

FINANCIAL LITERACY RESEARCH ON UNDERGRADUATE STUDENTS IN MALAYSIA: CURRENT LITERATURE AND RESEARCH OPPORTUNITIES

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ABSTRACT

The needs of financial literacy are becoming increasingly important for undergraduate students in the Malaysian context. As a developing nation, rising cost of living and dynamic fluctuations price of goods and services demand people to be financially equipped in financial decision making, especially young adults which include undergraduate students. This paper reviews four published studies on financial literacy of undergraduate students in Malaysia. As a result, this paper presents research gaps from the existing literature, proposes research opportunities that not only targeted at scholars but academicians teaching financial literacy in schools and universities.

Keywords: financial literacy, financial education, financial skills

1.0 INTRODUCTION

The global marketplace is an increasingly risky and can be unpredictable. It affects the nations and the societies. One of its main implications include rising costs of goods and services that push people to be able to be able to make well-informed financial decisions (Lusardi & Mitchell, 2011a). This phenomenon requires individuals to be equipped with some knowledge and skills relating to personal financing, or simply financial literacy.

In academia, financial literacy can be defined as “one’s understanding and knowledge of financial concepts” (Fox, Bartholomae, & Lee, 2005; Hogarth & Hilgert, 2002). Hogarth (2002) describes financial literacy as the ways how people manage their money in terms of insuring, investing, saving and budgeting. She further

described that financial literacy is the understanding and knowledge of basic financial concepts, and the ability to use them to plan and manage their financial decisions (Hogarth, 2002).

The knowledge and skills related to money management include the ability to balance a checkbook, prepare a budget and invest in financial products (Beverly & Burkhalter, 2005). The researcher agrees to adapt the generic definition of financial literacy as: “the ability to make informed judgments and to make effective decisions regarding the use and management of money” (Hung, Parker, & Yoong, 2009; Schagen & Lines, 1996) to guide his review. This paper examines four published studies in financial literacy in the Malaysian context, finds the relevant research gaps and proposes future research opportunities for continuing development in financial literacy.

2.0 THE IMPORTANCE AND NEEDS OF FINANCIAL LITERACY

Financial literacy provides the necessary knowledge, skills and tools for individuals to make informed financial decisions with confidence, to manage personal wealth with efficiency and to increase financial competence to demand for better financial services (Ali, 2013). Incompetency in financial literacy will limit ability to make informed financial decisions. When individuals cannot manage their finances, then it is a problem to society (Chen & Volpe, 1998). Increasing financial literacy and capability promotes better financial decision-making, thus, enabling better planning and management of life events such as education, housing purchase, or retirement (Mahdzan & Tabiani, 2013).

3.0 RESEARCH ON THE FINANCIAL LITERACY OF UNDERGRADUATE STUDENTS IN MALAYSIA

This paper has selected four published studies based on their main focus on the financial literacy of university students in Malaysia. The earliest published paper presented here is 2004 (Jariah, Husniyah, Laily, & Britt, 2004), then 2009 (Ibrahim, Harun, & Isa, 2009) and 2010 (Sabri, MacDonald, Hira, & Masud, 2010), and the latest is in 2013 (Shaari, Hasan, & Kumar, 2013).

3.1 Jariah, Husniyah, Laily, and Britt(2004)

This study’s main focus was to examine the financial behavior of university and college students. A self-administered questionnaire was used to collect data in this study and ten percent of all students receiving student loans from one public university participated in the study. Eighteen hundred questionnaires were distributed and fifteen hundred were returned and usable. Variables used in this study were 13 items on the Likert scale treatment describing financial behavior and a list of 16 financial related experiences or problems. The respondents were also

asked to indicate which of the 10 financial education topics they are interested in attending. The socioeconomic variables tested were gender, age, marital status, place of origin, number of siblings, academic achievement, whether the respondents experienced staying in boarding school, parent's marital status, educational attainment, and occupation. Descriptive statistics are used to present the data. 1500 students participated in the study with 40:60 split males and females. Malays represented more than 70% of the respondents followed by Chinese, Indian and other ethnics. On top of that, 46% of respondents were from rural areas and 31% from urban areas.

The males reported that they were receiving slightly more than females with those from dual income families receiving an average of US\$63.96 (RM243.10) compared to only US\$43.62 (RM165.75) among those with one earner parent. With regards to financial behavior, more female respondents tended to enjoy shopping and bought items that were on sale. The males however, tended to hide their spending habits from their families and reported that their debts create problems. There were respondents who had involved in impulse purchases and were easily influenced by sales promotion activities. Females were experiencing financial problems compared to males. More than half of respondents reported skipping meals to save money, especially those living off-campus and those from rural areas. 35% from rural areas indicated that they had financial matters that had an impact to their studies compared to only 23% from urban areas. 50.7 % of those who lived off-campus generally did not have sufficient money compared to those living on campus where some had resorted to borrowing from friends. When their financial problems were compared to academic achievements, those with a higher grade point average (GPA) reported fewer problems compared to those with a lower GPA. Ethnic groups from Sabah and Sarawak located in the East Malaysia (the public university where the survey was conducted located in the Peninsular Malaysia) reported higher means of financial problems. 90% reported that they were interested in learning about specific topics in financial education, where the highest percentage of them needed counselling services, followed by learning about savings and investment, budgeting, how to increase their income and financial management. More than half of the respondents reported that they would like to learn about personal management, how to reduce spending, insurance protection and wise spending. The researchers agreed that students were given knowledge and skills for job seeking, but they were lacking basic financial knowledge and skills that could help them to manage their income effectively when they enter the job market. This study had data that supported that respondents did not have sufficient knowledge and skills about managing their financial affairs. The researchers suggested that financial

education should be introduced at the college level or earlier to prepare students to manage their finances effectively.

3.2 Ibrahim, Harun, and Isa (2009)

This study surveyed the level of financial knowledge, financial attitudes and family influences based on gender, programs and parts (semesters) of UiTM Kedah degree students. The researchers recruited a sample size of 200 degree students using a random sampling method across all programs, namely Bachelor of Marketing, Bachelor of Islamic Banking, Bachelor of Administration Science and Bachelor of Information Service. Out of 200 students participated, 133 completed questionnaires were usable. The researchers conducted descriptive analysis for interpretation of data and cross-tabulation technique to study the relationship between variables.

It was found that there were no differences in the level of financial knowledge and family influences based on gender, programs and parts. There were also no differences found in financial attitudes based on programs and parts. Family influences were also not affected by gender, programs and parts. However, differences were found in the level of financial attitudes based on gender. A correlation was found between financial literacy and financial attitude. Those who had higher level financial attitude has higher level of financial literacy.

It was reported that degree students with high level of financial literacy were influenced by gender and mothers' education backgrounds but not programs and parts. The researchers of this study concluded that the degree students in UiTM Kedah campus were lacking their financial knowledge and hence, weak money management skill. The campus however had financial related seminars held that were targeted for business or finance students only due to budget constraints but the participation rate was low. They highlighted that the studies on financial literacy among the age group of 18 to 24 years old in Malaysia are very limited, especially those below than 18 years old as they need to improve their financial knowledge before entering colleges or universities.

3.3 Sabri, MacDonald, Hira, and Masud (2010)

The study investigated the impact of personal and family background, academic ability, and childhood experiences on the financial literacy of college students in Malaysia. A total of 2,519 questionnaires were used out of 3,850 questionnaires that were distributed to five public colleges, five private colleges and one public university. The *t* tests were used to examine the significance of mean differences in financial literacy for predictors with two categories and analysis of variance to test for literacy mean differences with multiple category variables. Tests of hypotheses were obtained from ordinary least squares multiple regressions in a step-wise procedure.

The results showed that the average score on the 25-item of financial knowledge is 11.77, that was less than half of the questions answered correctly by the students. Surprisingly, students of Chinese ethnicity have lower mean scores than Malay, Indian and the other ethnic groups which was not consistent with a previous finding in the study conducted by Abu Bakar, Masud, and Md. Jusoh (2006) that the Chinese students were more likely to have greater knowledge about education loans. The students from private colleges had lower financial literacy scores than students from public colleges while first year students while those students who never had an experience discussing finances with parents are also likely to have low scores. College students who lived off-campus were more likely to have greater financial knowledge compared those on campus, probably because they have more financial responsibilities and liabilities as the researchers suggested. Another interesting finding from the study was that the level of financial literacy of students from less well-off families was greater than those from upper-income families.

3.4 Shaari, Hasan, and Kumar (2013)

The main purpose of this study was to examine the financial literacy among university students. The primary data was collected from a sample of 384 out of 2500 questionnaire forms distributed to the university students in Malaysia using convenience sampling method. The independent variables were age, gender, faculty, spending habit and year of study while the dependent variable was the financial literacy. The researchers used reliability and multiple regression analysis to study the data.

Based on ANOVA tests, positive relationships had been found between personal financial literacy and the level of education. Participants with a higher level of education, attending full time or graduating from a 4-year college have a higher level of financial literacy. There were positive relationships among the three independent variables, namely gender, faculty and year of study but the other two independent variables; age and spending habit had a negative relationship with the financial literacy level of the university students. The researchers also found that there was no significant relationship between financial literacy level and the respondents' gender. They concluded that administrators at high school, colleges and universities could use the study findings to be able to prepare and modify courses, seminar or programs to increase the students' awareness of the financial literacy.

In general, the study provided an evidence that financial illiteracy was a problem among college students in Malaysia. The average score of 25-item test was less than 12 and multivariate analysis revealed that financial illiteracy was significant among Chinese students, those who live on campus, and students at private colleges. The

researchers suggested that Malaysian private and public college administrators and faculty leaders to consider how to monitor and improve financial knowledge for their students.

4.0 RESEARCH GAPS

There are four published papers presented here in which they are selected based on their main focus of study on the financial literacy of undergraduate students in Malaysia. All the researchers have employed quantitative procedures and statistical analysis to examine the level of financial literacy of undergraduate students in Malaysia and their attributes such as gender, background and age. While quantitative data can be used to describe characteristics of a population, qualitative data is suitable to describe individual experiences, in this case financial experiences in managing personal finance.

The researchers of all four studies recommend the need for undergraduate students to be involved in financial literacy programs at any point during their studies. The rising need for financial literacy programs is also prominent in developed countries such as US (Boyland & Warren, 2013), UK (*Adult financial literacy advisory group (AdFLAG)*, 2000), Australia (Fry, Mihajilo, Russell, & Brooks, 2006), New Zealand and Japan (Cameron, Calderwood, Cox, Lim, & Yamaoka, 2013). In other words, the issue of lacking financial literacy knowledge and skills is now a global phenomenon, so much it is referred as financial education or financial literacy programs.

Financial literacy generally improves as people age (Chen & Volpe, 1998; Volpe, Kotel, & Chen, 2002), although Joo et al. (2003) did not have age as a significant result in their research on credit attitudes. A research by Henry, Weber, & Yarbrough (2001) found that students 36-40 were more likely to budget than students under 20. Hogarth & Hilgert (2002) revealed that those in the 18-24 were those one of the least financially knowledgeable. The researchers of all four studies agreed that their student respondents were lacking financial knowledge. There should be studies that aim to highlight reasons why young people are vulnerable with financial problems and why they have the least knowledge on financial literacy even most of them have gone through formal training or workshops.

Sabri et al. (2010) found that there was no significant relationship between financial literacy level and the respondents' gender, in contrast with the study conducted by Shaari et al. (2013) and Ibrahim et al. (2009) where female respondents had scored lower than male respondents. In other related studies, female respondents had been known to score lower marks in financial literacy tests (Chen & Volpe, 1998; Murphy, 2005; Volpe, Chen, & Pavlicko, 1996). Hogarth and Hilgert (2002) also found a disproportionate number of women in the less financially knowledgeable category. However, Donohue (2011) in her thesis entitled "Financial literacy and women: A mixed

method study of challenges and needs” suggested that the idea the gender-based difference in financial literacy may not be due to weaknesses in women’s financial knowledge, but rather to disparities in women’s access to capital compared to men such as having limited legal rights in the financial spectrum in terms of owning land and having access to credit independent of their husbands. She added that the accepted definition of financial literacy may not only incomplete, but may have significant gender-related issues as it masks areas of women’s financial knowledge and provides evidence that is not necessarily accurate (Donohue, 2011). The study of gender in financial literacy can be further explored.

Regarding ethnic groups and financial literacy, a study by Sabri et al.(2010) showed somewhat a controversial finding that students of Chinese ethnicity had lower mean scores than Malay, Indian and the other ethnic groups which is contradict with the previous study by Abu Bakar et al. (2006). Generally, racial minority college students had lower rates of financial literacy knowledge and practice than the racial majority(Chen & Volpe, 1998; Joo et al., 2003). However, Chen and Volpe’s (2002) subsequent research did not show any significant racial impact with Asians, Blacks, Latinos and Whites. This is definitely a point to ponder and requires further examination.

A study of financial behavior by Jariah et al.(2004) discovered that female respondents tended to enjoy shopping and bought items that were on sale, and they also experienced more financial problems compared to males. Males however, tended to hide their spending habits from their families. It seems that there is again a significant issue regarding gender not only with regards to the level of financial knowledge but also to financial behavior.

5.0 FUTURE RESEARCH OPPORTUNITIES

The existing studies of financial literacy of undergraduate students in Malaysia are mainly based on quantitative data. As much as we would like to know the level of financial literacy of our undergraduate students in Malaysia, it is also essential to understand how these students experience in managing their personal finance which may also impact their financial behavior. We can obtain these kind of data by interviewing or even by observing their daily activities, through ethnographic method (Fetterman, 2010). The study by Jariah et al.(2004) which examines the financial behavior of students can be extended to include some qualitative elements. Such qualitative data is useful for studies at the individual level, and to find out, in depth, the ways in which these students think or feel.

It is apparent now that providing financial literacy to undergraduate students is a national agenda (Ali, 2013). The problem has been identified by existing researches, the focus should now be on how to deliver financial

literacy effectively to all undergraduate students in Malaysia. There can be various methods, such seminars, information pamphlets or booklets, printed medias and also the Internet (Toussaint-comeau & Rhine, 2000). Financial literacy educators and researchers can work together to design a curriculum that is best suited to undergraduate students in Malaysia, using Malaysian cases and examples. The researchers can examine motivation of students to learn or retain financial literacy skills after they have taken a course in personal finance (Mandell & Klein, 2007) . The data can be used to evaluate the effectiveness of such course being implemented in colleges or universities.

The study by Jariah et al. was conducted in December 2002 where a self-administered questionnaire was delivered to students from one public university (Jariah et al., 2004) and that was ten years ago. A new study can be proposed to reflect the current financial literacy level of undergraduate students, but this time, it can incorporate the transtheoretical model of change (TTM) into a research design. Its purpose is to explore change processes that effectively help people who want to change their financial behavior (Xiao et al., 2001, 2004). According to Xiao et al. (2001) financial behavior changes can include the following components: eliminating an undesirable behavior such as impulsive buying, or developing a desirable behavior, such as saving money. Stage of change can be assessed using self-report methods, by binary response: yes or no) to the following four statements (Xiao et al., 2001):

1. I solved my problem more than six months ago.
2. I have taken action on my problem within the past six months.
3. I am intending to take action in the next month.
4. I am intending to take action in the next six months.

Educators in financial literacy can then use the data to develop programs that appeal to people at different stages of readiness for behavior change. This theory can also be applied to better understand the factors that contribute to individuals' attitudes toward money (Tang & Gilbert, 1995). Both financial literacy and financial behavior (which are correlated) tend to increase with formal education to the point where college seniors, regardless of major, tend to be reasonably capable of handling their own finances (Mandell, 2011) and also their future earning capacity (Danes & Hira, 1987).

6.0 CONCLUSION

This paper comments on the selected studies on financial literacy in Malaysia. There are more relevant studies in the same subject which conveys the lacking of financial literacy knowledge and skills of undergraduate students not only in Malaysia but also other nations (Lusardi & Mitchell, 2011b). While most of the studies were conducted using quantitative method, the author feels that there is a need to use qualitative method such as ethnography to deeply understand the underlying reasons why these students reported that they were lacking the important aspects in financial literacy such as budgeting and cash flow. Moreover, the existing curriculum of financial literacy teaching in schools and universities may need to be revamped by taking considerations the stage of change of students (Xiao et al., 2004) and then design it accordingly.

Finally, further research on financial literacy in Malaysia should also focus on the gender and ethnic issues as it seems that there are inconsistencies in the existing research findings. A national benchmark on the financial literacy level can be established by academicians and scholars to make sure the educational initiatives are effective and sustainable.

REFERENCES

- Abu Bakar, E., Masud, J., & Md. Jusoh, Z. (2006). Knowledge, attitude, and perceptions of university students towards educational loans in Malaysia. *Journal of Family and Economic Issues*, 27, 692–701.
- Adult financial literacy advisory group (AdFLAG)*. (2000). London.
- Ali, S. (2013). *Financial literacy in Malaysia: Issues and status update*.
- Beverly, S. G., & Burkhalter, E. K. (2005). Improving the financial literacy and practices of youth. *Child Sch*, 27(2), 121–124.
- Boyland, J., & Warren, R. (2013). Assessing the financial literacy of domestic and international college students. *MBA Student Scholarship, Paper 18*.

- Cameron, M. P., Calderwood, R., Cox, A., Lim, S., & Yamaoka, M. (2013). Personal financial literacy among high school students in New Zealand, Japan and the United States. Hamilton, New Zealand.
- Chen, H., & Volpe, R. P. (1998). An analysis of personal financial literacy among college students. *Financial Services Review*, 7(2), 107–128. doi:10.1016/S1057-0810(99)80006-7
- Chen, H., & Volpe, R. P. (2002). Gender differences in personal financial literacy among college students. *Financial Services Review*, 11, 289–307.
- Danes, S. M., & Hira, T. K. (1987). Money management knowledge of college students. *The Journal of Students Financial Aid*, 17(1), 4–16.
- Donohue, M. (2011). *Financial literacy and women: A mixed method study of challenges and needs*. University of Massachusetts.
- Fetterman, D. M. (2010). *Ethnography: Step-by-step* (3rd ed.). California: Sage Publications, Inc.
- Fox, J., Bartholomae, S., & Lee, J. (2005). Building the case for financial education. *Journal of Consumer Affairs*, 59(1), 199–214.
- Fry, T. R. L., Mihajilo, S., Russell, R., & Brooks, R. (2006). *Evaluation of the Australian MoneyMinded financial literacy program*.
- Henry, R. A., Weber, J. G., & Yarbrough, D. (2001). Money management practices of college students. *College Student Journal*, 35(2), 244–249.
- Hogarth, J. M. (2002). Financial literacy and Family. *Journal of Family and Consumer Sciences*, 94, 1–12.
- Hogarth, J. M., & Hilgert, M. (2002). Financial knowledge, experience and learning preferences: Preliminary results form a new survey on financial literacy. *Consum Interest Annu*, 48, 1–7.
- Hung, A. A., Parker, A. M., & Yoong, J. K. (2009). Defining and measuring financial literacy. *RAND Labor Popul*, WR708, 1–28.
- Ibrahim, D., Harun, R., & Isa, Z. M. (2009). A study on financial literacy of Malaysian degree students. *Cross-cultural Communication*, 5(4), 51–59.
- Jariah, M., Husniyah, A. R., Laily, P., & Britt, S. (2004). Financial behavior and problems among university students: Need for financial education. *Journal of Personal Finance*, 3(1), 82–96.

- Joo, S.-H., Grable, J. E., & Bagwell, D. C. (2003). Credit card attitudes and behaviours of college students. *College Student Journal*, 37(4), 405–419.
- Lusardi, A., & Mitchell, O. S. (2011a). Financial literacy around the world: An overview. *Journal of Pension Economics and Finance*. Turin, Italy. Retrieved from http://cerp.unito.it/images/stories/wp_106.pdf
- Lusardi, A., & Mitchell, O. S. (2011b). Financial literacy around the world : An overview. *Journal of Pension Economics and Finance*, 10, 497–508.
- Mahdzan, N. S., & Tabiani, S. (2013). The impact of financial literacy on individual saving: An exploratory study in the Malaysian context. *Transformations in Business & Economics*, 12(1), 41–55.
- Mandell, L. (2011). Financial education: What have we learned so far?
- Mandell, L., & Klein, L. S. (2007). Motivation and financial literacy. *Financial Services Review*, 16, 105–116.
- Murphy, A. J. (2005). Money, money, money: An exploratory study on the financial literacy. *College Student Journal*, 39(3), 478–489.
- Sabri, M. F., MacDonald, M., Hira, T. K., & Masud, J. (2010). Childhood consumer experience and the financial literacy of college students in Malaysia. *Family and Consumer Sciences Research Journal*, 38(4), 455–467. doi:10.1111/j.1552-3934.2010.00038.x
- Schagen, S., & Lines, A. (1996). *Financial Literacy in Adult Life: a Report to the NatWest Group Charitable Trust*.
- Shaari, N. A., Hasan, N. A., & Kumar, R. (2013). Financial literacy: A study among the university students. *Interdisciplinary Journal of Contemporary Research in Business*, 5(2), 279–299.
- Tang, T. L.-P., & Gilbert, P. R. (1995). Attitudes toward money as related to intrinsic and extrinsic job satisfaction, stress and work-related attitudes. *Personality and Individual Differences*, 19(3), 327–332.
- Toussaint-comeau, M., & Rhine, S. L. W. (2000). Delivery of financial literacy programs.
- Volpe, R. P., Chen, H., & Pavlicko, J. J. (1996). Personal investment literacy among college students: A survey. *Financial Practice and Education*, (Fall/Winter), 86–95.
- Volpe, R. P., Kotel, J. E., & Chen, H. (2002). A survey of investment literacy among online investors. *Financial*, 13(1), 1–16.

Xiao, J. J., Neill, B. O., Prochaska, J. M., Kerbel, C., Brennan, P., & Bristow, B. (2001). Application of the transtheoretical model of change to financial behavior. *Consumer Interests Annual*, 47, 1–9.

Xiao, J. J., Newman, B. M., Prochaska, J. M., Leon, B., Bassett, R. L., & Johnson, J. L. (2004). Applying the transtheoretical model of change to consumer debt behavior. *Financial Counseling and Planning*, 15(2), 89–100.