

EFFECTIVE APPROACHES TO FINANCIAL WELL-BEING AMONG UNIVERSITY STUDENTS: A CONCEPTUAL PAPER

Amri Mohamad^{1*}

*Faculty of Accountancy, Universiti Teknologi MARA Cawangan Kelantan
amri093@uitm.edu.my*

Siti Haliza Asat²

Faculty of Accountancy, Universiti Teknologi MARA Cawangan Kelantan

Che Rokiah Mohamed³

Faculty of Accountancy, Universiti Teknologi MARA Cawangan Kelantan

Anis Abul Hasan Ashari⁴

Faculty of Accountancy, Universiti Teknologi MARA Cawangan Kelantan

Rosbi Ishak⁵

Faculty of Accountancy, Universiti Teknologi MARA Cawangan Kelantan

Wan Roshaini Wan Ali⁶

Faculty of Accountancy, Universiti Teknologi MARA Cawangan Kelantan

Othman Zailani Hassan⁷

Faculty of Accountancy, Universiti Teknologi MARA Cawangan Kelantan

Abstract: This is a conceptual paper showing the linkages on the relationship between factors affecting the financial well-being of university students and also the moderating effects of parents' influence on their financial well-being. The focus on the financial well-being of university students is very important to ensure that university students do not encounter financial difficulties during their years at universities. To be more specific, this paper examines the four factors which determine the financial well-being of university students which are Budget & Financial Education, Structured Funding, Unstructured Funding, and Food Coupon & Book Voucher. The objectives of this research are to establish the extent of the conceptual relationship between four determining factors and the students' financial well-being. The aims and objectives of this research are accomplished when the conceptualizations of each of the independent variable dimensions and students' financial well-being are established and the linkages are clearly explained.

Keywords: Budget & Financial Education, Food Coupon & Book Voucher, Parents' Influence, Structured Funding, Students' Financial Well-being, Unstructured Funding

1. Introduction

The problem of university students' financial well-being is such an important area that deserves further attention from the scholars and practitioners alike to come up with ways of how to help university students cope with their studies.

The financial burden that students have to face on their way to graduation will result in them relying on family support, student loans, or other alternative sources. Many people who would have been unable to attend university now have been able to do so because of access to loans from the government. As students strive to obtain a degree, their need for financing and loans is growing and their numbers are increasing all the time. Lapon (2015) has reported that in the United States (US), student loan debt has

* Corresponding author: Faculty of Accountancy, Universiti Teknologi MARA Cawangan Kelantan, Bukit Ilmu, 18500 Machang, Kelantan, amri903@uitm.edu.my

surpassed credit card debt to become the second-largest category of consumer debt behind home mortgages.

Therefore, exposing students to manage their spending and proper budgeting is essential to keep spending under control, and it is the single most important money management skill. Budgeting will give students an accurate picture of their money situation and makes it possible to make limited resources go a long way. It can also help identify areas where they are spending too much. It shows them and their parents that they are handling their money wisely.

Financial well-being has become an important area that receives attention from scholars and practitioners, especially in the context of university students. The majority of university students are young adults at the age of 18–25 who have a distinct life-cycle stage (Peterson and Leffert, 1995), and their emerging adulthood period is characterized by major life-changing experiences, including university (Gutter, M. & Copur, Z., 2011). Leila & Laily (2011) add that students are at an age in which they begin to develop their skills and build personal well-being in the present and the future. For the first time, during that age, the majority of them are managing money independently, without the supervision of parents. They either depend on parents for funding or receive a loan from the National Higher Education Fund (PTPTN).

Based on a study done by the National survey (Gutter & Copur, 2011) on United States college students in 2008, the financial well-being average score of students is 6.18 at the midpoint of 5.50. That indicates that college students' financial well-being level is still relatively moderate. Studies conducted by Leila & Laily (2011) on university students in Malaysia show that the average level of the financial well-being of male students (32.2) is higher than female students (26.48) with a maximum score of 60. The level of financial well-being is still relatively low because the average score is still below the midpoint.

Financial well-being is a state of being financially healthy, happy, and worry-free (Sabri & Falahati, 2012). However, in reality, the financial well-being of students is not easy to achieve. Based on a study done by Setiyani and Solichatun (2019), the majority of students sometimes feel worried about their finances. The reasons are because of no savings for immediate needs and lack of financial planning. Studies found that individuals who lack the money to buy daily necessities and cannot regulate financial matters will have lower financial well-being (Sabri & Falahati, 2012) and they tend to have wasteful spending behaviors (Setiyani & Solichatun, 2019). Findings also showed that young adults who do not effectively manage the psychological costs will end up with high obligatory debt (Borden et al. 2008; Rao and Barber 2005). This is the risk that students need to address through financial risk assessments.

Many studies had revealed the association of financial literacy (Gunardi, Ridwan, & Sudarjah, 2017; Fazli and Falahati, 2012), financial education (Lyons 2008; Rao & Barber 2005) and financial behavior (Shim et al. 2009; Xiao et al. 2006; Xiao et al. 2009) with financial well-being including students' context. However, other factors such as budgeting, structured funding e.g. Majlis Amanah Rakyat (MARA), unstructured funding e.g. infaq, food coupon, and book voucher also influenced students' financial well-being. Budgeting is a strategy of how individuals manage their - finances to avoid negative outcomes of debt accumulation. Without proper financial planning as well as budgeting, students may have a hard time keeping their money in good order. Undoubtedly, financial education has a positive association with financial well-being. A financially educated society tends to make better financial decisions.

Basic knowledge about personal finance is very important among young people, particularly university students. This is due to the reports of the financial situation of this age group, which shows a serious management problem. A survey conducted by Federation of Malaysian Consumers Associations (FOMCA) in 2013 found that 37 percent of young Malaysians spent beyond their income means, while 47 percent used more than one-third of their monthly income to settle debts.

Therefore, the objectives of this research are to establish the extent of the conceptual relationship between four determining factors and the students' financial well-being. The financial well-being of students is important because the financial well-being of students has a significant influence on their financial well-being after graduation and overall life satisfaction (Shim et al., 2009).

The study on the importance of the family roles, especially parents, on the financial socialization has already been confirmed in several studies (Jorgensen and Savla, 2010; Shim et al., 2010; Solheim et al., 2011). Calamato (2010) stated that 87% of students learn how to manage money from their parents and added that nearly all teenagers learn about personal money management from their parents. Therefore, it is expected that individuals who do not have any financial freedom make their financial decisions according to suggestions from their families. In this study, parents' influence is an indicator to moderate between the determining factors of financial well-being with the financial well-being of university students.

2. Literature Review

2.1. Budget and Financial Education

For a majority of university or college students, the first-year situation is viewed as an important transitional stage. Some of them are confronted with financial responsibilities such as paying bills, creating a budget and using credit for the first time without parental supervision. According to studies in the United States and other countries, college students usually manage their finance poorly, and they are inadequately prepared for these new burdens (Markovich & DeVaney, 1997; Chen & Volpe, 1998; Murphy, 2005). The ability to cope with these challenges depends on how deep the financial knowledge and behaviors they have before arriving at college.

The study of Malaysian students shows that students of Chinese ethnicity, students in private colleges, freshmen, and students who never discussed finances with parents in their childhood have less financial knowledge (Mohamad Fazli Sabri (2012). Kamaruddin and Mokhlis (2003) found that Chinese adolescents were less likely to interact with their parents and peers than Malay youngsters. Therefore, Chinese college students tend to have less financial knowledge. This finding was obtained from Chinese students, students who live on campus, and students in private colleges. The result from a study by Peng, Bartholomae, Fox, and Cravener (2007) revealed that investment knowledge improves the financial information if the students have a bank account before the age of 18.

Maintaining the financial budget is a critical component of financial knowledge. Budgeting refers to allotting all or part of total financial resources into distinct categories to track expenses against a tangible monetary forecast (Heath & Soll, 1996). Thus, budgeting can be considered as a strategy of how a person manages his finances to avoid the negative outcomes of debt accumulation. Without a budget, students may have a hard time keeping their money in good order. If the money is from a student loan, it will eventually need to be repaid.

Financial education should be introduced at the college level or earlier to prepare students to manage their finances effectively. Many approaches and learning channels can be utilized to achieve this objective at the college level or earlier. University, faculty, and administrators should create financial education resources and experiences for students that are accessible, collaborative, practical, and timely. A good starting point could be offering financial seminars on campus during times that are convenient for students. To provide more access for these students, financial seminars could be recorded and posted to an online platform or presented separately as online webinars. Financial education programs should be taken into consideration in which financial topics are the most pertinent to graduate students given the time of year and progression through their program. Some areas of budgeting and credit cards such as filing taxes, or securing funding or loan repayment plans, and also various employee benefits packages are example of education program that can be taken into consideration (Goetz & Palmer,

2012). Colleges and universities have a unique opportunity to encourage the development of sound financial practices among students through coursework, workshops, and other educational experiences (Shim et al, 2009).

From the above discussion, it can be hypothesized that;

H1: Increases in financial education will have a positive relationship with the students' financial well-being.

H2: Managing a good financial budget will have a positive relationship with the students' financial well-being.

2.2. Structured Funding

MARA (the Council of Trust for the People), an agency under the purview of the Ministry of Rural Development, was established on 1 March 1966 as a statutory body by an Act of Parliament as a result of the first Bumiputera Economic Congress resolution in 1965. MARA is responsible for developing, encouraging, facilitating, and fostering the economic and social development in the federation, particularly in rural areas. MARA's biggest role is as the change agent in terms of developing quality human capital focusing on the lower-income group, whether rural or urban poor.

The Ministry of Entrepreneur Development and Cooperative through the agency of the Mara Education Foundation (YPM) allocated RM343,200 to help the Malays and 550 poor Bumiputera students in Terengganu. In Penang, MARA has allocated RM700,000 as early relief to Bumiputera students who wanted to further their studies at institutions of higher learning (IPTS). The startup assistance of RM2,500 per student was offered to 350 students to enable them to continue their studies at IPTS. The government helped poor families to ease the financial burden of the higher cost of fees in IPTS.

In 1996, NFAS (National Student Financial Aid Scheme) was introduced in South Africa. It was government-funded, aiming to help students who are well-achievers but are financially destitute that they cannot proceed to tertiary education. It became a tool to develop the country's human capital and eradicate poverty, crime, skill shortages, and a high rate of unemployment.

Thus, based on the above discussion, the following hypothesis is posited;

H3: Increases in Structured Funding will lead to increases in the students' financial well-being

2.3. Unstructured Funding

Infaq in Arabic means spending. In Islam, it is a type of charity that is given without any expectation of reward or return; it is pious spending in the way of Allah. In Islamic economic principles, infaq significantly contributes to wealth distribution and elimination of poverty. Infaq can be utilized as an optimal means of increasing wealth to fulfill the contemporary needs of Islamic society (Abdul Hamid & Suhaili, 2014). Infaq is extended to cover the need for proper education, from preschool to tertiary level, let alone to meet the necessities of life. Proper education produces high quality of human capital to ensure the development and progress of a country. The economic gap in the Muslim community, by helping the less fortunate can be potentially closed by educational funding through infaq (Alin@Nordin & Ab Rahman, 2018). From the above discussion, the practice of infaq can support the financial well-being of students, especially at the tertiary level. Hence, it can be hypothesized that;

H4: The practice of infaq is positively associated with the financial well-being of students in higher learning institutions.

One of the most important resources to colleges and universities are alumni. As defined by the

Cambridge English Dictionary, alumni are men and women who have completed their studies, especially at a college or university. There are several ways alumni can contribute to students' welfare; students can get placements at the respective alumni's organization, voluntary programs like mentoring students in their areas of expertise and contributing scholarships to deserving students. Turan (2016) proposed the evaluation of alumni funding as a possible solution to the issues related to higher education financing in Turkey. This proposition is supported by their findings of alumni websites analysis which shows that there is more potential to tap into an underutilized resource; the alumni, especially in a culture of giving to the needy is valued (Turan, 2016). In the time of higher education expenses becoming costly, the private voluntary contributions are resources sought by many competitors, and alumni groups can be a source for financial support. Good quality education requires additional support to produce a good quality of faculty and students and to maintain state-of-the-art facilities (Gaier, 2001). According to a report by the Council for Aid to Education, strong competition for voluntary resources is a future trend in higher education institutions (Morgan, 1995). Based on the above discussion, the role of alumni can support students' financial well-being, especially at the tertiary level. Hence, it can be hypothesized that;

H5: The role of alumni is positively associated with the financial well-being of students in higher learning institutions.

2.4. Food Coupon & Book Voucher

Malaysia launched the '1Malaysia Book Voucher' program (BB1M) worth RM200, the first book voucher scheme in 2012 to ease the financial burden of students in higher learning institutions in Malaysia. The vouchers were distributed to local higher learning institution students, including matriculation and form six students. The vouchers were exclusively for students to spend on books and reading materials. The amount was increased to RM250 in 2014. However, in 2017, the vouchers were replaced with RM250 cash that was preloaded to the student's debit card under the name Baucar-Kad Diskaun 1Malaysia (KADS1M) due to the misuse of the vouchers to buy items other than reading materials and were even being sold (The Star, 2018; Nur Haziqah and Shaheera, 2018).

In March 2019, the Malaysian government introduced the Higher Education Student Aid (BPPT) worth RM100 per student, credited into the Kad Diskaun Siswa issued by Bank Rakyat, as reported in the New Straits Times (2019). According to the Finance Ministry, BPPT was an improvement on the previous distribution of RM250 book vouchers, also intending to support the students during campus life.

Food coupon is another initiative to reduce the financial struggles of university students. For instance, the University of Maribor, Slovenia offers coupons for students to buy subsidized student meals at some restaurants. In Malaysia, Universiti Putra Malaysia (UPM) and the University of Malaya (UM) set up food banks to provide supplies and meals for needy students. They can take bread, cereals, and biscuits for free. UM also provides food aid such as Student Affairs Food Coupon and also Central Kitchen for this purpose. Food pantries have also been set up for colleges, faculties, and student societies. UPM alumni association and individuals also manage a free meal program for students to have free meals at the cafes. Universiti Teknologi Mara (UiTM), which comprises around 80 percent of the student population from the B40 group, also makes effort to provide food incentives such as meal allowances for students.

From the above discussion, the distribution of food coupons and book vouchers can support the financial well-being of students, especially at the tertiary level. Hence, it can be hypothesized that:

H6: The distribution of book vouchers and food coupons is positively associated with the financial well-being of students in higher learning institutions.

2.5. Financial Well-being

Students will experience financial independence when they start entering universities. College students begin intensive personal financial management without parental supervision while in college (Gutter & Copur, 2011). However, since not all parents can afford to pay fully for the students' expenditure at universities, many students borrow money to obtain an education and carry considerable debt into jobs where they earn entry-level salaries (Leach et al., 1999). Besides the education loan, some of the university students also divulge in other forms of debt, such as car loans, credit cards, and other financial commitments such as postpaid handphone lines, which are offered to students.

Based on a study conducted in 2018 by Blackbullion in collaboration with Sheffield Hallam University, 95% of students admitted they felt stressed by their financial situation, with 45% stating they felt stressed either often or every day. 67% felt that their financial situation negatively impact their degree. 50% of students worried over not having enough money for necessities, such as food, toiletries, etc. (Blackbullion, 2018).

Sabri & Falahati (2012) define financial well-being as a state of being financially healthy, happy, and free from worry. Financial well-being is regarded as a person's feelings about the financial situation at the moment (Prawitz et al., 2006). Three factors affect the financial well-being of students, namely financial problems, financial knowledge, and financial socialization (Leila & Laily, 2011). Other than that, personal and family background, academic ability, consumer childhood experience, financial socialization, and financial literacy also can affect the financial well-being (Fazli Sabri, Cook, & Gudmunson; 2012).

2.6. Parents' Influence

The study on the importance of the family, especially of parents, for the financial socialization, has already been confirmed in several studies (Jorgensen and Savla, 2010; Shim et al., 2010; Solheim et al., 2011). For instance, individuals tend to imitate the behavior of their families when making financial decisions (Shim et al, 2010). Shim et al. (2010) were able to confirm that the direct instruction of parents concerning financial issues and decisions has a significant influence on the financial knowledge of adolescents. Calamato (2010) stated that 87% of students learn how to manage money from their parents, and added that nearly all teenagers learn about personal money management from their parents. Therefore, it is expected that individuals who do not have any financial freedom make their financial decisions according to suggestions from their families.

For college students, one of the important factors that influence their financial well-being is their background, or more specifically, their parents' financial status. Family income is the starting point for any student, and regardless of the current dependency on parental finances, this background affects college students' perspectives and behaviors regarding money (Graves & Savage, 2015). Graves and Savage (2015) investigated students' abilities to process information relating to personal finance. They focused heavily on the concept of scarcity, a time a person is at an economic disadvantage such as poverty. Some students are only recently experiencing scarcity; they have left their parents' homes to attend school and are trying to support themselves with limited income. Other students come from low-income families, which is a more prolonged period of scarcity. People experiencing financial scarcity are often stressed and emotionally taxed, because of a lack of financial capabilities and poor attitudes toward money (Graves & Savage, 2015).

While financial background certainly influences perceptions and behaviors regarding money, it also affects university affordability. Lower-class, low-income students receive need-based financial assistance via grants, which often do not cover the full cost of attending college. This results in the accumulation of student loans to fill the gap (Dwyer, McCloud, & Hodson, 2012).

In the Malaysian context, a study by NGO Muslim Volunteers Malaysia revealed that the undergraduates at public universities are having financial difficulties because they use their student loans to help their families at home. Students who receive a loan of RM3,500 per semester from the National Higher Education Fund (PTPTN) use the money to pay for tuition fees, university accommodation, books, transportation, meals, and other expenses for up to five months. However, students from low-income families may use the money to assist their families' financial matters by sending home half or more of their student loan disbursement (NGO Muslim Volunteers Malaysia, 2016).

Thus, based on the above discussions, the hypotheses for the parents' influence are posited as follows;

H7: Parents' influence moderates the relationship between budget & financial education with students' financial wellbeing.

H8: Parents' influence moderates the relationship between structured funding with students' financial well-being.

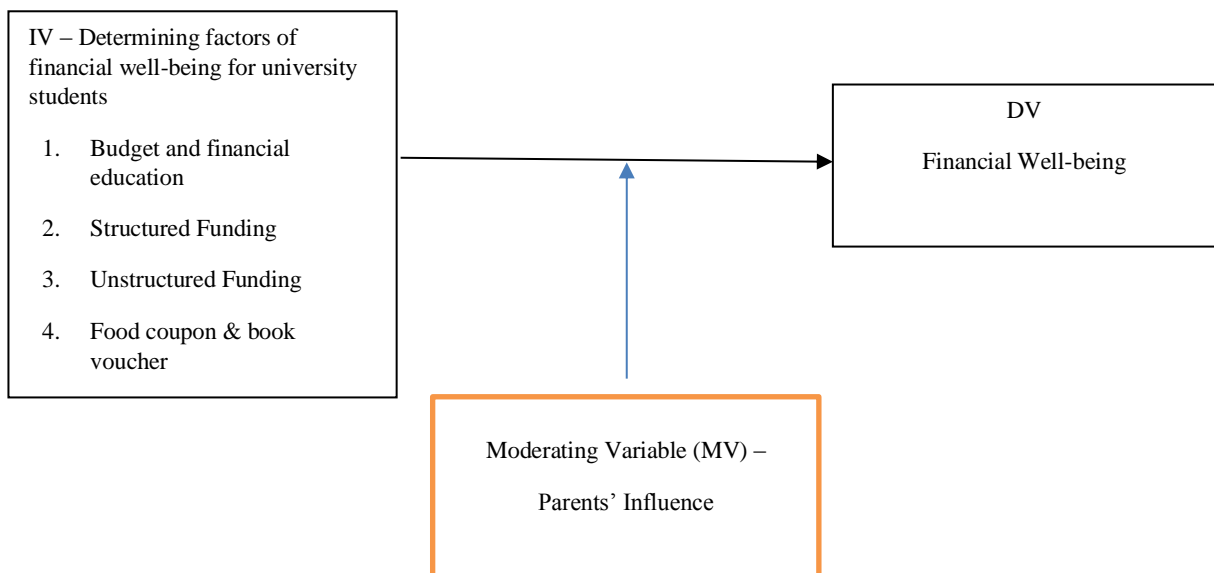
H9: Parents' influence moderates the relationship between unstructured funding with students' financial well-being.

H10: Parents' influence moderates the relationship between food coupon & book voucher with students' financial well-being.

3. Research Framework

The research framework for the above discussions is shown in Figure 1 below.

Figure 1: Research Framework



4. Research Methodology

4.1. Introduction

This is an empirical study where a questionnaire is constructed to collect data and further quantitative analyses using statistical tools will be carried out. Hypothesis testing is to show and explain the nature of relationships between the independent variable (IV) and its effect on the students' financial well-being, the moderating effect of parents' influence on the relationship between the IV and students' financial well-being.

4.2. Research Design

This fundamental research adopts a questionnaire-based survey to gather data. The very reason for employing the survey method is because it could reach a comprehensive list of university students within UiTM.

4.3. Population and Sampling Procedure

The data used in this study is drawn from a questionnaire-based survey of UiTM students. UiTMCK students will become the population frame for this study.

4.4. Unit of Analysis

This study seeks to explain the effect on an individual basis. Thus, the unit of analysis in this study is the university students at UiTMCK. The respondents in this study are the degree and diploma students at UiTMCK.

4.5. Questionnaire Design

The main instrument for data collection is a structured, self-administered questionnaire survey adapted from previous studies. The questionnaire includes questions about general information such as the background of the university students, the sources of study findings, parents' financial background, etc. to find out the level of financial dependability of the financial aid provided to the students.

4.6. Summary of Data Analysis

The analysis in the next section involved sample profile and descriptive statistics, factor analysis, reliability analysis, correlation, and regression analysis. The following chapter provides detailed explanations of each analysis.

In this study, the analysis is done by testing the hypotheses using correlations, multiple regression analysis and hierarchical regression analysis. There are a few basic assumptions that needs to be observed in a multiple regression analysis, namely normality, linearity, homoscedasticity, and multicollinearity. According to Hair et al., (2006), the explanations of the terms are:

- i. Normality - refers to the shape of data distribution and its correspondence to the normal distribution.
- ii. Linearity – to see the distribution in a scatterplot that is not too far from the linear relationship.
- iii. Homoscedasticity – refers to the notion that the dependent variable shows equal levels of variance across the range of the independent variable.

- iv. Multicollinearity – the correlations between the data for independent variables must not exceed 0.9.

5. Conclusion

This study has managed to elucidate theoretically on the linkages between the four determining factors and university students' financial well-being. The moderating factor of parents' influence is incorporated to explain the influence parents have towards university students' financial well-being. Finally, the proposed research methodology is explained to give a clearer understanding of the research endeavor to be taken in the next stage of this research process.

References

- Abdullah S.C. (1998, June 1). Matriculation: More will get help from MARA. *Berita Harian*
- Abdul Hamid, M., & Suhaili, N. A. (2014). Waqaf Perkongsian Strategik Sebagai Pendekatan Waqaf Pendidikan Tinggi. In W. K. Mujani (Ed.), *Pelestarian Institusi Wakaf: Memperkasa Pendidikan Tinggi Negara*, Bangi: Fakulti Pengajian Islam, Universiti Kebangsaan Malaysia.
- Alin @ Nordin, N.A. & Ab Rahman, A. (2018). Role of Infaq in Financing Students in Malaysian Public Universities. *New Developments in Islamic Economics*, 35-45.
- Aziz H, Abu Karim M. (2020, January 8). MARA – Moving forward. *New Straits Times*.
- BD RHM, (1998 May 14). Students in financial difficulties must apply. *Bernama*
- Calamato, M. P. (2010). Learning Financial Literacy in the Family. *International Journal of Business and Social Science*, 23(1), 4563
- Blackbullion. (2018). *Money and Mental Health Student Financial Understanding and Wellbeing. Money-and-Mental-Health-Sheffield-Hallam-and-Blackbullion-Student-Survey*. Retrieved from <https://www.blackbullion.com/wp-content/uploads/2018/10/Money-and-Mental-Health-Sheffield-Hallam-and-Blackbullion-Student-Survey.pdf>.
- Chen, H., & Volpe R.P. (1998). An Analysis of Personal Financial Literacy Among College Students. *Financial Services Review*, 7(2), 107-128.
- CKZ ERE RS (2005, June 16). MARA allocate RM343,000 to Poor Students in Terengganu, *Bernama*
- Dwyer, R. E., McCloud, L., & Hodson, R. (2012). Debt and graduation from American universities. *Social Forces*, 90(4), 1133–1155.
- EIY, TCT, KLS (2014, April 19). MARA Pulau Pinang allocate RM700,000 to IPTS, *Bernama*
- Fazli Sabri, M., Cook, C. C., & Gudmunson, C. G. (2012). Financial Well-Being of Malaysian College Students. *Asian Education and Development Studies*, 1(2), 153–170.
- Goetz, J., & Palmer, L. (2012). Content and Delivery in Financial Education Programs. In D. C. Durband & S. Britt (Eds.), *Student Financial Literacy: Campus-Based Program Development*, 65-78. Springer: Boston, MA.
- Graves, E., & Savage, S. (2015). Financial pasts, presents, and futures of community college students of a personal finance course. *Journal of Business & Finance Librarianship*, 20(1/2), 116–132.
- Gunardi, A., Ridwan, M., and Sudarjah, G. M. (2017). The Use of Financial Literacy for Growing Personal Finance. *Jurnal Keuangan Dan Perbankan*, vol. 21, no. 3, pp. 446– 458
- Gutter, M. and Copur, Z. (2011). Financial Behaviors and financial Well-Being of College Students: Evidence from a National Survey. *Journal of Family and Economic Issues*, 32(4), 699–714.
- Hair, J. F., Black, W. C., Babin, B. J., Anderson, R. E., & Tatham, R. L. (2006). *Multivariate data analysis*. New Jersey: Pearson Prentice Hall.
- Hossain Biplob, Abdullah Md. Faruk. (2019). Islam and Civilizational Renewal. The Importance of Islamic Financial Literacy for Muslims: A General Review. icrjournal.org. ICR 10.1 Produced and distributed by IAIS Malaysia
- Jorgensen, B. L., & Savla, J. (2010). Financial Literacy of Young Adults: The Importance of Parental Socialization. *Family Relations*, 59, 465–478.

- Kamaruddin, A.R., & Mokhlis, S. (2003). Consumer Socialization, Social Structural Factors, and Decision-Making Styles: A Case Study of Adolescents in Malaysia. *International Journal of Consumer Studies*, 27(2), 145-156.
- Lapon, G. (2015). *The Political Economy of Student Loans*. Retrieved from <https://isreview.org/issue/98/political-economy-student-loans>.
- Leach, L.J., Hayhoe, C.R. & Turner, P.R. (1999). Factors Affecting Perceived Economic Well-Being of College Students: A Gender Perspective, *Financial Counseling and Planning*, 10(2), 11-23.
- Leila, F. & Laily, P. (2011). Gender Differences in Financial Well-Being Among College Students. *Australian Journal of Basic and Applied Sciences*, 5(9), 1765– 1776.
- Lyons, A. C. (2008). Risky credit card behavior of college students. In J. J. Xiao (Ed.), *Handbook of Consumer Finance Research* (pp. 185–208). New York: Springer
- MARA Webpage. Introduction and History. Retrieved from <https://www.mara.gov.my/en/index/mara-info/profile/introduction-and-history/?lang=en>
- Markovich, C.A., & DeVaney, S.A. (1997). College seniors' personal finance knowledge and practices. *Journal of Family and Consumer Sciences*, Fall, 61-65.
- MNR, NMO (1998, June 3). RM3 million financial aids to students, *Bernama*
- Morgan, D. R. (1995). Voluntary support of education 1995. New York, NY: Council for Aid to Education. (ERIC Document Reproduction Service No. ED 398 634).
- Murphy, A.J. (2005). Money, money, money: An exploratory study on the financial literacy of black college students. *College Student Journal*, 39(3), 478-488.
- Nelson Mandela Metropolitan University (2012). *The Adequacy of national student financial aid scheme towards qualification completion at Nelson Mandela Metropolitan University*. Retrieved from <http://openaccess.library.uitm.edu.my/Author/Home?author=Nzuzo%2C+Nomakhaya+Olivia>
- NGO Muslim Volunteers Malaysia. (2016). 'Students starving as they send PTPTN money home'. Retrieved from <https://www.malaysiakini.com/news/326197>.
- Peng, T.M., Bartholomae, S., Fox, J.J., & Cravener, G. (2007). The impact of personal finance education delivered in high school and college courses. *Journal of Family and Economic Issues*, 28, 265-284.
- Peterson, A. C., & Leffert, N. (1995). What is special about adolescence? In M. Rutter (Ed.), *Psychosocial disturbances in young people: Challenges for prevention* (pp. 3–36). Cambridge: Cambridge University Press
- Prawitz, A. D., Garman, E. T., Sorhaindo, B., et al. (2006). Incharge financial distress/financial well-being scale: Development, administration, and score interpretation. *Financial Counseling and Planning*, 17(1), 34–50.
- Rao, A., & Barber, B. L. (2005). Financial well-being: Descriptors and pathways. TCAI Working Paper 5–2
- Sabri, M. and Falahati, L. (2012). Estimating a model of subjective financial well-being among college students. *International Journal of Humanities and Social Science*, 2(18), 191–199.
- Setiyani and Solichatun (2019), Financial Well-being of College Students: An Empirical Study on Mediation Effect of Financial Behavior. *International Conference on Economics, Education, Business and Accounting Volume 2019*
- Solheim, C. A., Zuiker, V. S., & Levchenko, P. (2011). Financial socialization family pathways: Reflections from college students' narratives. *Family Science Review*, 16(2), 97-112.
- 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, 1457–1470.
- Shim, S., Xiao, J.J., Barber, B.L., & Lyons, A.C. (2009). Pathways to life success: A conceptual model of financial well-being for young adults. *Journal of Applied Developmental Psychology*, 30, 708-723.
- The Star (2018). *Education Ministry asks for tertiary students' book vouchers to be maintained*. Retrieved from <https://www.thestar.com.my/news/nation/2018/11/10/education-ministry-asks-for-tertiary-students-book-vouchers-to-be-maintained#dHOSRdmAiWdsxG6u.99>.