

## PARENTAL SAVING: DOES SSPN MATTER TO MY CHILDREN'S EDUCATION?

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**Abstract:** *Paradigm shift in today's education has witnessed significant changes in the current generation's way of thinking. Thus, this study aims to identify the parent's intention to save in Skim Simpanan Pendidikan Nasional (SSPN) for their children's future education. This study identified four factors that influence parent's awareness on SSPN saving scheme namely parent attitude, social influence, financial literacy and brand image. In addition, the mediating variable of parent's awareness was examined to identify its influence level toward parent's intention to save in SSPN for their children. Theory of Planned Behavior (TPB) has been adapted in this study. This research employed a structured online survey targeting approximately 400 parents from various age ranges in Malaysia. Data obtained was analysed using Partial Least Square-Structural Equation Modelling (PLS-SEM) and interpreted in two stages. In the first stage, measurement model was evaluated while structural model was evaluated in the second stage. The findings indicate that all the independent variables (parent attitude, brand image, financial literacy and social influence) will influence the parent's awareness and influence parent's intention to save in SSPN for their children's future education. The result of this study will contribute towards creating more awareness and dissemination of SSPN information and its benefits to the public especially to the parents for their children's education.*

**Keywords:** *SSPN, parent attitude, social influence, financial literacy, brand image, Theory of Planned Behaviour*

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## INTRODUCTION

Paradigm shift in today's education has witnessed the significant changes in current generation's way of thinking. Parents are aware of the importance of education for their children's future well-being (Wong et al., 2018). To address this concern, the government has introduced an educational loan known as National Higher Education Fund or in Malay as *Perbadanan Tabung Pendidikan Tinggi Nasional* (hereafter PTPTN) as a main source of financing to the student in pursuing higher level of education. The amount of PTPTN borrowed funds since its enforcement in year 1997 until 2016 amounted to RM35 billion (Aziz, 2016) disbursed to more than 2 million students (LoanStreet, 2016).

Undeniably, PTPTN educational loan is categorized as the government's generous educational loan scheme as the interest payment is rated at 1% per annum compared to other available education loans offered by banks. The repayment interest is intentionally kept at a low rate to make education affordable for everyone. The phenomenon has grown wildly among PTPTN borrowers who successfully graduated from Malaysian universities. They refuse to repay and some tend to defer the repayment with all sorts of excuses such as having low salary, unresponsive administrators, tedious procedures and annoying paperwork. With regards to this phenomenon, statistics have shown that the collection rate of the outstanding PTPTN loans falls at just 46% (LoanStreet, 2016). Thus, it is evident that the PTPTN defaulters were over 50% of the total number of borrowers

### SSPN in Malaysia

In year 2004, National Education Savings Scheme or in Malay known as Skim Simpanan Pendidikan Nasional (hereafter SSPN) was created by PTPTN as their product with the motive to encourage parents to save for their children's future education. Since its implementation in year 2004 until 31 December 2017, approximately 3.2 million SSPN accounts have been opened with a total amount of more than RM3.3 billion. The deposit in year 2017 has successfully reached beyond the targeted deposit RM550 million to RM727.40 million relatives to RM544.51 million in year 2016. This proved that the nation has begun to realize the importance of saving for their children's higher education. This was also an indirect indication that the nation has started to reduce its dependency on education loan.

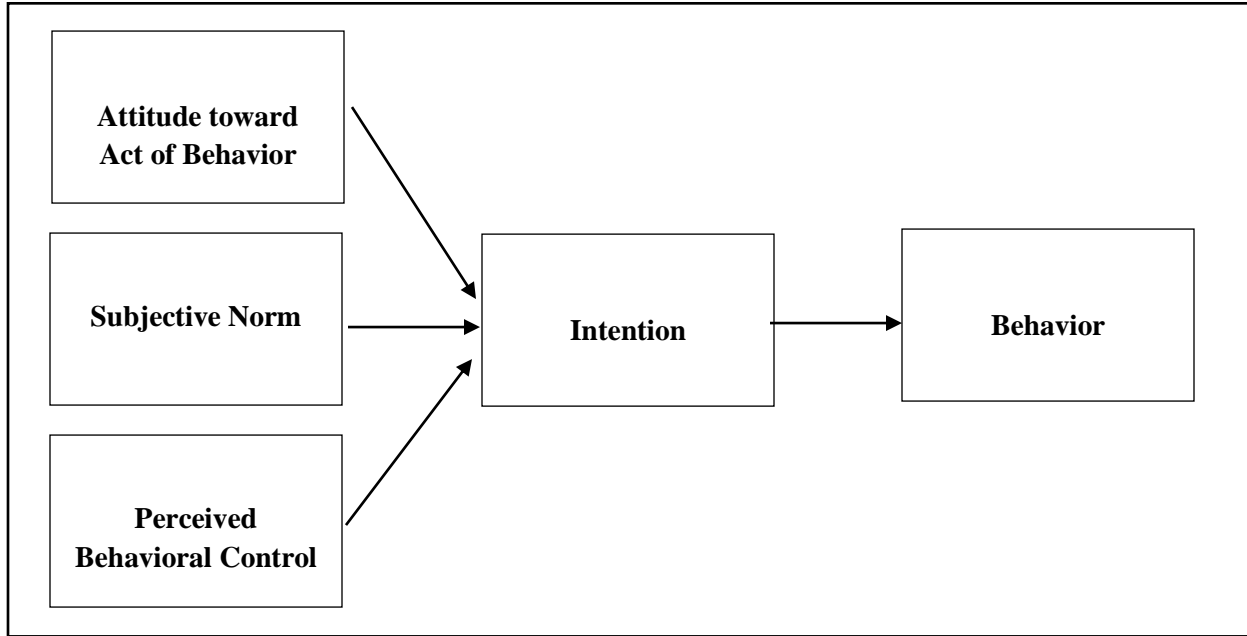
On 1 January 2012, PTPTN has designed a new saving scheme that is Shariah-compliant which uses the concept of "Wakalah Bil Istithmar" called SSPN1M-i whereby the savings will be managed by PTPTN for investment purposes. In the meantime, students who apply for PTPTN loan are required to have SSPN1M-i accounts with minimal savings as determined by PTPTN. This scheme offers a variety of advantages to the depositor such as release of income tax assessment on current year net saving up to RM6,000 per year for parents, free Takaful coverage on depositors of RM1,000 and above, dividend received exempted from income tax, entitled for grant to enter higher education institution up to RM10,000 for the family with monthly salary below RM4,000. Moreover, the savings in SSPN are guaranteed by the government.

On 8 June 2015, SSPN1M-i Plus was created with the additional benefit of Takaful coverage to the depositor and family. As at 31 December 2017, 182,396 accounts have been created with the total deposit amount of RM69.6 million. An amount of RM18.6 million has been channelled to the Takaful insurance. The claim amount from the Takaful coverage stood at RM8.3 billion as at 31 December 2017. The benefits from SSPN1M-i Plus include tax relief of up to RM12,000 per year, Takaful benefit for death or permanent disability up to RM1,000, no medical check-up required and funeral expenses (Khairat) including spouse and up to 3 children.

## **REVIEW OF LITERATURE**

### **Theory of Planned Behavior (1991)**

Theory of Planned Behavior (hereafter TPB) has been adapted in the study to examine several factors influencing the parent's intention to save in SSPN. Ajzen (1991) explained that TPB is to foresee and understand the consumer behavior. This theory indicates that individual behavior is driven by intention, which is determined by the individual's attitude toward behavior, subjective norms, and perceived behavioral control. According to Ajzen (1991), an attitude toward a behavior refers to the positive or negative evaluation of the particular behavior based on the individual's feelings and beliefs. Meanwhile, a subjective norm refers to the individual's perception of what significant others think and believe of the behavior. It relates to an individual's perception of the social environment surrounding the behavior. Perceived behavioral control refers to the individual's perception on the perceived difficulty of performing the behavior. This theory is an appropriate theory for studying the behavior of parents in Malaysia towards the National Education Saving Scheme (SSPN) for their children. The theory can be used to evaluate parents' general attitudes about the planning for their children's education saving, their feelings about the social norm influence towards saving behavior, the importance of financial literacy on saving behavior and the effect of saving scheme brand image and marketing on saving behavior. Some of the previous studies in Malaysia support the factors used in the theory as predictors of saving behavior (Abdul Jamal, Ramlan, Abdul Karim & Osman, 2015; Hamzah, Musa, Muda & Mohamed, 2011; Seong, Kai & Joo, 2011).



**Figure 1:** Theory of Planned Behavior

### **Parent Attitude (attitude toward action/behavior)**

Based on the TPB, Ajzen (1985, 1991) suggested that attitudes affect an individual's behavior. The author also described that attitudes consist of a number of important behavioral beliefs that influence the outcome. Parents' attitudes and roles in influencing the young adult behavior are considered great since the financial behavior formed in childhood persists into adulthood (Shim, Barber, Card, Xiao, & Serido, 2010). Past studies done by Cude et al. (2006) and Sam, Geetha, and Mohidin (2012) showed that parents' attitudes had successfully encouraged their children's financial socialization and influenced the children's financial behavior development. The authors also mentioned that parents should be one of the good examples and role models to their children in financial management. Similarly, Batty, Collins and Odders-White (2015) found that parent influences result in certain financial behavior before children are formally educated. In addition, Bucciol and Veronesi (2014) stated that parental attitudes towards financial education can encourage a young adult's willingness to save by 16% and increase their total saving amounts by 30%. Besides that, Norvilitis and MacLean (2010) also found that parents influence the saving and borrowing behavior of adults.

### **Social Influence (subjective norm)**

Ajzen (1985) revealed that subjective norms are related to the social influences and pressures on individuals whether to do or not do a particular behavior. Montandon (2014) stated that young adults are easily affected by peer influence and peer pressure in doing the decision making. The authors also indicated that social influence with closer peers has significant influence in the attitude and behavior of young adults. Abdul Jamal et al. (2015) found that peer influence could also predict the individuals' financial behavior. According to the authors, the major reason that many young adults failed in their financial management was due to peer pressure. In a similar way, Duflo and Saez (2001) concluded that based on their study in the United States, peer

influence has a significant role in the individual's financial decision such as savings behavior. This is because individuals with the same preferences tend to belong to the same circle of peer group, therefore creating an interconnection between the peer group and individual behavior. Likewise, Duensberry (1949) and Lim, Sia and Gan (2011) mentioned that individuals tend to compare their saving level with their peer group which results in an individual becoming motivated in saving behavior whenever the peer group saves higher than him/her.

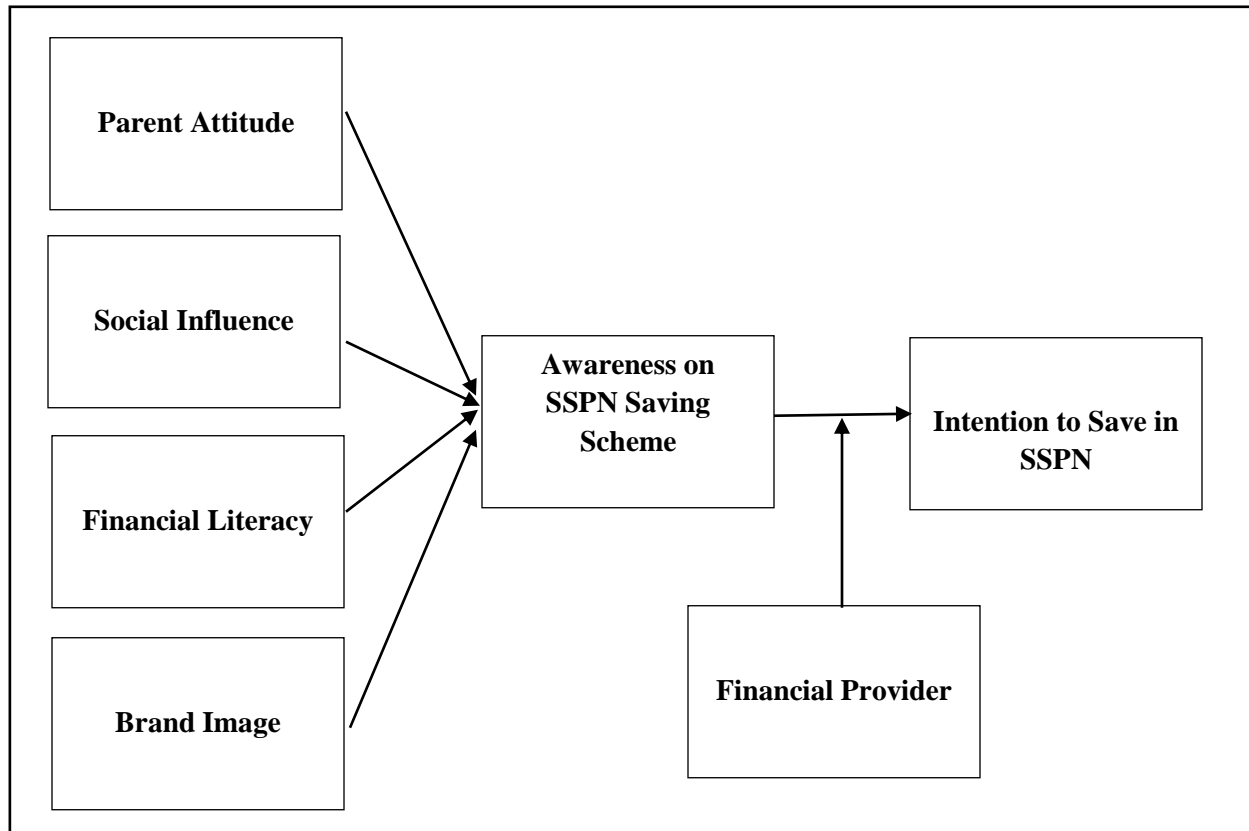
### **Financial Literacy (financial knowledge)**

Financial literacy aspect has been widely studied within the broad field of social science (Hayes, 2012; Chudry, Foxall & Pallister, 2011; Huston, 2010). According to Huston (2010), financial literacy measures specific financial knowledge as an independent variable derived from the original TPB. Norvilitis et al. (2006) found that lack of financial literacy is the most significant factor of financial problem. Similarly, Hamzah et al., (2011) and Gathergood (2012) revealed that having poor financial literacy will result in less saving thus increasing individuals' financial burden. According to Citi (2008) and Gan (2008) as cited in Boon et al. (2011), the awareness of adequate financial literacy is still considered at its early stage and being ignored by most Malaysians. In fact, due to the lack of financial literacy and awareness of their personal financial burdens, the savings amongst Malaysians are relatively low because majority of them do not have the saving habit (Abdul Jamal et al., 2015). In addition, Abdul Jamal et al. (2015) also found that financial literacy has a significant impact on attitude towards saving behavior. Buccioli and Veronesi (2014) proposed that adequate financial literacy since childhood can influence young adults' saving behavior. Homan (2016) presented a result of willingness to save and total savings relative to net income increasing by 2% when individuals had financial literacy which they received from parental or peer financial teaching compared to those who were not receiving any.

### **Brand Image**

The TPB is implemented in social psychology as a framework to evaluate the predicting and changing of behavior (Ajzen, 1991). Kumar and Raju (2013) mentioned that the purpose of branding and advertising is to influence an individual's behavior, which leads to the decision-making process through the inherent established emotion. A good branding image and strategy should focus on brand name awareness, perceived quality of the brand product and brand association (Aaker, 1991, 1996). A good brand image of saving scheme may become an attachment of symbolic attributes that will motivate an individual to like the specific brand and eventually become interested to do saving in its representative products.

There is minimal literature in Malaysia on the SSPN related research. Thus, this study aims to narrow the research gap by examining the factors that influence parent's intention to save in SSPN for their children's future education. The research framework has been designed in Figure 2 as below.



**Figure 2:** Research Framework

H<sub>1</sub>: Parent's attitude has a positive relationship in influencing the awareness towards SSPN Saving Scheme

H<sub>2</sub>: Social influences play a role in influencing the awareness towards SSPN Saving Scheme

H<sub>3</sub>: Financial literacy positively motivates in influencing the awareness towards SSPN Saving Scheme

H<sub>4</sub>: Brand Image has a positive relationship in influencing the awareness towards SSPN Saving Scheme

H<sub>5</sub>: Awareness on SSPN Saving Scheme has a significant effect on the intention to save money in SSPN

## METHODOLOGY

### Data Collection

This study employed quantitative approach. Data was obtained through a questionnaire created online in the Google form and reached the respondents through email. There were 201 valid questionnaires successfully collected from the 400 targeted respondents. Some questionnaires were found to be invalid due to inconsistent and misleading valuation answers given by the respondents. The research instrument was developed via adopting the relevant items and

variables through the past studies reference and measured using 5-points Likert scale. The questionnaire consists of six sections. Section A consists of the respondent's details such as gender, race, age, education level and monthly salary. Section B until section F consist of the items for each construct namely awareness on SSPN, social influence, parent attitude, brand image, financial literacy and intention to save in SSPN. Data obtained from the questionnaire will be analyzed via PLS-SEM.

Table 1 shows that 34.82% of the respondents are male whereas 65.18% are female. More than 50% respondents are Malay (51.24%), followed by Chinese (41.29%), Indian (5.47%) and Bidayuh (2.0%). Majority of them fall between the ages of 36 years old to 50 years old. All of the respondents' education levels fall within diploma level (15.42%) to Doctor of Philosophy (14.44%). Around 90% of the respondents obtained a monthly salary of more than RM2,500.

**Table 1:** Demographic Profile of Respondents

|                               | Frequency | Percentage (%) |
|-------------------------------|-----------|----------------|
| <b><i>Gender</i></b>          |           |                |
| Male                          | 70        | 34.82          |
| Female                        | 131       | 65.18          |
| <b><i>Race</i></b>            |           |                |
| Malay                         | 103       | 51.24          |
| Indian                        | 11        | 5.47           |
| Chinese                       | 83        | 41.29          |
| Bidayuh                       | 4         | 2              |
| <b><i>Age</i></b>             |           |                |
| Less than 25 years            | 0         | 0              |
| 25-35                         | 76        | 22.4           |
| 36-50                         | 115       | 42             |
| 50 and above                  | 10        | 28.8           |
| 51 and above                  | 0         | 6.8            |
| <b><i>Education Level</i></b> |           |                |
| Diploma/Advance Diploma       | 31        | 15.42          |
| Bachelor/Degree               | 63        | 31.34          |
| Master's degree               | 77        | 38.35          |
| Doctor of Philosophy          | 29        | 14.44          |
| Professional Certification    | 1         | 0.45           |
| <b><i>Monthly Salary</i></b>  |           |                |
| Below RM2,500                 | 18        | 9              |
| RM2,501- RM3,500              | 21        | 10.44          |

|                   |    |       |
|-------------------|----|-------|
| RM3,501- RM4,500  | 45 | 22.36 |
| RM4,501- RM5,500  | 40 | 19.9  |
| More than RM5,500 | 77 | 38.3  |

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Source: Developed for research

Next, the PLS-SEM analysis was performed in two stages. In the first stage, measurement model was evaluated while structural model was evaluated in the second stage. The measurement mode evaluated the relations between observed items and latent variables. The measurement variable model examined through assessment of validity and reliability of the construct measures in the model. This ensures that only reliable and valid constructs' measures were used to assess the nature of the relationship in the overall model.

## Measurement Model

### *Convergent Validity*

To analyze the latent constructs' convergent validity, the standardized factor loading ( $>0.6$ ), the average variance extracted ( $AVE > 0.5$ ), and the composition reliability ( $CR > 0.7$ ) was carried out. Based on Table 2, factor loading for all items exceeded the recommended value of 0.6 (Chin, Gopal & Salisbury, 1997). The composite reliability values, which depict the degree to which the construct indicator indicates the latent construct, ranged from 0.626 to 0.916, and exceeded the recommended value of 0.6 (Hair, Black, Babin & Anderson, 2010). The average variance extracted, which reflected the overall amount of variance in the indicators accounted for by the latent constructs, was in the range of 0.508 to 1.000, and exceeded the recommended value of 0.5 (Hair et al., 2010).



**Table 2:** Factor Loading and Reliability

| Variable         | Items | Loading | Composite Reliability | Average Variance Extracted | Cronbach Alpha |
|------------------|-------|---------|-----------------------|----------------------------|----------------|
| Awareness        | A1    | 0.718   | 0.858                 | 0.601                      | 0.779          |
|                  | A3    | 0.805   |                       |                            |                |
|                  | A4    | 0.765   |                       |                            |                |
|                  | A5    | 0.810   |                       |                            |                |
| Brand Image      | BI1   | 0.845   | 0.942                 | 0.700                      | 0.928          |
|                  | BI2   | 0.854   |                       |                            |                |
|                  | BI3   | 0.830   |                       |                            |                |
|                  | BI4   | 0.821   |                       |                            |                |
|                  | BI5   | 0.815   |                       |                            |                |
|                  | BI6   | 0.822   |                       |                            |                |
|                  | BI7   | 0.866   |                       |                            |                |
| Literacy         | FI_   | 1.000   | 1.000                 | 1.000                      | 1.000          |
| Intention        | I1    | 0.810   | 0.836                 | 0.508                      | 0.762          |
|                  | I3    | 0.743   |                       |                            |                |
|                  | I4    | 0.715   |                       |                            |                |
|                  | I6    | 0.727   |                       |                            |                |
| Parent Attitude  | MM1   | 0.727   | 0.863                 | 0.515                      | 0.810          |
|                  | MM2   | 0.749   |                       |                            |                |
|                  | MM3   | 0.812   |                       |                            |                |
|                  | SM1   | 0.626   |                       |                            |                |
|                  | SM3   | 0.740   |                       |                            |                |
| Social Influence | SM4   | 0.633   | 0.883                 | 0.717                      | 0.811          |
|                  | SI3   | 0.897   |                       |                            |                |
|                  | SI4   | 0.916   |                       |                            |                |
|                  | SI5   | 0.712   |                       |                            |                |

Source: Developed for research

### Discriminant Validity

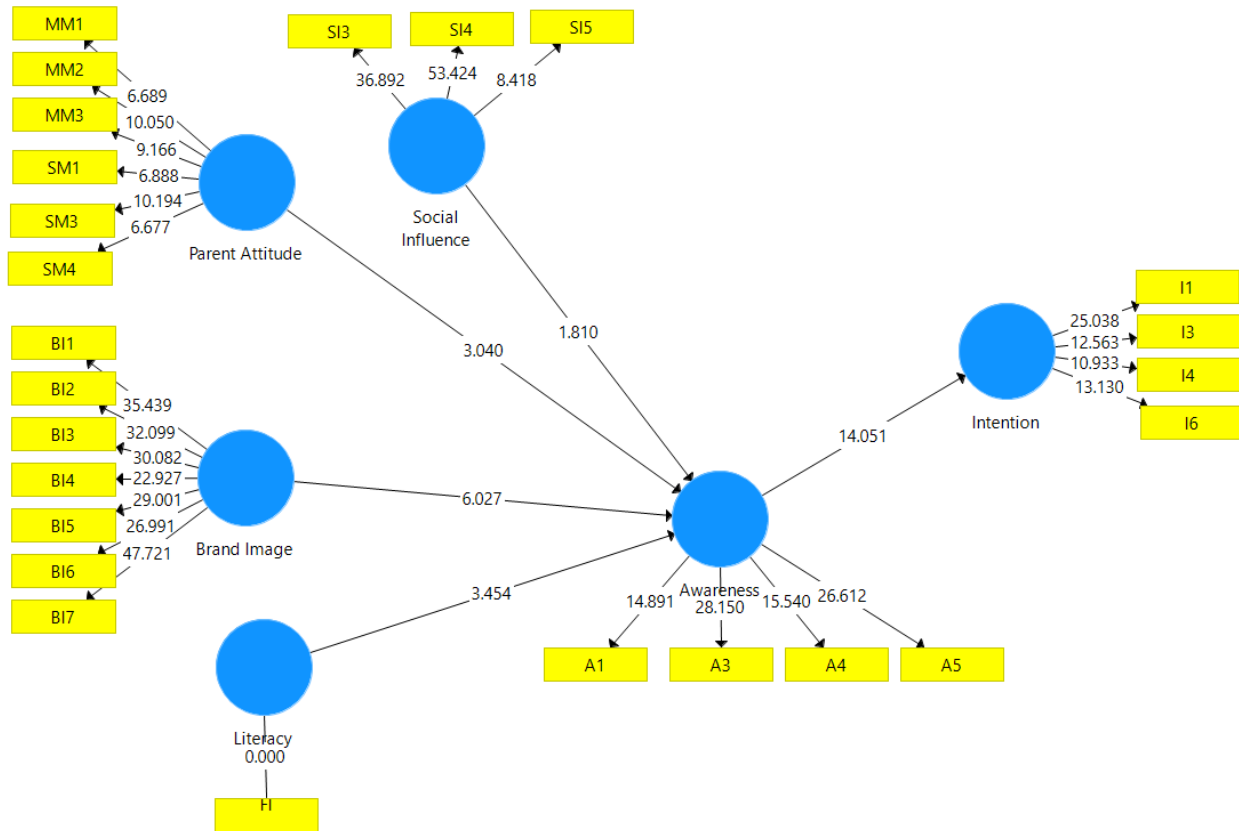
Discriminant validity is the extent to which the measures do not reflect other variables and it is indicated by low correlations between variables by examining the comparison between average variance extracted (hereafter AVE). Based on formula by Fornell and Larcker (1981), it requires that square root for each construct's AVE is higher than all its correlation with other constructs. As shown in Table 2, the squared correlations for each construct were less than square root of the average variance extracted, so it can be inferred that the constructs have a good level of validity.

**Table 3: Inter-Construct Correlation**

|                  | Awareness | Brand Image | Intention | Literacy | Parent Attitude | Social Influence |
|------------------|-----------|-------------|-----------|----------|-----------------|------------------|
| Awareness        | 0.775     |             |           |          |                 |                  |
| Brand Image      | 0.504     | 0.836       |           |          |                 |                  |
| Intention        | 0.631     | 0.552       | 0.750     |          |                 |                  |
| Literacy         | 0.089     | -0.162      | -0.010    | 1.000    |                 |                  |
| Parent Attitude  | 0.259     | 0.148       | 0.369     | -0.005   | 0.717           |                  |
| Social Influence | 0.370     | 0.519       | 0.321     | -0.145   | 0.154           | 0.847            |

Source: Developed for research

**Structural Model**



**Figure 3: Structural Model**

Source: Developed for research

Once the reliability and the validity of the measures are assured, path coefficients can be reported based on the results of a PLS structural model. Table 4 shows the significance of the path coefficients. The t-value can be compared with critical value form the standard normal

distribution to decide whether the coefficients are significantly different from zero. For instance, the critical value for significance levels of 5 percent probability of error is 1.96 (two-tailed test). In this study, the results showed that all the independent variables (Parent Attitude, Brand Image, Financial Literacy and Social Influence) are significant with parent's awareness toward SSPN saving scheme and will influence the parent's intention to save in SSPN for their children's future education.

**Table 4:** Summary of the Structural Model

| Description                   | Hypothesis | Path coefficient | t-value   | Results   |
|-------------------------------|------------|------------------|-----------|-----------|
| Parent Attitude -> Awareness  | H1         | 0.173            | 3.040***  | Supported |
| Social Influence -> Awareness | H2         | 0.146            | 1.810*    | Supported |
| Literacy -> Awareness         | H3         | 0.181            | 3.454***  | Supported |
| Brand Image -> Awareness      | H4         | 0.431            | 6.027***  | Supported |
| Awareness -> Intention        | H5         | 0.631            | 14.051*** | Supported |

Note: all p-values are two-tailed, \* significant at 0.05, \*\*\* significant at 0.001.  
 Source: Developed for research

Further, a non-parametric multi-group analysis (PLS-MGA) method was conducted to see whether there are different significantly financial provider groups towards intention to save in SSPN education scheme. As seen from Table 5, there are significant differences across the financial provider groups at 0.05 significant levels under brand image and awareness factors.

**Table 5:** PLS-MGA (Difference between Financial Providers)

| Description                   | Path Coefficients (Financial Provider) |          | Path Coefficients (Non-Financial Provider) |          | Remarks              |
|-------------------------------|--|----------|--|----------|----------------------|
|                               |  | p-values |  | p-values |                      |
| Parent Attitude -> Awareness  | 0.189                                  | 0.103    | 0.268                                      | 0.000    | No difference exists |
| Social Influence -> Awareness | 0.234                                  | 0.040    | 0.116                                      | 0.295    | No difference exists |
| Literacy -> Awareness         | 0.324                                  | 0.000    | 0.060                                      | 0.393    | No difference exists |
| Brand Image -> Awareness      | 0.338                                  | 0.001    | 0.447                                      | 0.000    | Difference exists    |
| Awareness -> Intention        | 0.649                                  | 0.000    | 0.627                                      | 0.000    | Difference exists    |

Note: all p-values are two-tailed, \* significant at 0.05, \*\*\* significant at 0.001.  
 Source: Developed for research

## **IMPLICATION AND CONCLUSION**

The purpose of this study is to identify the parent's intention to save in SSPN for their children's future education. The findings in this study showed that parent attitude, brand image, financial literacy and social influence are significant with awareness and intention to save in SSPN scheme. All the hypothesis testing is accepted in influencing the awareness towards SSPN Saving Scheme. However, differences exist between financial provider groups under brand image and awareness factors.

Furthermore, this study may be beneficial to the PTPTN management to improve their strategy to promote SSPN as an attractive national saving scheme. This can be performed via collaboration of the relevant governmental and non-governmental agencies to expand its programme offerings by taking proactive alternatives to increase awareness among parents who are saving for their children's future tertiary education. It is evident from this study that parents have awareness to save in SSPN scheme but the lack of information pertaining to its returns and benefits could be an impediment to that intention.

In addition, the importance of savings and financial planning for higher education to reduce students' reliance on loans alone could substantiate the reasons for awareness among parents. Parents have to be financially prepared to ensure their children will have a chance to further their studies when they grow up. Hence, continuously offering new incentives or providing special privileges for school leavers without standing results will raise awareness on SSPN as an educational saving scheme.

In conclusion, parents need to start saving for their children's education as early as possible to ease the burden of funding their tertiary education studies. As the cost of a university education is set to rise as years roll by, good planning serves as a crucial dimension for the parents.

## REFERENCES

- Aaker, D. (1991). *Managing brand equity: Capitalizing on the value of the brand name*. New York, NY: The Free Press.
- Aaker, D. (1996). *Building Strong Brands*. New York, NY: The Free Press.
- Abdul Jamal, A. A., Ramlan, W. K., Abdul Karim, M. R., & 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(11-1), 110-119.
- Ajzen, I. (1985). *From intentions to actions: A theory of planned behavior*. In Kuhl & Beckman (Eds.), *Action Control: From Cognition to Behavior* (11-39).
- Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, 50(2), 179-211.
- Aziz, A. A. (2016). The impact of CSR, word of mouth in brand image effectiveness at PTPTN agency. *Journal Postgraduate*, 1(1), 8-13.
- 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.
- Boon, T. H., Yee, H. S., & Ting, H. W. (2011). Financial literacy and personal financial planning in Klang Valley, Malaysia. *International Journal of Economics and Management*, 5(1), 149-168.
- Buccioli, A., & Veronesi, M. (2014). Teaching children to save: What is the best strategy for lifetime savings? *Journal of Economic Psychology*, 45, 1-17.
- Chin, W. W., Gopal, A., & Salisbury, W. D. (1997). Advancing the theory of adaptive structuration: The development of a scale to measure faithfulness of appropriation. *Information Systems Research*, 8(4), 342-367.
- Chudry, F., Foxall, G., & Pallister, J. (2011). Exploring attitudes and predicting intentions: Profiling student debtors using an extended theory of planned behavior. *Journal of Applied Social Psychology*, 41, 119-149.
- Cude, B., Lawrence, F., Lyons, A., Metzger, K., LeJeune, E., Marks, L., & Machtmes, K. (2006). College students and financial literacy: What they know and what we need to learn. *Proceedings of the Eastern Family Economics and Resource Management Association*, 102-109.
- Duesenberry, J. S. (1949). *Income, saving, and the theory of consumer behavior*. Cambridge, Mass: Harvard University Press.
- Duflo, E., & Saez, E. (2001). Participation and investment decisions in a retirement plan: The influence of colleagues' choices. *Journal of public Economics*, 85(1), 121-148.
- Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of Marketing Research*, 18(1), 39-50.
- Gathergood, J. (2012) Self-control, financial literacy and consumer over-indebtedness. *Journal of Economic Psychology*, 33(3), 590-602.
- Hair, J. F, Black, W. C., Babin, B. J., & Anderson, R. R. (2010). *Multivariate data analysis*. Upper Saddle River, New Jersey: Prentice- Hall.
- Hamzah, H., Musa, R., Muda, M., & Mohamed, R. N. (2011). Analysing the predicting factors influencing parents to save in National Education Savings Scheme (SSPN).

- In *Humanities, Science and Engineering (CHUSER), 2011 IEEE Colloquium on* (pp. 951-956). IEEE.
- Hayes, D. (2012). Higher education and financial literacy: A new paradigm. *Diverse: Issues in Higher Education, 29*(5), 8-9.
- Homan, A. M. (2016). The influence of parental financial teaching on saving and borrowing behavior. Unpublished Master Thesis.
- Huston, S. (2010). Measuring financial literacy. *Journal of Consumer Affairs, 44*(2), 296-316.
- Kumar, D. P., & Raju, K. V. (2013). The role of advertising in consumer decision making. *IOSR Journal of Business and Management (IOSR-JBM), 14*(4), 37-45.
- Lim, C. S., Sia, B. K., & Gan, G. J. (2011). The analysis of psychological factors affecting savers in Malaysia. *Middle Eastern Finance and Economics, 12*, 77-85.
- LoanStreet (2016, May 23). *The real consequences of not paying back your PTPTN loan*. Retrieved from <https://loanstreet.com.my/learning-centre/the-real-consequences-of-not-paying-back-your-ptptn-loan>.
- Norvilitis, J. M., & MacLean, G. M. (2010). The role of parents in college students' financial behaviors and attitudes. *Journal of Economic Psychology, 31*(1), 55-63.
- Norvilitis, J., Merwin, M., Osberg, T., Roehling, P., Young, P., & Kamas, M. (2006). Personality factors, money attitudes, financial knowledge, and credit-card debt in college students. *Journal of Applied Social Psychology, 36*(6), 1395-1413.
- Montandon, A. (2014). Social influence of siblings and friends in generation Y's development of risk preferences. Retrieved on June 10, 2018 from [https://open.uct.ac.za/bitstream/handle/11427/8540/thesis\\_com\\_2014\\_com\\_montandon\\_a.pdf?sequence=4](https://open.uct.ac.za/bitstream/handle/11427/8540/thesis_com_2014_com_montandon_a.pdf?sequence=4).
- Sam, Y. T., Geetha, C., & Mohidin, R. (2012). What were the factors that influence the financial management behavior of undergraduates? *International Journal of Business Trends and Technology, 2*(1), 1-10.
- Seong L. C., Kai, S. B., & Joo, G. G. (2011). The analysis of psychological factors affecting savers in Malaysia. *Middle Eastern Finance and Economics, 12*, 78-85.
- 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.
- Wong, R. S. M., Ho, F. K. W., Wong, W. H. S., Tung, K. T. S., Chow, C. B., Rao, N., ... & Ip, P. (2018). Parental involvement in primary school education: Its relationship with children's academic performance and psychosocial competence through engaging children with school. *Journal of Child and Family Studies, 1*-12.