Determinants of Ethical Financial Behaviour and Well-being among Malaysian Tertiary Students

Lee Eunkyoung¹, Hainnuraqma Rahim²*, Nornajihah Hasbullah³, NorBalkish Zakaria⁴ and Mohd Hafiz Bakar⁵

¹Sun Moon University, Global Sustainability Economy Institute, Tangjeong-myeon,
Asan-si, Chungcheongnam-do, South Korea

^{2,3,5}Faculty of Business and Management, Universiti Teknologi MARA, Melaka, Malaysia

⁴Accounting Research Institute, Universiti Teknologi MARA,
Shah Alam, Selangor, Malaysia

ABSTRACT

Financial problems and stress among Malaysian tertiary students could be instigated by poor financial management. This study assessed Malaysian tertiary students' financial literacy, money ethic, financial knowledge and family influence in explaining Financial Well-Being (FWB) through ethical financial behavior. Ethical financial behavior it was introduced as a mediator via online survey questionnaires and 134 of the 200 questionnaires that were delivered were used for analysis. Employing Partial Least Squares Structural Equation Modelling (PLS-SEM), this study evaluated the hypotheses. The findings indicated that ethical financial behavior acted as the primary precursor, succeeded by money ethics and familial influence in forecasting FWB. Thus, achieving FWB among Malaysian tertiary students necessitatesa balance between money ethic and expenditure, alongside the management of financial literacy and knowledge. It is imperative for governmental and financial institutions to amplify their roles and initiatives towards cultivating a financially literate and adept society. This research provides complementary insights into financial comprehension, aiding the development of ideas associated with financial management, which prove advantageous not only for students but also for society at large.

Keywords: Financial Well-being; Malaysian tertiary students, Ethical Financial Behavior

ARTICLE INFO

Article History:

Received: 15 October 2023 Accepted: 10 December 2024 Available online: 1 December 2025

Corresponding Author: Hainnuraqma Rahim; Faculty of Business and Management, Universiti Teknologi MARA, Melaka Branch, Melaka, Malaysia; hainnuraqma@uitm.edu.my; 012-6531855

INTRODUCTION

Ethical financial behaviour plays a crucial role in defining the financial well-being of Malaysian tertiary students. This concept encompasses the decision- making processes that adhere to personal and societal ethical standards, focusing on long-term financial healt hand social responsibility. For students, this involves making informed choices about spending, borrowing, and saving, considering their limited financial resources and future financial stability. Ethical financial behaviour is particularly significant in the context of this demographic, as students often encounter their first major financial decisions, such as managing student loans, budgeting with limitedfunds, and planning future expenses. By integrating the principles of ethical financial behaviour, students can avoid the pitfalls of impulsive spending and unsustainable debt, which are prevalent issues exacerbated by social influences and the pressures of modern consumer culture.

In recent times, the financial stability of young adults in Malaysia has been adversely affected by the COVID-19 pandemic, resulting in diminished savings and income prospects. Consequently, there has been a noticeable increase in underemployment not only within Malaysia but also globally. Within this demographic, several categories exist. Firstly, young adults may be students or part-time workers embarking on their college journey, navigating expenses and tuition fees. Alternatively, they might be unemployed or recent graduates seeking stable employment, possiblyearning lower salaries compared to their more experienced counterparts. Another subgroup includes newlyweds establishing their own families ornew parents, taking on responsibilities for both their families and young children. FWB among tertiary students is a multifaceted and pressing concern, influenced by various factors such as financial literacy, money ethic, financial knowledge, and family influence. One noteworthy dimension of this issue is the provocative spending trend observed among students, which raises questions about the ethical dimensions of financial behaviour in the academic setting. From the perspective of students in tertiary education, the situation differs as they are between students in schools who are entirely dependent on their parents and adults who are fully independent in managing their financial obligations. Many students face their first financial obligations when entering college, although they partially depend on their parents or financial loans (or scholarships). Although most

of them do not have income, they must manage their financial obligations using little money from their parents or other sources.

Malaysian tertiary students, lacking personal income, often rely on minimal financial support from parents or alternative sources to meet their financial obligations. Additionally, their susceptibility to imprudent financial management stems from a deficiency in knowledge or experience. Consequently, inadequate financial management can precipitate financial difficulties and stress among Malaysian tertiary students. Traditionally, individuals in Malaysia are expected to secure employment by the age of 24 (Sabri et al., 2023). Thus, this study focused on Malaysian tertiary students aged between 18 and 29 years old, as this age range defines "young adults" in Malaysia.

The Financial Well-being Research Framework represents a state of contentment or overall satisfaction with one's financial circumstances. It encompasses financial situations that offer both security and freedom of choice, addressing both material and non-material aspects of living. FWB goes beyond mere monetary stability, encompassing an individual's comprehensive FWB and ethical conduct in financial matters. An understanding of the components contributing to FWB is pivotal in fostering responsible financial behavior among tertiary students. One of the contemporary challenges impacting the FWB of tertiary students is the provocative spending trend. Recent evidence suggests a surge in extravagant expenditures on non-essential items, often driven by social influences, peer pressure, and the desire to maintain a certain lifestyle.

Social media platforms amplify these trends, creating an environment where students feel compelled to engage in provocative spending to align with perceived societal norms. The research concentrated on individuals aged between 18 and 30 by Razak et al. (2014) indicated that young Malaysians tend to prioritize spending on food and transportation over electronics, gadgets, entertainment, and sports activities. However, inefficient debt management, unplanned spending, weak personal financial management, self-influence on certain habits, and various other factors lead to the declaration of bankruptcy for many young individuals (Nurauliani et al., 2015).

According to the report released by the Malaysian Insolvency Department (2023), there were 49,133 instances of bankruptcy recorded over a five-year period from 2018 until December 2022. Furthermore, in 2022, there were 16 petitions filed daily, with an equivalent number of cases registered each day. Approximately 40 per cent of these cases involved individuals aged 35 to 44, while 29 per cent implicated those aged 45 to 54. Bankruptcy is more common among young people and recent graduates because of a lack of knowledge in financial planning and the unwise financial behaviour exhibited by these individuals (Murthy & Mariadas, 2017). Young adults constitute a significant portion of Malaysia's 32.6 million population, as indicated by official estimates showing that youths make up 45.8% of the total population (Department of Statistics Malaysia, 2020). This highlights the precarious financial situation of young adults in the country, the resolution of which could profoundly impact Malaysia's economic trajectory in the future.

Ahlam and Sheerad (2021), indicated a significant relationship between financial literacy and financial behaviour. Enhanced financial literacy empowers individuals, particularly young adults and Malaysian tertiary students to leverage their financial knowledge and skills in engaging in prudent financial activities, thus exhibiting planned and responsible financial behaviour promptly. The transition from financial dependence to financial independence poses challenges for Malaysian tertiary students in making critical decisions.

They will experience a significant transitional moment in which parental monitoring and oversight are diminished, and the students attain financial independence (Riyaz ahmed et al.,2021). The situation isquitedifferent;they usually need more financial constraints as most need their own income. This situation causes students to manage their finances differently (Stollak et al., 2011). Some are willing to go hungry, and some work part-time to earnextra pocket money (Abdul Rahman & Zulkifly, 2016). In a similar vein, the tendency of Malaysian tertiary students to trap in a digital lifestyle is high, exposing them to financial burdens (Asian Institute of Finance, 2017). Changing consumer patterns and easy access to private debt facilities result in youths becoming bankrupt as they lose control over their finances (Yeganeh, 2021).

In Malaysia, research conducted by Trading Economics (2023)in dicated that consumer spending decreased to RM241464 million in the fourth quarter of 2023 from RM247041 million in the third quarter of 2023. Consumer spending in Malaysia averaged RM142,185.30 million between 2005 and 2023. It peaked at RM247,041.00 million in the third quarter of 2023 and hit a nadir of RM56,768.00 million in the second quarter of 2005. Malaysian tertiary students are particularly susceptible to imprudent financial management practices. Poor financial management can trigger financial problems and stress for Malaysian tertiary students, especially when they neglect the importance of financial knowledge, as Norlaila et al. (2019) mentioned.

Aligning with this reasoning, the objective of this study was to assess Malaysian tertiary students'ethical financial behavior in explaining FWB. To comprehend and address this provocative spending trend, it became imperative to investigate the interplay between financial literacy, money ethic, financial knowledge, and family influence. Each of these factors plays a crucial role in shaping students' attitudes and behaviors towards money. In other words, this study aims to delve into the intricate relationships between financial literacy, money ethic, financial knowledge, family influence, and the provocative spending behaviors exhibited by tertiary students. In addition, this study will investigate the mediator roles of ethical financial behavior.

Further, the study delved into how financial literacy, money ethics, and family influence intersected to mold students' ethical financial behaviour. Enhanced financial literacy was posited to empower students with the knowledge and skills necessary to navigate their financial landscape responsibly. Similarly, strong money ethics can encourage frugality and integrity in financial dealings. Family influence also plays a pivotal role, as familial attitudes and behaviours towards money can significantly shape a student's financial practices and ethical standards. Together, these elements contribute to a student'sability tomanage finances with prudence and ethical consideration. This study aimed to analyse these interactions and their cumulative impact on the financial well-being of Malaysian tertiary students, highlighting the critical nature of fostering ethical financial practices from a young age to promote sustainable financial futures.

Hence, this study explored how financial literacy programs, money ethic development, increased financial knowledge, and family dynamics acted as mitigating or exacerbating factors in the context of provocative spending. By synthesizing current evidence, this study aimed to contribute valuable insights into the holistic understanding of FWB and ethical financial behavior among tertiary students. This paper continues with the literature review section. Next, the methodology and result sections will discuss the research design, respondents and finding results table. The final section will conclude the research with recommendations and highlight the study's implications.

LITERATUREREVIEW

Financial Literacy

Financial literacy is one of the most studied subjects in personal finance. The findings from Albeerdy & Gharleghi (2015) at several colleges and universities in Malaysia found that education, financial socialization agents and money attitude directly influenced financiall iteracy. A positive correlation existed between financial literacy and all variables, underscoring their significance as determinants of financial literacy. Gender was found to have no significant impact, whereas income and age were identified as influential factors affecting financial literacy among students. The results presented that the model was accepted, and all variables were essential in determining financial literacy. The value that lies within individual may be influence by financial literacy, financial management and stress towards finance (Delafrooz & Paim, 2011).

Utkarsh et al. (2020) examined the link between financial literacy and FWB in India and found it to be insignificant. Instead, they emphasized the impact of attitudes and financial socialization on the FWB of young adults. Improved financial literacy led to better financial management, potentially enabling families to increase their surplus and cope with challenging financial situations. According to Lusardi (2019), financial literacy included not only knowledge and understanding of financial concepts and risks but also the skills, motivation, and confidence to apply that knowledge and understanding in practice.

Inadequate financial skills, on the other hand, can lead to various pitfalls, including susceptibility to debt. Generally, financially literate millennials are expected to exhibit better financial behaviors, contributing to economic security and overall community well-being, thereby fostering economic development (Dewi et al., 2020). Thus, we hypothesized that financial literacy positively influences financial behavior (H1):

H1: Financial literacy has a positive effect on ethical financial behavior.

Money Ethic

The Theory of Lea and Webley (2005, pp. 161-176) elaborate on the complex relationship individuals have with money, portraying it both as a means to achieve goals and as resembling a drug. This dual perspective suggests that money serves as a tool for acquiring goods and services while also being pursued as an end in itself. People are attracted to money because of its ease of exchange for desired commodities and services. The latter aspect of Lea and Webley's Theory characterizes money as having motivational properties similar to a drug, despite its lack of inherent functionality.

Attitudes toward money are shaped by educational, occupational, and financial contexts (Furnham & Argyle, 1999). Elif Akben-Selcuk (2015) asserted that these attitudes significantly influence students' financial behaviors, with those exhibiting positive attitudes demonstrating timely bill payments, effective budgeting, and prudent savings habits. Setiyani and Solichatun (2019) further argued that positive financial attitudes foster responsiblefinancialbehaviors, creating acyclical relationship wherein good attitudes reinforce good behaviors. Therefore, the following hypothesis (H2) was proposed:

H2: Money ethic has a positive effect on ethical financial behavior.

Financial Knowledge

Financial knowledge pertains to an individual's capacity to comprehend and utilize financial concepts, as outlined by OECD (2018). Financial literacy and financial knowledge are intertwined. Financial

knowledge serves as the cornerstone upon which financial literacy is constructed (Mandell, 2006). Financial knowledge alone cannot guarantee behavioral improvements, financial literacy tries to change behavior by enhancing financial decision-making skills (Mitchell & Lusardi, 2014). A person will act rationally to facilitate consumption during his life with good knowledge (Kempson, Finney & Poppe, 2017).

Brüggen et al. (2017) developed a comprehensive framework for FWB that incorporates contextual factors, interventions, behaviors, consequences, and personal traits. Kempson and Poppe (2018), building upon this framework, expanded it to include financial knowledge, skills, attitudes, socio-economic status, and personality traits based on studies across multiple countries. Barrafrem et al. (2020a) emphasized the importance of contextual factors, while Gonçalves et al. (2021) and Lee et al. (2020) highlighted the influence of household, community, societal factors, and financial planning on FWB, respectively. Therefore, the formulated hypothesis (H3) was;

H3: Financial knowledge has apositive effect on ethical financial behavior.

Family Influence

Family influence is deemed as the determinant of financial literacy among Malaysian tertiary students. The spending behavior or financial management of one's family might influence the family members to follow. According to Hira (1997), financial attitudes and the spending behavior of the family will be transferred to the students when they manage their finances. Williams (2010) stated that parents' guidance on financial mattersis very important and essential to ensure the well-being of their children's life in the future.

According to Kuknor and Sharma (2017), professionals with a positive attitude towards debt tend to have higher FWB. Conversely, compulsive buying behavior is negatively associated with FWB, leading to financial distress. Similarly, Zvonkovic et al. (2013) highlighted the adaptive responses of professional families to economic uncertainties, with adjustments in spending habits amid reduced leisure and dining expenditures. Understanding the impacts of economic strains and work pressures is crucial for enhancing familial FWB. Therefore, the following hypothesis (H4) was formulated:

H4: Family influence has a positive effect on ethical financial behavior.

The Mediation Role of Ethical Financial Behavior

Financial behavior is "the acquisition, allocation, and use of financial resources oriented toward some goal" (Topa et al., 2018, p. 3). Personal financial behavior can be investigated by looking at how well a person manages cash, savings, debt, and other expenses (Hasibuan et al., 2018). However, Fei et al. (2020); Sabri et al. (2020a) found a negative link between financial behavior and financial vulnerability, which has a detrimental impact on an individual's economic well-being. Empirical research indicates that adept financial management within families leads to enhanced long-term economic well-being and financial contentment (Consumer Financial Protection Bureau, 2015). Furthermore, positive financial behaviors, including financial management, savings, and investing, are essential determinants of FWB (Sabri et al., 2020b). Therefore, the formulated hypothesis (H5) was;

H5: Ethical financial behavior has a positive effect on FWB.

Financial literacy plays a crucial role in making financial decisions within house holds approaching retirement (Xue, Gepp, O'Neill, Stern & Vanstone, 2020). Previous research has confirmed a positive correlation between financial literacy and FWB (Grohmann, 2018). Kaur, Yadav & Gautam (2013) asserted that financial literacy was an essential life skill for individuals to achieve FWB. Xiao et al. (2014) conducted research on consumer financial capability and financial satisfaction, suggesting that commendable financial behavior, subjective financial literacy, and financial capability all contribute positively to FWB. Consequently, based on this discourse, the study posited the following hypothesis (H6):

H6: Ethical financial behavior mediates the relationship between financial literacy and FWB.

Research by the Consumer Research and Resources Centre (2012) highlighted that around half of young workers aged 18–35 encountered substantial debt issues, particularly those earning between RM2,000 and RM3,000 per month. A survey conducted by the Credit Counselling and Debt

Management Agency (2018) revealed that almost half of Malaysian working adults were classified as 'need attention' or 'under pressure' regarding their FWB scores. In terms of financial behaviors, two out of 10 working adults admitted to having no savings in the past six months. Moreover, over half of those earning less than RM2,000 struggled to save RM1,000 for emergency expenses. Three out of 10 acknowledged occasionally borrowing money for essential needs.

Consequently, a majority of young adults in Malaysia heavily rely on loans and credit cards, possibly due to commitments such as housing and car purchases that escalate their loan repayment obligations. Given these statistics, it is not surprising that young adults reported lower FWB due to their limited financial literacy and unfavorable financial behaviors.

Individuals with positive financial behaviors managed their finances better to achieve higher economic well-being (Brilianti & Lutfi, 2020; Wijekoon etal., 2021a; 2021b). However, diverse financial behavior, including wise and cautious money spending, is a valuable safeguard against unsafe financial behaviors (Topa et al., 2018). Therefore, the following hypothesis (H7) was proposed:

H7: Ethical financial behavior mediates the relationship between moneyethic and FWB.

In the contemporary financial market, financial knowledge has gained heightened importance due to its increasing complexity. Consequently, consumers are shouldering more significant responsibilities in financial decision-making, including tasks such as investing and saving (Garg & Singh, 2018). Furthermore, Engels et al. (2020) discovered that individuals with a higher level of financial expertise exhibit better abilities in detecting fraud. Research conducted by Younas emphasized the direct impact of financial knowledgeon FWB (Younas, Javed, Kalimuthu, Farooq, Khalilur-Rehman, & Raju, 2019).

The study also urged governments, financial institutions, and economists to implement programs aimed at enhancing financial knowledge, coveringareas such as investment, daily necessities, and retirement savings, thereby contributing to overall well-being. Riitsalu and Murakas (2019)

similarly affirmed a strong correlation between knowledge and FWB (Riitsalu & Murakas, 2019). Therefore, the formulated hypothesis (H8) was;

H8: Ethical financial behavior mediates the relationship between financial knowledge and FWB.

In a study conducted by Sabri (2011) on students, it was discovered that discussions within the family, particularly initiated by parents, contribute to providing additional information and knowledge to the students. The family income serves as the initial reference for every student, and irrespective of the present reliance on parental financial support, this background significantly influences the perspectives and behaviors of Malaysian tertiary students regarding money (Graves & Savage, 2015). Hence, the subsequent hypothesis (H9) was formulated:

H9: Ethical financial behaviour mediates the relationship between family influence and FWB.

Financial Well-Being

An individual's happiness is influenced by financial situations, focusing on individuals' knowledge, behavior, and financial inclusion, which contribute to achieving FWB. FWB is also perceived as a condition for a person to maintain the desired standard of living and financial freedom (Brüggen, Hogreve, Holmlund, Kabadayi, & Löfgren, 2017). The standard of living refers to the combination of wealth, services, comfort, and goods available to someone considered necessary for their life (Fah, 2010). It makes FWB a dream for everyone to meet their standard of living. Kempson, Finney, & Poppe (2017) defined FWB as the extent to which a person can comfortably fulfil all their current commitments and needs and have the financial resilience to sustain them in the future.

Personal preferences and aspirations play a significant role in individuals' financial decisions and sacrifices to attain their goals, as observed by Tanoto and Evelyn (2019), who found that financial knowledge significantly impacted FWB. Recognizing the national importance of young adults' FWB, including in Malaysia, considerable efforts have been made to facilitate FWB attainment. Young adults with solid financial knowledge,

socialization in financial matters, good financial behaviors, and manageable financial strain are more likely to lead financially prosperous lives. Therefore, this study incorporated five factors in the research framework to explore their sustained effects on FWB (see Figure 1).

There has been a noticeable increase in research on FWB in recent years, as evidenced by numerous literature reviews (Gonçalves et al., 2021; Kaur et al., 2021; Nanda & Banerjee, 2021; Wilmarth, 2021) and special editions focusing on the subject (Kabadayi & O'Connor, 2019). For instance, Kaur et al. (2021) analyzed publication trends from 1995 to 2019, Gonçalves et al. (2021) from 1991 to 2020, and Nanda and Banerjee (2021) from 1978 to 2020. These reviews collectively demonstrate a significant increase in research on FWB, especially in recent years. Moreover, there has been a proliferation of publications on FWB in grey literature, with various policymakers and financial sector institutions issuing reports on the subject (e.g., Comerton-Forde et al., 2020; UNCDF, 2021; UNSGSA, 2021). However, it's important to note that research on FWB is still in its nascent stages (Kaur et al., 2021, p. 235).

Based on the seprior studies, this study presented the FWB among Malaysian tertiary students, integrating several core components: Financial Literacy, Money Ethics, Financial Knowledge, and Family Influence. These elements are essential in shaping Ethical Financial Behaviour, influencing students' overall Financial Well-Being. This relationship underscores the complex interplay between knowledge, values, and external influences in determining student financial outcomes.

Financial literacy is crucial as it equips students with the practical skills needed to make informed financial decisions, thereby promoting ethical financial behaviours while a strong money ethic might promote behaviours such as saving and prudent spending, which are indicative of ethical financial practices. Financial knowledge is distinct from financial literacy, which encompasses the theoretical understanding of economic concepts and financial products. This knowledge can empower students to make decisions that align with long-term financial well-being. In addition, the role of family in shaping financial behaviours cannot be overstated. Family influence includes the financial habits students observe and learn from their family members, which can either support or hinder the development of ethical financial behaviours.

The theoretical framework posits that these four factors Financial Literacy, Money Ethics, Financial Knowledge, and Family Influence converge to foster Ethical Financial Behaviour among students. This behaviour is a criticalmediatorthatdirectlyimpactsstudents' Financial We ll-Being. Ethical Financial Behaviour involves making choices that are beneficial to the individual and responsible within a broader social and economic context. By fostering a culture of ethical finance, students can improve their own financial stability and contribute to a more financially aware society.

This approach provides a comprehensive view of how educational and familial inputs can mold the financial behaviours of Malaysian tertiary students, leading to improved financial well-being. By applying this framework, the study aimed to highlight the pathways through which interventions in financial education and family engagement can be optimized to enhance the financial health of young adults. This structured exploration into the influences on financial behaviour offers a robust foundation for understanding and improving financial well-beinginatargeted demographic.

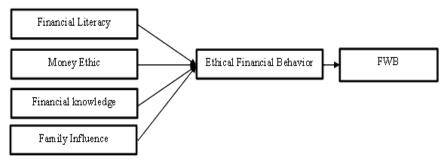


Figure1: Financial Well-Being Conceptual Framework

METHODOLOGY

The questionnaire was created using both self-developed metrics and prior research. Three sections made up this questionnaire. The first section of the questionnaire asked about I financial literacy, (ii) financial attitude, (iii) financial self-efficacy, (iv) locus of control, and (v) commitment to higher education. On a five-point Likert scale, with 1 being strongly disagreed with and 5 being highly agreed, the respondents expressed their agreement with

each item (strongly agree). Items regarding Malaysian tertiary students' ethical financial behavior were included in Section 2. A five-point Likert scale, ranging from 1 (strongly disagree) to 5, assessed FWB (agree). Sociodemographic factors were covered in detail in Section 3.

The survey aimed to learn more about Malaysian students' financial stability. Note that students' house hold income eventually represented the whole family income to support the student. Data were gathered during Marchand April 2022. Data were gathered from Malaysian tertiary students at the Universiti Teknologi Mara (UiTM) in Malacca using a survey method. The data were gathered using a process known as purposive sampling. Theunique administered method was used to give 200 questionnaires to pupils due to the COVID-19 pandemic, which prevented travel and movement (online). The data underwent testing using the partial least square structural equation modelling (PLS-SEM) method.

SMART-PLS 3.3.3 was used to examine the suggested research model. The minimum number of participants required to determine the effect size was determined using power analysis (Hair et al., 2017). Given that the sample size was more than the minimum size of 129 specified by G-power analysis and had an effect size of 0.15 at an 80% power level, the sample size was deemed adequate (Hair et al., 2017). 200 survey sets were sent using agoogle form to prevent the absence of a sufficient sample size brought on by non-returned, incomplete, or other survey problems.

This survey depended on a non-probability voluntary and convenience sample approach because no sampling frame was available (Saunders, Lewis & Thornhill 2016). The respondents were questioned regarding their voluntary involvement in both verbal and nonverbal ways by phone contact and email. The survey was verified to make sure all information wasincluded after it was finished. Only 134 of the 200 questionnaires that were delivered were used for analysis.

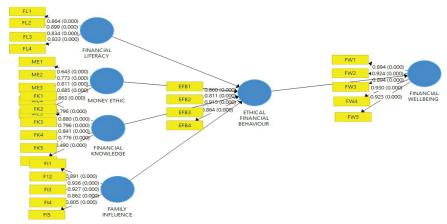


Figure 2: Initial Results of Measurement Model Analysis

RESULTS AND DISCUSSION

The demographic features of the respondents are shown in detail in Table 1. The findings indicated that the female were (47.01%) andmale (52.98%). Matriculation was the most common level of schooling among respondents. Less than RM5000 (32.84%), RM5,000 to RM10,000 (26.12%), and more than RM10,000 made up the median monthly house hold income (14.04).

Table1: Demographic Profile of Respondents (N=134)

Items	Frequency	Percentage(%)
Gender		
Male	71	52.98
Female	63	47.01
EducationalLevel		
Diploma	32	23.88
Matriculation	80	59.70
Degree	22	16.42
FinancialResources		
Self-funded	42	31.34
Scholarship	66	49.25
Others	26	19.40
HouseholdIncome		

Items	Frequency	Percentage(%)
Less than RM5000	44	32.84
RM5000 -RM10,000	35	26.12
More than RM10,000	55	41.04

Data was assessed in two stages: the measurement model and the structural model assessment, as suggested by Hair et al. (2017). Figure 2 shows the initial results of the measurement model analysis. Factor loadings, composite reliability (CR), and average variance extracted (AVE) were examined to evaluate the reflecting measurement model (Hair et al., 2017). Table 3 shows that all factor loadings exceeded the suggested threshold of 0.708. (Hair et al., 2017). The composite dependability value was higher than the threshold value of 0.70, and the AVE scores were above the cut off value of 0.50.

Table 2: Assessment of Internal Consistency and Convergent Validity

Construct	Item	Loading	CR	AVE
Financial Literacy	FL1	0.864	0.918	0.736
(FL)	FL2	0.899		
	FL3	0.834		
	FL4	0.833		
Money Ethic	ME1	0.643	0.871	0.576
(ME)	ME2	0.773		
	ME3	0.811		
	ME4	0.685		
	ME5	0.863		
Financial	FK1	0.796	0.897	0.599
Knowledge	FK2	0.880		
(FK)	FK3	0.796		
	FK4	0.841		
	FK5	0.776		
	FK6	0.490		
Family Influence	F11	0.891	0.948	0.784
(FI)	FI2	0.936		
	FI3	0.927		
	FI4	0.862		
	FI5	0.805		

Construct	Item	Loading	CR	AVE
Ethical Financial	EFB1	0.860	0.921	0.745
Behaviour	EFB2	0.811		
(EFB)	EFB3	0.915		
	EFB4	0.864		
FWB	FW1	0.712	0.921	0.745
(FW)	FW2	0.852		
	FW3	0.845		
	FW4	0.801		

Heterotrait Monotrait (HTMT) was used to investigate the discriminant validity (Henseleret al., 2015). AS demonstrate din Table 3 all the structures' HTMTs were with in the acceptable range of 0.90. Thus, HTMT .90 establishes discriminant validity. The measurement model, in other words, attests to the existence of convergent and discriminant validity across the relevant constructs.

Table 3: Heterotrait-Monotrait Criterion (HTMT)

	Ethical Financial Behaviour	Family Influence	Financial Knowledge	Financial Literacy	FWB	Money Ethic
Ethical Financial Behaviour	0.856					
Family Influence	0.828	0.658				
Financial Knowledge	0.812	0.758	0.725			
Financial Literacy	0.621	0.425	0.795	0.526		
FWB	0.495	0.876	0.625	0.484	0.568	
Money Ethic	0.682	0.854	0.564	0.475	0.597	0.456

Structural Model

Before assessing the structural model, it was essential to ensure no collinearity difficulties. The variance inflation factors (VIF) were evaluated to discover multicollinearity concerns. The VIFs results varied from 1 to 2.904, less than the most used threshold value of 3.33, showing that multicollinearity was not a concern. Based on the guidelines for non-parametric tests, 5000 bootstraps resample were used to test the hypotheses. The results of the direct and indirect effects of study variables are displayed in Table 4. The results indicated significant relationships between money

ethicsand FWB (=0.193, p0.01), family influence and FWB (=0.691, p0.00), and ethical financial behaviour and FWB (=0.815, p0.00), hence confirming hypotheses 2, 4, and 5.

The results of the hypotheses tested and parameters showed that money ethics, family influence and ethical financial behavior had a significant direct relationship towards FWB. The significance results were supported by Prince and Shagrin (2010). Personal attitudes and behaviours towards money may stem from childhood experiences or traumatic events related to finances. The use of money reflects one's lifestyle, and with a bad attitude toward money, someone may end up in debt without realising it (Fazli et al., 2006). Besides, this result found that financial literacy was not significant towards ethical financial behavior. This contradicted Alex (2009) and Nazni et al, (2012). Alex (2009) and Nazni et al, (2012) who highlighted that most individuals failed to manage money and eventually fell into bankruptcy because of ignorance in financial aspects, especially credit cards. The dissimilar results could be derived from different settings and times of observation.

This study evaluated the importance of indirect effects using bias-corrected bootstrap confidence intervals (CIs) to assess the potential mediation effects. Ethical financial behaviour also mediated indirect relationships between (financial literacy, money ethic, financial knowledge, family influence) and FWB conduct. Nevertheless, the results demonstrated that ethical financial behaviour only mediated the relationship between financial literacy and FWB (=0.563, p0.00); and the relationship between financial knowledge and FWB (=0.008, p0.00). Thus, hypotheses 6 and 8 were accepted. Financial literacy and FWB were positively correlated (Bilal & Zulfiqar, 2016). In addition, financial literacy also helped in developing the financial attitude of the individual. As posit by Worthington (2006), financial literacy positively contributed to well-being, strengthen the economy and promoted growth.

Table 4: Direct and Indirect Effects between Study Variables

Effects	Hypotheses	Std. Beta	Standard error	p- values	t-values	Decision	R ²
Direct	H1: Financial Literacy -> Ethical Financial Behaviour	0.035	0.067	0.595	0.532	Rejected	
	H2: Money Ethic -> Ethical Financial Behaviour	0.193	0.065	0.003	2.965	Accepted	
	H3: Financial Knowledge -> Ethical Financial Behaviour	0.01	0.059	0.869	0.166	Rejected	
	H4: Family Influence -> Ethical Financial Behaviour	0.691	0.07	0.000	9.914	Accepted	0.665
	H5: Ethical Financial Behaviour -> FWB Indirect	0.815	0.035	0.000	23.441	Accepted	0.740
Indirect	H6: Financial Literacy -> Ethical Financial Behaviour -> FWB	0.563	0.058	0.000	9.704	Accepted	
	H7: Money Ethic -> Ethical Financial Behaviour -> FWB	0.029	0.055	0.601	0.523	Rejected	
	H8: Financial Knowledge -> Ethical Financial Behaviour -> FWB	0.158	0.054	0.004	2.929	Accepted	
	H9: Family Influence -> Ethical Financial Behaviour -> FWB	0.008	0.049	0.870	0.164	Rejected	

DISCUSSION, CONCLUSION AND RECOMMENDATION

This study's findings shed light on the FWB among Malaysian tertiary students. It examined the key antecedents of FWB among Malaysian tertiary students, focusing on five independent variables: financial literacy, money ethics, financial knowledge, family influence, and ethical financial behavior. Five of the nine hypotheses tested in the study were supported. For direct relationship, the results exhibited that all three hypotheses money ethics, family influence and ethical financial behavior (H2, H4, and H5) were significantly related to FWB. Money ethics, family influence and ethical financial behavior were found to have a positive influence towards FWB among Malaysian tertiary students. Generally, millennials who arefinancially literate are expected to be better able to demonstrate good financial behavior for their economic security and well-being resulting in the overall community's economic development (Dewi et al. 2020). The significant positive relationship for family influence suggested that the more students learned about finances (financial literacy) from their parents,

the more likely they reported satisfaction with their perceived FWB. A significant positive correlation existed between money ethics and FWB satisfaction, indicating that individuals with childhood savings accounts were more content with their current FWB compared to those without such early experiences. Managing money earlier in life is also associated with higher perceived FWB. For college students, parental financial status notably influenced their FWB. Family income is the starting point for any student, and regardless of the current dependency on parental finances, this background affected college students' perspectives and behaviors regarding money (Graves & Savage, 2015).

Financial literacy (H1) and financial knowledge (H3) were insignificantly related to FWB. The study by Utkarsh et al. (2020) in India also did not find any significant relationship between these variables and claimed that objective financial knowledge is not a crucial factor in improving the financial well-being of emerging adults. Financial well-being is often measured subjectively, based on how individuals feel about their financial situation. Emotional aspects, such as stress, financial confidence, or satisfaction with financial status, may not directly correlate with factual financial knowledge. Financial behavior and financial attitude are significant aspects of financial literacy because, according to Lusardi (2019), financial literacy encompasses not only knowledge and understanding of financial concepts and risks but also the abilities, drive, and confidence to put that knowledge and understanding into practice. FWB is closely linked to financial confidence, emotional control, and psychological well-being. Even if individuals have financial literacy, their psychological mindset (such as anxiety about money or lack of confidence in financial decisions) may prevent them from making sound financial choices, reducing the impact of literacy on FWB.

For indirect relationships, it was discovered that ethical financial behaviour regulated the association between financial literacy and financial knowledge towards FWB. When ethical financial behaviour mediated the observed relationship, financial literacy and FWB (H6); and financial knowledge and FWB (H8) were found significant. These findings are supported by Ismail & Zaki (2019), Mokhtar and Husniyah (2017). Money ethics (H7) and family influence (H9) were insignificantly related to FWB. A person's attitudes, convictions, and values around money were referred to

as their money ethics. Although it affected behavior, FWB, which included overall financial health, satisfaction, and stress management, may not bedirectly correlated with it. If other factors like income level, financial literacy, or the state of the economy restricts an individual's ability to experience financial well-being, they may still possess strong money ethics such as saving consistently or having a positive outlook on money.

Acomprehensive understanding of finances often leads to prudent behaviour, with psychology playing a crucial role in determining actual financial conduct. This research enhanced our understanding of ethical financial behaviour's role in FWB. Financial literacy, money ethics, family influence, and financial knowledge influenced ethical financial behaviour, which inturn affected FWB. Positive financial habits contributed to greater FWB satisfaction. Improvements in FWB can be achieved through favourable financial behaviour, solid financial literacy, and effective stress management. This study provided valuable insights and practical implications. Government bodies and financial institutions like Permodalan Nasional Berhad (PNB), Bank Negara Malaysia (BNM), and Credit Counseling & Management Agency (AKPK) should intensify efforts to promote financial literacy and skills. Moreover, universities should enhance their commitment, particularly among students. Collaborative efforts are needed to foster better financial attitudes, and education plays a crucial role in promoting positive financial behaviours. Notably, parental influence significantly enhances the financial knowledge Malaysian tertiary students. Parents should play an active role in nurturing children's financial knowledge and skills from a young age. Additionally, ethical financial behaviour can predict student financial conduct. Furthermore, it's recommended to include a more diverse demographic in surveys to ensure a representative sample of Malaysian financial behaviour and literacy.

RESEARCH LIMITATION AND IMPLICATIONS

Despite its conceptual and methodological rigour, our study had limitations. First, the data were collected only from students, so the generalizability of the findings to another sample likely remains limited (Cohen, 1988). As with any study, significant findings are applicable primarily to the target population at the current time. However, expanding the scope to specific professions

or industries could yield further insights, given the observed disparities in perceptions between auditors and the public regarding professional auditor attributes.

Moreover, this study's cross-sectional and quantitative design may not capture changes in behavior, societal attitudes, and norms over time. Finally, this study examined the hypothesis within the developed framework without the intervention of any theory. It is highly recommended that future researchers use behavioral theories to get more comprehensive results. The way that students spend their funds ethically has a big effect on how well off they are financially, both now and in the future. Avoiding debt is one of the most crucial components of financial management ethically. Students who conduct ethical financial management are less likely to support their lifestyles with debt and loans, which may impair their credit scores and make it harder for them to get credit in the future. Responsible money management entails reserving a portion of earnings for savings.

Students who emphasize saving are likelier to have a financial safety net in unforeseen bills or emergencies. Nevertheless, early and regular saving can significantly accelerate long-term wealth building. To the study fund providers, funders can look for signs of creditworthiness in a person's financial ethics when evaluating student loan applications. Financiallyethical students are more likely to make on-time payments and repay their loans in total, which can boost the percentage of loans repaid to funders.

Financial ethics are connected with special credit risk assessment and higher loan payback rates, which benefit fund providers investing in student loans. Better portfolio performance and greater returns for investors may result from this. Fund providers can enhance their reputation and draw in more clients who seek socially conscious investment by prioritizing responsible lending procedures, such as encouraging financial ethics among student borrowers. Generally, students who manage their finances ethically are more likely to experience long-term success and financial security. Students can prepare for a prosperous financial future by staying out of debt, saving money, making wise judgements, establishing good credit, and forming sound money habits.

ACKNOWLEDGEMENTS

This research was funded by the Universiti Teknologi MARA Shah Alam, Selangor under MyRA Research Grant, [Grant Number :600-RMC/GPM LPHD 5/3 (005/2023)].

REFERENCES

Adolescence, 39(12), 1457-1470.

- Albeerdy, M. I., & Gharleghi, B. (2015). Determinants of the financial literacy among college students in Malaysia. *International Journal of Business Administration*, 6(3), 15-24.
- Ahlam M.K. & Sheerad S. (2021). Financial Literacy and Financial Behaviour of Malaysian tertiary students in Malaysia, *Turkish Onluinr Journal Qualitative Inquiry, Vol 12*, Issue 9.
- Abdul-Rahman, A., & Zulkifly, W. (2016). Faktor penentu pengurusan kewangan: kes mahasiswa Universiti Kebangsaan Malaysia. *Jurnal Personalia Pelajar*, 19(2).
- Asian Institute of Finance. (2017). Crowdfunding Malaysia's Sharing Economy: Alternative Financing for Micro, Small and Medium Enterprises.
- Azmi, N., & Othman, N. (2017). Tingkah laku mahasiswa dalam menguruskan wang pembiayaan pendidikan. Proceeding of the 4Th International Conference on Management and Muamalah 2017 (Icomm 2017), 978-967-2122-15-9.
- Atkinson, A., & Messy, F.A. (2012). Measuring financial literacy: Results of the OECD/International Network on Financial Education (INFE) pilot study.
- Bandura, A. (1977). Self-efficacy: toward a unifying theory of behavioural change. *Psychological review*, 84(2).

- Bilal, M., & Zulfiqar, M. (2016). FWB is the goal of financial literacy. *Research Journal of Finance and Accounting*, 7(11), 94-103.
- Brüggen, E. C., Hogreve, J., Holmlund, M., Kabadayi, S., & Löfgren, M. (2017). FWB: A conceptualization and research agenda. *Journal of business research*, 79, 228-237.
- Brilianti, T. R. (2019). Pengaruh pendapatan, pengalaman keuangan dan pengetahuan keuangan terhadap perilaku keuangan keluarga di kota Madiun (Doctoral dissertation, STIE Perbanas Surabaya).
- Castro-González, S., Fernández-López, S., Rey-Ares, L., & Rodeiro-Pazos, D. (2020). The influence of attitude to money on individuals' FWB. *Social Indicators Research*, *148*(3), 747-764.
- Cobb-Clark, D. A., & Schurer, S. (2013). Two economists' musings on the stability of locus of control. *The Economic Journal*, *123*(570), F358-F400.
- Comerton-Forde, C., deNew, J., Salamanca, N., Ribar, D.C., Nicastro, A., & Ross, J. (2020). Measuring Financial Wellbeing with SelfReported and Bank-Record Data (Melbourne Institute Working Paper No. 26/20; Working Paper Series, p. 86). Melbourne Institute. https://doi.org/10.2139/ssrn.3737273.
- Sabri, M. F., Anthony, M., Wijekoon, R., Suhaimi, S. S. A., Abdul Rahim, H., Magli, A. S., & Isa, M. P. M. (2021). The Influence of Financial Knowledge, Financial Socialization, Financial Behaviour, and Financial Strain on Young Adults' FWB. *International Journal of Academic Research in Business and Social Sciences*, 11(12), 566-586.
- Dare, S. E., van Dijk, W.W., van Dijk, E., van Dillen, L. F., Gallucci, M., & Simonse, O. (2022). How Executive Functioning and Financial Self-efficacy Predict Subjective FWB via Positive Financial Behaviours. *Journal of Family and Economic Issues, 1*-17.
- Delafrooz, N., & Paim, L. (2011). Determinants of financial wellness among Malaysia workers. *African Journal of Business Management*, 5(24), 10092-10100.

- Dewi, V., Febrian, E., Effendi, N., Anwar, M. (2020). Financial Literacy among the Millennial Generation: Relationships between Knowledge, Skills, Attitude, and Behavior. *Australasian Accounting, Business and Finance Journal*, 24-37.
- Eagly, A. H., & Chaiken, S. (1993). The psychology of attitudes. Harcourt brace Jovanovich college publishers.
- Engels, C., Kumar, K., & Philip, D. (2020), Financial literacy and fraud detection. *The European Journal of Finance*, 26(4-5), 420-442.
- Elif, Akben-Selcuk. 2015. Factors Influencing College Students' Financial Behaviors in Turkey: Evidence from a National Survey. *International Journal of Economics and Finance, Vol.* 7, No. 6.
- Fah, B. C. Y. (2010). Living standard, living level and economic well-being of older persons: Similarity and differences in measuring these concepts. *Canadian Social Science*, *6*(5), 145-150.
- Farrell, L., Fry, T. R., & Risse, L. (2016). The significance of financial self-efficacy in explaining women's personal finance behaviour. *Journal of Economic Psychology*, *54*, 85-99.
- Fei, C. K., Sabri, M. F., Mohamed, N. A., Wijekoon, R., & Majid, A. Z. A. (2020). Determinants of financial vulnerability among young employees in Malaysia. *Journal of Critical Reviews*, 7(15), 3097-3107.
- Furnham, A., & Cheng, H. (1999). Personality as predictor of mental health and happiness in the East and West. Personality and individual differences, 27(3), 395-403.
- Gąsiorowska, A. (2008). Różnice indywidualne jako determinanty postaw wobec pieniędzy. Nieopublikowana rozprawa doktorska.
- Garman, E. T., Leech, I. E., & Grable, J. E. (1996). The negative impact of employee poor personal financial behaviours on employers. *Journal of Financial Counselling and Planning*, 7, 157-168.

- Garg, N., & Singh, S. (2018). Financial literacy among youth. *International Journal of Social Economics*, 45(1), 173–186.
- 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.
- Grohmann, A. (2018). Financial literacy and financial behavior: Evidence from the emerging Asian middle class. *Pacific-Basin Finance Journal*, 48, 129-143.
- Grohmann, A., Kouwenberg, R., & Menkhoff, L. (2015). Childhood roots of financial literacy. *Journal of Economic Psychology*, *51*, 114-133.
- Gonçalves, V. N., Ponchio, M. C., & Basílio, R. G. (2021). Women's financial well-being: a systematic literature review and directions for future research. *International Journal of Consumer Studies*, 45(4), 824–843. https://doi.org/10.1111/ijcs.12673.
- Hair Jr, J. F., Sarstedt, M., Ringle, C. M., & Gudergan, S. P. (2017). Advanced issues in partial least squares structural equation modeling. saGe publications.
- Hasibuan, B. K., Lubis, Y. M., & HR, W. A. (2018). Financial literacy and financial behaviour as a measure of financial satisfaction. Retrieved on 30/08/2021 from https://doi.org/10.2991/ebic-17.2018.79.
- Hira, T. K. (1997). Financial attitudes, beliefs and behaviours: differences by age. *Journal of consumer studies & home economics*, 21(3), 271-290.
- Howlett, E., Kees, J., & Kemp, E. (2008). The role of self-regulation, future orientation, and financial knowledge in long-term financial decisions. *Journal of Consumer Affairs*, 42(2), 223-242.
- Ismail, N., & Zaki, N. D. A. (2019). Does financial literacy and financial stress effect the financial wellness. *International Journal of Modern Trends in Social Sciences*, 2(8), 1-11.

- Kabadayi, S., & O'Connor, G. E. (2019). Exploring the antecedents of financial well-being: where we are and where we go from here. *International Journal of Bank Marketing*, *37*(4), 930–933. https://doi.org/10.1108/IJBM-06-2019-338.
- Kaur M., Yadav SS., Gautam V., (2013). Financial system development and foreign direct investment: a panel data study for BRIC countries. *Glob Bus Rev* 14(4):729–742. https://doi.org/10.1177/097215091350160.
- Kaur, G., Singh, M., & Singh, S. (2021). Mapping the literature on financial well-being: a systematic literature review and bibliometric analysis. *International Social Science Journal*, 71(241–242), 217–241. https://doi.org/10.1111/issj.12278.
- Kempson, E., Finney, A., & Poppe, C. (2017). FWB.
- Kempson, E. (2018, November 26). Financial Capability and Well Being. An international comparison. National Research Symposium on Financial Literacy, Toronto.
- Kempson, E., & Poppe, C. (2018). Understanding Financial WellBeing and Capability—Are vised model and comprehensive analysis (p. 140). Consumption Reserach Norway SIFO. (Professional Report No. 3).
- Kim, K.T., Anderson, S.G., & Seay, M. C. (2019). Financial knowledge and short-term and long-term financial behaviours of millennials in the United States. *Journal of Family and Economic Issues*, 40(2), 194-208.
- Krueger, A. B., & Summers, L. H. (1986). Reflections on the inter-industry wage structure.
- Kuknor S., & Sharma A. (2017). The relationship of debt management, compulsive buying behavior and financial well-being. *Indian Journal of Public Health Research and Development, 822-828.*
- Lusardi, A., Mitchell, O.S., & Curto, V.(2010). Financial literacy among the young. *Journal of consumer affairs*, 44(2), 358-380.

- Lusardi, A. (2019). Financial literacy and the need for financial education: evidence and implications. Swiss. Journal of Economics and Statistics, 1-8.
- Lusardi, A. (2019). Financial Well-being of the Millennial Generation: An In-Depth Analysis of Its Drivers and Implications. Global Financial Literacy Excellence Center, 1-7.
- Lapp, W. M. (2010). The missing link: Financial self-efficacy's critical role in financial capability. San Francisco, CA: EARN Research Institute, 54-63.
- Lea, S. E. G., Webley, P. (2005). Money as tool, money as drug: The biological psychology of a strong incentive. *Behavioral and Brain Sciences*, 29(2), 161–176. DOI:doi.org/10.1017/S0140525X06009046 Malaysian Insolvency Department Report (2021).
- Mahdzan, N. S., Zainudin, R., Sukor, M. E. A., Zainir, F., & Wan Ahmad, W. M. (2019). Determinants of subjective FWB across three different household income groups in Malaysia. *Social Indicators Research*, 146, 699-726.
- Mountain, T. P., Kim, N., Serido, J., & Shim, S. (2021). Does type of financial learning matter foryoung adults' objective financial knowledge and financial behaviours? A longitudinal and mediation analysis. *Journal of Family and Economic Issues*, 42(1), 113-132.
- Mokhtar, N., & Husniyah, A. R. (2017). Determinants of FWB among public employees in Putrajaya, Malaysia. *Pertanika Journal of Social Sciences and Humanities*, 25(3), 1241-1260.
- Norlaila, N. (2019). Pengembangan Model Instrumen Penilaian Sikap Berbasis Kerja Sama Melalui Buku Penghubung Pada Pembelajaran Pendidikan Agama Islam Dan Budi Pekerti Di Smp Kota Banjarmasin.
- Nanda, A. P., & Banerjee, R. (2021). Consumer's subjective financial well-being: asystematicreview and research agenda. International *Journal of Consumer Studies*, 45(4), 750–776. https://doi.org/10.1111/ijcs.12668.

- Prince, S., & Shagrin, S. (2010). Discovering in neuro science about money. The money coaching institute. Proceeding of the association for Financial Counseling and Planning Education, 2010 Annual Conference. Retrieved March 4, 2018, from http://www.afcpe.org/wp-content/uploads/2014/04/2010 afcpe conference proceedings.pdf.
- Rasheed, M. H., Rafique, A., Zahid, T., & Akhtar, M. W. (2018). Factors influencing investor's decision making in Pakistan: Moderating the role of locus of control. Review of Behavioural Finance.
- Rimal, A., Moon, W., Balasubramanian, S. K., & Miljkovic, D. (2011). Self efficacy as a mediator of the relationship between dietary knowledge and behaviour. *Journal of Food Distribution Research*, 42(856-2016-58007), 28-41.
- Riyazahmed, D. K. (2021). Does Financial Behaviour Influence FWB?. Journal of Asian Finance, Economics, and Business (JAFEB), ISSN, 2288-4637.
- Riitsalu, L., & Murakas, R. (2019). Subjective financial knowledge, prudent behaviour and income: The predictors of FWB in Estonia. International Journal of Bank Marketing.
- Ruxyn, T. (2017). A Young Graduate In Sabah Made RM300,000 In Just A Year By Turning His Hobby Into A Career. SAYS. com.
- Sandler, M. E. (2000). Career decision-making self-efficacy, perceived stress, and an integrated model of student persistence: A structural model of finances, attitudes, behaviour and career development. *Research in Higher Education*, 41(5), 537–580.
- Sabri, M. F., & Falahati, L. (2003). Predictors of financial well-being among Malaysian employee: Examining the mediate effect of financial stress. *Journal of Emerging Economies and Islamic Research*, 1(3), 1-16.
- Sabri, M. F., Reza, T. S., & Wijekoon, R. (2020). Financial management, savings behaviour, investment behaviour and FWB of working women in the public sector. *Majalah Ilmiah Bijak*, 17(2), 135-153.

- Sabri, M., Wijekoon, R., & Rahim, H. (2020). The influence of money attitude, financial practices, self-efficacy and emotion coping on employees' FWB. *Management Science Letters*, 10(4), 889-900.
- Sabri, M. F. (2011). Pathways to financial success: Determinants offinancial literacy and FWB among young adults. Iowa State University.
- Sabri, M. F., Rahim, H. A., Wijekoon, R., Fardini, N., Zakaria, A. S. M., & Reza, T. S. (2020). The mediating effect of money attitude on association between financial literacy, financial behaviour, and financial vulnerability. *Int. J.Acad. Res. Bus. Soc. Sci, 10*, 340-358.
- Sabri, M. F., Anthony, M., Law, S. H., Rahim, H. A., Burhan, N. A. S., & Ithnin, M. (2023). Impact of financial behaviour on financial wellbeing: evidence among young adults in Malaysia. *Journal of Financial Services Marketing*, 1-20.
- Saunders, H., & Vehviläinen-Julkunen, K. (2016). The state of readiness for evidence-based practice among nurses: An integrative review. *International Journal of Nursing Studies*, 56, 128-140.
- Setiyani, Rediana., & Solichatun, Ipit. 2019. Financial Well-being of College Students: An Empirical Study on Mediation Effect of Financial Behavior. Conference Paper 3rd ICEEBA International Conference on Economics, Education, Business and Accounting Volume 2019.
- Stollak, M., Vandenberg, A., Steiner, K., & Richards, J. (2011). Student budgeting and spending behaviours: a comparative study. *Journal of Behavioural Studies in Business*, 3, 1.
- Tahmassian K., Moghadam N. J. (2011). Relationship.between self-efficacy and symptoms of anxiety, depression, worry and social avoidance in a normal sample of students. *Iran J Psychiatry Behav Sci* 5:91–97.
- Thapa, B. S. (2015). Financial literacy in Nepal: A survey analysis from college students. *NRB Economic Review*, *27*(1), 49-74.

- Tanoto, S., & Evelyn, E. (2019). Financial knowledge, FWB, and online shopping addiction among young Indonesians. *Jurnal Manajemen dan Kewirausahaan*, 21(1), 32-40.
- Taylor, C. D., Klontz, B. and Lawson, D. (2017), "Money disorders and locus of control: implications for assessment and treatment", *Journal of Financial Therapy, Vol. 8* No. 1.
- Topa, G., Hernandez-Solis, M., & Zappala, 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*, *9*(NOV), 1–10. https://doi.org/10.3389/fpsyg. 2018.02419.
- UNCDF(2021). Delivering Financial Health Globally: A collection of insights, approaches and recommendations (p.61). UN Capital Development Fund. https://www.uncdf.org/article/7008/delivering-financial-health-globally-a-collection-of-insightsapproaches-and-recommendations.
- UNSGSA (2021). Financial Health: An Introduction for Financial Sector Policymakers (p. 26). UNSGSA Financial Health Working Group. https://www.unsgsa.org/publications/financial-health-introduction-financial-sector-policymakers.
- Utkarsh, Pandey, A., Ashta, A., Spiegelman, E., & Sutan, A. (2020). Catch them young: impact of financial socialization, financial literacy and attitude towards money on financial well-being of young adults. *International Journal of Consumer Studies*, 44(6), 531–541. https://doi.org/10.1111/ijcs.12583
- Vaughan, G., & Hogg, M. A. (2005). Introduction to social psychology.
- Wilmarth, M. J. (2021). Financial and Economic Well-being: a Decade Review from Journal of Family and Economic Issues. *Journal of Family and Economic Issues*, 42(1), 124–130. https://doi.org/10.1007/s10834-020-09730-8.

- Wijekoon, R., Sabri, M. F., Ahmad, N., Rahim, H. A., & Suhaimi, S. S. A. (2021). Financial factors as antecedents of economic well-being and mediation effect of technology adoption. *Jurnal Pengguna Malaysia*, *37*, 148-171.
- Wijekoon ,R., Sabri, M. F., Ahmad, N., & Rahim, H. A. (2021b). Understanding the path toward family economic well-being of coconut growers. *International Journal of Academic Research in Business and Social Sciences*, *II*(19), 327–348, http://dx.doi.org/0.6007/IJARBSS/v11-i19/11740.
- Xue, R., Gepp, A., O'Neill, T. J., Stern, S., & Vanstone, B. J. (2020). Financial well-being amongst elderly Australians: the role of consumption patterns and financial literacy. *Accounting & Finance*, 60(4), 4361-4386.
- Yakob, N. A., & Abu Hasan, N. (2021). Exploring the interaction effects of board meetings on information disclosure and financial performance in public listed companies. *Economies*, *9*(4), 139.
- Yeganeh, H. (2021). Emerging social and business trends associated with the Covid-19 pandemic. Critical perspectives on international business.
- Younas, W., Javed, T., Kalimuthu, K. R., Farooq, M., Khalil-ur-Rehman, F., &Raju, V. (2019). Impact of self-control, financial literacy and financial behaviour on FWB. *The Journal of Social Sciences Research*, *5*(1), 211-218.