

Factors Determining Money Management Among University Students

**Wan Rasyidah Wan Nawang¹,
Syadiyah Abdul Shukor²**

^{1,2} Faculty of Economics and Muamalat, Universiti Sains Islam Malaysia,
Negeri Sembilan, Malaysia

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Abstract

Money matters are integral to our lives and for university students, these are an even more pressing aspect. Thus, it is important for university students to have prudent and responsible money management as this can impact their future and personal well-being. The study is set to meet its objective which is to investigate the impact of economic, social, and psychological factors on money management among university students. This study adopted an online survey for data collection. A survey questionnaire in Google form was distributed on social media platforms including Facebook and WhatsApp to undergraduate students in Nilai, Negeri Sembilan, Malaysia. A total of 143 responses were received for further analysis. The findings reveal that economic factors, rather than social and psychological factors, have a significant influence on students' money management behaviour. This study could prove to be beneficial to scholars and practitioners in developing money management curricula and programmes, as well as promote good money management habits among university students.

Keywords: economic, money management, psychology, social, university students

Introduction

Money is an issue that everyone needs to think about, but for some groups like students, it can be of a greater concern. As it can leave a potential impact on their future and personal

well-being, it is important for students, especially university students, to be able to manage their money carefully and wisely. One of the earliest studies to look at money management among university students was

Corresponding author: Wrasdyidah@usim.edu.my

published by Danes and Hira (1987). In their work, they concluded that university students need to be taught how to manage money.

Reports have been published about young adults, including students, facing financial distress such as bankruptcy. 2022 data from the Malaysia Insolvency Department (MDI) revealed that 47,929 Malaysians were declared bankrupt from 2018 to September 2022, with 60 per cent of those declared bankrupt being between 18 and 44 years of age. The worrying statistics of bankruptcies among young people are prompting researchers to investigate the causes (Brau, 2019; Chong et al., 2021; Diana-Rose & Zariyawati, 2015; Hashim et al., 2021; Huish, 2017; Murthy & Mariadas, 2017; O'Malley & Payne, 2021). For example, a study by Murthy and Mariadas (2017) concluded that the most important factors influencing bankruptcy among first-year students were poor attitudes towards money, poor financial planning, overuse of credit cards, and misjudging or overestimating bank policies. Diana-Rose and Zariyawati (2015) supported this and emphasised that lack of discipline in financial management appears to be a prominent factor leading to youth bankruptcy. This is an alarming situation because given the long road young people have ahead of them in life, it will affect their well-being.

In addition, students are often easy victims of financial scams, frauds, and debt traps. This is partly because they are young, naïve, and considered one of the easiest, most innocent, and vulnerable targets (Dickler, 2021; Lieber, 2021; “Macau scam”, 2019; “University student”, 2022). In response, Halim et al. (2021), who investigated the gullibility factors of people exposed to a pyramid scheme and limited their study to Bumiputera students

in Malaysia, concluded that these students were too young to make decisions about their money management.

The above studies point to the same conclusion, that money management is essential. Being a broad field of knowledge, money management concerns plenary aspects of financial control such as using money wisely, budgeting, saving, or investing in personal assets. Money management has a significant role to play in our lives today, and individuals, the community, and the nation are its direct beneficiaries. A study by Chuah et al. (2021) for instance, highlighted the significance of placing more value on the importance of money for the improvement of life satisfaction among young people. With wise money management, bankruptcies, financial frauds, scams, and debt traps are able to be combated and short and long-term financial planning towards the attainment of financial freedom can be materialised. In this sense, Mohd Padil et al. (2022) pointed out that sufficient knowledge in budgeting can significantly influence students' awareness of investment fraud. It is therefore recommended that early financial education is essential for students and the focus should be on learning disciplined budgeting habits to prevent them from becoming victims of financial fraud.

In examining money management behaviours, a wealth of previous literature has focused on functional financial literacy (Danes & Hira, 1987; Hamid & Loke, 2021; Humaidi et al., 2020; Thomas & Subhashree, 2020), financial knowledge (Chuah et al., 2020), attitudes towards money (Chuah et al., 2020), financial efficiency (Chuah et al., 2020), and credit card use and debt management (Abdullah et al., 2019; Bamforth et al., 2018). Nevertheless, a few other published studies did

dwell on economic, social, and psychological aspects that could also influence the money management behaviour of university students (Cloutier & Roy, 2020; Sachitra et al., 2019; Sachitra & Wijesinghe, 2018), especially in developing countries like Malaysia. With this scarcity, obviously there is still a gap in the literature. Our current study may not come at a better time, as it aims to examine the economic, social, and psychological factors that influence Malaysian students' money management behaviour.

This paper will now proceed as follows. Section 2 sheds light on the relevant literature which forms the basis of this study. Section 3 describes the methodology, Section 4 presents the results and discussion and finally, Section 5 concludes the study.

LITERATURE REVIEW

Money Management

"Money management" is a term used to mean a person's ability to manage their personal financial activities such as spending, saving, investing, and budgeting as an effort to achieve financial well-being (Atkinson & Messy, 2012). Money management is also about dealing with excessive spending, avoiding mistakes in financial matters, and confronting financial debt (Bamforth et al., 2018). According to these definitions, money management is the ability to manage financial activities in a way that achieves financial well-being.

Excellent money management skills enable one to become more confident and to adopt a more responsible financial behaviour and careful financial decision-making (Bamforth et al., 2018), which subsequently contribute to financial satisfaction and well-being (Bilal & Zulfiqar, 2016; Xiao et al., 2009). Moreover, effective money

management is very important for individuals, as their financial resources and conditions can take a toll on their quality of life and social connections (Gardner & Holley, 2011). Echoing this, poor money management can pave a way to chronic debt, failure to pay bills or file for bankruptcy, and poor mental health for individuals and households (McNair et al., 2016; Peltier et al., 2013; Topa et al., 2018). The preceding studies demonstrate that money management behaviour has a significant impact on a person's quality of life, social relationships, and mental health. It is therefore inextricably linked to individual economic, social, and psychological factors.

Students usually have no source of income and have to rely on their parents, scholarships, or education loans to support themselves (Kumar et al., 2022; Rahim et al., 2020). Given the tight budget, they must have financial literacy to manage their money wisely. For university students, family, friends, and significant others are the closest social support and help (Lim et al., 2020). When it comes to seeking advice and making decisions, including financial decisions, they are therefore strongly influenced by these social actors (Rajanderan & Wai-Yan, 2021). Moreover, students' lives are stressful (Kotera et al., 2021; Wong et al., 2023), especially when they have to balance studies and social activities. These economic, social, and psychological factors influence how students manage their finances. Therefore, the purpose of this study is to investigate these factors in relation to Malaysian students' money management behaviour.

Economic Factors

According to Cull and Whitton (2011), economic factors comprise macroeconomic and microeconomic factors that can govern

a person's income, savings, investment, and spending behaviour. Macroeconomic factors include aspects that are beyond an individual's control, such as financial crises, regional events, the increasing use of technology for low-skilled jobs, and changes in government policies (Blanchard et al., 2010). Microeconomic factors concern a person's local environment, including organisations, groups, and people with whom interactions occur (Schermerhorn et al., 2011). As opposed to macroeconomic factors, individuals are able to have some control over their microeconomic factors. Concerning the microeconomic factor, the level of financial literacy is often linked with the individual's money management behaviour (Cull & Whitton, 2011; Sachitra et al., 2019; Sachitra & Wijesinghe, 2018). As established, better financial literacy leads to better money management, and vice versa.

Since this study is about the behaviour of individuals, microeconomic factors are better suited to be studied. Also, following Cull and Whitton (2011), Sachitra et al. (2019), and Sachitra & Wijesinghe (2018), the aspect of financial literacy was used to investigate the influence of economic factors on the money management behaviour of university students. According to studies, people who are financially literate have a better understanding of money management and are more likely to be financially independent (Foster & Johansyah, 2022; Md. Sapir@ Md. Shafik & Wan Ahmad, 2020). Financially illiterate people, on the other hand, are more likely to be unable to manage their money and therefore get into financial difficulties such as debt (Batizani & Quetishat, 2022). Therefore, students who excel at economic factors, which in this study translates to financial literacy, should also demonstrate good money management skills.

Previous studies provided evidence of a direct relationship between economic factors and money management behaviour of university students (Bamforth et al., 2018; Bamforth et al., 2017; Sachitra et al., 2019; Sachitra & Wijesinghe, 2018; Zulfaris et al., 2020; Wong et al., 2022). In a study by Sachitra and Wijesinghe (2018), knowledge and skills related to financial decision-making were found to influence good money management among students. This is supported by Zulfaris et al. (2020) and Wong et al. (2022) who emphasise that financial literacy is paramount for the development of frugal behaviour in students.

Therefore, the following hypothesis is formed:

H1: Economic factors significantly influence money management behaviour.

Social Factors

Franzoi's (2006) definition is often used when defining social factors (Adebisi et al., 2020; Bamforth et al., 2017; Sachitra et al., 2019). Franzoi defines that social influence refers to the exercise of social power by a person or group to change the attitudes or behaviour of other persons or groups in a particular direction. The influence of these social actors can therefore affect a person's state of mind, thinking, and behaviour. In this study, social influence can be seen as the extent to which the student's social group, such as parents, families, friends, and religious groups, have an influence on how money is managed.

When students leave home to study at a university and are on their own, their expenses increase, and their financial management becomes more complicated. This can lead to them becoming dependent on credit and debts if they do not get a grip on them. Therefore, in order to manage money independently,

a good attitude towards managing money inflows and outflows is of utmost importance. This good attitude is conveyed and influenced by the people or groups or social actors that surround a person.

Among all the social actors, parents play the most important role and manifest themselves as the perfect mechanism in instilling the right attitudes and behaviours in their children and when it comes to financial decisions (Alshebami & Aldhyani, 2022; Firmansyah, 2014; Gudmonson & Danes, 2011). Teachers can play a unique role as financial facilitators (Shim et al., 2015) and motivators when they can first explain why financial well-being is important in the first place (McCormick, 2009). Peers, friends, and colleagues are also the other support system that can influence university students' learning and decision-making processes (Sachitra & Bandara, 2017) and their financial behaviour (Bamforth et al., 2017). Previous research is also consistent when stating that social media use (Park & Lee, 2014) and religious upbringing (Adebisi et al., 2020; Alderman et al., 2017; Du et al., 2016) have an impact on university students' money management behaviour.

A number of studies have found that social factors influence how individuals set norms related to money management behaviour (Bamforth et al., 2017; Gudmonson & Danes, 2011; Sachitra & Wijesinghe, 2018; Zulfaris et al., 2020). However, Md Kassim et al. (2022) found that social factors such as parental and peer influence were not significant predictors of money management. Due to the contradictory results, the influence of social factors on students' money management should be further investigated.

And with this in mind, the following hypothesis is proposed:

H2: Social factors significantly influence money management behaviour.

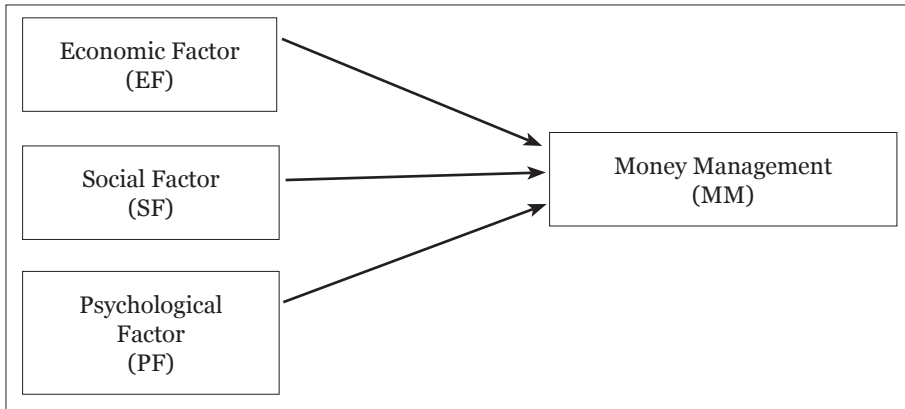
Psychological Factors

Psychological influences can also impact money management behaviour (Bamforth et al., 2018; Hamid & Loke, 2021; Husniyah et al., 2020; Lea et al., 1995). Human psychology is concerned with how people understand and engage with the world through inner thought processes (Bamforth et al., 2017). And this inner thinking can play a role in how a person manages their money and makes financial decisions (Bijleveld & Aarts, 2014). In addition to inner thinking, self-concept, or self-identity (Dwyer et al., 2011) and emotions (Kzendzova et al., 2016) are other psychological factors that influence money management behaviour.

According to studies, students experience high levels of stress (Kotera et al., 2021; Wong et al., 2023). Stress causes depression and one of the most common factors for depression among students is psychological stress (Mohamed Fauzi & Khoo, 2021; Shamsuddin et al., 2013). Psychological stress refers to the stress or oppression caused by a person's thoughts, feelings, and other internal processes, as well as the emotional changes caused by school, society, daily life, interpersonal relationships, and other things, which leading to anxiety and negative emotions (Zhang, 2022). One of the main factors of psychological stress among university students is financial situation (Yahya et al., 2017). Students who are in a difficult financial situation experience financial stress, which has been linked to poor academic performance (Norazlan et al., 2020; Omar Ali et al., 2021) and life satisfaction (Fauzi & Khoo, 2021).

The studies above suggest that there is a direct association between psychological

Table 1
Conceptual Framework and Hypotheses



factors and money management behaviour among university students (Bamforth et al., 2018; McNair et al., 2016; Sachitra et al., 2019). According to Bamforth et al. (2018), students who experience stress disrupt their money management behaviour. Similarly, McNair et al. (2016) found that daily emotional stress is a factor that affects students' money management behaviour.

Therefore, the following hypothesis is put forth:

H3: Psychological factors significantly influence money management behaviour.

Conceptual Framework

According to Bamforth et al. (2017), there is still a lack of understanding of the factors that influence students' money management behaviours. This is especially true in developing countries like Malaysia (Sachitra et al., 2019; Sachitra & Wijesinghe, 2018). This phenomenon suggests that there is a gap in the literature. Therefore, in response to these claims, this study therefore rules

out the possibilities for further investigation of university students' money management behaviour in terms of economic, social, and psychological factors. Figure 1 illustrates the conceptual framework and hypotheses used in this study.

Methodology

In view of restrictions imposed to control the Covid-19 pandemic, this study employed online survey to collect data using convenience sampling method. Online survey allows messages to be delivered instantly to respondents and report a higher response rate (Healey et al., 2002). With the assistance of four (4) enumerators, the questionnaires were distributed online to undergraduate students enrolled in tertiary institutions located in Nilai, Negeri Sembilan, Malaysia. The data was collected in seven days, from 1 to 7 June 2021. A link to the survey invitation was sent out and published through social media platforms including Facebook and WhatsApp. The survey questionnaires were developed in

the English language. The survey items for all constructs in this study were adopted from previous study by Sachitra and Wijesinghe (2018). All survey items and responses were measured on a five-point Likert scale with response options ranging from 1 (strongly disagree) to 5 (strongly agree). To ensure validity of the survey questionnaires, two (2) scholars in the fields of research methodology and business management assessed and evaluated the measurement items to ensure they accurately represented the construct. A total of 143 usable responses were received for further analysis. The data were entered

into IBM Statistical Package for Social Science (SPSS) and descriptive analysis and multiple regression analysis were performed.

Results and Discussion

Descriptive Analysis

Table 1 provides profiles of the 143 respondents while Table 2 presents descriptive statistics of constructs used in this study. From the total number of 143 respondents, 36 were males and 107 were females. These represent 25.2% and 74.8% of the total sample respectively. Furthermore, most respondents were between 18 and 20 years old (53.7%), 39.7% were

Table 1
Respondents' Profile

Demographic	Frequency	Percentage
Gender		
Male	36	25.2
Female	107	74.8
Age		
18-20	78	54.5
21-23	54	37.8
24 and above	11	7.7
Ethnicity		
Malay	127	88.8
Non-Malay	16	11.2
Program of Study		
Business	36	25.2
Non-Business	107	74.8
Year of Study		
Year 1	84	58.7
Year 2	26	18.2
Year 3	21	14.7
Year 4	9	6.3
Year 5 and above	3	2.1

between 21 and 23 years old, and 6.6% were 24 years old and older. In terms of ethnicity, Malays made up the majority of respondents (89%) and non-Malays only 11%. Students from different years of study were used to provide their responses. The respondents were categorised into business students and non-business students, with the majority being non-business students (74.3%) and the remaining was business students (25.7%). The majority of the respondents were in their first

year of study (58.8%), followed by second year (18.4%), third year (14.7%), fourth year (6.6%) and fifth year and above (1.5%).

As shown in Table 2, the mean score for money management construct was 3.68, implying a moderate level of money management behaviour where they practise both prudent and risky money management. According to Sachitra and Wijesinghe (2018), good money management behaviour is one of the most important factors in maintaining

Table 2
Descriptive Statistics

Demographic	Mean
Money Management <ul style="list-style-type: none"> • I follow a weekly or monthly budget. • I keep a written or electronic record of my weekly/monthly expenses. • I review and evaluate my spending on a weekly or monthly basis. • I spent more money than I have. • I get into more and more debt each month. • I regularly set aside money for saving. • I regularly set money aside for possible unexpected expenses. • I am able to buy goods really need. • I have high debt/ credit card debt. • I repay the borrowed money as soon as possible. • I plan ahead for purchases. • I only buy necessities. 	3.68
Economic Factor <ul style="list-style-type: none"> • I have knowledge and skills of budgeting. • I aware of saving opportunities available for university students. • I understand key financial concepts such as inflation, liquidity, interest, compound interest, diversification, share market. I take on part-time job to manage my expenses. • I search cheaper ways to manage my expenses. • I am able to make short-term financial decisions. • I am able to manage long-term financial planning. • I am interested in making investments. • I know how to live within my budget. 	3.59

Table 2
Descriptive Statistics

Demographic	Mean
Social Factor <ul style="list-style-type: none"> • My parents support me to control my expenses. • I am disciplined by my parents not to overspend. • I follow my parents' money management advice. • I follow my parents' money control behaviour. • I discuss with my parents before do shopping. • My friends influence me to enjoy an expensive lifestyle. • I spend more because of my friends. • I have friends who have similar lifestyle like me. • My friends understand that I have difficulties in financing. • I follow my religious beliefs when making expenses. • My religion helps me when managing money. 	3.38
Psychological Factor <ul style="list-style-type: none"> • I feel out of control in financial matters. • I am experiencing high levels of negative feelings relating to money management. • I have confidence in my ability to resist temptation. • I feel shame when taking debts. • I have a worried view of managing money. • I have confidence in my ability to manage myself. • I like to change the way that I spend my money. • I learn lessons from my reckless money spending. • I believe that one should save a little regularly even on a low income. 	3.63

long-term financial stability of different bodies and agencies- the organisations, industries, and nations.

Amongst the factors, psychological factors recorded the highest mean score (3.63), followed by economic factors (3.59) while social factors recorded the lowest mean score

(3.38). This score may suggest that university students' self-identity and emotions, whether positive or negative, should be given attention as they can affect their money management behaviour. Then, mean score of 3.59 for economic factors showed that the respondents regarded themselves as well-equipped with

Table 3
Internal Consistency Reliability

Constructs	Number of Items	Cronbach's Alpha
Money Management	12	0.626
Economic Factors	9	0.829
Social Factors	11	0.824
Psychological Factors	9	0.737
Overall reliability	4	0.708

knowledge and budgeting skills and they were also aware of the financial concepts. This score indicates that it is important for university students to develop and strengthen their money management skills. Finally, the mean score for social factors highlights the fact that socialization actors that may include family and friends can influence students' money management behaviour (Bamforth et al., 2017; Sachitra & Wijesinghe, 2018).

Reliability

Table 3 presents Cronbach alpha values for all the constructs. Cronbach alpha was used to measure the internal consistency reliability of the multiple item scale used for data collection. The higher the value of Cronbach alpha, the higher the reliability of the scale. As a rule of thumb, Cronbach alpha should be greater than 0.6 (Sekaran & Bougie, 2016),

indicating that there is adequate reliability for all constructs. As shown in Table 3, Cronbach alpha values for all constructs were greater than 0.6, indicating adequate reliability. Economic factor construct showed the highest Cronbach's alpha of 0.829 and money management carried the lowest value of 0.626. The overall reliability of the instrument was 0.708.

Multiple Regression Analysis

To test the intended hypotheses in this study, multiple regression was conducted. Specifically, multiple regression analysis was conducted to examine the influence of economic factors (EF), social factors (SF) and psychological factors (PF) on money management (MM). As shown in Table 4, these variables predicted MM in a statistically significant way, $F(3, 139) = 20.008$, $p < .0005$, $R^2 = .302$. EF was a significant factor in predicting MM ($t=6.048$, $p < .005$) while SF and PF were found to be insignificant in predicting money management.

With regard to H1, findings from this study show that economic factors have a significant influence on money management behaviour. The result is consistent with previous studies by Bamforth et al. (2018), Bamforth et al. (2017), Sachitra et al. (2019), and Sachitra and Wijesinghe (2018). The economic perspective

Table 4
Multiple Regression Analysis Results

Hypothesis	Regression Weights	Beta Coefficient	R ²	F	T value	P value	Hypotheses Supported
H1	EF à MM	.388	.302	20.008	6.048	.000	Yes
H2	SF à MM	.152			0.724	.470	No
H3	PF à MM	.093			1.117	.256	No

Notes: $p < 0.05$. MM: Money Management, EF: Economic Factor, SF: Social Factor, PF: Psychological Factor

suggests that financial literacy should be emphasised and strengthened in universities. Moreover, students should learn to manage their expenses and develop good saving habits during their studies so that they are able to minimise financial difficulties, avoid financial problems, and be wary of financial fraud in their lives.

Concerning H2, social factors are not in line with the literature findings that financial literacy and education by parents, peers, and other social actors significantly influence the financial decisions made by young people (Bamforth et al., 2017; Dwyer et al., 2011; Gudmonson & Danes, 2011; Kzendzova et al., 2016; Sachitra & Wijesinghe, 2018; Zulfaris et al., 2020). Nonetheless, the findings are consistent with the findings of Md Kassim et al. (2022), who found that social factors were not a predictor of money management among Malaysian university students. Although the importance of sound advice on money management advice to social actors, especially parents, is very high, the result of this study suggests that students do not perceive any influence from parents, peers, and other social actors on their money management behaviour. Perhaps due to the different backgrounds of parents and peers and the different income groups, it was possible that the practical financial literacy imparted by parents and peers was not strongly related to the money management behaviour of the respondents.

Regarding H3, psychological factors too appeared to contradict the findings from previous studies (Dwyer et al., 2011; Kzendzova et al., 2016) as it was found that it does not have any influence on university students' money management behaviour. Psychologically speaking, although feelings, self-concept or self-identity, and emotions

were not predictors that influence money management behaviour in this study, most respondents were in unison in saying that they had the tendency to feel stressed when dealing with money management, based on the mean score.

Conclusion

Various parties have shown concern over the money management behaviour of university students simply because university students are the future managers and decision makers- the revenue generators for the nation. Moreover, it should be a concern since naturally, many important financial decisions are made for the first time in young adulthood (Eccles et al., 2013). This study takes a closer look into the influence of economic, social, and psychological factors on the money management behaviour of university students in Malaysia. The results show that statistically, economic factors have a significant impact on young adults' money management behaviour, but the social and psychological factors are not significant on money management behaviour.

These insights have spawned several useful academic and practical implications. If reference is made to established theories, few studies have delved into how economic, social, and psychological factors influence the money management behaviour of university students. Therefore, this study comes into the picture and helps readers to closely follow the growing literature on consumer behaviour and money management. When it comes to practice, the findings of this study are all useful to governments, financial institutions, educational institutions, and parents who need to educate university students on prudent money management.

This study carries some limitations similar to other studies, and they need to

be addressed before the study may be done again or replicated in the future. As this study was conducted during the Covid-19 pandemic, many issues with regard to the data collection have to be considered. In addition, the pandemic had caused the data to have been collected online using a convenience sample. Therefore, the survey results cannot be representative of the entire population. Moreover, only a small sample size was obtained, so it may be difficult to confirm if a particular result obtained would count as a strong outcome.

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References

- Abdullah, N., Fazli, S. M., & Muhammad Arif, A. M. (2019). The relationship between attitude towards money, financial literacy and debt management with young worker's financial well-being. *Pertanika Journal of Social Sciences & Humanities*, 27(1), 361-378.
- Adebisi, T. T., Odunayo, O. S., Oritshegbemi, D. A., & Oluwaseyi, J. W. (2020). Determinant factors of money management among Nigerian undergraduates. *Journal of Consumer Sciences*, 5(2), 87-101.
- Alderman, J., Forsyth, J., & Walton, R. (2017). How religious beliefs influence financial decision-making. *Graziadio Business Review*, 20(3). <https://gbr.pepperdine.edu/2017/12/religious-beliefs-influence-financial-decision-making/>.
- Alshebami, A. S., & Aldhyani, T. H. (2022). The interplay of social influence, financial literacy, and saving behaviour among Saudi youth and the moderating effect of self-control. *Sustainability*, 14(14), 8780. <https://doi.org/10.3390/su14148780>
- Bamforth, J., Jebarajakirthy, C., & Geursen, G. (2017). Undergraduates' responses to factors affecting their money management behaviour: Some new insights from a qualitative study. *Young Consumers*, 18, 290-311. <https://doi.org/10.1108/YC-11-2016-00645>
- Bamforth, J., Jebarajakirthy, C., & Geursen, G. (2018). Understanding undergraduates' money management behaviour: A study beyond financial literacy. *International Journal of Bank Marketing*, 36, 1285-1310. <https://doi.org/10.1108/IJBM-05-2017-0104>
- Batizani, D., & Quetishat, A. (2022). An empirical study on financial literacy among undergraduate higher education students: The case of Malawi Institute of Management. *American Journal of Economics and Business Management*, 5(8), 118-126.
- Bijleveld, E., & Aarts, H. (2014). A psychological perspective on money. In *The psychological science of money* (pp. 3-19). New York, NY: Springer New York.
- Bilal, M., & Zulfikar, M. (2016). Financial wellbeing is the goal of financial literacy. *Research Journal of Finance and Accounting*, 7(11), 94-103.
- Brau, J. C., Holmes, A. L., & Israelsen, C. L. (2019). Financial literacy among college students. *Journal of Financial Education*, 45(2), 179-205.

- Chong, K. F., Sabri, M. F., Magli, A. S., Abd Rahim, H., Mokhtar, N., & Othman, M. A. (2021). The effects of financial literacy, self-efficacy and self-coping on financial behaviour of emerging adults. *The Journal of Asian Finance, Economics and Business*, 8(3), 905-915. <https://doi.org/10.13106/jafeb.2021.vol8.no3.0905>
- Chuah, S. C., Ahmad Atory, N. A., Mohamad Arshad, A. A., Denan, Z., & Mohd Ariffin, A. (2021). An exploratory study on money attitudes and life satisfaction among Malaysian adolescents. *Malaysian Journal of Consumer and Family Economics*, 27(S1), 162-176.
- Chuah, S. C., Kamaruddin, J. N., & Singh, J. S. K. (2020). Factors affecting financial management behaviour among university students. *Malaysian Journal of Consumer and Family Economics*, 25, 154-174.
- Cloutier, J., & Roy, A. (2020). Consumer credit use of undergraduate, graduate and postgraduate students: An application of the theory of planned behaviour. *Journal of Consumer Policy*, 43(3), 565-592. <https://doi.org/10.1007/s10603-019-09447-8>
- Danes, S. M., & Hira, T. K. (1987). Money management knowledge of college students. *Journal of Student Financial Aid*, 17(1), 1-16. <https://doi.org/10.55504/0884-9153.1435>
- Diana-Rose, F., & Zariyawati, M. A. (2015). *Factors affecting youth bankruptcy in Malaysia*. UPM-SAGE Publications Young Writer's Award, 18-34.
- Dickler, J. (2021, November 27). *More colleges face bankruptcy even as top schools experience record wealth*. CNBC. <https://www.cnn.com/2021/11/27/more-colleges-face-bankruptcy-but-top-schools-experience-record-wealth.html>
- Du, X., Du, Y., Zeng, Q., Pei, H., & Chang, Y. (2016). Religious atmosphere, law enforcement, and corporate social responsibility: Evidence from China. *Asia Pacific Journal of Management*, 33(1), 229-265. <https://doi.org/10.1007/s10490-015-9441-0>
- Dwyer, R. E., McCloud, L., & Hodson, R. (2011). Youth debt, mastery, and self-esteem: Class-stratified effects of indebtedness on self-concept. *Social Science Research*, 40(3), 727-741. <https://doi.org/10.1016/j.ssresearch.2011.02.001>
- Eccles, D. W., Ward, P., Goldsmith, E., & Aarsal, G. (2013). The relationship between retirement wealth and householders' lifetime personal financial and investing behaviours. *Journal of Consumer Affairs*, 47(3), 432-464. <https://doi.org/10.1111/joca.12022>
- Fauzi, N. F. M., & Khoo, K. K. (2021). Financial distress and perceived stress among university students in health sciences. *Jurnal Personalia Pelajar*, 24(1), 41-52.
- Foster, B., & Johansyah, M. D. (2022). Analysis of the effect of financial literacy, practicality, and consumer lifestyle on the use of chip-based electronic money using SEM. *Sustainability*, 14(1), 32. <https://doi.org/10.3390/su14010032>
- Franzoi, S. L. (2006). *Social psychology*. (Vol. 4th ed.). McGraw-Hill.

- Gudmunson, C. G., & Danes, S. M. (2011). Family financial socialization: Theory and critical review. *Journal of Family and Economic Issues*, 32(4), 644-667. <https://doi.org/10.1007/s10834-011-9275-y>
- Hair, J. F., Black, W. C., Babin, B. J., & Anderson, R. E. (2019). *Multivariate data analysis*. Andover. Hampshire, United Kingdom: Cengage.
- Halim, S. A. A., Nadzri, F. A. A., & Zolkafil, S. (2021). Gullibility theory and ponzi scheme participation among university students in Malaysia. *Academy of Strategic Management Journal*, 20, 1-20. <https://www.proquest.com/scholarlyjournals/gullibility-theory-ponzi-schemeparticipation/docview/2599946980/se-2>
- Hamid, F. S., & Loke, Y. J. (2021). Financial literacy, money management skill and credit card repayments. *International Journal of Consumer Studies*, 45(2), 235-247. <https://doi.org/10.1111/ijcs.12614>
- Hashim, H. B., Chee, A. L. Y., Fern, Y. S., Chelvarayan, A., & Lajis, K. N. B. (2021). Factors contributing to financial literacy level among youth. RSF Conference Series: *Business, Management and Social Sciences*, 1(1), 30-35. <https://doi.org/10.31098/bmss.vii1.251>
- Healey, N.M., Baron, S., & Ilieva, J. (2002). Online surveys in marketing research. *International Journal of Market Research*, 44(3), 1-14.
- Huish, D. A. (2018). Clawing Back Tuition Payments in Bankruptcy: Looking to Ancient and Recent History to Define the Future. *Iowa L. Rev.*, 104, 2151.
- Humaidi, A., Khoirudin, M., Adinda, A. R., & Kautsar, A. (2020). The effect of financial technology, demography, and financial literacy on financial management behaviour of productive age in Surabaya, Indonesia. *International Journal of Advances in Scientific Research and Engineering*, 6(01), 77-81. <https://doi.org/10.31695/IJASRE.2020.33604>
- Husniyah, A. R., Amirah Shazana, M., Mohamad Fazli, S., Mohd.Amim, O., & Roziah, M. R. (2020). Psychological factors contributing towards financial problem among civil service sector employees. *Malaysian Journal of Consumers and Family Economics*, 25(S1), 148-171.
- Kotera, Y., Ting, S. H., & Neary, S. (2021). Mental health of Malaysian university students: UK comparison, and relationship between negative mental health attitudes, self-compassion, and resilience. *Higher education*, 81(2), 403-419. <https://doi.org/10.1007/s10734-020-00547-w>
- Ksendzova, M., Donnelly, G. E., & Howell, R. T. (2017). A brief money management scale and its associations with personality, financial health, and hypothetical debt repayment. *Journal of Financial Counseling and Planning*, 28(1), 62-75. <https://doi.org/10.1891/1052-3073.28.1.62>
- Kumar, D. S., Sudin, H., Othman, J., & Salehuddin, S. (2022). The influence of spending behaviour among university students in Malaysia. *Asian Journal of Accounting and Finance*, 4(3), 30-43.

- Lea, S. E., Webley, P., & Walker, C. M. (1995). Psychological factors in consumer debt: Money management, economic socialization, and credit use. *Journal of Economic Psychology*, 16(4), 681-701. [https://doi.org/10.1016/0167-4870\(95\)00013-4](https://doi.org/10.1016/0167-4870(95)00013-4)
- Lieber, R. (2021, June 25). *The young fall for scams more than seniors do. Time for a warning.* The New York Times. <https://www.nytimes.com/2021/06/25/your-money/young-seniors-scams-warning.html>.
- Lim, W. Q., Lau, P. L., & Razak, N. A. A. (2020). Social support among students in a Malaysian public university: A preliminary study. *JuKu: Jurnal Kurikulum & Pengajaran Asia Pasifik*, 8(2), 27-34.
- Majid, M., Qureshi, H. A., & Aftab, H. (2021). Predictors of money management behaviour among university students. *International Journal of Innovation, Creativity and Change*, 15(4), 1065-1084.
- Malaysia Insolvency Department. (2022). *Bankruptcy statistic 2022*. <https://www.mdi.gov.my/index.php/legislation/statistics/75-bankruptcy/1983bankruptcy-statistic-2022>.
- Malaysian Institute of Information Technology students. *Science International (Lahore)*, 29(3), 561-564.
- Maraidas, P. A., & Muruthy, U. (2021, October 21). *Prioritize paying debts over other spending.* New Straits Times. <https://www.nst.com.my/opinion/columnists/2021/10/738324/prioritisepaying-debts-over-other-spending>.
- McNair, S., Summers, B., de Bruin, W. B., & Ranyard, R. (2016). Individual-level factors predicting consumer financial behaviour at a time of high pressure. *Personality and Individual Differences*, 99, 211-216. <https://doi.org/10.1016/j.paid.2016.05.034>
- Md Kassim, A. A., Yousefi Nejad, M., Othman, J., Mamat, S., Mat Saad, A., & Mohamed Izwan, I. D. (2022). Determinants of money management behavior among Malaysian private universities students. *International Journal of Business and Applied Social Science*, 8(8), 10-18. <http://dx.doi.org/10.33642/ijbass.v8n8p2>
- Md. Sapir @ Md. Shaft, A. S., & Wan Ahmad, W. M. (2020). Financial literacy among Malaysian Muslim undergraduates. *Journal of Islamic Accounting and Business Research*, 11(8), 1515-1529. <https://doi.org/10.1108/JIABR-10-2017-0149>
- Mohamed Fauzi, N. F., & Khoo, K. K. (2021). Financial distress and perceived stress among university students in health sciences. *Jurnal Personalia Pelajar*, 24(1).
- Mohd Padil, H., Kasim, E. S., Muda, S., Ismail, NT., & Md Zin, N. (2022). Financial literacy and awareness of investment scams among university students. *Journal of Financial Crime*, 29(1), 355-367. <https://doi.org/10.1108/JFC-01-2021-0012>
- Murthy, LT., & Mariadas, P. A. (2017). Factors affecting fresh graduate bankruptcy at young age: The case of fresh graduates in Kota Damansara. *International Journal of Business and Management*, 12(12), 194-194. <https://doi.org/10.5539/ijbm.vi2n12p194>

- Norazlan, N., Yusuf, S., & Al-Majdhoub, F. M. H. (2020). The financial problems and academic performance among public university students in Malaysia. *The Asian Journal of Professional & Business Studies*, 1(2), 1-6.
- Nunnally, J. C. (1978). *Psychometric theory* (2nd ed.). McGraw-Hill.
- O'Malley, T. C., & Payne, B. C. (2021). Can student borrowing lead to bankruptcy? *Journal of Applied Business & Economics*, 23(1), 13-28.
- Omar Ali, S. R., Ajit, N., Mohd Said, N. S., Mat, K. A., & Abdullah, N. (2021). Stressors and academic performance among part time students in a public university in Malaysia. *Voice of Academia (VOA)*, 17(2), 50-61.
- Park, N., & Lee, S. (2014). College students' motivations for Facebook use and psychological outcomes. *Journal of broadcasting & electronic media*, 58(4), 601-620. <https://doi.org/10.1080/08838151.2014-966355>
- Pellier, J. W., Pornirleanu, N., Endres, M., & Markos, E. (2016). Psycho-social factors impacting credit acquisition and use by college students. *Financial Literacy and the Limits of Financial Decision-Making*, 177-200.
- Rahim, H. A., Seng, N. D., Ngadiman, D. W. T., & Ismail, N. A. (2020). The debt management patterns of educational loan recipients among Polytechnic students in Kota Kinabalu, Sabah: An empirical study. *International Journal of Accounting*, 5(28), 49-57.
- Rajanderan, P., & Wai-Yan, W. (2021). Financial health of undergraduates in Malaysia: An empirical study on the underlying factors. *Journal of Contemporary Issues and Thought*, 11, 113-125.
- Sabri, M. F., Wahab, R., Mahdzan, N. S., Magli, A. S., & Rahim, H. A. (2022). Mediating Effect of Financial Behaviour on the Relationship Between Perceived Financial Wellbeing and Its Factors Among Low-Income Young Adults in Malaysia. *Frontiers in Psychology*, 13, 858630.
- Sachitra, V., & Bandara, U. (2017). Measuring the academic self-efficacy of undergraduates: The role of gender and academic year experience. *International Journal of Educational and Pedagogical Sciences*, 11(11), 2608-2613.
- Sachitra, V., & Wijesinghe, D. (2018). What determine money management behaviour of undergraduates? An examination in an emerging economy. *Journal of Education, Society and Behaviour al Science*, 26(4), 1-14
- Sachitra, V., Wijesinghe, D., & Gunasena, W. (2019). Exploring undergraduates' money-management life: Insight from an emerging economy. *Young Consumers*, 20(3), 167-189. <https://doi.org/10.1108/YC-07-2018-00828>
- Schermerhorn, J. R., Davidson, P., Poole, D, Simon, A., Woods, P., & Chau, S. L. (2011). *Management: Foundations and Applications*. John Wiley & Sons.

- Shamsuddin, K., Fadzil, F., Ismail, W. S. W., Shah, S. A., Omar, K., Muhammad, N. A., & Mahadevan, R. (2013). Correlates of depression, anxiety and stress among Malaysian university students. *Asian Journal of Psychiatry*, 6(4), 318-323.
- The Star. *University student loses over RM42,000 to online scam.* (2022). <https://www.thestar.com.my/news/nation/2022/03/06/universitystudentloses-over-rm42000-to-onlinescam>.
- The Sun Daily. (2019). *Macau Scam targets IPTS students to provide 'mule accounts'*. <https://www.thesundaily.my/local/macau-scam-targets-ipts-studentstoprovide-mule-accounts-LN681519>.
- Thomas, B., & Subhashree, P. (2020). Factors that influence the financial literacy among engineering students. *Procedia Computer Science*, 172, 480-487. <https://doi.org/10.1016/j.procs.2020.05.161>
- Topa, G., Hernández-Solís, M., & Zappalà, S. (2018). Financial management behaviour among young adults: The role of need for cognitive closure in a three-wave moderated mediation model. *Frontiers in Psychology*, 2419. <https://doi.org/10.3389/fpsyg.2018.02419v.017.n03.245>
- Wong, S. K. Y., Misiran, M., Yusof, Z. M., & Supadi, S. S. (2022). Impact of financial literacy level on financial behavior among higher education students: A case study in KDA University. *EDUCATUM Journal of Social Sciences*, 8(1), 43-52. <https://doi.org/10.37134/ejoss.v018.1.5.2022>
- Wong, S. S., Wong, C. C., Ng, K. W., Bostanudin, M. F., & Tan, S. F. (2023). Depression, anxiety, and stress among university students in Selangor, Malaysia during COVID-19 pandemics and their associated factors. *Plos one*, 18(1), e0280680.
- Xiao, J. J., Tang, C., & Shim, S. (2009). Acting for happiness: Financial behaviour and life satisfaction of college students. *Social Indicators Research*, 92(1), 53-68. <https://doi.org/10.1007/s11205-0089288-6>
- Yahya, Y., Mohd, N., Nazaruddin, NT., & Sanusi, S. N. (2017). *Predictive factors of depression among university students: A study on University Kuala Lumpur*
- Zhang, H. (2022). A novel deep learning model for analyzing psychological stress in college students. *Journal of Electrical and Computer Engineering*, 2022, 1-11. <https://doi.org/10.1155/2022/3244692>
- Zulfaris, M. D, Mustafa, H., Mahussin, N., Alam, M. K., & Daud, Z. M. (2020). Students and money management behaviour of a Malaysian public university. *The Journal of Asian Finance, Economics and Business*, 7(3), 245-251. <https://doi.org/10.13106/jafeb.2020>.