The Effect of Financial Stress on Mental Health among University Students

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ABSTRACT

Financial stress is a significant challenge faced by university students, affecting both their overall well-being and academic performance. This study investigates the impact of financial stress on the mental health of students in the Faculty of Technology Management and Business (FPTP) at Universiti Tun Hussein Onn Malaysia (UTHM). Financial stress is a significant challenge faced by university students, affecting both their overall well-being and academic performance. While previous studies have examined this issue broadly, there is limited research focusing on the specific experiences of students in the Faculty of Technology Management and Business (FPTP) at Universiti Tun Hussein Onn Malaysia (UTHM). Understanding the unique financial pressures and their impact on mental health within this context is essential for developing targeted support strategies. This study focuses on key financial stressors such as tuition fees, housing costs, daily living expenses, debt obligations, and insufficient financial aid and examines how these challenges contribute to psychological effects, including anxiety, depression, and emotional distress. Data were collected using both quantitative and qualitative methods through structured questionnaires and semi-structured interviews of students under the faculty. Data were collected from 167 online questionnaires among the students from the faculty, which was analysed using SPSS version 30. Interviews have also been conducted to support the findings which involve 3 students from the FPTP faculty. The findings illustrate a strong relationship between financial stress and mental health problems, bringing into sharp focus the critical need for effective coping strategies and institutional support. The findings underscore the importance of implementing structured financial literacy programs, expanding scholarship opportunities, and improving access to on-campus mental health services as practical measures to mitigate the negative psychological impact of financial stress. By addressing the specific financial challenges identified in this study, universities can reduce students' anxiety and depression levels, enhance their academic focus, and promote long-term financial resilience.

Keywords: Financial literacy, university mental health Malaysia, student coping strategies

INTRODUCTION

Financial stress has emerged as a critical factor affecting the mental health and academic success of university students worldwide. Students from economically disadvantaged backgrounds are particularly vulnerable, as they face multiple financial pressures related to tuition fees, accommodation, daily living expenses, and limited access to financial aid or scholarships (Robb, 2017). Such pressures have been shown to exacerbate anxiety, depression, and stress, which in turn can undermine academic performance and persistence in higher education (Richardson et al., 2017).

Even though student financial difficulties have been extensively reported, more research is still needed to determine how these stressors appear in particular institutional settings. Because of program requirements, living arrangements, and socioeconomic backgrounds, students in the Faculty of Technology Management and Business (FPTP) at Universiti Tun Hussein Onn Malaysia (UTHM) may face particular financial and academic pressures. In order to provide evidence for focused interventions and support systems, this study will analyze these experiences in order to advance a more nuanced understanding of financial stress and its psychological effects.

According to Kharroubi et al. (2024), financial problems are one of the significant factors that influence university students' wellbeing. This issue directly impacts their mental health and academic performance. Students with money problems usually find it very challenging to balance academic and personal life, which aggravates their mental health issues. This financial load may cause the student to seek part-time work, thereby reducing the time utilized in both academic improvement and self-care activities (Kim & Chatterjee, 2019).\

Although financial stress is a serious risk to students' academic performance and mental health, little is known about how it affects particular university environments. Students at Universiti Tun Hussein Onn Malaysia (UTHM)'s Faculty of Technology Management and Business (FPTP) may experience unique financial strains influenced by living expenses, debt loads, tuition requirements, and uncertainty about their future financial security. By identifying the most significant stressors—such as tuition costs, housing expenses, debt, and insufficient financial support—and examining their psychological effects, such as anxiety, depression, and emotional distress, this study proposes to investigate the relationship between financial stress and mental health among FPTP students. Additionally, the study aims to emphasize how coping mechanisms, financial literacy initiatives, and institutional support can help lessen these impacts.

Financial stress is a growing concern among Faculty of Technology and Business Management (FPTP) students at University Tun Hussein Onn Malaysia (UTHM). Life at the university often introduces various financial challenges, such as daily expenses, high tuition fees, and housing costs. This give significant pressure because many students are faced with a lack of sufficient financial resources, the number of scholarships received is lower, or delays in receiving financial aid. This situation has a very high impact and gives significant pressure that can affect the mental health of students, such as anxiety, depression, and emotions that are not stable.

The mental health challenges faced by students caused by financial stress will affect the quality of life, affect students' academic performance, and affect their interpersonal relationships. However, there is limited research that focuses on the relationship between financial stress and mental health among universities in Malaysia. Most previous studies have taken a global perspective, with limited research focusing on financial stress and mental health among university students in Malaysia.

In addition, existing research has largely focused on the short-term effects of financial stress, with insufficient attention given to its long-term implications for students' mental health and academic trajectories. Prolonged financial strain may impair cognitive functioning, reduce motivation, and hinder students' capacity to manage academic stress effectively. It can also limit their engagement in co-curricular and extracurricular activities, which are essential for holistic development and skill acquisition. By addressing these gaps, this study aims to provide a deeper understanding of how sustained financial stress shapes students' psychological well-being, academic engagement, and coping behaviours. The findings are expected to inform the design of targeted mental health interventions and financial support strategies that enhance both the well-being and academic success of university students.

Research Objectives

1. To explore the most prevalent sources of financial stress among students in the Faculty of Technology Management and Business (FPTP).
2. To examine gender differences in the impact of financial stress on mental health among FPTP students.

3. To analyze how the relationship between financial stress and mental health varies across racial groups among FPTP students.
4. To assess differences in the mental health impact of financial stress across study programs within the FPTP student population.
5. To investigate how financial stress affects mental health outcomes across different academic years among FPTP students.

Scope of Study

This study focuses on undergraduate students enrolled in the Bachelor of Technology Management with Honours program at the Faculty of Technology Management and Business (FPTP), Universiti Tun Hussein Onn Malaysia (UTHM). The sample comprises students from the first to the fourth year of study, representing various academic cohorts within the faculty. Data were collected within a defined short-term period, involving a total of 167 respondents who met the inclusion criteria. The study scope is limited to full-time, locally enrolled students, and excludes part-time and international students to ensure a consistent academic and cultural context. By defining these parameters, the research maintains clear institutional and demographic focus, allowing for a more accurate examination of the relationship between financial stress and mental health among this specific student population.

Significance of Study

The present research will explore the impact of financial stress on the mental well-being of students enrolled in the Faculty of Technology Management and Business (FPTP) at Universiti Tun Hussein Onn Malaysia. Understanding this relationship is essential for informing institutional support systems and contributing to research on student mental health in higher education contexts.

The findings of this study will contribute to a deeper understanding of how financial stress influences the mental health of university students, with a specific focus on those enrolled in the Bachelor of Technology Management with Honours program at FPTP, UTHM. Beyond documenting the prevalence and impact of financial stressors, the study provides evidence that can guide the development of targeted institutional interventions—such as financial literacy programs, enhanced scholarship schemes, and accessible mental health support services.Students will benefit from the findings, but so will university administrators who can create policies to lessen financial strain, mental health professionals who can create counseling strategies specifically for students who are stressed about money, and legislators who might think about distributing funds or establishing financial aid programs that fill in identified gaps. By analyzing financial stress in the context of Malaysian higher education, the study also fills a vacuum in the literature by providing information that can guide comparative studies and aid in the creation of new programs that will enhance students' academic resilience and general well-being.

LITERATURE REVIEW

Financial Stress

Financial stress refers to the emotional distress arising from an inability to meet financial obligations or effectively manage personal finances. It has been consistently linked to adverse psychological outcomes, including anxiety, depression, and reduced life satisfaction (Ryu et al., 2023). Among university students, financial stress often stems from tuition fees, living expenses, and debt, which can significantly influence both academic performance and mental well-being (Usman et al., 2019).

Several studies have documented the prevalence and severity of this issue in higher education contexts. Baker et al. (2019) reported that over 60% of students experienced moderate to severe financial stress, primarily due to tuition costs and student loan burdens. Similarly, Abdullah et al. (2021) found that financial difficulties outweighed academic and social pressures as the most frequent source of stress among students. While both

studies identify tuition and debt as major stressors, Abdullah et al. (2021) highlight that financial concerns may eclipse other traditional academic pressures, suggesting a shift in the dominant stress landscape among university populations.

Student loan debt has emerged as a persistent contributor to financial strain. Salari et al. (2021) found a strong association between loan-related stress and decreased emotional well-being, recommending financial counselling and institutional support as effective mitigators. Moore et al. (2023) further observed that students reporting high financial stress also displayed reduced academic performance and general well-being, illustrating a cyclical relationship: economic pressure heightens stress, which in turn diminishes academic outcomes, leading to further financial hardship.

Despite these consistent findings, much of the literature is concentrated in Western contexts, with limited investigation into Malaysian university students' experiences. This study addresses that gap by examining the unique financial stressors and their psychological effects on students at Universiti Tun Hussein Onn Malaysia (UTHM), particularly within the Faculty of Technology Management and Business (FPTP).

Mental Health Condition

Mental health disorders among university students have been increasingly recognized as critical factors influencing academic performance, personal well-being, and overall life satisfaction. Depression and anxiety are consistently reported as the most prevalent conditions within this population, both of which can negatively affect concentration, motivation, and social engagement (Wong et al., 2023). The authors recommended the implementation of accessible campus-based mental health services.

Mental health disorders such as anxiety and depression are among the most prevalent challenges faced by university students, with significant implications for academic performance, motivation, and social participation (Wong et al., 2023). Multiple studies highlight the role of external stressors in worsening these conditions. Browning et al. (2021), for example, reported that the COVID-19 pandemic led to a substantial increase in anxiety and depression among students, driven by academic disruptions, uncertainty about the future, social isolation, and economic pressures. Similarly, Pointon-Haas et al. (2024) emphasized the importance of peer support and community engagement, noting that supportive university environments can foster resilience and reduce stigma around seeking mental health help.A growing amount of research shows that financial stress is a significant risk factor for students' declining mental health. According to Guan et al. (2022), students who are struggling financially report much higher psychological distress, and there is a strong correlation between financial stress and symptoms of anxiety and depression. Pham et al. (2024) also showed that long-term financial stress exacerbates mental health issues by causing academic burnout and decreased motivation. These findings suggest that financial stress is not merely one of many stressors but a core driver of psychological difficulties among students, often interacting with other factors such as pandemic-related disruptions or lack of social support. While Browning et al. (2021) and Pointon-Haas et al. (2024) focus on intervention strategies—ranging from structured mental health services to resilience-building programs—addressing financial pressures may be an equally important preventive measure. Integrating financial literacy training, scholarship opportunities, and accessible counseling services could address both the economic and psychological needs of students, creating a more sustainable foundation for academic success and well-being.

Depression Anxiety Stress Scale (DASS)

The DASS, Depression Anxiety Stress Scale, is a widely used scale for assessing these feelings. It is designed to independently assess symptoms of depression, anxiety, and stress with specificity and sensitivity. The Depression, Anxiety, and Stress Scale (DASS) has been widely recognized for its effectiveness in evaluating emotional distress among university students, with strong capability to detect symptoms ranging from mild to severe (Mofatteh et al., 2020). Its relevance has been confirmed across diverse cultural contexts; for example, Lan et al. (2020) validated the DASS-21 in Southeast Asia, reporting robust psychometric properties. Beyond

research settings, it has been applied clinically to monitor treatment outcomes, such as in Yu et al. (2024), where significant score reductions across all subscales were observed after psychotherapy.

With the increasing use of digital health tools, the DASS-21 has been successfully adapted for online administration. Giromini et al. (2021) found no significant differences in reliability or validity between online and paper-based formats, a finding particularly relevant during the COVID-19 pandemic when remote psychological assessments became necessary (Fatima et al., 2021). In the present study, the DASS-21 was administered via an online survey platform to ensure accessibility for all participants and to accommodate the logistical constraints of a short-term data collection period. This approach aligns with previous evidence supporting the equivalence of digital and paper-based formats while also enabling efficient large-scale distribution.Nevertheless, the DASS-21 has received methodological critiques. Cao et al. (2023) note potential redundancy between the anxiety and stress subscales, which may limit the instrument's discriminative precision. To address this concern, the present study interpreted results with caution, considering the conceptual overlap between these constructs and focusing on composite patterns of emotional distress rather than isolated subscale scores when drawing conclusions.

Research Framework

The conceptual framework for this study illustrates the hypothesized relationship between financial stress (independent variable) and mental health condition (dependent variable) among students enrolled in the Bachelor of Technology Management with Honours program at the Faculty of Technology Management and Business (FPTP), Universiti Tun Hussein Onn Malaysia (UTHM).

Financial stress is conceptualized as a multidimensional construct encompassing tuition fees, living expenses, indebtedness, lack of financial support, and other economic pressures identified in prior studies (Guan et al., 2022; Baker et al., 2019; Pham et al., 2024). Mental health condition is operationalized through three dimensions—depression, anxiety, and stress—as measured by the DASS-21 instrument (Mofatteh et al., 2020; Lan et al., 2020).

Informed by previous research, the framework hypothesizes a positive association between higher financial stress and increased severity of mental health symptoms (Ryu et al., 2023; Salari et al., 2021). Additionally, potential moderating variables—such as gender, year of study, and coping strategies—are acknowledged, as literature suggests these factors can influence the strength or direction of the relationship (Pointon-Haas et al., 2024; Moore et al., 2023).
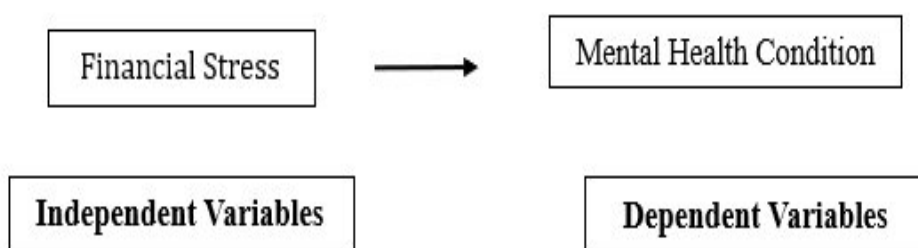

Fig. 1 *Research framework*

Figure 1 presents the modified conceptual framework, developed from an extensive literature review. Each construct is included based on empirical evidence linking financial stress to psychological distress in university populations, with the expectation that identifying these relationships will provide a foundation for targeted interventions at the institutional level.

H1 : There is a significant relationship between financial stress and mental health conditions among FPTP students.

RESEARCH METHODOLOGY

Research Design

This study employs a descriptive mixed-methods design, combining both quantitative and qualitative approaches to investigate the impact of financial stress on mental health among students of the Faculty of Technology Management and Business (FPTP) at UTHM.3.1.1 Quantitative Study

In this study, the quantitative method is adopted to achieve the main objective, which is to examine the relationship between financial stress and mental health outcomes among the FPTP students.

Qualitative Study

In this study, the qualitative method is adopted to allow in-depth understanding of the participants experiences toward the financial stress on mental health among the FPTP students.

Survey Method

In this study, there is Two data collection methods were used which is survey questionnaire and semi-structured interview. The survey questionnaires were distributed online through popular social media platforms like WhatsApp. The questions developed for this study aim to investigate the effect of financial stress on mental health among the FPTP students. A total of 167 questionnaires were distributed to selected respondents through Google Forms. The semi-structured interviews were conducted in-person and and were recorded with participants' informed consent. Field notes were also taken during the interview and later being transcribed verbatim for analysis. In this interview, there is 3 student who are really faced financial problem has been chosen.

Respondent

The respondents for this study comprise undergraduate students enrolled in the Bachelor of Technology Management with Honours program at the Faculty of Technology Management and Business (FPTP), Universiti Tun Hussein Onn Malaysia (UTHM). This group was selected because they represent a population that is directly relevant to the study's objectives, particularly in examining the relationship between financial stress and mental health within a Malaysian higher education context. 3.3.1 Population

In the case of this research, the target population consists of FPTP students located at the main campus of UTHM in Parit Raja. The focus on this population is since mental health issues among students are becoming more recognized as a significant concern at universities alongside the financial stress. Therefore, by targeting this group, the researchers can gather suitable data for their study.

Sample

In this study, the population of interest consisted of students from the Faculty of Technology Management and Business (FPTP) at the Universiti Tun Hussein Onn Malaysia (UTHM) main campus. As it was not feasible to collect data from all students within this faculty, a smaller representative sample was selected to ensure that the findings could be generalised to the broader student body.

The sample size was determined with reference to sample size recommendations in social science research, which suggest that a minimum of 100–200 respondents is adequate for correlational studies involving multiple variables (Hair et al., 2019; Kline, 2016). In this study, a total of 167 respondents participated, exceeding the minimum recommended threshold.

A convenience sampling technique was employed, whereby participation was open to all FPTP students who were accessible during the data collection period and willing to complete the online questionnaire. This approach was chosen for its practicality given the study's time constraints, while still allowing for a diverse representation across year levels and gender within the faculty. Although convenience sampling may limit generalizability, it remains a widely accepted method for exploratory research where the aim is to identify patterns and relationships rather than to produce population-wide estimates.

Instrumentation

This survey is adopted from The Depression Anxiety Stress Scale-21 (DASS-21) developed by Lovibond & Lovibond (1995). The questionnaire in this research is divided into three parts. The first section, Section A, aims to gather demographic data from the respondents. Sections B is to evaluate the extent of agreement expressed by the respondents regarding the financial stress. Lastly, Section C gauges the level of mental health among the respondents based on DASS-21. Section A includes 8 questions, Section B has 5 questions; Section C has 21 questions. Participants responded to all 34 items using a 5-point Likert scale ranging from 'Never' (1) to 'Always' (5).. . The interview protocol for this study was designed to align directly with the main research objective of examining the relationship between financial stress and mental health among students. The structured interview consisted of two sections, each containing five open-ended questions. The first section focused on participants' experiences and perceptions of financial stress, including sources of financial pressure, coping mechanisms, and perceived impacts on academic life. The second section addressed participants' mental health status, specifically exploring symptoms and experiences related to depression, anxiety, and stress.

The questions were developed based on constructs identified in the literature (Guan et al., 2022; Ryu et al., 2023; Mofatteh et al., 2020) and adapted to the study's context to ensure relevance to FPTP students. To enhance content validity, the interview guide was reviewed by two subject-matter experts in educational psychology and student affairs, after which minor revisions were made for clarity and cultural appropriateness.

All interviews were audio-recorded with participants' consent and transcribed verbatim. Data were analyzed using thematic analysis (Braun & Clarke, 2006), following a six-phase process: familiarization with data, generating initial codes, searching for themes, reviewing themes, defining and naming themes, and producing the final report. This approach allowed for systematic identification of patterns related to both financial stressors and mental health experiences, ensuring that the findings were grounded in participants' own narratives.

Measurement of variables

Three scales nominal, ordinal, and interval would be used in this study to separate the different types of data.

Nominal Scale

In Section A of the questionnaire, this scale is employed to assess the demographic profile of the respondents, including variables such as gender, age, race, courses, year of study, primary source of financial support and main sources of financial stress. Respondents are required to choose only one answer except for main sources of financial stress, respondent can choose multiple answers.

Ordinal Scale

In Section A of the questionnaire, respondent's demographic profiles, such as their range of loan or sponsorship are assessed using an ordinal scale.

Interval Scale

This research uses a five-point Likert scale in Sections B and C of the questionnaire to evaluate the dependent and independent variables. The table below show the measurement of variable.

Variable	Definition	Number of Items	Sample Item	Scale Type	Reliability (Cronbach's α)	Source
Financial Stress (Independent)	The perceived pressure arising from an inability to meet financial obligations or manage financial resources effectively.	5	"I often worry about my ability to pay tuition fees."	5-point Likert	0.646	Adapted from Robb (2017); Guan et al. (2022)
Mental Health Condition (Dependent)	Self-reported symptoms of depression, anxiety, and stress among students.	21 (DASS-21 subscales)	"I found it hard to wind down."	5-point Likert	0.851	Lovibond & Lovibond (1995); validated in Mofatteh et al. (2020)
Gender (Control)	Biological sex of respondent.	1	"Male/Female"	Nominal	—	—
Year of Study (Control)	Academic level of respondent in program.	1	"Year 1 / Year 2 / Year 3 / Year 4"	Ordinal	—	—

Validity and Reliability

In this study, internal consistency reliability was assessed using Cronbach's alpha (α). According to Nunnally and Bernstein (1994), a minimum threshold of 0.60 is considered acceptable for exploratory research, while values above 0.70 indicate good reliability. Items with low item–total correlations (<0.30) were examined for potential removal to improve the overall alpha value, ensuring that each item contributed meaningfully to its respective construct. In this research, there is no pilot test included.

Data Collection

There are two main types of data sources: primary and secondary. This research only used the primary data collection method. The primary data was obtained by distributing an online survey questionnaire and interview.

Primary Data Collection

This study employed a structured, self-administered questionnaire to collect data from the target participants — students enrolled in the Faculty of Technology Management and Business (FPTP) at Universiti Tun Hussein Onn Malaysia (UTHM). The primary aim was to examine the relationship between financial stress (independent variable) and mental health conditions (dependent variable).

The questionnaire, prepared in English, consisted of three main sections which is section A: Demographic information (e.g., gender, age, year of study, primary source of financial support, and main sources of financial stress). Next, section B: Financial stress scale (adapted from Robb, 2017; Guan et al., 2022). Section C: Mental health condition scale, measured using the DASS-21 (Lovibond & Lovibond, 1995).

The survey was distributed online using Google Forms to facilitate accessibility and reach. Participation was entirely voluntary, and each respondent was provided with an informed consent statement at the beginning of the questionnaire, outlining the study's objectives, the nature of participation, and the right to withdraw at any time without penalty.

Anonymity and confidentiality were ensured by avoiding the collection of personally identifiable information. All responses were stored securely and accessible only to the research team

Analysis of Data

A structured questionnaire was utilized to gather data from UTHM students. The aim of the study was to identify the effect of financial stress on mental health among FPTP students. The data were collected and analyzed using the SPSS 30 software package for descriptive analysis and correlation analysis.

Descriptive Analysis

Descriptive analysis serves the purpose of understanding and exploring a given situation, providing a foundation for further investigation. Common techniques employed in descriptive analysis to assess and summarize large amounts of data include frequencies, means, medians, standard deviation, correlation, scatter plots, graphs, tables, charts, and more (Rawat, 2021).

Correlation Analysis

Correlation analysis was conducted to examine the relationship between the independent variable, financial stress, and the dependent variable, mental health condition. Due to the non-normal distribution of the data, as indicated by the normality tests, Spearman's rank-order correlation was applied. The interpretation of the correlation strength followed Cohen's (1988) guidelines, where values between 0.10 and 0.29 indicate a small correlation, values between 0.30 and 0.49 indicate a moderate correlation, and values of 0.50 or above indicate a strong correlation. Statistical significance was assessed at the $p < 0.05$ level, meaning that a p-value below this threshold suggests that the observed correlation is unlikely to have occurred by chance. It is important to note that the p-value determines whether the correlation is statistically significant, while the correlation coefficient (r) indicates the strength and direction of the relationship. In this study, a correlation coefficient of $r = 0.455$ was found, which represents a moderate positive correlation, indicating that higher financial stress levels tend to be associated with poorer mental health outcomes among FPTP students.

ANALYSIS AND FINDINGS

Data analysis will play a crucial role in this study by identifying key findings and assessing whether the research objectives are being met. Data collected through primary sources, particularly via questionnaires, will be examined using descriptive analysis and correlation analysis techniques.

Data Collection Process and Survey Response

The actual practical data collection began in December 2024 and took almost a month to obtain 167 valid questionnaires. The questionnaires were distributed via WhatsApp and face-to-face promotions to selected respondents selected from the entire population.

The survey is divided into three sections, namely A, B, and C. Section A is the demographics of the students. This section focuses on gender, age, course of study, year of study, race, main source of financial support, various loans or sponsorships, and main causes of financial stress. While section B investigates the impact of financial stress among FPTP students. In this section, it can be assessed whether the impact of financial stress on these respondents is never, occasionally, sometimes, often, or always. In addition, The Depression Anxiety Stress Scale-21 (DASS-21) is in section C. The selection answer of respondents' answers is the same as in section B.

Data Cleaning

Data cleaning involves detecting, correcting or eliminating errors, inconsistencies, and inaccuracies in a database to ensure it is accurate and reliable. Data cleaning improves data quality and helps provide more accurate information.

Detection of Missing Data

Missing data is common issues and crucial step that faced by researchers. Detection of missing data is referred to finding occurrences in a dataset when expected data points are missing or unavailable. Missing data might result in decreased statistical power and inaccurate conclusions. Researchers typically assess missing data during the data preparation process by examining datasets for blank values, null entries or inconsistent record counts. In order to mitigate this problem, the researcher took stringent measures during the data collection procedure. Using Google Forms with all questions marked as required to ensures that respondents fill out all question before submitting the form. This technique guarantees a complete dataset free of missing values.

Outliers Analysis

An outlier is a data point or value that differs significantly from the majority of other values in a dataset. It can significantly influence statistical analyses, potentially distorting the outcomes of hypothesis tests. In conclusion this study has no outlier.

Reliability Analysis

Following the pilot study's conclusion that the questionnaires were valid and reliable, the results of the reliability test carried out for the actual study are displayed in Table 2. Cronbach's alpha for financial stress is 0.646. Mental health condition is 0.893, where the reliability of all the two factors is acceptable and good.

Table 2 *Reliability test*

Variables	Number of items	Cronbach's Alpha
Financial Stress	5	0.646
Mental Health Condition	21	0.893

Descriptive Analysis for Demographic

Descriptive and frequency analysis serves the purpose of succinctly summarizing survey-derived data and elucidating the demographic profiles of respondents within this study, encompassing variables such as gender, age, study course, year of study, race, primary source of financial support, range of loan or sponsorships and main sources of financial stress.

Gender

Table 3 *Respondents' gender*

		Frequency	Percent
Valid	Male	75	44.9
	Female	92	55.1
	Total	167	100.0

Table 3 shows that there are 167 respondents who take part in the survey questionnaire. Of 167 respondents in this study, 75 (44.9%) are male. The remaining 92 respondents (55.1%) are female.

Age

Table 4 *Respondents' age (years)*

		Frequency	Percent
	20 years old and below	30	18.0
	21 - 24 years old	88	52.7
Valid	25 - 29 years old	47	28.1
	30 years old and above	2	1.2
	Total	167	100.0

Table 4 shows the respondents' age group. Of 167 respondents in this study, there are 30 respondents (18%) who are 20 years old and below. 88 respondents (52.7%) are 21-24 years old. 47 respondents (28.1%) are 25-29 years old and the remaining 2 (1.2%) are 30 years old and above. It shows that most of the respondents are between 21 and 24 years old.

Study Course

Table 5 *Respondents' study course*

		Frequency	Percent
	BPA	46	27.5
	BPB	36	21.6
Valid	BPC	32	19.2
	BPD	38	22.8
	BPP	15	9.0
	Total	167	100.0

Table 5 shows the respondents' study course group. Of 167 respondents in this study, there are 46 respondents (27.5%) from BPA course. 36 respondents (21.6%) from BPB course. 32 respondents (19.2%) from BPC course. 38 respondents (22.8%) from BPD course. 15 respondents (9.0%) from BPP course. It shows that the majority of respondents are from BPA course.

Year of Study

Table 6 *Respondents' year of study*

		Frequency	Percent
	1	16	9.6
	2	51	30.5
Valid	3	79	47.3
	4	21	12.6
	Total	167	100.0

Table 6 Shows the respondents' year of study group. Of 167 respondents in this study, there are 16 respondents (9.6%) came from year 1 of study. 51 respondents (30.5%) came from year 2 of study. 79 respondents (47.3%)

from year 3 of study. The remaining of 21 respondents were in year 4 of study. The majority of respondents are from year 3 of study.

Race

Table 7 *Respondents' race*

		Frequency	Percent
	Malay	77	46.1
	Chinese	62	37.1
Valid	Indian	26	15.6
	Iban	2	1.2
	Total	167	100.0

Table 7 Shows the respondents' race. There are 167 respondents in this study, there are 77 respondents (46.1%) are Malay. 62 respondents (37.1%) are Chinese. 26 respondents (15.6%) are Indian and the remaining 2 respondents (1.2%) are Iban. The majority of respondents are from Malay race.

Primary Source of Financial Support

Table 8 *Respondents' Primary Source of Financial Support*

		Frequency	Percent
	Family Support	38	22.8
	Scholarships	26	15.6
	Part-time work	23	13.8
Valid	Student loans	47	28.1
	Personal savings	21	12.6
	Financial aid from the university	12	7.2
	Total	167	100.0

Table 8 Shows the respondents' primary sources of financial support. Of 167 respondents in this study, 38 respondents (22.8%) primary sources are family support. 26 respondents (15.6%) primary sources are scholarships. 23 respondents (13.8%) primary sources are part-time work. 47 respondents (28.1%) primary sources are student loans. 21 respondents (12.6%) primary sources are personal savings, and the remaining 12 respondents (7.2%) primary sources are financial aid from the university. The majority primary sources of respondents are student loans.

Range of Loan or Sponsorships

Table 9 *Respondents' Range of Loan or Sponsorships*

		Frequency	Percent
	Less than RM400	24	14.4
	RM401 - RM800	29	17.4
	RM801 - RM1,200	35	21.0
Valid	RM1,201 - RM1,600	27	16.2
	RM1,601 - RM 2,000	28	16.8
	More than RM2,000	24	14.4
	Total	167	100.0

Table 9 Shows the respondents' range of loan or sponsorships. Of 167 respondents in this study, 24 respondents (14.4%) range of loan or sponsorships is less than RM400. 29 respondents (17.4%) range of loan or sponsorships is RM401 – RM800. 35 respondents (21.0%) range of loan or sponsorships is RM801-RM1,200. 27 respondents (16.2%) range of loan or sponsorships is RM1,2001- RM1,600. 28 respondents (16.8%) range of loan or sponsorships is RM 1,601- RM2,000, and the remaining 24 respondents (14.4%) range of loan or sponsorships is more than RM2,000.

Main Sources of Financial Stress

Table 10 *Respondents' Main Sources of Financial Stress*

		Frequency	Percent
	Tuition fees	60	35.9
	Rent or housing expenses	34	20.4
	Daily living expenses (e.g. food, transportation, utilities)	29	17.4
	Family financial support needs (e.g. sending money to family members)	6	3.6
Valid	Lack of financial support or scholarships	9	5.4
	Debt repayment (e.g. loans, credit cards, etc)	4	2.4
	Part-time works	9	5.4
	Health-related expenses (e.g. medical bills, insurance)	7	4.2
	Delayed financial support (e.g. delayed scholarships, funding)	9	5.4
	Total	167	100.0

Table 10 Shows the respondents' main sources of financial stress. Of 167 respondents in this study, 60 respondents (35.9%) main sources of financial stress are tuition fees. 34 respondents (20.4%) main sources of financial stress are rent or housing expenses. 29 respondents (17.4%) main sources of financial stress are daily living expenses. 6 respondents (3.6%) main sources of financial stress are family financial support needs. 9 respondents (5.4%) main sources of financial stress are lack of financial support or scholarships. 4 respondents (2.4%) main sources of financial stress are debt payment. 9 respondents (5.4%) main sources of financial stress are part-time works. 7 respondents (4.2%) main sources of financial stress are health-related expenses, and the remaining 9 respondents (5.4%) main sources of financial stress are delayed financial support. The majority main sources of financial stress of respondents are tuition fees.

Descriptive Analysis for Independent Variables and Dependent Variable

Table11 *Descriptive analysis data*

	N	Minimum	Maximum	Mean	Std. Deviation
Financial Stress	167	1.00	5.00	2.9329	0.71629
Mental Stress	167	1.00	5.00	2.9042	0.69111
Valid N (listwise)	167				

From Table 11, the results indicate that the mean scores for both the independent variable (financial stress) and the dependent variable (mental health condition) fall within the medium range. The highest mean was

recorded for financial stress (Mean = 2.93, SD = 0.716), followed closely by mental health condition (Mean = 2.90, SD = 0.691). On a five-point Likert scale, a mean of approximately 2.9 suggests that, on average, respondents perceive themselves as experiencing a moderate level of both financial stress and mental health challenges.

Practically, this implies that while students are not reporting extremely high distress levels, financial concerns are still a consistent and noticeable factor in their daily lives. The slightly higher mean for financial stress compared to mental health condition suggests that financial pressures may be a more immediate and tangible concern for these students than the emotional or psychological symptoms that may follow. This aligns with prior research (e.g., Guan et al., 2022; Pham et al., 2024) indicating that moderate levels of financial stress can still have significant cumulative effects on students' mental health and academic performance over time. Therefore, interventions aimed at mitigating financial strain such as improved financial aid, budgeting workshops, or part-time job support could be beneficial in preventing escalation to higher levels of psychological distress.4.7 Normality Test

The normal distribution can be evaluated analytically or graphically. There are two specific tests that Kolmogorov-Smirnov test and the Shapiro-Wilk test. In this study, Shapiro-wilk test is used. A p-value bigger than 0.01 indicates that the data are normally distributed. However, if the p-value is less than 0.01, it indicates non-normality. Based on the result in Table 13, the data seem to be non-normally distributed. It led to prompting use Spearman's rho in correlation analysis.

Table 12 *Test of normality*

	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
Financial Stress	0.079	167	0.012	0.987	167	0.111
Mental Stress	0.137	167	0.000	0.917	167	0.000

Table above shows that the Sig. value of the Shapiro- Wilk Test for financial stress is bigger than 0.01 which indicates the data is normal. However, Sig. value of the Shapiro- Wilk Test for mental stress is less than 0.01 which indicates the data is not normal. Hence, Spearman's rho was used in the correlation analysis.

Correlation Analysis

Correlation analysis used to verify the relationship between independent variables and the dependent variable. In this study, the researcher will use correlation analysis to measure the level of correlation. Spearman's rho was used due to non-linear relationship data in this study.

Table 13 *Result of spearman's correlation coefficient*

			Financial Stress	Mental Stress
Spearman's rho	Financial Stress	Correlation Coefficient	1.000	0.455[**]
		Sig. (2-tailed)	.	0.000
		N	167	167
	Mental Stress	Correlation Coefficient	0.455[**]	1.000
		Sig. (2-tailed)	.000	.
		N	167	167

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

From the analysis, the correlation between financial stress and mental stress is 0.455, which shows a strong relationship between both variables. The correlation analysis supports a significant positive relationship between financial stress and mental stress. Therefore, H1 is accepted.

Summary of the Hypothesis Testing

As a result of the study objectives, one hypothesis was developed for this investigation, which will be tested in this study. Theory that was developed has been accepted. Table 15 below shows the summary of hypothesis testing results.

Table 14 *Summary of hypothesis testing*

Hypothesis	Summary
H1: There is a positive relationship between financial stress and mental health condition among FPTP students	Accepted

Based on Table 14, H1 are accepted. So, we can deduce that the survey's questions are about financial stress have positive relationship towards mental health condition.

Qualitative Analysis

Validation using interview

Table 15 *Validation of interview*

Question	Section A : Financial Stress		
	Respondent 1	Respondent 2	Respondent 3
Financial difficulties experienced during studying	• Daily expenses • Skip meals	• Financial risk • Cut or skip meals • Alone or emotional stress	• Yes • Overspend
Specific time when financial concern cause you stress	• Cut a meal at night • overspending	• Run out money • Overspending • Wasting money	• Monday blues • Overspending • Reduce the budget
Significant sacrifices or change due to financial difficulties	• Yes • Allocate money • Cut a meal in a day	• Lots • Buy earlier • Allocate money • Skip meals	• Yes • Depends on the mood • Won't leave it to someone
Financial stress affected your relationship	• family • impatient • under control	• Family • Pressure or impatient	• No • Managing financial well
Financial stress impact your academic performance	• Yes • Not totally • Avoid usage of money	• Not impact • No program, no impact • All money in food	• No

Question	Section B : Depression anxiety and stress level		
	Respondent 1	Respondent 2	Respondent 3
Felt sad,empty and depress most of the day	• Not always • When paying something	• Not • Hungry	• Yes • Emptiness • Depression • Overthinking • Can't sleep
Had a period of fear or panic when all of a sudden you felt a surge of feelings like very frightened, anxious and uneasy.	• No panic • Fear overspending	• No	• Yes • Trauma
Have fear or find it uncomfortable to talk to people.	• Yes • Money • Poor • Overthinking	• Shy • Poor	• Yes
Any issues such as not making up your mind about things you usually have no problem deciding about.	• Not difficult • Frustrated usage money	• No • Neutral • Able to make decision	• Yes • Choose what comes first
Hurt yourself on purpose.	• No • Still matured • Skip meals	• No • Still maintain	• No

Table 15 shows that two sections of the interview protocol were conducted with three different groups of respondents who we identified as having financial issues. There are two sections in this procedure, with five questions in each. The first question in Section A asks about financial issues encountered while studying, and three respondents discuss their spending and feelings. Subsequently, their overspending was the precise moment they experienced tension. They also make major sacrifices, such as skipping or cutting off a meal each day. Then, financial stress has an impact on their relationship; they primarily stated that it is family-only but somewhat impatient. Finally, when asked if financial stress affects academic performance, the majority of them respond negatively because they are still able to cover their daily expenses by sticking to their budget.

In Section B, people are asked about their mental health during this crisis. We start by asking them if they were feeling gloomy, sad, or empty. They claimed that while they don't always feel this way, overanalyzing causes them to experience certain negative emotions. Thus, they are unable to sleep. The following question focusses on the period of their panic. In general, they responded no, but some of them only said yes when it came to terms of trauma. Additionally, they find it uncomfortable to interact with others, therefore they said yes primarily because they overthink their lack of money by skipping meals or not going out with their friends. Then, did they encounter any problems when making or choosing decisions? Because of certain situations that require serious consideration, some of them said no, while one individual just said yes. According to them, it takes a while. When asked if they intentionally try to harm themselves, the majority of them replied in the

negative. They are in neutral condition, as we can tell from this. However, they claimed that skipping meals alone was one of the things that damaged them.

Table 16 *Summary of interview*

Question	Summary
Financial difficulties experienced during studying.	• Yes • Overspend and skip meals
Specific time when financial concern cause you stress.	• Overspending
Significant sacrifices or change due to financial difficulties.	• Yes • Allocate money
Financial stress affected your relationship. Financial stress impact your academic performance.	• Family • Impatient • No
Felt sad, empty and depress most of the day.	• Not always • Depression
Had a period of fear or panic when all of a sudden you felt a surge of feelings like very frightened, anxious and uneasy.	• No and sometimes
Have fear or find it uncomfortable to talk to people.	• Yes • Poor
Any issues such as not making up your mind about things you usually have no problem deciding about.	• No
Hurt yourself on purpose.	• No

The interview component involved three respondents who were identified as experiencing varying degrees of financial stress. Analysis of their responses revealed several recurring themes relating to spending habits, coping strategies, and the psychological effects of financial strain.

A common finding across all participants was a tendency to overspend, often leading to the necessity of skipping meals—sometimes once or twice a day—to manage their limited resources. This behaviour was not solely a result of poor budgeting but was also influenced by social dynamics. Respondents reported avoiding outings with peers to prevent additional expenses, which, while financially prudent, also limited their social engagement. Feelings of financial inadequacy were also evident, although participants expressed a conscious effort to maintain politeness and composure around their families to avoid causing concern.

Despite these challenges, the respondents demonstrated adaptive coping strategies. They prioritised essential expenses such as food, educational materials, and tuition fees, and exercised self-control by reducing or

eliminating purchases of non-essential items. While occasional budget overruns occurred, these were followed by deliberate efforts to rebalance finances, such as avoiding known spending triggers.

These findings suggest that while financial stress does lead to tangible lifestyle adjustments such as meal skipping and reduced social participation students are capable of exercising financial self-regulation when necessary. However, the trade-offs between financial control, nutritional health, and social engagement highlight the complex and multifaceted impact of financial stress on student well-being. This qualitative insight complements the quantitative findings, underscoring the need for targeted financial literacy programs and support mechanisms that address both economic and psychosocial dimensions of student life.4.11 Summary

This chapter has presented the analysis of both quantitative and qualitative data, structured around the study's two primary constructs: financial stress and mental health condition. Quantitative results demonstrated that the dataset met acceptable reliability standards, as confirmed through pilot and main study assessments. Given that the normality test indicated a non-normal distribution, Spearman's rank-order correlation was employed to examine the relationship between financial stress and mental health outcomes. The results supported the study's primary hypothesis (H1), revealing a statistically significant positive association between higher levels of financial stress and increased severity of depression, anxiety, and stress symptoms among respondents.

The qualitative findings provided deeper insight into these statistical relationships by capturing students' lived experiences. Through thematic analysis (Braun & Clarke, 2006), two overarching themes emerged:

Sources and Intensities of Financial Stress – Participants frequently cited tuition fees, daily living expenses, and delayed financial aid as primary stressors. Some described having to reduce meal portions or take on additional part-time work, which directly impacted their study time and concentration.

Psychological and Behavioral Consequences where students reported heightened anxiety before tuition deadlines, difficulty sleeping, and reduced participation in social or academic activities. These experiences align with cognitive-behavioral models of stress, which suggest that persistent financial strain can contribute to maladaptive coping and withdrawal behaviors (Lazarus & Folkman, 1984).

While most participants acknowledged a direct link between financial stress and their mental health, the interviews also revealed variability in coping capacity. For instance, students with greater financial literacy or family support described adopting proactive budgeting strategies, which appeared to buffer emotional distress.

These qualitative insights not only reinforce the quantitative trends but also connect them to broader frameworks in mental health and financial behavior literature. Integrating both strands of data underscores the multidimensional nature of financial stress and highlights the need for targeted institutional interventions that address both economic and psychological dimensions.5.

CONCLUSION

The purpose of this chapter was to review and analyze the findings related to the study objectives. The aim was to conclude the research. This chapter also discussed limitations encountered and provided suggestions for enhancing future relevant research.

Discussions on the Main Findings

This research was conducted to determine the relationship between the effect of financial stress on mental health among the FPTP students. The analysis conducted in the preceding chapter revealed a significant and positive correlation between financial stress and mental health among the FPTP students.

Demographic of respondents

Based on the study completed by the researchers, the information demographic of respondents has been summarized in gender, age, study course, year of study, race, primary source of financial support, range of loan or sponsorships, and main sources of financial stress. Female students from the Faculty of Technology Management and Business (FPTP) represent the largest group of respondents. This finding corresponds with general trends in higher education that indicate female students often outnumber males in fields related to management and business studies (Ministry of Higher Education, 2021). The age range of the respondent's majority is between 21 and 24 years old. Typically, bachelor's degree students begin their studies at 18 or 19 years old and graduate within three to five years (National Central for Education Statistics, 2020). Besides, a significant number of respondents were students from the BPA program within FPTP, with most of them is in their third year of study. In terms of ethnicity, Malay respondents formed the largest respondent, this distribution aligns with Malaysia's overall demographic. Where BRespondent Aputera consists of the largest ethnic group (World Bank Group, 2022). The primary sources of financial support for most respondents were student loans. The range of these loans or sponsorship was predominantly between RM801 and RM1,200, which is a typical funding amount for undergraduate students in Malaysia (Malaysia Financial Planning Council, 2021). Lastly, most respondents reported no prior.

Financial Stress

Financial stress has become a serious problem affecting all demographic backgrounds, especially university students. It is defined as the emotional distress that arises from an inability to meet financial responsibilities or deal with financial problems. (Ryu et al., 2023) propose that financial stress is strongly associated with negative emotional effects, including anxiety and depression. H1 suggested that there is a positive relationship between financial stress and mental health condition among FPTP students. The findings revealed a notably significant positive correlation coefficient of 0.455 (p>0.01) between financial stress and mental health condition, thereby confirming the acceptance of H1. The results shows that there is a strong degree of correlation between financial stress and mental health condition among FPTP students. However, according to Xu and Rashid (2023) investigated the relationship among Malaysian university students' financial emotional well-being, financial self-efficacy, financial stress, financial anxiety, and financial literacy. Financial stress and anxiety influence students' emotional health, according to the study, which also emphasized the significance of financial knowledge and self-efficacy in reducing all of this. These studies suggest that financial stress may have an impact on the mental health of FPTP students at UTHM, despite the lack of direct research on this topic. To improve student well-being, financial stress must be addressed through financial education and support platforms.

Mental Health Condition

A mental health condition is a disorder or illness that affects a person's thoughts, feelings, conduct, or overall ability to function. These diseases can be moderate or severe and can have an impact on daily activities, relationships, work, or school. Based on World Health Organization (WHO) mental health is a condition of well-being that enables individuals to cope with the normal stresses of life, realize their ability, learn and work well and contribute to their community. H1 indicated a positive correlation between financial stress and mental health conditions among FPTP students. The results indicated a substantial positive correlation coefficient of 0.455 (p>0.01) between financial stress and mental health, thereby validating the adoption of H1. The results indicated a significant association between financial stress and mental health conditions among FPTP students. The study by Khoo (2021) have support the result. The study is focusing on Malaysia university students in health-related field found a moderate levels of financial distress and perceived stress. The research highlights a direct correlation student experiencing higher financial distress also reported elevated levels of perceived stress. This underscores the profound effect financial challenge can have on student's mental well-being. Addition, a 2019 rapid review examined the association between financial stress and mental health among higher education students in the UK. The findings indicated that while the amount of debt did not consistently correlate with mental health issues, subjective measures of financial stress, such as financial concerns and

difficulties, were consistently linked to poorer mental health outcomes. This suggests that students' perceptions of their financial situations play a crucial role in their mental health (Tayla, 2019).

Implications of Theoretic and Practical

Theory Implication and Suggestion

The findings of this study provide empirical support for the Transactional Model of Stress and Coping (Lazarus & Folkman, 1984), which posits that an individual's appraisal of a stressor combined with their available coping resources shapes their psychological and behavioral outcomes. Among the FPTP students surveyed, financial stressors such as tuition fees, living expenses, and debt obligations were appraised differently in terms of severity and perceived controllability.

Students who appraised these stressors as overwhelming and beyond their control tended to report higher levels of depression, anxiety, and stress. Conversely, those with greater coping resources such as family financial support or budgeting skills demonstrated comparatively lower emotional distress, despite facing similar financial challenges. These findings illustrate the transactional model's emphasis on subjective perception, reinforcing the need to examine not only the presence of financial stressors but also the cognitive appraisals and coping mechanisms that mediate their impact.

By integrating both quantitative and qualitative evidence, this study extends the application of the transactional model within the context of Malaysian higher education. It highlights the model's utility in understanding how culturally and institutionally specific factors influence students' stress appraisals and coping strategies.5.2.2 Practical Implication and Suggestion

Based on the findings, this study may benefit educational institutions because it can guide UTHM to identify the students in financial crisis. For example, this study will help basically Faculty Management to detect the student who having this kind of problem. So, they can bring the names to the upper authorities which is UTHM students affairs center. So, they can easily help the students in needs. According to this report, the University Counselling Center UTHM also can assist students by providing counselling to those who are experiencing stress or mental health issues while managing their financial difficulties. These useful ramifications offer a path forward for resolving the problems identified in the research and enhancing the academic achievement and general well-being of FPTP students who are experiencing financial strain.

Limitation

Several limitations of this study should be acknowledged. First, targeting only students from the Faculty of Technology Management and Business (FPTP) at Universiti Tun Hussein Onn Malaysia (UTHM) presented logistical challenges in participant recruitment. Given that UTHM has multiple faculties, identifying and reaching only FPTP students required additional effort and time, which may have contributed to a smaller and potentially less diverse sample than initially intended. This limitation could affect the generalizability of findings even within the FPTP population.

Second, locating students within FPTP who were currently experiencing significant financial stress was challenging. This constraint may have limited the depth and variability of responses in the qualitative interviews, as students with milder financial concerns may have been overrepresented. Furthermore, during the interview process, validating self-reported survey responses posed occasional difficulties, particularly when participants' verbal accounts appeared inconsistent with their questionnaire data. This may have introduced minor discrepancies between quantitative and qualitative findings.

These limitations suggest several directions for future research. Expanding the study to include multiple faculties within UTHM—or conducting multi-institutional research—would enable broader comparative analysis and enhance the external validity of results. Additionally, extending the data collection period beyond

four weeks would allow for more targeted recruitment of students facing acute financial challenges, thereby enriching the qualitative data. Employing purposive sampling strategies, combined with verification of financial stress levels prior to interviews, could further strengthen the reliability and depth of insights.

Directions for Future Research

In terms of future research, several recommendations emerge from these limitations. Firstly, future studies should include more diverse range of students beyond FPTP students. Expanding the sample to students from other faculties within UTHM would allow for comparison of unique stressor and mental health pattern across different academic courses. Secondly, to overcome the difficulty in reaching FPTP students from diverse courses, future research could implement online approach and collab with faculty administration for higher response rates and identification of possible participant for more effective and accurate data collection. Moreover, future research should extend the research duration because it would allow for a more comprehensive investigation of the long-term effect of financial stress on student's mental health. This extended period could enhance data accuracy and provide deeper insights into stress pattern and its reliability of the research outcome. Additionally, expanding demographic segments to encompass diverse respondent groups from various universities can enrich data comparability and accuracy in understanding how financial stress affects mental health across diverse group of students. Employing a multilingual questionnaire, available in Malay, Mandarin, and Tamil, would ensure greater inclusivity and comprehension among respondents from diverse ethnic backgrounds, fostering broader participation and more reliable data. Furthermore, future studies should consider incorporating additional independent variables relevant to financial stress, ensuring these variables directly align with the research focus to provide a comprehensive understanding of influential factors without compromising the study's outcomes.

Conclusion

This four-week study examined the relationship between financial stress and mental health among students enrolled in the Faculty of Technology Management and Business (FPTP) at Universiti Tun Hussein Onn Malaysia (UTHM). Using Spearman's rank-order correlation, the findings revealed a statistically significant positive association between higher levels of financial stress and increased symptoms of depression, anxiety, and stress, as measured by the DASS-21. These results affirm the study's hypothesis and underscore that financial stress is not only an economic concern but also a critical determinant of students' psychological well-being.Beyond validating prior research, this study contributes to the literature by focusing on a specific institutional and disciplinary context—FPTP students—thereby offering insights relevant to targeted interventions within similar academic settings. The integration of quantitative correlations with qualitative thematic findings provides a more nuanced understanding of how financial stress manifests in daily student life, from reduced participation in academic activities to heightened emotional distress before tuition payment deadlines.

The implications of these findings are twofold. First, they highlight the need for universities to implement proactive support mechanisms, such as financial literacy workshops, flexible payment schemes, and accessible mental health services. Second, the results suggest that future research should explore longitudinal impacts of financial stress to better understand its cumulative effect on academic performance and mental health over time.

By situating financial stress within both an academic and mental health framework, this study underscores its multidimensional impact and calls for integrated institutional strategies that address both the economic and psychological needs of students.

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CONFLICT OF INTEREST

Authors declare that there is no conflict of interests regarding the publication of the paper.

AUTHOR CONTRIBUTION

The authors confirm contribution to the paper as follows: study conception and design: T.Q.Y. and J.N.; data collection: T.Q.Y.; analysis and interpretation of results: T.Q.Y.; draft manuscript preparation: T.Q.Y. and J.N. All authors reviewed the results and approved the final version of the manuscript. The heading of the Acknowledgment section and the References section must not be numbered.

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