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### Abstract

National Higher Education Fund Corporation, also known as *Perbadanan Tabung Pendidikan Tinggi Nasional (PTPTN)* is one of the study loans taken by students from public and private institutions to finance their cost of living throughout their studies. The specific loan amount has not been revised despite the significant increase in the cost of living, affecting individuals across demographics and causing substantial financial strain. Researchers aim to investigate how students at public and private institutions allocate their overall PTPTN loan. Descriptive statistics were used to describe the total monthly expenditure in nine categories. Public university students exhibited higher variability and maximum expenditure in categories such as food and beverages, savings, transportation, communication, and health. An independent sample t-test showed no significant difference in the average monthly expenditure between public and private university students.

**Keywords:** Financial behavior, living cost, monthly expenditure, PTPTN.

### 1. Introduction

The cost of living, which refers to the money needed to pay necessities such as housing, food, taxes, and healthcare, varies greatly depending on location, lifestyle choices, and personal expenditure preferences. This escalating expense has sparked debate and discussion at all levels of society, including among students at higher learning institutions. Students on and off campus face ongoing and increasing financial challenges in the developing world. These difficulties worsened in November 2014, when the Perbadanan Tabung Pendidikan Tinggi Nasional (PTPTN) reduced the maximum loan amounts for degree programs at public and private higher education institutions by 15% and 5%, respectively, except for medical courses at private higher education institutions (Ong et al., 2016). This decline in financial aid has left students struggling with raising costs and limited finances for extra expenditures. To navigate these financial hurdles effectively, students must become adept at managing their finances and using available financial resources responsibly. Financial stress, resulting from these challenges, can significantly impact students' personal lives. For instance, anxiety and worry about their financial situation can lead to sleep problems, where students find it difficult to fall asleep. Furthermore, financial stress can detrimentally affect college students' mental health, contributing to issues such as depression and anxiety (Richardson et al., 2017). Understanding financial stress as a risk factor for poor mental health in college students highlights the negative impact of economic needs on their well-being. Recognizing these effects allows for measures to be taken to help students better manage their finances and reduce related mental

health concerns.

## 2. Research Design

This research utilizes the theoretical framework created by Zulfaris et al. (2020). A descriptive design was used in this study. Descriptive statistics were mainly used to describe features of a population or an existing problem by gathering and analyzing data structures (Awang, 2012). Descriptive statistics were used to describe the total monthly expenditure of public and private university students. An independent t-test was used to investigate whether there is a significant difference in the average total monthly expenditure between public and private university students.

## 3. Literature Review

The cost of living refers to the expenditure a person or household must incur to meet basic needs such as food, clothes, housing, and other necessities for survival and comfort (Sabri et al., 2018). The cost of living is usually linked to a country's economic growth. As a country's economy grows, it can be challenging for households to preserve their standard of living, and lifestyle changes can cause the cost of living to fluctuate (Evans et al., 2007).

### 3.1. Demographic factors

#### 3.1.1. Gender

There can be general trends or stereotypes about expenditure habits based on gender, it's essential to recognize that individual preferences and circumstances play a significant role. Males and females want different products, and they are likely to have different ways of tasting and obtaining these which reflects their consumption behaviors (Mitchell and Walsh, 2004). In addition, women, in comparison to men, focus more on the enjoyable aspects of buying and possess a stronger emotional motivation for shopping (Dittmar et al., 2004). It is essential to avoid generalizing expenditure patterns based solely on gender. Individual goals, interests, and financial circumstances significantly influence expenditure habits. Cultural, societal, and personal factors also play a role in shaping these behaviors. 53.5% of female students allocate more money to social activities and leisure while 34.6% of male students do (Sereetrakul, 2013). For instance, a study found that recent technological advances have raised student expenditure. It noted that male students tend to purchase expensive equipment, while female students are more inclined to shoes, bags, and clothing to look presentable for class (Shahryar, 2014).

#### 3.1.2. Age

There is a condition to follow in applying for PTPTN where the age does not exceed 45 years old on the date of application. Students usually have a range of ages between 20-30 years old (Arnaud et al., 2001). It is supported by a study from Omran (2016), 67 respondents, or 69.8% had the greatest age range of 22–23 years old, with 20–21 years old coming in second. There is also a significant relationship between the factors affecting expenditure (age) and respondent background when the p-value for age  $< 0.005$  which is equal to 0.021 (Omran, 2016). According to Greenberger and Steinberg (1986), young people often use up money immediately upon receiving it, frequently making unwise financial decisions and wasting resources Hayhoe et al. (2000). Young people are becoming more impulsive shoppers because

of having more credit cards, pocket money, or credit cards from other family members (Shim et al., 2010). Despite their intelligence and independence, most young people lack financial literacy. Additionally, university students often use up their discretionary income on personal desires rather than saving for their education.

### 3.1.3. *Types of institution*

In Malaysia, there is a notable difference in expenditure between public and private institutions. (Salleh, 2022). For example, UiTM, a public institution, charges just RM590 for six to eight semesters and all courses attended by full-time degree students, while full-time diploma students pay RM540 (Nurul Jannah, 2023). On the other hand, according to the official website of Management and Science University (MSU), the cheapest school fees for a diploma in 2023 were approximately range RM 20000 - RM 25000, while the costliest might reach RM 70000 - RM 75000. Meanwhile, the cheapest educational expenditure for a degree was approximately RM 35000 - RM 40000, while the costliest might go up to RM 295000. For the record, students at public colleges in Malaysia receive a government subsidy covering approximately 90% of tuition fees, leaving them to pay only 10% (Salleh, 2022). This results in significantly lower tuition costs at public institutions compared to market rates in private institutions. Seman and Ahmad (2017) researched to determine the difference in expenditure habits between public and private university students using a 5-Likert scale question. The results as well as the discussion for public students show that the statement "basic needs such as food and phone bills" has the greatest mean of 3.95 and the lowest standard deviation of 1.131, while "shelter" has the lowest mean of 2.95 and the highest standard deviation of 1.239. On the other hand, the tendency to shop has the greatest mean of 3.93 and a standard deviation of 0.944 among private university students. The mean is 2.03 with a standard deviation of 1.291, indicating a fundamental requirement for intake of food.

### 3.1.4. *Level of study*

Certain courses and programs have higher costs due to the nature of required materials, equipment, or facilities. For example, Science, Technology, Engineering, and Mathematics (STEM), programs often demand expensive laboratory equipment and technology, leading to increased tuition fees. Additionally, diplomas are typically much cheaper than degrees due to their lower qualification level and shorter duration (Carnevale et al., 2013). UiTM also provides 107,000 residential college spots, with 34,000 reserved for new Diploma and Bachelor students, 52,000 reserved for students who qualify on merit according to UiTM's placement criteria, and 21,000 reserved for students who apply for residential colleges (UiTM forms committee for student accommodation issues, 2022). At UiTM, most on-campus students are diploma students who typically do not incur significant transportation costs, as the university provides bus services. Degree students, however, who do not meet the college merit for on-campus accommodation often rely on personal cars or e-hailing services, impacting their finances. Some students reduce fuel costs by carpooling.

### 3.1.5. *Financial family category*

Income classification in Malaysia can be divided into three categories. As stated by Salleh (2022), the three categories of income levels: are B40 (bottom 40%), M40 (middle 40%), and T20 (top 20%). Each group represents a percentage of the total income households in Malaysia. B40 groups represent households with monthly incomes less than RM3860, M40 groups represent households with monthly incomes between RM3860 and RM8320, and T20

groups represent households with monthly incomes greater than RM8320. As a result of the study’s findings, students who face financial difficulties receive financial aid from the government as well as financial resources from their parents to continue their studies at the school (Jamil et al., 2020). This circumstance demonstrates that the high cost of living makes it difficult for students to control their expenditure by continually analyzing the prices of things before purchasing (mean score 4.30) and students only purchase essential requirements (mean score = 3.98).

3.1.6. CGPA

A good performance in academics is very important to certain students who need to pass one semester and go for another semester. CGPA and GPA and students’ test results were used to measure the student’s performance (Mushtaq and Khan, 2012). Having a great CGPA does not ensure that the students are good at managing their expenditures and can cause stress. Stress can lead to low performance for students (Agolla and Ongori, 2010). If students are unable to cope with stress, their academic performance will suffer. Students who get less sleep or work late at night are more likely to perform poorly (Trochel et al., 2000).

4. Methodology

Primary data are those that are gathered directly from the source and were not acquired by other parties or researchers Salkind (2010) which is the original data collected by the researcher himself for the study. In this study, primary data was used. The goal of primary research was to disclose fresh information that was supported by studies carried out by other researchers and, in the process, to remove any biases held by the researchers (Driscoll, 2011).

The questionnaire was designed as clearly as possible, with a few sections provided. Each section contains several questions that are important to the study. Most importantly, it must have a demographic profile, and the rest of the questions focused on answering the research questions. This research instrument consists of three parts: Part A was the demographic data, Part B was about household monthly expenditure, and Part C consisted of financial behavior, peer influence, and parent’s socialization. A cover letter placed on the front page follows the questionnaire for a better understanding of the purpose of the study. Researchers went over the completed questionnaires to ensure that there were no missing data points that could impact the study.

A total of 425 samples were needed for this study using a formula by Umar and Wachiko (2021) based on the number of populations for each of the universities. However, with a 71.7% response rate, only 305 respondents were involved in this study.

Table 1: Number of Population and Sample

University	Population	Sample size calculation	Sample size in the study
Public	55,108	396	261
Private	4,000	29	44
Total	59,108	425	305

Total monthly expenditures were calculated by the total expenditure across various categories. Begin by summing costs for food and beverages, including groceries and dining. Next, include expenditure for room rental, utilities (electricity, water, internet), and transportation (public transit or vehicle-related costs). Also, accounts for communication (phone, internet), personal care products, healthcare, clothing, social activities, recreation,

cultural participation, and expenditures related to home decoration, hardware, and rental maintenance.

**5. Result and Discussion**

**5.1. Demographic**

From Table 2, most of the respondents were female with a total of 220 (72.13%), and male with a total of 85 (27.87%) respondents participated in this study. The researchers discovered that most of the respondents were at age 21 years old with 154 (50.49%) respondents. Besides, 53 respondents (17.38%) and 45 respondents (14.75%) of them were from 20 to 22 years of age. Otherwise, another 36 (11.80%) were from the 23 years old category. Finally, the lowest number of respondents were from 19, 24, and 25 years of age with 17 (5.57%) respondents. Most of the respondents were from public institutions with a total of 261 (86%) respondents and private institutions with a total of 44 (14%) respondents. According to the respondent, researchers discovered it was obvious that the highest number of the respondents were bachelor’s degree holders with a total number of 261 (86%) respondents. In comparison, 44 (14%) of the respondents had a diploma level. Most of the respondents were B40, which was 172 (56.39%) respondents. Besides, 115 (37.70%) of them were M40, and lastly, 18 (5.90%) respondents as T20 in the financial family category. For CGPA, half of the respondents had CGPA from 3.00 to 3.50 with 163 (53%) respondents. Another 121 (40%) of respondents had a CGPA of 3.50 to 4.00. Other than that, the number of respondents whose CGPA was between 2.50 to 2.99 is 21 (7%).

Table 2: Descriptive Statistics of Demographic

Variables	N	Percentage (%)
Gender	Female	72.13
	Male	27.87
Age	19	1.31
	20	17.38
	21	50.49
	22	14.75
	23	11.80
	24	2.95
	25	1.31
Type of Institution	Public	85.57
	Private	14.43
Level of Education	Diploma	14.43
	Bachelor’s Degree	85.87
Financial Family Category	B40	56.39
	M40	37.70
	T20	5.90
CGPA	2.50-2.99	6.89
	3.00-3.49	53.44
	3.50-4.00	39.67

**5.2. Descriptive Analysis for Total Monthly Expenditure Between Public and Private University Students**

Table 3 provides a descriptive analysis of the money expenditure of public and private university students across nine categories. University students spend the highest allocation of their PTPTN loan on course fees, books, and stationery per semester. On average, private university students allocate higher amounts to course fees compared to public university students. with RM930.11 and RM863.04, respectively. However, every month, both universities' students spend more on food and beverages. In contrast to course fees, public

university students spend RM330.45 per month compared to RM255.32 for private university students. For room rental and utilities, the mean total monthly expenditure for private university students is more than for public university students, at RM 250.86 and RM 229.30 per month, indicating that private university students allocate more than public university students for room rental and utilities. Aside from that, the mean total monthly expenditure on social, recreation, and cultural participation shows private university students allocated more than public university students, at RM 29.77 monthly. This shows that private university students have allocated more money to social life than public university students depending on lifestyle choices.

The analysis of student expenditure between public and private universities reveals distinct expenditure patterns. Public university students incur a wider range of study-related costs with higher maximum amounts and variability, hinting at potential disparities in tuition and fees. The students also spend more expenditure on food, beverages, and personal care, possibly due to different living conditions or lifestyle choices. In contrast, private university students have higher mean total monthly expenditure in savings, transportation, communication, and health, indicating different priorities or access to resources. Despite similar rental and utility costs, private students save more and exhibit greater variability in their expenditures. These differences underscore the diverse financial landscapes students face based on their type of institution.

Table 3: Descriptive Analysis of Money Expenditure of University Students

Money Expenditure (RM)	Public Universiti Students		Private Universiti Students	
	Mean	Std. Dev	Mean	Std. Dev
Course fees, books, and stationery per semester	863.04	313.65	930.11	401.23
Food and beverages per month	330.45	177.45	255.32	147.39
Room rental and utilities per month	229.30	72.40	250.86	69.18
Transportation per month	44.95	63.287	52.73	67.973
Communication per month	53.01	33.33	59.62	46.81
Personal Care per month	87.43	63.25	72.27	43.17
Healthcare per month	20.42	48.93	48.41	52.76
Savings per month	58.18	77.61	109.43	112.79
Cloth and accessories	4.21	16.32	5.00	14.71
Social, recreation, and cultural participation per month	22.92	38.91	29.77	43.49

**5.3. Testing the Difference in the Average Total Expenditure Between Public and Private University Students**

The independent sample t-test is used to compare the two population means. This test compares the disparities in average total monthly expenditure between private and public university students. Normality and equality of variances are two assumptions that must be met for an independent sample t-test to be valid.

**5.3.1. Normality checking**

T-tests are a form of parametric procedure that can be employed when the samples are normal, independent, and have equal variance (Kim, 2015). Table 4 shows that the value of unstandardized residuals is assumed to be normal as it does not stray far from the line. There are very few deviations from the straight line. This shows that the data is distributed normally.



Table 4: Kolmogorov-Smirnov

		Statistics	df	Sig.
Unstandardized	Public	0.560	261	0.057
Residual	Private	0.104	44	0.200

Table 4 shows the Kolmogorov-Smirnov test value. The p-value of Kolmogorov-Smirnov for public institutions is 0.057 while private institutions are 0.200. Since the p-value for public institutions and private institutions are greater than 0.05, it fails to reject the null hypothesis. So, the data is considered to follow normal distribution.

5.3.2. *Equality of variances*

The Levene’s Test (F Test) conducted by Snedecor and Cochran (1967) is used to see if two populations’ variances are equal. The equality of variances is another assumption that must be met in a parametric test. Levene’s test is used to examine this assumption (Kim, 2015). In this case, the variances are not statistically significantly different, as indicated by the p-value greater than 0.05. Since the p-value from Levene’s test is 0.231, we fail to reject the null hypothesis of equal variances. Therefore, the assumption of equal variance is fulfilled.

Table 5: Levene’s Test for Equality of Variance

F	p-value
1.441	0.231

5.4. *Comparison Mean of Total Monthly Expenditure Between Public and Private University Students*

Table 6 presents the mean comparison for public and private university students. The total monthly expenditure was calculated from eight categories as detailed in Table 3. The spending of course fees, books, and stationery was excluded since this variable is assessed per semester. With a total of 261 students at a public university, it shows a mean of RM797.67 of total money expenditure and a standard deviation of 234.95. Meanwhile, a private university has a total of 44 students, showing a mean of RM774.56 for total money expenditure and a standard deviation of 214.18. A higher mean score indicates more favourable attitudes (Giroux and Geiss, 2019). Public universities demonstrate higher overall satisfaction in this survey than private universities.

Table 6: Mean Comparison between Public and Private University Students

	Institution	N	Mean	Std. Dev	Std. Error Mean
Total Monthly Expenditure	Public	261	797.67	234.95	14.54
	Private	44	774.56	214.18	32.29

Table 7 presents the result of an independent sample t-test. There was no significant difference in the total monthly for public university students (mean=RM797.67, s 234.95) and private university students (mean = RM774.56, standard deviation = 214.18), conditions; t (0.611), p - value= 0.542.



Table 7: Independent Sample t-test

	t	df	Sig (2-tailed)	Mean difference	Std. Error Difference
Equal variance assumed	0.611	303	0.542	23.11	37.83

Figure 1 depicts the average monthly expenditure of students in Shah Alam. The research reveals no significant difference in monthly expenditure between students from public and private institutions in the area. Notably, the largest portion of their budget, 52.36%, is allocated to educational expenditure. Other major expenditures include food and beverages (19.17%) and rental accommodations and utilities (14.20%). Smaller portions of the budget are dedicated to social, recreational, and cultural activities (1.43%), personal care (5.11%), communication and information (3.24%), health (1.47%), and clothing and shoes (0.25%). This distribution highlights the financial priorities of students, emphasizing educational costs, essential living expenditures, and leisure activities.

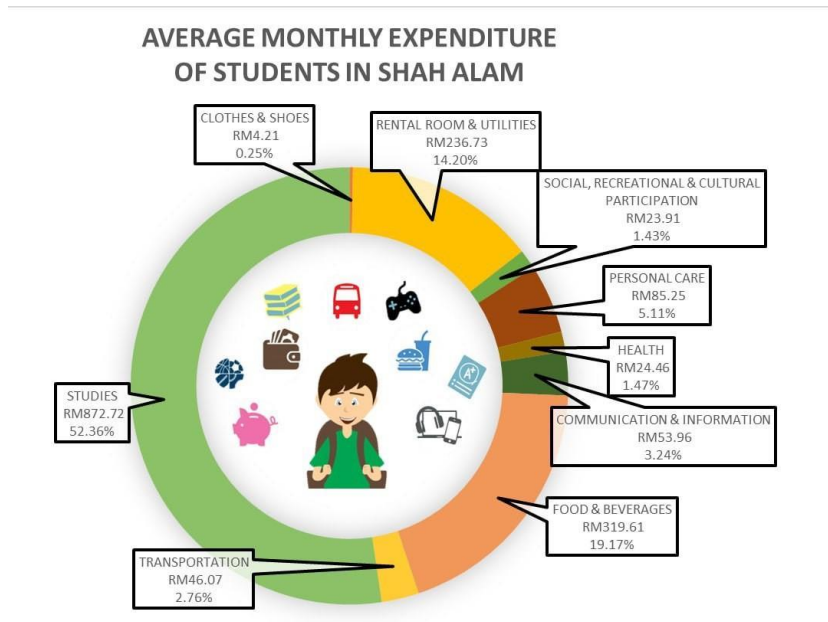


Figure 1: Average Monthly Expenditure of Students in Shah Alam

## 6. Conclusion

Descriptive statistics were used to achieve this objective. The findings revealed variations in total monthly expenditure between public and private university students across different categories. Public university students exhibited higher variability and maximum expenditure in categories such as food and beverages, savings, transportation, communication, and health. In contrast, private university students typically spent more on studies per semester, with the highest value being RM3070 per semester, compared to RM2800 for public universities. Both groups had similar maximum expenditure on personal care and social, recreation, and cultural participation. Public university students saved more and displayed greater variability in their

overall expenditure patterns, highlighting the diverse financial environments between the two types of institutions.

An independent t-test was used to test significant differences in the average total monthly expenditure between public and private institutions. The data for both public and private universities were normally distributed, and all assumptions for the t-test were met. Contrary to what the findings initially suggested, the test results indicated no significant difference in the average total monthly expenditure between public and private university students. This suggests that both groups have similar expenditure patterns, contradicting the earlier observation of higher expenditure among public university students.

## 7. Recommendations

Suggestions play a crucial role in this research, offering valuable guidance on potential areas for improvement to achieve more accurate outcomes. Therefore, several recommendations have been proposed to address the encountered issues in this study.

While this study utilized resources from Malaysian public and private institutions, there is still room for improvement in terms of scope. Expanding the institutional scope by including more university samples from different institutional contexts and geographical locations can address some of the highlighted shortcomings. Additionally, examining responses from universities in various states, each with its academic setting and sociocultural context, can uncover a wealth of information. A wider range of participating institutions would provide a more comprehensive understanding of students' attitudes and behaviours, thereby enhancing the overall robustness and validity of the research findings.

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