

The Role of Spending Behavior in Mediating the Influence of Financial Socialization and Reaction to Indebtedness among Malaysian Tertiary Students

Chia Mei Si^a, Zuriadah Ismail^b, Rusliza Yahaya^c

^a*Faculty of Business and Finance, University of Tunku Abdul Rahman, 31900 Kampar, Perak, Malaysia*

^{b, c}*Faculty of Management and Economics, Sultan Idris Education University,
35900 Tanjong Malim, Perak, Malaysia*

Corresponding Author: chiams@utar.edu.my

To cite this article (APA): Chia, M. S., Zuriadah Ismail, & Rusliza Yahaya. (2024). The Role of Spending Behavior in Mediating the Influence of Financial Socialization and Reaction to Indebtedness among Malaysian Tertiary Students. *International Business Education Journal*, 17(1), 1–11. <https://doi.org/10.37134/ibej.Vol17.1.1.2024>

To link to this article: <https://doi.org/10.37134/ibej.Vol17.1.1.2024>

Abstract

Financial depression occurs when a person mismanages personal financial resources when engaging in financial planning or decision-making because it requires financial knowledge, financial awareness of financial products, and management skills. In Malaysia, the primary issues are the low level of financial literacy and the rising trend in the bankruptcy rate among the younger generation. Children and young adults may acquire financial attitudes, such as spending attitudes and responses to debt from their parents. Meanwhile, spending decisions might be influenced by financial awareness of financial products and peers due to the group effect. However, there is a very limited research on the role of spending behavior as a mediating variable for the influence of financial socialization and reaction to indebtedness. Hence, this study aims to assess the role of spending behavior in mediating the influence of financial socialization and reaction to indebtedness among tertiary students in Malaysia. This study includes 1800 tertiary students, with primary data is obtained through a structured questionnaire. This study employs partial least square structural equation modeling (PLS-SEM) for data analyses. The result indicates that spending behavior mediates the effects of parental influence, peer influence, and financial awareness on reaction to indebtedness. Furthermore, it is a competitive partial mediation of spending behavior between financial awareness and reaction to indebtedness. It indicates that the higher the level of financial awareness, the worse the reaction to indebtedness. It may be due to overconfidence in handling debt. However, high financial awareness and good spending behavior will contribute to a positive reaction when a person is indebted. As a result, this study recommends that tertiary students strengthen their financial literacy before graduation.

Keywords:

Partial Least Square Structural Equation Modelling, Parental Influence, Financial Awareness, Spending Behavior, Reaction to Indebtedness

INTRODUCTION

There has been an overall upward tendency in the world population for decades. When a nation's population increases, the demand for basic needs such as food, water, shelter, and transportation will accelerate. Malaysia's population is increasing yearly, even facing the

impact of Covid-19. As at September 20, 2023, Malaysia's population hit the number of 34,387,750 (Worldometer, 2023). When the aggregate demand exceeds the supply in Malaysia, the price level will lead to an increasing trend. With these extensions, personal financial management is essential to attain financial stability, goal achievement, debt management, emergency preparedness, future planning, financial independence, security, and even reduced financial burden.

Moreover, in 2021, Malaysia's household debt climbed further to RM 1.34 trillion. These household debt structures derived the issues of house financing delinquency as some housing loan borrowers face challenges in maintaining their regular home financing repayments (Seah, 2021). Financial problem refers to situations where a person has difficulty in paying off debts. Financial problems arise when the demand for resources and a person's internal financial resource is unbalanced. As a result, people will look for an external financial resource to support their resource needs, such as obtaining loans or spending on credit cards (Kerkmann et al., 2000; Nga et al., 2010; OECD 2020).

Recently, financial problems have become a common problem among young adults. Some may have trouble making repayments and are sometimes or often short of money (Chong et al., 2021). Therefore, excessive debt can be caused by obtaining loans, using credit cards to cover repayments, or even supporting daily expenses. According to Philippas and Avdoulas (2020), tertiary education students representing Generation Z accomplish the impacts of the consequences of the financial crisis. They find that students with better financial knowledge and financial fragility are better adapted to unexpected financial shocks. Today, managing personal finances is a significant challenge for Malaysian society, especially for those who fail to make proper financial decisions. These trends have raised concerns about spending behavior, financial socialization, and reaction to indebtedness among Malaysians. Thus, this study aims to examine the role of spending behavior in mediating the influence of financial socialization and reaction to indebtedness among tertiary students in Malaysia.

LITERATURE REVIEW

The theory of reasoned action (1980) by Martin Fishbein and Icek Ajzen as the first theory of attitude to predict how individual behaves based on their pre-existing attitudes and behavior intention form the foundation of this study (Hale et al., 2002). The assumption of the theory of reasoned action where people make conscious decisions about how people behave and that behavior is under volitional control (Hansen et al., 2012). Furthermore, the intervening environmental condition will influence the behavior of one person, and the choices are rational for the most part. In addition, an individual attitude can be derived from personal beliefs and evaluation outcomes (Glanz et al., 2008). Therefore, as agents of socialization, parents play an essential role in influencing their children's attitudes (Troshikhina & Manukyan, 2016).

Moreover, according to Scully and Moital (2016), an interpersonal influence between peers dramatically impacts an individual's decision-making. To an extent, an individual spending behavior differs from generation to generation. Due to this, all government worldwide is interested in knowing their residents' spending behavior because it will generally influence their local economies. Furthermore, understanding tertiary students' spending behavior may be necessary since they will become significant players in the local economy after employment. Today, spending among tertiary students can be influenced by factors such as global online purchasing through the website, implementation of new payment methods such as credit cards, debit cards, and internet banking, as well as the effect of brand awareness.

According to Yue and Abdul Razak (2022), overspending may result from impulse purchase. Thus, personal self-control on spending is needed, and identification of the personal spending behavior of tertiary students is essential. Spending behavior can be further classified as intention, attitude, positive affective, pass behavior, spending barrier, and structure spending. The rising cost of living and education costs cause an increase in the number of students enrolling in debt. According to Walker and Zhu (2011), students' perspective toward education loans is generally positive and considered an excellent long-term investment. The perception of debt becomes an issue when many young graduates face difficulties in repayment of debt (Walsemann et al., 2015; Agnew & Harrison, 2015; Harrison et al., 2015).

METHOD

Primary data is selected in this study to capture the behavior, perception, feeling, experience, and opinion of independent, mediating, and dependent variables to generate results from a large population. This study has selected a questionnaire as the primary data collection source. The benefit of adopting a questionnaire is that it can have substantial control to meet the specific needs of the researchers. Eight universities are selected as the target population, and the target respondents of this study are 1,800 undergraduate students. The traditional age of undergraduate students will be those who fall between 18 to 24 years old (Crowley et al., 2022). Due to the impact of the Covid-19 pandemic, an email with Google Form link will be sent to several faculties of the Universities. The limitation of snowball sampling is that there may be a high probability of selecting a sample with the same characteristics (from the same university). Furthermore, it is time consuming because it relies on each participant to recommend others as well representativeness of the sample is not guaranteed.

Generally, data filtering is needed to ensure that the sample size can represent the population. The age of the respondents will be the first filtering criterion, whereby the respondents must be between 18 to 24 years old. After that, gender and field of study will be the second and third criteria for filtering the data. Partial least square structural equation modeling (PLS-SEM), is a multivariate statistical analysis technique that is used to analyze and explain the interrelationship among variables. PLS-SEM combines factor analysis and multiple regression analysis, enabling users to exhibit the relationship between dependent and independent variables where the constructs can be unobservable or latent (Hair et al., 2017). SPSS and SmartPLS 3.0 are employed to analyze the collected data, which is used to run descriptive analysis, outer loadings, cronbach alpha, composite reliability, average variance extracted (AVE), Heterotrait-Monotrait Ratio (HTMT), and bootstrapping.

RESULT AND DISCUSSION

After filtering according to age and gender, 1800 respondents are selected as the sample in this study, totaling 900 respondents from both females and males, respectively. Furthermore, according to Table 1, the age of the respondents fall between 18 to 24 years old.

In Figure 1, all items, ten items for financial awareness, eight items for parental influence and reaction to indebtedness, and five items for peer influence and spending behavior are above 0.5, which is consistent with the recommended level and good convergent validity (Hair et al., 2017).

Table 1: Age distribution

	Frequency	Percentage	Cumulative Percentage
18 years old	28	1.6	1.6
19 years old	149	8.3	9.8
20 years old	351	19.5	29.3
21 years old	499	27.7	57.1
22 years old	321	17.8	74.9
23 years old	223	12.4	87.3
24 years old	229	12.7	100.0
Total	1,800	100.0	

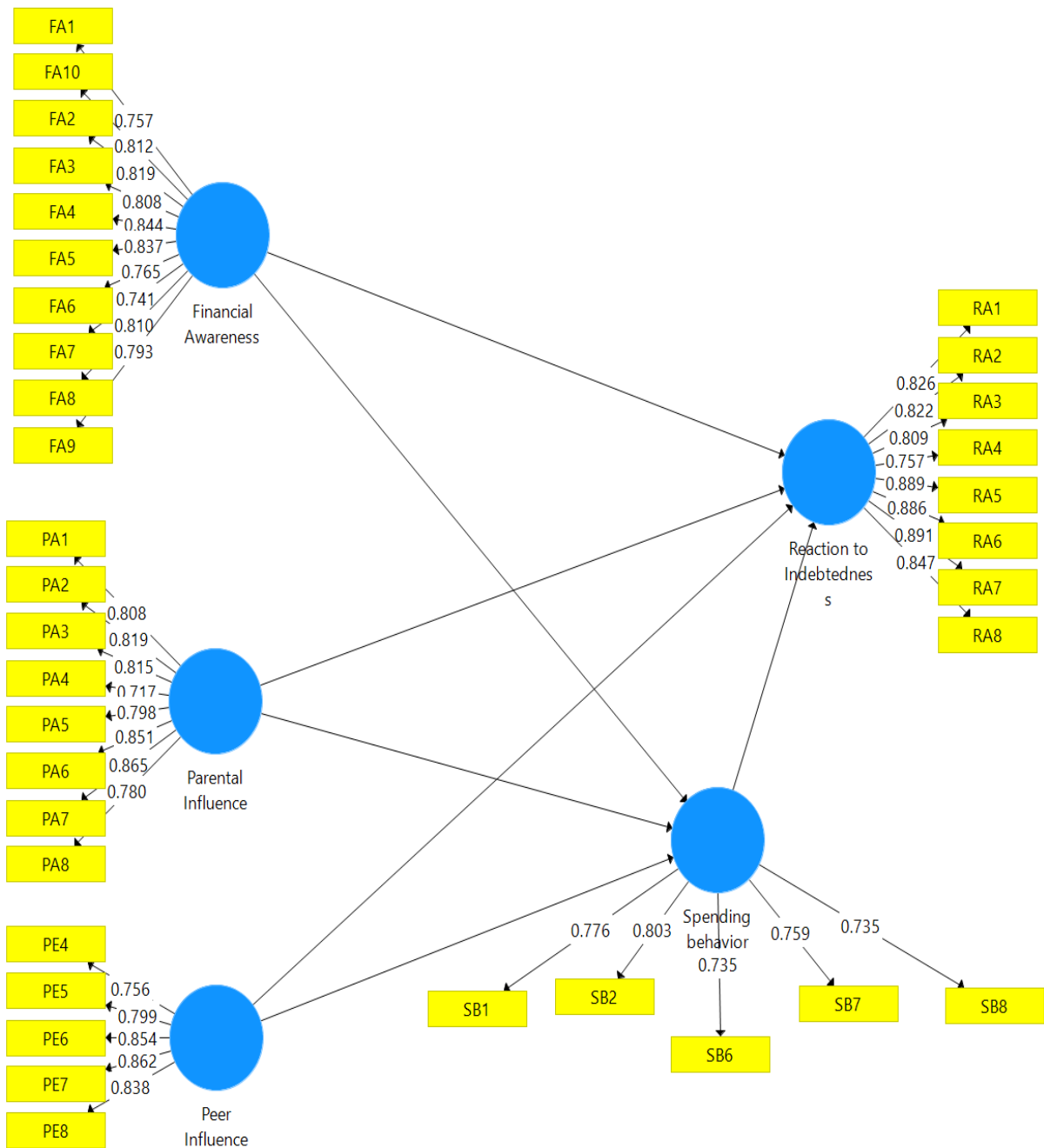


Figure 1: Outer loading of constructs

In Table 2, cronbach's alpha for parental influence, peer influence, financial awareness, spending behavior and reaction to indebtedness were above 0.8, indicating that each respondent's response value is consistent. This consistency indicates that the measurements are reliable, and the items measure the same characteristics. Composite reliability checks a data set's internal consistency and should be greater than the benchmark of 0.7 to be considered adequate (Fornell & Larcker, 1981; Hair et al., 2017). In this study, composite reliability is more than 0.8, indicating the measurements are internal consistent and adequate. In addition, the average variance extracted (AVE) was used to assess the measurement model's convergent validity. Hair et al. (2017) state that AVE's minimum requirement must exceed 0.5. In this study, it met the AVE's requirement.

Table 2: Cronbach's alpha, composite reliability, and average variance extracted

	Cronbach's Alpha	Composite Reliability	Average Variance Extracted
Financial Awareness	0.937	0.946	0.639
Parental Influence	0.924	0.937	0.652
Peer Influence	0.885	0.913	0.677
Spending Behavior	0.820	0.874	0.581
Reaction to Indebtedness	0.941	0.951	0.709

Furthermore, the HTMT ratio measures the correlations within the constructs to the correlations between the constructs. According to Hair et al. (2017), all HTMT values need to be lower than 0.90 for conceptually distinct constructs. In this study, in Table 3, all the HTMT values are lower than 0.90. It indicates that discriminant validity has been established between constructs in this study.

Table 3: Heterotrait-Monotrait Ratio (HTMT)

	Financial Awareness	Parental Influence	Peer Influence	Reaction to Indebtedness
Parental Influence	0.314			
Peer Influence	0.342	0.327		
Reaction to Indebtedness	0.170	0.360	0.149	
Spending Behavior	0.395	0.476	0.292	0.621

Figure 2 and Table 4 indicate a positive significant relationship between financial awareness and spending behavior. It shows that when a person obtains higher financial awareness, it will contribute to positive spending behavior. The result is supported by Esmail Alekam (2018), where financial awareness is positively related to spending behavior. However, it shows a negative significant relationship between financial awareness and reaction to indebtedness. To an extent, when a person obtains higher financial awareness, he or she will negatively react to handling their debt. When a person has a higher financial awareness, over-confident may occur when dealing with debt management. Furthermore, it is a significant positive relationship between parents influence and children's spending behavior. The result is supported by Bona (2018) that parental influence significantly impacts college students' finances and spending behavior. Moreover, parents positively influence debt handling matters by their children. This result is supported by Ismail et al. (2011), a statistically and positively significant relationship exists between parental influence and debt repayment. Thus, the result

indicates that parents should play a role in transferring their financial knowledge and sharing their personal experiences in handling financial decisions with their children to shape their spending behavior and debt handling matters.

Peer influence on spending behavior is significantly and positively correlated in this study. Since peers are significant, group behaviors can easily impact an individual. However, this study's path coefficient value between peer influence and spending behavior is low (0.096). Furthermore, there is no relationship between peer influence and the reaction to indebtedness, which contrasts with Jamilakhon et al. (2020) that peer influence positively impacts debt behavior. It may be because the data collecting period is under a movement control order (MCO) that restricts movement (stay at home), which separates tertiary students from their peers (study via online mode). As a result, the effect of peers is reduced to a little touch.

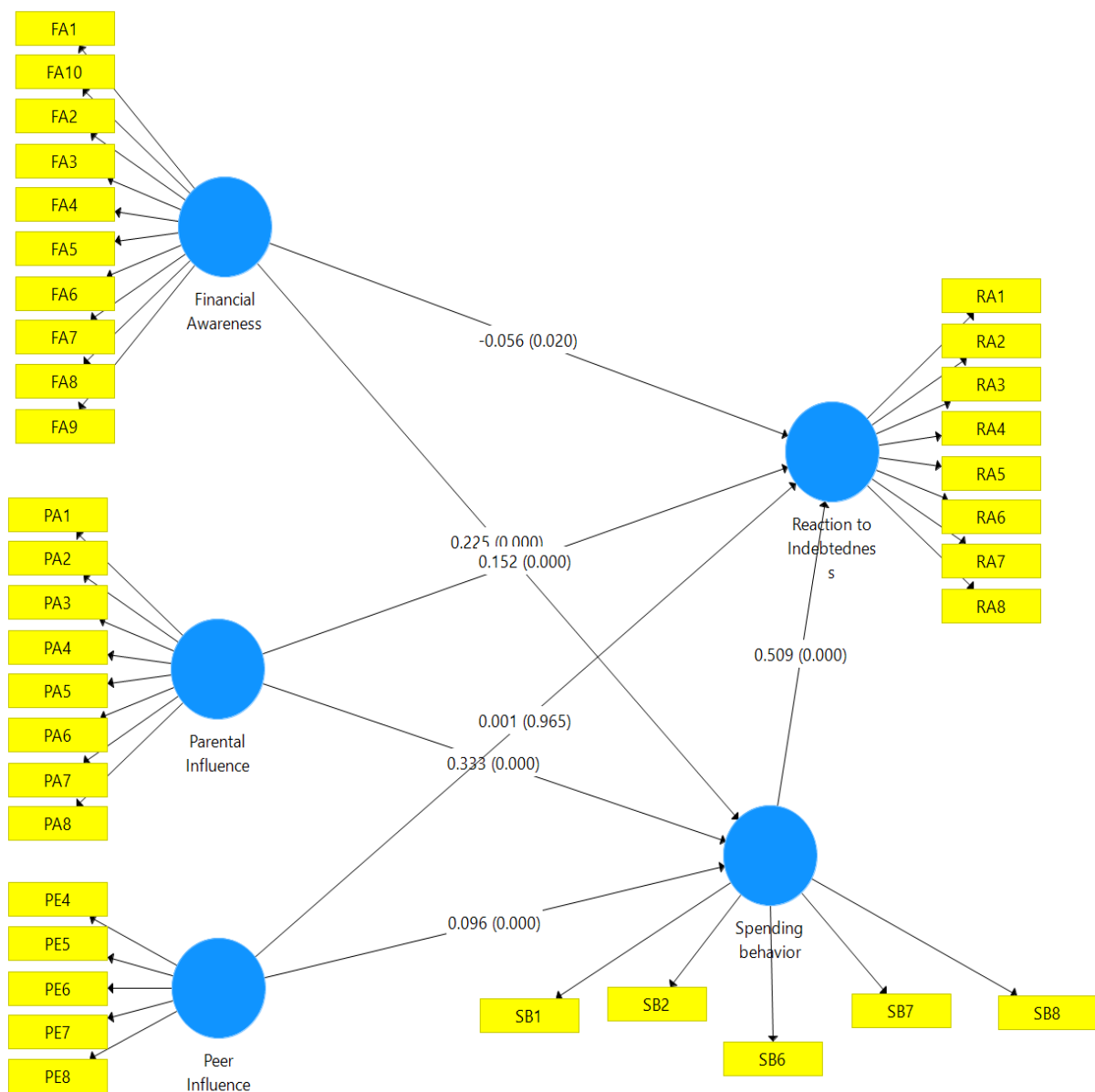


Figure 2: Bootstrapping result

Table 4: Relationship between variables

	Coefficient	T-Statistic	P Value	Result (H1)
Financial Awareness -> Spending Behavior	0.225	8.738	0.000	Supported
Financial Awareness -> Reaction to Indebtedness	-0.056	2.332	0.020	Supported
Parental Influence-> Spending Behavior	0.333	14.481	0.000	Supported
Parental Influence -> Reaction to Indebtedness	0.152	8.738	0.000	Supported
Peer Influence-> Spending Behavior	0.096	4.291	0.000	Supported
Peer Influence -> Reaction to Indebtedness	0.001	0.444	0.965	Rejected
Spending Behavior -> Reaction to Indebtedness	0.509	21.464	0.000	Supported

This study shows that the highest path coefficient exists in the relationship between spending behavior and reaction to indebtedness (0.509). Thus, investigating the mediating effect of spending behavior on the relationship between financial awareness, parental influence, peer influence, and reaction to indebtedness is needed. In Table 5, the results shown is significant, with the t-values of 7.930, 11.722, and 4.117. The indirect effects of 95% Boot Confidence Intervals Bias Corrected: [LL=0.087, UL=0.142], [LL=0.140, UL=0.196], and [LL=0.027, UL=0.072]. It does not straddle a 0 in between, indicating a mediation of spending behavior between financial awareness, parental influence and peer influence toward reaction to indebtedness among tertiary students in Malaysia. It is necessary to examine whether it is wholly or partially mediated between independent and dependent variables in this study. Fully mediating means that without spending behavior, there is an insignificant relationship between dependent and independent variables. Partially mediating means a significant relationship exists between independent variables, mediating variables and dependent variables.

Table 5: Mediation of Spending Behavior

	Standard Beta	Standard Error	T-Statistic	Confidence Intervals (BC)		Result (H1)
				LL	UL	
Financial Awareness -> Spending Behavior -> Reaction to Indebtedness	0.114	0.114	7.930***	0.087	0.142	Supported
Parental Influence -> Spending Behavior -> Reaction to Indebtedness	0.170	0.171	11.722***	0.140	0.196	Supported
Peer Influence -> Spending Behavior -> Reaction to Indebtedness	0.049	0.049	4.117***	0.027	0.072	Supported

In addition, to evaluate the degree to which the mediation process explains the variation of the dependent variable, further analysis of the mediation impact with the VAF approach by computing the indirect to the total effect ratio is conducted in this study. The VAF value could be low if the indirect effect is significant, where it does not mediate much of the total effect. According to Hair et al. (2017), if the VAF value is less than 20%, there is nearly zero mediation takes place, VAF value is greater than 20% but less than 80%, as partial mediation, and the VAF value is greater than 80% as a full mediation. According to Table 6, although there is a significant positive relationship between financial awareness toward spending behavior (a) and spending behavior toward reaction to indebtedness (b), there is a competitive partial mediation because the direct effect of financial awareness toward reaction to indebtedness (c) is in a negative relationship (Zhao et al., 2010). In the competitive partial mediation hypothesis, it is assumed that the spending behavior will reduce the magnitude of the relationship between financial awareness and reaction to indebtedness. The interpretation of VAF is clear only for consistent or complementary mediating effects when c and $a * b$ have the same effects, whether a positive or negative relationship. In this study, the VAF value for financial awareness toward reaction to indebtedness via spending behavior is more than 100 % (195.69%) (Ramayah et al., 2018).

Furthermore, there is a complementary partial mediation between parental influence toward reaction to indebtedness via spending behavior. It is because the direct effect of parental influence toward reaction to indebtedness (c) is in the same (significant positive relationship) when there is a significant positive relationship between parental influence toward spending behavior (a) and spending behavior toward reaction to indebtedness (b). It is indicated that a portion of the effect of parental influence on reaction to indebtedness is mediated by spending behavior, whereas parental influence still explains a portion of reaction to indebtedness as independent of spending behavior. The VAF value for parental influence toward reaction to indebtedness via spending behavior is 52.72%, indicating a partial mediation effect.

Moreover, a positive relationship exists between peer influence toward spending behavior (a) and spending behavior toward reaction to indebtedness (b). There is a full mediation because the direct effect of peer influence toward reaction to indebtedness (c) is not significant. It is indicated that the effect of peer influence on reaction to indebtedness is completely transmitted with the help of spending behavior. In addition, it also means the reaction to indebtedness completely absorbs the positive effect of peer influence. Thus, the VAF value for peer influence toward reaction to indebtedness via spending behavior is 100%, indicating a full mediation effect (Shrout & Bolger, 2002). It shows that peers will influence a person's spending behavior, and a positive spending behavior will influence a better reaction toward debt handling.

Table 6: Mediation of spending behavior

	Direct Effect	Indirect effect	Type of Mediation	VAF (%)
Financial Awareness -> Reaction to Indebtedness	(-) Significant	(+) Significant	Competitive Partial Mediation	195.69
Parental Influence -> Reaction to Indebtedness	(+) Significant	(+) Significant	Complementary Partial Mediation	52.72
Peer Influence -> Reaction to Indebtedness	Not Significant	(+) Significant	Full Mediation	100.00

Note: (-) = Negative, (+) = positive

CONCLUSION

The results of this study demonstrate that a person's intention is impacted by their perception of others' attitudes and subjective norms (Ng, 2020). This study presents alternative models of researchers concerned with spending behavior and the theories of reasoned action (1980), along with predictors of financial awareness, parental influence, and peer influence to enhance frugal behavior, proving that spending behavior can mediate reaction to indebtedness. Therefore, by storing spending behavior, the theory of reasoned action (1980) may explain the linkage between financial awareness, parental influence, peer influence, and its reaction to debt.

Thus, parental influence is essential in children's attitudes to handling debt and shaping their spending behavior. Being a parent is a monumental task, and children learn things by observing others around them, especially their parents. Parents, therefore, have a significant effect on modeling them by setting a good example for their children. According to Kuk (2019), expenditure declines in short term when debt repayment issues are addressed. Spending bounces back following issues with debt repayment, but the increasing level is less than the initial decrease, and spending stays lower than before the issues started. It means that when someone has good spending habits, they will also react favorably to debt. An individual's positive spending habits will result in less debt.

Furthermore, the finding of this study proves that financial awareness, parental influence, and peer influence affect reaction to indebtedness, both directly and indirectly, through spending behavior. Spending behavior mediates the relationship by strengthening the relationship between financial socialization and reaction to indebtedness. Meanwhile, this study shows a negative relationship between financial awareness and reaction to indebtedness, indicating that higher financial awareness contributes to an adverse reaction toward debt handling. However, the mediator of spending behavior shows a positive significant indirect relationship between financial awareness and reaction to indebtedness. Thus, an individual with high financial awareness and good spending behavior will contribute to better debt handling. Moreover, a further investigation on peer influence is needed due to the data collecting period is under a movement control order (MCO) that restricts movement (stay at home), separating tertiary students from their friends (study via online mode). As a result, the effect of peers is reduced to a little touch in this study. In addition, in this study, the respondents are merely from West Malaysia. Thus, further study of the respondents from East Malaysia is recommended.

In conclusion, Malaysian tertiary students who plan for their spending will benefit from their spending attitude toward debt handling in the future. As a result, good spending behavior significantly influences spending decisions, debt management strategies, and even future planning. It has tremendous impacts on people in distributing their financial resources, handling debt, and developing future financial stability plans. Additionally, it is recommended that a suitable personal financial planning curriculum to be developed for primary and secondary students before entering the workforce, or continuing their study at university due to primary school education as the compulsory education in Malaysia. It is because the best time to shape a person's spending behavior is while they are still at young age, since the channel to reach the target population to explore financial information is restricted because it depends on working adults' willingness to self-study for financial information after they leave school.

REFERENCES

Agnew, S. & Harrison, N. (2015). Financial literacy and student attitudes to debt: A cross national study examining the influence of gender on personal finance concepts. *Journal of*

- Retailing and Consumer Services*, 25, 122-129.
<https://www.sciencedirect.com/science/article/pii/S0969698915000491>
- Bona, J. T. C. (2018). Factors affecting the spending behavior of college students. *Journal of Fundamental and Applied Sciences*, 10(3S), 142-152.
<https://www.ajol.info/index.php/jfas/article/view/171490>
- Chong, K. F., Sabri, M. F., Magle, A. S., Rahim, H., Mokhtar, N., & Othman, M. A. (2021). The Effects of Financial Literacy, Self-Efficacy and Self-Coping on Financial Behavior of Emerging Adults. *The Journal of Asian Finance, Economics and Business*, 8(3), 905-915.
- Crowley, C., Kapitula, L. R., & Munk, D. (2022). Mindfulness, happiness, and anxiety in a sample of college students before and after taking a meditation course. *Journal of American College Health*, 70(2), 493-500.
- Esmail Alekam, J. M. (2018). The effect of family, peer, behavior, saving and spending behavior on financial literacy among young generations. *International Journal of Organizational Leadership*, 7, 309-323.
- Fornell, C., & Larcker, D. F. (1981). Structural equation models with unobservable variables and measurement error: Algebra and statistics. *Journal of marketing research*, 382-388.
- Glanz, K., Rimer, B. K., & Viswanath, K. (Eds.). (2008). *Health behavior and health education: theory, research, and practice*. John Wiley & Sons.
- Hair, J. F., Hult, T. M., Ringle, C. M., & Sarstedt, M. (2017). A primer on partial least square structural equation modeling (PLS-SEM). Sage Publications.
- Hale, J. L., Householder, B. J., & Greene, K. L. (2002). The theory of reasoned action. *The persuasion handbook: Developments in theory and practice*, 14(2002), 259-286.
- Hansen, T., Risborg, M. S., & Steen, C. D. (2012). Understanding consumer purchase of free-of cosmetics: A value-driven TRA approach. *Journal of consumer behaviour*, 11(6), 477-486.
- Harrison, N., Agnew, S., & Serido, J. (2015). Attitudes to debt among indebted undergraduates: A cross-national exploratory factor analysis. *Journal of Economic Psychology*, 46, 62-73
- Ismail, S., Serguieva, A., & Singh, S. (2011). Integrative model of students' attitude to educational loan repayment: A structural modelling approach. *Journal of International Education in Business*, 4(2), 125-140.
- Jamilakhon, K., Singh, J. S. K., Subramaniam, A., & Suppramaniam, S. (2020). Determinants of debt behavior. A quantitative study among Generation Y individuals in Tashkent, Uzbekistan. *TEST: Eng. Manag. J*, 82(1-2), 891-904.
- Kukk, M. (2019). Debt repayment problems: short-term and long-term implications for spending. *Review of Economics of the Household*, 17(2), 715-740.
- Kerkmann, B. C., Lee, T. R., Lown, J. M., & Allgood, S. M. (2000). Financial Problems and Marital satisfaction among Recently Married University Students. *Financial Counseling and Planning*, 11(2), 55-65

- Ng, K. Y. N. (2020). The moderating role of trust and the theory of reasoned action. *Journal of Knowledge Management*, 24(6), 1221-1240.
- Nga, J. K., Yong, L. H., & Sellappan, R. D. (2010). A study of financial awareness among youths. *Young Consumers*, 11(4), 277-290.
- OECD. (2020). OECD/INFE 2020 international survey of adult financial literacy. <https://www.oecd.org/financial/education/oecd-infe-2020-international-survey-of-adult-financial-literacy.pdf>
- Philippas, N. D., & Avdoulas, C. (2020). Financial literacy and financial well-being among generation-Z university students: Evidence from Greece. *The European Journal of Finance*, 26(4-5), 360-381.
- Ramayah, T. J. F. H., Jacky Cheah, Francis Chuah, Hiram Ting, and Mumtaz Ali Memon. (2018). "Partial least squares structural equation modeling (PLS-SEM) using smartPLS 3.0." *An updated guide and practical guide to statistical analysis*. Pearson.
- Seah, E. H., (29 October 2021). Economic 2021/2022: Household debt swells to RM1.34 trillion, 89.6% of GDP. *The Edge Malaysia*. <https://www.theedgemarkets.com/article/household-debt-swells-rm134-trillion-896-gdp>
- Scully, K. & Moital, M., (2016). Peer influence strategies in collectively consumed products (events and festivals): an exploratory study among university students. *Young Consumers*, 17(1), 46-63.
- Shrout, P. E., & Bolger, N. (2002). Mediation in experimental and nonexperimental studies: new procedures and recommendations. *Psychological methods*, 7(4), 422.
- Wordometer (2023). Malaysia Population. <https://www.worldometers.info/world-population/malaysia-population/>
- Troshikhina, E. G., & Manukyan, V. R. (2016). Self-esteem and Emotional Development of Young Children in Connection with Mothers' Parental Attitudes. *Procedia-Social and Behavioral Sciences*, 233, 357-361.
- Walker, I., & Zhu, Y. (2011). Differences by degree: Evidence of the net financial rates of return to undergraduate study for England and Wales. *Economics of Education Review*, 30(6), 1177-1186.
- Walsemann, K. M., Gee, G. C., & Gentile, D. (2015). Sick of our loans: Student borrowing and the mental health of young adults in the United States. *Social Science & Medicine*, 124, 85-93. <https://www.sciencedirect.com/science/article/pii/S0277953614007503>
- Yue, C. Y., & Abd Razak, A. Z. A. (2022). Factors Influencing Impulse Buying Behavior among Working Ladies in Selangor, Malaysia. *International Business Education Journal*, 15(2), 65-78. <https://ejournal.upsi.edu.my/index.php/IB EJ/article/view/7455>
- Zhao, X., Lynch, J. G., & Chen, Q. (2010). Reconsidering Baron and Kenny: Myths and truths out mediation analysis. *Journal of Consumer Research*, 37(2), 197-206. <https://academic.oup.com/jcr/article-abstract/37/2/197/1813998>