ACADEMIC STRESS, PEER PRESSURE, AND

LIFE SATISFACTION AS PREDICTORS TOWARDS ANXIETY LEVELS

AMONG UNIVERSITY STUDENTS IN MALAYSIA

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Academic Stress, Peer Pressure, and Life Satisfaction as Predictors Towards Anxiety Levels

Among University Students in Malaysia

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Universiti Tunku Abdul Rahman

Copyright Statement

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APPROVAL FORM

This research paper attached hereto, entitled "Academic Stress, Peer Pressure, and Life Satisfaction as Predictors Towards Anxiety Levels Among University Students in Malaysia." prepared and submitted by Tong Huey Yin, Wang Sze Jazz and Wong Zu Yuen in partial fulfillment of the requirements for the Bachelor of Social Science (Hons) Psychology is hereby accepted.

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Abstract

Anxiety is a prevalent concern among university students and can be influenced by factors such as academic stress, peer relationships, and life satisfaction. This study examined how academic stress (AS), peer pressure (PP), and life satisfaction (LS) predicted anxiety levels (AL) in a sample of Malaysian undergraduate students. A quantitative, cross-sectional, correlational design was employed, with data collected from 121 Malaysian undergraduate students. Validated instruments were used: the Perception of Academic Stress Scale (PASS) for AS, the Peer Pressure Questionnaire-Revised (PPSQ-R) for PP, the Satisfaction with Life Scale (SWLS) for LS, and the Westside Test Anxiety Scale (WTAS) for AL. Multiple linear regression analysis was conducted to determine how AS, PP, and LS contribute to student anxiety levels. Results indicated that academic stress significantly and positively predicted anxiety levels, meaning that students reporting higher academic stress also reported higher anxiety. Peer pressure was a significant negative predictor of anxiety, suggesting that higher perceived peer pressure was associated with lower anxiety. Life satisfaction did not significantly predict anxiety levels when controlling for academic stress and peer pressure. These findings suggest that academic stress is a major contributor to anxiety in this Malaysian student sample, whereas peer pressure may act as a protective factor. Life satisfaction did not significantly influence anxiety when academic pressures were considered. These results underscore the need to address academic stress in efforts to reduce student anxiety and suggest further research on peer pressure and life satisfaction in student well-being.

Keywords: academic stress, peer pressure, life satisfaction, anxiety levels, university students, Malaysia

Subject area: H1-99 Social Sciences (General)

DECLARATION

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

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List of Abbreviations

AL	Anxiety Levels
AS	Academic Stress
LS	Life Satisfaction
MLR	Multiple Linear Regression
PAS	Perceptions of Academic Stress
PP	Peer Pressure
PPSQ-R	Peer Pressure Scale Questionnaire-Revised
SDT	Self-Determination Theory
SPSS	Statistical Package for the Social Sciences
SERC	Scientific and Ethical Review Committee
SWLS	Satisfaction with Life Scale
UTAR	Universiti Tunku Abdul Rahman
WTAS	Westside Test Anxiety Scale
β	Beta
df	Degree of Freedom
F	F-statistic
f^2	Effect Size
H	Hypothesis
p	Significance Level
r	Correlation Coefficient
t	T-statistic
R^2	Coefficient of Determination

Chapter 1

Introduction

1.1 Background of Study

Nowadays, university students frequently encounter various challenges, such as personal and academic transitions, that may negatively affect their mental health and overall well-being. Entering higher education often introduces new academic demands, social relationships, and personal responsibilities, all of which can increase their risk of psychological distress and susceptibility to mental health issues (Mulaudzi, 2023). Among the many factors influencing mental health, academic stress (AS), peer pressure (PP), and life satisfaction (LS) have consistently been considered as significant predictors of anxiety levels (AL) among university students. Given the rising prevalence of anxiety-related concerns globally, understanding how these factors collectively contribute to AL is essential for promoting mental health in higher education environments.

AS arises when students perceive a mismatch between academic demands and their ability to cope effectively. It can manifest in various forms, such as test anxiety, heavy workload, tight deadlines, and pressure to achieve high academic performance. Beyond the immediate academic tasks, students may also experience stress from time management difficulties, group competition, evaluation pressure, and fear of failure (Córdova et al., 2023). Persistent exposure to these stressors can lead to negative psychological consequences, including increased anxiety and depressive symptoms.

PP refers to the influence exerted by individuals within a peer group that shapes their values, attitudes, and behaviors. In university settings, this influence often stems from the desire for acceptance, belonging, and approval from peers. PP can be direct, through explicit persuasion to engage in certain activities, or indirect, through implicit social norms that

encourage conformity (Obindah & Iminabo, 2024). While positive peer influence fosters motivation and emotional support, negative PP can lead to maladaptive behaviors such as academic dishonesty, substance abuse, or aggressive behavior. Social comparison processes and fear of exclusion can drive students to compromise personal values, sometimes at the expense of well-being (Batool & Batool, 2025). Chronic exposure to negative peer influence has been linked to increased stress, lower self-esteem, and increased susceptibility to anxiety.

LS is defined as an individual's cognitive evaluation of their overall quality of life and sense of fulfilment, reflecting an important dimension of well-being beyond the absence of psychological distress. Higher LS promotes to healthier coping mechanisms, emotional balance, and psychological resilience, which can serve as a protective factor against anxiety (Ooi et al., 2022; Wang et al., 2025). Research by Padmanabhanunni et al. (2023) shows that LS not only influences anxiety independently, but it may also modulate or buffer the negative effects of stressors such as AS and PP. Therefore, lower LS may increase susceptibility to anxiety, while higher LS helps students maintain psychological stability when facing challenges.

Although there is extensive research on AS and PP, studies that incorporating LS as an equally important predictor in explaining AL remain scarce, especially in the Malaysia context. Therefore, this study aims to bridge this gap by examining the predictive roles of AS, PP, and LS on AL among university students. The findings are expected to provide evidence-based insights for developing preventative interventions, mental health services, and campus support programs to reduce anxiety and promote overall well-being among university students.

1.2 Problem Statement

Over the past three decades, anxiety issues have been gradually increasing, making it one of the most common psychological disorders in the world. According to Javaid et al. (2023), anxiety disorders affect about 301 million individuals worldwide, or 4.05% of the population, and the number of cases increased by 55% between 1990 and 2019. Urbanization, socioeconomic changes, and demographic shifts are some of the factors associated with the increasing prevalence. Women are especially at risk, with a 1.66 times higher risk of developing anxiety disorders than males. These statistics underscore how important anxiety is on a global scale as a serious mental health issue that impacts developing and industrialized countries. Beyond prevalence, anxiety has been linked to various negative consequences, including reduced academic performance, impaired social relationships, and lower quality of life. Prolonged anxiety can also contribute to physical health problems such as sleep difficulties, cardiovascular risks, and weakened immune function, highlighting its broad effects on both mental and physical well-being (Civieri et al., 2024).

In Malaysia, anxiety has become a major issue for various populations. According to a scoping study by Khaiyom, Mukhtar, and Oei (2021), prevalence percentages ranged significantly based on the specific groups examined, ranging from 1% to 67.6%. Risk factors that have been repeatedly associated with increased risk include socioeconomic disadvantages, adverse life experiences, a family history of mental illness, and chronic illness. However, the situation seems especially concerning among university students. According to Wong et al. (2023), depression and stress were widespread during the COVID-19 epidemic, and 66.2% of Malaysian students reported having moderate to severe anxiety. These results suggest that young individuals are more prone to anxiety-related issues, especially those juggling the pressures of school and life transitions. It shows that young people are more vulnerable to anxiety-related problems. Such anxiety may cause poor focus, lower motivation, social withdrawal, and an increased risk of developing long-term

psychological illnesses if left untreated. All of these may threaten students' academic achievement and future professional growth.

There is growing evidence associating academic stress (AS), peer pressure (PP), and life satisfaction (LS) with anxiety levels (AL). However, most existing studies have examined these factors in a separate way. For example, numerous studies have linked AS to increased psychological distress, such as depression and anxiety (Salami et al., 2021; Misra & Castillo, 2004), while other research has emphasized the protective role of LS in reducing emotional disorders (Liu & Wang, 2024; Wang et al., 2023). The majority of the research conducted included China, the United States, and Middle Eastern countries. Few have attempted to analyze their combined effects inside a single model, especially in the context of Malaysian universities. Peer-related impacts, such as conformity, social comparison, or PP, have also been studied independently, yet they are rarely linked directly to anxiety issues in university settings. As a result, the combined effects of AS, PP, and LS have not been thoroughly investigated, leaving a limited understanding of how these factors interact to influence students' mental health. This separated approach makes it difficult to capture the full complexity of students' experiences, where academic, social, and personal dimensions often overlap.

Furthermore, the limited research on the relationship between PP and AL leaves another significant gap. Compared to the reported relationship between AS and LS, the role of PP as a predictor of anxiety remains underexplored. In the Malaysian context, where collectivist cultural values place a great emphasis on belonging and peer acceptance, the influence of peer interactions may have a strong impact. This leads to a crucial research gap in the understanding of how these three factors interact to impact university students' AL. As a result, this study focuses on addressing these gaps by examining the combined and relative contributions of AS, PP, and LS to university students' AL. In doing so, the study not only

clarifies the individual impact of each factor but also explores how they interact to influence mental health outcomes. This integrated approach is expected to provide a more comprehensive understanding of anxiety among Malaysian students, allowing for more effective prevention and intervention strategies.

Therefore, this study aims to address these gaps by examining the combined impact of AS, PP, and LS on AL among Malaysian university students. By applying a multiple regression framework, the research will provide a more thorough understanding of how academic, social, and personal aspects influence students' mental health. The findings are expected to offer insights for scholars, educators, and mental health professionals in developing targeted interventions to reduce anxiety and enhance overall well-being among university students.

1.3 Research Objectives

1. To examine whether academic stress positively predicts anxiety levels among university students in Malaysia.
2. To examine whether peer pressure positively predicts anxiety levels among university students in Malaysia.
3. To examine whether life satisfaction negatively predicts anxiety levels among university students in Malaysia.

1.4 Research Questions

1. Does academic stress positively predict anxiety levels among university students in Malaysia?
2. Does peer pressure positively predict anxiety levels among university students in Malaysia?

3. Does life satisfaction negatively predict anxiety levels among university students in Malaysia?

1.5 Hypotheses

H_1: Academic stress positively predicts anxiety levels among university students in Malaysia.

H_2: Peer pressure positively predicts anxiety levels among university students in Malaysia.

H_3: Life satisfaction negatively predicts anxiety levels among university students in Malaysia.

1.6 Significance of Study

This study examines the impact of AS, PP, and LS on the AL among university students in Malaysia. By exploring the interactions between these variables, the study aimed to address the growing concern of student mental health in higher education, particularly in the context of increasing anxiety among young adults coping with academic, social, and personal challenges. While previous research has explored the impact of AS and LS on anxiety separately, few studies have considered AS, PP, and LS together as predictors, especially in Southeast Asia. This gap underscores the need for more comprehensive research on how these factors simultaneously shape the university students' psychological well-being.

The theoretical foundation of this study is based on the Transactional Model of Stress and Coping (Lazarus & Folkman, 1984) and Self-Determination Theory (Deci & Ryan, 1985). The Transactional Model explains how students' appraisals of stressors such as AS and PP influence their coping styles, which in turn affect their AL. Meanwhile, Self-Determination Theory emphasizes the role of basic psychological needs—autonomy, competence, and relatedness—in shaping well-being. When unmet, these needs may intensify anxiety, whereas higher LS may buffer against stress by fulfilling these psychological needs.

By integrating these perspectives, this study provides a more comprehensive framework for understanding how academic, social, and personal factors interact to influence AL among Malaysian university students.

Beyond the theoretical contributions, this study has significant practical implications. The findings could guide universities and educators in designing student support services and stress-management programs that consider not only academic demands but also peer influences and overall LS. For mental health professionals, the results may offer insight into developing interventions and counselling strategies tailored to the unique stressors faced by university students. Policymakers and public health organizations may also benefit from these findings in creating initiatives that enhance resilience, promote mental health awareness, and encourage healthier coping mechanisms among young adults.

In conclusion, this study contributes to existing literature by addressing a research gap and offering an integrated approach to understanding AL in university students. Through both theoretical and practical insights, the research aims to foster a supportive academic environment that prioritizes mental health and enhances the overall well-being of university students in Malaysia.

1.7 Conceptual Definitions

Academic Stress

AS refers to the psychological distress experienced by students when academic demands (e.g., assessments, workloads, and expectations) exceed their perceived ability to cope. It encompasses feelings such as pressure, tension, and worry, leading to emotional strain and decreased well-being (Anjala, 2024).

Peer Pressure

PP refers to the influence exerted by peers in a social group to encourage others to conform to certain behaviors, values, or attitudes (Sharma & Charulatha, 2024).

Life Satisfaction

LS is a holistic cognitive evaluation of an individual's overall quality of life, reflecting the extent to which their experiences align with personal standards, goals, and expectations (Vittersø, 2025).

Anxiety Levels

Anxiety refers to persistent worry, tension, or apprehension that interferes with daily functioning (Yildirimer & Günay, 2025).

University Students in Malaysia

University students in Malaysia are individuals who enrolled in a diploma, undergraduate, or postgraduate program at a public or private higher education institution across the country (StudyMalaysia.com, 2022). This group comprises both local and international students who face diverse academic, social, and personal challenges throughout their university journey.

1.8 Operational Definitions

Academic Stress

In this study, AS among university students will be measured using the Perceptions of Academic Stress (PAS) Scale developed by Bedewy and Gabriel (2015). The scale consists of 18 items rated on a 5-point Likert scale ranging from (strongly disagree) to (strongly agree). It covers four subscales reflecting different sources of AS: pressure to perform, perceptions of workload, academic self-perceptions, and time restraints. Some items are

positively worded and therefore require reverse scoring. The total score ranges from 18 to 90, with higher scores indicating greater AS.

Peer Pressure

In this study, PP among university students will be measured using the Peer Pressure Scale Questionnaire-Revised (PPSQ-r) revised by Saini and Singh (2016). The scale consists of 25 items rated on a 5-point Likert scale ranging from (strongly disagree) to (strongly agree). It covers 5 subscales reflecting various forms of peer influence, with higher scores indicating greater susceptibility to PP.

Life Satisfaction

In this study, LS among university students will be assessed using Satisfaction with Life Scale (SWLS) developed by Diener et al. (1985). The SWLS consists of 5 items measured on a 7-point Likert scale, with scores ranging from 1 (strongly disagree) to 7 (strongly agree). The total score ranges from 5 to35, with higher scores reflecting greater LS (5 – 9 = extremely dissatisfied, 30 -35 = highly dissatisfied).

Anxiety Levels

In this study, AL among university students will be measured using the Westside Test Anxiety Scale (WTAS) developed by Driscoll (2007). The WTAS consists of 10 items rated on a 5-point Likert scale ranging from 1 (never true) to 5 (always true). Scores are categorized as follows: <1.9 (low test anxiety), 2.0–2.5 (normal), 2.6–2.9 (high normal), 3.0–3.4 (moderately high), 3.5–3.9 (high), and 4.0–5.0 (extremely high).

University Students in Malaysia

In the current study, university students in Malaysia are individuals aged 18 years and above who are currently enrolled in undergraduate and postgraduate programs at higher education institutions in Malaysia. The sample for this study includes students from diverse faculties, academic years, and cultural backgrounds to reflect the heterogeneous nature of the Malaysian student population.

Chapter 2

Literature Review

2.1 Introduction

This literature review aims to examine academic stress (AS), peer pressure (PP), and life satisfaction (LS) as psychological predictors of university students' anxiety levels (AL). In this study, AS, PP, and LS are treated as independent variables, while anxiety serves as the dependent variable. Each construct will be clearly defined and supported by relevant conceptual and empirical literature to establish a comprehensive understanding of its role in student mental health. Following the conceptual clarification, this review will analyze existing studies that explore the relationships between independent variables and student anxiety. Particular attention will be given to the correlations between AS and anxiety, PP and anxiety, as well as LS and anxiety. This review also aims to identify existing research gaps, inconsistencies, and limitations in the current body of literature. By doing so, the review justifies the relevance of the present study and its contribution to enhancing knowledge of how these factors interact to influence AL among university students.

2.2 Academic Stress

AS is a prevalent issue among university students and is widely recognized as a significant contributor to anxiety. Zhang et al. (2022) defines AS as the stress experienced in relation to academic tasks such as examinations, assignments, evaluations, and the overall educational environment. Yang and Yang (2022) further emphasize that academic stress is a subjective experience resulting from the perceived mismatch between academic demands and a student's coping resources. This stress is not solely a response to external pressures but also involves the individual's cognitive appraisal of those pressures. When students perceive academic challenges such as heavy workloads, competitive grading systems, or high-

performance expectations, as threatening or unmanageable, it often leads to emotional responses such as anxiety, tension, and frustration.

Numerous scholars have found that AS among university students is often more intense than during earlier stages of education. The stressors at this level are multifaceted and may include extensive course loads, pressure to succeed, financial concerns, time constraints, and the transition to independent living (Barbayannis et al., 2022; Chuan et al., 2022). These challenges are further compounded by familial expectations and peer competition. According to the American Psychological Association (2020), as many as 87% of university students in the United States cited academic demands as their primary source of stress. Alarmingly, the 2015 American College Health Association survey found that three in four students reported feeling stressed, with one in five experiencing stress-related suicidal ideations (Barbayannis et al., 2022), highlighting the seriousness of the issue.

The adverse effects of AS extend beyond emotional strain; it can hinder academic achievement, reduce motivation, and even contribute to college dropout rates. High AS has also been associated with the onset of mental health conditions such as anxiety (Chuan et al., 2022). The 2014 *China Education Development Report* further underscores the gravity of the issue by identifying AS as a primary factor in student suicides (Yang & Yang, 2022).

Despite its relevance, AS lacks a universally accepted definition. The World Health Organization characterizes it as a student's perception of academic events as threats, leading to emotional reactions like worry and fear (Yang & Yang, 2022). Similarly, Lazarus (1990) and Lin, Yang, and Huang (2003) describe AS as both a psychological burden and a nervous reaction that arises from external academic demands and internal self-expectations. Synthesizing these perspectives, AS can be understood as a cognitive-emotional response driven by students' evaluations of academic challenges, shaped by both environmental

demands and personal aspirations. This form of stress, when prolonged or unregulated, significantly contributes to heightened AL among university students.

2.3 Peer Pressure

"Peers" generally refers to individuals of similar age or those belonging to the same social group. Therefore, PP can be defined as the influence that these individuals exert on one another, which may affect a person's behavior, attitudes, or decision-making (Hartney, 2024). PP is particularly prevalent in educational settings, especially among university students. This is due to the increased social interaction, exposure to diverse peer groups, and the growing drive for independence and autonomy that characterize university life.

According to Laursen and Veenstra (2021), adolescence—a period during which most university students find themselves, is marked by heightened conformity. During this stage, individuals are particularly susceptible to peer influence. In order to gain social acceptance, develop a sense of identity, and fit in with their peer groups, students may feel compelled to emulate the behaviors, attitudes, or values of their peers. A study by Lou (2023) on the influence of PP among adolescents showed that as individuals spend more time with their peers, their emotional dependence gradually shifts from family members to friends. This increasing intimacy and peer interaction creates fertile ground for PP to grow.

PP can have both negative and positive effects on students. On the negative side, it has been identified as a significant predictor of risky behaviors such as smoking, alcohol consumption, and drug use, which may also lead to poor academic performance and psychological issues such as stress, anxiety, and low self-esteem (Bhujbal & Verma, 2024). Conversely, PP can also be a positive force. For example, it can motivate students to perform better academically through healthy competition and encouragement from their peers (Kasim

et al., 2025). The dual nature of PP highlights its significant role in shaping students' overall mental health.

2.4 Life Satisfaction

LS is how people see and evaluate their lives as a whole based on their own standards (Martela, Laitinen and Hakulinen, 2024). The standards vary from everyone's perspective; it could be having a high income, building a family, thriving in careers or studies, etc. LS is also a personal and subjective judgment, which reflects how satisfied someone feels with their life overall. It's about whether their current life matches their personal values, goals, and expectations. While most people pursue a high-satisfaction life, and everyone defines it differently, this concept offers valuable insight into an individual's well-being and mental health.

In recent years, LS has drawn attention in Malaysia, particularly among young adults who are navigating through academic life and fast-paced societal changes. With the ongoing national development, concerns like financial commitments, family expectations, and cultural perspectives have shaped how Malaysians view their quality of life. A study found that factors like depression, stress, and anxiety can negatively influence LS among Malaysian university students, which potentially affects their academic performance and social interaction (Ooi *et al.*, 2022). Besides, in most Asian countries, the cultural stress on collectivism and academic achievement often increases the pressure on a student, which can reduce LS in the long term, especially when their personal goals clash with social expectations.

University students are at a critical stage of discovering who they are, transitioning between various roles, and adjusting to different life transitions (Cage *et al.*, 2021). Balancing academic responsibilities, new social circles, and the uncertainty after graduation, all of these

can affect their fulfillment with life. For some students who move far away from home and begin to make decisions independently, it can be rewarding but overwhelming at the same time. A few studies by Cage et al. (2021), Zahid, Jamal and Hassan (2025), and Fronda et al. (2025) show a correlation between social support, mental health, and AS with LS. Therefore, it is crucial for university students to balance between all these factors that can potentially affect their LS.

In short, a student's LS is not based on academic achievements alone; it can be shaped by life purpose, confidence, mental stability, relationships, etc. Some factors like social support, AS, and mental health play a major role. On the other hand, low LS may cause social isolation, stress, or signs of anxiety. As LS is closely tied to overall mental functioning, it reveals the need for young adults to manage these challenges wisely while growing into adulthood.

2.5 Anxiety Levels

Anxiety is often defined as an emotional response related to constant feelings of worry, nervousness, fear, or uncertainty (Chellappa and Aeschbach, 2021). While it is normal to feel anxious from time to time, persistent or intense feelings of anxiety can disrupt our everyday life. When the symptoms grow severe and interfere with one's daily activities, it might progress to a psychological disorder known as anxiety disorders. It includes mental symptoms like racing thoughts, behaviors like avoiding responsibilities, and physical signs like a rapid heartbeat or sweaty palms.

In Malaysia, mental health awareness among the nation has gradually improved, especially following the COVID-19 pandemic. However, stigma and limited access to care remain obstacles in the mental health field. According to a study conducted by Wong et al. (2021), anxiety and other mental health issues are on the rise in Malaysia, particularly among

students, females, and those facing financial challenges. Self-blaming, life challenges, and fear of judgment often discourage young people from opening up about their mental health struggles (Hellström and Beckman, 2021). Despite there being several campaigns and initiatives aimed at raising awareness and eliminating stigma, many students tend to still hide their anxiety, especially when those around them appear to be indifferent and have high expectations of them.

University students are particularly vulnerable to anxiety due to numerous transitions they face throughout this stage. High academic expectations, financial concerns, social comparisons, and uncertainty about future careers all contribute to their mental health conditions. First-year students might feel puzzled adjusting to university life, while final-year students often feel overwhelmed by the pressure to succeed and the anxiety of unemployment after graduation. Besides, family expectations and cultural contexts can further worsen mental health problems like anxiety (Deng *et al.*, 2022).

Furthermore, research shows that teenagers and young adults are more likely to experience emotional distress and anxiety than older adults (Mohamad *et al.*, 2021). The majority of university students were young adults aged eighteen to twenty-four, which is the period when the developmental stage moves from late adolescence to adulthood.

Thus, understanding the causes and effects of anxiety is critical to offering better support to young individuals. This includes providing early intervention, promoting peer support, and ensuring access to culturally appropriate mental health care. As university students increasingly take on more adult responsibilities, recognizing and managing anxiety is essential for building resilience and improved coping behaviors.

2.6 Academic Stress and Anxiety Levels

Academic Stress (AS) has been widely recognized as a significant predictor of anxiety among university students. Numerous studies have reported a positive correlation between AS and anxiety symptoms, indicating that the increasing demands of university life can lead to emotional distress and psychological discomfort. Common academic stressors include exam pressure, assignment deadlines, competitive grading systems, and strained relationships with lecturer factors that have consistently been linked to elevated AL among students (Zhang et al., 2022).

Stress response theory explains that when individuals are continuously exposed to stressors that exceed their coping abilities, they are more likely to experience negative emotional outcomes, including anxiety. This is particularly relevant to university students, who often face immense pressure to excel academically, secure promising career paths, and fulfill family expectations. If such academic stressors are not effectively managed, they may contribute to the development of more serious mental health conditions, such as chronic anxiety, burnout, or depression (Zhang et al., 2022).

Yang and Yang (2022) also found that university students experience substantial psychological stress related to academic performance, career uncertainty, and postgraduate pursuits. Their findings support the notion that AS has a significant positive predictive effect on anxiety. If students are unable to adapt or cope effectively with these stressors, they are at risk of developing persistent negative emotions that may impair both their psychological well-being and academic performance.

Further supporting this, Lee, Jeong, and Kim (2021) reported that 88% of undergraduate students experienced moderate to severe levels of AS, while 44% exhibited moderate to severe anxiety. These findings are alarming and emphasize the importance of addressing AS as a critical factor influencing students' mental health, academic success, and

overall university experience. Together, these studies support the hypothesis that AS is significantly and positively correlated with anxiety among university students.

2.7 Peer Pressure and Anxiety Levels

Peer pressure (PP) refers to the influence exerted by peers within the same age group or social circle, encouraging individuals to conform certain behaviors or attitudes, while anxiety is a psychological response characterized by excessive worry, tension, and uneasiness. In this study, PP is considered a significant factor that may influence students' mental health, especially their anxiety levels. Several studies have shown a positive correlation between PP and anxiety levels (AL) among university students, suggesting that greater PP is associated with higher AL.

One of the primary mechanisms by which PP contributes to anxiety is social comparison. When university students frequently compare themselves with their peers, they may experience confusion, worry, and uncertainty about their self-worth. Liu (2022) emphasized that such comparisons often lead to increased anxiety, especially among students who are striving for academic or social excellence. When they perceive themselves as falling behind, they may develop feelings of inferiority, which in turn makes them more susceptible to peer influence and emotional distress. Similarly, Yoo (2024) found that adolescents who experienced higher levels of PP reported more severe symptoms of anxiety and even somatic complaints. These findings reinforce previous research suggesting that PP can significantly impact students' mental health and lead to broader psychological distress such as anxiety.

Hung et al. (2025) further explained that PP can increase anxiety among university students due to fear of social rejection. Under such pressure, individuals often become highly sensitive to others' perceptions of them. To avoid negative judgement or rejection, students may alter their behavior or suppress their personal preferences, resulting in increased

emotional tension. Chakraborty (2023) adds that because peer acceptance and group cohesion are highly valued in educational settings, many students conform to group norms even when they conflict with their personal values. This misalignment can intensify internal conflict and anxiety, as individuals are compelled to engage in inauthentic behavior in order to maintain their social status.

In conclusion, PP plays a significant role in shaping the emotional well-being of university students. Existing literature consistently emphasizes that excessive or negative peer influence is associated with elevated levels of anxiety. Understanding this relationship is crucial to develop effective intervention that can promote healthier peer interactions and enhance student mental health.

2.8 Life Satisfaction and Anxiety Levels

The link between life satisfaction (LS) and anxiety levels (AL) has been well-documented in psychological studies, which generally show a strong negative relationship. People who are more satisfied with their lives tend to experience lower levels of anxiety. This suggests that when people see their life as fulfilling and aligned with their values, they are less likely to experience ongoing anxiousness or emotional stress.

Past studies have highlighted that higher LS is associated with lower levels of anxiety, and vice versa. Especially among university students, they often encounter academic, social, and financial stressors while adjusting to higher education. These challenges may significantly influence their emotional well-being, affecting both how satisfied they feel with their lives and their levels of anxiety. For instance, in a cross-sectional study of over 1,200 undergraduate students during the COVID-19 pandemic, a significant negative correlation was found between LS and symptoms of anxiety. Students who reported lower LS also exhibited higher levels of anxiety. Conversely, those with higher LS showed better

psychological health and were more likely to use healthier coping mechanisms such as goal-setting and positive reframing (Lopes & Nihei, 2021). Another research study conducted in China has demonstrated that lower levels of anxiety and depression are predicted by higher LS. Wang et al. (2023) showed that during the COVID-19 pandemic, medical students' anxiety symptoms were considerably decreased by LS. These findings suggested that LS may act as a protective psychological shield against anxiety in university students, especially during times of crisis.

This relationship is not only cross-sectional but may also persist longitudinally. A study among Chinese university students revealed that LS negatively predicted future AL. Students who reported higher satisfaction with their university life during their third-year experienced lower levels of anxiety in their fourth year, supporting the idea that LS can have a lasting influence on mental health (Liu & Wang, 2024). The researchers explained that students who feel satisfied with their academic environment and personal life are less likely to develop anxious thoughts or behaviors, especially if they are supported by high-quality educational environments.

Interestingly, the relationship between LS and AL may be affected by external factors such as academic year and available coping resources. In the same study, the negative link between anxiety and LS was stronger during students' junior year, due to heightened academic pressures related to postgraduate plans and employment. On the other hand, senior students, who had adapted better to university life, reported higher overall LS and lower AL. This emphasizes the importance of adaptation and sense of control in this psychological interplay (Liu & Wang, 2024).

Moreover, the Malaysian context also supports these trends. In a cross-sectional study involving medical students from various public universities in Malaysia, it was found that

psychological and social quality of life scores, which closely align with LS, were significantly below average levels (Abdullah et al., 2021). This study highlighted that factors such as strong social support systems from family and peers were associated with higher LS and lower psychological distress. In contrast, high levels of stress and depression were related to lower quality of life and greater likelihood of experiencing anxiety. This suggests that both internal and external coping mechanisms play an important role in the connection between life satisfaction and anxiety levels.

Another dimension worth highlighting is the role of LS in more complex emotional experiences, such as burnout. Among medical students during the COVID-19 pandemic, it was found that LS, along with resilience, significantly mediates the relationship between stress and both emotional exhaustion and disengagement, two experiences that are often closely tied to anxiety. When LS levels were high, students were less likely to experience stress-related psychological issues, such as anxiety and burnout symptoms. These findings suggest the importance of LS does not just reflect well-being but also shapes how students respond to challenging environments (Duarte et al., 2022).

All in all, these findings emphasize the importance of fostering LS within university populations. While personal traits like resilience and coping strategies are vital, external factors like supportive academic environments, mentorship, and access to mental health resources also play a critical role in shaping students' emotional experiences. Addressing LS may be an effective prevention to reduce anxiety and promote psychological well-being, especially in higher education settings.

Despite previous studies having established a significant negative correlation between LS and anxiety among university students, most of the studies have focused on Western contexts or specific student groups such as medical students. There remains a shortage of

research exploring this relationship among Malaysian university students across different programs and backgrounds. Moreover, many past studies have used cross-sectional data, which limits the ability to examine causal relationships or other potential variables, like peer pressure (PP) or academic stress (AS), that might influence AL. In short, this leaves a gap in understanding how different factors interact simultaneously to affect students' mental health.

In summary, the studies support a negative and statistically significant relationship between LS and AS among university students. This relationship is influenced by various factors such as academic pressure, years of study, and external support systems. By focusing on both individual and structural interventions to enhance LS, it could be a key pathway to reduce anxiety and foster long-term student success and well-being.

2.9 Theoretical Framework

This study is grounded in two psychological theories: transactional model of stress and coping (Lazarus & Folkman, 1984) and self-determination theory (SDT) (Deci & Ryan, 1985). These theories together explain how AS, PP, and LS contribute differently to university students' AL, as shown in the conceptual framework (Figure 2.10.1).

The transactional models conceptualize stress as a cognitive appraisal and coping process. When students encounter academic or social demands, they first engage in primary appraisal to evaluate whether these stressors pose a threat to their well-being and then engage in secondary appraisal to assess whether they possess the resources to respond effectively. If demands outweigh resources, such as overwhelming AS or intense PP, students are likely to experience heightened AL (Kivak, 2024). Through reappraisal, students continually reassess the situations, which can exacerbate or alleviate anxiety depending on new information or coping outcomes. Accordingly, AS and PP are positioned as predictors of AL in the

conceptual framework, as negative appraisals of these stressors trigger physiological and emotional anxiety response (Mofatteh, 2020).

Conversely, LS is incorporated into the framework as a psychological resource, which influences the appraisal and coping process. Students with higher LS tend to find stressors as more manageable as they possess greater emotional stability, optimism, and effective coping resources (Ooi et al., 2022). Empirical evidence shows that LS can buffer the adverse effects of stress by reducing the likelihood of stress translating into anxiety (Singh et al, 2022). This phenomenon is known as stress-buffering effect, highlights the value of LS as a direct and moderating predictor of AL.

SDT further explains LS as an indicator of well-being derived from the fulfillment of three basic psychological needs, which are autonomy, competence, and relatedness. AS can undermine competence and autonomy, while PP can negatively affect autonomy and relatedness when conformity pressure intensifies (Crespo-López & Koning, 2025). When these needs are frustrated, individuals experience greater psychological distress, including anxiety (Cherry, 2024). Conversely, high LS reflects the successful fulfilment of needs and enhances an individual's resilience against anxiety, thus reinforcing its critical protective role (Nishimura & Joshi, 2021).

In summary, the transactional model supports the role of AS and PP as stressors that increase AL, while SDT clarifies how unmet psychological needs resulting from these stressors further exacerbate anxiety. Both theories support LS as a critical resilience factor, reducing anxiety by improving cognitive appraisals and ensuring the fulfillment of psychological needs. Therefore, the conceptual framework proposes that AS and PP positively predict AL, whereas LS negatively predicts AL among university students.

2.10 Conceptual Framework

Figure 2.10.1

Academic stress, peer pressure, and life satisfaction as predictors towards anxiety levels among university students in Malaysia

Independent Variable   **Dependent Variable**
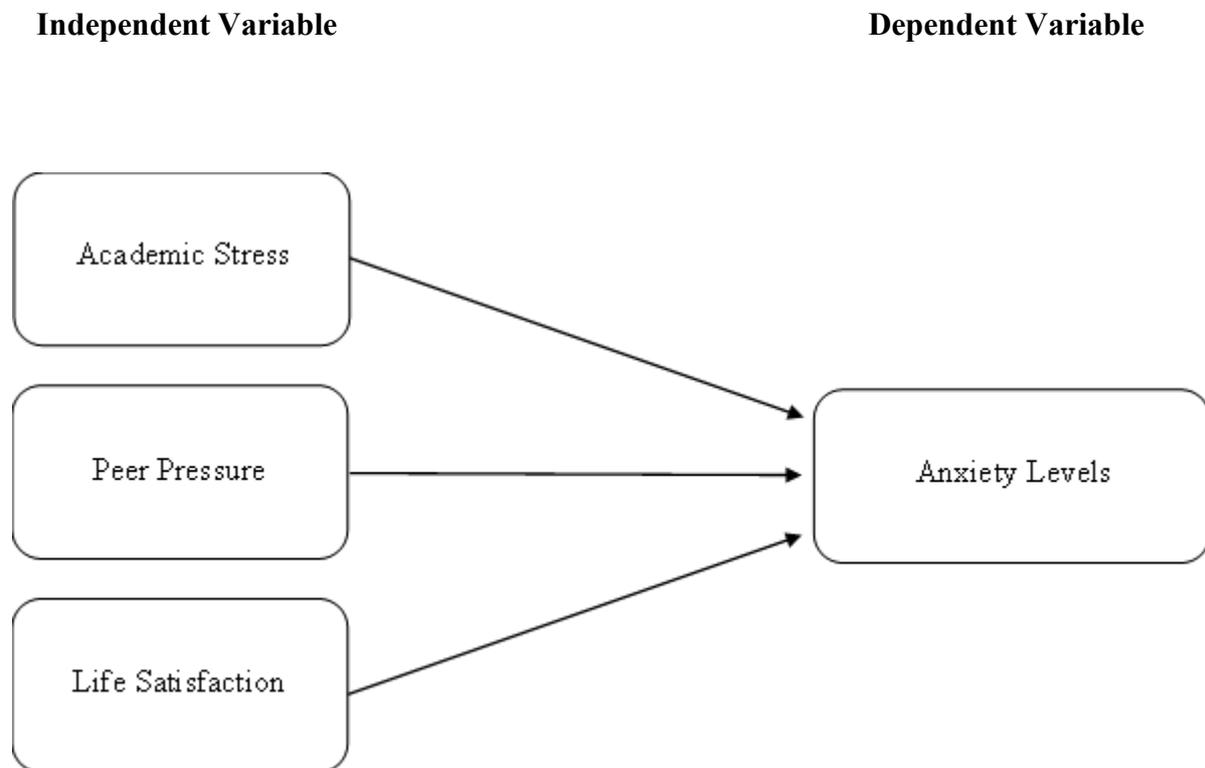
Figure 2.10.1 illustrates the relationship between three independent variables, which are academic stress (AS), peer pressure (PP), and life satisfaction (LS), and one dependent variable, which is anxiety levels (AL). AS and PP are expected to contribute positively to AL, meaning that higher stress or pressure may lead to higher AL, whereas LS is expected to have a negative relationship with AL, meaning that higher LS may help reduce AL. This conceptual framework provides a visual representation of these factors impacting university students' AL.

Chapter 3

Methodology

3.1 Research Design

The study adopted a quantitative, cross-sectional, and correlational research design to investigate the predictive relationship between academic stress (AS), peer pressure (PP), and life satisfaction (LS) on anxiety levels (AL) among university students in Malaysia. Quantitative research was appropriate as it produced objective, numerical data that could be statistically analyzed to examine the strength and direction of relationships between variables (Delfia Herwanis et al., 2025). This allowed the current study to investigate whether AS and PP positively predicted AL while LS negatively predicted AL, consistent with the hypotheses in previous literature.

A correlational design was used as it enabled statistical examination of associations between variables without manipulating them, making it suitable for studying psychological constructs that were ethically or practically uncontrollable (Shao et al., 2022). While correlation did not establish causation, it provided insight into whether the predictors contributed significantly to explaining variations in anxiety levels among students (Devi et al., 2022).

In addition, this study adopted a cross-sectional design, where data were collected at a single time point. This approach was widely used in survey-based psychological research as it allowed efficient data collection, reduced cost, and minimized ethical and time constraints compared to longitudinal designs (Wang & Cheng, 2020). The study used self-administered online questionnaires as the data collection method, which was practical and accessible for students across different faculties. Statistical analysis such as Multiple Linear Regression

(MLR) were used to test the hypotheses and determine the predictive relationships between AS, PP, LS, and AL.

3.2 Sampling Method

This study applied convenience sampling and snowball sampling, which are both non-probability sampling techniques. Convenience sampling involved recruiting participants who were easily accessible to researchers through available platforms such as university email systems, WhatsApp groups, and social media (Golzar et al., 2022). This method was widely used in psychological research due to its efficiency in obtaining responses quickly and at a relatively low cost.

However, convenience sampling had limitations such as potential self-selection bias and limited representativeness. To address this, snowball sampling was used as a supplementary method. In this approach, initial participants were encouraged to share the survey link with their peers who also met the study requirements. Snowball sampling expanded participant reach and improved trust among respondents, particularly when discussing sensitive topics such as stress and anxiety (Ting et al., 2025).

The combination of these two sampling methods maximized the participant recruitment by leveraging both researcher outreach and peer networks. This approach increased the likelihood of obtaining sufficient and diverse responses within the study timeframe.

3.3 Sample Size

The sample size for this study was determined using G*Power version 3.1.9.4 software for Multiple Linear Regression (MLR) analysis. G*Power was widely recognized as an effective tool for conducting power analysis and estimating sample sizes across various

statistical methods, such as F, t, χ^2, and Z tests (Kang, 2021). In this study, the formula

$f^2 = \frac{R^2}{1-R^2}$ was used to calculate the effect size of the predictors. The calculated effect size of

academic stress was 1.4751, peer pressure was 0.2866, and life satisfaction was 0.0230. The

average effect size for all predictors was 0.5949 (Refer to Appendix A).

The estimated total sample size was calculated using four parameters: effect size (f^2),

probability alpha error (α err prob), statistical power (1 − β err prob), and number of

predictors. Based on a significance level of 0.05 and a statistical power of 0.95, the G*Power

analysis indicated that a minimum of 34 participants was required for this study (Refer to

Appendix B). Therefore, the study recruited at least 34 participants to ensure adequate

statistical power for the analysis.

3.4 Research Population

The target population for this study consisted of university students aged 18 to 30

years old who were currently enrolled in public or private universities in Malaysia.

Participant recruitment utilized a combination of convenience sampling and snowball

sampling methods. To ensure adequate statistical power for the multiple regression analysis,

a minimum sample size of 34 participants was determined using the G*Power model.

University students were selected as the primary targets for this study because they were at a

critical stage of academic and personal development, making them particularly relevant for

exploring the effects of AS, PP, and LS on AL.

The inclusion criteria were as follows:

1. Undergraduate (diploma or degree program) students currently enrolled at public or
   private universities in Malaysia.
2. Aged between 18 to 30 years old.

3. Able to understand and respond to the questionnaire in English.

Exclusion criteria included individuals who were not currently enrolled in a university, individuals enrolled in foundation or postgraduate programs (master's or Ph.D.), and individuals with a clinical diagnosis of anxiety disorders, to ensure the study focused on general undergraduate student anxiety rather than clinical cases.

3.5 Research Location

The study was conducted across selected universities in Malaysia, including both public and private institutions, to ensure diversity in the academic environment and a representativeness of the sample. The study sites provided a suitable environment setting for recruiting participants who were currently enrolled in undergraduate programs, as they were expected to experience varying levels of AS, PP, and LS.

3.6 Ethical Clearance Approval

Prior to data collection, this study obatined ethical approval from the UTAR Scientific and Ethical Review Committee (SERC) of Universiti Tunku Abdul Rahman (UTAR). Participation in this study was voluntary, and informed consent was obtained from all participants through a consent form provided before the questionnaire, which participants were required to agree to before proceeding with the questionnaire.

The informed consent form outlined the purpose of the study, confidentiality measures, and the voluntary nature of participation. To ensure confidentiality, no personal identifiable information was collected, and responses were securely stored with access restricted to the research team only. Participants were informed that they could withdraw from the study at any time without consequences or penalty.

3.7 Data Collection Procedures

Data collection was conducted through a self-administered questionnaire (Refer to Appendix C) using a combination of online and physical methods to maximize participant reach and response rates.

For the online method, a survey link or QR code was distributed via social media platforms commonly used by university students, such as WhatsApp, Instagram, RedNote, and Facebook. This method allowed participants to conveniently access the questionnaire via their mobile devices or computers.

For the physical method, the research team directly approached students and presented a QR code on printed materials or displayed on mobile devices, requesting participants to scan the QR code to access the questionnaire. This method was conducted in common areas of the university to encourage student participation while ensuring minimal disruption to their schedules.

3.8 Instrumentation

The Perceptions of Academic Stress (PAS) Scale

Academic stress (AS) was assessed using the Perceptions of Academic Stress (PAS) Scale (Bedewy & Gabriel, 2015). The PAS is made up of 18 items designed to identify the perceived sources of AS among university students. The instrument has acceptable internal consistency reliability, as measured by Cronbach's alpha of 0.70. The PAS is divided into three major subscales: (1) academic expectations (4 items), (2) workload and exams (8 items), and (3) students' academic self-perceptions (6 items). Each item is rated on a 5-point Likert scale. Specifically, items 1 to 5 are positively worded and rated from 1 (Strongly Disagree) to 5 (Strongly Agree), whereas items 6 to 18 are negatively worded and scored in reverse, from 1 (Strongly Agree) to 5 (Strongly Disagree). This combination of positive and negative items helps to minimize response bias. Higher total scores imply a higher level of

perceived AS. This measure is frequently used in student populations and is appropriate for evaluating the psychological pressures associated with academic responsibilities in university settings.

Peer Pressure Scale Questionnaire-Revised (PPSQ-R)

The PPSQ-R, created by Saini and Singh (2016), was used to measure peer pressure (PP). The PPSQ-R is a self-report questionnaire developed to evaluate how much individuals are influenced by their peers in everyday situations. The questionnaire contains 25 items, each assessed on a 5-point Likert scale from 1 (strongly disagree) to 5 (strongly agree). Higher total scores suggest a greater vulnerability to PP. The instrument shows strong internal consistency (Cronbach's alpha = 0.79), as well as satisfactory concurrent validity, as it is positively related with other measures of PP and self-esteem. Given its psychometric reliability and relevance, this instrument is suitable for investigating the impact of peer interactions on anxiety levels (AL) in university students.

Satisfaction with Life Scale (SWLS)

Life satisfaction (LS) was measured using the SWLS, developed by Diener et al. (1985). The SWLS is a frequently used instrument for assessing an individual's overall satisfaction with life through global cognitive assessments. The scale has five items, each assessed on a 7-point Likert scale from 1 (strongly disagree) to 7 (strongly agree). Scores from all items are summed together to provide a total score ranging from 5 to 35, with higher total scores indicating greater levels of LS. The SWLS is well-known for its psychometric validity and cross-cultural applicability, making it one of the most extensively used tools in subjective well-being research. Cronbach's alpha was reported to be 0.74, indicating good internal consistency (López-Ortega et al., 2016). The SWLS is considered suitable for

assessing LS among university students in this study due to its simplicity, validity, and reliability.

Westside Test Anxiety Scale (WTAS)

Anxiety levels (AL) were measured by WTAS, developed by Driscoll (2007). It is a simple 10-item self-report tool developed to recognize students who are suffering test-related anxiety, which could affect their academic performance. The scale measures both self-perceived anxiety impairments and worry-related cognitive processes that interfere with concentration and exam results. The scale has also been demonstrated to be a reliable and valid instrument for assessing test-anxiety issues in student populations. The scale is brief, easily accessible, and simple to administer, making it appropriate for both research and therapeutic settings. Items are scored on a 5-point Likert scale (1 = not at all true to 5 = extremely true), and average scores are used to categorize AL ranging from comfortably low (1.0-1.9) to extremely high (4.0-5.0).

3.9 Pilot Study

A pilot study was carried out prior to the actual data collection to assess the research instruments' clarity, reliability, and feasibility. According to Bujang et al. (2024), at least 30 respondents are required to fully assess the reliability of a questionnaire. As a result, we have recruited 31 university students from Malaysia with similar characteristics to the target group for this phase. The pilot study helps to recognize potential concerns, such as unclear wording, response difficulties, and technical difficulties during implementation. The obtained data is used to determine the instruments' internal consistency reliability using Cronbach's alpha coefficients. To avoid bias, participants from the pilot study are not included in the main sample. Before the full-scale data collection, the questionnaire was improved and refined as needed to make sure they are valid and reliable.

As shown in Table 3.1, the Perceptions of Academic Stress (PAS) Scale, Peer Pressure Scale Questionnaire-Revised (PPSQ-R), Satisfaction with Life Scale (SWLS), and Westside Test Anxiety Scale (WTAS) demonstrated strong internal consistency (Cronbach's α ranging from .884 to .916), indicating that the items were reliable for use in the actual study (Refer to Appendix E). Based on the feedback and observations obtained from the pilot study, the questionnaire was subsequently refined. Specifically, three attention-check items were added to strengthen data quality by ensuring participant's attentiveness and response validity.

3.10 Actual Study

The actual study was conducted using an online self-administered questionnaire distributed through university student groups and social media platforms using convenience and snowball sampling. After data screening, a total of 121 valid undergraduate responses were retained for analysis. All instruments demonstrated acceptable to excellent reliability (α = .841 to .874), indicating suitability for the main analysis (Refer to Appendix F). The reliability is shown as below in Table 3.1.

Table 3.1

Reliability of Instruments in Pilot Study (n = 31) and Actual Study (n = 121)

Instruments	No. of items	Cronbach's Alpha α	
		Pilot Study	Actual Study
The Perceptions of Academic Stress Scale	18	.884	.841
Peer Pressure Scale Questionnaire-Revised	25	.873	.905
Satisfaction with Life Scale	5	.891	.854
Westside Test Anxiety Scale	10	.916	.874

3.11 Data Analysis

The data collected was analyzed using the Statistical Package for the Social Sciences (SPSS) software. Prior to conducting the actual analysis, descriptive statistics were used to summarize the respondents' demographic information, such as frequency, percentage, mean, and standard deviation. Cronbach's alpha was used to assess internal consistency and ensure reliability for each scale, which includes the Perceptions of Academic Stress (PAS) Scale, Peer Pressure Scale Questionnaire-Revised (PPSQ-R), Satisfaction with Life Scale (SWLS), and the Westside Test Anxiety Scale (WTAS). Finally, Multiple Linear Regression (MLR) was conducted to examine the predictive roles of academic stress, peer pressure, and life satisfaction on anxiety levels among university students in Malaysia in a model. The level of statistical significance is set at $p < 0.05$.

Chapter 4

Results

4.1 Data Cleaning

A total of 212 responses were collected from the questionnaire. Data screening procedures were conducted to ensure data quality and eligibility. A total of 91 responses were removed due to disqualification, which included participants who did not meet the study requirements or provided inconsistent responses. A total of 54 responses contained substantial missing data and were therefore excluded. In addition, eight participants selected "disagree" to the personal data processing agreement, and their data was not processed. Five participants were foundation students and were removed as the study targeted only undergraduate students. Furthermore, 24 participants failed at least one attention-check item and were excluded from further analysis. After the data cleaning process, a final sample of 121 valid undergraduate cases was retained for analysis.

4.2 Descriptive Statistics

Demographic Characteristics

Table 4.1 presents the demographic information provided by the participants in this study. The final sample consisted of 121 undergraduate students aged between 18 to 26 years old ($M = 21.59$, $SD = 1.26$). The age distribution showed that the largest proportion of participants were aged 21 (33.9%, $n = 41$), followed by 22 years old (31.4%, $n = 38$). In terms of gender, the sample comprised of 74.4% female ($n = 90$) and 25.6% male ($n = 31$). The majority of participants were Chinese (95.9%, $n = 116$), followed by Malay (2.5%, $n = 3$) and Indian (1.7%, $n = 2$). For the current year of study, a total of 9.1% of participants were first-year students ($n = 11$), 13.2% were in their second year ($n = 16$), 68.6% were third-year

students (n = 83), and 9.1% were fourth-year students (n = 11). All participants are currently pursuing their undergraduate studies in Malaysia's universities (Refer to Appendix G).

Distribution of the Variables

Table 4.2 summarizes the descriptive statistics for the study variables. Participants reported moderately high levels of academic stress (M = 50.45, SD = 10.25) and moderate levels of peer pressure (M = 63.48, SD = 16.25). Life satisfaction scores indicated a slightly satisfied evaluation of life (M = 21.34, SD = 6.45). Anxiety levels were high normal test anxiety (M = 2.69, SD = .78), suggesting that most participants experienced a close to moderately high anxiety levels (Refer to Appendix H).

Table 4.1

Demographic Information of Participants (n = 121)

	n	%	*M*	*SD*
Age			21.59	1.263
18	1	.8		
19	3	2.5		
20	15	12.4		
21	41	33.9		
22	38	31.4		
23	17	14.0		
24	2	1.7		
25	3	2.5		
26	1	.8		
Gender				

Female	90	74.4
Male	31	25.6
Ethnicity		
Chinese	116	95.9
Malay	3	2.5
Indian	2	1.7
Current Year of Study		
First year	11	9.1
Second year	16	13.2
Third year	83	68.6
Fourth year	11	9.1

Note. n= number of cases, %= percentage, M= mean, SD= standard deviation

Table 4.2

Descriptive Statistics of Academic Stress, Peer Pressure, Life Satisfaction, and Anxiety

Levels (n = 121)

Variables	*M*	*SD*	*Min*	*Max*
Academic Stress	50.45	10.250	23	73
Peer Pressure	63.48	16.246	29	111
Life Satisfaction	21.34	6.453	5	34
Anxiety Levels	2.69	.783	1	5

Note. M= mean, SD= standard deviation, Min= minimum, Max= maximum

4.3 Normality Assumptions

Histogram

The histograms indicated that all four variables (academic stress, peer pressure, life satisfaction, and anxiety levels) displayed approximately bell-shaped distributions. Although peer pressure showed a slight left skewed, the overall pattern still resembled a normal curve with no extreme deviations. Therefore, the histogram results suggested that the distributions were generally consistent with normality (Refer to Appendix I).

Q-Q Plot

The Q-Q plot for all variables showed that the observed values aligned closely with the diagonal reference line. Since the points clustered near the line for all variables, the Q-Q plots further supported the assumption that the data were approximately normally distributed (Refer to Appendix J).

Skewness and Kurtosis

Skewness and kurtosis values were examined to assess the normality of the study variables. Acceptable ranges for skewness are between –2 and +2 (George & Mallery, 2007), while acceptable ranges for kurtosis fall between –7 and +7 (Hair et al., 2010; Byrne, 2010). As shown in Table 4.3, all variables recorded skewness and kurtosis values within these thresholds, indicating that none of the distributions were substantially skewed or exhibited extreme peakedness and flatness. Therefore, the results suggest that all four variables were approximately normally distributed (Refer to Appendix K).

Table 4.3

Skewness and Kurtosis of Variables

Variables	Skewness	Kurtosis
Academic Stress	-.112	-.187
Peer Pressure	.282	.291
Life Satisfaction	-.438	-.148
Anxiety Levels	.197	-.344

Kolmogorov-Smirnov Test and Shapiro-Wilk Test

The Kolmogorov-Smirnov (KS) and Shapiro-Wilk (SW) tests were also conducted to statistically assess normality (Refer to Appendix L). Results in Table 4.4 indicated that academic stress, peer pressure, and anxiety levels were approximately normally distributed. However, life satisfaction showed a slight deviation from normality in the SW test ($p = .043$), but skewness and kurtosis values were within acceptable ranges, suggesting the distribution is sufficiently normal for parametric analyses.

Table 4.4

Kolmogorov-Smirnov Test and Shapiro-Wilk Test

	Kolmogorov-Smirnov			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Academic Stress	.044	121	.200*	.992	121	.689
Peer Pressure	.059	121	.200*	.985	121	.207
Life Satisfaction	.081	121	.050	.978	121	.043
Anxiety Levels	.073	121	.172	.988	121	.396

Note. df= degree of freedom.

Conclusion for Normality Assumptions

In summary, no violations of normality were found in Q-Q plot, histogram, and skewness and kurtosis. However, there was minor violations of normality found in SW test for one variable which is life satisfaction, while academic stress, peer pressure, and anxiety levels were shown to have no violation. According to all assumptions of normality, four out of five indicators have met the normality assumptions for all the variables, and thus the normality assumption was achieved.

4.4 Outliers

Multivariate Outliers

Multivariate outliers were assessed using Mahalanobis distance, Cook's distance, and centered leverage values to identify cases that might have a significant influence on the regression model. Table 4.5 presents six potential outliers identified through casewise diagnostics, which are case 3, 24, 42, 90, 111, and 116 (Refer to Appendix M). According to Barnett et al. (1979), Mahalanobis distance values are set as 15, and none of the cases exceeded the recommended cutoff for identifying multivariate outliers. Cook's distance values set as less than one, and no approached the commonly cited threshold indicating problematic influence, suggesting that no cases had an excessive influence on the regression coefficients (Camilleri et al., 2024; Cook & Weisberg, 1982). Centered leverage value for this study is 0.0661, which was obtained through formula $(\frac{2(p+1)}{n})$, where p was the number of predictors and n was the sample size. According to Hoaglin and Welsh (1978), cases having a value higher than centered leverage are potential multivariate outliers. Although case 3, 42, 90, 111, and 116 exceeded the recommended threshold for centered leverage diagnostics, their Mahalanobis distance was within the critical limit and their Cook's distance value remained well below 1.0. This indicates that while the cases are leveraging point, they do not exert undue influence on the regression model. Taken together, Mahalanobis distance, Cook's distance, and leverage diagnostics indicated no severe multivariate outliers. Therefore, all 121 cases were retained for further analysis.

Table 4.5

Multivariate Outliers Test

Case Number	Mahalanobis Distance	Cook's Distance	Centered Leverage Value
3	8.67280	.13144	.07227

24	.19163	.02058	.00160
42	2.21567	.02872	.01846
90	.79527	.02901	.00663
111	4.80605	.09096	.04005
116	2.72454	.04007	.02270
Total N	6	6	6	6

Note. N= number of cases.

4.5 Assumptions of Multiple Linear Regression (MLR)

Multicollinearity

Tolerance and variance inflation factor (VIF) were used to analyze each independent variable's correlation. The VIF thresholds and tolerance are stated as above.10 and correspondingly less than 10 (Shrestha, 2020). As stated in Table 4.6, the results indicate that there are no multicollinearity violations for any of the independent variables (Refer to Appendix O).

Table 4.6

Collinearity Statistics

	Tolerance	VIF
Academic Stress	.595	1.680
Peer Pressure	.735	1.360
Life Satisfaction	.698	1.432

Note. DV= anxiety levels.

Independence of Errors

The Durbin-Watson test was used to assess residual independence, with acceptable benchmark values ranging from 1 to 3 (Champion et al., 1998). Table 4.7 shows that the Durbin-Watson value of 2.091 satisfies the assumption and is close to the ideal value of 2 (Refer to Appendix O).

Table 4.7

Independent Error Test

Model	Durbin-Watson
1	2.091

Normality of Residuals, Linearity, and Homoscedasticity

The scatterplot shows that residuals cluster around zero and follow a random pattern (Refer to Appendix N). Therefore, all three assumptions for multiple linear regression analysis were met.

4.6 Multiple Linear Regression (MLR) Analysis

Multiple linear regression (MLR) analysis was conducted to examine whether academic stress, peer pressure, and life satisfaction jointly predicted anxiety levels among university students in Malaysia. As shown in Table 4.8, the overall regression model was significant. $F(3, 117) = 32.20$, $p < .05$, indicating that the set of predictors reliably predicted anxiety levels. The model explained 45.2% of the variance in anxiety, with an adjusted R^2 of .438, suggesting a strong model fit (Refer to Appendix O).

Among the predictors shown in Table 4.9, academic stress emerged as a significant positive predictor of anxiety levels ($\beta = .526$, $t(117) = 5.93$, $p < .05$), indicating that higher academic stress was associated with greater anxiety levels. Peer pressure was a significant

negative predictor ($\beta = -.193$, $t(117) = -2.42$, $p = .017$), suggesting that lower peer pressure was associated with higher anxiety levels in this sample. Life satisfaction, however, was not a significant predictor ($\beta = .047$, $t(117) = 0.58$, $p = .566$), indicating that life satisfaction is showing no significant predictive effect towards anxiety levels.

Table 4.8

Results of Regression Model

	df	*F*	*p*	Adj. R^2
Regression	3	32.196	.000	.438
Residual	117			
Total	120			

Note. Predictors= academic stress, peer pressure, and life satisfaction. DV= anxiety levels, *df*= degree of freedom, *F*= F-statistic, Adj. R^2= coefficient of determination.

Table 4.9

Results of Regression Coefficient

	Std. β	*t*	*p*
Academic Stress	.526	5.934	.000**
Peer Pressure	-.193	-2.415	.017*
Life Satisfaction	.047	.576	.566

Note. $p < .01**$, $p < .05*$, DV= anxiety levels, Std. β= standardized beta, *t*= t=statistic

Conclusion for Multiple Linear Regression (MLR) Analysis

As shown in Table 4.10, academic stress significantly positively predicted anxiety levels, supporting H$_1$. In contrast, peer pressure was also a significant predictor of anxiety, but the effect was negative, contrary to the hypothesized positive relationship; thus, H$_2$ was

not supported. Life satisfaction did not significantly predict anxiety, so H_3 was not supported. In short, higher academic stress was associated with higher anxiety, higher peer pressure was associated with lower anxiety, and life satisfaction showed no significant effect on anxiety.

Table 4.10

Summary of Findings

Hypotheses	Significant	Actual Direction	Decision
H_1: Academic stress positively predicts anxiety levels among university students in Malaysia.	Yes	Positive	Supported
H_2: Peer pressure positively predicts anxiety levels among university students in Malaysia.	Yes	Negative	Not Supported
H_3: Life satisfaction negatively predicts anxiety levels among university students in Malaysia.	No	Positive	Not Supported

Chapter 5

Discussion

H₁: Academic stress (AS) positively predicts anxiety levels (AL) among university students in Malaysia.

The results of this study support the first hypothesis, indicating that AS positively predicts AL among university students in Malaysia. This suggests that AS functions as a significant predictor of AL. This finding is consistent with previous research, which has shown that heavy academic demands, such as exams, heavy coursework, and performance expectations are significant factors contributing to increased anxiety among university students.

According to Charan et al. (2025), heavy academic workload is one of the main factors contributing to students' anxiety. University students typically have to cope with multiple courses simultaneously, including assignments, examinations, and presentations. When all these academic tasks come at once, students experience cognitive overload, where their mental demands exceed their working memory capacity (Sweller, 2011). Cognitive overload reduces attentional concentration, increases errors, and exacerbates feelings of inadequacy, all of which contribute to increased anxiety (Koudsia & Kirchner, 2024). Research of university students has consistently shown that excessive coursework and constant assessments increase academic stress, which in turn increases anxiety by raising cognitive demands and reducing processing efficiency (Abdul Aziz et al., 2024). In Malaysia context, the heavy workload can be more pronounced due to the emphasis on continuous assessment and high evaluation requirement in academic courses, leading to persistent mental fatigue among university students.

Time pressure is another mechanism by which AS predicts AL. University students often face overlapping deadlines and tight schedules, which can create a sense of urgency and insufficient time to complete tasks (Bautista & Delas Alas, 2025). Students experience greater anxiety when they encounter difficulties with time management, such as delaying the start of assignments, struggling to prioritize tasks, or underestimating the time required to complete academic requirements (Ahmady et al., 2021). Research shows that poor time management can exacerbate anxiety because it reduced perceived control and increases fear of negative academic outcomes (Iqra, 2024). In addition, students who must juggle their academic studies, part-time jobs, or family responsibilities while also dealing with AS often experience greater time pressure (Drăghici & Cazan, 2022; Samaratunga et al., 2025). Studies has found that time management difficulties play a mediating role between AS and anxiety, suggesting that students who cannot effectively prioritize tasks or allocate their time appropriately are more susceptible to stress-induced anxiety (Luceño-Moreno et al., 2025).

Fear of failure plays a central role in anxiety caused by AS, especially in cultures where academic achievement is closely linked to high social and familial expectations (Xia, 2023). Students who internalize high performance expectations from themselves, parents, or teachers often perceive academic challenges as potential threats. This kind of appraisal can trigger anticipatory anxiety, excessive worry, and negative self-evaluation (Olivera et al., 2023). Dang and Middlemiss (2025) found that the fear of failure plays an important mediating role between AS and anxiety, as students who are afraid of disappointing others or failing to meet expectations become more anxious when faced with academic tasks. This mechanism aligns well with findings from Malaysian university students who frequently report feeling stress and anxiety to achieve high grades and secure for future opportunities (Ghazali et al., 2024).

Benítez-Agudelo et al. (2025) showed that AS often disrupts students' daily routines and physiological functioning, especially sleep patterns, which are critical regulators of emotional health. Students under heavy academic pressure often sacrifice sleep time, staying up late to study, completing assignments, or revising for examinations (Nakie et al., 2024). However, insufficient sleep reduced emotional regulation, increases responsiveness to stressors, and increases AL (Wang et al., 2024). Therefore, students with poor sleep quality due to academic pressure are more likely to experience anxiety and stress. Moreover, AS can lead to physical discomfort such as fatigue, headaches, and reduced physical activity, all of which can further weaken resilience to stress and elevate anxiety (Monserrat-Hernández et al., 2023). Recent research has shown that sleep disturbances and physical exhaustion play a mediating role between AS and anxiety (Time et al., 2024), highlighting their significant impact on stress-related mental health issues among university students.

H₂: Peer pressure (PP) positively predicts anxiety levels (AL) among university students in Malaysia.

The findings of this study revealed that PP has a significant but negative predictive effect on AL among university students in Malaysia. This result contradicts many views in the existing literature, which typically links PP to harmful consequences such as stress, anxiety, or maladaptive behaviors. However, some theoretical and situational explanations may be able to account for this unexpected finding, particularly when considering the social dynamics within Malaysian university settings.

One possible explanation is that the "PP" captured by the measurement may reflect a positive or adaptive peer influence rather than coercive pressure (Allen et al., 2020). Research has shown that not all forms of PP are detrimental; instead, certain types of peer influence can foster social motivation, emotional connectedness, and sense of belonging,

which help reduce anxiety among university students (Parmar et al., 2025; Zhu et al., 2025). For example, students may receive encouragement from their peers, but they are not typically forced to study harder, participate in academic activities, or maintain positive behavior. Such encouragement reflects a supportive peer environment rather than coercive pressure. In collectivist contexts such as Malaysia, peer norms commonly emphasize cooperation, mutual support, and shared academic achievement (Ahmed et al., 2024). Therefore, students who report higher levels of PP may actually be experiencing more structured peer interactions and constructive academic encouragement, which enhances engagement and helps alleviate anxiety. This positive social influence can also reduce loneliness, strengthen academic confidence, and ultimately lower AL (Dost, 2025). This explanation aligns with recent findings that suggest supportive peer norms have a buffering effect on stress and anxiety among university students (Pointon-Haas et al., 2023).

Another plausible explanation is that higher PP may indicate stronger peer connectedness, which is a recognized protective factor against anxiety (Truong & Joshi, 2024; Zhu et al., 2023). Students who actively participate in social activities often receive more feedback, advice, emotional support, and shared experiences from their peers, all of which help alleviate anxiety. Yetim et al. (2024) found that students with stronger peer relationships, active participation in study groups, and access to university social networks reported lower AL despite academic stressors. This sense of social belonging may reduce anxiety when students interpret PP as a natural component of being included in a close peer group (Moldes et al., 2019). This explanation aligns with interpersonal theories, which posits that belongingness reduces negative cognitive rumination and enhances emotional stability (Pardede & Kovač, 2023). Therefore, the negative predictive relationship found in this study may reflect the role of peer engagement as a source of social support systems rather than a contributor to anxiety.

Furthermore, this may also be influenced by cultural and contextual factors. In Malaysian universities, especially those with strong community or collectivist values, peer groups often function as extended support systems (Bellamy et al., 2023; Hussin et al., 2021). Students can rely on their peers for academic collaboration, emotional reassurance, or mutual monitoring of learning progress. In such contexts, the "PP" experienced by students may create a structured and supportive environment that helps them stay organized and motivated (Schimmelpfennig, 2025), thereby reducing anxiety associated with uncertainty, procrastination, or excessive academic demands. Research further suggests that peer influence which promotes a sense of responsibility or academic engagement can reduce stress, enhance perceived control, and ultimately lower AL (Zhu et al., 2025). This contextual interpretation may help explain why students who report higher PP in our sample tend to exhibit lower AL.

This unexpected negative result may stem from how participants interpreted the items in the PPSQ-r scale. Some students may perceive "PP" as positive encouragement or supportive expectations from friends rather than coercive pressure (Laursen & Veenstra, 2021). When peers generally provide support, higher expectations may function as motivation instead of an anxiety-provoking force. Research suggests that when peer influence aligns with students' personal goals, it can enhance performance and reduce rather than intensify it (Järvenoja et al., 2025). This interpretation may partially explain the reversed findings in this study.

Additionally, characteristics of the sample may also contribute to this negative prediction. For example, freshmen or socially active students may rely more heavily on peers for adaptation during university transition, making peer influence become a source of comfort and belonging that helps reduce anxiety (Laursen & Veenstra, 2021). In contrast, students who report lower levels of PP may actually be more socially isolated or have weaker peer

networks. Low social connectedness is closely associated with higher AL among university students (Anto et al., 2023). This pattern may cause PP to appear as a protective factor within the analysis.

H₃: Life satisfaction (LS) negatively predicts anxiety levels (AL) among university students in Malaysia.

In this study, it was hypothesized that LS would negatively predict AL among university students in Malaysia. However, the results showed that LS was not a significant predictor, and unexpectedly, the direction of the coefficient was positive. This indicates that in this study's sample, higher LS did not translate into lower AL. Instead, LS and anxiety appear to coexist rather than mutually influencing each other as expected. These results suggest that the relationship between these variables may be more complex, situationally influenced, and moderated or inhibited by other psychological or situational factors.

One explanation for this non-significant relationship is the conceptual difference between LS and anxiety. LS reflects an individual's long-term cognitive evaluation of their overall life situation, while anxiety is an immediate emotional response to current stressors. These concepts operate at different temporal levels; LS is stable and global, while anxiety is situation-focused and reactive. Because university students often experience acute academic pressures, impending deadlines, and concerns about grades or employability, their anxiety tends to fluctuate according to immediate demands rather than their overall LS (Mohamad et al., 2021; Rogowska et al., 2021). This aligns with findings by Ruiz-Camacho and Gozalo (2025), who reported that situational academic stressors have a stronger influence on anxiety symptoms than general well-being measures among students.

The second explanation involves the role of stronger proximal predictors in the regression model. When more powerful predictors, such as AS, are included, they may

overwhelm or suppress weaker predictors like LS. In this study, AS was the strongest predictor, indicating that it explained most of the variance in anxiety. This is consistent with Malaysian findings showing academic-related concerns as the primary driver of anxiety, overshadowing other influences including well-being (Barbayannis et al., 2022; Meng Chuan et al., 2022; Mohamad et al., 2021). In other words, even if students feel satisfied with their friendships, families, or living conditions, intense academic pressure may continue to generate anxiety regardless of overall LS.

A third factor that may explain the unexpected positive relationship is the influence of achievement orientation and perfectionistic traits among students. High LS may stem from academic competence, robust performance, or successful social relationships. However, individuals who place high value on achievement often experience higher anxiety due to fear of failure, competitiveness, or self-imposed expectations (Shin et al., 2023). These students may report higher LS but also experience anxiety when working to maintain their standards or avoid disappointing others. Previous research has shown that perfectionism mediates the link between positive functioning and anxiety, meaning that high satisfaction does not guarantee low anxiety (Koutra et al., 2023; Kruger et al., 2023).

Another explanation relates to inconsistent and context-dependent findings in previous literature. Although many studies propose that LS reduces anxiety, recent findings demonstrate that this relationship is not always straightforward. For example, Ooi et al. (2022) found that LS only predicts lower psychological distress when interpersonal burdens and social expectations are low. LS did not significantly predict future AL at multiple time points, suggesting that external stressors may moderate this relationship. This variability indicates that LS alone is insufficient to buffer against anxiety, particularly when high chronic stress is present (Duffy et al., 2020).

Furthermore, cultural factors within the Malaysian university environment may also influence this relationship. University students in Malaysia often experience strong academic, societal, and familial expectations. These pressures may create a situation where students feel satisfied with areas of life unrelated to academics, yet remain anxious due to academic competitiveness, fear of disappointing family members, and concerns about post-graduation job prospects (David Han Kung & Ahmad, 2025; Xin & Wan Jaafar, 2024). Thus, although students may report LS in areas such as friendships or family support, these areas do not necessarily counteract the academic and societal pressures that drive anxiety.

In summary, these explanations highlight that the non-significant finding is theoretically plausible and supported by emerging literature. In the Malaysian context, the relationship between LS and anxiety appears to be moderated by academic pressure, perfectionistic tendencies, interpersonal expectations, and cultural pressures. When academic demands become the primary source of stress, the protective role of LS may weaken or disappear.

Overall, the results indicate that LS does not serve as a reliable predictor of anxiety among Malaysian university students. Instead, anxiety is primarily influenced by immediate academic challenges and internal performance expectations rather than overall evaluations of LS. This underscores the importance of addressing AS and psychological factors such as perfectionism in mental health interventions, as these emerge as more influential determinants of anxiety than LS alone.

Implications

Theoretical implication

This study used the Transactional Model of Stress and Coping and Self-Determination Theory (SDT) to examine how AS, PP, and LS predict AL among university students in

Malaysia. The transactional mode theory posits that when individuals perceive environmental demands as exceeding their coping resources, they experience stress and corresponding psychological impacts (Lazarus & Folkman, 1984), while SDT emphasizes the role of basic psychological needs, which are autonomy, competence, and relatedness, in shaping individual well-being (Deci & Ryan, 1985). The findings of this study partly reinforce and challenge these theoretical frameworks, contributing to a more nuanced understanding of how these predictive factors function within the context of Malaysian universities. Specifically, the results showed that AS (H_1) significantly and positively predicted anxiety, PP (H_2) significantly but negatively predicted anxiety, and LS (H_3) did not significantly and negatively predicted anxiety. AS was the strongest predictor, consistent with both transactional model and SDT, whereas the unexpected effects of PP and LS suggest that additional contextual and cultural interpretations may be needed.

First, this study found that AS significantly and positively predicted anxiety (H_1), providing strong empirical support for the transactional model. This model posits that stress arises when individuals appraise environmental demands as exceeding their coping resources, leading to emotional distress. Therefore, students are more likely to experience anxiety when they perceive academic demands such as exams, heavy coursework, and performance expectations as threatening stressors, reinforcing the relevance of primary and secondary appraisals in predicting anxiety. This result is consistent with previous research, indicating that AS is a major emotional burden faced by university students. According to SDT, high AS may also undermine students' autonomy and competence needs, leading to increased anxiety. This supports the SDT's notion that environments characterized by excessive evaluation, control, or performance pressure tend to trigger maladaptive emotional outcomes. Therefore, the significant positive predictive relationship between AS and anxiety (H_1)

reinforces the applicability of both transactional model and SDT in explaining how academic environments contribute to emotional distress among university students in Malaysia.

However, current findings on PP pose a theoretical challenge to both models. Contrary to the expected positive relationship, PP has a significant but negative predictive effect on anxiety (H_2), indicating that students experiencing higher PP reported lower AL. From the transactional model perspective, this suggests that peer-related demands may not be appraised as stress-inducing. Conversely, students may perceive PP as a motivator or social encouragement rather than a psychological burden. In the Malaysian university environment, peer influence may reflect strong social support, shared academic norms, and collaborative coping mechanisms, consistent with research findings that peer connections can alleviate anxiety (Ahmed et al., 2024; Hussin et al., 2021). From the perspective of SDT, this negative predictive relationship suggests that "PP" may satisfy relatedness needs, providing students with emotional support, encouragement, and sense of belonging (Parmar et al., 2025; Zhu et al., 2025). Instead of exerting pressure, peers may help students feel connected, particularly within collectivist cultural contexts, thereby alleviating anxiety. This finding partially challenges SDT, which typically links pressure to controlled motivation, suggesting that peer influence can play a supportive and need-fulfilling role. Therefore, this unexpected direction highlights the need to further interpret PP within the social dynamics of cultural dependence.

In addition, the unexpected non-significant and positive prediction relationship between LS and anxiety (H_3) further challenges the assumptions in the transactional model and SDT. As mentioned earlier, LS represents a global, long-term cognitive evaluation of one's life, while anxiety is a momentary emotional reaction to immediate stressors. For example, students may be satisfied with aspects of their personal life such as family support, friendships, or living conditions, but still find the academic demands overwhelming. This illustrates a mismatch between global well-being and emotional responses in specific

contexts. The transactional model emphasizes situational stress appraisal, while SDT emphasizes the satisfaction of needs in specific domains, suggesting that global well-being indicators may not directly buffer acute stressors (Mohamad et al., 2021; Rogowska et al., 2021). From the perspective of SDT, even if students report high LS, they may still experience autonomy or competence frustration in their academic lives, especially when their LS stems from an achievement-oriented environment. This aligns with research findings that suggest high-achieving or perfectionistic individuals may simultaneously report higher LS and anxiety due to internal pressure to maintain performance (Koutra et al., 2023; Kruger et al., 2023). Therefore, the findings indicate that LS may not function as a protective factor in highly demanding academic environment, and both transactional model and SDT may require refinement to account for domain-specific psychological stress that overweighs global well-being in predicting anxiety.

Overall, this study reinforces the applicability of transactional model and SDT in explaining the role of AS in student anxiety, while also revealing their limitations in explaining social influences and general well-being. The unexpected findings of PP and LS suggest that the need for theoretical refinement, particularly in understanding how cultural norms, supportive peer environments, and contextual psychological needs shape the experience of anxiety among university students.

Practical Implication

The findings of this study offer important insights into the factors that contribute to anxiety among undergraduate students in Malaysia, specifically AS, PP, and LS. The results revealed that AS was the strongest and most significant predictor of anxiety, indicating that students with higher AS are more likely to experience anxiety symptoms. PP was also found to significantly predict anxiety, but in the opposite direction from the hypothesis, showing a

negative relationship. This suggests that certain forms of PP may serve as motivational or supportive mechanisms rather than harmful stressors (Maykyle Fudolin & Dioso, 2025). LS, meanwhile, did not significantly predict anxiety, although the positive direction of its effect contradicts the initial assumption that higher LS would relate to lower anxiety. These findings have important practical implications for universities, mental health professionals, policymakers, and students.

First, the strong predictive role of AS highlights the need for universities and the Ministry of Higher Education (MOHE) to evaluate existing academic structures that may contribute to student anxiety. Universities could introduce balanced assessment systems that reduce over-dependence on high-stakes examinations and incorporate more continuous, formative assessments, group-based tasks, or project-oriented learning. Academic support systems such as tutoring programs, time-management workshops, and study-skills seminars can also equip students with coping strategies to handle demanding coursework. Lecturers play a role in recognizing signs of academic burnout and offering flexibility in assignment deadlines, when necessary, especially during peak academic periods.

Second, the unexpected negative predictive effect of PP on anxiety suggests that peer influence can sometimes function as a protective factor rather than a risk factor. Universities may leverage this by promoting positive peer-support environments. Peer mentoring programs, student buddy systems, and collaborative learning groups can enhance students' sense of belonging and reduce academic isolation. Workshops can also help students differentiate between healthy peer encouragement and harmful social comparison, enabling them to utilize peer support effectively. Student organizations, clubs, and societies can further foster supportive communities where students feel motivated, guided, and less alone in managing academic challenges.

Third, although LS did not significantly predict anxiety, its positive direction indicates that having a satisfying life alone is not sufficient to buffer academic-related anxiety. This means that interventions focusing solely on overall well-being may not adequately address the specific challenges that trigger anxiety among undergraduates. Therefore, counseling departments should prioritize targeted anxiety management interventions, such as cognitive behavioral therapy, stress reduction strategies, emotion regulation techniques, and academic coping strategies, rather than relying only on broad well-being programs. Screening tools for anxiety symptoms can also be integrated into routine student health or counselling services to identify at-risk students early.

Additionally, mental health professionals can incorporate psychoeducation sessions that address the relationship between academic pressure, peer influence, and anxiety. For students who experience supportive peer environments, counsellors may help reinforce these positive networks. For those who lack such support, interventions may focus on building social skills, reducing social isolation, and encouraging participation in on-campus communities. Counsellors should also be aware that students may present anxiety even without external indicators of low LS, highlighting the need for more targeted assessment tools that should not be limited to general well-being questions.

From a policy perspective, this study highlights the importance of strengthening campus-based mental health services in Malaysian universities. MOHE can collaborate with institutions to develop national guidelines for student mental health support, ensuring that counselling services are accessible, adequately staffed, and equipped to handle academic-related anxiety. Public awareness campaigns on campuses can also normalize help-seeking behaviors and reduce stigma associated with mental health issues. Universities may consider implementing compulsory mental health literacy modules during orientation week to educate students about anxiety symptoms, coping skills, and available support systems.

Finally, the findings may encourage students to reflect on how AS and peer relationships shape their own mental health. Students can benefit from developing healthy study habits, seeking academic support when needed, and engaging in peer groups that foster encouragement rather than unhealthy comparison. Increasing awareness of early anxiety signs allows students to manage symptoms before they worsen.

In conclusion, the results of this study highlight the central role of AS in predicting anxiety among Malaysian undergraduates, while also revealing the complexity and sometimes protective role of peer influence. By integrating these insights into university policies, mental health services, and student support programs, higher education institutions can better address the academic and social pressures that contribute to anxiety and create a healthier, more supportive learning environment for all students.

Limitations

This study has several limitations that need to be acknowledged. First, it employed a cross-sectional survey design in which data were collected at a single point in time. Although this design is efficient and widely used in psychological research, it restricts the ability to determine causal relationships between the predictors (AS, PP, and LS) and AL among university students (Maier et al., 2023). For example, while findings suggest that AS significantly predicted anxiety, the cross-sectional nature of this study implies that it is equally possible that higher AL can influence how students perceive and report their AS. Therefore, the observed associations remain correlations rather than causal relationships, and the direction of the relationships cannot be confidently determined.

Secondly, the sampling methods used presents limitations related to the representativeness of the sample. The study employed convenience-based sampling through online distribution, primarily relying on social media platforms and existing online networks

for data collection. This approach may have introduced sampling bias, as students who are more active online or more accustomed to online surveys were more likely to participate. Although the participants were recruited from various Malaysian states, the demographic distribution was uneven, and certain regions, academic programs, or university types may have been overrepresented. As a result, the findings may not fully reflect the experiences of the broader Malaysian university student's population, particularly those from rural areas, different academic fields, or institutions with limited internet access. This lack of representativeness limits the generalizability of the findings.

Thirdly, this study relied entirely on self-report questionnaires to measure AS, PP, LS, and AL. Although self-report instruments are practical and widely used, they are inherently susceptible to several forms of biases. Participants may have responded in ways they perceived as socially desirable or acceptable rather than accurately expressing their true feelings (Júnior & Patrício, 2022), particularly when reporting sensitive psychological constructions such as anxiety. Additionally, some respondents may have misunderstood certain items or found it difficult to accurately evaluate their own emotional experiences, which could lead to inaccuracies in the data. Another concern is that the instruments used were primarily developed and validated in Western contexts, which may not fully account for cultural differences in how Malaysian students interpret stress, peer influence, or LS. Such cultural variations may partly explain why LS did not significantly predict anxiety in this study, despite its strong predictive value in previous research conducted in other cultural settings.

Recommendations

Based on the limitations discussed above, several recommendations are proposed to strengthen future research on AL among Malaysian university students. First, future studies should consider employing longitudinal or experimental research designs. Longitudinal

research designs involve collecting data at multiple time points, allowing researchers to observe how AS, PP, and LS change over time and how these changes affect AL. This approach can more clearly reveal the temporal relationships and potential causal relationships between variables (So et al., 2025). Experimental research designs, such as interventions aimed at reducing AS or enhancing coping skills, could also help determine whether modifying psychological factors can significantly reduce AL.

Secondly, to enhance representativeness and improve the generalizability of findings, future studies should focus on recruiting larger, more demographically diverse samples. Researchers should not rely solely on online convenience sampling but should employ probability-based or stratified sampling methods across multiple public and private universities in Malaysia. Ensuring more balanced representation across gender, ethnicity, geographic regions, academic year, and socioeconomic status would help increase the external validity of the findings. A larger and more diverse sample could also capture a wider range of student experiences and allow for subgroup analyses that reveal significant differences in AL across various demographic groups.

Thirdly, future research should consider incorporating multi-method approaches to improve the accuracy and depth of data collected. While self-report surveys can provide valuable insights, they can be supplemented with qualitative methods such as interviews, open-ended questions, or focus group discussions to better understand students lived experiences of AS and PP. Additionally, integrating objective indicators such as academic records, behavioral measurements, or physiological stress indicators could help reduce reliance on subjective assessments and mitigate issues related to inaccurate self-reporting. Combining quantitative and qualitative methods would allow future studies to gain a more

comprehensive understanding of the factors influencing anxiety and capture subtle differences that may be missed by self-report measurements alone.

Conclusion

The present study aimed to examine the extent to which AS, PP, and LS predict AL among university students in Malaysia. The findings showed that AS was a significant positive predictor of anxiety, highlighting the significant impact of academic demands, workload, and performance expectations on students' mental health. PP also demonstrated a significant effect, but in the opposite direction to the initial hypothesis, suggesting that certain forms of peer influence may be a source of social support rather than a stressor. Conversely, LS did not significantly predict anxiety, indicating that general well-being alone may not be sufficient to buffer against stressors that are specifically related to university life. Collectively, these findings underscore the complexity of factors contributing to anxiety and emphasize the need to examine both academic and social factors when exploring mental health concerns among students.

Overall, the results of this study contribute meaningfully to the existing literature by offering evidence based on a Malaysian university student population, an area where empirical studies remain limited. By identifying AS and PP as significant predictors, this research provides valuable insights for educators, counsellors, and policymakers in developing targeted interventions to promote students' mental health. The non-significant role of LS also suggests that important cultural or contextual factors may influence Malaysian students' perceptions of well-being and stress management styles, pointing to the need for more nuanced approaches in future research.

In conclusion, the study highlights the urgency of addressing mental health issues among university students, particularly those stemming from academic and social pressures.

The findings deepen our understanding of anxiety and its predictors, while also revealing gaps that future research must improve through more diversified samples, culturally sensitive measurement methods, and more robust research designs. Strengthening institutional support systems, promoting stress-management resources, and fostering healthy peer environments may play a crucial role in reducing anxiety among university students. Ultimately, improving mental health support within university settings is essential for enhancing students' overall well-being, academic success, and long-term personal development.

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Appendices

Appendix A: Effect Size Calculation

Correlation Test

We used the Pearson correlation test and found that academic stress was moderately correlated with anxiety ($r = 0.772$, $p < 0.01$).

Table 4
Correlation test

Variables	1	2
Academic stress	-	.772**
Anxiety	.772**	-

Note. **$p < 0.01$

Meng Chuan, H., Chye Ying, L., Khong Yun, P., Pei Boon, O., & Kay Hooi, K. (2022). Academic stress and anxiety among undergraduate students in Malaysia. *International Journal of Education, Psychology and Counseling*, *7*(46), 98–109. https://doi.org/10.35631/ijepc.746009

Table 1.

Descriptive statistics and intercorrelations for study Variables($N = 521$)

Measure	M(SD)	Cronbach's α	1	2	3
1. Peer Pressure	2.849(1.209)	0.834	1		
2. Anxiety	3.965(1.589)	0.907	0.472***	1	
3. Smartphone Addiction	4.634(1.313)	0.810	0.283***	0.462***	1

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Note: ***$p < 0.001$。

Hung, M.-T., Hung, L.-C., Zhou, Q., & Huang, Z. (2025). Peer pressure, anxiety, and smartphone addiction among Chinese college students: a mediation analysis. *BMC Psychology, 13*(1). https://doi.org/10.1186/s40359-025-03107-y

Table 4

Variables	ALL					
	(1)	(2)	(3)	(4)	(5)	(6)
Depression	1					
Anxiety	0.63**	1				
Stress	0.63**	0.67**	1			
Perceived burdensomeness	0.62**	0.57**	0.54**	1		
Thwarted belongingness	0.15**	0.23**	0.24**	0.17**	1	
Satisfaction with Life	−0.28**	−0.15*	−0.15**	−0.23**	0.19**	1

** $p < 0.01$.

Table 4. Correlation between variables.

Ooi, P. B., Khor, K. S., Tan, C. C., & Ong, D. L. T. (2022). Depression, anxiety, stress, and satisfaction with life: Moderating role of interpersonal needs among university students. *Frontiers in Public Health, 10*. https://doi.org/10.3389/fpubh.2022.958884

Effect Size of Academic Stress

$$f^2 = \frac{0.772^2}{1-0.772^2} = 1.4751$$

Effect Size of Peer Pressure

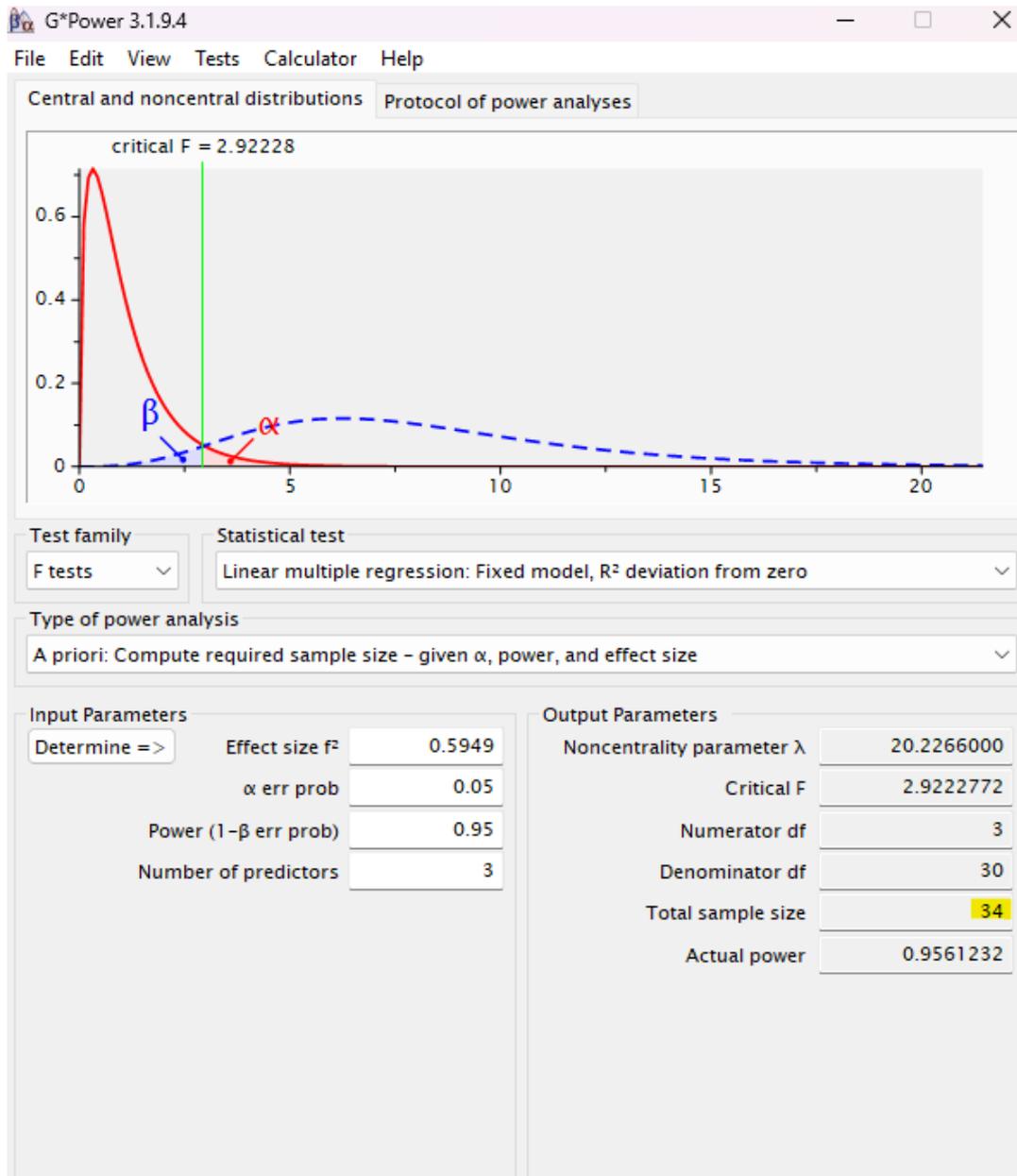$$f^2 = \frac{0.472^2}{1-0.472^2} = 0.2866$$

Effect Size of Life Satisfaction

$$f^2 = \frac{-0.15^2}{1-(-0.15)^2} = 0.0230$$

Average Effect Size

$$f^2 = \frac{1.4751 + 0.2866 + 0.0230}{3} = 0.5949$$

Appendix B: G*Power Calculation

Appendix D: Ethical Approval Letter

UNIVERSITI TUNKU ABDUL RAHMAN DU012(A)
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Re: U/SERC/78-617/2025

7 October 2025

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

Dear Dr Lee,

Ethical Approval For Research Project/Protocol

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

The details of the research projects are as follows:

No	Research Title	Student's Name	Supervisor's Name	Approval Validity
1.	Academic Stress, Peer Pressure, and Life Satisfaction as Predictors Towards Anxiety Levels Among University Students in Malaysia	1. Tong Huey Yin 2. Wang Sze Jazz 3. Wong Zu Yuen	Ms Teoh Xi Yao	7 October 2025 – 6 October 2026

The conduct of this research is subject to the following:

(1) The participants' informed consent be obtained prior to the commencement of the research;

(2) Confidentiality of participants' personal data must be maintained; and

(3) Compliance with procedures set out in related policies of UTAR such as the UTAR Research Ethics and Code of Conduct, Code of Practice for Research Involving Humans and other related policies/guidelines.

(4) Written consent be obtained from the institution(s)/company(ies) in which the physical or/and online survey will be carried out, prior to the commencement of the research.

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

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

Thank you.

Yours sincerely,
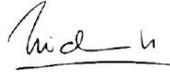
Professor Dr Zuraidah Abd Manaf
Chairman
UTAR Scientific and Ethical Review Committee

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

Appendix E: Pilot Study Instruments Reliability

Perceptions of Academic Stress (PAS) Scale

Reliability Statistics

Cronbach's Alpha	N of Items
.884	18

Peer Pressure Scale Questionnaire-Revised (PPSQ-R)

Reliability Statistics

Cronbach's Alpha	N of Items
.873	25

Satisfaction with Life Scale (SWLS)

Reliability Statistics

Cronbach's Alpha	N of Items
.891	5

Westside Test Anxiety Scale (WTAS)

Reliability Statistics

Cronbach's Alpha	N of Items
.916	10

Appendix F: Actual Study Instruments Reliability

Perceptions of Academic Stress (PAS) Scale

Reliability Statistics

Cronbach's Alpha	N of Items
.841	18

Peer Pressure Scale Questionnaire-Revised (PPSQ-R)

Reliability Statistics

Cronbach's Alpha	N of Items
.905	25

Satisfaction with Life Scale (SWLS)

Reliability Statistics

Cronbach's Alpha	N of Items
.854	5

Westside Test Anxiety Scale (WTAS)

Reliability Statistics

Cronbach's Alpha	N of Items
.874	10

Appendix G: Descriptive Statistics (Demographic)

Age

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	18	1	.8	.8	.8
	19	3	2.5	2.5	3.3
	20	15	12.4	12.4	15.7
	21	41	33.9	33.9	49.6
	22	38	31.4	31.4	81.0
	23	17	14.0	14.0	95.0
	24	2	1.7	1.7	96.7
	25	3	2.5	2.5	99.2
	26	1	.8	.8	100.0
	Total	121	100.0	100.0	

Gender – Selected Choice

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Female	90	74.4	74.4	74.4
	Male	31	25.6	25.6	100.0
	Total	121	100.0	100.0	

Race – Selected Choice

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Chinese	116	95.9	95.9	95.9
	Malay	3	2.5	2.5	98.3
	Indian	2	1.7	1.7	100.0
	Total	121	100.0	100.0	

Current Year of Study

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	First year	11	9.1	9.1	9.1
	Second year	16	13.2	13.2	22.3
	Third year	83	68.6	68.6	90.9
	Fourth year	11	9.1	9.1	100.0
	Total	121	100.0	100.0	

Current Education Level

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Undergraduate	121	100.0	100.0	100.0

Appendix H: Descriptive Statistics (Variables)

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
SUM_PASS	121	23	73	50.45	10.250
SUM_PPSQ	121	29	111	63.48	16.246
SUM_SWLS	121	5	34	21.34	6.453
MEAN_WTAS	121	1	5	2.69	.783
Valid N (listwise)	121				

Appendix I: Histogram

Academic Stress

SUM_PASS

Mean = 50.45
Std. Dev. = 10.25
N = 121

Peer Pressure

Life Satisfaction

Anxiety Levels

MEAN_WTAS

Mean = 2.69
Std. Dev. = .783
N = 121
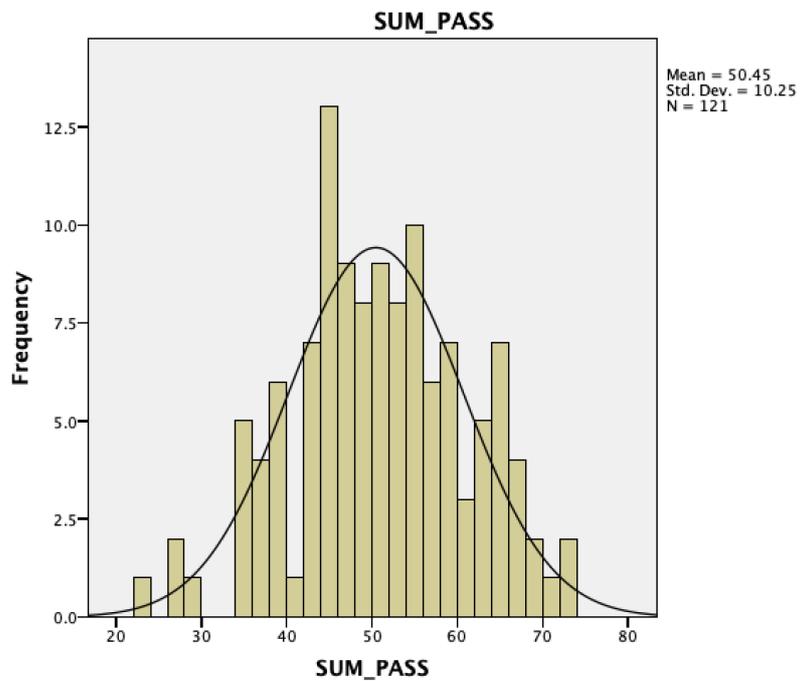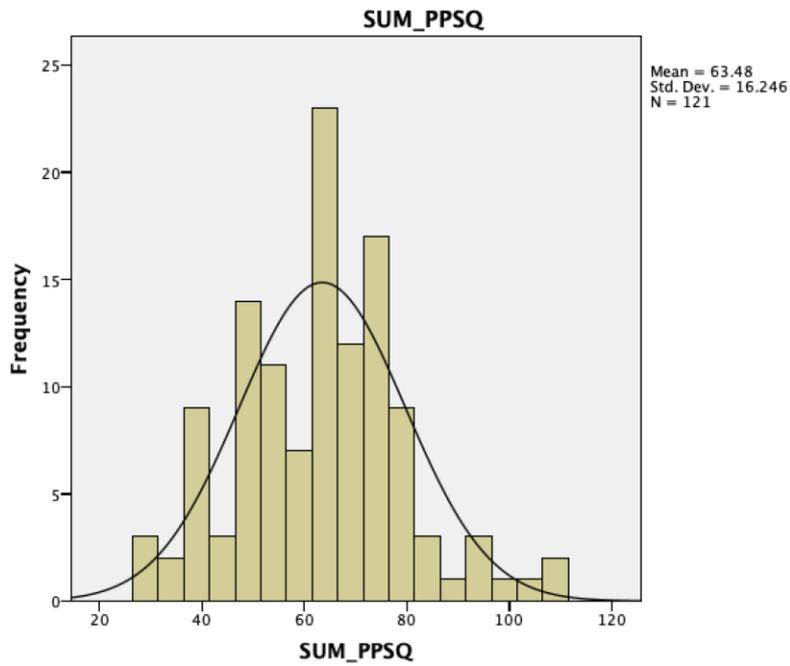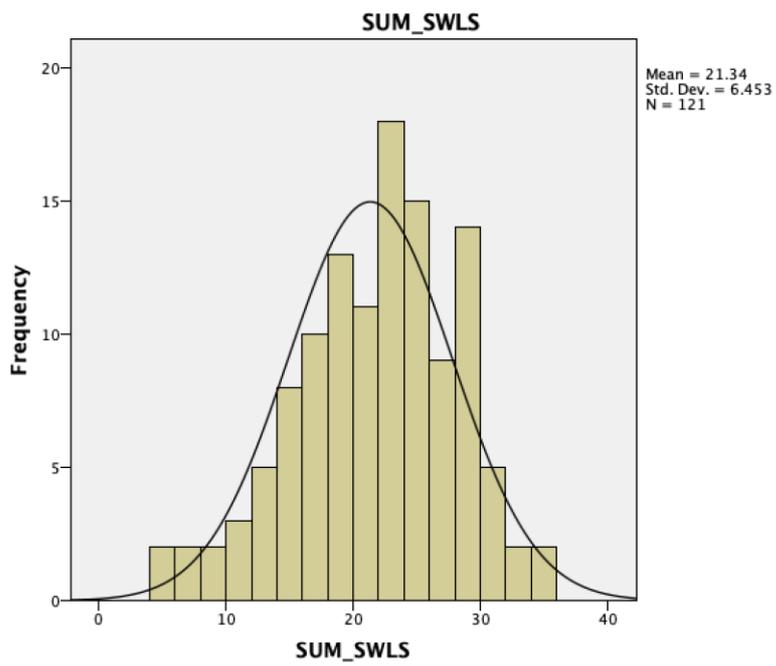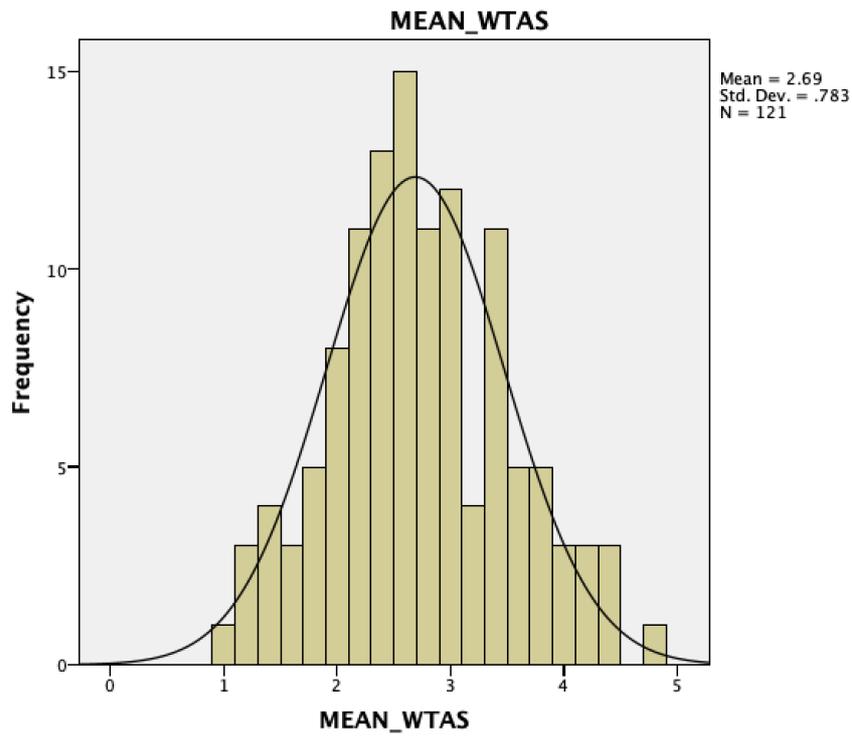
Appendix J: Q-Q Plot

Academic Stress

Normal Q-Q Plot of SUM_PASS

Peer Pressure

Normal Q–Q Plot of SUM_PPSQ

Life Satisfaction

Normal Q–Q Plot of SUM_SWLS
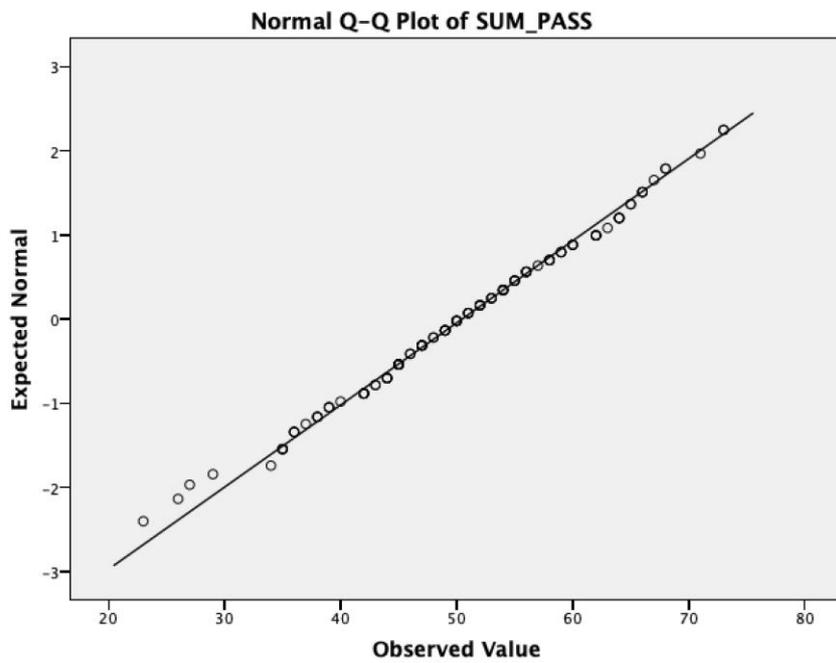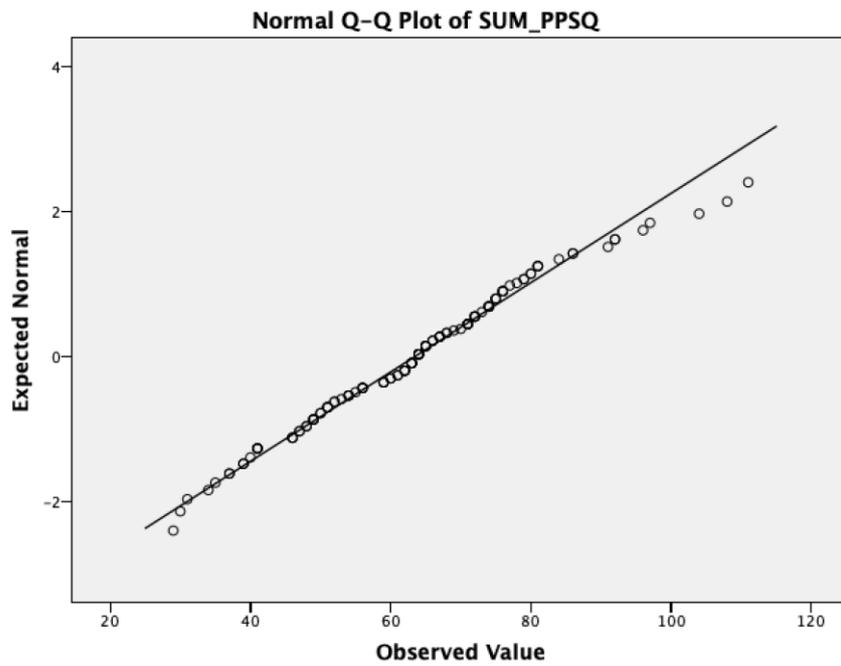
Anxiety Levels
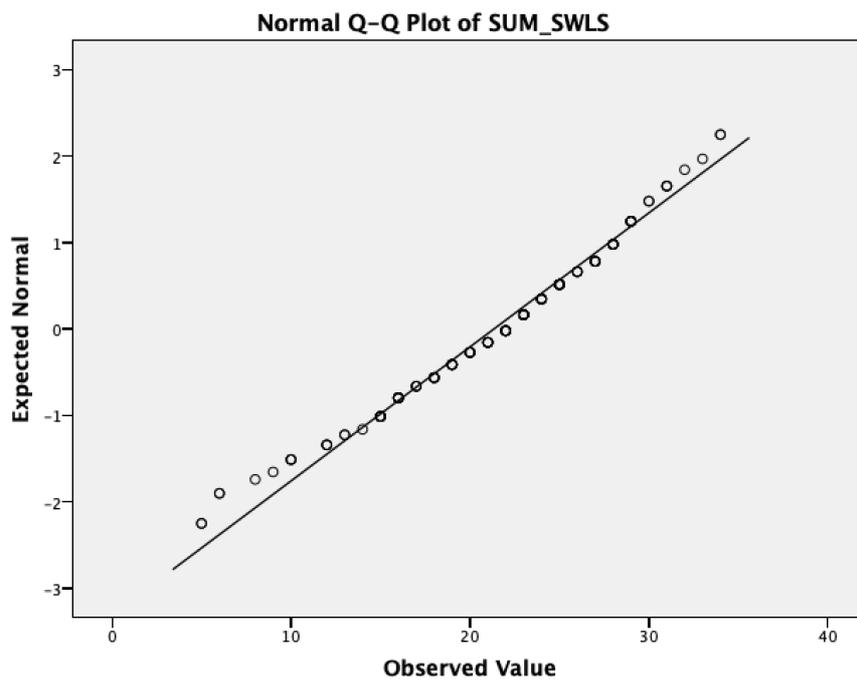
Normal Q–Q Plot of MEAN_WTAS
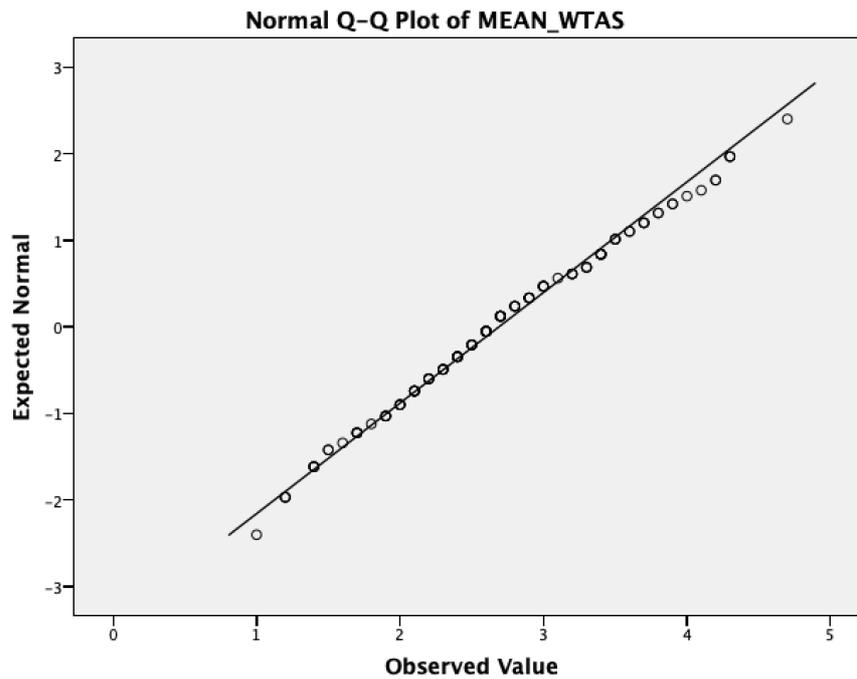
Appendix K: Skewness and Kurtosis of Variables

Academic Stress

Skewness	−.112
Kurtosis	−.187

Peer Pressure

Skewness	.282
Kurtosis	.291

Life Satisfaction

Skewness	−.438
Kurtosis	−.148

Anxiety Levels

Skewness	.197
Kurtosis	−.344

Appendix L: Kolmogorov-Smirnov and Shapiro-Wilk Test

Tests of Normality

	Kolmogorov–Smirnov[a]			Shapiro–Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
SUM_PASS	.044	121	.200[*]	.992	121	.689
SUM_PPSQ	.059	121	.200[*]	.985	121	.207
SUM_SWLS	.081	121	.050	.978	121	.043
MEAN_WTAS	.073	121	.172	.988	121	.396

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

a. Lilliefors Significance Correction

Appendix M: Outliers

Casewise Diagnostics[a]

Case Number	Std. Residual	MEAN_WTAS	Predicted Value	Residual
3	2.349	3	1.92	1.379
24	−2.861	1	2.88	−1.679
42	2.018	4	3.02	1.184
90	−2.750	1	3.01	−1.614
111	−2.612	2	3.03	−1.533
116	−2.205	2	3.39	−1.294

a. Dependent Variable: MEAN_WTAS

Case Summaries

	ID	Mahalanobis Distance	Cook's Distance	Centered Leverage Value
1	1	4.54940	.00445	.03791
2	2	1.34022	.00265	.01117
3	3	8.67280	.13144	.07227
4	4	2.94337	.00239	.02453
5	5	6.63830	.00710	.05532
6	6	5.32658	.00686	.04439
7	7	1.79024	.01206	.01492
8	8	4.01830	.00008	.03349
9	9	1.16117	.00042	.00968
10	10	4.04212	.00153	.03368
11	11	.86186	.00033	.00718
12	12	2.69064	.00009	.02242
13	13	.95066	.00096	.00792
14	14	.83073	.00146	.00692
15	15	1.18616	.00090	.00988
16	16	5.31778	.00198	.04431
17	17	.42927	.00395	.00358
18	18	7.18312	.02638	.05986
19	19	2.77589	.00000	.02313
20	20	.91486	.00001	.00762
21	21	2.32804	.00422	.01940
22	22	1.43853	.00574	.01199
23	23	5.68286	.00088	.04736
24	24	.19163	.02058	.00160
25	25	1.18283	.00155	.00986
26	26	2.22437	.00233	.01854
27	27	1.07477	.00780	.00896
28	28	8.88579	.01873	.07405
29	29	5.20399	.01072	.04337
30	30	2.01793	.00163	.01682
31	31	.45290	.01066	.00377
32	32	.23525	.00010	.00196
33	33	.35864	.00553	.00299
34	34	1.83419	.01817	.01528
35	35	4.21336	.00020	.03511

36	36	4.49847	.00742	.03749
37	37	3.64033	.00667	.03034
38	38	3.50633	.00032	.02922
39	39	2.67100	.00542	.02226
40	40	3.03104	.00454	.02526
41	41	1.09675	.00970	.00914
42	42	2.21567	.02872	.01846
43	43	4.93883	.00490	.04116
44	44	1.11799	.00077	.00932
45	45	5.02919	.00148	.04191
46	46	.88809	.00008	.00740
47	47	.64077	.00643	.00534
48	48	4.81600	.01539	.04013
49	49	8.46479	.07288	.07054
50	50	1.89631	.00100	.01580
51	51	3.59573	.00290	.02996
52	52	.19897	.00314	.00166
53	53	5.46482	.00177	.04554
54	54	2.63515	.00392	.02196
55	55	4.45305	.02386	.03711
56	56	3.87455	.00372	.03229
57	57	3.09507	.00011	.02579
58	58	1.02114	.00339	.00851
59	59	1.52411	.00112	.01270
60	60	5.31351	.00169	.04428
61	61	2.50537	.00013	.02088
62	62	.77140	.00001	.00643
63	63	4.89691	.01706	.04081
64	64	.56750	.00053	.00473
65	65	3.17154	.00003	.02643
66	66	.87160	.01063	.00726
67	67	2.05622	.00071	.01714
68	68	.95003	.00446	.00792
69	69	.24446	.00348	.00204
70	70	.40182	.00059	.00335
71	71	5.39954	.00046	.04500
72	72	2.04944	.01155	.01708
73	73	1.69232	.00204	.01410

74	74	2.07452	.00015	.01729
75	75	.41767	.00099	.00348
76	76	3.63031	.00222	.03025
77	77	2.31359	.00179	.01928
78	78	4.12314	.00176	.03436
79	79	3.11792	.01940	.02598
80	80	.43280	.00001	.00361
81	81	.27604	.00005	.00230
82	82	.31061	.00237	.00259
83	83	.85547	.00042	.00713
84	84	8.60751	.05816	.07173
85	85	.45671	.00017	.00381
86	86	4.76066	.01449	.03967
87	87	2.58560	.02205	.02155
88	88	.74456	.00006	.00620
89	89	2.34783	.00025	.01957
90	90	.79527	.02901	.00663
91	91	4.69034	.03206	.03909
92	92	3.85632	.00476	.03214
93	93	1.93622	.01485	.01614
94	94	2.15357	.00517	.01795
95	95	1.97683	.00182	.01647
96	96	3.53936	.00003	.02949
97	97	.59192	.00051	.00493
98	98	2.11371	.00158	.01761
99	99	4.91489	.00044	.04096
100	100	3.17236	.00014	.02644
101	101	3.02544	.00309	.02521
102	102	7.98331	.00338	.06653
103	103	10.81634	.00918	.09014
104	104	3.23613	.00235	.02697
105	105	.59189	.00061	.00493
106	106	2.45366	.01802	.02045
107	107	1.25778	.00018	.01048
108	108	.81954	.00325	.00683
109	109	9.89873	.01708	.08249
110	110	7.19707	.02925	.05998
111	111	4.80605	.09096	.04005

112	112	2.98331	.00836	.02486
113	113	3.07292	.00034	.02561
114	114	2.48736	.00147	.02073
115	115	5.43696	.04377	.04531
116	116	2.72454	.04007	.02270
117	117	.81430	.00070	.00679
118	118	1.05454	.01386	.00879
119	119	3.76903	.00428	.03141
120	120	1.18519	.00084	.00988
121	121	11.43578	.00439	.09530
Total N	121	121	121	121

Appendix N: Scatterplot

Scatterplot
Dependent Variable: MEAN_WTAS
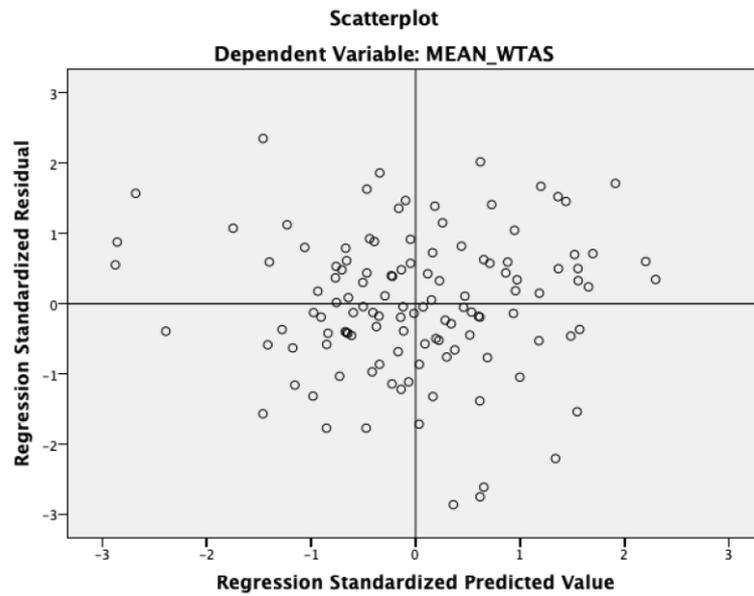
Appendix O: Multiple Linear Regression (MLR) Analysis

Tolerance and Variance Inflation Factor (VIF) Values

Coefficients[a]

Model		Unstandardized Coefficients B	Unstandardized Coefficients Std. Error	Standardized Coefficients Beta	t	Sig.	95.0% Confidence Interval for B Lower Bound	95.0% Confidence Interval for B Upper Bound	Collinearity Statistics Tolerance	Collinearity Statistics VIF
1	(Constant)	1.128	.487		2.314	.022	.163	2.093		
	SUM_PASS	.040	.007	.526	5.934	.000	.027	.054	.595	1.680
	SUM_PPSQ	-.009	.004	-.193	-2.415	.017	-.017	-.002	.735	1.360
	SUM_SWLS	.006	.010	.047	.576	.566	-.014	.025	.698	1.432

a. Dependent Variable: MEAN_WTAS

Durbin-Watson Test

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.672[a]	.452	.438	.587	2.091

a. Predictors: (Constant), SUM_SWLS, SUM_PPSQ, SUM_PASS

b. Dependent Variable: MEAN_WTAS

Regression Model

ANOVA[a]

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	33.281	3	11.094	32.196	.000[b]
	Residual	40.315	117	.345		
	Total	73.596	120			

a. Dependent Variable: MEAN_WTAS

b. Predictors: (Constant), SUM_SWLS, SUM_PPSQ, SUM_PASS

Regression Coefficient

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B		Collinearity Statistics	
		B	Std. Error	Beta			Lower Bound	Upper Bound	Tolerance	VIF
1	(Constant)	1.128	.487		2.314	.022	.163	2.093		
	SUM_PASS	.040	.007	.526	5.934	.000	.027	.054	.595	1.680
	SUM_PPSQ	−.009	.004	−.193	−2.415	.017	−.017	−.002	.735	1.360
	SUM_SWLS	.006	.010	.047	.576	.566	−.014	.025	.698	1.432

a. Dependent Variable: MEAN_WTAS