

Tahap Kesedaran, Pengetahuan dan Sikap Pelajar UPM Mengenai Amalan Keselamatan Siber Melalui Aktiviti Pembelian Dalam Talian

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Understanding Water Saving Behavior among Sub-Urban Households in Penang, Malaysia

*Norzalina Zainudin, Nor Hidayah Che Ahmad, Askiah Jamaluddin, Bukryman Sabri, Nurnaddia Nordin and Nurhaiza Nordin*

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Nudges: An Alarm for Consumers Against Unfair Terms in Online Booking Flight Tickets

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# DETERMINANTS OF SAVING BEHAVIOR AMONG THE STUDENTS AT UNIVERSITI PUTRA MALAYSIA

Muhamad Wafiy Asnawi Jaffar<sup>1</sup>

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## Abstract

This study aimed to determine the relationship between financial literacy, parental socialization, peer influence, self-control, and saving behavior among the students at Universiti Putra Malaysia. Two hundred fifty students from Universiti Putra Malaysia were selected via simple random sampling. A questionnaire was used to collect the quantified research data. The data obtained were analyzed using SPSS software version 26. Pearson correlation is used to determine the relationship between variables, and Multiple Linear Regression is used to examine the relationship between one dependent variable and several independent variables. The findings show that there was a significant relationship between parental socialization ( $r = 0.532^{**}$ ,  $p = 0.000$ ), a significant relationship between financial literacy and saving behaviour ( $r = 0.425^{**}$ ,  $p = 0.000$ ), a significant relationship between self-control and saving behaviour ( $r = 0.271^{**}$ ,  $p = 0.000$ ), and a significant relationship between peer influence and saving behaviour ( $r = 0.266^{**}$ ,  $p = 0.000$ ). Multiple Linear Regression analysis also found that financial literacy, parental socialization, peer influence, and self-control had a significant relationship with saving behavior ( $R^2 = 0.382$ ,  $F = 37.806$ , and  $p < 0.05$ ). In conclusion, all the independent variables are significant in saving behavior. The study contributed significantly to assisting the retail banks and policymakers in providing the students with sufficient knowledge about saving and reducing bad attitudes and behaviors. Retail banks and policymakers should establish an effective education program based on students' needs and level of financial literacy. Parents must encourage their children to save, which will positively impact their future lives and personal well-being.

**Keywords:** Financial literacy; Parental socialization; Peer influence; Self-control; Saving behavior

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## Abstrak

*Kajian ini bertujuan untuk mengetahui hubungan antara celik kewangan, sosialisasi ibu bapa, pengaruh rakan sebaya, kawalan sendiri, dan tingkah laku menabung dalam kalangan pelajar di Universiti Putra Malaysia. Seramai 250 pelajar Universiti Putra Malaysia telah dipilih melalui persampelan rawak mudah. Soal selidik telah digunakan untuk mengumpul data kajian yang telah dikuantifikasi. Data yang diperolehi dianalisis menggunakan perisian SPSS versi 26. Korelasi Pearson digunakan untuk menentukan hubungan antara pembolehubah, dan Regresi Linear Berganda digunakan untuk mengkaji hubungan antara satu pembolehubah bersandar dan beberapa pembolehubah tidak bersandar. Dapatan kajian menunjukkan terdapat hubungan yang signifikan antara sosialisasi ibu bapa ( $r = 0.532^{**}$ ,  $p = 0.000$ ), hubungan yang signifikan antara celik kewangan dan tingkah laku menabung ( $r = 0.425^{**}$ ,  $p = 0.000$ ), hubungan yang signifikan antara kawalan diri dan tingkah laku menyimpan ( $r = 0.271^{**}$ ,  $p = 0.000$ ), dan hubungan yang signifikan antara pengaruh rakan sebaya dan tingkah laku menyimpan ( $r = 0.266^{**}$ ,  $p = 0.000$ ). Analisis Regresi Linear Berganda juga mendapati bahawa literasi kewangan, sosialisasi ibu bapa, pengaruh rakan sebaya, dan kawalan diri mempunyai hubungan yang signifikan dengan tingkah laku menabung ( $R^2 = 0.382$ ,  $F = 37.806$ , dan  $p < 0.05$ ). Kesimpulannya, semua pembolehubah tidak bersandar adalah signifikan dalam tingkah laku menyimpan. Kajian ini memberi sumbangan besar dalam membantu bank runcit dan penggubal dasar dalam menyediakan pelajar dengan pengetahuan yang mencukupi tentang menabung dan mengurangkan sikap dan tingkah laku buruk. Bank runcit dan penggubal dasar harus mewujudkan program pendidikan yang berkesan berdasarkan keperluan dan tahap celik kewangan pelajar. Ibu bapa mesti menggalakkan anak-anak mereka menabung, yang akan memberi kesan positif kepada kehidupan masa depan dan kesejahteraan diri mereka.*

**Kata kunci:** Celik kewangan; Sosialisasi ibu bapa; Pengaruh rakan sebaya; Kawalan diri; Tingkah laku menabung

## Introduction

Over the past decades, saving has played an essential role in economic growth and development. Generally, an economy with a high saving ratio can lead to increased economic growth. Savings also can be defined as income earned or generated that is not consumed immediately and is thus accessible for future use. Savings also serve as a source of household wealth and a cushion against adversity, helping people to smooth out their consumption during difficult times.

The need for students to manage money wisely is, therefore, critical. The federal government, parents, higher education institutions, and students benefit from prudent financial management. According to Kezar, Chambers, and Burkhardt (2015),

society's impressions of future leaders' commitment and responsibility to public money are shaped by images of saving behavior among university students. A system of financial planning for university students is required. Students in higher education are primarily young people who try to develop abilities that will enable them to face challenges outside campus life.

Malaysians also accumulated significant debts due to excessive credit use, a lack of budgeting, overspending, poor shopping and spending skills, low salaries, and a lack of financial awareness. As a result, the Malaysian Department of Insolvency recorded 224,943 bankruptcy cases between 1990 and 2010, with the majority of them being young adults under the age of 30. Therefore, Malaysian scholars (Abu Bakar, Masud, & Md. Jusoh, 2006; Ibrahim, Harun, & Mohamed Isa, 2009; Sabri, MacDonald, Masud, Paim, Hira, & Othman, 2008) are interested in financial behavior among university students. Findings found that many students borrow money for their education and easily fall into debt due to the lack of financial planning for the future.

## **Literature Review**

### **Saving Behaviour**

The word 'saving' had a wide range of meanings and explanations. Savings can be defined as anything that is not spent out of disposable income. Saving is an essential source of investment that directly influences economic growth (Htet, 2020). There are two forms of saving and investment. They are non-financial savings and financial savings. Investing in assets such as real estate and purchasing gold and jewelry are examples of non-financial savings. Buying financial securities, investing in the bond market, stock market, and current savings accounts are examples of financial savings instruments that can generate additional income. Tharanika and Andrew (2017) refer to any percentage of an individual's income that is not spent as savings. The success of saving is determined by how a person uses his or her saving behavior. When someone saves, they are reducing their consumption or expenditure. Ahmad, Yunus, Baharudin, Johari, and Ripain (2015) defined saving as saving a certain amount of money on a monthly or daily basis.

### **Financial Literacy**

Financial literacy is undeniably a topic that has received much attention recently. There is, however, no universal definition of financial literacy. Financial literacy is one of the factors influencing saving behavior (Delafruez & Laily, 2011). In addition, financial literacy affects one's money management (Zulfaris et al., 2020) and participation in the financial market (Nguyen & Nguyen, 2020). Sabri and Aw (2019) found that financial literacy impacts individuals' investment decisions and the likelihood of having a financial planner. According to a study by Gale and Levine



(2010), financially literate persons can make educated and effective decisions regarding the use and management of money and wealth. Financial literacy is more than just knowing about finances; it also includes the ability to make sound financial decisions daily (Huston, 2010). According to Isomidinova and Jugindar (2017), financial literacy significantly impacts Uzbek students.

**H1:** There is a significant relationship between financial literacy and saving behavior among the students at Universiti Putra Malaysia.

## **Parental Socialization**

As the primary socialization agent, parents can encourage youth to save and support their financial activities by functioning as good financial role models (Bakar & Bakar, 2020). Any financial information received from parents, either intentionally or unintentionally, positively and significantly increases youth's financial knowledge and practices. The influence of parental financial education on saving and borrowing behavior revealed that parental financial education encourages people to save more and borrow less (Homan, 2016). Moreover, the study also found that when parents provide it throughout childhood, it significantly impacts saving behavior. Salikin, Ab Wahab, Zakaria, Masruki, and Nordin (2012), conducted a study on students' saving attitudes with different findings based on their parents' backgrounds. Their findings revealed that the greater the parents' educational level, the less likely students would put money aside for savings. It was also discovered that the higher the household income, the less likely the students are to save. According to Naradin, Ismail, Harun, and Khamis (2017), parents are thought to play the most crucial influence in influencing a student's behavior. Lastly, Batty, Collins, and Odders-White (2015) also discovered that parental socialization impacts children's financial behavior.

**H2:** There is a significant relationship between parental socialization and saving behavior among the students at Universiti Putra Malaysia.

## **Peer Influence**

Peer influence is also among the most influential factors affecting students' saving behavior. According to Noor Zaihan (2016), discussing ideas regarding financial management among peers is essential. She also discovered that the amount of money a group of students spent during social time impacted their behavior. Some students spend most of their time with friends, which may impact their intention and behavior (Kadir et al., 2020). Peer influence is vital in shaping their friends' saving behavior and motivating them to spend only on necessities and needs to prevent overspending. Not only that, but some students also encourage one another to plan for the future by practicing various types of saving and investments with their friends. According to Montandon (2014), young adults are strongly impacted by their peers in



various ways, including spending and investing. Erskine, Kier, Leung, and Sproule (2005) examined the predictors of young people's saving behavior. The research revealed that young Canadians' money-saving behavior is influenced by peer influence. Jamal, Ramlan, Karim, and Osman (2015) discovered that a student's ability to save is strongly influenced by their peers, and this is also supported by Alwi, Amir Hashim, and Ali (2015), who discovered that many Generation Y decisions are influenced by peer influence.

H3: There is a significant relationship between peer influence and saving behavior among the students at Universiti Putra Malaysia.

### **Self-Control**

Most students should have good self-control to avoid overspending on their money (Kadir et al., 2020). Rha, Montalto, and Hanna (2006) observed the impact of self-control mechanisms on household saving behavior. The findings showed some surprising insights, with the author stating that mechanisms that help households practice self-control significantly impact household saving behavior. For example, households with saving rules were significantly more likely to spend less of their income than those. In addition, Strombacka, Linda, Skagerlundb, Vastfjal, and Tinghog (2017) identified whether self-control predicts financial behavior and well-being in the Swedish population. The researchers used the behavioral lifecycle hypothesis to determine that those with high self-control are more likely to save money from their income. The findings also show that they have better overall financial behavior, are less concerned about money, and are more confident in their current and future financial situations.

H4: There is a significant relationship between self-control and saving behavior among the students at Universiti Putra Malaysia.

### **Theory of Planned Behaviour (TPB)**

The Theory of Planned Behaviour (TPB), developed by Icek Ajzen in 1991, is used in our research. TPB is an extension of Ajzen and Fishbein's Theory of Reasoned Action (TRA), which they jointly developed (Ajzen & Fishbein, 1980). In general, it attempts to explain why people do specific actions.

TPB has been applied to a variety of fields, including information system research (Mathieson, 1991; Pavlou & Fygenson, 2006), health-related research (Pellino, 1997), economic research (Cook, Kerr & Moore, 2002), and human resource management (Wiethoff, 2004).

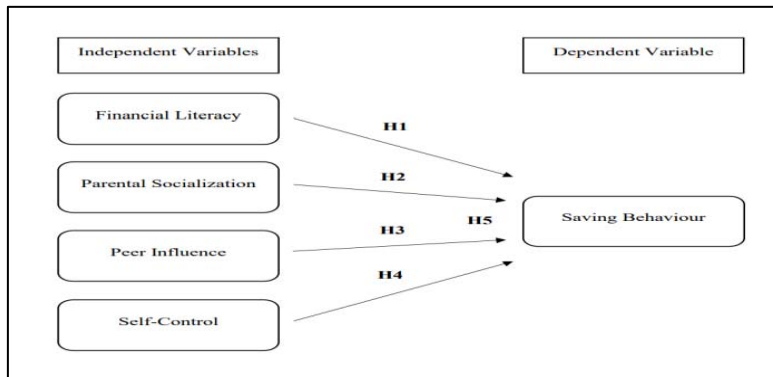
People engage in certain behaviors because they have decided to do so (Ajzen, 1991). Attitude toward the behavior, subjective norm, and perceived behavioral control are the three concepts determining TPB's intention. Firstly, the degree of a person's positive or negative evaluation of the behavior is referred to as attitude toward the behavior. On the other hand, the perceived social pressure to perform or not perform the behavior is referred to as the subjective norm. The social pressure comes from important referents, including parents, spouses, friends, and colleagues. Perceived behavioral control, which refers to people's perceptions of their capacity to accomplish a specific behavior, is the third determinant of intention. It indicates that a person's intention to undertake specific actions is predicted by their perceived ease or difficulty. It is thought to represent both experience and anticipated impediment. This experience is shown in the research by Furnham (1985), who found that the least well-educated people are less likely to save because they feel saving will not provide them with wealth.

In this study, financial literacy is utilized to explain how students' saving behavior is predicted by their attitude toward behavior and perceived behavioral control. Students with more financial understanding are more likely to recognize the benefits of saving and the challenges that can arise if a savings account is not maintained. As a result of this behavioral belief, students will develop a positive attitude toward saving behavior. Meanwhile, students are expected to save if they have better financial management cognitive abilities and believe they can save properly. Furthermore, students with high levels of self-control will perceive the ease of saving since they can regulate their desires, be self-disciplined, and defer gratification.

For the moment, subjective norms describe how parents and peers influence students' saving behavior. In addition, parents and peers commonly create social pressures, and their actions impact students' desire to save significantly. In conclusion, the principles of TPB can well explain all of the determinants (financial literacy, parental socialization, peer influence, and self-control) in predicting students' saving behavior.

## **Conceptual Framework**

The conceptual framework in this study consists of independent variables and dependent variables. The independent variables are financial literacy, parental socialization, peer influence, and self-control. At the same time, the dependent variable is saving behavior among the students at Universiti Putra Malaysia (Figure 1).



**Figure 1: Conceptual Framework**

## Methodology

This methodology is a descriptive study of the determinants of saving behavior among the students at Universiti Putra Malaysia. The researcher uses the quantitative method as the empirical evaluations consist of numerical measurement and analysis. The research can be classified as a cross-sectional study from the time horizon perspective. The data were collected from August to October 2021. The researcher has followed a deductive approach where this research was conducted based on existing theories and research (Saunders, Lewis & Thornhill, 2009). According to Hair, Babin, Money, and Samouel (2003), sampling design is a process for selecting a suitable number of units from the interest population to provide accurate information about the entire population. According to Easton & McColl (1997), The entire group of people the researcher is interested in is referred to as the target population.

The target population for this research is the students at Universiti Putra Malaysia. The total number of students at Universiti Putra Malaysia is 21,302. According to Krejcie and Morgan (1970), 196 responders can represent 400 different populations. However, in this study, the researcher chooses 250 respondents among the students at Universiti Putra Malaysia to represent the population. The method of data collection used is determined by the type of data needed and pre-set research design (Burns & Bush, 2003). The two types of data are primary data and secondary data. In this research, the primary data collection method is used to obtain information and opinions directly, specifically from the students at Universiti Putra Malaysia. To answer the hypotheses and research questions, primary data ensures the most up-to-date information and realistic view (Saunders et al., 2009). The primary data for the research was collected via a survey questionnaire, which needed less skill and sensitivity (Jankowicz, 2005). To increase the response rate, the researchers

distributed and collected the self-administered questionnaires to and from the target respondents after answering them.

## **Instrumentation**

The demographic profile of respondents in Section A is measured using ordinal and nominal scales. According to Malhotra (2010), a nominal scale is suitable for variables that a simple naming system can distinguish. For example, gender, marital status, course of study, and part-time engagement are all measured on a nominal scale. In contrast, an ordinal scale is used to measure the object's attitude, opinion, and measurement, whether it has more or less of a character in the study (Malhotra, 2010). Therefore, an ordinal scale is applied for age, a monthly source of income, allowance received from parents per month, monthly salary from a part-time job, and monthly saving percentage. Section B refers to financial literacy. Ten questions are designed to evaluate respondents' level of agreement on the extent to which they were financially literate. Most of these questions are based on Hira and Loibl (2005) and Cude et al. (2006). Respondents with a higher score have better financial literacy and vice versa. Section C refers to parental socialization. To analyze the relationships between respondents' saving behavior and their parents, the researchers developed eight questions based on Otto (2009). A larger scale indicates that parental socialization influences respondents' saving behavior and vice versa. Section D refers to peer influence. The researchers devised seven questions based on Otto (2009) to determine the extent of peer influence. These questions help determine the extent to which respondents' saving behavior is influenced by their peers. As a result, a higher score indicates more peer influence and vice versa. Section E refers to self-control. Another ten questions were designed to evaluate the respondents' impulsivity, based on Multistate North Central Research Project 1013 (2007), Otto (2009), and Esenvalde (2011). A higher score shows that respondents are more impulsive than a lower score, which leads to decreased self-control, and vice versa. The last section refers to saving behavior in Section E. All variables are measured via a five-point Likert scale ranging from strongly disagree (1) to strongly agree (5).

## **Data Analysis**

This study analyzed the data collection using Statistical Package for Social Sciences (SPSS, version 26). Descriptive and inferential analysis was used in this study. The descriptive analysis includes frequencies, percentages, and mean (Zikmund, W. G., 2003), while the inferential analysis includes Pearson Correlation and Multiple Linear Regression (MLR). Pearson correlation analysis examines the relationship between the four independent variables (financial literacy, parental socialization, peer influence, and self-control) and the dependent variable (saving behavior). MLR analysis determines the determinants of saving behavior among the students at Universiti Putra Malaysia.

## Results and Discussion

### Respondent's Demographic Profile

Table 1 shows that most respondents are female (79.6%) while the male (20.4%). More than half of respondents fall into the age group of 23 years old and above (55.6%). They were followed by the age group of 21 to 22 years old (38%) and 19 to 20 years old (4.8%). Meanwhile, only 1.6% of the respondents are 18 years old and below.

Additionally, the majority of the respondents (84%) depend on PTPTN as their monthly source of income, followed by those under scholarship (81%) and allowance from parents (79%). Meanwhile, only 2.0% and 0.4% of the respondents fall into the salary from part-time jobs and others.

Most respondents receive an allowance of less than RM200 (54%) per month from their parents, followed by an allowance between RM201-RM500 (31.6%). However, the result shows that only a small portion of respondents receive a substantial allowance from their parents, whereby 6% fall into the range of RM501-RM800, RM801-RM1000 (4.8%), and only 3.6% of respondents receive more than RM1000. The respondents' monthly percentage of savings ranged from 0% to more than 20%. More than half of the respondents (56%) save 1% to 10% of their savings. There 18.4% and 10.4% of the respondents save 10% to 20% and more than 20%. Meanwhile, the respondents who do not allocate any percentage of their money for their savings is 15.2%.

**Table 1: Respondent's Demographic Profile**

Variables		Frequency (n)	Percentage (%)
Gender	Male	51	20.4
	Female	199	79.6
Age	18 and below	4	1.6
	19 - 20	12	4.8
	21 - 22	95	38.0
	23 and above	139	55.6
Monthly Source of Income	Allowance from parents	79	31.6
	PTPTN	84	33.6
	Scholarship	81	32.4
	Salary from a part-time job	5	2.0
	Others	1	0.4
Monthly Percentage of Saving	0%	38	15.2
	1% - 10%	140	56.0
	10% - 20%	46	18.4
	More than 20%	26	10.4

## Pearson Correlation Analysis

Pearson correlation is a statistical test evaluating the strength of the relationship between two variables of numerical data (Saunders et al., 2009). Therefore, the Pearson correlation is used to measure the relationship between independent variables and dependent variables. The significance level in the Pearson Correlation test is 0.05, meaning there is a 95% confidence level.

Following Table 2 shows the Pearson correlation analysis results. All independent variables have positive and significant relationships with saving behavior. The closer the Pearson correlation to 1, the stronger the relationship between the two variables. Therefore, in these four independent variables, parental socialization has the strongest relationship with saving behavior ( $r = 0.532$ ,  $p = 0.00$ ). This relationship indicates that parental socialization is important in encouraging and motivating their children to save. While peer influence has the weakest one ( $r = 0.266$ ,  $p = 0.00$ ). The result was supported by Ling (2021), whereby peer influence was the weakest relationship with saving behavior. This relationship indicates that students are easily influenced by their peers, which impacts their saving behavior. Additionally, all hypotheses fail to reject due to all p-values of this study being less than 0.05, even 0.01, which indicates that relationships are significant at the 0.01 level (Malhotra, 2010).

**Table 2: Pearson Correlation between Financial Literacy and Saving Behaviour**

Hypotheses	Statistical Test	Results	Conclusion
H1: There is a significant relationship between financial literacy and saving behavior among the students at Universiti Putra Malaysia.	Pearson Correlation	$r = 0.425^{***}$ $p = 0.000$	Fail to reject.
H2: There is a significant relationship between parental socialization and saving behavior among the students at Universiti Putra Malaysia.	Pearson Correlation	$r = 0.532^{***}$ $p = 0.000$	Fail to reject.
H3: There is a significant relationship between peer influence and saving behavior among the students at Universiti Putra Malaysia.	Pearson Correlation	$r = 0.266^{***}$ $p = 0.000$	Fail to reject.
H4: There is a significant relationship between self-control and saving behavior among the students at Universiti Putra Malaysia.	Pearson Correlation	$r = 0.271^{***}$ $p = 0.000$	Fail to reject.

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

## Multiple Linear Regression Analysis

Multiple Linear Regression is a technique to explore the more sophisticated and complex relationship between one dependent variable and several independent variables. To have a better understanding of the determinants of saving behavior among the students, the Multiple Linear Regression method was used to examine the relationship between the independent variables and dependent variables. However, the Multiple Linear Regression needs to be analyzed again to ensure no multicollinearity of the data. The samples are normally distributed, the residuals should have a straight-line relationship with the predicted dependent variable, and the residual variances are homoscedastic, according to the assumptions.

H5: There are the determinants of saving behavior among the students at Universiti Putra Malaysia.

**Table 3: Model Summary of Saving Behaviour**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.618 <sup>a</sup>	.382	.372	.501

a. Predictors: (Constant), Financial Literacy, Parental Socialization, Peer Influence, Self-Control

Table 3 shows that the  $R^2$  for this model is 0.382, indicating that 38.2% of the SB (dependent variable) variation can be explained by FL, PS, PI, and SC (independent variables).

**Table 4: Analysis of Variance (ANOVA)**

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	37.998	4	9.499	37.806	.000 <sup>b</sup>
Residual	61.561	245	.251		
Total	99.559	249			

a. Dependent Variable: Saving Behaviour

b. Predictors: (Constant), Financial Literacy, Parental Socialization, Peer Influence, Self-Control

Based on Table 4, the F-value of 37.806 is significant at the 0.05 level. This F-value indicates that the overall regression model with these four independent variables (FL, PS, PI, and SC) can well explain the variation of the dependent variable (SB) (Coakes et al., 2010).



**Table 5: Summary of Regression Coefficients**

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta, $\beta$		
(Constant)	1.385	.247		5.614	.000
Financial Literacy	.400	.140	.166	2.860	.005
1 Parental Socialization	.334	.054	.363	6.219	.000
Peer Influence	.164	.046	.205	3.587	.000
Self-Control	.184	.044	.236	4.166	.000

a. Dependent Variable: Saving Behaviour

Table 5 shows that all the B values are favorable, and all variables are significant at a 95% level ( $p$ -value  $< 0.05$ ). Therefore, a linear regression equation can be determined, which includes all independent variables and dependent variables.

$$\text{Equation: } SB = 1.385 + 0.400 (FL) + 0.334 (PS) + 0.164 (PI) + 0.184 (SC)$$

According to the results, parental socialization ( $\beta = 0.363$ ) influences saving behavior the most. This  $\beta$  can explain that every unit increase in parental socialization will increase by 0.363 units in saving behavior, holding other variables constant. Parents who practice money-saving are more likely to influence their children's saving habits. Subsequently, self-control ( $\beta = 0.236$ ) has the second strongest influence. Peer influence ( $\beta = 0.205$ ) and financial literacy ( $\beta = 0.166$ ) significantly influence saving behavior. Saving behavior only increases by 0.205 and 0.166 units for every unit increase in peer influence and financial literacy. In contrast, Ling (2021) found that financial literacy has the smallest influence on saving behavior. The knowledge of finance enables them to understand how the importance of money saving.

## Conclusion

This research studies the relationship between all the independent variables: parental socialization, peer influence, self-control, and financial literacy with saving behavior. According to the findings, all the independent variables, parental socialization, peer influence self-control, and financial literacy, have a positive and significant relationship with saving behavior. Parental socialization has the most vital relationship with saving behavior, followed by peer influence, self-control, and financial literacy. Furthermore, it shows that the Pearson correlation has a positive linear correlation.

The finding also proves a positive relationship between peer influence and saving behavior, which is supported by the findings of a previous study conducted by Erskine et al. (2005) on the determinants of young people's saving behavior in Canada. Furthermore, self-control and saving behavior are positively related ( $p < 0.05$ ). It has been observed that an individual's self-control is essential to his or her savings.

Lastly, financial literacy and saving behavior are also positively related. There is sufficient evidence to conclude that financial literacy has a significant relationship with saving behavior among the students at Universiti Putra Malaysia. According to this finding, students with a higher level of financial literacy are more likely to save. It is compatible with the research of Sabri & MacDonald (2010), which observed that financial literacy is positively related to college students' saving behavior. Other researchers, such as Delafrooz & Laily (2011), have shown that financial literacy considerably impacts an individual's saving behavior. As a result, students with a higher level of financial literacy are more likely to save because they can recognize the knowledge and understand the importance of saving.

The Multiple Linear regression results show that all independent variables were influenced by saving behavior. Amongst the factors, parental socialization significantly influences saving behavior, followed by self-control, peer influence, and financial literacy.  $R^2$  indicates that all the independent variables can explain 38.2% of the variation in the saving behavior.

Based on the basic problems studied, educators and regulators need to develop appropriate programs and design relevant financial courses to assist students in managing their money. This is to avoid them from being burdened with debt in the future. In this regard, retail banks can also develop marketing strategies that are more appropriate to benefit and encourage the younger generation of savers to save in Malaysia. Besides that, the study contributed significantly to assisting the retail banks and policymakers in providing the students with sufficient knowledge about saving and reducing bad attitudes and behaviors. Therefore, retail banks and policymakers should establish an effective education program based on student's needs and level of financial literacy. In addition, parents must encourage their children to save, which will positively impact their future lives and personal well-being.

Future research should draw a larger sample size to generate a more accurate and representative manner (Lim et al., 2011). Large sample size is more likely representative than a small sample size, and the sample means are more likely to equal the population mean (Saunders et al., 2009).

## References

- Abu Bakar, E., Masud, J., & Md. Jusoh, Z. (2006). Knowledge, attitude and perceptions of university students towards educational loans in Malaysia. *Journal of Family and Economics Issues*, 27, 692-701.
- Ahmad, N. W., Yunus, M. M., Baharudin, N. A., Johari, N., & Ripain, N. (2015). Determinant of Saving Behavior among Staff in International Islamic University

College Selangor. *In International Conference on Economics and Banking (ICEB-15)*. Atlantis Press.

Ajzen, I. (1991). The theory of planned behaviour. *Organizational Behaviour and Human Decision Processes*, 50, 179-211.

Ajzen, I., & Fishbein, M. (1980). *Understanding attitudes and predicting social behaviour*. Englewood Cliffs, NJ: Prentice.Hall.

Alwi, S., Amir Hashim, I. Z., & Ali, M. S. (2015). Factors Affecting Savings Habits within Millennials in Malaysia: Case Study on Students of Taylor's University. *In Proceedings of the Fourth Asia- Pacific Conference on Global Business, Economics, Finance and Social Sciences*, 1-10.

Bakar, M. Z. A., & Bakar, S. A. (2020). Parental Financial Socialisation: Pathways to Positive Financial Behaviour. *International Journal of Academic Research in Business and Social Sciences*, 10(6), 54– 62.

Batty, M., Collins, J. M. and Odders-White E. (2015). Experimental evidence on the effects of financial education on elementary school students' knowledge, behavior and attitudes. *Journal of Consumer Affairs*, 49(1), 69-96.

Burns, A. C., Bush, R. F. (2003). *Marketing Research: Online Research Applications* (4<sup>th</sup> ed.). Upper Saddle River, NJ: Prentice Hall.

Coakes, S. J., Steed, L., & Ong, C. (2010). *SPSS: analysis without anguish: version 17 for Windows*: John Wiley & Sons Australia.

Cook, A. J., Kerr, G. N., & Moore, K. (2002). Attitudes and intentions towards purchasing GM food. *Journal of Economic Psychology. Special Issue: Social Psychology and Economics in Environmental Research*, 23, 557-572.

Cude, B. J., Lawrence, F. C, Lyons, A. C, Metzger, K., Lejeune, E., Marks, L., & Machtmes, K. (2006). College students and financial literacy: What they know and what we need to learn. *Eastern Family Economics and Resource Management Association*.

Delafrooz, N. & Laily (2011). Determinants of saving behavior and financial problem among employees in Malaysia. *Australian Journal of Basic and Applied Sciences*, 5(7), 222-228.

Easton, V. J., & McColl, J. H. (1997). *Statistics glossary*. Retrieved from <http://www.stats.gla.ac.uk/steps/glossary/sampling.html>.

- Erskine, M., Kier, C., Leung, A., & Sproule, R. (2005). Peer crowds, work experience, and financial saving behaviour of young Canadians. *Journal of Economic Psychology*, 27(2), 262-284.
- Esenvalde, I. (2011). *Psychological predictors of savings behavior: contrasting the impact of optimism and burnout on self-control, achievement motivation and savings behavior*. Alliant International University, Los Angeles.
- Furnham, A. (1985). Why do people save? Attitudes to, and habits of, saving money in Britain. *Journal of Applied Social Psychology*, 15, 354-373.
- Gale, W. G., & Levine, R. (2010). Financial literacy: What works? How could it be more effective? How Could it be More Effective.
- Hair, J. F., Babin, B. Jr., Money, A. H., & Samouel, P. (2003). *Essential of business research methods*. United States of America: John Wiley & Sons.
- Hira, T. K. & Loibl, C. (2005). Understanding the impact of employer-provided financial education on workplace satisfaction. *Journal of Consumer Affairs*, 39(1), 173-194.
- Homan, A. M. (2016). The influence of parental financial teaching on saving and borrowing behavior. Unpublished Master Thesis, University of Groningen, Netherlands.
- Htet, K, D. (2020). Influencing Factors on Saving Behaviour Among Army Officers in Yangon Cantonment (Master, Yangon University of Economics).
- Huston, S. J. (2010). Measuring Financial Literacy. *Journal of Consumer Affairs*, 44(2), 296-316.
- Ibrahim, D., Harun, R., & Mohamed Isa, Z. (2009). A Study on Financial Literacy of Malaysian Degree Students, Canadian Academy of Oriental and Occidental Culture, 5(4), 51-59.
- Isomidinova, G., & Jugindar, S. K. S. (2017). Determinants of financial literacy: A quantitative study among young students in Tashkent, Uzbekistan. *Journal of Business & Management*, 2(1), 61-67.
- Jamal, A. A. A., Ramlan, W. K., Karim, M. A., & Osman, Z. (2015). The effects of social influence and financial literacy on savings behavior: A study on students of higher learning institutions in Kota Kinabalu, Sabah. *International Journal of Business and Social Science*, 6(11), 110–119.

- Jankowicz, A. D. (2005). *Business Research Projects* (4<sup>th</sup> ed.). London: Thomson Learning.
- Kadir, J. M. A., Shoukat, A., Naghavi, N., & Jamaluddin, A. A. (2020). Saving Behavior in Emerging Country: The Role of Financial Knowledge, Parent Socialization and Peer Influence. *GADING (Online) Journal for Social Sciences*, Universiti Teknologi MARA Cawangan Pahang, 23(01).
- Kezar, A., Chambers, A. C., & Burkhardt, J. C. (Eds.). (2015). *Higher education for the public good: Emerging voices from a national movement*. Hoboken, NJ: John Wiley & Sons.
- Krejcie, R. V., & Morgan, D. W. (1970). Determining sample size for research activities. *Educational and Psychological Measurement*, 30(3), 607-610.
- Lim, C.S., Sia, B.K., & Gan, G.J. (2011). The analysis of psychological factors affecting savers in Malaysia. *Middle Eastern Finance and Economic*, 12, 77-85.
- Ling, H. (2021). Determinants of saving behaviour among university students in Guangdong Province. *The Frontiers of Society, Science and Technology*, 3(5), 51-70, DOI: 10.25236/FSST.2021.030510
- Malhotra, N. K. (2010). *Marketing research: an applied orientation* (6<sup>th</sup> ed.). United States of America: Pearson Education, Inc.
- Mathieson, K. (1991). Predicting user intentions: Comparing the technology acceptance model with theory of planned behaviour. *Information Systems Research*, 2, 173-191.
- Montandon, A. (2014). Social influence of siblings and friends in generation Y's development of risk preferences (Doctoral dissertation, University of Cape Town).
- Multistate North Central Research Project 1013. (2007). *Survey Instrument: The Economic and Psychological Determinants of Household Savings Behavior*. [http://lgu.umd.edu/lgu\\_v2/homepages/attachs.cfm?trackID=3374](http://lgu.umd.edu/lgu_v2/homepages/attachs.cfm?trackID=3374).
- Naradin, D. K., Ismail, F., Harun, N. S., & Khamis, Z. (2017). Determinants of the saving behaviour among students of UiTM Terengganu. *Terengganu International Finance and Economics Journal (TIFEJ)*, 5(1), 31-40.
- Nguyen, T. A. N., & Nguyen, K. M. (2020). Role of financial literacy and peer effect in the promotion of financial market participation: Empirical evidence in Vietnam. *The Journal of Asian Finance, Economics, and Business*, 7(6), 1-8.

- Noor Zaihan, D. (2016). Determinants of saving behavior among generation Y students in Universiti Utara Malaysia (Doctoral dissertation, Universiti Utara Malaysia).
- Otto, A. M. C. (2009). *The economic psychology of adolescent saving*. Exeter: University of Exeter.
- Pavlou, P. A., & Fygenson, M. (2006). Understanding and predicting electronic commerce adoption: An extension of the theory of planned behaviour. *Management Information Systems Quarterly*, 30(1), 115-143.
- Pellino, T. A. (1997). Relationships between patient attitudes, subjective norms, perceived control, and analgesic use following elective orthopedic surgery. *Research in Nursing and Health*, 20, 97-105.
- Rha, J. H., Montalto, C. P., & Hanna, S. D. (2006). The effect of self-control mechanisms on household saving behaviour. *Journal of Financial Counselling and Planning*, 17(2), 1-14.
- Sabri, M. F., MacDonald, M., Masud, Jariah, Paim, L. Hira, T. K., & Othman M. A. (2008). Financial behavior and problems among college students in Malaysia: Research and education implication. *Consumer Interests Annual*, 54.
- Sabri, M. F. & MacDonald, M. (2010). Savings behaviour and financial problems among college students: The role of financial literacy in Malaysia. *Cross-Cultural Communication*, 6(3): 103-110.
- Salikin, N., Ab Wahab, N., Zakaria, N., Masruki, R., & Nordin, S. N. (2012). Students' Saving Attitude: Does Parents' Background Matter? *International Journal of Trade, Economics and Finance*, 3(6), 479-483.
- Saunders, M., Lewis, P. & Thornhill, A. (2009). *Research methods for business students* (4<sup>th</sup> ed.). Harlow, England: Prentice Hall.
- Strombacka, C., Linda, T., Skagerlundb, K., Vastfjal, D., & Tinghog, G. (2017). Does self-control predict financial behavior and financial well-being? *Journal of Behavioral and Experimental Finance*, 14, 30–38.
- Tharanika, K., & Andrew, A. (2017). Factors influencing on saving behaviour among university students. *International Journal of Research*, 4(14), 861-871.
- Wiethoff, C. (2004). Motivation to learn and diversity training: Application of the theory of planned behaviour. *Human Resource Development Quarterly*, 15(3), 263-278.

- Zikmund, W. G. (2003). *Business research methods* (7<sup>th</sup> ed.). South-Western Publishing.
- Zulfaris, M. D., Mustafa, H., Mahussin, N., Alam, M. K., & Daud, Z. M. (2020). Students and money management behavior of a Malaysian public university. *The Journal of Asian Finance, Economics, and Business*, 7(3), 245–251.



Jurnal  
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ISSN 1511-998X

