

Relationship of saving habit determinants among undergraduate students: A case study of UiTM Negeri Sembilan, Kampus Seremban

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Abstract. It has been reported that students are already accumulating substantial debt from higher education fees and their spending habit are at a critical stage. These situations cause the youngsters facing bankruptcy if they cannot improve their saving habit. Many researches have acknowledged that the determinants of saving habit include financial management, parental socialization, peer influence, and self-control. However, there remains a need for investigating the relationship between these determinants in order to avoid bankruptcy among youngsters. The objectives of this study are to investigate the relationship between saving habit determinants and to generate a statistical model based on the determinants of saving habit. Data collection method used is questionnaire and its scope is undergraduate students of UiTM Negeri Sembilan, Kampus Seremban. Samples are chosen by using stratified probability sampling technique and cross-sectional method is used as the research design. The results are then analysed by using descriptive analysis, reliability test, Pearson Correlation, and Multiple Linear Regression analysis. It shows that saving habit and self-control has no relationship. It means that students with less self-control tend to save less. A statistical model has been generated that incorporated this relationship. This study is significant to help the students save more by having high self-control.

1. Introduction

There were many cases of bankruptcy according to gender in year 2012 which is 13,613 men and 5,962 women [1]. This report includes 130 individuals under the age of 25 that have been declared bankrupt in year 2012. The Minister in Prime Minister's Department, Nancy Shukri claimed that the number of bankruptcy cases was consistently increasing by 6.17% from 2007 to 2008. The number of bankruptcy cases increased by 23.73% for 2009 and 18.91% for 2010. However, in year 2011, the number of bankruptcy cases decreased to 19.52%. It then increased by 24.62% from 2012 to 2013. It has been revealed that this is not a good sign for developing countries such as Malaysia, since it can affect the economic performance in future [2].

This study has aimed at UiTM Negeri Sembilan, Kampus Seremban which is assumed to be a strategic place as it is near to major tourists' spots such as Malacca and Port Dickson. Furthermore, there are variety of public transport facilities provided near UiTM Seremban like bus station, train



station and taxi stands. This has resulted to frequent holiday of the students to tourist haven, namely Malacca and Port Dickson, which is within their reach. Besides, Seremban is the capital of Negeri Sembilan, offers many shopping complexes which may is a hotspot for students to buy needs and pay utilities.

Hence, the significance of the study will improve the saving habit among undergraduate students. Student must have their financial monthly budget to ensure the budget is under control. With the financial budget, the cash flow of the money comes in and goes out can be controlled. Students must be able to manage the money according to priorities. Furthermore, statistical model generated could help in further studies.

2. Problem statement

It has been stated that university students are already accumulating substantial debt from higher education fees [3]. From these situations, spending habit among university students is at a critical. Furthermore, students tend to be irresponsible towards their student loans, which they need to pay back [4]. Besides, there is only limited investigation about saving habit among students [5]. Most of the previous studies were only focused on factors affecting the households and employee's saving habit. There are only a few studies regarding the students' saving behaviour were conducted. Hence a study on determinants and statistical model generated would be beneficial to help improve saving habit among undergraduate students.

3. Objective

This paper aims to achieve two objectives. Firstly, to investigate the relationship between saving habit determinants among undergraduate students of UiTM Negeri Sembilan, Kampus Seremban. Secondly, to generate statistical model based on the determinants saving habit.

4. Methods of research

The population in this study were 3,229 undergraduate students. The data of total number of population was taken from Academic Affairs (HEA) of UiTM Negeri Sembilan, Kampus Seremban. The total population includes the students from three faculties; Faculty of Administrative Science and Policy (FSPPP), Faculty of Computer and Mathematical Science (FSKM) and Faculty of Sports Science and Recreation (FSR) and the numbers are 1789 students from FSPPP, 1148 students from FSKM and 292 students from FSR. The sample size of 344 undergraduate students was considered to be representative for population. A pilot study involving 45 respondents is conducted on March 2016 prior the actual study is done.

This study applied the Theory of Planned Behaviour (TPB) and it has been stated in previous study that these four independent variables are the dominant factors that give influence in saving habit [6]. In this study, stratified probability sampling is the method used that considers all the undergraduate students from each faculty in UiTM Negeri Sembilan, Kampus Seremban who have an equal chance to be selected as sample [7]. The questionnaire used was adopted from Thung, Kai, Nie, Chiun and Tsen (2012) which had been conducted at Tunku Abdul Rahman University (UTAR) [6]. However, some of the items in the questionnaire had been simplified, so it can be easily understood by the respondents. The questionnaire is divided into two sections which are section A: consists of demographic profiles of the respondents and section B: focused on the factors related to saving habit among student.

The results will be analysed by using descriptive statistics, reliability test, Pearson Correlation for the first objective. In general, for reliability test, if the value of each questions is less than 0.60 are considered to be poor, while those in the 0.70 range, acceptable, and those over 0.80 are good [8].

Multiple Linear Regression (MLR) analysis is used for the second objective. Multiple regression analysis is applied because more than one independent variable is used to explain variance in the dependent variable. Based on MLR, the test that will be used to generate statistical model is F-Test and T-test. After that, the model generated must be discussed by using five (5) assumptions of MLR [9]. Firstly, the linearity between dependent variable and independent variable that could be checked

by plotting dependent variable against independent variable and the plot must be linear. Second, homoscedasticity or error variance is constant. The scatter plot is a suitable technique to check the presence of homoscedasticity. The third assumption is multicollinearity. Multicollinearity exists when two or more independent variables are highly correlated to each other and this can be checked by using Variance Inflation Factor (VIF). Next is, auto-correlation and test used is Durbin Watson. Finally, normally distributed residual and the technique used is P-P plot.

5. Result

5.1 Demographic Analysis

Majority of the total respondents as shown in cross tabulation Table 1 is from Faculty of Administrative Science and Policy (FSPPP) which is 55.23%. However, only 9.30% of the total respondents are from Faculty of Sports Science and Recreation (FSR). Table 1 shows the cross tabulation of faculty and gender for this study.

Table 1. Cross tabulation of faculty and gender

Faculty	Gender		Total	Percentage (%)
	Male	Female		
FSKM	20	102	122	35.47
FSPPP	20	170	190	55.23
FSR	13	19	32	9.30
Total	53	291	344	100

Moreover, the percentage of the students who are currently receiving loan from PTPTN is 64% and currently who are not receiving any loans is 36%. Besides, 55.23% of the students received allowance less than or equal to RM200 from the parents. However, only 7.56% students received between RM501 to RM800 allowance per month from the parents.

5.2 First objective: To investigate the relationship between saving habits determinants

In this study, saving habit is the dependent variable while the other four determinants which also known as the independent variables; financial management, parental socialization, peer influences and self-control. Table 2 below shows the comparison value of Cronbach's Alpha between pilot study and real study. In real study, it shows that all variables are reliable since the value is greater than or nearer to 0.70. It can be concluded that these questions can be used to measure each variable.

Table 2. Cronbach's alpha for pilot study and real study

Variable	Cronbach's Alpha	
	Pilot Study	Real Study
Saving habits	0.873	0.812
Financial Management	0.524	0.678
Parental Socialization	0.808	0.784
Peer Influences	0.680	0.635
Self-control	0.934	0.876
Overall study	0.687	0.761

From the Table 3, there is a relationship between financial management and saving habits among students. The parental socialization and peer influence also has relationship towards students' saving habits. However, there is no relationship between self-control and saving habits among students since the negative correlation value is close to zero.

Table 3. Correlation of independent variables and dependent variable

CORRELATION					
		Financial Management	Parental Socialization	Peer Influence	Self-Control
Saving Habit	Pearson Correlation	0.271	0.330	0.093	-0.388

5.3 Second objective: To generate a statistical model based on the determinants of saving habits

The second objective is to generate a statistical model from this study. Firstly, the F-test been conducted and the result shows the overall model is significant and at least one of independent variable is contributed to the model. Then, the T-test then was performed. It can be concluded that, the variable of financial management, parental socialization, peer influences and self-control are significant and contributed to the model. Hence, multiple linear regression could be generated and the model is as in equation (1).

$$\text{SavingHabits} = 2.748 + 0.145(\text{Financial_Mgt}) + 0.226(\text{ParentalSocialization}) + 0.083(\text{PeerInfluence}) - 2.42 (\text{SelfControl}) \quad (1)$$

6. Discussions

6.1. Discussion for first objective

6.1.1. *Financial management.* Financial management is used as one of the factors that determine student's saving habit in previous studies. It is provided that there is positive relationship between financial management and saving habit but it does not give the most influence factor in the study [6, 10]. From this study, it can be claimed that financial management give positive significant effect on saving habits and it's the most influence factor. Hence it can be concluded, if the students that have higher knowledge on financial management are more likely to engage in saving habit [11].

6.1.2. *Parental socialization.* The next determinant is parental socialization and based on previous studies, it is highlighted that parental socialization has relationship with saving habits [6, 10]. For this study, it is found that the parental socialization and saving habit has also relationship among students. This is because, parents who had practice money management skill influenced children's saving habit [12].

6.1.3. *Peer influence.* There has a fact that points out that students spend more time with their peers compared with others [13]. A study conducted involving four local universities and two private universities comprised 420 students claimed that peer influence has relationship with saving habit [6]. For this study, it shows that peer influence has weak relationship and it indicated that student saving habit is poorly influence by their peers.

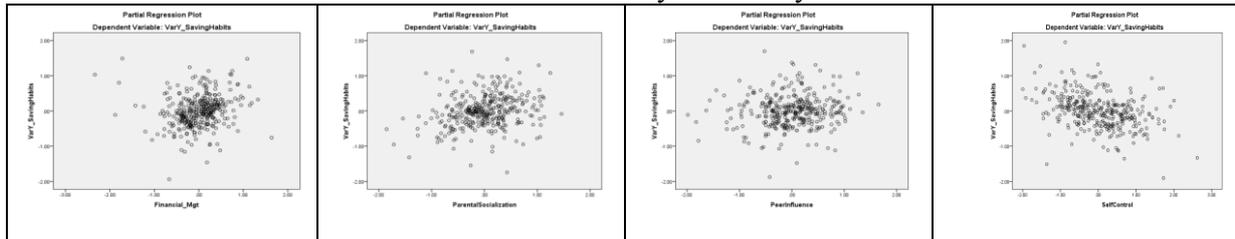
6.1.4. *Self-control.* However, for this study self-control has no relationship towards saving habit. It is contradicting with the previous study where by self-control has impact on saving habit [6]. On the other hand, people are mostly fail to realize that it is not how much money a person make but it is about how much money a person keep in life [14]. In this context it refers the ability of a person to be consistent in saving money so that, if a student that that has less self-control tend to save less money for the future purpose.

6.2 Discussion for second objective

Since this study is aim to generate a multiple linear regression, there are five assumptions that need to be discussed after conducting F-test and T-test.

6.2.1. *Linearity between dependent and independent variable.* From the table 4, it can be concluded that the relationship of financial management, parental socialization and peer influence with saving habit is approach to linear. However, the linearity between saving habit and self-control is assumed to be curvy linear.

Table 4. Summary of linearity



6.2.2. *Error variance is constant.* The scatter plots show randomly scattered pattern which indicates the variances of residuals are constants (homoscedasticity).

6.2.3. *Multicollinearity.* There is no multicollinearity since the variance inflation factor (VIF) value for all independent variables is less than 10. Besides, the tolerance value is more than 0.10. It proves that the data has no multicollinearity and data is good to predict the future value.

6.2.4. *Auto-correlation.* The Durbin Watson test value is 2.124, which indicates that there is no auto-correlation since the value is close to 2. In that case, error between error is not correlated.

6.2.5. *Normally distributed residuals.* The P-P plot of regression standardized residuals as shown in Figure 1 and the result shows the residual in normally distributed since the plots lie on 45° line.

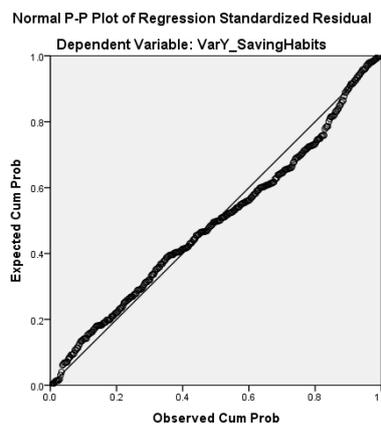


Figure 1. Normal P-P plot of regression standardized residual

For this study, the model is fully satisfied with the assumptions of MLR. Firstly, the assumption on linearity between dependent and independent variables. The variables financial management, parental socialization and peer influence are approach linear to saving habit respectively. However, for variable self-control is assumed curvy linear to saving habit. Furthermore, the other assumptions can be well explained by; error variance is constant, independent variables has no multicollinearity, no auto-correlation and residual is normally distributed. As the recommendation, this paper has identified four (4) determinants that could be the driving force towards improving saving habit among students. To

apply these results, Driving Force-Pressure-State-Impact-Response (DPSIR) framework can be used to further improve saving habit [15].

7. Conclusions

Nowadays, university students are already accumulating substantial debt from higher education fees. This situation could be more critical if they are not practicing of saving. Stratified probability sampling technique and cross-sectional method is used as the research design. Questionnaire is distributed to the respondents to get the feedback. The authors build the evidence based on multiple linear regression analysis procedure. Financial management, parental socialization, and peer influence are the determinants that has relationship but only variable self-control has no relationship to saving habit among UiTM Negeri Sembilan, Kampus Seremban undergraduate students. The significant of this study is to help the students to save more by having high self-control.

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