

# Saving Behavior in Emerging Country: The Role of Financial Knowledge, Peer Influence and Parent Socialization

Juliana Mohd Abdul Kadir\*, Ayesha Shoukat \*\*, Navaz Naghavi\*\*\*,  
Amirul Azri Jamaluddin\*\*\*\*

## Abstract

*The household debt in Malaysia was recorded at 83 per cent of gross domestic product in 2018. This contributed to insufficient amount of saving by household who are mostly not prepared for retirement. Meanwhile, youths in emerging countries however are reported as the main group trapped into the financial problem. The tendency of saving among individual is different from one another due to differences in financial knowledge, peers influence, parent's socialization and self-control based on Theory of Planned Behavior. A survey was conducted on 133 students in emerging country, Malaysia, to examine the factors which affected their savings behavior. Structured questionnaires were distributed using convenient sampling technique. Results revealed that financial knowledge, peer influence and parent socialization have a significant effect on students' saving behavior. Findings serve to inform policy makers who are formulating strategies to enhance students' financial knowledge and to maximize the role of parents and peers in order to encourage higher saving behavior in emerging countries.*

**Keywords:** Saving behavior, Financial knowledge, Peer influence, Parents socialization.

**JEL Classification:** Z000

## 1. Introduction

Education loan has become the major source of financing for the majority of students in university. Students need to have personal financial management skills to ensure that they use their financial resources effectively and efficiently. According to Goldsmith and

---

\*Senior Lecturer, Faculty of Business and Management, Universiti Teknologi Mara (UiTM) Johor, Malaysia. Email: julia593@uitm.edu.my

\*\* Assistant Professor, Department of Commerce, The Islamia University of Bahawalpur, Pakistan. Email: ayesha.shoukat@iub.edu.pk (Corresponding author)

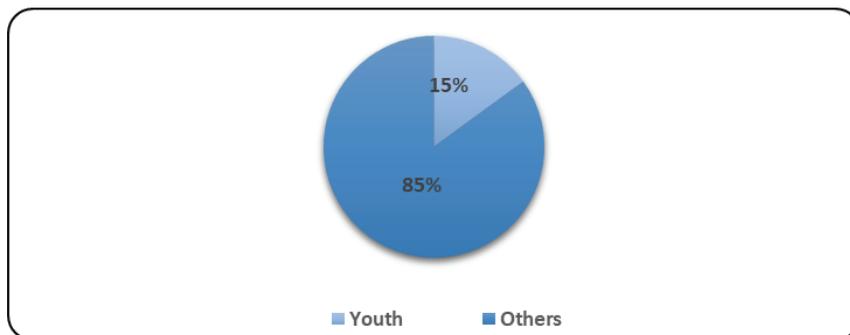
\*\*\*Lecturer, Faculty of Business & Law, School of Accounting and Finance, Taylor's University, Lakeside Campus, Malaysia. Email: navaz.naghavi@gmail.com

\*\*\*\*Faculty of Business and Management, Universiti Teknologi Mara (UiTM) Sabah, Malaysia. Email: azriamirul.aa@gmail.com

Goldsmith (2006), Kidwell and Turrisi (2004), college students have easy access to financial services such as credit card and education loan, making them at risk for financial problem when they have little financial management knowledge and experiences required to manage money.

National Higher Education Fund Corporation (PTPTN) has become the most important source of funds for students in Malaysia. The existence of PTPTN has enabled more students to pursue education to a higher level by providing support for their living cost. However, the lack of financial knowledge may cause financial problem to occur among university students Sabri et al. (2008). According to Holub (2002) and Norvilitis et al. (2006), lack of financial management skills has led to higher debt, higher credit card usage, and low financial satisfaction among university students.

Young generations are not aware of the uncertainty that might happen in the future and have lack of knowledge on saving behavior (Benartzi,2012). Nowadays, students are more demanding toward luxury goods and do not see the effect of spend thrift lifestyle.



Source: The Credit Counselling and Debt Management Agency (AKPK, 2016)

*Figure 1: Individual Seek for Debt Assistance from AKPK in 2016*

Figure 1 showed that, most of the young adults failed to manage their financial wisely. 15 per cent of the 160,000 individuals who seek financial counselling assistance through AKPK debt management program are youths aged between 24 to 25 years (AKPK News, 2016). This proves that youth are likely to spend more than their income and have bad financial management.

Malaysian government have implemented many efforts to encourage people, especially students, to save but still the rate of saving is said to be at a low level. Bank Negara Malaysia (BNM) reported that household ability to save for the future is worrying since

statistics had shown that half of Malaysian household spent their income on servicing debt. Moreover, Malaysian youth are the main group that was trapped in financial problem. The existence of online shopping websites and applications that support the usage of credit and debit card has led to the increasing in debt level.

Financial problem particularly among young adults in emerging countries is mostly caused by overspending on unnecessary items or due to impulse buying, lack of financial knowledge, and maintaining luxury lifestyle that prompted them to satisfy their wants. Moreover, the advancement of the technology such as on-line purchasing websites where customers are able to make an order on-line and enjoy rewards from their purchase has offered new shopping experience at their convenience which will increase debt level since most of the transactions were performed using credit cards Jamal et al. (2015). Higher spending habit among youths makes them an easy target by banks to promote their credit-based banking facilities.

Compared to old generation, today's generation is more materialistic, in which they view money to be their top priority in life. Individuals who view money as something to fulfill their short-term goal without considering it long-term might not be able to have good financial situations in the future, which most of the people are facing nowadays. This may lead to failure to reap the profits of early saving or bankruptcy.

According to Gathergood (2012), having poor financial literacy will also lead to higher burden of financial problem that will result to non-payment of consumer credit and this in turn will urge individuals to plan for their financial management. Salikin et al. (2012) explains about the problem of doing savings in university life which really depends on unpredictable cost and family support to satisfy desire and economic needs. Buccioli and Veronesi (2014) and Karunaanithy, Karunanithy, and Santhirasekaram (2017) revealed that parental influence is more effective in shaping their child's saving behavior especially during young age. Students saving behavior is related to socialization agents as friends and peer influence will assist them for better planning and practices in terms of their financial related issue (Sundarasan et al.,2016).

Several authors including Falahati and Paim (2011), Salikin et al. (2012), Fazli Sabri, Cook, and Gudmunson (2012), Albeerdy and Gharlegghi (2015), Sundarasan et al. (2016), and Mohamed (2017), have explored financial literacy among youth, though none of these studies focused specifically on savings behavior. Shambare and Rugimbana (2012) found that the students in emerging countries generally show a moderate level of awareness in terms of financial issues, despite having a higher level of financial knowledge, thereby revealing the need for more focused research on this topic.

Even though Jamal et al. (2015) indicated that family, peers and financial literacy have an effect on students' saving behavior in Kota Kinabalu, however, this study has added other factor, which is self-control to examine the saving behavior. To this end, we have collected data from university students in Malaysia to examine the role of important determinants as financial knowledge, peers influence, parent's socialization, and self-control towards their saving behavior. This is important for policy makers to be aware of what factors that will encourage university students to save the money, and likewise the factors that will deter them from doing so.

## **2. Literature Review**

### **2.1 *Theoretical Framework***

Ajzen (1991) proposed a Theory of Planned Behavior (TPB), which is an extension of the Theory of Reasoned Action. This theory was developed by Fishbein and Ajzen (1977) and applied in this research. The purpose of the theory is to know why people perform an action. Basically, people form an intention for certain actions and it then led them to perform certain behavior, Ajzen (1991). In this research, attitude toward behavior, perceived behavioral control and subjective norm are used to explain how financial knowledge affect students' saving behavior. Students with good financial knowledge can manage their finances well. Thus, this behavioral belief will drive students to form a positive attitude towards saving behavior.

Furthermore, perceived behavioral control can be used to explain self-control as students with high level of self-control will perceive saving as an effortless endeavor because they have the ability to regulate their desires, self-discipline and delay gratification (Shively, 2001). According to Ajzen and Fishbein (1970), the factor of peers and parents can be explained by subjective norms so the social stress caused by peers, parents and financial situation can influence students' intention to save. Therefore, all the determinants used in this study such as financial knowledge, peers influence, parent's socialization and self-control can be well explained by the concepts of TPB in predicting student saving behavior.

### **2.2 *Saving Behavior in Emerging Countries***

Saving is a process of not spending money for the current period in order to use it in the future. According to Denton, Finnie, and Spencer (2011), saving can be define as the excess of income over all of the expenditures. The 2016 HSBC annual report stated that 70 per cent of Malaysian are worried about their finance, while 40 per cent is expected to have poor standard of living during their retirement.

In terms of financial knowledge, a study done by Sam, Geetha, and Mohidin (2012). Found that undergraduate student has no saving behavior due to not applying the skills and knowledge related to financial management in their daily life. Chen and Volpe (2002) reported that female students are less likely to learn about personal finance than male students as they are more interested in other courses than finance. This finding is supported by Falahati and Paim (2011) in the case of Malaysia. Study conducted by Hilgerte, Hogarth, and Beverly (2003) reported that the financial literacy positively affected saving and investment practices. He also revealed that the main reasons for financial problem and low level of saving are poor financial knowledge and lack of information. Financial literacy plays an important role in developing life attitude and individual's financial management attitude. Shim et al. (2010) and Sundarasan et al. (2016) found that financial literacy had a positive impact on money management. Thus, financial literacy plays a pivotal role in achieving successful saving behavior. Most of the literature concluded that majority of the students with lack of financial knowledge tend to give negative idea on financial issue.

In other case, parent's socialization is seen to be a vital factor in motivating a saving behavior in students. This is proven by a study done by Caruana and Vassallo (2003) who found that parent's socialization is more effective than financial knowledge as children tend to watch and copy their parents' behavior. While according to research by Bucciol and Veronessi (2014), parent's socialization in teaching finance has resulted in the increase of individual willingness to save by 16 per cent. This is supported by Moore and Asay (2013) who stated that individual behavior or actions influence the behavior of the whole family. Similar to Batty, Collins, and Odders (2015), parent's socialization in teaching about finance influenced children's financial behavior before they are in formal education. In the case of university students in Sabah, Jamal et al. (2015) explored that strong family ties and parental influences positively influenced child's savings behavior. The importance of the role of parents is described by Sundarasan et al. (2016), and Mohamed (2017), in which the results reported a strong positive relationship between them.

For peer influence, Ogonowski et al. (2014) found peer influence to be the most important influence in forming good and bad attitude in terms of social distance and physical of Generation Y. While, peer force is the main factor in influencing Generation Y in making decisions (Alwi, Hashim, & Ali, 2015). According to Montandon (2014), Generation Y are easily persuaded by their peers during decision making. Abdul Jamal and Amer Azan (2015) also agreed that individuals' financial behavior could be motivated by peer pressure other than parenting factor. In addition, based on the study done by Jamal et al. (2015) they found that peer influence could also influence a person's financial behavior and can affect student's ability to save. According to Noor Zaihan (2016), exchanging ideas about financial management matters among peers and their spending inclination during their social time could influence their saving behavior. However, a study done by Mohamed (2017) reported an

insignificant relationship between peer influence and financial behavior of young employees. decisions (Alwi, Hashim & Ali, 2015). According to Montandon (2014), Generation Y are easily persuaded by their peers during decision making. Abdul Jamal and Amer Azan (2015) also agreed that individuals' financial behavior could be motivated by peer pressure other than parenting factor. In addition, based on the study done by Jamal et al. (2015) they found that peer influence could also influence a person's financial behavior and can affect student's ability to save. According to Noor Zaihan (2016), exchanging ideas about financial management matters among peers and their spending inclination during their social time could influence their saving behavior. However, a study done by Mohamed (2017) reported an insignificant relationship between peer influence and financial behavior of young employees.

In addition, self-control plays an important element which impact individual's saving behavior. Self-control is linked with individual's attitude since it is individual's perception about performing a specific behavior (Ajzen, 1991). According to Thaler (1994), and Rabinovic and Webley (2007), individual must exercise self-control in managing their wants and expenditures in order to save more money. A study by Choi, Laibson, and Madrian (2011), found that individuals who lack self-control tend to save enough money to retire. However, Achziger et al. (2015) indicated that individual with low self-control in financial management would frequently spend their money on shopping rather than saving them which lead to higher personal debt. According to Strömbäck et al. (2017) higher self-control predicts sound financial behavior and financial well-being and thus enable them to manage well for the future. However, since attitude is not constant all the time, there are also other factors, such as social persuasion (Prislin & Wood, 2005; Webley & Nyhus, 2006), the motives or values that an individual holds (Wyer & Albarracin, 2005) and optimism and deliberative thinking that seem to affect saving behavior (Strömbäck et al., 2017).

### **3. Research Methodology**

The primary participants comprised of students in Universiti Teknologi MARA Segamat Campus, in Johor, Malaysia, which were randomly selected for the study to measure the saving behavior among students aged between 21 and 24 years. Data collection of this study was through an online questionnaire which was distributed randomly to the students and the responses were collected via google drive. A total of 133 useable respondents completed the questionnaires as requested with 45.1 per cent of the respondents are male, whilst 54.9 per cent are female, which aligns in Malaysian context where the female proportion exceeded the male students. The respondents' profile is summarized in Table 1. The questionnaire consisted of 2 sections; the first section collected the demographic data and the second section elicited information about savings behaviors of the students.

This study adopts a quantitative approach to measure the factor of financial knowledge, peers influence, parent's socialization and self-control on students' saving behavior.

The questionnaire for this study contained 19 questions and the responses were measured using a five-point Likert scale anchored by ‘strongly disagree’ (1) to ‘strongly agree’ (5). The questionnaire were collected in April 2019 and the data was coded and analyzed using SmartPLS. Data were analyzed using the following steps; first, model measurements were examined using validation factor analysis and second structural model measurements were evaluated by examining standard roots coefficients and t-statistics ( $t > 1.645$ ).

### 3.1 Findings

The results presented in Table 1 indicate the demographic data for the 133 respondents of the study. The data includes variables such as gender, age, education level, engage part time job, monthly expenses, monthly allowance and source of finance.

Table 1  
*Sample Characteristics*

Characteristics	Frequency (N=133)	Percentage (100%)
<b>Gender</b>		
Male	60	45.1
Female	73	54.9
<b>Age</b>		
21-22	67	50.4
23-24	66	49.6
<b>Education level</b>		
Diploma	2	1.5
Degree	131	98.5
<b>Engage part time job</b>		
Yes	8	6.0
No	125	94.0
<b>Monthly expenses</b>		
<RM200	3	2.3
RM201-RM350	14	10.5
RM351-RM500	99	74.4
RM501 and above	17	12.8
<b>Monthly allowance</b>		
<RM200	7	5.3
RM201-RM400	7	5.3
RM401-RM500	99	74.4
RM501 and above	20	15.0
<b>Major source of finance</b>		
Allowance from parents	30	22.6
PTPTN	92	69.2
Scholarship	6	4.5
Salary from part time job	5	3.8
<b>Is the major source of finance enough?</b>		
Yes	39	29.3
No	94	70.7

The majority of respondents were young and studying in degree level (98.5 per cent) and have not engaged in any part time job (94.0 per cent). From the survey, these students depends on PTPTN and parental support for their financial source which indicated 69.2 per cent and 22.6 per cent respectively. Moreover, it shows that their monthly allowance is ranged between RM401-RM500 and they spend around RM351-RM500. A study revealing that most of the students (70.7 per cent) are stressed over their finance or being financially insufficient.

Structural Equation Modeling (SEM) analysis using SmartPLS 3 was used to estimate the measurement and structural model for quality and fit (MK & Ramayah, 2019). As suggested by Fornell and Larcker (1981), convergent validity was determined by calculating item reliability, internal consistency, and average variance extracted (AVE). Item reliability assesses the loadings for each individual item. Table 2 presents the detailed item loadings. The loadings indicate the correlation of the items with their respective constructs. The results showed that all item greater than 0.7 which consider as acceptable. This table also showed that Average Variance Extracted (AVE) values are above 0.5 except for parent's socialization. AVE is a strict measure of convergent validity. AVE is a more conservative measure than construct reliability (CR). On the basis of CR alone, the researcher may conclude that the convergent validity of the construct is adequate, even though more than 50 per cent of the variance is due to error (Pahlevan Sharif & Sharif Nia, 2018). Refer to the AVE, the largest value is 0.695 for self-control whilst the lowest is 0.481 for parent's socialization.

Table 2  
*Convergent Validity*

<b>Constructs</b>	<b>Items</b>	<b>Loading</b>	<b>CR</b>	<b>AVE</b>
Financial Knowledge	FK2	0.653	0.785	0.553
	FK3	0.690		
	FK4	0.870		
Peers Influence	PEE2	0.666	0.799	0.574
	PEE3	0.698		
	PEE4	0.891		
Parent's Socialization	PS1	0.732	0.730	0.481
	PS2	0.795		
	PS3	0.526		
Savings Behavior	SAV1	0.781	0.883	0.654
	SAV2	0.868		
	SAV3	0.746		
	SAV4	0.834		
Self-Control	SC1	0.921	0.900	0.695
	SC2	0.865		
	SC3	0.663		
	SC4	0.864		

Note: FK1 and PEE1 were deleted due to low loadings.

Next, we proceeded to test the discriminant validity. The first criterion of discriminant validity is assessed by calculating the square root of average variance extracted (AVE). This value is then compared with inter construct correlation. To meet the discriminant validity criteria, the square roots of the AVE were calculated and represented in the main diagonal of Table 3. The off-diagonal elements represent the correlations among the latent variables. Barclay, Higgins, and Thompson (1995) specified that discriminant validity is achieved when the square root of the AVE of a construct is larger than its correlation with other constructs. Table 3 confirms that the discriminant validity was achieved.

The cross-loading matrix explained that all items are loaded higher on the construct they were measuring than on any other construct in the model. Therefore, the two criterion of discriminant validity was met. The implication is that all the reflective constructs in the measurement model are different from each other.

Table 3  
*Discriminant Validity*

Constructs	1	2	3	4	5
1. Financial Knowledge	<b>0.744</b>				
2. Peers Influence	0.350	<b>0.758</b>			
3. Parent's Socialization	0.384	0.366	<b>0.694</b>		
4. Savings Behavior	0.532	0.433	0.501	<b>0.809</b>	
5. Self-Control	-0.188	0.043	-0.172	-0.242	<b>0.834</b>

Note: Values on the diagonal (bolded) are square root of the AVE while the off-diagonals are correlations.

Table 4 indicated the summarized of hypothesis testing for the main model. The standardized path coefficient indicates whether the direction of the relationship is either positive or negative whilst the t-value assesses whether this relationship is significant or not. H1, H2, H3 and H4 examined the influence of financial knowledge, peers influence, parent's socialization and self-control on savings behavior, respectively.

Table 4  
*Hypothesis Testing*

Hypothesis	Relationship	Std. Beta	Std. Error	t-value	Decision
H <sub>1</sub>	Financial Knowledge -> Savings Behavior	0.321	0.077	4.184	Supported
H <sub>2</sub>	Peers Influence -> Savings Behavior	0.228	0.062	3.667	Supported
H <sub>3</sub>	Parent's Socialization -> Savings Behavior	0.269	0.09	2.990	Supported
H <sub>4</sub>	Self-Control -> Savings Behavior	-0.145	0.102	1.424	Not Supported

Note: \*p < 0.05

From the hypothesis testing, it showed that all three variables for standard path coefficients were positively related to savings behaviour while self-control was not significant. More specifically, financial knowledge ( $\beta = 0.321$ ,  $t = 4.184$ ), peers influence ( $\beta = 0.228$ ,  $t = 3.667$ ), parent’s socialization ( $\beta = 0.269$ ,  $t = 2.990$ ), and self-control ( $\beta = 0.145$ ,  $t = 1.424$ ). The result was accepted at  $t > 1.645$ . In conclusion, three of the hypotheses (H1, H2, H3) were statistically significant. All the variables explained an R2 of 0.44 which shows that they explained 44 per cent of the variation in savings behavior. The most influential predictor of saving behavior was financial knowledge followed by parent’s socialization and peers influence which shows that the students in emerging country are very much concerned with financial knowledge. Figure 2 shows the path diagram and results.

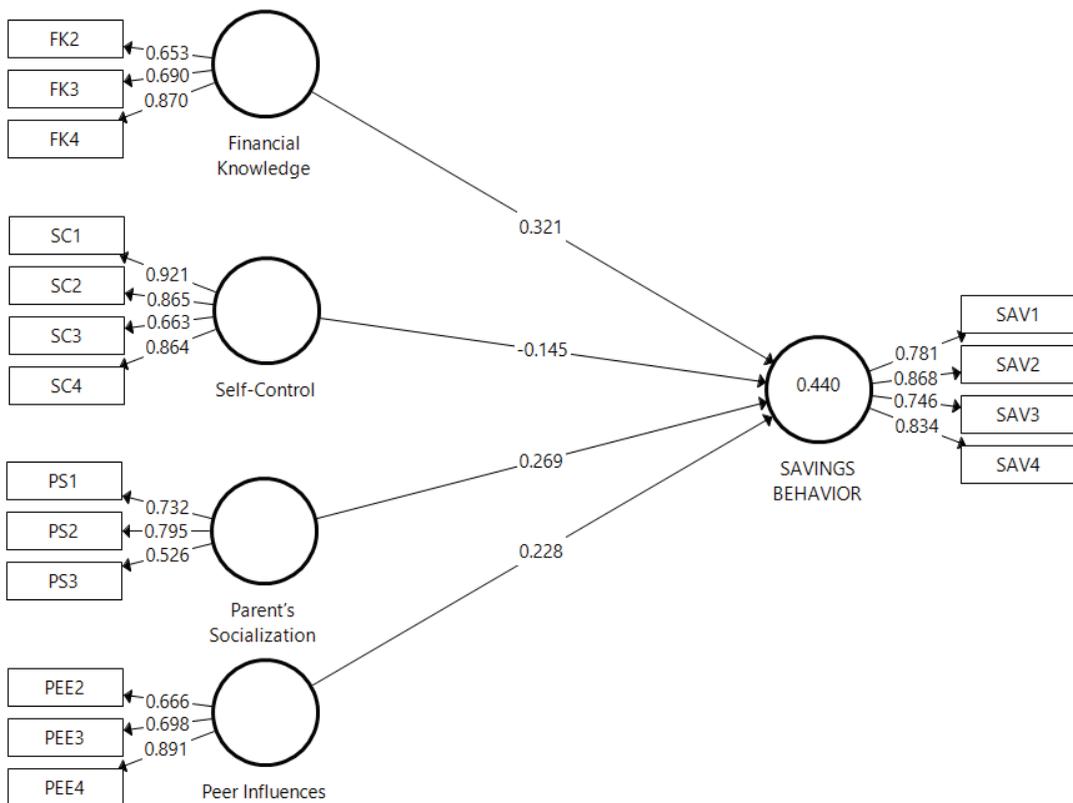


Figure 2: Path Diagram

#### 4. Conclusion

This study examined the linkages among financial knowledge, peer influences, parent's socialization and self-control towards savings behavior among university students in emerging country. The respondents comprise of students of Universiti Teknologi MARA Segamat Campus. Financial knowledge, peer influences and parent's socialization were found to play an important role in explaining saving behavior in university students of an emerging country. The role of financial knowledge which has been discussed widely appears to be an important factor for encouraging saving behavior. This implies that students with good financial literacy know how to spend, save and invest money wisely. This finding corroborates with the findings of Hilgerte, Hogarth, and Beverly (2003), Shim et al. (2010), and Sundarasan et al. (2016) who stated that financial literacy positively affected investment practices and saving.

From the finding, the implication of parent socialization seems even more apparent, given the important role for their children's financial issues. Children who had been taught to save money since young ages usually will develop and build on that behavior until older. Batty, Collins and Odders (2015) revealed that the role of parent in socializing with financial skills before enrolment to formal education will affect their child's financial behavior. Peer influence is also one the most influential factors to affect saving behavior among students. This is supported by study done by Noor Zaihan (2016) which stated that exchanging ideas about financial management matters among the peers. Not only that, she also found out that the expenditure made by group of students during their social time could also influence their behavior. Some students spend most of their time with friends who would influence their intention and behavior. Peer influence is significant in shaping their friends' saving behavior and motivating them to only spend on necessity and needs in order to prevent overspending. Not only that, some students also practice several types of saving and investment with their friends and encourage one another for future planning.

In contrast, self-control does not affect the behavior of saving. This is due to the result proven that self-control has insignificant effect towards the saving behavior. Nowadays, most of students are likely to spend their money on entertainment compared to saving it. Students cannot control themselves from keeping up-to-date on the latest trends and technologies that cost a lot of money. Thus, most students cannot control their desire and this led to overspending of their money. This result is different from that of Hayhoe et al. (2000), Miotto and Parente (2015), and (Strömbäck et al., 2017) who argue that higher financial self-efficacy associated with lower debt and higher savings. Not only that, students are not having any financial problem, are not aware of the importance of saving for future and precautionary use. Additionally, students that do not suffer from this problem probably think that their money is enough to cover their current expenditures for the entire semester thus they do not save money.

The findings suggest that the practice of saving money need to be taught and encouraged even when children are still in their primary and secondary education level so that they will have sufficient financial knowledge to set up long-term financial goal when they reach adulthood. This would also benefit those who receives allowance from their learning institution or other parties since it would help them to save up for future and would motivate them to manage their money. This empirical evidence may throw some light in which the authorities in emerging country could use in order to increase financial literacy among students. Beside classes, there are many programs or activities that can be held to help students gain financial knowledge. In other words, participating in innovative events in business could provide additional information and guidance to enhance the understanding of personal investment and financial management.

## References

- Achtziger, A., Hubert, M., Kenning, P., Raab, G., & Reisch, L. (2015). Debt out of control: The links between self-control, compulsive buying, and real debts. *Journal of Economic Psychology*, 49(3), 141-149.
- Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, 50(2), 179-211
- Ajzen, I., & Fishbein, M. (1970). The prediction of behavior from attitudinal and normative variables. *Journal of Experimental Social Psychology*, 6(4), 466-487
- AKPK (2016, Nov 09). 24,000 Youths Aged 24 To 25 Seek Debt Assistance From AKPK. Retrieved from: <https://www.akpk.org.my/news/944-24000-youths-aged-24-25-seek-debt-assistance-akpk>
- Albeerdy, M. I., & Gharleghi, B. (2015). Determinants of the financial literacy among college students in Malaysia. *International Journal of Business Administration*, 6(3),15-31.
- Alwi, S., Hashim, I. Z. A., & Ali, M. S. (2015, August). 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*, Kuala Lumpur, Malaysia.
- Batty, M., Collins, J. M., & 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.

- Barclay, D. W., Higgins, C. A., & Thompson, R. (1995). The partial least squares approach to causal modeling: personal computer adoption and use as illustration. *Technology Studies*, 2(2), 285–309.
- Benartzi, S. (2012). *Save more tomorrow: Practical behavioral finance solutions to improve 401 (k) plans*. Penguin.
- Buccioli, A., & Veronesi, M. (2014). Teaching children to save: What is the best strategy for lifetime savings?. *Journal of Economic Psychology*, 45(4), 1-17.
- Chen, H., & Volpe, R. P. (2002). Gender differences in personal financial literacy among college students. *Financial Services Review*, 11(3), 289-307.
- Choi, J. J., Laibson, D., & Madrian, B. C. (2011). \$100 bills on the sidewalk: Suboptimal investment in 401 (k) plans. *Review of Economics and Statistics*, 93(3), 748-763.
- Falahati, L., & Paim, L. H. (2011). Toward a framework of determinants of financial management and financial problems among university students. *African Journal of Business Management*, 5(22), 9600-9606.
- Fazli Sabri, M., Cook, C. C., & Gudmunson, C. G. (2012). Financial well-being of Malaysian college students. *Asian Education and Development Studies*, 1(2), 153-170.
- Fishbein, M., & Ajzen, I. (1977). Intention and Behavior: An introduction to theory and research, *Journal of Business Venturing*, 5(1), 177- 189.
- Fornell, C., & Larcker, D. F. (1981). Structural equation models with unobservable variables and measurement error: Algebra and statistics.
- Gathergood, J. (2012). Self-control, financial literacy and consumer over-indebtedness. *Journal of Economic Psychology*, 33(3), 590-602.
- Goldsmith, R. E., & Goldsmith, E. B. (2006). The effects of investment education on gender differences in financial knowledge. *Journal of Personal Finance*, 5(2), 55-69.
- Hayhoe, C. R., Leach, L. J., Turner, P. R., Bruin, M. J., & Lawrence, F. C. (2000). Differences in spending habits and credit use of college students. *Journal of Consumer Affairs*, 34(1), 113-133.

- Hilgert, M. A., Hogarth, J. M., & Beverly, S. G. (2003). Household financial management: The connection between knowledge and behavior. *Fed. Res. Bull.*, 89, 309.
- Holub, T. (2002). Credit Card Usage and Debt among College and University Students. *ERIC Digest*.
- 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.
- Karunaanithy, K., Karunanithy, M., & Santhirasekaram, S. (2017). Understanding and responding to youth savings behaviour: Evidence from undergraduates in the war torn regions of Sri Lanka. *EPRA International Journal of Research and Development (IJRD)*, 2(1), 124-131.
- Kidwell, B., & Turrisi, R. (2004). An examination of college student money management tendencies. *Journal of Economic Psychology*, 25(5), 601-616.
- Miotto, A. P. S., & Parente, J. (2015). Antecedents and consequences of household financial management in Brazilian lower-middle-class. *Revista de Administração de Empresas*, 55(1), 50-64.
- MK, N., & Ramayah, T. (2019). The Impact of Security Factors towards Internet Banking Usage Intention among Malaysians. *Global Business & Management Research*, 11(2), 241-251.
- Mohamed, N. A. (2017). Financial socialization: A cornerstone for young employees' financial well-being. *Reports on Economics and Finance*, 3(1), 15-35.
- Montandon, A. (2014). *Social influence of siblings and friends in generation Y's development of risk preferences* [Unpublished doctoral dissertation], University of Cape Town, South Africa.
- Moore, T. J., & Asay, S. M. (2013). Values, Attitudes and Behaviors: Understanding Family Choices. *Family Resource Management*, 99-110.
- Noor Zaihan, D. (2016). *Determinants of saving behavior among generation Y students in Universiti Utara Malaysia* ([Unpublished doctoral dissertation], Universiti Utara Malaysia, Malaysia).

- Norvilitis, J. M., Merwin, M. M., Osberg, T. M., Roehling, P. V., Young, P., & Kamas, M. M. (2006). Personality factors, money attitudes, financial knowledge, and credit-card debt in college students 1. *Journal of Applied Social Psychology, 36*(6), 1395-1413.
- Ogonowski, A., Montandon, A., Botha, E., & Reyneke, M. (2014). Should new online stores invest in social presence elements? The effect of social presence on initial trust formation. *Journal of Retailing and Consumer Services, 21*(4), 482-491.
- Pahlevan Sharif, S., & Sharif Nia, H. (2018). Structural equation modeling with amos. Iran: Artin Teb.
- Prislin, R., & Wood, W. (2005). Social Influence in Attitudes and Attitude Change.
- Rabinovich, A., & Webley, P. (2007). Filling the gap between planning and doing: Psychological factors involved in the successful implementation of saving intention. *Journal of Economic Psychology, 28*(4), 444-461.
- Sabri, M. F., Masud, J., Karen, K. L., & Paim, L. (2008). Personal financial wellness among Malaysian employees: Socio demographic comparison. *Consumer Interests Annual, 54*(2), 189-192.
- 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), 479-491.
- Sam, Y. T., Geetha, C., & Mohidin, R. (2012). What were the factors that influence financial management behavior of undergraduates. *International Journal of Business Trends and Technology, 2*(1), 1-10.
- Shambare, R., & Rugimbana, R. (2012). Financial literacy among the educated: An exploratory study of selected university students in South Africa. *Thunderbird International Business Review, 54*(4), 581-590.
- Shim, S., Barber, B. L., Card, N. A., Xiao, J. J., & Serido, J. (2010). Financial socialization of first-year college students: The roles of parents, work, and education. *Journal of Youth and Adolescence, 39*(12), 1457-1470.
- Shively, M. (2001). Male self-control and sexual aggression. *Deviant Behavior, 22*(4), 295-321.

- 
- Strömbäck, C., Lind, T., Skagerlund, K., Västfjäll, D., & Tinghög, G. (2017). Does self-control predict financial behavior and financial well-being?. *Journal of Behavioral and Experimental Finance*, 14(3), 30-38.
- Sundarasan, S. D. D., Rahman, M. S., Othman, N. S., & Danaraj, J. (2016). Impact of financial literacy, financial socialization agents, and parental norms on money management. *Journal of Business Studies Quarterly*, 8(1), 137-152.
- Thaler, R. H. (1994). Psychology and savings policies. *The American Economic Review*, 84(2), 186-192.
- Webley, P., & Nyhus, E. K. (2006). Parents' influence on children's future orientation and saving. *Journal of Economic Psychology*, 27(1), 140-164.
- Wyer Jr, R. S., & Albarracín, D. (2005). Belief Formation, Organization, and Change: Cognitive and Motivational Influences. In: Albarracín D, Johnson BT, Zanna MP (eds) *The handbook of attitudes*. Psychology Press, New York.