








# “Factors affecting the financial well-being of Islamic university students in Indonesia: The mediating role of financial behavior”

<b>AUTHORS</b>	Ade Gunawan   Mukmin   Irma Christiana   Azzura Kahfi Ilzam Friska Nur Laily
<b>ARTICLE INFO</b>	Ade Gunawan, Mukmin, Irma Christiana, Azzura Kahfi Ilzam and Friska Nur Laily (2025). Factors affecting the financial well-being of Islamic university students in Indonesia: The mediating role of financial behavior. <i>Investment Management and Financial Innovations</i> , 22(2), 65-76. doi: <a href="https://doi.org/10.21511/imfi.22(2).2025.06">10.21511/imfi.22(2).2025.06</a>
<b>DOI</b>	<a href="http://dx.doi.org/10.21511/imfi.22(2).2025.06">http://dx.doi.org/10.21511/imfi.22(2).2025.06</a>
<b>RELEASED ON</b>	Thursday, 10 April 2025
<b>RECEIVED ON</b>	Monday, 28 October 2024
<b>ACCEPTED ON</b>	Monday, 17 March 2025
<b>LICENSE</b>	 This work is licensed under a <a href="https://creativecommons.org/licenses/by/4.0/">Creative Commons Attribution 4.0 International License</a>
<b>JOURNAL</b>	"Investment Management and Financial Innovations"
<b>ISSN PRINT</b>	1810-4967
<b>ISSN ONLINE</b>	1812-9358
<b>PUBLISHER</b>	LLC “Consulting Publishing Company “Business Perspectives”
<b>FOUNDER</b>	LLC “Consulting Publishing Company “Business Perspectives”



NUMBER OF REFERENCES

49



NUMBER OF FIGURES

1



NUMBER OF TABLES

8

© The author(s) 2025. This publication is an open access article.



## BUSINESS PERSPECTIVES



LLC "CPC "Business Perspectives"  
Hryhorii Skovoroda lane, 10,  
Sumy, 40022, Ukraine  
[www.businessperspectives.org](http://www.businessperspectives.org)

**Received on:** 28<sup>th</sup> of October, 2024

**Accepted on:** 17<sup>th</sup> of March, 2025

**Published on:** 10<sup>th</sup> of April, 2025

© Ade Gunawan, Mukmin, Irma Christiana, Azzura Kahfi Ilzam, Friska Nur Laily, 2025

Ade Gunawan, Dr., Associate Professor, Faculty of Economics and Business, Universitas Muhammadiyah Sumatera Utara [Muhammadiyah University of North Sumatra], Indonesia. (Corresponding author)

Mukmin, M.Si., Associate Professor, Faculty of Economics and Business, Universitas Muhammadiyah Sumatera Utara [Muhammadiyah University of North Sumatra], Indonesia.

Irma Christiana, M.M., Senior Lecturer, Faculty of Economics and Business, Universitas Muhammadiyah Sumatera Utara [Muhammadiyah University of North Sumatra], Indonesia.

Azzura Kahfi Ilzam, Student, Faculty of Economics and Business, Universitas Muhammadiyah Sumatera Utara [Muhammadiyah University of North Sumatra], Indonesia.

Friska Nur Laily, Student, Faculty of Economics and Business, Universitas Muhammadiyah Sumatera Utara [Muhammadiyah University of North Sumatra], Indonesia.



This is an Open Access article, distributed under the terms of the [Creative Commons Attribution 4.0 International license](https://creativecommons.org/licenses/by/4.0/), which permits unrestricted re-use, distribution, and reproduction in any medium, provided the original work is properly cited.

### Conflict of interest statement:

Author(s) reported no conflict of interest

Ade Gunawan (Indonesia), Mukmin (Indonesia), Irma Christiana (Indonesia), Azzura Kahfi Ilzam (Indonesia), Friska Nur Laily (Indonesia)

# FACTORS AFFECTING THE FINANCIAL WELL-BEING OF ISLAMIC UNIVERSITY STUDENTS IN INDONESIA: THE MEDIATING ROLE OF FINANCIAL BEHAVIOR

## Abstract

Sharia financial literacy pertains to individuals' capacity to manage their finances, partake in Sharia-compliant agreements, and make investments based on Islamic tenets for long-term prosperity. This study explores the relationship between Sharia financial literacy, financial stress, financial behavior, and financial well-being among Islamic university students in Medan, Indonesia. Three hundred seventy-eight (378) students from various regions of Medan, Indonesia, were used as the research sample. The questionnaires were disseminated using social media chat functions or messaging applications (e.g., WhatsApp, Telegram) in which the Google Forms link is shared. The Likert scale measures indicators in responses to statements and questions. The analysis was conducted using SEM with PLS 3.0 software. The findings show a significant positive effect of Islamic financial literacy on financial behavior and well-being ( $p < 0.05$ ). However, financial stress does not significantly impact financial behavior and financial well-being ( $p > 0.05$ ). In addition, financial behavior positively affects financial well-being among university students ( $p < 0.05$ ). This study also demonstrates that Islamic financial literacy indirectly improves financial well-being through its influence on financial behavior ( $p < 0.05$ ). However, financial stress does not indirectly affect financial well-being through financial behavior ( $p > 0.05$ ).

## Keywords

Sharia financial literacy, financial well-being, students, SEM-PLS, Indonesia

## JEL Classification

G41, G53, I31, Z12

## INTRODUCTION

The development of Islamic-based universities in Indonesia is growing rapidly, along with the community's increasing interest in obtaining higher education based on religious values. However, along with the increasing cost of education and living needs, students in Islamic universities face complex challenges in managing their finances. Healthy finances are key to maintaining good financial well-being, but not all students understand how to manage their finances wisely per Sharia principles.

Islamic financial literacy is an important aspect of helping students understand how to manage finances according to Islamic values. Islamic financial literacy includes the management of funds that are free from usury, fair transactions, and applying principles that support financial balance by Islamic teachings. Students of Islamic universities in Indonesia who live in an academic environment with religious values must understand and apply these principles to manage their finances more effectively. However, despite having a sufficient understanding of Islamic financial literacy, it is not uncommon for students to experience financial stress caused by various factors such as increasing

tuition fees, family responsibilities, and growing daily needs. This financial stress can affect students' emotional and psychological well-being, leading to an imbalance between their academic and financial lives. Therefore, it is important to understand how Islamic financial literacy can help reduce the impact of such financial stress.

Financial behavior is a crucial intermediary connecting Islamic financial knowledge to financial well-being. Financial behavior includes students' spending, saving, investing, and debt management by Sharia standards. Students exhibiting sound financial behaviors are more inclined to mitigate financial stress, sustain financial equilibrium, and enhance their overall financial wellness.

---

## 1. LITERATURE REVIEW

Financial literacy involves knowing, practical skills, and confidence necessary to effectively manage their money and make well-informed choices about financial services and products (Wahyuni et al., 2023). As described by (Pala et al., 2024), Sharia financial literacy is about knowing Islamic financial products and distinguishing them from conventional banking systems. It reflects an individual's capacity to apply knowledge consistent with Sharia principles for managing finances. Rohmania et al. (2023) describe it as a combination of insight, cognitive abilities, and decision-making skills aligned with Islamic financial concepts. Islamic financial literacy entails a comprehensive grasp of Islamic financial products and services, differentiating between conventional and Islamic banking institutions, and shaping one's economic decision-making by Sharia law (Khasanah et al., 2022). Muslims must pursue knowledge in Islamic finance, economics, and banking, which helps achieve prosperity (Falah) in this world and the hereafter. An increase in understanding among Muslims is anticipated to support the growth of the Islamic economy in Indonesia and positively influence overall economic development.

Financial stress refers to the psychological distress that arises when an individual's financial resources are insufficient to meet fundamental living needs, including having a home, obtaining meals, and handling other essential costs of daily life (Rahman et al., 2021). It manifests as worry, anxiety, and fear over the inability to manage financial obligations effectively. When people experience financial stress, they may find it challenging to engage in activities typically associated with relaxation and personal fulfillment, like leisure outings, participating in hobbies, or spend-

ing quality time with family and friends. This is often due to the financial limitations that restrict their capacity to allocate funds for non-essential or recreational activities (Friedline et al., 2021). Furthermore, according to Kim et al. (2006), financial stress becomes evident when individuals cannot fulfill their financial commitments, such as paying bills, covering loans, or meeting other financial responsibilities, leading to feeling overwhelmed. Rahman et al. (2021) also describe financial stress as a burden that stems from managing financial obligations with insufficient resources, which results in difficulties in meeting necessities and planning for future needs. This stress can accumulate over time, particularly if income levels remain stagnant while expenses increase, intensifying the strain on an individual's financial situation. Emotional responses to financial stress are common, including intense fear, worry, and frustration. Such emotions are often accompanied by physical symptoms like sleep disturbances or headaches and can escalate into more severe psychological issues if left unaddressed (Davis & Mantler, 2004). The implications of financial stress are not limited to emotional distress; they can extend further, affecting an individual's overall well-being, including their physical and mental health. Studies by Steen and MacKenzie (2013) indicate that prolonged exposure to financial stress can lead to hopelessness, significantly deteriorating both physical health, such as chronic fatigue or hypertension, and mental health, including anxiety and depressive disorders. The broader consequences of financial stress are also reflected in academic and professional outcomes. As Heckman et al. (2014) highlight, financial stress has far-reaching impacts, including poor academic performance, difficulty maintaining focus and motivation, and challenges in achieving educational and career goals.

One of the important concepts in finance is finance behavior. Many figures define the concept of behavioral finance; for example, Ricciardi & Simon (2000) states that financial behavior is a field characterized by multiple disciplines' inherent and constant integration, ensuring that discussions are not conducted in isolation. Gunawan et al. (2023) emphasize that managing finances effectively depends heavily on financial behavior. This involves individuals' approaches, feelings, and actions to handle financial matters (Owusu, 2021). Various studies have described financial behavior as a conscious method of making financial choices, focusing on the steps and alternatives considered (Rapina et al., 2023). Financial behavior is a new focus of financial theory, which seeks to comprehend and forecast financial markets and to analyze the influence of psychological decision-making. Financial behavior is a psychological mechanism influencing decision-making, particularly in the context of certain cognitive illusions. These illusions are categorized into two groups: those resulting from elevated decision-making processes and those derived from the brain's reflective interpretation of expectations (Kanapickienė et al., 2024). Financial behavior refers to an individual's conduct about financial management in everyday life (Xiao, 2008). Financial behavior generally pertains to income, expenditure, borrowing, saving, and risk management. Consequently, financial conduct is intrinsically linked to income management and the allocation of resources to satisfy current consumption requirements while reserving for future necessities. Financial conduct refers to how individuals or households administer their financial resources, encompassing planning, budgeting, saving, insurance, and investment. Financial responsibility is deemed productive as it pertains directly to the mastery of financial asset utilization. Financial behavior management encompasses three primary components: consumption, savings, and investment (Sabri et al., 2023).

Financial well-being refers to an individual's capacity to meet current and future financial obligations, attain financial security, and exercise the autonomy to make decisions that improve their quality of life (Riitsalu et al., 2024). Setiyani and Solichatun (2019) describe financial well-being as a stable state where worry is minimized, based on a person's subjective evaluation of their financial status. It indicates how

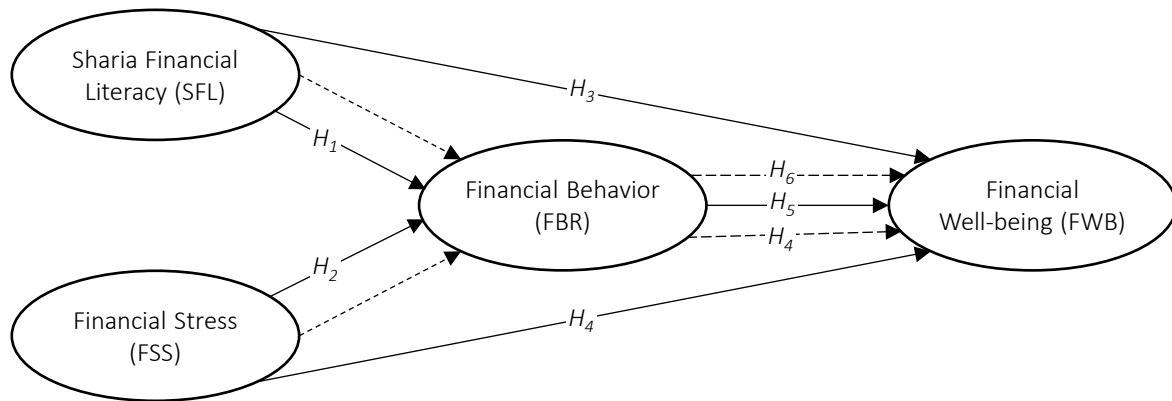
individuals view their financial situation, including their ability to meet their needs easily and make decisions on resource allocation without stress (Rahman et al., 2021). Additionally, financial well-being encompasses the satisfaction derived from tangible and intangible elements of one's financial condition, including perceived stability (Sorgente et al., 2023). It is not solely about the wealth one possesses but also about being free from financial fears and maintaining stability over time. The degree of autonomy in making financial choices further enhances this state of well-being. This complex nature of finances has been studied from economic, psychological, and behavioral viewpoints, exploring financial well-being's multiple dimensions (Elgeka & Querry, 2021).

Several studies have examined the factors influencing financial literacy within Islamic finance, including educational attainment, income level, and religious beliefs. However, these studies indicate a need for a more comprehensive exploration of how these factors interact specifically within Islamic finance. While there is literature on financial behavior, financial stress, financial well-being, and general financial literacy (Xiao et al., 2007; Gunawan et al., 2022; Robb, 2017; Gunawan et al., 2023; Moore et al., 2021; Mohd Rafien et al., 2022), there remains a scarcity of studies that focus on their interrelationships and the impact on Sharia financial literacy.

## 2. AIMS AND HYPOTHESES

This study examines the correlation between Sharia financial literacy, financial stress, financial behavior, and financial well-being among Islamic university students in Medan, Indonesia. By comprehending these dynamics, the research findings are anticipated to substantially enhance the formulation of more effective Sharia financial education policies and programs for the youth. The hypotheses for the structural model in this study are formulated as follows:

- H1: *Sharia financial literacy affects financial behavior.*
- H2: *Financial stress affects financial behavior.*
- H3: *There is a positive influence of Sharia financial literacy on financial well-being.*



**Figure 1.** Research model

- H4: Financial stress affects financial well-being.*
- H5: Financial behavior affects financial well-being.*
- H6: Sharia financial literacy influences financial well-being through financial behavior.*
- H7: Financial stress influences financial well-being through financial behavior.*

Medan (Al-Washliyah University Medan). The study used the Structural Equation Modeling (SEM) statistical modeling technique. Because SEM depends on tests of sample size and covariance differences, the sample taken should not be small. The number of samples used in covariance-based SEM cannot be small because SEM testing is sensitive to sample size, so the sample must range from 200 to 400. Therefore, the sample of this study was 378 students. An accidental sampling technique was utilized.

### 3. METHODOLOGY

This study uses a quantitative approach, a structured and methodical way of doing things that allows you to sort the data, measure it, test theories, and draw conclusions. Quantitative research is an approach that emphasizes objective measurement and the use of numerical data to analyze phenomena. In this research, data is collected through structured instruments such as questionnaires or experiments and then analyzed using statistical techniques to test previously formulated hypotheses (Creswell, 2014).

This study's population includes all undergraduate and postgraduate students from private universities in North Sumatra, Indonesia, such as Universitas Muslim Nusantara (Muslim Nusantara University), Universitas Islam Sumatera Utara (Islamic University of North Sumatra), Universitas Nahdlatul Ulama Sumatera Utara (Nahdlatul Ulama University North Sumatra), Universitas Muhammadiyah Sumatera Utara (Muhammadiyah University of North Sumatra), and Universitas Al-Washliyah

This study adopted various techniques for data gathering: 1) Information was collected via interviews aimed at understanding the key variables and conducted in a structured or flexible manner. 2) A survey served as the main tool, prompting respondents to provide their feedback using a Likert scale, with ratings spanning from 1 (low agreement) to 5 (high agreement). 3) The documentation process involved retrieving primary and secondary data from past research papers and creating a theoretical and conceptual foundation for the study's framework. The study focuses on students in Indonesia and is carried out within the country's context.

The chosen methodology for analysis is the variance-based structural equation test, specifically the Partial Least Square (PLS) method, utilizing the Smart PLS 3.0 software. The Partial Least Squares (PLS) technique elucidates that the Structural Equation Model (SEM-PLS) can effectively capture latent variables that are not immediately observable using indicators, also known as manifest variables (Ghozali, 2013).



## 4. RESULTS

Evaluating indicator measurement models entails thoroughly examining several key elements, including item reliability, composite reliability (to assess consistency within the model), the average variance extracted (AVE), and discriminant validity. These elements are integral to convergent validity (Cheung et al., 2023). Within this context, convergent validity involves verifying item reliability (examining the accuracy of each indicator individually), composite reliability, and AVE, which collectively establish the effectiveness of indicators in reflecting their dimensions. A higher level of convergent validity implies stronger alignment between dimensions and the latent variable (Lim, 2024). The validity of an indicator, often referred to as item reliability, is determined by evaluating its loading factor value (standardized loading). This value reveals how strongly an indicator correlates with its respective construct. Ideally, a loading factor above 0.70 indicates that the indicator effectively measures the construct. In contrast, any indicator with a standardized loading factor below 0.50 should be eliminated, as only those meeting or exceeding this value align with the model's criteria (Chin, 1998).

**Table 1.** Outer loading

Indicator	FBR	FSS	FWB	SFL
FBR.1	0.806			
FBR.2	0.796			
FBR.3	0.832			
FBR.4	0.773			
FBR.5	0.801			
FBR.6	0.832			
FBR.7	0.749			
FBR.8	0.674			
FSS.1		0.769		
FSS.10		0.563		
FSS.2		0.740		
FSS.3		0.607		
FSS.4		0.737		
FSS.5		0.838		
FSS.6		0.870		
FSS.7		0.887		
FSS.8		0.741		
FSS.9		0.575		
FWG.1			0.826	
FWG.10			0.740	
FWG.2			0.782	
FWG.3			0.822	
FWG.4			0.725	

Indicator	FBR	FSS	FWB	SFL
FWG.5			0.601	
FWG.6			0.697	
FWG.7			0.700	
FWG.8			0.729	
FWG.9			0.716	
SFL.1				0.849
SFL.2				0.841
SFL.3				0.813
SFL.4				0.825
SFL.5				0.799
SFL.6				0.804
SFL.7				0.793
SFL.8				0.675

Table 1 shows that all indicators possess outer loading values greater than 0.50, validating the variables and indicators incorporated in this research.

Reliability assessments for composite and total constructs utilize Cronbach's alpha and D.G rho (PCA). While Cronbach's alpha identifies the minimum reliability threshold, composite reliability reveals the actual measurement. For constructs to be deemed reliable, these figures must exceed 0.60; surpassing this benchmark establishes high reliability (Taber, 2018).

**Table 2.** Composite reliability

Variable	CA	rho_A	CR	AVE
FBR	0.910	0.914	0.927	0.615
FSS	0.919	1.053	0.922	0.549
FWB	0.906	0.913	0.922	0.543
SFL	0.920	0.921	0.935	0.642

As seen in Table 2, the composite reliability scores are as follows: 0.927 for financial behavior, 0.922 for financial stress and financial well-being, and 0.935 for Sharia financial literacy. The Cronbach's alpha values recorded are 0.910 for Financial Behavior, 0.919 for Financial Stress, 0.906 for Financial well-being, and 0.920 for Sharia Financial Literacy. Since these values exceed the threshold of 0.60, they validate the reliability of the indicators. The AVE values, which are 0.615 for Financial Behavior, 0.549 for Financial Stress, 0.543 for Financial well-being, and 0.642 for Sharia Financial Literacy, further confirm that these variables possess strong convergent validity.

Cross-loadings assess discriminant validity in reflective measurement models, comparing the AVE value with the squared correlation between

constructs. Cross-loading evaluates the correlation strength of an indicator with its construct in contrast to others (Henseler et al., 2015). An indicator exhibits good discriminant validity when it explains a greater proportion of its variance than it does for the variance of other constructs' indicators.

**Table 3.** Cross-loading

Indicator	FBR	FSS	FWB	SFL
FBR.1	0.806	-0.027	0.773	0.756
FBR.2	0.796	-0.061	0.777	0.744
FBR.3	0.832	-0.103	0.714	0.671
FBR.4	0.773	-0.091	0.634	0.580
FBR.5	0.801	-0.065	0.711	0.682
FBR.6	0.832	-0.056	0.705	0.691
FBR.7	0.749	-0.054	0.624	0.568
FBR.8	0.674	-0.074	0.635	0.575
FSS.1	-0.041	0.769	-0.045	-0.024
FSS.10	-0.030	0.563	-0.016	0.011
FSS.2	-0.009	0.740	-0.027	-0.001
FSS.3	-0.042	0.607	-0.045	-0.030
FSS.4	0.009	0.737	0.003	0.038
FSS.5	-0.046	0.838	-0.035	-0.030
FSS.6	-0.056	0.870	-0.010	-0.011
FSS.7	-0.117	0.887	-0.078	-0.043
FSS.8	-0.040	0.741	-0.031	-0.028
FSS.9	0.003	0.575	0.008	0.042
FWG.1	0.687	-0.081	0.826	0.802
FWG.10	0.739	-0.051	0.740	0.689
FWG.2	0.689	-0.080	0.782	0.708
FWG.3	0.676	-0.081	0.822	0.790
FWG.4	0.630	-0.105	0.725	0.600
FWG.5	0.485	-0.001	0.601	0.448
FWG.6	0.564	0.010	0.697	0.531
FWG.7	0.527	-0.060	0.700	0.526
FWG.8	0.719	0.024	0.729	0.697
FWG.9	0.712	0.002	0.716	0.689
SFL.1	0.660	-0.067	0.784	0.849
SFL.2	0.663	-0.075	0.746	0.841
SFL.3	0.603	-0.017	0.744	0.813
SFL.4	0.610	-0.019	0.700	0.825
SFL.5	0.669	0.025	0.696	0.799
SFL.6	0.773	-0.029	0.751	0.804
SFL.7	0.770	-0.055	0.759	0.793
SFL.8	0.648	0.013	0.642	0.675

As shown in Table 3, each variable's loading factor or discriminant validity value is more closely associated with its variable than with others. This holds for all indicators, confirming they are correctly assigned to their respective variables.

The next validity test is the Fornell-Larcker criterion, which shows the validity of variables with a

greater correlation than the correlation between different variables.

**Table 4.** Fornell-Larcker criterion

Variable	FBR	FSS	FWB	SFL
FBR	0.784			
FSS	-0.083	0.741		
FWB	0.693	-0.060	0.737	
SFL	0.746	-0.037	0.711	0.801

Furthermore, Table 4 shows that the Fornell-Larcker Criteria for each variable correlate more with their respective variables than with others. This is also true for the indicators, validating that the placement is appropriate for each variable.

The overall structural model's validity is assessed through the Goodness of Fit (GoF), a comprehensive index that simultaneously measures the effectiveness of both the measurement and structural models. To calculate the GoF value, the square root of the product of the average AVE (commonalities) and the R<sup>2</sup> value of the model is used.

**Table 5.** Average commonalities index

Variable	AVE	R Square
FBR	0.615	0.719
FSS	0.549	
FWB	0.543	0.882
SFL	0.642	
Average	0.587	0.801
GoF	0.686	

The average commonalities in Table 5 are listed as 0.587. By multiplying this with the R<sup>2</sup> value and taking the square root, a GoF of 0.686 is derived. This value exceeds 0.36, placing it in the category of a large GoF, indicating a strong alignment between the model and the observed data.

The R-square statistic shows the extent to which the independent variables explain variance in the dependent variable. It serves as a gauge for model effectiveness: a score of 0.75 reflects strong performance, 0.50 indicates moderate performance, and 0.25 signifies a weak model (Juliandi, 2018). The outcomes from the GoF calculation are detailed in the subsequent figures and tables.

**Table 6.** R-square

Variable	R Square	R Square Adjusted
FBR	0.719	0.717
FWB	0.882	0.882

From Table 6, it can be seen that the influence of Sharia Financial Literacy, Financial Behavior, and Financial Stress on Financial Well-being shows an R-square value of 0.882. This indicates that these factors can explain 88.2% of the variance in Financial Well-being, while the remaining 11.8% is attributed to other influences. Additionally, the combined effect of Sharia Financial Literacy and Financial Stress on Financial Behavior has an R-square value of 0.719, which indicates that these variables explain 71.9% of the variation in Financial Behavior, with the other 28.1% influenced by other factors.

This evaluation focuses on the path coefficients of the structural model to assess the significance of the relationships involved, which is crucial for testing the hypotheses. The analysis includes both direct and indirect effects.

**Table 7.** Direct effects

Path	T Statistics	P Values	Decision
SFL → FBR	37.155	0.000	Accepted
FSS → FBR	1.035	0.301	Rejected
SFL → FWB	8.670	0.000	Accepted
FSS → FWB	0.159	0.874	Rejected
FBR → FWB	6.700	0.000	Accepted

The results of the Smart PLS analysis are detailed in Table 7, revealing that financial behavior is heavily affected by Sharia financial literacy, with a t-value of 37.155 and a p-value of 0.000. This supports the validity of the first hypothesis (*H1*). Conversely, financial stress does not have a meaningful effect on financial behavior, indicated by a t-value of 1.035 and a p-value of 0.301, leading to the dismissal of the second hypothesis (*H2*). Moreover, there is a significant positive correlation between Sharia financial literacy and financial well-being, with a t-value of 8.670 and a p-value of 0.000, confirming the third hypothesis (*H3*). However, financial stress does not appear to significantly affect financial well-being, as shown by a t-value of 0.159 and a p-value of 0.870, resulting in the rejection of the fourth hypothesis (*H4*). Additionally, financial behavior positively influences financial well-being, with a t-value of 6.700 and a p-value of 0.000, reinforcing the acceptance of the fifth hypothesis (*H5*).

The indirect relationships among the independent and dependent variables explored in this study are summarized in Table 8.

**Table 8.** Indirect effects

Path	T Statistics	P Values	Decision
SFL → FBR → FWB	7.032	0.000	Accepted
FSS → FBR → FWB	0.955	0.340	Rejected

The information from Table 8 confirms a significant link between Sharia financial literacy and financial well-being, where financial behavior is the mediating factor ( $t = 7.032$ ,  $p = 0.019$ ), thus validating hypothesis *H6*. In contrast, the analysis of financial stress mediated through financial behavior reveals no meaningful effect on financial well-being ( $t = 0.955$ ,  $p = 0.340$ ), leading to the rejection of hypothesis *H7*.

## 5. DISCUSSION

Analysis of the first hypothesis (*H1*) assesses the influence of Sharia Financial Awareness on Financial Behavior, finding that this awareness positively and significantly impacts the financial habits of students attending Islamic university students in Medan, Indonesia ( $t = 37.155$ ,  $p = 0.000$ ). The implication is that a better grasp of Sharia financial principles is associated with an increased likelihood of responsible financial management. Effective financial behavior includes comprehensive planning, management, and control of financial activities. Financial knowledge serves as a factor influencing financial conduct (Hilgert et al., 2003). The findings are in agreement with earlier studies by Rahman et al. (2021), Aulia and Hendrawan (2023), and Gunawan et al. (2021), all of which support the link between Sharia financial literacy and financial behavior.

The second hypothesis (*H2*) examines the impact of Economic Stress on Financial Habits, showing that Economic Stress has a negative, yet statistically insignificant, effect on students' financial habits at Islamic university students in Medan, Indonesia ( $t = 1.035$ ,  $p = 0.301$ ). Economic stress reflects ongoing difficulties in meeting financial responsibilities, influencing behavior when stress levels rise. This is characterized by the struggle to fulfill financial duties (Mansor et al., 2022). Prior research has highlighted the detrimental effects of economic stress from multiple perspectives. Students who experience high levels of financial stress may feel compelled to drop out of university



to address urgent financial needs, often lacking effective strategies to manage such stress (Hicks, 2021). Research by Smathers et al. (2022) identifies financial stress as a key contributor to financial difficulties and, in some cases, academic withdrawal. These findings align with those of Mahdzan et al. (2023) and Mansor et al. (2022) confirming the negative influence of financial stress on behavior.

The third hypothesis (*H3*) examines the link between Sharia-based Financial Understanding and Financial Well-being, showing a positive and significant impact on students from Islamic university students in Medan, Indonesia ( $t = 8.670$ ,  $p = 0.000$ ). This financial understanding plays an important role in achieving economic balance, increasing financial skills, and management following Sharia rules to reduce risks and maintain steadiness. It also supports greater financial inclusion through active participation in Sharia-compliant financial systems. Previous studies, such as those by Cheah et al. (2015) and Grohmann (2018), have highlighted the positive connection between financial literacy and financial well-being. Financial knowledge is essential for economic growth and well-being (Worthington, 2006). Joo and Grable (2004) indicate that enhancing financial literacy boosts financial well-being, emphasizing the significance of saving, investing, and prudent spending.

The fourth hypothesis (*H4*) studies the effect of Economic Strain on Financial Well-being, finding that Economic Strain negatively affects Financial Well-being but is not statistically significant for students in Islamic university students in Medan, Indonesia ( $t = 0.159$ ,  $p = 0.870$ ). The results suggest that, while impactful, financial strain does not have a strong statistical effect. When economic strain increases, such as accumulating debt or financial difficulties, it may elevate stress and influence overall financial well-being. These findings are consistent with earlier research by (Sorgente et al., 2023), which reported a negative relationship between financial stress and well-being.

The fifth hypothesis (*H5*) explores the impact of Financial Behavior on Financial Well-being, demonstrating a significant positive influence among Islamic university students in Medan, Indonesia ( $t = 6.700$ ,  $p = 0.000$ ). This implies that students

who effectively manage their finances tend to experience greater well-being, as they are better equipped to fulfill their financial needs. According to Brügggen et al. (2017), financial behavior directly affects the ability to meet financial life demands, reinforcing its impact on well-being. Similarly, (Joo & Grable, 2004) argued that financial behavior is directly and indirectly associated with financial well-being. These results are consistent with the findings of Sabri et al. (2023), Chavali et al. (2021), and Lavonda et al. (2021), all of which show that financial behavior positively influences financial well-being.

The sixth hypothesis (*H6*) examines whether understanding Sharia finance can impact Financial Well-being when filtered through financial behavior. The results highlight a positive relationship ( $t = 7.032$ ,  $p = 0.019$ ), confirming that financial behavior mediates the influence of Sharia financial literacy on the well-being of Islamic university students in Medan, Indonesia. This finding underscores the significant role of financial habits in shaping an individual's life quality (Rahman et al., 2021). Financial behavior mediates the relationship between Islamic financial literacy and student welfare, indicating that welfare changes are determined by students' Islamic financial knowledge and how they apply it in their daily lives. Therefore, sound financial management according to Sharia principles is important to achieving optimal welfare.

The seventh hypothesis (*H7*) evaluates how financial pressure influences Financial Well-being, with Financial Behavior as a variable. The findings reveal a negative, though not statistically meaningful, effect among students in Islamic university students in Medan, Indonesia ( $t = 0.955$ ,  $p = 0.340$ ). This suggests that while financial habits might affect the outcome, they do not substantially change the statistical relationship in this scenario (Rahman et al., 2021). This suggests that financial behavior does not mediate between stress and student well-being. In other words, financial stress affects students' well-being without depending on how they manage their finances. The level of student well-being includes financial, emotional, and social aspects. High well-being means students feel financially secure and can live well without excessive economic pressure.

The practical implications of this study's results aim to improve Islamic financial literacy, reduce financial stress, promote good financial behavior, and ultimately improve the welfare of Islamic University students in Medan. A planned and sustainable implementation of the program will help create a generation of prosperous students who are financially independent and still uphold the Sharia principles.

---

## CONCLUSIONS

This study explores the relationship between Sharia financial literacy, financial stress, financial behavior, and financial well-being among Islamic university students in Medan, Indonesia. The findings suggest that Sharia Financial Literacy substantially and positively affects financial behavior and financial well-being ( $p < 0.05$ ). In contrast, Financial Stress does not significantly influence financial behavior or financial well-being ( $p > 0.05$ ). Additionally, Financial Behavior positively impacts financial well-being among students at Islamic universities in Medan, Indonesia ( $p < 0.05$ ). The indirect analysis indicates that Sharia Financial Literacy enhances financial well-being by influencing financial behavior ( $p < 0.05$ ). At the same time, Financial Stress shows no significant impact on financial well-being through financial behavior for these students ( $p > 0.05$ ).

This study offers important insights and practical recommendations. Among the three major determinants of financial well-being, financial behavior emerges as the most influential factor, followed by financial stress and literacy in promoting students' financial stability. Students must gain fundamental knowledge of managing income, understanding spending habits, and developing saving patterns to improve their financial security. However, this study is limited in its focus on behavioral factors, excluding the experiences of low-income groups and only considering three variables as predictors of financial well-being. To build a more comprehensive perspective, future studies should investigate additional factors such as seeking financial assistance, perceived financial competence, and demographic variables to understand their effects on financial well-being.

## AUTHOR CONTRIBUTIONS

Conceptualization: Ade Gunawan, Mukmin, Irma Christiana.

Data curation: Azzura Kahfi Ilzam, Friska Nur Laily.

Formal analysis: Ade Gunawan, Mukmin, Irma Christiana.

Funding acquisition: Ade Gunawan, Mukmin, Irma Christiana.

Investigation: Ade Gunawan, Mukmin, Irma Christiana, Azzura Kahfi Ilzam, Friska Nur Laily.

Methodology: Ade Gunawan.

Project administration: Mukmin, Irma Christiana.

Resources: Ade Gunawan, Azzura Kahfi Ilzam, Friska Nur Laily.

Software: Ade Gunawan, Azzura Kahfi Ilzam, Friska Nur Laily.

Supervision: Ade Gunawan, Mukmin.

Validation: Irma Christiana, Azzura Kahfi Ilzam, Friska Nur Laily.

Visualization: Ade Gunawan, Mukmin, Irma Christiana, Azzura Kahfi Ilzam, Friska Nur Laily.

Writing – original draft: Ade Gunawan, Mukmin, Irma Christiana.

Writing – review & editing: Ade Gunawan, Mukmin, Irma Christiana, Azzura Kahfi Ilzam, Friska Nur Laily.

## ACKNOWLEDGMENT

This research was funded in 2024 by the Ministry of Education, Culture, Research and Technology of the Republic of Indonesia under the Basic Research – Regular (PF-R) category. Thanks also go out to the different tiers of administration at Universitas Muhammadiyah Sumatera Utara, such as the administration of the School of Economics and Business and the staff at the Institute for Research and Community Service (LPPM).

## REFERENCES

1. Aulia, N. S., & Hendrawan, G. L. (2023). The Influence of Islamic Financial Literacy on Financial Behavior Among Students of Bandung State Polytechnic (Case Study of Islamic Finance Students at Bandung State Polytechnic). *Riwayat: Educational Journal of History and Humanities*, 6(3), 1183-1195. Retrieved from <https://jurnal.usk.ac.id/riwayat/article/view/33810/18702>
2. Brügggen, E. C., Hogreve, J., Holmlund, M., Kabadayi, S., & Löfgren, M. (2017). Financial well-being: A conceptualization and research agenda. *Journal of Business Research*, 79, 228-237. <https://doi.org/10.1016/j.jbusres.2017.03.013>
3. Chavali, K., Mohan, R. P., & Ahmed, R. (2021). Does Financial Behavior Influence Financial Well-being? *Journal of Asian Finance, Economics and Business*, 8(2), 273-280. <https://doi.org/10.13106/jafeb.2021.vol8.no2.0273>
4. Cheah, K. K., Foster, F. D., Heaney, R., Higgins, T., Oliver, B., O'Neill, T., & Russell, R. (2015). Discussions on long-term financial choice. *Australian Journal of Management*, 40(3), 414-434. <https://doi.org/10.1177/0312896214532476>
5. Cheung, G. W., Cooper-Thomas, H. D., Lau, R. S., & Wang, L. C. (2023). Reporting reliability, convergent and discriminant validity with structural equation modeling: A review and best-practice recommendations. *Asia Pacific Journal of Management*, 0123456789. Springer US. <https://doi.org/10.1007/s10490-023-09871-y>
6. Chin, W. W. (1998). The Partial Least Squares Approach to Structural Formula Modeling. *Advances in Hospitality and Leisure*, 8(2), 5. Retrieved from <https://www.taylorfrancis.com/chapters/edit/10.4324/9781410604385-10/partial-least-squares-approach-structural-equation-modeling-wynne-chin>
7. Creswell, J. W. (2014). *Qualitative, Quantitative, and Mixed Methods Approaches* (4th ed). SAGE Publications Ltd. Retrieved from [https://books.google.co.id/books?id=4uB76IC\\_pOQC&printsec=copyright&hl=id#v=onepage&q&f=false](https://books.google.co.id/books?id=4uB76IC_pOQC&printsec=copyright&hl=id#v=onepage&q&f=false)
8. Davis, C. G., & Mantler, J. (2004). *The consequences of financial stress for individuals, families, and society* (pp. 1-32). Centre for Research on Stress, Coping, and Well-being. Retrieved from <https://doyle-salewski.ca/how-we-help/the-consequences-of-financial-stress-for-individuals-families-and-society/>
9. Elgeka, H. W., & Querry, G. (2021). Peran money attitudes terhadap financial well-being dengan financial stress sebagai mediator pada mahasiswa rantau di Surabaya [The role of money attitudes towards financial well-being with financial stress as a mediator in out-of-town students in Surabaya]. *Jurnal Ilmiah Psikologi Terapan*, 9(1), 75. (In Indonesian). <https://doi.org/10.22219/jipt.v9i1.13906>
10. Friedline, T., Chen, Z., & Phelia, S. (2021). Families' Financial Stress & Well-Being: The Importance of the Economy and Economic Environments. *Journal of Family and Economic Issues*, 42(s1), 34-51. <https://doi.org/10.1007/s10834-020-09694-9>
11. Ghozali, I. (2013). *Aplikasi Analisis Multivariate dengan Program IBM SPSS 21 Update PLS Regresi [Multivariate Analysis Application with IBM SPSS 21 Update PLS Regression Program]*. Universitas Diponegoro. (In Indonesian). Retrieved from [https://www.researchgate.net/publication/289671928\\_Aplikasi\\_Analisis\\_Multivariate\\_Dengan\\_Program\\_IBM\\_SPSS\\_21\\_Update\\_PLS\\_Regresi](https://www.researchgate.net/publication/289671928_Aplikasi_Analisis_Multivariate_Dengan_Program_IBM_SPSS_21_Update_PLS_Regresi)
12. Grohmann, A. (2018). Financial literacy and financial behavior: Evidence from the emerging Asian middle class. *Pacific-Basin Finance Journal*, 48, 129-143. <https://doi.org/10.1016/j.pacfin.2018.01.007>
13. Gunawan, A., Jufrizen, J., & Pulungan, D. R. (2023). Improving MSME performance through financial literacy, financial technology, and financial inclusion. *International Journal of Applied Economics, Finance and Accounting*, 15(1), 39-52. <https://doi.org/10.33094/ijaefa.v15i1.761>
14. Gunawan, A., Sadri, M., Pulungan, D. R., & Koto, M. (2022). Study of Phenomenon on Consumption Behavior of Medan City Students During Pandemic: Financial Literacy on E-Commerce. *Webology*, 19(1), 2853-2872. <https://doi.org/10.14704/web/v19i1/web19190>
15. Gunawan, A., Asmuni, A., & Siregar, S. (2021). Islamic Financial Literacy and Financial Behavior: The case of Muhammadiyah Community in Medan City. *Journal of Accounting and Investment*, 22(3), 500-516. <https://doi.org/10.18196/jai.v22i3.10043>
16. Heckman, S., Lim, H., & Montalto, C. (2014). Factors Related to Financial Stress among College Students. *Journal of Financial Therapy*, 5(1). <https://doi.org/10.4148/1944-9771.1063>
17. Henseler, J., Ringle, C. M., & 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. <https://doi.org/10.1007/s11747-014-0403-8>
18. Hicks, S. P. (2021). *Financial Stress in Undergraduate Students Walden University This is to certify that the doctoral study by*. Walden University.
19. Hilgert, M. a., Hogarth, J. M., & Beverly, S. G. (2003). Household Financial Management: The Connection between Knowledge and Behavior. *Federal Reserve Bulletin*, 106(November 1991), 309-322. <https://ideas.repec.org/a/fip/fedgrb/y2003ijulp309-322nv.89no.7.html?pagewanted=all>
20. Joo, S., & Grable, J. E. (2004). An Exploratory Framework of the Determinants of Financial Satisfaction. *Journal of Family and Economic Issues*, 25(1),

- 25-50. <https://doi.org/10.1023/B:JEEI.0000016722.37994.9f>
21. Juliandi, A. (2018). *Structural Equation Model Partial Least Square (SEM-PLS) Menggunakan SmartPLS: Menggunakan Smart PLS*. Universitas Batam. Retrieved from <https://zenodo.org/records/2538001>
  22. Kanapickienė, R., Vasiliauskaitė, D., Keliuotytė-Staniulėnienė, G., Spicas, R., Omeir, A. K., & Kanapickas, T. (2024). A Comprehensive Review of Behavioral Biases in Financial Decision-Making: From Classical Finance to Behavioral Finance Perspectives. *Journal of Business Economics & Management*, 25(5), 1006-1029. <https://doi.org/10.3846/jbem.2024.22314>
  23. Khasanah, M., Aminullah, R., & Setianingsih, D. (2022). Determinants of Islamic Financial Literacy Index: Comparison Based on Ethnographic Studies in Yogyakarta, Indonesia. *Afkaruna: Indonesian Interdisciplinary Journal of Islamic Studies*, 18(1). <https://doi.org/10.18196/afkaruna.v18i1.12584>
  24. Kim, J., Sorhaindo, B., & Garman, E. T. (2006). Relationship between Financial Stress and Workplace Absenteeism of Credit Counseling Clients. *Journal of Family and Economic Issues*, 27(3), 458-478. <https://doi.org/10.1007/s10834-006-9024-9>
  25. Lavonda, P., Setiawan, I. R., & Ekadjadja, M. (2021). Determinants of Financial Well-Being Among Young Workers in Jakarta During the Covid-19 Pandemic. *Jurnal Ekonomi*, 26(2), 305-320. <https://doi.org/10.24912/je.v26i2.752>
  26. Lim, W. M. (2024). A typology of validity: content, face, convergent, discriminant, nomological and predictive validity. *Journal of Trade Science*, 12(3), 155-179. <https://doi.org/10.1108/jts-03-2024-0016>
  27. Mahdzan, N. S., Sukor, M. E. A., Zainudin, R., Zainir, F., & Ahmad, W. M. W. (2023). A Comparison of Financial Well-Being and Its Antecedents Across Different Employment Categories in Malaysia. *Gadjah Mada International Journal of Business*, 25(3), 255-277. <https://doi.org/10.22146/gamaijb.73947>
  28. Mahdzan, N. S., Zainudin, R., Wan Ahmad, W. M., & Hanifa, M. H. (2024). Does Islamic financial literacy and motives influence the holdings of Islamic financial products? A study on bank customers in Klang Valley, Malaysia. *Journal of Islamic Marketing*, 15(9), 2286-2309. <https://doi.org/10.1108/JIMA-05-2022-0158>
  29. Mansor, M., Sabri, M. F., Mansur, M., Ithnin, M., Magli, A. S., Husniyah, A. R., Mahdzan, N. S., Othman, M. A., Zakaria, R. H., Mohd Satar, N., & Janor, H. (2022). Analysing the Predictors of Financial Stress and Financial Well-Being among the Bottom 40 Percent (B40) Households in Malaysia. *International Journal of Environmental Research and Public Health*, 19(19). <https://doi.org/10.3390/ijerph191912490>
  30. Mohd Rafien, N. S., Awang, A. H., & Kamis, R. (2022). The Effects of Financial Knowledge, Financial Attitude and Locus of Control on Financial Well-Being among Students in Malaysian Public University: An Empirical Investigation. *International Journal of Academic Research in Business and Social Sciences*, 12(12), 134-142. <https://doi.org/10.6007/ijarbss/v12-i12/15778>
  31. Moore, A., Nguyen, A., Rivas, S., Bany-Mohammed, A., Majeika, J., & Martinez, L. (2021). A qualitative examination of the impacts of financial stress on college students' well-being: Insights from a large, private institution. *SAGE Open Medicine*, 9. <https://doi.org/10.1177/20503121211018122>
  32. Owusu, G. M. Y. (2021). Predictors of financial satisfaction and its impact on psychological wellbeing of individuals. *Journal of Humanities and Applied Social Sciences*, 5(1), 59-76. <https://doi.org/10.1108/jhass-05-2021-0101>
  33. Pala, F., Erdoğan, A., Ali, M., Alnori, F., & Barut, A. (2024). Analyzing the linkage between Islamic financial literacy and Islamic banking services adoption: evidence from Turkey. *Journal of Islamic Accounting and Business Research*, 15(5), 784-817. <https://doi.org/10.1108/JIABR-12-2021-0324>
  34. Rahman, M., Isa, C. R., Masud, M. M., Sarker, M., & Chowdhury, N. T. (2021). The role of financial behaviour, financial literacy, and financial stress in explaining the financial well-being of B40 group in Malaysia. *Future Business Journal*, 7(1), 1-18. <https://doi.org/10.1186/s43093-021-00099-0>
  35. Rapina, R., Meythi, M., Rahmatika, D. N., & Mardiana, M. (2023). The impact of financial literacy and financial behavior in entrepreneurial motivation – evidence from Indonesia. *Cogent Education*, 10(2). <https://doi.org/10.1080/2331186X.2023.2282827>
  36. Ricciardi, V., & Simon, H. K. (2000). What is Behavioral Finance? *The Business, Education and Technology Journal*, 2(2), 1-9. Retrieved from [https://papers.ssrn.com/sol3/papers.cfm?abstract\\_id=256754](https://papers.ssrn.com/sol3/papers.cfm?abstract_id=256754)
  37. Riitsalu, L., Sulg, R., Lindal, H., Remmik, M., & Vain, K. (2024). From Security to Freedom – The Meaning of Financial Well-being Changes with Age. *Journal of Family and Economic Issues*, 45(1), 56-69. <https://link.springer.com/article/10.1007/s10834-023-09886-z>
  38. Robb, C. A. (2017). College Student Financial Stress: Are the Kids Alright? *Journal of Family and Economic Issues*, 38(4), 514-527. <https://doi.org/10.1007/s10834-017-9527-6>
  39. Rohmania, A. S., Sholihah, E., & Nurhapsari, R. (2023). Developing Islamic financial literacy in improving Islamic financial behavior towards the financial well-being of MSMEs: The moderating effect of e-payment usage. *Journal of Islamic Economics Lariba*, 9(2), 293-310. <https://doi.org/10.20885/jielariba.vol9.iss2.art2>
  40. Sabri, M. F., Anthony, M., Law, S. H., Rahim, H. A., Burhan, N. A. S., & Ithnin, M. (2023). Impact of financial behaviour on financial well-being: evidence among



- young adults in Malaysia. *Journal of Financial Services Marketing*, 0123456789. <https://doi.org/10.1057/s41264-023-00234-8>
41. Setiyani, R., & Solichatun, I. (2019). Financial Well-being of College Students: An Empirical Study on Mediation Effect of Financial Behavior. *KnE Social Sciences*, 3(11), 451. <https://doi.org/10.18502/kss.v3i11.4026>
42. Smathers, K., Chapman, E., Deringer, N., & Grieb, T. (2022). The Relationship Between Financial Stress and College Retention Rates. *Journal of College Student Retention: Research, Theory & Practice*, 26(2), 581-604. <https://doi.org/10.1177/15210251221104984>
43. Sorgente, A., Zambelli, M., & Lanz, M. (2023). Are Financial Well-Being and Financial Stress the Same Construct? Insights from an Intensive Longitudinal Study. *Social Indicators Research*, 169(1-2), 553-573. <https://doi.org/10.1007/s11205-023-03171-0>
44. Steen, A., & MacKenzie, D. (2013). Financial Stress, Financial Literacy, Counselling and the Risk of Homelessness. *Australasian Accounting, Business and Finance Journal*, 7(3), 31-48. <https://doi.org/10.14453/aabf.v7i3.3>
45. Taber, K. S. (2018). The Use of Cronbach's Alpha When Developing and Reporting Research Instruments in Science Education. *Research in Science Education*, 48(6), 1273-1296. <https://doi.org/10.1007/s11165-016-9602-2>
46. Wahyuni, S. F., Radiman, R., Shareza, M. H., & Jufrizen, J. (2023). Financial literacy and financial attitude on financial management behavior: An examination of the mediating role of the behavioral intention of students at private universities in Indonesia. *Investment Management and Financial Innovations*, 20(3), 239-250. [https://doi.org/10.21511/imfi.20\(3\).2023.20](https://doi.org/10.21511/imfi.20(3).2023.20)
47. Worthington, A. C. (2006). Predicting financial literacy in Australia. *Financial Services Review*, 15(1), 59-79. <https://ro.uow.edu.au/commpapers/116>
48. Xiao, J. J. (2008). Applying Behavior Theories to Financial Behavior BT. In Xiao, J. J. (Ed.), *Handbook of consumer finance research* (pp. 69-81). Springer New York. [https://doi.org/10.1007/978-0-387-75734-6\\_5](https://doi.org/10.1007/978-0-387-75734-6_5)
49. Xiao, J. J., Shim, S., Barber, B. L., & Lyons, A. C. (2007). Financial behavior and quality of life of college students: Implications for college financial education. *2007 AFCPE Conference, November*. Retrieved from <https://www.researchgate.net/publication/340566285>