

The Role of Financial Behaviour, Financial Stress and Financial Well-Being towards Islamic Financial Literacy

Aubaidillah Doloh, Nur Harena Redzuan and Zarinah Mohd Yusoff

IIUM Institute of Islamic Banking and Finance, International Islamic University Malaysia
nurharena@iiium.edu.my

Abstract. Financial literacy is an important national issue and become the main focus in many countries. Various reports have confirmed that a huge number of the world's population is lacking knowledge of finance. The increasing number of people with a low level of financial literacy reflects the effectiveness of their educational institution and impacts the well-being of the national economy in the country. Thus, this study explores the role of financial behaviour, financial stress, and financial well-being in Islamic financial literacy. The study employs a qualitative research method by reviewing the selected literature using content analysis. Financial behaviour, financial stress, and financial well-being are good predictors to determine the level of Islamic financial literacy. The study suggests that the regulator and education institutions should provide more relevant projects and programs to improve the knowledge and understanding of Islamic financial literacy, especially among youth, to reflect on good financial behaviour and financial well-being according to Islamic principles.

Keywords: Islamic financial literacy, financial behaviour, financial stress, financial well-being, sustainability

1 Introduction

Money is one of the most essential needs that no one could avoid, especially in this modern day. This money should be managed carefully by its users to prevent insolvency and bankruptcy. So, people need to have basic knowledge of money management and usage to be smart money spenders. Knowledge of finance has highly an impact on one's behaviour on money. Thus, financial literacy is not only necessary for financial students or teachers, but anyone who uses money.

Financial literacy has been defined with several definitions by different groups and individuals. Mason and Wilson (2000) have defined financial literacy as a making process in which individuals use a set of skills and technologies, resources as well as contextual knowledge to arrive at information to make decisions with consideration of the financial consequences. Garman and Gappinger (2008) also defined financial literacy as "one's knowledge of facts, concepts, principles, and technological tools that are fundamental to being smart about money" (p.83).

Furthermore, financial literacy is also defined as "the ability to make informed judgments and to make effective decisions regarding the use and management of money" (Noctor, Stoney & Stradling, 1992, p.4). While Schagen and Lines (1996) proposed a

definition of financial literacy saying that a financially literate one can enjoy abilities comprising of understanding of money management, knowledge of financial institutions, services, and systems, analytical and synthetical skills, and attitudes that lead to responsible and effective management of financial matters.

However, some financial analysts emphasized that there is low personal financial literacy around the globe. This financial literacy is of growing importance as the financial markets and financial institutions compete massively with one another. Moreover, the development of financial products is rapidly growing with the government pushing people to be more responsible for their retirement planning. In addition to that, university students can prevent engaging in unprofitable investments by increasing their level of financial literacy. Therefore, financial knowledge is very significant for anyone to leave in comfortable life at the time and in the future.

Financial literacy has been studied not only by financial researchers but regulatory authorities, nationally and internationally. This is to determine the level of financial literacy among the citizens and the population and to create financial programs to increase their level of financial literacy. This will influence positively their financial behaviors and attitudes to financial products and services. Therefore, this study explores the role of financial behavior, financial stress, and financial well-being in Islamic financial literacy.

2 Islamic Financial Literacy

2.1 Literacy and Financial Literacy

Based on the title of the study, the operational definition of this paper consists of three definitions to provide a clearer meaning of the research.

2.1.1. Literacy

Traditionally, the term literacy is understood as the ability to write and read. This term is thought to have emerged together with the emergence of numeracy and computational devices around 800 BC. Gradually, the term has been expanded to cover the ability to use language, images, numbers, and other symbol systems of a culture or a community (Acheampong, Bridget, Joseph & Cynthia, 2015).

The Oxford English Dictionary has defined the term literacy as “the quality or state of being literate; knowledge of letters; condition in respect to education especially the ability to read and write”. While the American Heritage Dictionary of English language, fifth edition, defined literacy as “the condition of quality, especially the ability to read and write”. Both definitions basically define the quality and the ability to read and write. The United Nations Educational, Science and Cultural Organization (UNESCO) has also defined the word literacy as the “ability to identify, understand, interpret, create, communicate and compute using printed and written materials associated with varying contexts” (United Nations Literacy Decade 2003 – 2012).

2.1.2. Financial Literacy

The term literacy itself means the ability to read, write and do simple arithmetic. This is not sufficient to define financial literacy due to today's highly complex social, economic, and political system. Undoubtedly, literacy is the first stage of empowerment. Financial literacy is the next stage and more complex step towards empowerment. It enables us to effectively save, use, secure, and grow our fruits from the monthly earned income. In brief, having proficiency in dealing with our financial affairs will allow us to make our money function as hard as ourselves (Bhatt, 2017).

Sujaini (2022) stated that financial literacy refers to “the ability to understand and apply different financial skills effectively, including personal financial management, budgeting, and saving. Financial literacy makes individuals self-sufficient so that financial stability can be accomplished”. It is the ability to know how money functions in the world, how one earns or make a profit from it, how he manages it, invests it, and donates it to help people. Financial literacy refers to a set of knowledge and skills that lets a person make effective decisions on his financial resources.

2.2 Islamic Perspective on Financial Literacy

There are plenty of studies and research on financial literacy. However, the studies on financial literacy based on the Islamic perspective are still limited. A few studies are focusing on Islamic financial literacy by past researchers. Yet, the definition of Islamic financial literacy has not been commonly accepted. Nevertheless, there are few studies have defined it. Rahim, Rashid, and Hamed (2016) defined it as “the ability of a person to use financial knowledge, skill, and attitude in managing financial resources according to the Islamic teachings”. While Antara, Musa, and Hassan (2016) defined Islamic financial literacy as “the degree to which individuals have a set of knowledge, awareness, and skill to understand the fundamental of Islamic financial information and services that affect its attitude to make appropriate Islamic financing decisions” (p. 199). They stated that Islamic financial literacy is very significant as it can influence a Muslim's attitude toward financial behaviors such as differentiating between Islamic financing from conventional financing.

In 2017, Zaman, Mehmood, Aftab, Siddique, and Ameen (2017) conducted a study on the role of Islamic financial literacy in the adoption of Islamic Banking Services in Lahore, Pakistan, and found that majority of the respondents have awareness of the legitimacy of Islamic banking services, quality of services and products, the customer quality, and legitimacy of the Islamic banking system. Moreover, they also found that educational attainment level among the masses, services quality, customer services, and legitimacy of Islamic banking influence the adoption rate of Islamic banking services. Rahman, Tajudin, and Tajuddin (2018) studied the significant role of Islamic financial literacy among college students in Malaysia. They mentioned that the most important difference between conventional and Islamic finance is the prohibition of non-Halal elements such as *riba* (interest), *gharar* (uncertainty) and *maysir* (gambling).

2.3 Global Perspective on Financial Literacy

In 2003, The Organization for Economic Co-operation and Development (OECD) established a project aiming to provide a way to improve financial literacy and standards via the development of common principles of financial literacy. In March 2008, the OECD launched the International Gateway for Financial Education with the purpose to serve as a clearing house for financial education projects, information, and studies.

Moreover, The National Financial Educators Council (NFEC) defines financial literacy as “possessing the skills and knowledge on financial matters to confidently take effective action that best fulfills an individual's personal, family, and global community goals” (2014). Despite many definitions of financial literacy, the components of it are mostly similar. Precisely, financial literacy refers to the significance of having skills and knowledge to make effective decisions on financial resources. However, S&P Global FinLit Survey was conducted in 2014 on the basic literacy questions of the four fundamental concepts for financial decision-making, namely basic numeracy, inflation, interest compounding, and risk diversification.

An individual can gain financial knowledge from his or her parents, friends, educational institution, and media. Chen and Volpe (2002) stated that a person who learned business or economics courses is likely to be a financially knowledgeable person. This is supported by Falahati and Paim (2011) who stated that a student who joins a finance education activity is knowledgeable to manage his or her fund. Despite many studies supporting this statement, Wagland and Taylor (2009) mentioned that it is not necessarily for business students to score higher than non-business students. They stated that some students from science courses perform better than both business students and students who learn compound interest knowledge.

2.4 Financial Literacy among Youth

The research was conducted by Chen and Volpe on personal financial literacy in 1998 in the United State of America from 14 college campuses in 6 different states. The survey was undertaken by studying 924 university students from small 2-year colleges to large 4-year colleges both public and private institutions. The survey consisted of 36 questions that analyzed college students' financial literacy concerning these subjects: borrowing, saving, investments, insurance, and general financial knowledge. They analyzed the responses based on this percentage score: 80% and above was described as a high level of financial literacy, 60% to 79% was considered medium level and below 60% was included as a low level of financial literacy. The survey found that the students were inadequate in their knowledge of personal finance with a mean score of only 52.87%. The authors stated that this was due to the lack of a sound education on personal finance in the university curriculum. Moreover, the study found that study majors did contribute to the level of financial literacy as it stated that business students performed greater and scored a higher level of personal financial literacy compared to non-business students. Generally, the result indicated that the students scored at a low level of financial literacy. In addition to that, the researchers concluded that juniors and undergraduate students performed weaker than graduate students. Similarly, university

freshmen performed weaker than seniors and male students performed better than female students.

The study was done by McKenzie in 2009 on the financial literacy of university students. Similar to Chen and Volpe, this study was carried out in the United States of America in the Southeastern part studying seniors at public, state, and large universities who completed at least 105 course credit hours and also applied for graduation in the 2007-2008 year. All 186 graduating students were used in the research. 102 female students (54.84%) and 84 male students (45.16%) participated in the research.

The rating scale used in the study was developed by Mandell (2004) to examine the level of financial literacy of the students. The survey found that the mean score was 72.5% and the median score was 75.5% which means a high level of students' financial literacy. For knowledge of money management, 97 students (52.15%) showed that they would take chance to study a personal financial course if they had.

2.5 Malaysian National Strategy for Financial Literacy

The 2018 survey conducted by Financial Education Network (FEN) found that Malaysian people have low confidence pertaining to their own financial knowledge. One in three of them rate themselves to be of low knowledge of finance. Moreover, 1 in 5 Malaysian working adults (MWA) did not manage to save in the past six months. 52 percent of Malaysians face difficulty to raise even RM1,000 for emergency funds. While 68 percent of active EPF participants do not reach the Basic Savings recommended based on the age band. Besides that, RinggitPlus (2021) also conducted a survey on Malaysian Financial Literacy 2021 and found that approximately half of Malaysians save less than RM500 each month. About 51 percent of Malaysians can survive less than 3 months if their jobs are gone, but 28 percent can survive for 6 months. Furthermore, around 44 percent of consumers have started retirement planning.

To address the mentioned situations, several initiatives were attempted:

1. Ministry of Education Malaysia: the elements of financial education were integrated into the curriculum for primary as well as secondary school students directly and indirectly. For example, moral education, economics, accounting principles, business, and others.
2. Bank Negara Malaysia: Karnival Kewangan as a one-stop edutainment center to enhance Malaysians' financial literacy and to serve the needs of financial consumers. Moreover, BNM carries a program named Train-the-Trainer (TTT) to train and enhance the ability of counselors in government agencies to provide them with a guide on how to conduct educational programs.
3. Employees Provident Fund: Belanjawanku is an expenditure guide that provides an estimate of minimum monthly expenses on different kinds of goods and services for Malaysian households. It helps them to plan for their individual as well as family budgeting to achieve a good living standard.
4. Agensi Kauseling dan Pengurusan Kredit (AKPK): financial education public programs are taken by AKPK throughout the year targeting many segments such as women, youth, entrepreneurs, and other related parties. The programs are held to

enhance their knowledge and skills which allow them to make effective and correct decisions on their financial resources.

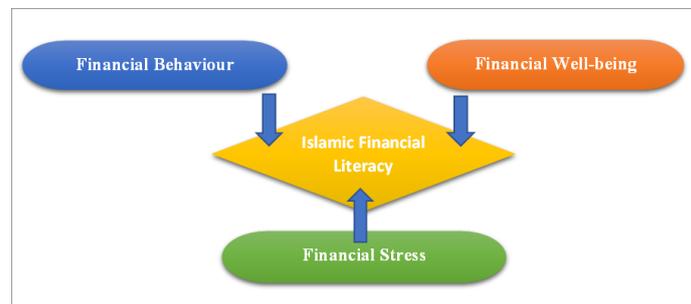
There are a few studies on financial literacy among university students in Malaysia. However, the main studies done are by Yew, Yong, Cheong, and Tey in 2017 and Kamel and Sahid in 2021. Yew et al. (2017) focused on the title of education literacy among undergraduates in Malaysia while Kamel and Sahid (2021) emphasized the topic of financial literacy and the financial behaviour of university students in Malaysia. Each study is elaborated on and studied.

Yew et al. (2017) studied financial education literacy among undergraduates and distributed a survey to a total of 605 students from 4 institutions of higher learning located in Klang Valley, Malaysia. Four institutions were selected for the study, namely University Tunku Abdul Rahman (UTAR), the University of Malaya (UM), Raffles International College of Higher Education, and HELP University. The study applied convenience sampling to collect data on financial literacy, behaviour, attitude, and financial socialization factors. They found that college and university students overall have a low level of financial literacy. Life experience and parental guidance were considered important predictors of students' financial knowledge while the year of study was not a significant predictor. The study also suggested promoting experiential learning about the knowledge of financial matters, and this will contribute to a positive attitude and better practices on it.

3 Conceptual Framework of the Study

Figure 1 below illustrates the conceptual framework of the study. The variables of the study are adopted from a study made by Rahman, Isa, Masud, and Sarker in 2021 when they conducted a study on the role of financial behaviour, financial literacy, and financial stress in explaining the financial well-being of the B40 group in Malaysia. Their study examined four variables with the level of financial literacy which was financial behavior, financial literacy, financial stress, and financial well-being.

Figure 1: Conceptual Framework of the Study



Since this study has a quite similar tendency, this research applies the same variables in the paper to assess the level of Islamic financial literacy. Thus, the independent

variables of this study are including financial behavior, financial stress, and financial well-being while the dependent variable is the level of Islamic financial literacy. The study will examine whether these independent variables have influences on the level of Islamic financial literacy (the dependent variable).

3.1 Hypotheses of the Study

3.1.1. Financial Behaviour

Financial behavior has a very significant relationship with financial literacy. The financial behavior of a person can indicate the level of his financial literacy. Susanti (2013) stated that financial literacy has a positive influence on a person's financial behavior. As supported by Zulaihati, Susanti, & Widayastuti (2020), financial literacy has also a positive impact on the behavior of expenditure, saving, and short-term as well as long-term planning. However, financial behavior involves how a person handles, manages, and uses available financial resources (Zaki et al., 2020). According to Yew et al. (2017), financial behavior is to be assessed through people's efforts in budgeting, price comparisons, savings, purchasing, and investment. The final link in the chain that links knowledge with practice is financial behavior (Yew et al., 2017). As such, the hypothesis of this study is:

H1: Financial behavior has a positive relationship with Islamic financial literacy.

3.1.2. Financial Stress

Financial stress occurs when a person is unable to meet his financial responsibilities (Kim, Sorhaindo, & Garman (2006). Rahman et al. (2021) stated that financial stress can be defined as "complexity engagement, general financial responsibilities due to lack of money". In other words, financial stress happens when one is not capable to fulfil financial needs, manage living expenses, and having adequate finances to make ends meet. It may involve the impression of fright, scare, and distress, but may also involve anger and dissatisfaction (Daivs & Mantler, 2004). Moreover, financial stress can raise endanger hopelessness and negatively affect one's health and psychological well-being (Steen & MacKenzie, 2013). According to Heckman, Lim, and Montalto (2014), the negative outcomes of financial stress are depression, anxiety, poor academic performance, poor health, and difficulty persisting toward degree completion. Thus, the study hypothesis is:

H2: Financial stress has a negative relationship with the level of Islamic financial literacy.

3.1.3. Financial Well-being

Plenty of surveys have suggested that a lot of Malaysians are not able to make responsible financial decisions for their financial well-being (Hayei & Khalid, 2019). Financial well-being is considered an essential concern for individuals, communities, as well as nations. Well-being includes a wide aspect of overall living quality that involves income level, job safety, housing facilities, healthcare access, education facilities, and

others. Thus, financial well-being is one of the crucial aspects of the overall well-being of individuals. Financial well-being implies the financial circumstance as well as adequate money to address an individual's needs with security and freedom of choice (Rahman et al., 2021). However, financial scholars generally defined financial well-being as one's attitude toward financial status based on objective indicators and subjective perceptions. The objective indicator is included the size of income, savings, debt, and financial aspects, while subjective perception includes satisfaction with the financial situation currently and future finance (Cox et al., 2009). Many researchers found that financial literacy is highly linked to financial well-being. Better financial well-being and lesser financial anxiety are considered the outcome of financial literacy (Schmeiser & Seligman, 2013; Taft, 2013). In other words, financial well-being is the outcome of financial literacy (Zulfiqar, 2016). Due to that, the hypothesis of the study is:

H3: Financial well-being has a positive relationship with the level of Islamic financial literacy.

To conclude, many past studies confirmed that there is a significant relationship between these variables (financial behavior, financial stress, and financial well-being) and the level of financial literacy. Thus, the study is to explore the level of Islamic financial literacy through these three variables and examine whether there is a relationship between the variables. The result is believed to provide some sort of data that is useful for the regulator and education institutions to realize and take the necessary actions accordingly.

References

1. A. Cox, H. Hooker, C. Marwick & P. Reilly, Financial well-being in the workplace, The Institute of Employment Studies, University of Sussex Campus Brighton, (2009). <http://www.employment-studies.co.uk>
2. Aziz, N. I. M., & Kassim, S. (2020). Does Financial Literacy Really Matter for Malaysians? A Review. *International Journal of Banking, Accounting, and Finance*, 2 (2), 13- 20.
3. Antara, P.M., Musa, R., & Hassan, F.H. (2016). Bridging Islamic Financial Literacy and Halal Literacy: The Way Forward in Halal Ecosystem. *Procedia. Economics and finance*, 37, 196-202.
4. Bhatt, Sonal. (2017). Financial Literacy: A Holistic Perspective. *Asian Journal of Research in Banking and Finance*. 7. 127-139. 10.5958/2249-7323.2017.00054.2.
5. Brougham, R., Zail, C., Mendoza, C., & Miller, J. (2009). Stress, Sex Differences, and Coping Strategies Among College Students. *Current Psychology*, 28(2), 85-97. doi:10.1007/s12144-009-9047-0
6. Cameron, M.P., R. Calderwood, A. Cox, S. Lim and M. Yamaoka, 2013. Factors Associated with Financial Literacy Among High School Students. University of Waikato, Hamilton, New Zealand.
7. Chen, H. & Volpe, R. P. (1998). An analysis of personal financial literacy among college student. *Financial Services Review*, 7, 107-128.

8. Chen, H. & Volpe, R. P. (2002). Gender differences in personal financial literacy among college students. *Financial Services Review*, 11, 289-307.
9. Davis CG, Mantler J (2004) The consequences of financial stress for individuals, families, and society. Centre for Research on Stress, Coping and Well-being. Carleton University, Department of Psychology, Ottawa
10. Financial Education Network (2019). MALAYSIA National Strategy for Financial Literacy 2019-2023.
11. Ghazali, M. S., Azer, I., Mohamad, S. A., Arifin, N. A. M. & Mat, A. (2017). Personal Financial Literacy among High School Students in Raub Pahang Malaysia. *Journal of Engineering and Applied Sciences*, 12(9), 2280-2284.
12. Garman, E. T., & J.Gappinger, A. (2008). Delivering Financial Literacy Instruction to Adults
13. Hayei, A. A., & Khalid, H. (2019). Inculcating Financial Literacy among Young Adults through Trust and Experience. *International Journal of Accounting, Finance and Business*, 4(18), 78-91.
14. Heckman, S., Lim, H., & Montalto, C. (2014). Factors Related to Financial Stress among College Students. *Journal of Financial Therapy*, 5 (1) 3. <https://doi.org/10.4148/1944-9771.1063>
15. Hirshmann, R. (2022). Students in public higher education institutions in Malaysia 2012-2020, by gender.
16. Joo, S., Durband, D. B., & Grable, J. (2008). The academic impact of financial stress on college students. *Journal of College Student Retention*, 10(3), 287-305.
17. Kamel, A., M. & Sahid, S. (2021). Financial Literacy and Financial Behaviour of University Students in Malaysia. *Turkish Online Journal of Qualitative Inquiry (TOJQI)* Volume 12, Issue 9, August 2021: 1208-1220
18. Kevin B. Wright, Researching Internet-Based Populations: Advantages and Disadvantages of Online Survey Research, Online Questionnaire Authoring Software Packages, and Web Survey Services, *Journal of Computer-Mediated Communication*, Volume 10, Issue 3, 1 April 2005
19. Kim J, Sorhaindo B, Garman E. Relationship between financial stress and workplace absenteeism of credit counselling clients. *Journal of Family and Economic Issues*. 2006;27(3):458-478.
20. Klapper, Leora, Annamaria Lusardi and Peter van Oudheusden, (2014) —Financial Literacy Around the World: Insights from The Standard & Poor's Ratings Services
21. Lim, H., Heckman, S. J., Leithiewicz, J. C., & Montalto, C. P. (2015). Financial Stress, Self-Efficacy, and Financial Help-Seeking Behaviour of College Students. *Journal of Financial Counseling and Planning* Volume 25, Issue 2, 2014, 148-160.
22. Lusardi, A. & Mitchell, O. S. (2007). Financial Literacy and Retirement Preparedness: Evidence and Implications for Financial Education. *Business Economics*, 1, 35-44
23. Lusardi, A., Mitchell, O. S., & Curto, V. (2010). Financial literacy among the young. *Journal of Consumer Affairs*, 44(2), 358-380. <https://doi.org/10.1111/j.1745-6606.2010.01173.x>
24. Rahman, M., Isa, C. R., Masud, M. M., Saker, M. & Chowdhury, N. T. (2021). The role of financial behaviour, financial literacy, and financial stress in explaining the financial well-being of B40 group in Malaysia. <https://doi.org/10.1186/s43093-021-00099-0>
25. Rahman, S.A., Tajudin, A., & Tajuddin, A.F. (2018). The Significant Role of Islamic Financial Literacy among College Students in Malaysia.

26. Rahim, S. H. A., Rashid, R. A., & Hamed, A. B. (2016). Islamic financial literacy and its determinants among university students: An exploratory factor analysis. *International Journal of Economics and Financial Issues*, 6(7), 32-35.
27. MASON, C.L.J. and WILSON, R.M.S., 2000. Conceptualising financial literacy. Occasional Paper, 2000:7. Loughborough: Business School, Loughborough University
28. Mandell, L. (2004). Financial Literacy: Are we improving? Results of the 2004 national Jump\$tart Coalition survey. Washington, DC: Jump\$tart Coalition.
29. Mandell, L., 2009. The impact of financial education in high school and college on financial literacy and subsequent financial decision making. Paper presented at the American Economic Association meetings, San Francisco, CA.
30. McKenzie Vandeen (2009). The financial literacy of students: A comparison of graduating seniors' financial literacy and debt level. Graduate thesis dissertation. <http://scholarcommons.usf.edu/etd/2094>.
31. Noctor, M., Stoney, S. and Stradling, R. (1992), Financial Literacy, National Foundation for Educational Research, Slough. Sazana Ab Rahman, Anas Tajudin, Ahmad Fadzli Ahmad Tajuddin, The Significant Role of Islamic Financial Literacy among College Students in Malaysia *International Journal of Managerial Studies and Research* 2018 , 6(11) : 46-50
32. Schagen, S., & Lines, A. (1996). Financial Literacy in Adult Life: a Report to the NatWest Group Charitable Trust.
33. Simpson, J. A., Weiner, E. S. C., & Oxford University Press. (1989). *The Oxford English Dictionary*. Oxford: Clarendon Press.
34. Steen A, MacKenzie D (2013) Financial stress, financial literacy, counselling and the risk of homelessness. *Austral Account Bus Finance J* 7(3):31–48
35. Sujaini (2022). Financial Literacy. <https://cleartax.in/g/terms/financial-literacy>
36. Susanti (2013). "Faktor-Faktor yang Mempengaruhi Perilaku Keuangan Siswa SMA di
37. Surabaya."
38. *The American Heritage dictionary of the English language*. (2000). Boston Houghton Mifflin
39. Wagland, S. P., & Taylor, S. (2009). When it comes to financial literacy, is gender really an issue?. *Australasian Accounting Business and Finance Journal*, 3(1)
40. Yew, S. Y., Yong, C. C., Cheong, K. C. & Tey, N. P. (2017). Does Financial Education Matter? *Education Literacy among Undergraduates in Malaysia. Institutions and Economies*, 9(1), 43-60.
41. Zaman, Z., Mehmood, B., Aftab R., Siddique, M. S., & Ameen, Y. (2017). Role of Islamic Financial Literacy in the Adoption of Islamic Banking Services: An Empirical Evidence from Lahore, Pakistan. *Journal of Islamic Business and Management*, 7(2), 230-247. doi: 10.26501/jibm/2017.0702-00
42. Zulaihati, S., Susanti, S. & Widyastuti, U. 2020. Teachers' financial literacy: Does it impact on financial behaviour? *Management Science Letters* 10(3): 653–658.