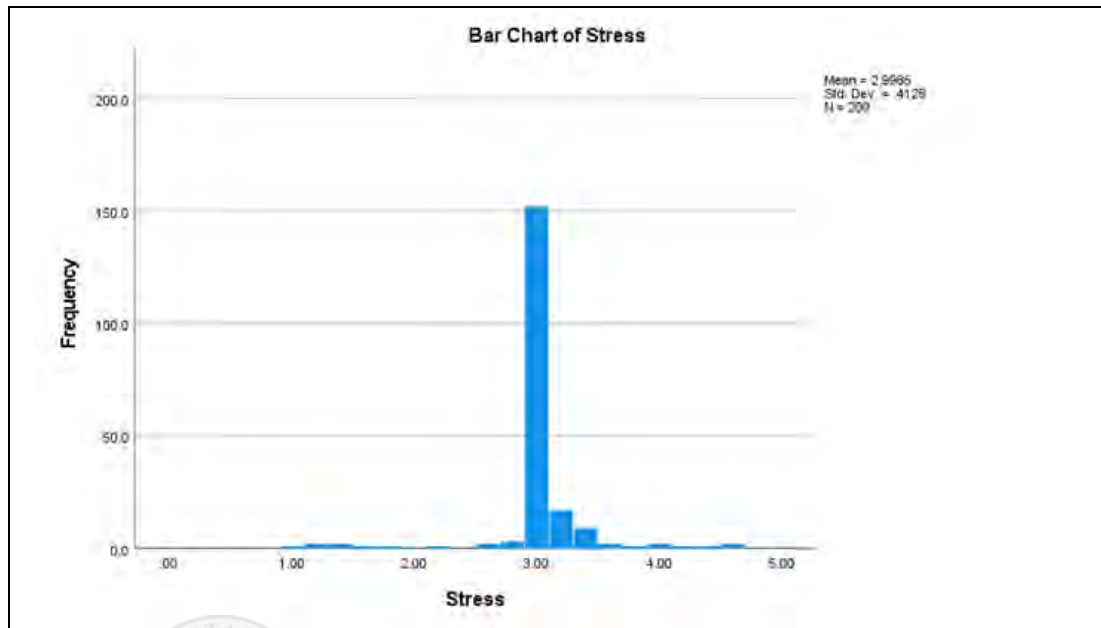


Figure 4.8
Bar Chart of Stress

4.2.3.2 Social Factors

The social factors variable's scores have a mean of 3.3900 and standard deviation of 0.24752, with the lowest score being 2.14 and the highest score being 4.71. The high mean shows that the support and relations as social factors scored quite highly among the respondents. Figure 4.9 illustrates the distribution of scores, with most responses clustering toward the higher end of the scale.

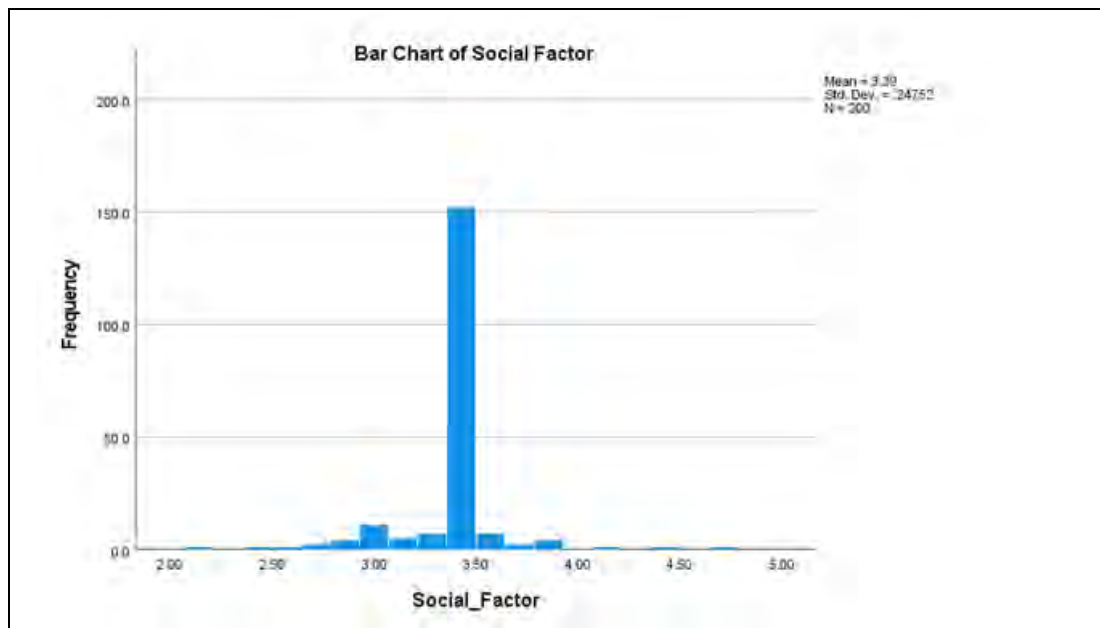


Figure 4.9
Bar Chart of Social Factors

4.2.3.3 Academic Factors

Academic factors have average scores of 2.6788 and a standard deviation of 0.56434, the lowest being 1.00 and the highest 5.00. This broad spectrum indicates variability in the respondents' academic lives and difficulties faced. A graphical illustration of the distribution is provided in Figure 4.10, which indicates a sizeable number of people who manage to achieve moderate academic success.

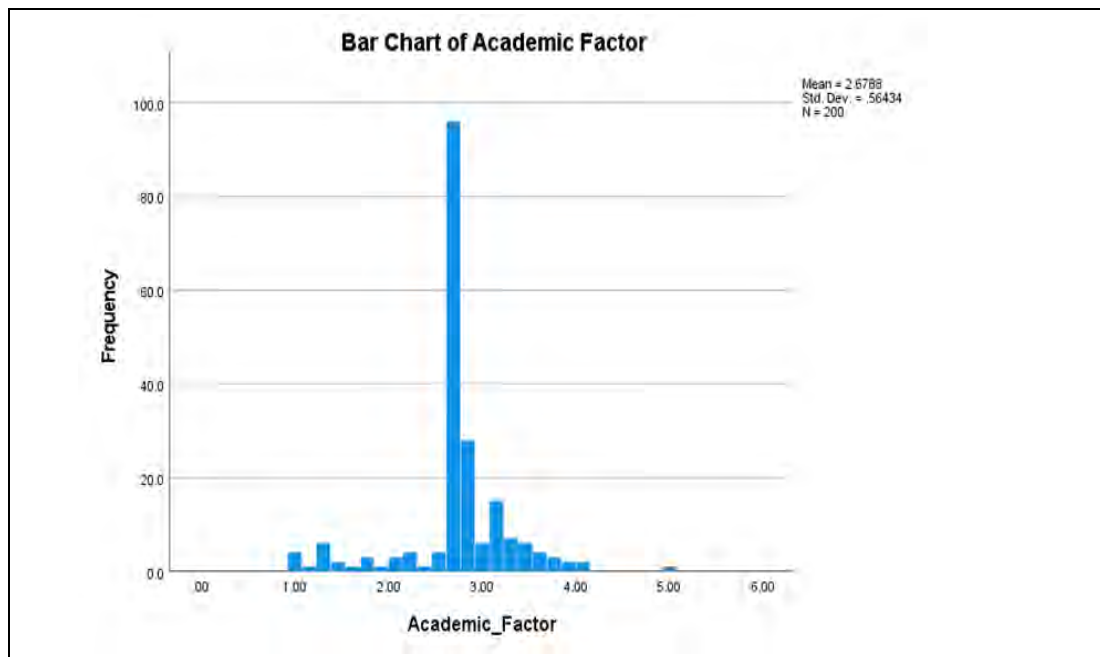


Figure 4.10
Bar Chart of Academic Factor

4.2.3.4 Physical Factor

The average score for physical factor is 2.3059, the standard deviation is approximated as 0.44041. The scores knowledge scores were between 1.00 and 3.73, which shows the extent to which physical factors, like health and environmental factors, affected the respondents. The frequency distribution of physical factors is depicted in Figure 4.11

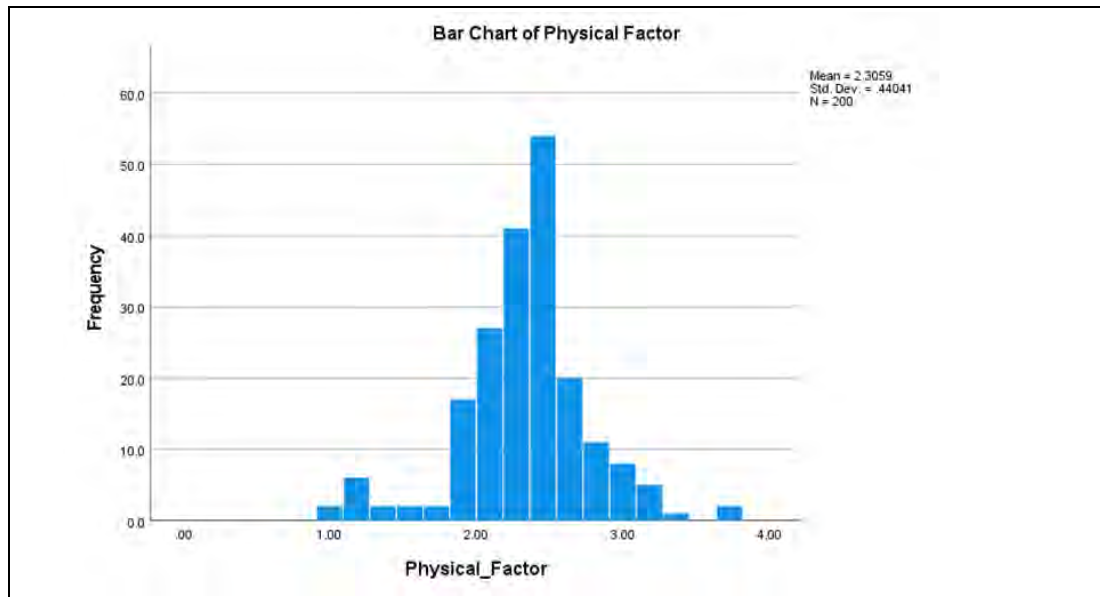


Figure 4.11
Bar Chart of Physical Factor

4.3 Pearson Correlation Analysis

The Pearson correlation analysis was conducted in order to determine the relationships existing between the dependent variable which was stress and the three independent variables which were social factors, academic factors and physical factors. This analysis is critical in the context of the study as it enables the researcher to achieve the objective of determining how these variables affect stress levels among the postgraduate students. The correlation coefficients and their significance levels are presented in Table 11 below.

Table 4.10
Pearson Correlation Coefficient for Stress and Independent Variables

		Stress	Social Factor	Academic Factor	Physical Factor
Stress	Pearson Correlation	1	-0.274	0.492	0.513
	Sig. (2-tailed)		<0.001	<0.001	<0.001
Social Factor	Pearson Correlation	-0.274	1	0.060	-0.141

		Stress	Social Factor	Academic Factor	Physical Factor
	Sig. (2-tailed)	<0.001		0.396	0.047
Academic Factor	Pearson Correlation	0.492	0.060	1	0.541
	Sig. (2-tailed)	<0.001	0.396		<0.001
Physical Factor	Pearson Correlation	0.513	-0.141	0.541	1
	Sig. (2-tailed)	<0.001	0.047	<0.001	

4.3.1.1 Relationship between Social Factors and Stress

It was reported that there is a negative correlation between stress and social factors ($r = -0.274$, $p < 0.001$). This indicates that as social factors increase, stress level decreases. Social factors in a Part C questionnaire included the liking of social interactions, the need to engage with other people, as well as the occurrence of anxiety or conflict when interacting with others. For instance, questions like “I enjoy meeting people” and “I have relationships with other relatives and friends” were indicative of social acceptance, while items like “I always have conflicts with others” and “I deal with others nervously when provoked” point to a negative interpretation of social interactions.

The current results are consistent with previous evidence regarding the role of social support in providing relief from stress. In their studies Hossain et al. (2022) indicate that strong social bonds function as stress relievers since they provide emotional, instrumental and informational support. In the case of postgraduate students, the capacity to establish contacts with now and career partners and them, as well as family, seems to reduce the psychological stress imposed by self-discipline and studies themselves.

This study shows how these variables may also intertwine with social aspects such as support and stressful relationships, i.e. coworkers or managers. Although they do provide encouragement to work on certain tasks and be successful, too much of it may have the complete opposite effect. To illustrate this point, students pursuing postgraduate programs may drift into extreme isolation due to shifting locations or even multiple activities. Such problems emphasize the need for active measures from institutions so that they can genuinely assist distribution in good social relationships among students through mentorship programs, networking, or other socially oriented means. This is noteworthy especially in relation to Objective 2, which aims at determining the effects of social factors on stress levels. The results support the hypothesis of adding social support as a means to increase stress resilience, and this in itself reveals sources for intervention

4.3.1.2 Relationship between Academic Factor and Stress

Stress and academic factors were found to be positively associated with a correlation coefficient of ($r = 0.492$, $p < 0.001$) such that when academic stress increases, the student stress also increases. These factors relate to the academic performance of the respondents as indicated in the part D such as inability to cope with the course work load, spending on university, academic problems that the students are not able to solve, and general lack of motivation or self-belief and confidence in struggling with academic tasks. Responses such as "My coursework is piling up, and I cannot finish it" and "I feel helpless in dealing with academic problems" were strongly affirmed by the respondents' accounts.

The result corroborates with the past work of Asturias et al. (2021) in which it emerged that postgraduate education-rushed has its unique exposure to high-brow pressure that

is mostly related to timelines, the amount of work to be done, and the level of research that the scholar is expected to deliver. The situation is further exacerbated by the lack of sufficient resources to make ends meet. Also the emphasis to perform at the required level at all times and make contact with the supervisors is an additional cause for academic stress (Alotaibi et al., 2020).

Significantly, this relationship also suggests systemic difficulties that exist within the academic setting. For instance, students often express challenges when trying to obtain academic materials, supervisor's requirements are vague, and the absence of the institution's help, and in effect, they increase anxiety. The findings highlight the importance of resolving this issue by universities developing anti-structural policies which give sufficient information about academic and research activities.

This result also goes directly to the achievement of Objective 3 which investigates the role of academic factors on stress. The importance of the correlation also highlights the need to mitigate the academic stressors in the first place by means of effective strategies like the provision of research assistance, second, prompt submission dates and students being constantly kept in the know what faculty members want.

4.3.1.3 Relationship between Physical Factors and Stress

In this research the strongest relation between variables stress and physical factors were observed in the study with the positive correlation of $r= 0.513$, $p<0.001$. Part E of the constructed questionnaire addressed the concerns of some aspects of sleep, general body fatigue, headaches, and physical discomfort in general. The symptoms reported by the participants include, but are not limited to, the following: "I feel tired," "I can't sleep", "I suffer from daily headaches."

This result points out the importance of the physical health aspect with regard to the factors that mediate stress. Stress is known to stem from various factors and low sleep status is a good example of these. Alhusseini et al. (2022), and Peng et al. (2022) claim that cognition, problem solving and one's general feelings of being helpless are all enhanced by sufficient sleep and decreased muscle fatigue, whereas the contrary is true for insufficient levels of sleep. In the same manner, physical issues that include headaches, fatigue, and backache have been shown by Byrom et al. (2020) to provide stress and serve as effects of stress also thereby providing a vicious cycle that is hard to break.

It is warranted to provide evidence to substantiate the previously given reasoning by explaining the phenomenon under consideration. In this case, the observed work-related physical stress and its high levels could be explained by the lack of balance between work and personal life among postgraduate students. A number of them pursue education while working in part-time jobs, looking after the family, and doing other commitments which doesn't allow them to have time for themselves. Furthermore, the educational process itself is limited in terms of taking care of students' physical health, since it involves many hours of work in front of desks, very few opportunities to engage in fitness activities, and a low focus on healthy living.

This evidence relates to the stressor, what was specified in **Objective 4**, regarding the role played by physical factors in the existence of stress. The findings point to the necessity for institutions to make efforts in a serious manner and education the students on the importance of their physical health, encouraging them to engage in routine bodily exercises, and ensuring the provision of orthopedic facilities in the institutions' libraries or study areas.

4.4 Multiple Linear Regression Analysis

This sections takes a comprehensive analysis from the multiple linear regression results with regards to the social, academic and physical predictors and the level of stress among the postgraduate students of University Utara Malaysia (UUM). The analysis determines the relevance of these predictors, thus explaining in greater detail the nature of stress and its factors. The findings are equally appraised regarding the purpose of the investigation and the literature to enhance the appreciation of the results.

The summary model in Table 4.10 indicates the extent of predictive power of the regression model, R value = 0.625, implying that a moderate relationship exists between the independent variables and the stress. The R-squared value of 0.390 confirms that 39 percent of the variance in stress levels within the sample population of postgraduate students can be accounted for by the total effect of social, academic, and physical factors. The adjusted R-squared value of 0.381 further sustains the strength of the model even after the model's degree of freedom is considered. These findings demonstrate the importance of these predictors but point out that there could be other, unaddressed, possible variables which might affect stress levels of the students which are consistent with how stress is explained in the literature.

Table 4.11

Model Summary Table Showing the Relationship between Independent Variables and Stress

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	0.625	0.390	0.381	0.32477

According to the findings of ANOVA provided in Table 4.11, it can be concluded that the regression model is statistically significant. This can be backed up by an F-value of 41.831 along with p-value less than 0.001. This proves that the model has the ability

to explain stress among postgraduate students and confirms its worth in helping meet the research aims. Stress is in fact shaped by the combined effects of social, academic and physical factors given that the significance of the regression model tended to support the formulated hypothesis.

Table 4.12
ANOVA Table Illustrating the Overall Significance of the Regression Model

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	13.236	3	4.412	41.831	<0.001
	Residual	20.673	196	0.105		
	Total	33.910	199			

The relation of each predictor to the criterion is further observed in Table 4.12 which is a coefficients table. Social factors tend to have a greater degree of inverse relationship with stress as a beta standardized coefficient of -0.255 with a t-value of -4.463 was recorded which is significant at $p < 0.001$. This implies that the greater the social support the lesser the stress experienced by individuals. For instance, questionnaire items such as “I enjoy meeting others” and “I have relationships with other relatives and friends” are indicative of positive social relationships that are likely to reduce stress. In contrast to the above, items that are conflict oriented for example “I always have conflict with others” are likely to increase stress levels. This is consistent with the work of Alotaibi et al. (2020) who also found that the provision of social support is crucial in fighting off stress.

Stress has been shown to have a positive correlation with academic factors having a t-value of 5.252 and having a standardized beta coefficient of 0.353 which is significant at $p < 0.001$. This reveals the stresses caused because of educational challenges such

as financial issues, coursework requirements, and concern about grades. For example, items such as “My coursework is piling up, and I cannot finish it”, and “I feel stress and mental fatigue from the large number of homework/coursework” highlight these problems. These findings are consistent with results from Byrom et al. (2020), and Asturias et al. (2021), who reported that academic workload was an area of concern in regard to stress.

Stress also has a positive correlation with physical factors with a standardized beta coefficient of 0.286 and with a t-value of 4.220 which were both statistically significant at $p < 0.001$. This means that stress is also caused by health conditions like headaches, fatigue, and lack of sleep. Stressors like "I suffer from daily headaches" and "I can't sleep" concentrate on such physical barriers. These results are consistent with the findings of Peng et al. (2022), which also advocated the role of health problems on stress levels and general well-being.

Table 4.13
Coefficients Table Detailing the Individual Contributions of Social, Academic, and Physical Factors to Stress

Model	Standardized Coefficient	t	Sig.
1 (Constant)		8.757	<0.001
Social Factor	-0.255	-4.463	<0.001
Academic Factor	0.353	5.252	<0.001
Physical Factor	0.286	4.220	<0.001

In conclusion, the multiple regression analysis elucidates factors that contribute to stress and their causes at a postgraduate student, there are several social, academic, and physical stressors as these factors are identified as crucial in the model. These contributions of findings meet not just the objectives of the study but also the wider

scope of research on one hand and practice on the other, as the findings provide practical recommendations on the best ways of enhancing the academic experience and wellbeing of postgraduate students.

4.5 Summary of the Chapter

This chapter discussed the factors that in one way or another contribute to stress among postgraduate students at University Utara Malaysia. A combination of descriptive, correlation, and multiple regression analyses were used to address the questions set out in the study. Noteworthy descriptive findings illustrate the onset and spread of stress and the determining factors which are, social, academic and physical among participants. Pearson Correlation was also beneficial in establishing the relationship between these factors and stress where social factors had a negative relationship whereas academic and physical factors had positive relationships. The regression analysis indicated that these factors were indeed significant predictors of stress, accounting for 39% of variation in this measure with academic factors being the first followed by physical and social factors.

CHAPTER FIVE

CONCLUSION AND DISCUSSION

5.1 Introduction

This chapter provides a conclusion to the research, as it merges the insights that were derived from the research that focused on the stress levels of postgraduate students at University Utara Malaysia (UUM). The stress levels and their relevant predictors which were: social, academic, and physical, were put under scrutiny with an expectation of achieving the research aims and objectives with the aid of strong statistical methods. The research increased awareness of the multiple aspects of life functioning that explain stress responsiveness in postgraduate students. The information contained in this chapter is structured in the following manner: First, this chapter begins with a summary of the findings. Second, the implications of the study for practice, policy and future research are discussed. The limitations experienced throughout the research are also mentioned, so that the reader understands the contextualization of the findings. Finally, recommendation for future research and the overall conclusions of the paper are formulated by pointing out the importance of the study to the academic discourse on stress and student well-being.

5.2 Summary of Findings

The stress experienced by postgraduate students at University Utara Malaysia (UUM) is accentuated by the context factors that shape the experience. To answer the research questions in this study, it captures the multidimensional constructs of stress in the

academic setting and as such adds to the body of knowledge and practice of stress management.

The first research objective, identifying the relationship between level of stress among postgraduate students at UUM, was achieved through the descriptive analysis of stress-related responses. It is evident from the results that there were low to moderate levels of stress that students experienced most notably because of increased endless tasks, unexpected academic workload, and an uncontrollable life situation. These findings are important as they support the former whereby postgraduate students have to grapple with the pressures of stress, also backing research across the globe that cites educational institutions and in particular postgraduate programmes as being stress laden environments (Yoo & Marshall, 2021; Hossain et al., 2022). Stress among the sample group could also be seen from the items included in the questionnaire with notable ones being ‘In the last month, how often have you been upset because of something that happened unexpectedly?’ and ‘How often have you felt difficulties were piling up so high that you could not overcome them?’ The results further indicate that stress among postgraduate students is widespread implying that they are faced with challenges in managing their studies and personal life to avoid stress.

The second objective, examining the relationship between social factors and stress level, was addressed through correlation and regression analyses. A significant negative correlation was found between the factors based on social interaction with the stress factor measuring it's evident that social support structures are quite useful to cope with stress For example, students who expressed a positive attitude towards social interaction, as well as keeping their friends and family, reported low levels of stress. On the other hand, the students living in the state of those who had regular fights or

were lonely were more stressed out. This further supports what other researches have reported on that social orientation tends to act as a buffer of stress (Peng et al., 2022; Allen et al., 2020). Certainly, the findings are noteworthy as they tend to answer satisfactorily the research question, “How do social factors influence stress levels among postgraduate students?” The data stresses that there is a great necessity for the universities to encourage social support systems, relationships between students and their teachers and other forms of peer interactions to soften the level of strain in the academic setting.

The third objective, determining the relationship between of academic factors and stress level, revealed that academic pressures are among the most significant predictors of stress. Results from regression analysis reflected that there is a positive correlation between academic aspects such as concern with excessive coursework, shortage of finances and the level of stress. For instance, students often articulated statements like “I experience stress and mental exhaustion due to the excessive amounts of homework/coursework that I have” and “I find it difficult to formulate constructive ways out of my academic challenges”. Such findings are consistent with the developed literature, on how the level of academic workload and the pressure to carry out research activities are the leading sources of stress among postgraduate students (Byrom et al., 2020; Asturias et al., 2021). The outputs not only answer the research question, “What is the nature of the linkage between academic factors and stress among students?” but also point out the potential areas of focus regarding the stressors, like more flexible deadlines, attention to academic advising and financial support.

The fourth objective, evaluating the relationship between physical factors and stress level, revealed a significant positive relationship between physical health issues and

stress levels. Students described constantly experiencing stress and physical symptoms such as headache and difficulty in sleeping, which directly enhanced their stress level. For instance, questionnaires such as "I suffer from daily headaches" and "I feel tired" were some of the most reported statements. The result is consistent with existing literature which shows that physical health problems are linked to experiencing more stress with regards to the interrelationship of physical and mental health (Peng et al., 2022; Mofatteh, 2020). This finding attempts to answer the question posed in relation to, "How do physical factors influence stress levels among postgraduate students?" Moreover, this evidence reinforces the argument for the implementation of health-promoting strategies such as fitness programs, wellness workshops, improved campus facilities to promote better physical health of the students.

To sum up, the findings show that all the three components - social, academic, and physical - have a significant effect on the stress level of the postgraduate students. Every factor adds up differently to the overall stress experience with the academic factors being the stronger inclination, physical factors supporting them, and social factors being the last to correlate. The research met its goals and all the research questions were answered adequately. The findings not only add to the understanding of stress dynamics in UUM but can also be used in the management of postgraduate stress in other similar academic environments. The study reveals the importance of a multi-dimensional approach and explains why targeting social, academic and physical factors could allow students to succeed in both their studies and private life. These findings are important to policymakers and university management in formulating practical stress management measures that will suit the needs of postgraduate students.

5.3 Implications of Study

5.3.1 Theoretical Implications

This study aims to strengthen the works of Lazarus and Folkman (1984) as it discusses coping strategies as part of the appraisal process of stress and confirms that postgraduate students do not interact with stress stimuli in a mindless way. Analyzing the results of this research leads to the conclusion that learners who consider their academic, social, and physical stressors to be manageable, experience lower levels of stress, while students who consider these stressors to be overwhelming tend to struggle more. This highlights the role cognitive appraisal plays in the study of stress and suggests that further research should be conducted on how students' individual perceptions shape their stress experiences.

The second theoretical implication is that this study is likely the first attempt to bridge the gap of an understanding of postgraduate-specific stressors that have been clearly differentiated from the undergraduate stressors. Most existing research tends to discuss general academic stress; this research, however, highlights specific postgraduate stressors: the amount of research work, the nature of supervisory relations, and societal expectations concerning academic achievement. This differentiation is important because it will enable future research model and framework development aimed at postgraduate students instead of applying the generalized student stress models which are likely to misrepresent the postgraduate experience.

5.3.2 Practical Implications

The initial practical ramifications of the study relates to the provision of academic support programs to alleviate the stress of postgraduate students. Since stress is brought about by the balance of academic workload, coursework, and research obligations, universities should adopt policies that are of an administrative nature, such as greater flexibility on deadlines, better supervision of research, and workshops on time management and academic writing. Taking these actions would enable students to manage the challenges associated with postgraduate education more efficiently.

The second practical implication is social support and general student health and welfare. The focus for this analysis was on social ties including peer, family, and even their financial support and how they help in ameliorating stress. The universities need to foster such environments where students can meet and interact by setting up mentorship activities, networking opportunities, and organized support groups. These actions will enhance social interaction among postgraduate students and give them a better chance to deal with their academic and personal problems.

The third practical implication focuses on the need to develop policies for mental health and wellness at the institutional level. In addition to worrying, postgraduate students reported issues with their physical health, including not being able to sleep and being overly tired. Universities need to act by incorporating mental health awareness campaigns, easily accessible counseling services, and stress management programs. Furthermore, relaxation spaces, wellness workshops, and other physical activity promoting initiatives should be developed by universities to help students foster a healthy lifestyle.

5.4 Limitations of the Study

This research using the Google Forms Survey instilled comprehensive information regarding the causes that lead to the stress of post graduate students of University Utara Malaysia (UUM). But, there are some limitations that need to be stated so that interpretation of the findings remains unbiased.

Leafing through the exploration, one of the most highlighted limitations was the uttering hardening retrieval of figures from institutional sources or even verified databases. This was limited with this study where data was collected via google forms through self-reporting means. And whilst self-reporting measures are fast, effective and efficient for capturing personal perspective, they do not have the Trump that official reports do, which is factual accuracy. As a result of being unable to have institutional figures such as the stress index or even number of enrollment, there was only so much less stress resourcing recruiting literature could do in context of finding prospects. Collaborations in the area in question with institutional bodies to have raw data at disposal will go such a long way in plugging that research hole for the future.

Moreover, the broad reach of the participants ended up being one of the constraints, resulting into limited meso-eco level representation. The survey method aided in the collection of responses with sufficient knowledge and time to fill in the forms, however this was a voluntary exercise and the respondents select themselves, and as a result it is a possibility that some groups among the postgraduate cohort are either over or underrepresented - which may have affected the accuracy of the final results. It can also be put that this exclusion of respondents is due to internet and basic IT Skills creation that is needed for participant selection, data sorting and eventually data gathering.

Time considerations were also significant in relation to the research process. The data collection and processing time available, and the analysis, also limited the breadth of research into some of the more detailed stress factors. For example, there was no opportunity for longitudinal studies or follow- ups in the participants so as to track shifts in patterns in the study period. This limitation indicates the possible advantages that future studies can have in this area in providing a longer timeframe.

Also, the current research was limited to quantitative data only which, while beneficial in pointing towards trends and interrelationships, is devoid of the richness that qualitative information provides. The same could have been achieved with the use of interviews or focus groups to help understand even more better the intricate and individual ways of defining stress among postgraduate students. To the extent that the quantitative data was somewhat limited, qualitative data would help to fully investigate the motivation factors and instances of self-harm or help-seeking behaviour, as reported.

In spite of the aforementioned challenges, this study contributes to the understanding of stress and its determinants among postgraduate students in a noteworthy fashion. Considering these limitations in further studies may increase the credibility and wider applicability of the research findings, hence leading to better targeted interventions and strategies for postgraduate students in higher education.

5.5 Recommendation for Future Research

Future work on stress among postgraduate students can start with the findings of this research, by overcoming any limitations of the study and investigating other factors

that may add to the context. Several key points are proposed as guidance for future studies in this area.

First, future empirical studies should work towards integrating the quantitative survey with qualitative approaches such as in-depth interviews and focus group discussions. This current study utilized survey data which was only self reporting, however qualitative data would help to better understand the lives of the respondents and the details of their stresses. For example, interviews would help in finding out how students view academic-related stress, social stress, physical stressors as well as how they cope with stressors. This would provide more comprehensive and contextualized information.

Second, future researchers should seek to work with higher education institution where students are drawn from in order to obtain credible institutional information. This partnership could provide actual data, for example, real enrollment data, grades, scores or even drop outs which would help the researcher put together the picture and find stronger correlations between stressors and academic performance. Such agreements would increase the significance and relevancy of research results and enhance the quality of policy formation through evidence based approach.

Third, it is necessary to conduct longitudinal studies to understand how stress and its determinants change over time. This study was a cross-sectional one, in which students were surveyed once, but with the help of the longitudinal design, it would be possible to analyze not only the level of stress, identify new patterns, in this case, the effectiveness of the implemented measures, but also the dynamics of chronic stress. This method would be particularly useful in exploring the relationship between stressors occurring at different intervals and their total effects on students at various

levels of the postgraduate curriculum followed by the comprehensive explanation of the phenomena.

Furthermore, in future studies additional scope for research could be broadened to be more inclusive and representative of this population. In this case, interventions should be aimed at minimizing self-selection bias by random sampling, stratified sampling aimed at an even spread of international, part-time, and trans-classed students. Such representation would enable a deeper understanding of the factors contributing to stress among the postgraduate students' population.

Another aspect that is interesting to explore is the relationship between students' stress experience and the institutional and environmental aspects. More researches could look into how the policies of the university, students' aids and the ambience of the campus affect the rate of stress. This research might provide good ideas on how to practically tackle the problem of stress, by examining the efficacy of stress management techniques such as mental health counseling, support programs, or academic rearrangements.

Following these recommendations will enable the future research to fill gaps in our knowledge about the phenomenon of the stress of the postgraduate student, and inform the effectiveness of practices designed to promote student health and enhance academic performance

5.6 Summary of the Chapter

This study has contributed to the understanding of the relationships of social, academic and physical factors with stress level among postgraduate students at University Utara Malaysia. The results established significant associations between these variables and

stress which were the aims and objectives of the research. Their qualitative research findings, although having some limitations regarding the statistical figures and time constraints, point to the need for specific policies and organizational aid that would lessen the stress level and improve the postgraduate level of education. All these aspects allow the universities to create a comprehensive academic setting which enables students to thrive, remain healthy and achieve their goals.



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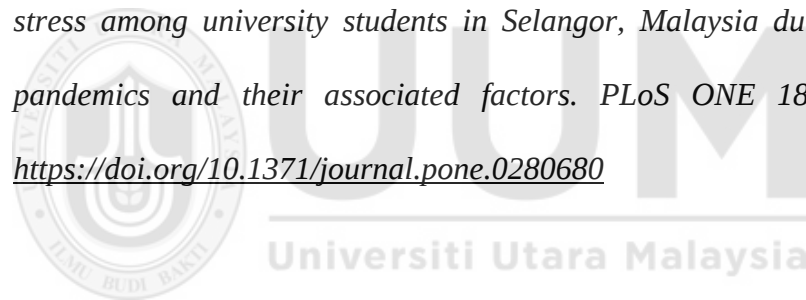
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APPENDIX

Appendix A

Part A: Demographic

1. Gender of the respondent

- a. Male
- b. Female

2. Age of the respondent

- a. 23-27
- b. 28-32
- c. 33-37
- d. 38-42
- e. 43 and above

3. Year of study

- a. First year
- b. Second year
- c. Third year
- d. Fourth Year and Above

4. Study Term

- a. Part Time
- b. Full Time

5. Marital Status

- a. Single
- b. Married
- c. Others

6. Program of Study

- a. Accounting
- b. Finance
- c. Human Resource Management
- d. International Accounting
- e. International Business
- f. Management Science
- g. Masters in Finance
- h. Masters in Human Resource Management
- i. Masters in International Accounting
- j. Masters in International Accreditation
- k. Masters in International Business
- l. Masters in Islamic Finance & Banking
- m. Masters in Public Management
- n. Masters in Science (Management)
- o. PhD

7. Study Funding

- a. EPF/KWSP
- b. Family
- c. Family & Self-Funding
- d. Loan
- e. Office Scholarship
- f. PTPTN
- g. PTPTN & Self-Funding
- h. PTPTN & Office Scholarship
- i. Scholarship
- j. Self-Funding
- k. Sponsorship
- l. Not Applicable

Part B: Stress

No.	Questions	Never	Almost Never	Sometimes	Fairly Often	Very Often
1	In the last month, how often have you been upset because of something that happened unexpectedly?					
2	In the last month, how often have you felt that you were unable to control the important things in your life?					
3	In the last month, how often have you felt nervous and "stressed"?					
4	In the last month, how often have you felt confident about your ability to handle your personal problems?					
5	In the last month, how often have you felt that things were going your way?					
6	In the last month, how often have you found that you could not cope with all the things that you had to do?					
7	In the last month, how often have you been able to control irritations in your life?					
8	In the last month, how often have you felt that you were on top of things?					
9	In the last month, how often have you been angered because of things that were outside of your control?					
10	In the last month, how often have you felt difficulties were piling up so high that you could not overcome them?					

Part C: Social Factor

No.	Questions	Never	Almost Never	Sometimes	Fairly Often	Very Often
1	I enjoy meeting people.					
2	I spend a budget for entertainment and recreation.					
3	I have relationship with other relatives and friends.					
4	I always have conflict with others.					
5	I insisted on my opinion.					
6	I do not like dealing with others.					
7	I deal with others nervously when they try to provocative me.					

Part D: Academic Factor

No.	Questions	Never	Almost Never	Sometimes	Fairly Often	Very Often
1	I lack self-confidence to complete my study.					
2	I have financial problems because of the expenses of the university.					
3	I find it difficult to reach practical solutions to my academic problems.					
4	I am worried about my academic progress.					
5	I feel depressed because of my low cumulative average.					
6	I feel disturbed when I always/have been asked about my academic achievement.					
7	My coursework is piling up, and I cannot finish it.					
8	Sometimes I think of leaving the university.					
9	I feel helpless in dealing with academic problems that I have been having.					
10	I feel stress and mental fatigue from the large number of homework./coursework.					
11	I avoid setting for examinations.					
12	I feel frustrated by the lack of institutional care of students.					
13	I do not enjoy the university activities.					

Part E: Physical Factor

No.	Questions	Never	Almost Never	Sometimes	Often	Very Often
1	I suffer from daily headache.					
2	I suffer from neck pain.					
3	I can't sleep.					
4	I can't breathe.					
5	I suffer from heart problems.					
6	I don't like food.					
7	I suffer from back pain.					
8	I feel tired.					
9	I can't stretch my legs and hands.					
10	I suffer from blood pressure.					
11	I feel sometimes low or high temperature.					



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