Vol 14, Issue 8, (2024) E-ISSN: 2222-6990

Unveiling Financial Behaviour among Adult Learners in Private Higher Education Institutions

Zahir Osman

Open University Malaysia
Corresponding author Email: zahir_osman@oum.edu.my

Ratna Khuzaimah Mohamad

Open University Malaysia Email: ratna_mohamad@oum.edu.my

To Link this Article: http://dx.doi.org/10.6007/IJARBSS/v14-i8/22306 DOI:10.6007/IJARBSS/v14-i8/22306

Published Date: 31 August 2024

Abstract

This study investigates the significance of financial behavior among working adult learners in private higher education institutions, recognizing that effective financial management is crucial for personal and professional success. The study's primary aim was to examine the direct and indirect impacts of financial knowledge and financial literacy on financial behavior, with financial self-efficacy serving as a mediator. A quantitative research design was employed, utilizing survey questionnaires for data collection, distributed to a sample of 465 participants, ultimately resulting in 323 valid responses for analysis. The gathered data were analyzed using Partial Least Squares Structural Equation Modeling (PLS-SEM) to test the proposed hypotheses. The results indicated that financial knowledge significantly influences financial self-efficacy, which in turn affects financial behavior, while the direct impact of financial knowledge on financial behavior was found to be non-significant. Future studies are encouraged to explore additional mediators and moderators, diverse populations, and the role of technology in financial education. The implications of this research highlight the necessity for educational institutions to strengthen financial education programs that enhance both knowledge and self-efficacy, ultimately empowering adult learners to make informed financial decisions and improve their financial behavior, thereby contributing to their overall financial well-being and stability. Through these initiatives, institutions can play a pivotal role in fostering financially responsible behaviors in their adult learner populations. Keywords: Financial Knowledge, Financial Literacy, Financial Self-Efficacy, Financial Behavior, Higher Education Institutions.

Introduction

The financial behavior of working adult learners is critical for ensuring personal and economic stability, both globally and in Malaysia. In the global context, sound financial behavior enables

Vol. 14, No. 8, 2024, E-ISSN: 2222-6990 © 2024

individuals to effectively manage their income, savings, and investments, leading to improved financial health and reduced stress. It also contributes to broader economic stability by promoting savings and investments that fuel economic growth. In Malaysia, the importance of financial behavior is underscored by the country's aspirations for economic development and the financial well-being of its population. However, many working adult learners in Malaysia face challenges in managing their finances effectively. Issues such as inadequate financial literacy, poor budgeting habits, and excessive debt are prevalent, leading to financial stress and instability. This study is significant for policymakers as it provides insights into the financial behavior of working adult learners, enabling the development of targeted financial education programs and policies to enhance financial literacy and management skills. For working adult learners, understanding and improving financial behavior is crucial for achieving financial independence, reducing stress, and enhancing overall quality of life (Kebah, 2019). Higher education institutions also play a vital role in this context, as they can incorporate financial education into their curricula, equipping students with essential financial management skills before they enter the workforce. By addressing the financial behavior of working adults, this study contributes to the development of a financially literate and stable population, which is essential for the socio-economic growth of Malaysia. Consequently, the findings of this study can help create a more supportive environment for working adults to thrive financially, benefiting individuals, families, and the nation as a whole. Additionally, it is important to consider the changing economic landscape and the rise of digital finance tools, which present both opportunities and challenges for financial management (Kebah, 2019). The ability to navigate these tools effectively can significantly enhance financial decision-making and planning. Moreover, with the increasing cost of living and economic uncertainties, effective financial behavior is more crucial than ever for ensuring long-term stability and resilience. Addressing these issues holistically through education, policy, and practical interventions can empower working adults to make informed financial decisions, ultimately leading to a more prosperous society. This study aims to assess the direct and indirect relationships between financial knowledge and financial literacy to financial behavior with financial self-efficacy as a mediator among adult learners in private higher education institutions.

Literature Review

Underpinning Theory

Social Cognitive Theory (SCT) (Bandura, 2012) provides a robust framework for studying the complex interactions between financial literacy, financial knowledge, and financial behavior, with financial self-efficacy as a crucial mediator. At its core, SCT emphasizes the reciprocal interaction between personal factors, behavior, and the environment, highlighting the role of observational learning, self-efficacy, and outcome expectations in shaping behavior. In financial decision-making, individuals with higher levels of financial knowledge are more likely to engage in behaviors that promote financial literacy, such as seeking financial education and information. As individuals acquire financial literacy comprising not just factual knowledge but also skills and confidence in financial management they develop a stronger sense of self-efficacy in handling financial matters. This increased self-efficacy, in turn, influences their financial behaviors by empowering them to make informed decisions, set financial goals, and persist in achieving them despite challenges. Moreover, SCT underscores the importance of social influences and environmental factors in shaping financial behaviors, acknowledging

Vol. 14, No. 8, 2024, E-ISSN: 2222-6990 © 2024

that individuals learn from others' experiences and adapt their behaviors based on perceived norms and expectations.

Relationship between Financial Knowledge, Financial Self-Efficacy & Financial Behaviour Financial self-efficacy, an individual's belief in their ability to manage financial matters, is a critical determinant of financial well-being (Morris, Maillet, & Koffi, 2022). It is influenced by a complex interplay of financial knowledge and behavior. Financial knowledge, encompassing an understanding of financial concepts, products, and services, serves as a foundation for informed decision-making. However, possessing knowledge alone does not guarantee positive financial outcomes. Financial behavior, encompassing actions and habits related to money management, budgeting, saving, and investing, is equally crucial. Research suggests a strong correlation between financial knowledge and behavior (Anisah, Winanda, & Herawan, 2023; Dewi et al., 2020), with individuals who possess greater financial knowledge tending to exhibit healthier financial habits. Moreover, financial self-efficacy acts as a mediator, influencing the relationship between knowledge and behavior (Normawati, Rahayu, & Worokinasih, 2022; Aristei & Gallo, 2021). Those with higher financial self-efficacy are more likely to apply their knowledge to make sound financial decisions, leading to improved financial outcomes (Fessler, Silgoner, & Weber, 2020). Understanding the intricate relationship between financial knowledge, behavior, and self-efficacy among adult learners in private higher education institutions is essential for developing effective financial literacy programs. By fostering both knowledge acquisition and the development of positive financial habits, institutions can empower students to make informed financial choices, ultimately enhancing their overall well-being (Osman et al., 2018). Therefore, the following hypotheses were proposed for this study:

- H1: There is a relationship between financial knowledge and financial behavior among adult learners in private higher education institutions.
- H2: There is a relationship between financial knowledge and financial self-efficacy among adult learners in private higher education institutions.
- H3: There is a mediating effect of financial self-efficacy on the relationship between financial knowledge and financial behavior among adult learners in private higher education institutions

Relationship between Financial Literacy, Financial Self-Efficacy & Financial Behaviour
Financial literacy, encompassing knowledge and understanding of financial concepts, is a cornerstone of effective financial management. It serves as the foundation for informed decision-making, influencing individuals' financial behavior, such as saving, budgeting, and investing (Dewi et al., 2020). However, possessing financial literacy alone does not guarantee positive financial outcomes. Financial self-efficacy, an individual's belief in their ability to manage financial matters, plays a pivotal role in translating knowledge into action (Morris, Maillet, & Koffi, 2022). Individuals with high financial self-efficacy are more likely to apply their financial knowledge to make sound decisions (Aristei & Gallo, 2021). Conversely, low financial self-efficacy can hinder individuals from utilizing their knowledge effectively, leading to suboptimal financial behaviors. Research has consistently demonstrated the relationship between financial literacy and financial behavior (Khawar & Sarwar, 2021; Mireku, Appiah, &

Vol. 14, No. 8, 2024, E-ISSN: 2222-6990 © 2024

Agana, 2023; SABRI et al., 2021). Moreover, financial self-efficacy has been found to mediate the relationship between financial literacy and financial behavior (Baptista & Dewi, 2021; Asdar, Hasbiah, & Mulyadi, 2024). Therefore, fostering financial literacy and self-efficacy is crucial for promoting positive financial outcomes among adult learners in private higher education institutions. Hwang and Park (2023), emphasize the importance of addressing financial behavior and well-being in financial literacy interventions, highlighting the multifaceted nature of financial outcomes. Marinov (2023), underscores the significance of understanding the determinants of financial literacy to influence financial behavior effectively. By combining knowledge of these factors with the development of strong financial self-efficacy, institutions can empower learners to make informed and confident financial decisions (Li et al., 2020). Thus, the following hypotheses were proposed for this study:

- H4: There is a relationship between financial literacy and financial behavior among adult learners in private higher education institutions.
- H5: There is a relationship between financial literacy and financial self-efficacy among adult learners in private higher education institutions.
- H6: There is a relationship between financial self-efficacy and financial behavior among adult learners in private higher education institutions.
- H7: There is a mediating effect of financial self-efficacy on the relationship between financial knowledge and financial behavior among adult learners in private higher education institutions

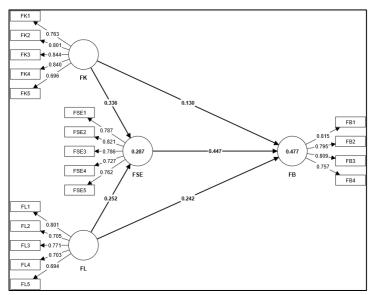


Figure 1: Research Framework

Notes: FK=Financial Knowledge FL=Financial Literacy FSE=Financia

Self-Efficacy FB=Financial Behavior

Methodology

This study set out to comprehensively investigate the direct and indirect impacts of financial knowledge and financial literacy on financial behavior, with financial self-efficacy acting as a mediator, among adult learners in private higher education institutions. To meet this goal,

Vol. 14, No. 8, 2024, E-ISSN: 2222-6990 © 2024

researchers carefully gathered primary data, ensuring the reliability and validity of measurements through an exhaustive review of existing literature. Survey questionnaires were dispatched via email to selected participants, employing purposive sampling due to the lack of a complete population list. The analysis focused on 19 observed variables, including independent variables such as financial knowledge (5 items) adopted from Susan (2018), financial literacy (5 items) adopted from Zulaihati et al (2020), the mediating variable of financial self-efficacy (5 items) adopted from Lown (2011), and the dependent variable of financial behavior (4 items) adopted from Susan (2018). Respondents provided evaluations for elements within each construct using a Likert scale with five response options, contributing to a rich data set. Of the 465 surveys distributed, 359 were returned, resulting in a satisfactory response rate of 77.2%, suitable for utilizing structural equation modeling (SEM) in data analysis. Ultimately, 323 responses were valid for analysis. Researchers selected Smartpls4 software, known for its expertise in SEM techniques, to conduct data analysis and hypothesis testing. This decision was based on Smartpls4's robust capability in evaluating multivariate data, conforming to the study's goals and following Ringle et al. (2022) recommendations. Smartpls4 enabled a thorough evaluation of the proposed hypotheses and extensive multivariate data analysis, facilitating a detailed assessment of both measurement and structural models.

Data Analysis

Respondents' Profile

The analysis of the respondents' profiles based on the provided data table reveals several key demographic insights. The gender distribution shows a marked disparity, with 196 participants (60.7%) being female and 127 (39.3%) male, indicating a higher female representation in the sample. The age distribution further highlights the demographic spread, with only 25 respondents (7.7%) aged between 20-30 years, suggesting that younger adults are underrepresented in this study. The majority of respondents, 145 individuals (44.9%), fall within the 30-40 years age range, making it the largest age group in the sample. This is followed by the 40-50 years age group, comprising 74 respondents (22.9%), and the 50-60 years age group with 58 respondents (18.0%). The smallest age category includes those aged over 60 years, with 21 participants (6.5%). In terms of the level of study, a significant portion of the sample, 214 respondents (66.3%), are postgraduate students, while 109 respondents (33.7%) are undertaking undergraduate studies. This demonstrates a higher representation of individuals pursuing advanced education. The income distribution provides additional insights, with 112 respondents (34.7%) earning less than RM4,850, indicating a considerable segment with lower income levels. The largest income group is those earning between RM4,851 and RM10,970, which encompasses 140 respondents (43.3%), representing a dominant middle-income cohort. Meanwhile, 71 respondents (22.0%) have incomes exceeding RM10,971, reflecting a notable presence of higher-income individuals in the sample.

Common Method Bias

Kock (2015), and Kock & Lynn (2012), introduced a comprehensive approach, known as the collinearity test, which examines both vertical and horizontal collinearity. This methodology detects pathological collinearity by evaluating the variance inflation factors (VIFs). According to Kock & Lynn (2012), VIF values exceeding 3.3 indicate a significant concern for common method bias in the model. Conversely, if the VIFs from the collinearity assessment are below

Vol. 14, No. 8, 2024, E-ISSN: 2222-6990 © 2024

3.3, as suggested by Kock (2015), it can be concluded that the model is free from common method bias. In this study, as depicted in Table 1, the VIFs obtained from the overall collinearity assessment were all below 3.3, verifying that the model is not affected by common method bias.

Table 1
Full Collinearity Test

Constructs	FB	FK	FL	FSE
FB		1.839	1.755	1.461
FK	1.856		1.416	1.813
FL	1.801	1.439		1.901
FSE	1.373	1.687	1.741	

Measurement Model

In this study, we utilized the approach advocated by Hair et al. (2017) to evaluate each measurement at both the first and second-order levels, enabling the identification of items with loadings below the 0.7 criterion. Analyses of construct reliability and validity revealed that the Average Variance Extracted (AVE) for all constructs ranged from 0.542 to 0.631, surpassing the 0.5 threshold and thereby indicating strong convergent validity (Hair et al., 2017) (see Table 2). Additionally, the composite reliability for all constructs was above 0.7, ranging from 0.790 to 0.872. Furthermore, Cronbach's alpha values for all constructs exceeded 0.7, with values varying between 0.788 and 0.850 (see Table 2). To ensure discriminant validity, the initial step involved evaluating cross-loadings to confirm the proper representation and measurement of their respective constructs (see Table 2). Following this, the Heterotrait-Monotrait (HTMT) ratio was employed for further assessment, adhering to the recommended criteria for examining discriminant validity in Variance-Based Structural Equation Modeling (VB-SEM) (Henseler, Ringle, & Sarstedt, 2015). Table 3 presented the HTMT ratios, original sample, and 95% confidence intervals, confirming compliance with the HTMT threshold of 0.85.

Vol. 14, No. 8, 2024, E-ISSN: 2222-6990 © 2024

Table 2
Construct Reliability and Validity & Item Loadings

Constructs	Indicators	Loadings	CA	CR	AVE
Financial	FB1	0.815	0.806	0.813	0.631
Behavior	FB2	0.795			
	FB3	0.809			
	FB4	0.757			
Financial	FK1	0.763	0.850	0.872	0.625
Knowledge	FK2	0.801			
	FK3	0.844			
	FK4	0.840			
	FK5	0.696			
Financial	FL1	0.801	0.788	0.790	0.542
Literacy	FL2	0.705			
	FL3	0.771			
	FL4	0.703			
	FL5	0.694			
Financial	FSE1	0.787	0.836	0.840	0.604
Self-Efficacy	FSE2	0.821			
	FSE3	0.786			
	FSE4	0.727			
	FSE5	0.762			

Notes: CA=Cronbach Alpha CR=Composite Reliability AVE=Average variance Extracted

Table 3
Hetrotrait & Monotrait (HTMT) Ratios

	, ,		
	FB	FK	FL
FK	0.596		
FL	0.660	0.783	
FSE	0.753	0.575	0.568

Structural Model

In this investigation, the assessment of the structural model followed the procedure set forth by Hair et al. (2017), which involved a thorough examination of pathway coefficients (β) and coefficients of determination (R^2). Utilizing the Partial Least Squares (PLS) method, 5000 subsamples were employed to ascertain the significance level of the path coefficients. The results of the hypothesis testing, including confidence intervals for path coefficients (beta), t-statistics, and p-values, are comprehensively detailed in Table 4. This meticulous analysis provides critical insights into the significance and robustness of the relationships among the variables within the structural model. The extensive presentation of hypothesis testing results in Table 4 offers a detailed analysis of each hypothesis, showcasing Beta coefficients, T-statistics, P-values, and the conclusive decisions regarding hypothesis support. As a result, the study's findings are presented with greater depth and clarity, enhancing the understanding of the interrelationships among the variables under investigation.

In this study, the evaluation of the seven hypotheses yielded a comprehensive understanding of the relationships among financial knowledge, financial literacy, financial self-efficacy, and

Vol. 14, No. 8, 2024, E-ISSN: 2222-6990 © 2024

financial behavior. For *H1* (Financial Knowledge -> Financial Behavior), the path coefficient (β) was 0.130, with a T statistic of 1.907 and a p-value of 0.057, leading to the rejection of the hypothesis due to insufficient statistical significance, indicating that financial knowledge does not directly influence financial behavior in the sample. In contrast, *H2* (Financial Knowledge -> Financial Self-Efficacy) exhibited a path coefficient of 0.336, a T statistic of 5.186, and a p-value of 0.000, thereby accepting the hypothesis and demonstrating that financial knowledge significantly enhances financial self-efficacy. The indirect effect in *H3* (Financial Knowledge -> Financial Self-Efficacy -> Financial Behavior) showed a path coefficient of 0.150, a T statistic of 4.085, and a p-value of 0.000, supporting the hypothesis that financial self-efficacy mediates the relationship between financial knowledge and financial behavior. *H4* (Financial Literacy -> Financial Behavior) had a path coefficient of 0.242, a T statistic of 4.074, and a p-value of 0.000, affirming the hypothesis and indicating a considerable direct influence of financial literacy on financial behavior.

Similarly, *H5* (Financial Literacy -> Financial Self-Efficacy) had a path coefficient of 0.252, with a T statistic of 4.004 and a p-value of 0.000, thereby accepting the hypothesis and showing that financial literacy significantly boosts financial self-efficacy. For *H6* (Financial Self-Efficacy -> Financial Behavior), the path coefficient was 0.447, the T statistic was 8.633, and the p-value was 0.000, leading to the acceptance of the hypothesis and demonstrating a strong direct impact of financial self-efficacy on financial behavior. Finally, *H7* (Financial Literacy -> Financial Self-Efficacy -> Financial Behavior) exhibited an indirect effect with a path coefficient of 0.113, a T statistic of 3.807, and a p-value of 0.000, supporting the hypothesis and suggesting that financial self-efficacy mediates the relationship between financial literacy and financial behavior.

Table 4 provides an extensive analysis of effect sizes (f2), meticulously categorized based on Cohen's (1992) criteria into small (0.020 to 0.150), medium (0.150 to 0.350), and large (0.350 or greater). The effect sizes observed in this study varied from small (0.017) to large (0.273), highlighting the varied impacts of the examined variables. Additionally, the Intrinsic Value Inflation Factor (VIF) values, as detailed in Table 6, consistently stayed below the more lenient threshold of 5, with the highest value recorded at 1.901. This indicates that collinearity is not a concern, ensuring the robustness of coefficient comparisons and interpretation within the structural model. Moreover, the substantial explained variance for the endogenous construct is evident, as indicated by an R^2 value of 0.477 (Figure 1). Regarding the mediator, the model effectively explains approximately 28.7% of the variance in the structure, as reflected by an R^2 value of 0.287. This underscores the model's efficacy in capturing the underlying dynamics of the mediation process.

Vol. 14, No. 8, 2024, E-ISSN: 2222-6990 © 2024

Table 4
Hypotheses Testing Results

		Т	Р			2.50	97.50	
Hypotheses	Beta	statistics	values	f^2	VIF	%	%	Decision
	0.13			0.01	1.90	-		
<i>H1</i> : FK -> FB	0	1.907	0.057	7	1	0.003	0.267	Rejected
	0.33			0.09	1.74			Accepte
H2: FK -> FSE	6	5.186	0.000	1	3	0.205	0.458	d
H3: FK -> FSE ->	0.15							Accepte
FB	0	4.085	0.000			0.085	0.228	d
	0.24			0.06	1.83			Accepte
<i>H4:</i> FL -> FB	2	4.074	0.000	1	2	0.124	0.359	d
	0.25			0.05	1.74			Accepte
<i>H5:</i> FL -> FSE	2	4.004	0.000	1	3	0.124	0.367	d
	0.44			0.27	1.40			Accepte
<i>H6:</i> FSE -> FB	7	8.633	0.000	3	2	0.338	0.546	d
<i>H7:</i> FL -> FSE ->	0.11							Accepte
FB	3	3.807	0.000			0.056	0.172	d

Significance at p<0.05

The evaluation of the model's inference and managerial implications was rigorously conducted through out-of-sample predictive analysis using the PLSpredict method, as recommended by Shmueli et al. (2016, 2019). As shown in Table 5, the application of PLS-SEM resulted in significantly higher Q² predictions (>0) compared to naive mean predictions, and consistently lower Root Mean Square Error (RMSE) values than those from linear model (LM) benchmarks, underscoring its robust predictive capabilities. Notably, in eight out of nine instances, the PLS-SEM predictions exhibited lower RMSE values than the LM predictions, emphasizing the superior predictive strength of the proposed model as detailed in Table 5. The Cross-Validated Predictive Ability Test (CVPAT) introduced by Hair et al. (2022), combined with its integration into PLSpredict analysis by Liengaard et al. (2021), marks significant progress in predictive modeling methodologies. Additionally, Table 6 reaffirms the enhanced predictive capabilities of PLS-SEM, demonstrated by lower average loss values compared to both indicator averages and LM benchmarks, thereby providing strong evidence of its superior predictive performance.

Table 5
PLSpredicts

Indicators	Q ² predict	PLS-RMSE	LM-RMSE	PLS - LM
FB1	0.271	0.620	0.626	-0.006
FB2	0.188	0.627	0.638	-0.011
FB3	0.212	0.678	0.683	-0.005
FB4	0.117	0.732	0.733	-0.001
FSE1	0.210	0.631	0.630	0.001
FSE2	0.183	0.632	0.643	-0.011
FSE3	0.109	0.680	0.684	-0.004
FSE4	0.132	0.692	0.707	-0.015
FSE5	0.176	0.621	0.633	-0.012

Vol. 14, No. 8, 2024, E-ISSN: 2222-6990 © 2024

Table 6
Cross Validated Predictive Ability Test (CVPAT)

	Average loss difference	t-value	p-value
FB	-0.107	5.255	0.000
FSE	-0.081	4.244	0.000
Overall	-0.093	5.366	0.000

Ringle and Sarstedt (2016) along with Hair et al. (2018) introduced Importance Performance Map Analysis (IPMA) to evaluate the significance and effectiveness of latent variables in explaining acceptance, as elaborated in Table 9. The overall impact on financial behavior was most pronounced for financial self-efficacy (0.447), followed by financial literacy (0.355), and financial knowledge (0.280), highlighting their relative importance in financial behavior. Financial knowledge scored the highest (66.369), while leader financial self-efficacy had the lowest score (60.542) on a 0-100 scale, indicating better performance for financial knowledge and lower achievement for financial self-efficacy. Despite ranking first in leader financial behavior importance, financial self-efficacy displayed the lowest performance. These findings suggest prioritizing strategies to enhance financial self-efficacy among adult students who are working, potentially improving the overall financial behavior of working adult students in private higher education institutions.

Table 7
Importance-Performance Map Analysis (IPMA)

	, , ,		
Constructs	Total Effect	Performance	
FK	0.280	66.369	
FL	0.355	65.733	
FSE	0.447	60.542	

Discussion & Conclusion

Discussion

To enhance the influence of financial knowledge and financial literacy on financial behavior with financial self-efficacy acting as a mediator among working adult learners in private higher education institutions, several targeted strategies can be implemented, based on the statistical analysis results. Firstly, integrating comprehensive financial education modules into the curriculum that focus on both theoretical and practical aspects of financial management can significantly boost financial knowledge, as indicated by the significant effect size (β = 0.336) on financial self-efficacy. These modules should include real-life scenarios and case studies to make the learning more relevant and engaging for working adults. Furthermore, workshops and seminars led by financial experts can provide additional insights and personalized advice, helping learners build a solid foundation of financial knowledge (Khawar & Sarwar, 2021). Secondly, fostering an environment that encourages regular practice of financial literacy skills is essential, as evidenced by the positive impact of financial literacy on financial self-efficacy (β = 0.252). This could involve simulated budgeting exercises, investment games, and the use of financial management software, which allows learners to apply their acquired knowledge in a controlled setting (Hwang & Park, 2023). Additionally, creating peer discussion groups and mentorship programs can facilitate knowledge sharing and collective problem-solving, reinforcing learning outcomes. Financial self-efficacy, which strongly influences financial behavior ($\beta = 0.447$), can be enhanced through personalized

Vol. 14, No. 8, 2024, E-ISSN: 2222-6990 © 2024

coaching sessions that focus on building confidence in handling personal finances (Dewi et al., 2020). Regular assessments and feedback mechanisms can help learners track their progress and address gaps in their understanding. Behavioral interventions, such as setting small, achievable financial goals, can also incrementally increase self-efficacy. To address the psychological aspect, incorporating components like stress management and decision-making skills into the financial education program can empower learners to make informed financial decisions confidently (Normawati et al., 2022). By adopting these strategies, educational institutions can create a supportive learning environment that not only increases financial knowledge and literacy but also strengthens financial self-efficacy, ultimately leading to improved financial behavior among adult learners, as supported by the mediated effect of financial self-efficacy on financial behavior ($\beta = 0.150$ when mediated by financial knowledge and $\beta = 0.113$ when mediated by financial literacy).

Theoretical Implications

The theoretical implications of this study are profound, particularly when viewed through the lens of Social Cognitive Theory (SCT) as articulated by Bandura (2012). SCT posits that learning occurs in a social context and is facilitated by the dynamic and reciprocal interaction between personal, behavioral, and environmental influences. The statistical analysis in this study highlights the pivotal role of financial self-efficacy in mediating the relationship between financial knowledge and financial literacy on financial behavior, aligning well with SCT's emphasis on self-efficacy as a crucial determinant of behavior. The observed relationships underscoring the importance of cognitive processes in enhancing self-efficacy support SCT's assertion that an individual's belief in their ability to execute specific behaviors significantly impacts their actions. This study adds to the SCT framework by empirically demonstrating how financial education interventions can enhance self-efficacy, subsequently leading to better financial behaviors. Such findings suggest that policies and educational strategies should focus on not only imparting knowledge but also on building self-efficacy to achieve more effective behavioral outcomes in financial management among adult learners. Through this lens, the study reinforces the importance of developing educational programs that foster self-efficacy, thereby enabling individuals to translate financial knowledge and literacy into practical financial behaviors.

Practical Implications

The practical implications of this study are significant for educational institutions and policymakers seeking to improve financial behavior among adult learners in private higher education. First, the findings suggest that integrating comprehensive financial education programs into the curriculum is essential (Fessler et al., 2020). These programs should focus on both financial knowledge and practical skills, ensuring that learners not only understand financial concepts but also feel confident in applying them in real-life situations. Workshops, seminars, and interactive learning experiences can provide opportunities for adult learners to engage with financial content actively, fostering a sense of self-efficacy that is crucial for behavioral change (Morris et al., 2022). Furthermore, the study highlights the importance of mentoring and peer support groups, which may enhance motivation and accountability among participants. Such initiatives can create a supportive learning environment where learners feel encouraged to discuss financial challenges and share strategies for success. Lastly, incorporating assessments and feedback mechanisms within financial education programs will help learners track their progress and gain insights into their financial self-

Vol. 14, No. 8, 2024, E-ISSN: 2222-6990 © 2024

efficacy (Aristei & Gallo, 2021). By focusing on these practical strategies, educational institutions can better equip adult learners with the skills and confidence needed to make informed financial decisions, ultimately leading to improved financial behaviors and outcomes in their personal and professional lives.

Suggestions for Future Study

Future studies could build upon the findings of this research by exploring various factors that may influence the relationship between financial knowledge, financial literacy, and financial behavior, particularly focusing on additional mediators and moderators such as socioeconomic status, cultural background, and personality traits. Longitudinal studies could also be valuable to assess how financial behaviors evolve as individuals gain more financial knowledge and experience. Furthermore, expanding the research to include diverse populations, such as different age groups or those from varying educational backgrounds, may yield insights into the generalizability of the findings. Additionally, qualitative research methods, such as interviews and focus groups, could provide deeper insights into the psychological barriers that affect financial decision-making and self-efficacy. Lastly, investigating the impact of technology-based financial education tools and resources could enhance understanding of how digital learning environments can support adult learners in improving their financial behaviors effectively.

Conclusion

This study underscores the critical role of financial knowledge and financial literacy in shaping financial behavior among working adult learners in private higher education institutions, with financial self-efficacy serving as a vital mediator in this relationship. The findings reveal that enhancing financial education programs not only increases individuals' knowledge and skills but also significantly boosts their confidence in managing their finances, which in turn positively influences their financial actions. The statistical analysis affirms the importance of incorporating self-efficacy strategies within financial education curricula to achieve lasting behavioral change. These insights provide valuable implications for educators and policymakers, emphasizing the need for comprehensive, interactive, and supportive financial education initiatives. Ultimately, by fostering both knowledge and self-efficacy, institutions can empower adult learners to make informed financial decisions and improve their financial behaviors, contributing to their overall financial well-being and success.

Vol. 14, No. 8, 2024, E-ISSN: 2222-6990 © 2024

References

- Anisah, A., Winanda, V., & Herawan, E. (2023). The Relationship Between Financial Knowledge And Financial Behavior And The Mediation Effect Of Financial Attitudes. *CEMJP*, *31*(1), 925-934.
- Aristei, D., & Gallo, M. (2021). Financial knowledge, confidence, and sustainable financial behavior. *Sustainability*, *13*(19), 10926.
- Asdar, A. S., Hasbiah, S., & Mulyadi, A. R. (2024). Do Self-Efficacy, Financial Literacy, and Digital Literacy among Students Contribute to Entrepreneurial Behavior through Entrepreneurship Education?. *Pinisi Journal of Entrepreneurship Review*, 2(1), 32-50.
- Bandura, A. (2012). Social cognitive theory. In P. A. M. Van Lange, A. W. Kruglanski, & E. T. Higgins (Eds.), *Handbook of theories of social psychology* (pp. 349–373). Sage Publications Ltd. https://doi.org/10.4135/9781446249215.n18
- Baptista, S. M. J., & Dewi, A. S. (2021). The influence of financial attitude, financial literacy, and locus of control on financial management behavior. *International Journal of Social Science and Business*, *5*(1), 93-98.
- Cohen, J. (1992). A power primer. *Psychological Bulletin*, 112, 155–159. doi:10.1037/0033-2909.112.1.155
- 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*, 14(4), 24-37.
- Fessler, P., Silgoner, M., & Weber, R. (2020). Financial knowledge, attitude and behavior: evidence from the Austrian Survey of Financial Literacy. *Empirica*, *47*, 929-947.
- Hair, J. F., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. (2017). *A primer on partial least squares structural equation modeling (PLS-SEM)* (2nd ed.). Thousand Oaks, CA: SAGE
- Hair, J. F., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. (2022). A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM) (3 ed.). Thousand Oaks, CA: Sage.
- Henseler, J., Ringle, C. M., and Sarstedt, M. (2015). A new criterion for assessing discriminant validity in variance-based structural equation modeling, *Journal of the Academy of Marketing Science*, 43(1): 115-135.
- Hwang, H., & Park, H. I. (2023). The relationships of financial literacy with both financial behavior and financial well-being: Meta-analyses based on the selective literature review. *Journal of Consumer Affairs*, 57(1), 222-244.
- Khawar, S., & Sarwar, A. (2021). Financial literacy and financial behavior with the mediating effect of family financial socialization in the financial institutions of Lahore, Pakistan. *Future Business Journal*, 7, 1-11.
- Kebah, M., Raju, V., & Osman, Z. (2019). Growth of online purchase in Saudi Arabia retail industry. *International Journal of Recent Technology and Engineering*, 8(3), 869-872.. ISSN: 2277-3878
- Kebah, M., Raju, V., & Osman, Z. (2019). Online purchasing trend in the retail industry in Saudi. International Journal of Recent Technology and Engineering (IJRTE), 8(3), 865-868. ISSN: 2277-3878
- Kock, N. (2015). Common method bias in PLS-SEM: A full collinearity assessment approach. *International Journal of e-Collaboration*, 11(4), 1-10.
- Kock, N., & Lynn, G. S. (2012). Lateral collinearity and misleading results in variance-based SEM: An illustration and recommendations. *Journal of the Association for Information Systems*, 13(7), 546-580.

Vol. 14, No. 8, 2024, E-ISSN: 2222-6990 © 2024

- Li, X. T., Rahman, A., Connie, G., & Osman, Z. (2020). Examining customers' perception of electronic shopping mall's e-service quality. *International Journal of Services, Economics and Management*, 11(4), 329-346.
- Liengaard, B. D., Sharma, P. N., Hult, G. T. M., Jensen, M. B., Sarstedt, M., Hair, J. F., & Ringle,
 C. M. (2021). Prediction: Coveted, Yet Forsaken? Introducing a Cross-validated
 Predictive Ability Test in Partial Least Squares Path Modeling. *Decision Sciences*, 52(2), 362-392.
- Lown, J. M. (2011). Development and Validation of a Financial Self-efficacy Scale. *Journal of Financial Counseling and Planning*, 22(2), 54–63.
- Marinov, K. M. (2023). Financial literacy: Determinants and impact on financial behaviour. *Economic Alternatives*, *1*, 89-114.
- Mireku, K., Appiah, F., & Agana, J. A. (2023). Is there a link between financial literacy and financial behaviour?. *Cogent Economics & Finance*, 11(1), 2188712.
- Morris, T., Maillet, S., & Koffi, V. (2022). Financial knowledge, financial confidence and learning capacity on financial behavior: a Canadian study. *Cogent Social Sciences*, 8(1), 1996919.
- Normawati, R. A., Rahayu, S. M., & Worokinasih, S. (2022). Financial satisfaction on millennials: examining the relationship between financial knowledge, digital financial knowledge, financial attitude, and financial behavior. *Jurnal Aplikasi Manajemen*, 20(2), 354-365.
- Osman, Z., Mohamad, W., Mohamad, R. K., Mohamad, L., & Sulaiman, T. F. T. (2018). Enhancing students' academic performance in Malaysian online distance learning institutions. *Asia Pacific Journal of Educators and Education*, 33, 19-28.
- Ringle, C. M.(2016). Gain more insight from your PLS-SEM results: The importance-performance map analysis. *Industrial Management & Data Systems*. 116: 1865–1886.
- Sabri, M. F., Cheng-Xi Aw, E. U. G. E. N. E., Rahim, H. A., Burhan, N. A. S., Othman, M. A., & Simanjuntak, M. E. G. A. W. A. T. I. (2021). Financial literacy, behavior and vulnerability among Malaysian households: does gender matter?. *International Journal of Economics & Management*, 15(2).
- Shmueli, G., Sarstedt, J. F., Hair, J.-H., Cheah, H., Ting, S., Vaithilingam. (2019). Predictive model assessment in PLS-SEM: Guidelines for using PLSpredict. *European Journal of Marketing*. 53: 2322–2347.
- Shmueli, G., Ray, J. M., Estrada, V., and Chatla. (2016). The elephant in the room: predictive performance of PLS models. *Journal of Business Research*, 69: 4552–4564.
- Susan, M. (2018). Financial Behavior and Problems Among College Student in Indonesia: the Role of Financial Knowledge. *International Journal of Engineering & Technology*, 7(3.25), 133–137. Retrieved from www.sciencepubco.com/index.php/IJET
- Zulaihati, S., Susanti, S. and Widyastuti, U. (2020), "Teachers' financial literacy: does it impact on financial behaviour?", *Management Science Letters*, 10, 653-658.