e-Bangi Faculty of Social Sciences and Humanities Universiti Kebangsaan Malaysia
Journal of Social Sciences and Humanities

Volume 21, Issue 1, DOI: https://doi.org/10.17576/ebangi.2024.2101.13

Article

Financial Literacy among Undergraduates: A Study in Universiti Sains Malaysia

Wei Quan LEE CHOCK & Yee Whah CHIN*

School of Social Sciences, Univeriti Sains Malaysia, 11800 Penang, Malaysia

*Corresponding Author: ywchin@usm.my

Received: 23 September 2023
Accepted: 06 November 2023

Abstract: Youth exposure to financial literacy information has become common in today's digital age, providing students with early financial management skills for a lifetime of well-being. However, easy access to technology and information doesn't always translate into financial literacy skills for today's students. This study aims to comprehensively understand financial literacy among undergraduates at Universiti Sains Malaysia, describing gender and ethnic group differences. It applied the theory of embeddedness to explain financial literacy variations across family backgrounds, friend networks, gender, and ethnicity. A single-stage non-probability sampling method was used. Employing purposive and quota sampling, ten informants from diverse backgrounds were interviewed. Grounded theory with open coding, axial coding, and selective coding was employed for data analysis. The findings show that undergraduate financial literacy is primarily shaped by family and social networks, where young individuals continuously develop and enhance their financial knowledge. The findings implied that educators and policymakers can customize strategies for young individuals, aligning financial literacy promotion with real-life experiences of young people which can contribute to long-term solutions for reducing youth bankruptcy.

Keywords: Financial literacy; embeddedness; undergraduates; family background; friend networks

Introduction

Early exposure to financial literacy is increasingly common in today's digital age, providing young people with essential skills for effective financial management. Financial literacy is an essential driver of undergraduates' risk-taking propensity Molina-García et al. (2023). However, despite easy access to information, many young individuals lack financial literacy. Between 2018 and September 2022, 10,378 Malaysian youths declared bankruptcy, with over 20% of them under the age of 34, mainly due to pursuing an extravagant lifestyle (Chin & Adlan, 2022).

The Credit Counselling and Debt Management Agency (AKPK) emphasize that fostering financial literacy is crucial in preventing youth bankruptcy. Since the year 2016, Bank Negara Malaysia has incorporated financial education into Malaysia's school curriculum stages. The curriculum on financial education in schools would include topics on money management, planning, savings and investments, credit and debt management, and insurance (Loh, 2013). However, various research suggests that financial literacy among youth in Malaysia is still in the low to moderate stages despite having easy access to financial information (Murugiah, 2016; Tay et al., 2020; Yew et al., 2017).

This study aims to achieve two main objectives. Firstly, to provide a comprehensive understanding of financial literacy among undergraduates by examining influences from their family backgrounds, and networks of friends. Secondly, it describes the similarities and differences in financial literacy between different genders and ethnic groups among these students.

The rest of this paper is organised as follows. Section two presents the literature review. Section three explains the methodology employed for the study. Section four explains the research findings. Section five presents the discussion. Finally, the paper concludes with the findings of this study.

Literature Review

Numerous studies have consistently shown low financial literacy among youth in emerging countries, making them susceptible to financial challenges (Kadir & Jamaluddin, 2020). In Malaysia, existing studies reveal the level of financial literacy among youth is low (Ansar et al., 2019a, 2019b; Mokhtar et al., 2020; Yew et al., 2017), especially in investing (Jay, 2017).

Women exhibit low levels of financial literacy due to socioeconomic disadvantages, limited income sources, and gender gaps (Sabri & Poh, 2017). Women tend to have lower financial knowledge than men and gender is a significant predictor of individual saving behavior (Mahdzan & Tabiani, 2013). These gender disparities in financial literacy may stem from socialization processes as parents often have higher expectations for their sons in terms of employment and savings, leading to more frequent financial discussions focused on sons rather than daughters (Edwards et al., 2007 cited in Mokhtar et al., 2018). Male youths are better informed on financial management and money matters compared to females (Sabri & Poh, 2017; Ying et al., 2020).

Studies exploring financial literacy and ethnicity reveal the impact of unique family cultures on financial behaviors within each ethnic group (Sabri et al. 2010). However, it's important to recognize that cultural factors are intricate and multifaceted, with various subcultures and socioeconomic backgrounds within different ethnicities introducing additional variables that can affect financial behaviors. A study (Jeyaram and Musthapa 2015, cited in Mokhtar et al. 2018) found notably higher financial literacy among Chinese respondents compared to other ethnic groups. Indians have a lower level of financial-related knowledge compared to Malay and Chinese ethnic groups (Sabri & Poh, 2017). These studies imply an ethnicity-financial literacy correlation. Conversely, systemic biases and structural inequalities may also affect financial literacy among ethnic groups, influencing access to resources and opportunities for financial education. Sabri et al. (2010) revealed that students from public universities, often from low- or middle-income families, tend to have higher financial literacy compared to those from private colleges.

Nevertheless, the existing studies on financial literacy available are built based on finance, economic, and/or business perspectives, and guided by psychological theory where the ontological and epistemological assumption is detached from the social-cultural context. The theory of Planned Behaviour is used in, but not limited to, studies of (Kadir & Jamaluddin, 2020; Koe & Yeoh, 2021; Sabri & Poh, 2017). This theory argues that individuals have the ability to exert self-control, thus, plan their behaviour. It is used to predict an individual's intention to engage in a behaviour at a specific time and place based on intention and behavioural control (LaMorte, 2022).

The study of youth’s financial literacy encompasses a broad range of financial-related knowledge. It argues that one's financial literacy is embedded in their structural, social, and cultural context (Granovetter, 1985; Hass 2020). This study focused on three categories that were widely studied and relevant to the everyday experiences of youth: (1) personal financial management, (2) budgeting, and (3) investment (Alekam et al., 2018; Ansar et al., 2019a; Halim et al., 2021; Jamal et al., 2016; Rahman & Gan, 2020)

Financial literacy, per OECD, is an individual's ability to acquire knowledge and skills for wise financial decisions. Personal financial management involves strategies to handle resources, while budgeting is a universal tool for planning (Lidia, 2014). The process of creating a budget typically begins with identifying one's net income (Ganti, 2022). Students' income sources include scholarships, loans, work earnings, and family allowances. Investing is using income for profit through financial products.

This research extends beyond previous quantitative studies that focused on patterns and correlations, adding a qualitative dimension to the complex and multidimensional concept of financial literacy. Employing the notion of embeddedness with in-depth interviews with youth informants offers valuable insights into their financial experiences, decision-making, and challenges. This study can potentially contribute to the development of targeted financial education programs, policies, and interventions aimed at improving the financial literacy of youth in Malaysia.

Methodology

1. Ontology and Epistemology
Most previous studies on financial literacy assume individual decision-making is based on self-interest, but in reality, economic and financial activities are influenced by multiple contextual forces like structures, culture, institutions, and politics that economic theory doesn't fully consider (Hass, 2020, pp. 12–17). In this study, the researchers explore youth's financial literacy within the context of their structural, cognitive, and cultural surroundings. A key aspect of embeddedness is how individuals exist within social structures, like microstructures or networks, which both limit and facilitate their access to information, knowledge, and skills. Family members and friends often constitute these microstructures (Hass, 2020, p. 12). Our notion of cognitive embeddedness refers to the actors' skills in making appropriate financial decisions that were subjected to the incomplete information they had (Hass, 2020, p. 14). The cultural embeddedness implies that human action and interaction cannot be understood without including the social and cultural context in the analysis. Categories, assumptions, and rituals from the contexts of our social lives shape our decisions and actions (Hass, 2020, p. 15). Categories such as language groups, culture, and ethnicity may have different influences on youth financial literacy. For language groups, the difference in financial literacy across the language groups is stronger for native students and monolingual students than for immigrant students and bilingual students (Brown et al., 2018).

2. Research Design
We recognized that financial literacy is a complex and multidimensional concept that cannot be fully captured through quantitative measures alone. Therefore, a qualitative design is adopted.

3. Location and Scope of the Study
This study focuses on undergraduates at the main campus of Universiti Sains Malaysia, who share a common educational environment, reducing variations in financial literacy often found in the general population. This study analyzes undergraduates aged 18 to 25 years, considered youth within Malaysia's 15 to 30 years age range as defined by the Youth and Sports Minister (Yunus & Landau, 2019).

4. Sources of Data
Data was sourced from semi-natural settings, with informants reporting their financial literacy face-to-face. The study began by collecting demographic information guided by a semi-structured interview. This aimed to reveal insights into the social context impacting youth financial behaviours. Understanding their demographics provided a comprehensive view of how their financial decisions were embedded within a larger social framework. Subsequently, the study probed informants about their financial literacy practices to gain a deeper understanding of their financial decision-making.

5. Types of Data and Method of Data Collection
This study purely relies on primary data. In-depth interviews were conducted that enabled the acquisition of detailed and comprehensive information from informants. Semi-structured interviews allowed flexibility in the conversation, enabling the exploration of new themes and the emergence of additional questions as they arose during the interview process.

6. Sampling and Sample Size
A single-stage non-probability sampling method was used, employing purposive and quota sampling to select informants with specific traits relevant to the study, including gender, ethnicity, and academic course. By

including informants from various courses, the study seeks to capture differences in structure, culture, and networks within different academic disciplines, which may influence financial literacy levels and behaviors among the informants.

Hennink and Kaiser (2022) suggest data saturation in qualitative research is usually achieved with about 9 to 12 interviews or 4 to 8 discussion groups. To reach saturation within constraints, a sample of 10 undergraduate informants, representing diverse ethnic backgrounds (Malay, Chinese, and Indian), was chosen for a comprehensive exploration of financial literacy experiences across cultural groups. Ethnicity encompasses various aspects but is not limited to, such as language, country of origin, religion, and cultural beliefs (Blakemore, 2019). To ensure a well-rounded sample, both male and female informants were included, acknowledging potential gender differences in financial knowledge and practices (see Table 1). Among the ten informants, four are male, six are female. The age range is 20 to 25 years old. There are four Malay, three Chinese, and three Indian students. In terms of parental education, five have higher secondary education (Form 5/SPM), two have a diploma, two have tertiary-level education, and one has lower secondary education (Form 3/SPR/PMR).

7. Data Analysis

Grounded theory with open coding, axial coding, and selective coding (Neuman, 2014) was employed for data analysis. In the initial phase, open coding was used to identify themes guided by the notion of embedddedness. In the second phase, axial coding was used to explore relationships, causal connections, and patterns for a structured framework. Finally, specific cases were selectively chosen to exemplify themes and concepts, refining themes for a central category.

Findings

1. Influences from Family and Networks of Friends

Based on the data, it is noteworthy that family backgrounds have a significant influence on the financial exposure of the informants. The more they are exposed to financial matters within their families, the more financially literate they tend to be.

One way families foster financial management skills is through pocket money and monitoring. Seven study informants received pocket money since childhood, with parents overseeing spending. For instance, Izzati allocated her monthly RM500 into savings and daily expenses, stressing self-initiated saving. She said, "…one month my parents will give me around RM500, I divided it into two parts. One into saving and another for food…they gave us the pocket money, so we need to learn savings by ourselves…" Conversely, Jamila restricted daily expenses to RM10, allocating RM300 for food and drinks and saving RM200 for emergencies.

Family members also provide financial advice to informants. Eight out of 10 mentioned parental guidance. Iffah's mother encouraged her to open an Employee Provident Fund (EPF) account to curb spending. Santhiya's mother advised investing in Amanah Saham Nasional Berhad (ASNB) unit trust accounts, citing higher interest rates and dividends than fixed deposits. Santhiya reasoned "My mother tells us how we should invest…bank interest rate was 3.5% compared to Amanah Saham, the dividend is very high. So, if you save the dividend money, it will also grow day by day". Santhiya also learned about income statements and household expense tracking from her mother, gaining financial awareness from a young age.

The data show that family members influence undergraduates' financial decisions and expose them to financial matters. They guide good budgeting by moderating pocket money usage, as seen in cases like Yeoh and Ali. Yeoh's father consistently reminds him to save money and avoid overspending, while Ali's parents suggest saving 50% of his total income. Parents commonly advise against overspending, with varying definitions based on income levels. For instance, Izzati economizes by eating only one meal daily. Notably, undergraduates' top expenses include food, transportation, utilities, and personal items, emphasizing their focus on essential needs over indulgences.

Parents are role models for children in financial management. Some students inherit financial literacy from family role models. Sinegaa's parents, involved in multilevel marketing (MLM) and emphasizing passive income, instilled the value of passive income, financial freedom, and early retirement. Exposure to forex investments within the family led Sinegaa to start investing in forex.

In contrast, some families seldom discuss financial management and investing with their children. Informants like Yeoh and Leong acquire financial literacy independently. Yeoh works part-time, attends online investment and business seminars, and shares his financial knowledge management with his parents, fostering mutual financial insights such as how to spend money more efficiently, and making investments and savings. Leong, though rarely discussing finances with his parents, works as a freelancer, researched investment opportunities, and developed budgeting strategies through personal experience, demonstrating his proactive approach to financial knowledge and independent financial management by investing in the stock market.

Parents' educational levels can have varying influences on their children's financial literacy. Parents with a degree tend to provide valuable advice on saving, while those with a diploma often influence their children's approach to budgeting. However, it's worth noting that parental education level does not seem to significantly impact their children's investment habits. This holds true for all parents, regardless of their educational background.

Besides family influence, networks of friends also contribute to financial literacy among undergraduates. Peer-to-peer learning in informal settings is common for improving financial literacy and diversifying savings. Yeoh, Izzati, Sinegaa, and Ali exemplify this. Yeoh's friends discuss online finance seminars, Izzati and Ali's friends talk about buying gold for savings, and Sinegaa received ASNB investment advice from a friend, highlighting affordability. This demonstrates "financial socialization," where social interactions shape individuals' financial attitudes, behaviors, and knowledge.

Friends' financial behaviours also have an influence on personal financial management. For example, Santhiya benefits from a supportive group of like-minded friends, openly discussing finances, tracking expenses, and enhancing spending awareness. She actively initiates financial discussions, particularly with friends of similar backgrounds.

Table 1. Background and demographics of informants

Gender	Ethnicity	Informants	Age	Parents' Education Level	
				Father	Mother
Male	Malay	Ali	23	Degree	Diploma
	Chinese	Yeoh	25	Lower Secondary	Diploma
	Chinese	Leong	24	Higher Secondary	Higher Secondary
	Indian	Logen	22	Higher Secondary	Higher Secondary
Female	Malay	Iffah	21	Higher Secondary	Higher Secondary
	Malay	Izzati	20	Higher Secondary	Higher Secondary
	Malay	Jamila	21	Degree	Degree
	Chinese	Tan	24	Higher Secondary	Higher Secondary
	Indian	Santhiya	22	Higher Secondary	Degree
	Indian	Sinegaa	21	Higher Secondary	Lower Secondary

Note: Lower Secondary (Form 3/PMR/PT3); Higher Secondary (Form 5/SPM); pseudonyms are used to represent the informants.

Source: Fieldwork (2023)

2. Financial Literacy Among Male and Female Undergraduates

This section describes the similarities and differences in financial literacy among undergraduates of different gender and ethnic groups.

Sources of Income

Both male and female informants have diverse income sources, including parental support, scholarships, and part-time work. They understand the significance of effective income management, recognizing the need to track their earnings and allocate them wisely to meet their needs and financial objectives.

Table 2. Sources of income of male and female informants

Gender	Informants	Income per Month	Source of Income
Male	Ali	RM1,200	Intern’s allowance.
	Yeoh	RM1,000 – RM1,500	Part-time, freelance.
	Leong	RM1,300 – RM1,400	Parents, scholarship, freelance.
	Logen	RM1,200	Parents, intern’s allowance.
Female	Iffah	RM950 – RM1,000	Parents, scholarship, part-time.
	Izzati	RM500	Parents.
	Jamila	RM500	Parents.
	Tan	RM800 – RM1,100	Freelance, government loan.
	Santhiya	RM450 – RM600	Parents, performance.
	Sinegaa	RM1,000	Parents, scholarship, freelance.

Source: Fieldwork data (2023)

Table 2 presents the monthly income and sources for male and female informants. Male informants' monthly income ranges from RM1,000 to RM1,500, sourced from internships, part-time work, freelance activities, and parental support. For instance, Ali relies on his intern allowance for his monthly income of RM1,200, while Yeoh and Leong have diverse sources of income from part-time work, freelance activities, and parental support contributing to their higher monthly income of RM1,000 to RM1,500 and RM1,300 to RM1,400 respectively.

Female informants have slightly lower monthly income (RM450 to RM1,100), sourced from freelance work, parental support, scholarships, part-time work, and performance earnings. For example, Iffah and Sinegaa receive parental support and scholarships, supplemented with part-time work and freelance activities, achieving RM950 to RM1,000 monthly incomes. Santhiya earns RM450 to RM600 monthly primarily from parental support and performance earnings.

Both male and female informants demonstrate financial diversification and independence. Male informants generally have a slightly higher income range, possibly due to various factors such as the type of work, parental support, scholarships, or societal expectations. Leong highlights the importance of financial management and investment for men, emphasizing financial stability and diversification. Leong said,

> *“Well, if I speak on behalf of a mature man... one’s financial management should include savings... and men especially, need to know about investment”.*

Knowledge in Personal Financial Management

Informants allocate their income into categories like savings, expenses, and investments, effectively managing their money. This budgeting approach ensures they cover essential expenses, save for the future, and grow their wealth. For instance, Yeoh, a male informant separates his income into different accounts for different purposes, allowing effective tracking. He said,

> *"Usually I will separate my money into different accounts for different purposes. For saving, then cash flow in another, and income from side income. I will separate my income into different banks so that I know how much income I acquire from different sources".*

Sinegaa follows a similar strategy learned from her father, maintaining two separate accounts for distinct financial activities. One account is a current account and another one is a savings account.

Both male and female informants employ financial management methods shaped by their income sources. Females have a comprehensive view, including income management, savings, budgeting, and investing. For instance, Tan sees it as investing and saving, while Jamila and Izzati emphasize budgeting and saving. Sinegaa and Santhiya add passive income and asset investments. Male informants' understanding centers on practical daily expense management and savings. For example, Yeoh ensures he doesn't run out of money by month-end, and Leong emphasizes savings and expense management.

Budgeting

Both male and female informants engage in some degree of budgeting, with differing spending priorities. Male informants prioritize food, utilities, transport, and entertainment, allocating more to utilities. Females focus on food, skincare, and supplements, allocating more to skincare and supplements. Both prioritize food. Males monitor spending but don't strictly adhere to budgets, while females demonstrate greater budget discipline, strictly adhering to their pre-determined budgets. Female informant Iffah highlights the importance of adhering to budgets to maintain financial balance. She stated,

> *"If we overspent this month, we need to cut back next month to balance out the excess spending."*

Investment Preference and Strategies

Regarding investment preferences and strategies, both male and female informants understand the importance of investing for financial stability. However, they differ in their choices. Males like Yeoh and Leong prefer active investments in financial markets, with a focus on mutual funds and stocks. Leong considers current economic trends before investing. Yeoh opts for low-risk investments like mutual funds, while Logen explores forex and cryptocurrency investments. In contrast, Ali leans towards more traditional and stable investments like ASNB and has future plans to invest in gold.

Female informants also participate in diverse investment activities. Tan invests in forex, FDs, and ASNB, with most decisions guided by her father. Jamila and Izzati use Amanah Saham Bumupiutera (ASB) unit trust accounts for savings and potential profits, and both contemplate future gold investments. Iffah follows her mother's advice by contributing to EPF and has opened her own Amanah Saham Nasional (ASN) unit trust account, emphasizing the importance of investment for non-wealthy individuals. Sinegaa views her MLM business as an investment in effort, expecting greater returns as her network expands. Santhiya holds savings in ASNB and an education insurance policy, with plans for future property investment.

Both male and female informants acknowledge the significance of investment and opt for low-risk options, assessing potential returns beforehand. However, males adopt a more active approach, investing in financial markets and monitoring economic trends. In contrast, females often take a more passive stance, relying on parental guidance for investment decisions or viewing their business efforts as investments.

3. Ethnicity and Financial Literacy among Undergraduates

Ethnic disparities in financial management are evident, with Malay informants generally favoring a conservative approach. They rely heavily on parental support or scholarships, indicating less income diversity compared to Chinese informants. For instance, Jamila and Izzati receive approximately RM500 monthly from their parents, with Jamila aiming to spend less than RM10 per day, while Izzati allocates her funds between savings and daily expenses. Iffah has a somewhat more diversified income, including a scholarship, parental support, and part-time income as a drop-shipper, but she still maintains conservative spending habits, allocating RM400 to food and RM100 to transportation.

Personal Financial Management

Malay informants tend to adopt a cautious spending habit and prioritize saving, possibly due to cultural or educational factors. This contrasts with Chinese informants who take a more proactive approach to managing finances. They have multiple income streams, engage in strategic fund allocation, and show a proactive financial management approach. This may be influenced by cultural factors or financial education. This active income management is further exemplified by their practice of allocating their funds into different accounts for distinct purposes, indicating a strategic approach to financial management. For example, Yeoh, Tan, and Leong earn various incomes from part-time work, scholarships, or freelance gigs, and they allocate their money into different accounts for specific purposes, such as for utilities, car loans, and for investments, demonstrating their strategic financial management.

On the other hand, Indian informants combine active and conservative financial management approaches. This could be attributed to a combination of cultural influences, personal financial education, and individual experiences. They have diverse income sources, including internships, parental support, and MLM businesses, showcasing income diversification. They employ budgeting to manage expenses, demonstrating financial discipline and adaptability to personal circumstances. For example, Sinegaa receives scholarships, RM600 parental support per month, and RM200 monthly MLM income while aiming to spend within RM20 for food daily. Santhiya receives RM500 monthly parental support and uses savings when needed. Logen earns from an internship stipend of around RM1200 per month and parental support, saving around RM800 monthly.

Budgeting

The informants universally recognize the importance of budgeting, but their adherence and priorities vary by ethnic group. Chinese and Indian informants don't strictly adhere to budgets but make conscious efforts to avoid overspending. For example, Tan sees budgeting as a guideline, especially when resources are limited. She stated,

> *"…(budgeting) depends on oneself, if you have a lot of money, you don't need a budget. If you have a budget, then it will be a very good guideline".*

In contrast, Malay informants tend to adhere more strictly to their budgets. Izzati stresses budgeting to avoid losing track of spending. She said,

> *"If we don't have a budget... we won't know where the money has gone."*

These differences arise from individual financial literacy and personal experiences.

Investment Preference and Strategies

Investment practices among the informants vary by ethnicity. Chinese informants favor diverse financial instruments and analyze economic trends. For instance, Yeoh prefers low-risk mutual funds, and Leong invests in Bursa stocks, considering current trends. Malay informants lean toward traditional, stable investments like AS) accounts and gold. Jamila manages an ASB account and considers gold for future investments, while Izzati applied for an ASB account and also considers gold. Indian informants adopt diverse investment strategies, including forex, cryptocurrency, MLM businesses, and gold. Sinegaa views her MLM business as an investment, expecting more as the network grows. Logen invests in forex and has ventured into cryptocurrency in the past.

Discussion

The study underscores the significant impact of family and social networks on the financial literacy of the informants. This observation supports prior research by Alekam et al. (2018) and Jamal et al. (2016), emphasizing the influential role of familial and social factors in shaping financial literacy among the informants. The research findings highlight how family members function as a microstructure, guiding informants in developing an understanding of personal financial management, budgeting, and investment. Through advice and financial support, families play a crucial role in imparting the financial knowledge the informants adopt. This guidance shapes the informants' spending priorities, particularly in areas like food and utilities. This conclusion aligns with the research conducted by Sabri et al., (2010), which argued that university students place significant importance on financial matters for a fulfilling life.

Furthermore, the network of supportive friends exerts a pivotal influence on the informants' financial literacy. While they receive financial guidance from their families, the informants also appear to be influenced by their peers' financial insights. This implies that financial knowledge is embedded within these networks, as friends motivate the informants to consider investments like unit trusts and gold.

Our observations indicate that male respondents typically enjoy higher incomes and a broader array of income sources in comparison to their female counterparts. This disparity leads to a broader spectrum of budgeting strategies and potentially divergent investment preferences. The findings of this study not only align with but also enhance the insights gleaned from the research conducted by Sabri and Poh (2017) which addressed gender disparities in financial literacy. Our observations substantiate their conclusions and contribute further depth to our comprehension of how gender influences financial literacy. Furthermore, the observed trend of men having more diverse income sources can be attributed to societal and familial expectations regarding gender roles. This discovery aligns with the research of Edwards et al. (2007).

The findings align with the research of Mahdzan and Tabiani (2013) which emphasized the role of gender in predicting individual saving behavior. Surprisingly, despite females having lower total incomes compared to males, they perform better in budgeting. Females demonstrate strong budgeting skills by adhering strictly to their budgets to prevent overspending and maintain sustainable spending habits throughout the month. This discovery suggests that both males and females possess adequate financial literacy, but they exhibit distinct strengths in financial management. Males tend to be more proactive in diversifying their income sources, while females excel in their diligence in budget adherence.

From an ethnic perspective, it was observed that Malay informants showed a greater inclination towards savings and budgeting compared to their Chinese counterparts, who placed more emphasis on seeking multiple sources of income. This divergence can be attributed to cultural influences deeply rooted in families that consistently emphasize the importance of savings, as well as easy access to information about ASNB within the Malay community. This discovery is in line with the research by (Sabri et al., 2010) highlighting the pivotal role of cultural factors in shaping financial literacy.

It's essential to contextualize this ethnic perspective within Malaysia's affirmative action policy, as discussed by Chin and Teh (2017). This policy grants Malays special privileges to purchase the secure, high-dividend ASNB unit trust fund. This policy, established with the goal of wealth redistribution and the creation of the fund management company, Permodalan Nasional Berhad (PNB), on March 17, 1978, has significantly influenced the mindset of savings within the Malay community. Operating under PNB's umbrella, ASNB is part of a broader affirmative action program for wealth redistribution. Over five decades, this policy has successfully nurtured a culture of savings among Malays by offering guaranteed returns on their savings, instilling a sense of financial security and stability.

This historical and socio-economic context aligns seamlessly with the findings of the current study. The research uncovered that all Malay informants were well-versed in the potential returns offered by ASNB. Moreover, every one of them possessed an ASNB account, whether self-initiated or opened by their parents. This indicates that the enduring influence of PNB and ASNB, stemming from the affirmative action policy, continues to exert a significant impact on the financial behaviors and choices of the Malay community to the present day.

Conclusion

Financial literacy among undergraduates is deeply embedded within family and social networks, where young individuals continually acquire and refine their financial knowledge. Despite facing constraints on their income, undergraduates employ diverse strategies to manage their finances. Male undergraduates tend to take a proactive approach by diversifying their income sources, whereas females exhibit a greater commitment to budget adherence. Among different ethnic groups, Malay undergraduates typically adopt a more conservative financial approach. In contrast, both male and female Chinese undergraduates demonstrate a more proactive approach to financial management, while Indian undergraduates employ a wide array of investment strategies.

The research has highlighted that the Malay community's familiarity with ASNB serves as a significant indicator of structural embeddedness in investment. ASB is an integral part of the broader affirmative action policy. Over more than five decades, PNB has deliberately nurtured a savings mindset among Malays by promising guaranteed returns on their savings. On another note, as microstructures, families play a pivotal role in shaping an individual's financial literacy. Cognitive embeddedness is evident in how male and female undergraduates grasp personal financial management concepts. Cultural embeddedness is reflected in the distinct priorities and practices between male and female undergraduates. This study underscores the importance of recognizing these diverse forms of embeddedness when assessing and understanding financial literacy among the youth.

Recognizing the crucial roles of family, social networks, and cultural contexts, educators and policymakers can tailor strategies to meet the unique needs of young individuals. This approach allows for a more nuanced promotion of financial literacy, aligning policies and educational efforts with the real-life experiences of young people. Furthermore, these insights can contribute to long-term solutions for reducing youth bankruptcy. By fostering financial literacy early on and addressing the structural and cultural factors influencing financial behaviors, young individuals can gain the skills needed for effective financial management, reducing the risk of financial troubles that could lead to bankruptcy.

Finally, the small undergraduate sample may not represent the diverse university student population, potentially limiting the findings' generalizability. Future research should include more case studies with varied socio-economic backgrounds to enable broader insights into financial literacy among youth.

Acknowledgment: The authors would like to thank Associate Professor Dr. Azrina Husin for her comments and suggestions which helped to improve the quality of this paper.

Informed Consent Statement: Participants provided informed consent, and the researchers maintained rigorous academic integrity to ensure research validity and reliability.

Conflicts of Interest: No potential conflict of interest was reported by the authors.

References

Alekam, J. M. E., Salleh, M. S. B. Md., & Mokhtar. Sany Sanuri bin Mohd. (2018). The effect of family, peer, behavior, saving and spending behavior on financial literacy among young generations. *International Journal of Organizational Leadership*, *7*, 309–323.

Ansar, R., Karim, M. R. A., Osman, Z., & Fahmi, M. S. (2019a). The impacts of future orientation and financial literacy on personal financial management practices among generation Y in Malaysia: The moderating role of gender. *Asian Journal of Economics, Business and Accounting*, *12*(1), 1–10. https://doi.org/10.9734/ajeba/2019/v12i130139

Ansar, R., Karim, M. R. B. A., Osman, Z., & Fahmi, M. S. (2019b). Gender, educational qualification and ethnicity differences in personal financial management practices among generation Y in Malaysia. *Asian Journal of Economics, Business and Accounting*, *12*(1), 1–7. https://doi.org/10.9734/ajeba/2019/v12i130143

Blakemore, E. (2019, February 23). *Race and ethnicity facts and information*. *National Geographic*. https://www.nationalgeographic.com/culture/article/race-ethnicity

Brown, M., Henchoz, C., & Spycher, T. (2018). Culture and financial literacy: Evidence from a within-country language border. *Journal of Economic Behavior & Organization, 150,* 62–85. https://doi.org/10.1016/J.JEBO.2018.03.011

Chin, C., & Adlan, N. I. (2022, November 27). Why Some Malaysian youths are going bankrupt? Insolvency Dept: Over 20% of Bankrupts Are Youths. *The Star*. https://www.thestar.com.my/news/education/2022/11/27/young-and-broke

Chin, Y. W., & Teh, B. C. G. (2017). Malaysia's protracted affirmative action policy and the evolution of the Bumiputera Commercial and Industrial Community. *Journal of Social Issues in Southeast Asia*, *32*(2), 336–373. https://doi.org/10.1355/sj32-2d

Edwards, R., Allen, M. W., & Hayhoe, C. R. (2007). Financial attitudes and family communication about students' finances: The role of sex differences. *Communication Reports*, *20*(2), 90–100. https://doi.org/10.1080/08934210701643719

Ganti, A. (2022, May 7). *What Is a budget? Plus 10 budgeting myths holding you back*. Investopedia.

Granovetter, M. (1985). Economic action and social structure: The problem of embeddedness. *American Journal of Sociology*, *91*(3), 481–510. https://www.jstor.org/stable/2780199

Halim, Z. A., Zolkefli, M. N., Kusairi, S., Nor, S. M., Zawawi, N. H. M., & Sukemi, M. N. (2021). Investment literacy, social influence and undergraduates' readiness to invest: Dataset from Malaysia. *Data in Brief, 34*(106700). https://doi.org/10.1016/J.DIB.2020.106700

Hass, J. K. (2020). *Economic sociology: An introduction* (2nd ed.). Routledge. https://doi.org/10.4324/9781315439686

Hennink, M., & Kaiser, B. N. (2022). Sample sizes for saturation in qualitative research: A systematic review of empirical tests. *Social Science & Medicine*, *292*(114523). https://doi.org/10.1016/J.SOCSCIMED.2021.114523

Jamal, A. A. A., Ramlan, W. K., Mohidin, R., & Osman, Z. (2016). Determinants of saving behavior among university students in Sabah, Malaysia. *International Journal of Accounting, Finance and Business*, *1*(1), 24–37. www.ijafb.com

Jay, B. N. (2017, October 13). Young Malaysians lacking in financial knowledge, need to start investing. *New Straits Times*. https://www.nst.com.my/news/nation/2017/10/290665/young-malaysians-lacking-financial-knowledge-need-start-investing

Kadir, J. M. A., & Jamaluddin, A. A. Bin. (2020). Saving behavior in emerging country: The role of financial knowledge, parent socialization and peer influence. *GADING (Online) Journal for Social Sciences*, *23*(01). https://gadingss.learningdistance.orgeISSN:2600-7568|65

Koe, J. H. N., & Yeoh, K. K. (2021). Factors influencing financial planning for marriage amongst young Malaysian couples. *International Journal of Business and Society*, *22*(1), 33–54. https://doi.org/10.33736/IJBS.3161.2021

LaMorte, W. W. (2022, November 3). *The theory of planned behavior*. Boston University School of Public Health.

Lidia, T. G. (2014). Difficulties of the budgeting process and factors leading to the decision to implement this management tool. *Procedia Economics and Finance*, *15*, 466–473. https://doi.org/10.1016/s2212-5671(14)00484-5

Loh, F. F. (2013, October 7). Bank Negara: Financial education to be incorporated into school curriculum from 2014. *The Star*. https://www.thestar.com.my/news/nation/2013/10/07/bank-negara-financial-education-to-be-incorporated-into-school-curriculum-from-2014/

Mahdzan, N. S., & Tabiani, S. (2013). The impact of financial literacy on individual saving: An exploratory study in the Malaysian context. *Transformations in Business & Economics*, *12*(28), 41–55. https://www.researchgate.net/publication/275056695

Mokhtar, N., Sabri, M. F., & H0, C. S. F. (2020). Financial capability and differences in age and ethnicity. *Journal of Asian Finance, Economics and Business*, *7*(10), 1081–1091. https://doi.org/10.13106/jafeb.2020.vol7.no10.1081

Mokhtar, N., Sabri, M. F., Ho, C. S. F., & Dass, T. A. M. (2018). Profile and differences in financial literacy: Empirical evidence. *Malaysian Journal of Consumer and Family Economics*, *21*, 164–185. https://www.researchgate.net/publication/329932809

Molina-García, A., Cisneros-Ruiz, A. J., López-Subires, M. D., & Diéguez-Soto, J. (2023). How does financial literacy influence undergraduates' risk-taking propensity? *The International Journal of Management Education*, *21*(3), 100840. https://doi.org/10.1016/j.ijme.2023.100840

Murugiah, L. (2016). The level of understanding and strategies to enhance financial literacy among Malaysian. *International Journal of Economics and Financial Issues*, *6*(S3), 130–139. http:www.econjournals.com

Neuman, W. L. (2006). *Social research methods: Qualitative and quantitative approches* (J. Lasser, Ed.; 6th ed.). Allyn and Bacon.

Rahman, M., & Gan, S. S. (2020). Generation Y investment decision: an analysis using behavioural factors. *Managerial Finance*, *46*(8), 1023–1041. https://doi.org/10.1108/MF-10-2018-0534/FULL/PDF

Sabri, M. F., MacDonald, M., Hira, T. K., & Masud, J. (2010). Childhood consumer experience and the financial literacy of college students in Malaysia. *Family and Consumer Sciences Research Journal*, *38*(4), 455–467. https://doi.org/10.1111/j.1552-3934.2010.00038.x

Sabri, M. F., & Poh, L. M. (2017). How financially literate is today's youth? *International Journal of Asian Social Science*, *7*(10), 803–817. https://doi.org/10.18488/journal.1.2017.710.803.817

Tay, L. Y., Chan, C., & Tan, G. S. (2020). *Financial literacy among gen Y in Malaysia*. 484–493. https://doi.org/10.15405/epsbs.2020.12.05.52

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. http://mojes.um.edu.my/index.php/ijie/article/view/5057

Ying, T. L. (2020). *Financial literacy among gen Y in Malaysia*. 484–493. https://doi.org/10.15405/epsbs.2020.12.05.52

Yunus, A., & Landau, E. (2019, July 3). "Youth" now defined as those between 15 and 30. *New Straits Times*. https://www.nst.com.my/news/nation/2019/07/501288/youth-now-defined-those-between-15-and-30