G. & L. E. R., Vol. 21, No. 2, 2017

Rayenda Brahmana[*] - Gesti Memarista[†]

FINANCIAL PLANNING BEHAVIOUR AMONG THE YOUNG: EVIDENCE FROM MALAYSIAN UNIVERSITY STUDENTS

Abstract

This study examines the effect of socio-demographics, saving motives, and financial literacy on the financial planning behaviour of 457 university students in Malaysia. For a robustness check, the model is rerun by introducing saving attitude as the proxy for financial planning behaviour. However, the conclusion remains the same. The findings show that students will have better financial expenditure planning if they have better motives for savings and are financially literate. Interestingly, demographic factors did not have significant effects on financial planning. Governments and family will play important roles by giving better motivation and financial education to students.

JEL CLASSIFICATION: G02; G20
KEYWORDS: FINANCIAL PLANNING; SAVINGS; FINANCIAL KNOWLEDGE; SOCIO-DEMOGRAPHICS; UNIVERSITY STUDENT.

[*] Centre of Business, Economics, and Finance Forecasting, Universiti Malaysia Sarawak, Kota Samarahan, Sarawak 94300, Malaysia; *E-mail address*: brkhresna@unimas.my.
[†] Faculty of Economics, Universitas Kristen Petra, Siwalankerto, 60236, East Java, Indonesia; *E-mail address*: gesti@petra.ac.id.

1. Introduction

The literature extensively documents why adults save money (Bernheim, Garrett, and Maki 2003; Lusardi and Mitchell 2007a; Lusardi and Mitchell 2007b; and Van Rooij, Lusardi, and Alessie 2011). However, it is rare to find research investigating the actual savings behaviour among students. An example is Bernheim et al (2003), who surveyed households and found the importance of financial education on the wealth of working adults. Lusardi and Mitchell (2007a) stated that financial literacy plays a role for baby boomers in their future savings. Puri and Robinson (2007) found a link between happiness and savings in adults. The findings showed very clearly that savings are determined by financial literacy and other psychological factors.

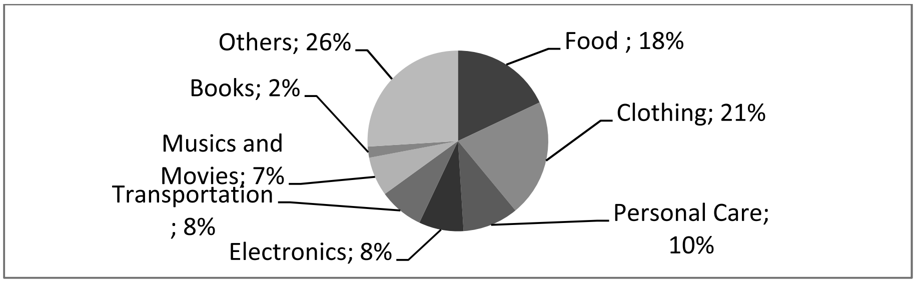
However, what makes students save money? Are savings habits simply a function of their demographic profiles or is saving related to motives? Does financial literacy significantly influence the students' financial planning? Abramovitch, Freedman, and Pliner (1991) conducted an experimental study of students' spending by giving them \$4, in cash or credit card, and these students had to spend the money in an experimental store. The results showed that the students with cash money spent the same amount as those who used a credit card. Furnham (1999) conducted a survey of over 250 young British participants and stated that the regularity of savings, as well as the amount of money saved, is influenced by the amount of money received. Raghubir and Srivastava (2009) investigated the consumption behaviour of undergraduate students. They found that students tended to spend more money in large denominations. However, none of the prior findings empirically investigated the role of saving motives and/or students' financial literacy in savings behaviour.

Unlike prior research in youth savings behaviour (e.g., Waerneryd 1998; Furnham 1999; Lusardi et al 2011), this paper addresses the determinants of the savings behaviour of Malaysian students. In detail, this research aims to examine the students' saving motives and the students' financial literacy in determining their financial planning.

Why are saving motives and financial literacy important for students' financial planning behaviour? The literature has many examples on the link between saving motives and financial literacy and the effects of these two variables on financial behaviour. For example, Lusardi and Tufano (2009) found that debt struggles are experienced by people with bad financial literacy. Stango and Zinman (2006) documented a similar conclusion that the accumulation of wealth is associated with the level of saving motives and financial literacy. Further, Lusardi and Mitchell (2007a, 2007b) found a significant role of financial literacy on better retirement planning. A study by Sallie-Mae (2009) also concluded that a sound financial attitude is due to motives and literacy. That study surveyed undergraduate students about credit card use and determined 84% of students needed more financial management education. Furthermore, 64% of them studied financial topics in high school because it would affect their financial decision making.

It is noteworthy that as a group, students spend almost half of their income on clothes and food, representing 21% and 18% of the total, respectively. The other spending categories of books, games, movies, transportation, etc., are each less than 10%. This implies that students have focused their spending cuts on clothes and food. However, what are the determinants of this spending behaviour? That is a question this research aims to tackle.

Figure 1. Typical student spending.



Source: The Atlantic (2013)

Malaysia is no exception to this financial behaviour. In July 2013, Malaysia's population was estimated to be 29,947,600, making it the 40th most populated country in the world. That population is dominated by youths as the result of baby boomers of the 1990s. Wealth management companies in Malaysia have concerns about bad financial behaviour among the Malaysian youth. This is due to low levels of financial knowledge among Malaysians, which is rated below five on a scale of one to ten after taking into account individuals who live in rural and urban areas. This lack of knowledge might cause increased spending among Malaysians. Furthermore, the research study done by Ibrahim, Harun, and Isa (2010) stated that undergraduate students have low management with their money due to low levels of financial literacy. According to Ibrahim et al. (2010), although there are financial based seminars conducted on campus, the participation of students is low. This may lead to financially illiterate students on campus. Hence, they cannot make good financial decisions since most of them do not manage their own prosperity well.

However, there is little investigation into young people's socio-demographics, saving motives, and financial literacy, which directly affect their financial planning. Therefore, this research aims to assess more features about the relationship between financial planning and socio-demographics, saving motives, and financial literacy among university students in Malaysia.

2. Prior Research

Financial planning behaviour is a young person's comprehensive estimation of current and future financial state to predict their future asset values, withdrawal plans, cash flows, and retirement plan by using financial instruments. This can be explained through lifecycle theory. Crown (2001) argued that students tend to have few savings to cover their consumption needs, which already surpass their income due to their intentions. Students will need these estimations to achieve their financial objectives in the future, together with evaluations of their asset growth rates, and to ensure the steps taken will be successful. Additionally, a good financial plan can always show students the need to be careful with decision making in order to safeguard a smooth transition through the lifecycle's financial phases, such as changing asset distribution or reducing spending. Thus, liquidity of financial plans is important because it reduces risk when facing infrequent financial changes.

2.1 Socio-Demographics and Financial Planning among University Students

Studies have documented that there is a significant relationship among socio-demographic factors, such as gender, race, religion, and financial planning, for young people. Previous research shows that female and male young people have different patterns of spending (Birari and Patil 2014), which might influence the groups to have differences in financial planning. Furthermore, the age group of 17-25 years is likely to spend more on clothing, and they may become more impulsive buyers due to their brand consciousness (Kamath 2006). According to research by Sorooshian and Tan (2013), male students in particular are fascinated with buying expensive gadgets. Meanwhile, females usually spend money on shoes, bags, and clothes since they want to look nice for classes. Attri (2012) also mentioned that a difference in genders was observed in having different wise purchase behaviours and savings habits. The previous study found that female respondents spend more on personal grooming, while male respondents spent the highest amount on entertainment. Additionally, the research found education level to be the observing probability for a variety of variables. Respondents with higher education and higher incomes will have better financial situations (Webley and Nyhus 2005). Furthermore, demographic variables are considered significant in household's savings studies (Ahmad, Atiq, Alam, and Butt 2006). Hence, the research hypothesizes that socio-demographics is related to financial planning among young people.

2.2 Saving Motives and Financial Planning among University Students

Warneryd (1999) mentioned that saving motives may be expressed as an intention that can affect saving behaviours. A person who has saving motives tends to accept the related saving behaviour compared to people that do not have saving motives. The theory stated by Katona (1975) defined saving as dependent on the willingness and the capability of someone to save based on assumption. In addition to that, this theory is a combination of psychological variables and economic variables. Mostly young people's savings are dependent on their willingness and their financial expectations and attitudes. Apart from that, Otto (2013) also concluded that saving motives usually depend on the willingness of an individual to save.

The saving motive is a significant factor that might affect financial planning among young people. If young people have a motive to save, their financial planning will be positively affected. Financial planning is an important factor for savings behaviour, especially among households (Lusardi 2003). According to Birari and Patil (2014), young people have issues in their intertemporal savings because of their low level of awareness. Those young people tend to proceed with spending their money for shopping, buying fast food, and transportation in large portions. Young people have the attitude of "live for today" instead of a belief of "saving for the future" (Kamath 2006). Thus, young people have lower levels of precautionary savings because they believe that saving happens if spending decreases. Moreover, since their current account likely contains only liquid assets consisting of cash and credit cards, Ziegelmeyer (2009) stated that emphasis on limiting spending and not falling below the minimum amount should reflect a precautionary attitude towards risk that should therefore raise precautionary savings, at least on average. Based on the results of previous research, Bachman (1983) discusses that college students would rather spend their optional revenue on instant satisfaction of their needs instead of saving the money for their future. Individuals who have lower levels of financial knowledge will tend to have poor financial planning, and their saving plans are inconsistent with the expectation of saving models (Kennickell, Starr-McCluer, and Sunden 1996). Therefore, this study hypothesizes that the saving motives have positive and significant impacts on financial planning among university students. The outcome of saving motives is related to financial resources as found in the study done by Xiao and Anderson (1997).

2.3 Financial Literacy and Financial Planning among University Students

Financial literacy is the part of financial planning that includes knowledge and the ability to understand financial choices. According to Burns and Dwyer (2007), financial literacy is a financial skill that contributes to money and investment management, financial planning, and budgeting skills. Moreover, to make any financial decision, deeply understanding financial literacy is very important for young people. Wilddowson and Hailwood (2007) explained financial literacy as the narrow focus on basic money management abilities, including savings, insuring, budgeting, and investing, as well as the ability to read, manage and analyse personal finance conditions. Moreover, Burns and Dwyer (2007) mentioned that people with higher financial literacy tend to have higher education, generate higher income, and have their own homes. Nevertheless, Pillai, Carlo and D'souza (2010) stated that young generations are rarely exposed to basic personal finance skills, such as monthly budgeting or other long-run financial planning.

Lack of this financial information and knowledge about financial literacy will cause young people to have potentially poor finance planning. Ibrahim et al. (2010) found that once students have money abundance, they simply spend it on necessities as well as items that are not necessities. This spending attitude obviously shows that students show a lack of financial literacy, which needs to be changed. In a previous research study, Lusardi and Mitchell (2007b) also concluded that being poorly knowledgeable about financial practices and products may confound a person's ability to invest or save for retirement, undermining their well-being in old age. New trends in fashion, sports, video games, electronic gadgets, mall culture and music are important contributors to wasteful spending among the youth in the Asian subcontinent due to lack of financial literacy and prudence (Pillai, et al. 2010). Additionally, financial literacy relates to the financial systems that influence the way people save, borrow, invest and manage their financial affairs (Widdowson and Hailwood 2007). That means it will affect consumer financial planning. Therefore, this study hypothesizes that financial literacy has positive and significant impacts on the financial behaviour among university students.

Table 1. Previous Research.

Author	Scope	Method	Findings
Attri, R. (2012)	Population size among the youth of 275 respondents aged 14 to 30 years old.	• Pilot test • Sampling method • Convenience method	The young people believe spending more on entertainment, eating out, gadgets and personal grooming rather than believe much in saving.
Bachman, J. G. (1983).	A large sample of high school seniors is surveyed each year, with mail follow-up surveys of smaller samples of each graduating class conducted since 1976.	• Survey percentage	The analyses summarized that high school students earn plenty of money but also spend more on their own entertainment. However, some of them experience a decline in their standard of living throughout the years immediately following high school.
Birari, A. and Patil, U. (2014)	Educated youth group with sample size of 150 in Metro city, Tier 2 and semi urban areas.	• ANOVA • SPSS	The research clearly shows how students in Aurangabad city spend in various categories. Youths spend a large portion of their money on shopping, fast food and transportation. Meanwhile, different genders have different spending habits. Girls do not spend at all on alcohol or tobacco and spend more on cosmetics, beauty care

			and shopping. Furthermore, none of the boys in junior college save money, and they instead spend money on shopping, eating out, etc.
Ibrahim, D. I. D., Harun, R., and Isa, Z. M. (2010).	All the degree students in Bachelor's in Marketing programmes, Bachelor's in Administration Science, Bachelor's in Islamic Banking and Bachelor's in Information Service at UiTM Kedah with a sample size of 200	• Correlation analysis • Chi-Square analysis	This research study concluded that the degree students at the UiTM Kedah campus are severely lacking in their financial knowledge. Thus, their money management abilities are very weak.
Lusardi and Mitchell (2007b)	Survey of consumers concentrating on respondents aged 18 to 97 years old.	• HRS sample analysed	Financial literacy surveys in many developed nations show that consumers are poorly informed about financial products and practices. This is concerning because it compromises the ability of people to save or invest for retirement, undermining their well-being in old age.

Pillai, Carlo, and D'souza (2010)	The sample covered both unemployed and employed young adults aged from 18 to 30 years old.	• Exploratory method	This study found that the practical application of such knowledge to real-life circumstances rather than the question of financial literacy problems.
Sorooshian, S. and Tan, S. K. (2013)	A small sample size of Taylor University students was chosen randomly**.**	• Qualitative as well as quantitative analysis methods • Convenience sample random sampling • Statistics Package for Social Sciences software (SSPS) • ANOVA	Among the variables studied the most significant spending behaviour is for phone expenses. Most of the students spend more on their devices, as they use laptops, PDAs and other technologies for studies related to everyday tasks. They are technology savvy as well.
Webley, P. and Nyhus, E. K. (2005)	One consisting of couples and one involving of singles. Households involving couples were only used if both the husband and wife had completed the questionnaire.	• Sampling method • OLS regression analysis	Parental behaviour of conversing financial matters with children and parental orientations, such as conscientiousness and future orientation, have a weak but clear impact on children's economic behaviour and on economic performance in adulthood.

Widdowson and Hailwood (2007).	Particular focus is on the financial literacy of non-expert consumers of financial services which is the members of the general public.	• Quarterly financial disclosures • Mandatory credit ratings	Financial literacy is a main source at many levels that is an important element in enabling people to manage their financial matters and can make an important contribution to the soundness and efficiency of the financial system as well as to the economy performance.
Ziegelmeyer, M. (2009).	Households with a household head between the age of 20 and 50 years old.	• Random route sample • Access panel	This study has examined the effects of different causes on a subjective measure of precautionary savings in a qualitative and quantitative way using the German SAVE dataset 2005-2007.

3. Methods

This research conducted a survey study by distributing a questionnaire in 10 Malaysian universities in 2015. The sampling technique is random sampling where undergraduate students are the unit of analysis. The questionnaires were distributed by field officers in face-to-face surveys. We successfully collected approximately 580 questionnaires, although only 457 questionnaires were used.

The questionnaire items were developed by adapting and adopting previous research. For financial planning, the items are adapted from Lusardi and Mitchell (2007a, 2007b). The savings planning adapted items used by Furnham (1999). The saving motives are adapted from Furnham (1999), Canova, Rattazzi, and Webley (2005), and Fisher and Montalto (2010). Hereafter, the financial literacy items follow Lusardi and Mitchel (2007a, 2007b). The questionnaire is designed in 4 sections. Section A consists of demographic profiles of respondents, including gender, age, religion and state of residence This section is designed to understand the effect of student demographics on financial planning. Section B consists of the financial planning of respondents, including the robustness test of savings planning behaviour. Section C is for the saving motives, and Section D consists of financial literacy.

The model is run under the partial least squares-structural equation model (PLS-SEM) because PLS-SEM is powerful in terms of model fit and prediction. Moreover, unlike ordinary least square (OLS), this model includes latent variable into the estimation model, giving better standard error variance and avoiding most endogeneity and exogeneity problems. The estimation model is as follows:

$$FinPlan_i = \alpha_1 + \beta_1 Gender_i + \beta_2 Race + \beta_3 \mathrm{R}eligion_i + \beta_4 State_i + \beta_4 Motive_i + \beta_5 FinLit_i + \varepsilon_i$$

where $FinPlan_i$ is the financial planning. We use two measures for it, which are financial planning and saving planning. Meanwhile, $Motiv_i$ is the saving motive, and $FinLit_i$ is financial literacy. These two variables are the main independent variables in this research. Lastly, the demographic factors, including gender, race, religion, and state, are the control variables.

4. Findings

4.1. Reliability

This research employs two main criteria used for testing goodness of fit measures, which are reliability tests and validity tests. Reliability is a test of how consistently a measuring instrument measures whatever concept it is measuring. Meanwhile, the validity test is used to verify how well an instrument measures the particular concept it is intended to measure (Sekaran and Bougie 2010).

The reliability test is used to check the stability of questionnaire measurement over time. Cronbach's alpha was used to measure the consistency reliability of variables in this study. It is the best examination to assess the inter-item consistency of our measurement items (Sekaran and

Bougie 2010). The value of Cronbach's alpha coefficient of 0.5 and above is considered acceptable, as suggested by Nunnally and Berstein (1994). Further, Hinton, Brownlow, McMurray, Conzens (2004) argue that this cut-off point is generally accepted as indicating a moderately reliable scale, while a lower number generally indicates low reliability. The result for reliability is shown in Table 2.

In terms of reliability, our findings show that Cronbach's alpha is higher than 0.5 for all variables. Cronbach's alpha for financial planning is 0.622, savings planning attitude is 0.865, saving motives is 0.688 and financial literacy is 0.725. This means that all items proposed are reliable and fulfil the requirements for this research study.

Table 2. Reliability test of the variables.

Variable	Cronbach's Alpha	No. of Items
Financial Planning	0.622	5
Saving Attitude	0.865	20
Saving Motives	0.688	4
Financial Literacy	0.725	5

4.2. Validity

We also tested the validity of items used. This test determines how well the results obtained from the measurements are in accordance with the theories from which the tests are designed (Sekaran and Bougie 2010). According to Hair, Black, Babin, and Anderson (2010), the loadings of each item has to be 0.5 or an average of 0.5. However, if we refer to Bryman and Bell (2014) or Sekaran and Bougie (2010), the threshold is 0.7 or an average of 0.7. Using both thresholds, our validity test still shows all items pass and support the item validation.

Table 3. Validity test for financial planning.

Items	Financial Planning	Loading
FP 1	I have a habit of saving money regularly.	0.850
FP 2	I do not think about money.	0.833
FP 3	I like to know where I spend my money every month.	0.824
FP 4	It is hard for me to stick to a budget with unexpected expenses.	0.815
FP 5	Investing seems complicated to me.	0.649

Table 3 reports the validity test of financial planning. The highest loading is item number 1, which is “I have a habit of saving money regularly”. The loading is 0.850. Meanwhile, the lowest loading is item number 5, which is “Investing seems complicated to me”. The loading for item number five is 0.649. The other items range from 0.815 to 0.833, which are higher than the threshold of 0.5. This implies that all items of financial planning are a good proxy as dimensions.

Next, we proceeded to the validity of savings planning attitude, which is shown in Table 4. The results showed the loading factor for each item of saving attitude. The lowest validity item is item number 13 which is: “I wouldn’t be without a credit card”. Meanwhile, item number 13 has the highest loading. The rest have loading more than 0.5, indicating that all twenty items are valid measurements.

Table 4. Validity test for saving attitude.

Items	Saving Attitude	Loadings
SA1	It is important for me to save.	0.845
SA2	I tend to spend money as soon as I get it.	0.658
SA3	I believe in putting some money aside for a rainy day.	0.743
SA4	I save because I want something special.	0.809
SA5	I am interested in looking at different ways of saving money.	0.775
SA6	I have always tried to save.	0.819
SA7	Money is for spending.	0.805
SA8	Every once in a while, I like to go on a big spending spree.	0.742
SA9	I never pay for something if I can get credit.	0.701
SA10	I do not like owing money.	0.717
SA11	Having a lot of money has never been my aim in life.	0.782
SA12	I do not care if I do not have much money.	0.874
SA13	I would not be without a credit card.	0.613
SA14	Everybody should have a bank account.	0.820
SA15	Modern people use cheques and cards, not cash.	0.654
SA16	I believe in making money work for me.	0.734
SA17	You cannot get far without a bank account.	0.747
SA18	I never seem to have enough money.	0.683
SA19	I do not believe I will ever be rich.	0.650
SA20	I love shopping.	0.809

For the loading of saving motives, Table 5 reports that item number 2, “I am saving to earn extra interest on my money”, has lowest loading. It has a loading of 0.644. The highest loading is for item number four, which is “I am saving because my parents advised me to open a bank account”. The loading for item number four is 0.886. Because the range of the loading is from 0.644 to 0.886, it implies that the four items are valid to proxy the dimension.

Table 5. Validity test for saving motive.

Items	Saving Motive	Loading
SM 1	I am saving to keep my money safe.	0.655
SM 2	I am saving to earn extra interest on my money.	0.644
SM 3	I am saving because my parents opened a bank account for me.	0.733
SM 4	I am saving because my parents advised me to open a bank account.	0.886

Meanwhile, Table 6 reports the validity test of financial literacy. There are five items in financial literacy dimension, and the lowest loading is item number five where the loading is only 0.699. The highest loading is item number four, "Suppose that in year 2010, your income has doubled and prices of all goods have doubled too. In 2010, how much will you be able to buy with your income?" with a loading value of 0.757. Because the loading ranges from 0.699 to 0.757, it indicates that all items of financial literacy are a good proxy as the dimension.

Table 6. Validity test for financial literacy.

Items	Financial Literacy	Loading
FL 1	Suppose you had RM100 in a savings account and the interest rate was 2% p.a. After 5 years, what do you think about the money that you would have in the account in the future?	0.699
FL 2	Suppose you had RM100 in a saving account and the interest rate is 20% p.a., and then you never withdraw money or interest payments. After 5 years, what do you think about the money that you would have in the account today?	0.711
FL 3	Imagine the interest rate on your savings account was 1% p.a. After 1 year, how much would you be able to buy with the money from this account?	0.706
FL 4	Suppose your income has doubled and prices of all goods have doubled too in 2010. How much will you be able to buy with your income in 2010?	0.757
FL 5	Assume a friend inherits RM10,000 today and then his siblings inherit RM10,000 3 years from now. Who is richer because of this inheritance?	0.648

4.3. Descriptive Statistics

Table 7 presents the descriptive statistic that consists of calculating the value of the median, mean, and standard deviation for all variables in this study, which contains 457 observations. The variables in this research study are financial planning, saving attitude, saving motive, financial literacy and the control variables in socio-demographics, including gender, race, religion, and the state. The result indicates that the information is normally distributed, as the median and mean values are closely related.

Table 7. Descriptive statistics of the variables.

Variables	Median	Mean	Standard Deviation
Gender	0.280	0.3184	0.467
Race	2.742	2.851	0.773
Religion	2.375	2.111	1.043
States	9.233	8.667	4.954
Saving Attitude	3.000	2.805	0.634
Plan	3.00	2.752	0.446
Motives	2.850	3.0846	0.683
Literacy	1.720	1.867	0.547

Table 7 implies that the students in Malaysian universities have low savings planning and low financial planning. The mean values for these two variables are lower than the midpoint of the Likert-scale, which are 2.805 and 2.752 for savings planning and financial planning, respectively. This result also agrees with the low financial literacy, where the mean value is only 1.867.

4.4. Financial Planning of Students

Table 8 shows the estimation of students' financial planning. There are five columns, where column (1) is the baseline model, (2) is the saving motive model, (3) is the financial literacy model, (4) is the combination of saving motives and financial literacy, and the last one is the full model.

The baseline model shows that none of demographic profiles have a significant role on the financial planning of students. This implies that it is does not matter whether the students are female or male, Malays or non-Malays, Muslim or others, or from big states, such Selangor, Kuala Lumpur and Penang, or small states, such as Kedah and Perlis. Students from Selangor do not have different financial planning than students from small states, such Kedah or Perlis. This result also implies that all Malaysian students have similar levels of financial planning.

The full model confirms that results of the demographic profile still do not affect financial planning even though saving motive and financial literacy have been added. However, saving motives and financial literacy have significant contributions towards the financial planning of Malaysian students. The saving motive of students contributes significantly to financial planning with the coefficient value of 0.521 at significance level of 1%. Meanwhile, financial planning contributes significantly and positively to financial planning, also at a 1% significant level. The coefficient value of financial literacy on financial planning is 0.101.

This study attempts to examine the role of saving motives and financial literacy on the monetary attitudes of young people, an interesting topic for financial industries to target young consumers. Indeed, students are economically very active, and the majority depended on parents for their income. It is interesting to investigate what makes them plan their finance.

This study allows us to understand that the financial planning of university students is determined by the saving motives and financial literacy, which is consistent with prior research of Canova et al (2005), Furnham (1999), and Lusardi et al (2011). When motivation to save is higher, the students better plan their finances. This result may be important to financial industries, such as wealth management, banking, and insurance because the way young people save is similar to the way they consume. However, the encouragement for young people is rarely found from their external circle. Financial industries are not the same as the clothing companies that vastly advertise their products to the young people. Those kinds of massive advertisement lead to consumption. This assessment agrees with Lowenstein and Prelec (1993) and Furnham (1999) in that a young person has to feel motivated by seeing the positive impact of it, such as savouring future pleasure. By having motivation to save, students may undertake better financial planning.

Our results also show that the saving motivation has to come from the parents. It is obviously seen that students in Malaysia will open accounts or save because their parents told them to. Therefore, to have better financial planning, it has to start from the inner family.

Meanwhile, in terms of financial literacy, students have to have better literacy in finance for having better financial planning. The descriptive statistics reported that the financial literacy of Malaysian students is low and significantly affects financial planning. This implies that financial planning of young people is low in Malaysia because of low financial literacy. This conclusion agrees with previous research, including Lusardi and Mitchell

(2007a), Lusardi and Mitchell (2007b), Lusardi and Tufano (2009) and Van Rooij et al (2011). People may make bad financial decisions because of their low financial literacy.

Table 8. Regression estimation towards financial planning.

Variables	Coefficient (SE)				
	Baseline (1)	Motives (2)	Literacy (3)	(2) + (3)	Full Model (1)+(2)+(3)
Constant	2.084***	1.112***	0.093***	1.432***	2.109***
	(0.412)	(0.322)	(0.052)	(0.533)	(0.577)
Gender	-0.018				-0.035
	(0.168)				(0.068)
Race	-0.048				-0.013
	(0.102)				(0.052)
Religion	-0.064				-0.015
	(0.239)				(0.039)
States	-0.053				-0.006
	(0.209)				(0.007)
Motives		0.942***		0.753***	0.521***
		(0.237)		(0.272)	(0.172)
Literacy			0.475***	0.385***	0.101***
			(0.136)	(0.128)	(0.036)
R-Square	0.213	0.082	0.024	0.094	0.343
Adjusted R-Square	0.202	0.079	0.021	0.088	0.330

Note: ***, **, and * denote the statistical level of significance at 1%, 5%, and 10%, respectively.

4.4.1 Robustness Test: Savings Planning Model

There are some people who argue that the financial planning as well as savings planning are different things. People may have better planning for savings than finance (such as stock market participation, insurance, budgeting, and credit card use). Hence, we use savings planning as another dependent variable to investigate that issue.

Table 9 reports the results of savings planning estimation. The conclusion is similar to the financial planning model. First, there is no demographic profile that has a significant effect on the students' savings planning. This means that there is no difference in the savings planning of male and female students. The same conclusion goes for race, religion, and states. Students with Malay backgrounds have no difference in savings planning when compared with non-Malay students.

Table 9. Regression estimation towards savings planning.

Variables	Coefficient (SE)				
	Baseline (1)	Motives (2)	Literacy (3)	(2) + (3)	Full Model (1)+(2)+(3)
Constant	2.02148***	1.274***	0.103***	1.117**	1.4763**
	(0.511)	(0.382)	(0.035)	(0.533)	(0.615)
Gender	-0.0189				-0.028
	(0.108)				(0.018)
Race	-0.0576				-0.00983
	(0.099)				(0.095)
Religion	-0.0512				-0.01035
	(0.324)				(0.058)
States	-0.03975				-0.00564
	(0.348)				(0.017)
Motives		0.895***		0.813**	0.5992***
		(0.307)		(0.362)	(0.184)
Literacy			0.665***	0.539**	0.1313**
			(0.224)	0.218	(0.053)
R-Square	0.386	0.012	0.046	0.11	0.417
Adj. R-Square	0.378	0.009	0.043	0.104	0.405

Note: ***, **, and * denote the statistical level of significance at 1%, 5%, and 10%, respectively.

Interestingly, saving motives and financial literacy are also significantly related to students' savings planning. Saving motives contributed significantly at the 1% level to savings planning, and the coefficient value of regression is 0.5992. This result implies that the higher the motivation to save, the more likely students undertake savings planning. Meanwhile, financial literacy contributed significantly to savings planning at the 5% level, with a coefficient value of 0.1313. This means that when students have higher financial literacy, they have better savings planning. Hence, these results portray that having better saving motivation and financial literacy induces savings planning in Malaysian students.

5. Conclusion

This study addresses the phenomenon of saving attitude and financial planning effort engaged by the Malaysian government towards Malaysian students. The main motivation of this research is that there is a lack of attention given to these financial behaviours considering the nation-wide promotion by Malaysian government. Therefore, this study argues that the student's financial behaviour may be due to their saving motives and financial literacy. This paper might be used as a foundation for any further research in this topic on emerging markets with more focus on demographical specific context.

This paper uses two prominent variables in explaining financial behaviour: saving motives and financial literacy. The saving motive items are adopted from Furnham (1999). Meanwhile, the financial literacy adopted the model developed by with slight modification in measures. The results allow us to draw conclusions about certain conceptions regarding financial behaviour, and empirical evidence found about financial behaviour is similar among the young people, especially undergraduate students. In addition, the results also show that demographic factors may not necessarily influence the financial behaviour of undergraduate students. For instance, the demographic factors of gender, race, religion, and state did not have any effect on the students' financial behaviour. It is noteworthy that this result suggests to policy makers that saving motives and financial literacy are important factors for helping young people in their financial planning. For example, student loans can be more intelligently planned by educating young people in saving motives and financial knowledge.

However, the findings from this research must be validated in combination with research in other countries to verify some facts about certain common variables that may be representative among university students. The limitation of this research is only to focus on examining the role of saving motivation and literacy on university students' financial behaviour. However, due to the different education systems and family cultural values among countries, particularly between developed and developing countries or between west and east countries, this research can be extended in a few additional investigative directions. First, more in-depth analysis can be done through an experimental design that complements the results of this study. Second, the overall demographic profiles of youths from each country may be different due to the differences in education systems and family values. Lastly, the roles of family subjective norms and government incentives for financial behaviour on influencing undergraduate students can be another direction for this study.

Acknowledgement

This research is funded by the UNIMAS Small Grant Scheme F01(s144)/1174/2014(09)

References

Abramovitch, R., Freedman, J.L., Pliner, P. (1991), *Children and money: getting an allowance, credit versus cash, and knowledge of pricing*∗, Journal of Economic Psychology, 12(1), 27-45.

Ahmad, M.H., Atiq, Z., Alam, S., Butt, M. S. (2006), *The impact of demography, growth and public policy on household saving: a case study of Pakistan*, Asia Pacific Development Journal, 13(2), 57-72.

Attri, R. (2012), *Spending and saving habits of youth in the city of Indore*, Bauddhik, The Journal of Management, 3(2), 8-15.

Bachman, J. G. (1983), *Premature affluence: Do high school students earn too much*, Economic Outlook USA, 10(3), 64-67.

Bernheim, B.D., Garrett, D.M., Maki, D.M. (2001), *Education and saving: The long-term effects of high school financial curriculum mandates*, Journal of Public Economics, 80(3), 435–465.

Birari, A., Patil, U. (2014), *Spending and Saving Habits of Youth in the City of Aurangabad*, Industrial, Financial & Business Management (IFBM), 2(3), 158-165.

Bryman, A., Bell, E. (2015), *Business research methods*. Oxford University Press, Oxford.

Burns, J., Dwyer, M. (2007), *Households' attitudes to saving, investment and wealth*, Reserve Bank of New Zealand Bulletin, 70(4), 25-37.

Canova, L., Rattazzi, A.M.M., Webley, P. (2005), *The hierarchical structure of saving motives*, Journal of Economic Psychology, 26(1), 21-34.

Crown, W. (2001), *Economic Status of the Elderly. Handbook of Aging and the Social Sciences*, Edited by R.H. Binstock and L.K. George. Academic Press, New York, 352-368.

Fisher, P.J., Montalto, C.P. (2010), *Effect of saving motives and horizon on saving behaviors*, Journal of Economic Psychology, 31(1), 92-105.

Furnham, A. (1999), *The saving and spending habits of young people*, Journal of Economic Psychology, 20(06), 677-697.

Hair, J.F., Black, W. C., Babin, B.J., Anderson, R.E. (2000), *Multivariate Data Analysis*, Seventh Edition. Prentice Hall, Upper Saddle River, New Jersey.

Hinton, P.R., Brownlow, C., McMurray, I., Cozens, B. (2004), *SPSS Explained*. Routledge Taylor by Francis Group, London and New York.

Ibrahim, D.I. D., Harun, R., Isa, Z.M. (2010), *A study on financial literacy of Malaysian degree students*, Cross-cultural communication, 5(4), 51-59.

Kamath, R. (2006), *Yuppies on a Shopping Spree*, Business Line. Retrieved from http://www.thehindubusinessline.in/iw/2006/11/12/stories/2006111201281300.htm.

Katona, G. (1975), *Psychological economics*. Elsevier, New York.

Kennickell, A.B., Starr-McCluer, M., Sunden, A.E. (1996), *Saving and financial planning: Some findings from a focus group*, SSRN.

Lowenstein, G., Prelec, D. (1993), *Anomalies in intertemporal choice: Evidence and an interpretation*, The Quarterly Journal of Economics, 107(2), 573-597.

Lusardi, A. (2003), *Planning and saving for retirement*, Working paper, Dartmouth College.

Lusardi, A., Michaud, P.C., Mitchell, O.S. (2011), *Optimal financial literacy and saving for retirement*, National Bureau of Economic Research.

Lusardi, A., Mitchell, O. (2007b), *Financial literacy and retirement preparedness: Evidence and implications for financial education*, Business Economics, 42(1), 35-44.

Lusardi, A., Mitchell, O.S. (2007a), *Baby boomer retirement security: The roles of planning, financial literacy, and housing wealth*, Journal of monetary Economics, 54(1), 205-224.

Lusardi, A., Tufano, P. (2009), *Debt literacy, financial experiences, and overindebtedness* (No. w14808), National Bureau of Economic Research.

Otto, A. (2013), *Saving in Childhood and Adolescence: Insights from developmental psychology*, Journal of Economics of Education Review, 33(C), 8-11.

Pillai, R., Carlo, R., D'souza, R. (2010), *Financial Prudence among Youth*, Retrieved from http://mpra.ub.uni-muenchen.de/22450/.

Puri, M., Robinson, D.T. (2007), *Optimism and economic choice*, Journal of Financial Economics, 86(1), 71-99.

Raghubir, P., Srivastava, J. (2009), *The denomination effect*, Journal of Consumer Research, 36(4), 701-713.

Sallie-Mae (2009, August 30), *How Undergraduate Students Use Credit Cards: Sallie Mae's National Study of Usage Rates and Trends 2009*. Retrieved from http://static.mgnetwork.com/rtd/pdfs/20090830_iris.pdf.

Sekaran, U., Bougie, R. (2010), *Research methods for business: A skill building approach (5th ed)*, John Wiley & Sons Ltd, West Sussex, UK.

Sorooshian, S., Tan, S.T. (2014), *Spending Behaviour of a Case of Asian University Students*, Asian Social Science, 10(2), 64-69.

Stango, V., Zinman, J. (2006), *Fuzzy Math and Red Ink: Payment/Interest Bias, Intertemporal Choice and Wealth Accumulation*, Working Paper, Dartmouth College.

The Atlantic (2013, April 12). *How Teenagers Spend Money*. Retrieved from http://www.theatlantic.com/business/archive/2013/04/how-teenagers-spend-money/274949/.

Van Rooij, M., Lusardi, A., Alessie, R. (2011), *Financial literacy and stock market participation*, Journal of Financial Economics, 101(2), 449-472.

Warneryd, K.E. (1999), *The psychology of saving: A study of economic psychology*, Edward Elgar Publishing, Cheltenham.

Webley, P., Nyhus, E.K. (2006), *Parents' influence on children's future orientation and saving*, Journal of Economic Psychology, 27(1), 140-164.

Widdowson, D., Hailwood, K. (2007), *Financial literacy and its role in promoting a sound financial system*, Reserve Bank of New Zealand Bulletin, 70(2), 37-47.

Xiao, J.J., Anderson, J.G. (1997), *Hierarchical financial needs reflected by household financial asset shares*, Journal of Family and Economic Issues, 18(4), 333-355.

Ziegelmeyer, M. (2009), *Analysis of the Precautionary Saving Motive Based on a Subjective Measure (SAVE 2005-2007)*, MEA.