

From financial literacy to financial satisfaction: The mediating role of financial behavior

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Abstract: The development of financial technology (fintech) and increased access to financial services, along with changes in consumption patterns, have significantly impacted individual perceptions of financial satisfaction (FS). Challenges to financial satisfaction include economic instability, inflation, and income disparity. This study aims to examine the relationship between financial literacy (FL) and financial risk tolerance (FRT) on financial satisfaction (FS), considering the mediating role of financial behavior (FB). The research was conducted on 383 teachers across five major cities in East Java, Indonesia—Surabaya, Sidoarjo, Gresik, Mojokerto, and Pasuruan—using proportional random sampling. Data collected were analyzed using Partial Least Squares Structural Equation Modeling (PLS-SEM). The findings revealed that both financial literacy (FL) and financial risk tolerance (FRT) positively influence teachers' financial satisfaction (FS). Additionally, financial behavior (FB) was found to mediate the relationship between financial literacy (FL) and financial satisfaction (FS), as well as between financial risk tolerance (FRT) and FS. This research is expected to contribute both theoretically and practically by emphasizing the importance for policymakers in the education sector to develop financial well-being programs for teachers and highlighting the need for teachers to prioritize financial components in their personal and professional lives.

Keywords: Financial behavior, Financial literacy, Financial risk tolerance, Financial satisfaction.

1. Introduction

Financial satisfaction (FS) has emerged as one of the key elements in understanding individual well-being holistically [1-3]. It represents a person's view of their financial situation, including their capacity to fulfill essential needs, achieve financial goals, and respond to unexpected events [4, 5]. Amid global economic fluctuations, FS is increasingly recognized as a critical indicator of subjective well-being, particularly within modern societies [6, 7].

In Indonesia, advancements in financial technology (Fintech), expanded access to financial services, and shifts in consumption patterns are significantly reshaping individual's perspective on FS. The challenges such as economic instability, inflation, and income disparity impact perceptions of financial security [8, 9]. Consequently, understanding the factors influencing FS is essential to inform effective financial policies and strategies [10, 11].

Moreover, human resource development is also affected. In this point, Financial Services Authority (FSA) stated that teachers are among the professions with the highest exposure to online loans in Indonesia, at 47%. It reflects significant financial issues among teachers, which drives them to seek quick solutions through high-risk online lending platforms.

FS is often described as a personal evaluation of one's financial condition, including the capability to cover basic necessities, handle debts, save money, and prepare for future expenses [12]. It is influenced by demographics, financial behavior (FB), psychological characteristics [13] income [11, 14] assets,

and debts [15, 16]. Further research emphasizes the role of financial literacy (FL) [17-19] financial Behavior (FB) [20, 21] and FRT [22, 23] in shaping FS.

Research on FL and risk tolerance has been widely conducted, including among teachers. FL, which encompasses an individual's understanding of fundamental financial principles and proficiency in handling money, is believed to directly influence FS [24, 25]. Individuals with strong FL tend to excel in managing their earnings, preparing for future financial needs, and making informed decisions, ultimately increasing their FS [18, 26].

An individual's willingness to take financial risks, known as financial risk tolerance (FRT), also affects their level of FS. Those with higher risk tolerance are frequently more willing to explore investment opportunities that support long-term financial well-being, which can enhance their overall satisfaction [14, 27].

Furthermore, FB acts as an intermediary linking FL, risk tolerance, and FS [28]. Budgeting, spending control, and saving practices amplify the relationship between FL and risk tolerance towards FS [20]. Without well financial behaviors, individuals with high FL and risk tolerance may not achieve the optimal FS [29-31].

Prior research identifies responsible FB as a primary driver to enhance the stability FS, yet the contributions of FL and FRT are equally critical. This research seeks to fill the gap by integrating FL and FRT with suitable FB to enhance FS. Financial behavior provides a bridge for individuals to leverage FL effectively, while risk tolerance determines how well they navigate financial uncertainties.

This study also contributes to financial management literature by positioning financial behavior as a mediator. It offers insights into how FL and FRT influence FS through teachers' FB. Additionally, this research offers implications for policymakers in the education sector, emphasizing the need for targeted financial well-being programs for teachers.

2. Literature Review

2.1. Underpinning Theories

The argument between *traditional finance* and *behavioral finance* has spurred theoretical developments within the field of management, especially in finance. The traditional approach is rooted in rationalism, assuming that individuals can evaluate future outcomes based on weighted probabilities and maximize their utility [32]. In contrast, the behavioral approach posits that individuals are not entirely rational, leading them to occasionally make irrational decisions [33]. Behavioral finance, therefore, challenges and expands on the foundational view of rationality in decision-making. Traditional financial management theories are based on assumptions that individuals are rational decision-makers. However, it is often seen as unrealistic, since individuals may make decisions under irrational conditions [33].

The mid-18th century marked the emergence of the traditional view, with utility theory as its cornerstone. This theory suggests that utility serves as a measure of individual satisfaction derived from consuming goods or services [21]. The concept of "homo economicus" — the rational economic human who seeks to maximize their utility within given constraints — is a central part of its theory [34]. Utility theory in FS provides a framework for understanding how individuals evaluate and make financial decisions [18]. His perspective is crucial for designing personal financial strategies that align with individual preferences and risk tolerance [14].

2.2. Financial Literacy, Financial Behavior, and Financial Satisfaction

Global financial markets have experienced rapid growth, providing a variety of goods and services that are affordable for both major and small-scale investors [35]. This evolution necessitates an individual's capacity to perform calculations, including complex analyses, to support sound financial decision-making related to asset development and debt management [18, 36].

A strong understanding of FL is crucial for individuals as it can significantly enhance their quality of life [37, 38]. Individuals with robust FL are often skilled in managing their finances, consistently staying informed about financial products, and efficiently handling debt [37, 39].

A lack of FL can result in suboptimal financial decisions, which, when compounded, may diminish overall well-being and limit an individual's capacity to fulfill their basic financial requirements [40, 41]. FL serves as a skillset that promotes effective financial management practices [42] such as comparing offers before applying for credit cards [43] maintaining savings accounts [18] keeping financial records, and preparing for the future by setting aside money or making investments for long-term objectives like house, education, or other life goals [44]. Additionally, FL aids in making informed decisions about income, savings, investments, and debt management [45]. According to the pattern of the involved theories, the first hypothesis is written as follows:

H₁: FL positively affects FS

The application of FL in the current era is strongly connected to FB [20]. Furthermore, the FB represents the practical application of FL and often contributes positively to an individual's financial well-being [46]. When financial management practices are combined with low FL and also low decision-making is more likely, leading to inconsistencies in positive financial planning [43, 47]. It is expected that, with formal education, Economics and Accounting teachers will demonstrate good FB, thereby avoiding reliance on loans or engaging in excessive consumerism. Thus, the second and third hypotheses are depicted as follows:

H₂: FL positively affects FB.

H₃: FB positively affects FS.

2.3. Financial Risk Tolerance and Financial Satisfaction

FRT represents the level of the significant risk that one is willing to take, thereby enhancing behavioral control [48]. Consequently, people with greater FRT are inclined more to participate in higher-risk investments than those who own lower FRT [22]. Every investment and job inherently carries risks, and individuals respond differently to these risks. Furthermore, the FRT that people own affects their FB, as several studies have identified a strong relationship between the two variables [31]. Thus, this FRT plays a crucial role in shaping saving habits for their own retirement [49]. It is anticipated that by investing, individuals will have available savings when they enter retirement. Therefore, the fourth hypothesis is presented as follows:

H₄: FRT positively affects FB

FRT denotes an individual's comfort level in facing financial uncertainty and fluctuations in investment values [23]. It plays a role as a factor influencing individuals' perceptions of their financial well-being [12]. Individuals who can manage the risk is effectively to be more satisfied with the financial decisions they made since they are more well-prepared to face potential short-term losses in pursuit of long-term gains [20, 23].

H₅: FRT positively affects FS

2.4. Financial Behavior as a Mediator

FB encompasses the actions or habits exhibited by individuals in managing their financial resources, such as saving, investing, managing debt, and budgeting [20]. Higher FL typically leads to prudent FB, leading to increased satisfaction with one's financial situation [50]. Furthermore, FL gives a fundamental information and lead to the comprehension skill they need to make wiser financial decisions Farida, et al. [51]. Even, Joo and Grable [14] stated that determining the degree to which FL influences a person's FS requires both a solid foundation in FL and sound financial conduct. Thus, the sixth hypothesis is presented as follows:

H₆: FB mediates the relationship between FL and FS

Individuals with a high tolerance for risk are more likely to make daring financial decisions, such as investing in high-risk assets or exploring business ventures with higher profit potential. In contrast,

those with a low tolerance for risk typically approach financial management more conservatively, preferring safer options, such as keeping savings in bank accounts or steering clear of debt [14]. In this point, the relationship between FRT and financial pleasure is mediated by financial conduct. Individuals with high-risk tolerance can achieve FS if their FB is directed, for instance, through wise investments and disciplined financial planning [31]. Conversely, individuals with low-risk tolerance may attain FS through conservative FB, providing a sense of security and stability. Therefore, FB that aligns with one's risk tolerance contributes to the significant role in determining how satisfied a person feels with their financial situation [49]. Thus, the seventh hypothesis is presented as follows:

H₇: FB mediates the relationship between FRT and FS

2.5. Conceptual Framework

The selection of variables in this research is driven by the factors that affect the FS of economics teachers. Through the educator certification program implemented by the government, one of its objectives is to enhance teachers' welfare. Therefore, this research aims to identify the factors affecting FS, mediated by the FB of teachers. Several hypotheses can be presented based on the literature reviews. Figure 1 depicts the research's conceptual framework, showcasing the connections between the independent, dependent, and mediating variables being studied. FL and FRT serve as the independent variables, FB acts as the mediating variable, and FS is the dependent variable. As the information, the solid black arrows in Figure 1 indicate direct impacts, while the dashed arrows represent indirect effects.

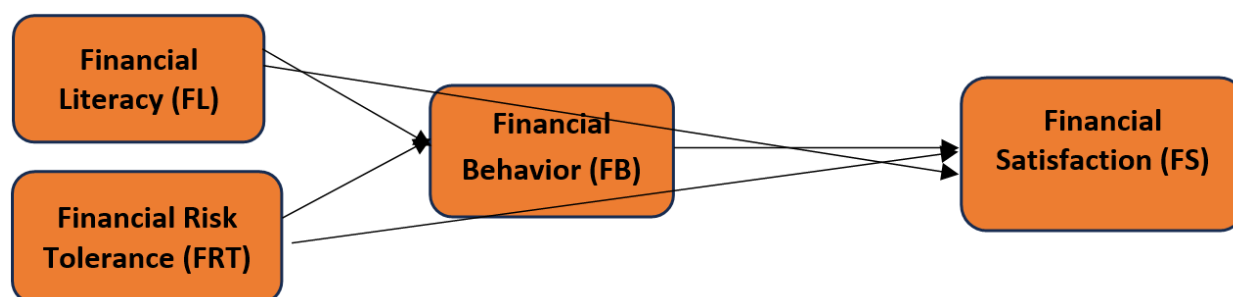


Figure 1.
Conceptual Framework.

3. Methodology

3.1. Design

This research serves as a preliminary exploration into the mediating role of FB in shaping FS. Specifically, the study seeks to validate the direct effects of FL and FRT on FS, as well as their indirect effects through FB as a mediator. Employing a cross-sectional research design, the data was gathered using a quantitative approach. The analysis was conducted using Partial Least Squares Structural Equation Modeling (PLS-SEM), as the primary aim is to examine the model of FS among teachers. Thus, PLS-SEM was deemed highly appropriate for this study due to its strong capability to predict all hypothesized relationships simultaneously and its effectiveness in analyzing and measuring interactions among variables.

3.2. Sample and Data Collection

The utilized data is aimed at examining the factors related between FS among senior high school economics teachers were gathered. Surveys were administered to senior high school teachers located in five of the largest cities or regencies in East Java. These cities or regencies include [30] as the Regional Minimum Wage (RMW) in these areas is relatively similar, averaging IDR 4,653,202.

Data collection took place from April to June 2024. Respondents filled out the survey online via Mentimeter, in which they could answer the questions provided by the researcher. The sample included

teachers working in SMA/SMK who hold a teaching certificate, both civil servants and private employees. In the questionnaire, the researchers asked the respondents regarding the identities confidential hidden, and the researcher emphasized that this was for academic purposes. A total of 433 respondents filled out the survey, of which 383 met the qualification criteria. Fifty respondents were disqualified due to the incomplete responses.

3.3. Measurement

The researcher utilized previously established research instruments. The FS measure utilized indicators including the amount of savings, the current financial condition, the capacity to fulfill financial needs, and skills in managing finances [10]. The FRT instrument used indicators including investment placement with risks, preferred types of investments, and percentage of the investment asset portfolio [22]. The dependent variable measured by FB, included indicators, including financial planning, financial management, saving and investing activities, and credit management [52]. These variables were assessed using a Likert scale from “1” that represents strongly disagree opinion to “5” that represents strongly agree opinion.

The FL instrument included the appropriate indicators by Mandell and Klein [53] and Xiao, et al. [54] including general knowledge, savings and loans, insurance, and investment. This instrument included 20 items in a test, with 100 as the maximum score and 0 as the minimum score. The results were interpreted with ranging categories from very poor to very good [55].

3.4. Data Analysis

The collected data in this study was analyzed by the help of various statistical programs for PLS-SEM with the SmartPLS4 software. The adoption of PLS-SEM is suitable for statistical estimation in exploratory studies that employ mediation effects. In this research, the author followed two stages of data analysis: the measurement model aimed to estimate convergent validity and reliability. Subsequently, the author performed the structural model to calculate the final model and test the hypotheses.

4. Results and Analysis

4.1. Respondent Description

This study involved 383 respondents surveyed across four cities/regencies in East Java. The data collection was conducted using Mentimeter for economics and accounting teachers who owned teaching certification. In this following table, the researcher presents a table summarizing the respondents from the open-ended questionnaire:

Table 1.

Respondent Characteristics.

Note: GE = Government Employees, GEEA = Government Employees with Employment Agreements

| Gender | Count | Percentage |
|----------------------|-------|------------|
| Male | 177 | 46% |
| Female | 206 | 54% |
| Age | | |
| 20-30 | 42 | 11% |
| 31-40 | 104 | 27% |
| 41-50 | 126 | 33% |
| >50 | 111 | 32% |
| Years of Service | | |
| 5-10 Years | 42 | 11% |
| 11-15 Years | 91 | 24% |
| 16-20 Years | 126 | 33% |
| > 20 Years | 124 | 32% |
| Employment Status | | |
| GE | 68 | 18% |
| GEEA | 142 | 37% |
| PFT | 173 | 45% |
| Education | | |
| Bachelor's (S1) | 310 | 81% |
| Master's (S2) | 70 | 18% |
| Doctorate (S3) | 3 | 1% |
| Monthly Income | | |
| 1-5 million | 157 | 45% |
| 5-10 million | 157 | 45% |
| 10-15 million | 32 | 9% |
| >15 million | 0 | |
| Number of Dependents | | |
| 0 Children | 3 | 18% |
| 1 Child | 86 | 37% |
| 2-3 Children | 241 | 44% |
| >3 Children | 53 | 1% |

Source: EPFT = Employed as Permanent Foundation Teachers.

Table 1 concluded that the majority of respondents are female in the age range 41-50 years with 16-20 years of work experience. They mostly hold a bachelor's degree (S1) certificate and are employed as permanent foundation teachers (EPF), earning between 5-10 million per month, and typically have 2-3 children as dependents.

4.2. Measurement Model

The data analysis followed the SEM-PLS methods described by Xiao, et al. [7] and Gerrans, et al. [56]. The initial step focused on evaluating validity and reliability. Reliability pertains to the degree to which a measurement scale is error-free and produces consistent outcomes. In this study, reliability was evaluated based on the loading values and Composite Reliability (CR), which must exceed the value of 0.70 [57]. Table 3 demonstrates that the factor loadings for the included constructs exceeded the required value, and the CR values also shows above 0.70, indicating compliance with reliability standards. Furthermore, convergent validity was assessed using the AVE, with a criterion that AVE should exceed 0.50. The table reveals that AVE values ranged from 0.608 to 0.753, confirming they met the validity requirements. These results align with the recommendations of Hair, et al. [57] and Hair, et al. [58] where Cronbach's Alpha (α) was above 0.70, Composite Reliability exceeded 0.70, and AVE was greater than 0.50.

Table 2.
Measurement Model.

| Variable | Items | Loading Factors | α | CR | AVE |
|--------------------------|-------|-----------------|----------|-------|-------|
| Financial Literacy | FL.1 | 0.763 | 0.785 | 0.861 | 0.608 |
| | FL.2 | 0.777 | | | |
| | FL.3 | 0.804 | | | |
| | FL.4 | 0.773 | | | |
| Financial Risk Tolerance | FRT.1 | 0.861 | 0.836 | 0.902 | 0.753 |
| | FRT.2 | 0.887 | | | |
| | FRT.3 | 0.855 | | | |
| Financial Behavior | FB.1 | 0.791 | 0.839 | 0.892 | 0.673 |
| | FB.2 | 0.845 | | | |
| | FB.3 | 0.822 | | | |
| | FB.4 | 0.824 | | | |
| Financial Satisfaction | FS.1 | 0.836 | 0.846 | 0.985 | 0.681 |
| | FS.2 | 0.790 | | | |
| | FS.3 | 0.818 | | | |
| | FS.4 | 0.856 | | | |

Note: α = Cronbach's Alpha, CR=Composite Reliability, AVE= Average variance.

The discriminant validity can be assessed by comparing the square root of the AVE for each latent variable with its correlations with other variables. If the square root of the AVE exceeds the correlations, the instrument is deemed to possess strong discriminant validity. Table 4 presents the square root calculations for the AVE results. This study concludes that there was substantial discriminant validity, as the correlation coefficients between FB and the other variables ranged from 0.780 to 0.868.

Table 3.
Discriminant Validity Result: Fornell & Larcker

| Variable | FB | FL | FRT | FS |
|----------|---------|---------|---------|---------|
| FB | (0.821) | | | |
| FL | 0.338 | (0.780) | | |
| FRT | 0.552 | 0.219 | (0.868) | |
| FS | 0.442 | 0.540 | 0.436 | (0.825) |

Note: FS=Financial Satisfaction, FB=Financial Behavior, FRT=Financial Risk Tolerance, FL= Financial Literacy

Table 4.
Discriminant Validity Using HTMT.

| Variable | FB | FL | FRT |
|----------|-------|-------|-------|
| FL | 0.414 | | |
| FRT | 0.644 | 0.269 | |
| FS | 0.516 | 0.638 | 0.511 |

Note: FS=Financial Satisfaction, FB=Financial Behavior, FRT=Financial Risk Tolerance, FL= Financial Literacy

4.3. Structural Model

Following the evaluation of the outer model, the next step involved assessing the structural model, adhering to the analysis procedures outlined by Hair, et al. [57] and Hair, et al. [58]. The inner model analysis included various procedures such as multicollinearity testing, R^2 assessment, F^2 evaluation, and predictive Q^2 analysis. The initial step, the multicollinearity test, aimed to determine whether the relationships among the tested variables exhibited multicollinearity. Hair, et al. [57] suggested using the VIF to detect multicollinearity, with a threshold of $VIF < 5.00$. Based on the VIF results, which adhered to the recommended threshold of $VIF < 5.00$, there was no evidence of multicollinearity. Thus, the relationships among FL, FB, FRT, and FS showed no signs of collinearity. Table 5 presents the collinearity test results, confirming that none of the estimated indicators of the constructs exhibited collinearity, allowing for further inner model analysis.

Table 5.
VIF Test Results.

| | FS | FL | FB | FRT |
|-----|-------|----|-------|-----|
| FS | | | | |
| FL | 1.549 | | 1.051 | |
| FB | 1.131 | | | |
| FRT | 1.442 | | 1.051 | |

Note: FS=Financial Satisfaction, FB=Financial Behavior, FRT=Financial Risk Tolerance, FL= Financial Literacy

The subsequent step in inner model testing is the R-squared assessment, which evaluates the predictive strength of endogenous latent variables within the model. The R^2 values serve as indicators of the predictive accuracy of these variables [57]. According to Chin [59] the criteria for interpreting R^2 values of 0.67 indicates a strong model, 0.33 represents a moderate model, and 0.19 signifies a weak model.

Table 6.
 R^2 Estimation.

| | R^2 | Category |
|-----|-------|----------|
| FS | 0.413 | Moderate |
| FRT | 0.542 | Moderate |
| FB | 0.355 | Moderate |

Note: FS=Financial Satisfaction, FB=Financial Behavior, FRT=Financial Risk Tolerance, FL= Financial Literacy.

Table 6 revealed that FS has an R^2 value of 0.413, indicating the variance of 41.3% in FS is explained by FL, FRT, and FB, reflecting a moderate level of predictive accuracy. Additionally, FB exhibited an R^2 value of 0.355, showing that 35.5% of its variance can be attributed to FL and FRT, also indicating a moderate prediction level.

The third step involved evaluating the effect size (F^2). This study followed the guidelines of Hair, et al. [57] and Chin [59] which propose thresholds of 0.02, 0.15, and 0.35, corresponding to small, moderate, and large effect sizes, respectively.

Table 7.
 F^2 Estimation.

| | F^2 | Category |
|----------|-------|----------|
| FL → FS | 0.325 | Moderate |
| FL → FB | 0.421 | Large |
| FRT → FS | 0.245 | Moderate |
| FRT → FB | 0.511 | Large |

Note: FS=Financial Satisfaction, FB=Financial Behavior, FRT=Financial Risk Tolerance, FL= Financial Literacy.

From Table 7, the F^2 estimation shown that FL has a moderate effect on FS ($F^2 = 0.325$). Similarly, FL has a large effect on FB ($F^2 = 0.421$). Consequently, FRT affects FS and FB at moderate and large levels ($F^2 = 0.245, 0.511$, respectively). The fourth procedure is to evaluate whether the Q^2 value is greater than 0, which indicates the predictive relevance. It can be concluded that the Q^2 values for FL, FRT, FB, and FS are all greater than 0, meaning the model meets the requirement for predictive relevance.

4.4. Direct and Indirect Impacts

The last step in evaluating the inner model is hypothesis test, which is conducted using the bootstrapping resampling method in SEM-PLS. The hypotheses are assessed based on a t-test threshold, with a critical t-value of 1.645 (one-tailed) and a p-value < 0.050 . As shown in Table 8 and Figure 2, the hypotheses were confirmed, with t-values ranging from 3.192 to 11.934 (all exceeding

1.645) and p-values of 0.000 (all below 0.050). Furthermore, Table 8 and Figure 2 demonstrate that all seven tested hypotheses were accepted, meeting the criteria of t-values > 1.645 and p-values < 0.050.

Table 8.
Hypothesis Test Results.

| Variable | B | SE | T-Value | P Value | Results |
|---------------|-------|-------|---------|---------|-------------|
| FL → FS | 0.432 | 0.433 | 8.067 | 0.000 | H1 Accepted |
| FL → FB | 0.228 | 0.230 | 5.080 | 0.000 | H2 Accepted |
| FB → FS | 0.155 | 0.157 | 2.610 | 0.009 | H3 Accepted |
| FRT → FB | 0.502 | 0.503 | 11.258 | 0.000 | H4 Accepted |
| FRT → FS | 0.255 | 0.252 | 5.032 | 0.000 | H5 Accepted |
| FB → FL → FS | 0.035 | 0.036 | 2.187 | 0.029 | H6 Accepted |
| FB → FRT → FS | 0.078 | 0.079 | 2.482 | 0.013 | H7 Accepted |

Note: FS=Financial Satisfaction, FB=Financial Behavior, FRT=Financial Risk Tolerance, FL= Financial Literacy.

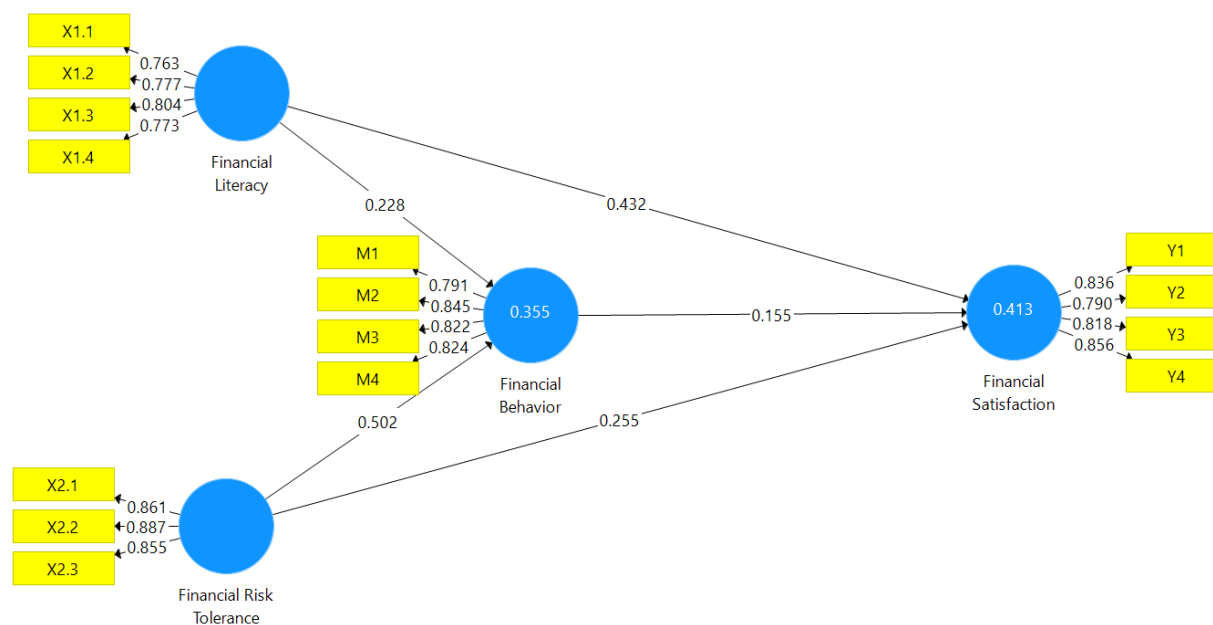


Figure 2.
Structural Model Results.

5. Discussion

This research employed utility theory, which posits that an individual's FS is influenced by how well their financial situation aligns with their needs, desires, and personal values. This theory emphasizes that finance is not solely about the amount of money that one possesses, but also about how that money corresponds to individual aspirations and priorities [14]. According to marginal utility theory, income positively impacts happiness, yet beyond a certain point increases in income yield diminishing marginal effects on life satisfaction [60].

The first finding revealed that FL affect positively and significantly the teachers' FS. This result corroborates previous findings (e.g., Farida, et al. [51]; Sohn, et al. [42] and Xiao and Porto [43]) highlighting FL's contribution to the advancement of prudent financial management techniques. This includes skills in personal financial bookkeeping and long-term investment planning. Additionally, FL aids in making informed decisions regarding savings, investments, and loans [45]. Teachers' FL, acquired during their undergraduate education and through the subjects they teach, equipped them with a high level of FL for both consumption and productive management.

Furthermore, addressing H2, FL positively and significantly affects teachers' FB. This finding reinforced the notion [20, 61, 62] that poverty and financial-related issues often stem from a lack of financial knowledge rather than economic or governmental problems. Teachers with low FL tend to have unbounded spending, leading to difficulties in managing their finances [18].

According to this situation, it is included that FL has pivotal role in influencing teachers' FB, with greater FL being associated with improved financial management and more positive FB. Furthermore, FB positively and significantly impacts teachers' FS, addressing H3 and supporting previous findings [12, 21, 43, 63]. FB encompassed individuals' habits in managing their finances, including income management, spending, investing, and saving. For teachers, who typically had a fixed income supplemented by educator certification allowances, prudent financial management is essential for achieving FS. Teachers with effective financial control experienced higher satisfaction due to reduced financial stress, confidence about the future and retirement, and the ability to meet their and their families' needs.

Additionally, FRT positively and significantly affects teachers' FS, addressing H4 and supporting findings from various studies Grable [22]; Saurabh and Nandan [30]; Madinga, et al. [28] and Van de Venter, et al. [48]. FRT relates to individuals' subjective attitudes toward investment risks, with higher risk tolerances leading to more aggressive risk management in financial decisions. FS can be deemed adequate when individuals have stable financial conditions. Conversely, dissatisfaction often results in incurring debt [16]. Accumulating debt and making investment errors can also lead to financial dissatisfaction.

FRT positively and significantly affects FB, aligning with findings from studies Grable [22]; Saurabh and Nandan [30]; Madinga, et al. [28] and Van de Venter, et al. [48] that suggest FRT reflects a teacher's capacity to take risks, enhancing control over FB. Consequently, teachers with high FRT are better positioned to engage in riskier investments than those with lower risk tolerance. Each investment carries risks, and individuals respond differently to investment risks [64].

The study also revealed that FL and FRT indirectly influenced teachers' FS through FB. This finding addressed H5 and aligned with previous research [9, 22, 23, 39] indicating that higher levels of FL are associated with better FB, ultimately leading to higher satisfaction levels. It underscored the importance of enhancing FL and risk understanding among teachers to foster improved FB and, consequently, enhance their well-being through teacher certification.

Education serves as a fundamental pillar in national development, with teachers playing a crucial role as the frontline of the educational process. The quality of education significantly depends on the quality and well-being of teachers. The Indonesian government's Teacher and Lecturer Law No. 14 of 2005 regards teacher professionalism as a vital aspect in assessing teacher quality [65]. Various efforts, including performance-based remuneration policies, educator recognition, promotion adjustments with incentives, and more, have been enacted to improve teacher quality and welfare [66]. One significant government initiative aimed at enhancing teacher quality and welfare is the teacher certification program.

Other research highlights that FL encompasses more than merely conveying and receiving information; it also fosters confidence and capability in managing finances [9]. Effective FL education can serve as an important aspect in improving teachers' quality of life and well-being, particularly for those who have attained teacher certification. This initiative represents an effort to enhance both the soft and hard skills of teachers.

6. Conclusion

This research is aimed at examining how FL affects the FS of teachers in five major cities in East Java. Additionally, this research is also aimed at examining FB's function as a mediating variable. The findings indicated that FL positively influenced both FS and FB among teachers. Furthermore, a strong relationship between FB, FRT, and teachers' FS was found to be the results of this research' data analysis. This study emphasizes the important role of FB in mediating the effects of FL and FRT on FS.

6.1. Theoretical Implications

This research has several theoretical implications. First, the findings provided insights into the FS of teachers who hold educator certification. Second, the results refined the marginal utility theory within the context of teachers' finances, demonstrating that the way teachers assessed and prioritized components in financial management differed from other professional groups.

6.2. Practical Implications

The study has several practical implications. First, financial satisfaction(FS) is influenced by financial literacy (FL) and financial risk tolerance(FRT), with financial behavior(FB) serving as a mediator. Therefore, it is essential for policymakers in the education sector to develop better financial welfare programs for teachers. In addition, there is a need for training on effective personal financial management to make it easier for teachers to make investment decisions that have low risk, debt management and long-term savings.

6.3. Limitations of the Study

Despite the effort to design this research effectively, several limitations must be considered when interpreting the results. The geographical limitations of this study mean that it only covers specific areas, and thus the results may not be generalizable to the entire population of teachers in economics and accounting.

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This study has received ethical approval obtained by the Committee Ethic of Universitas Negeri Malang (6.9.8/UN32.14/PB/2024).

Transparency:

The authors confirm that the manuscript is an honest, accurate, and transparent account of the study; that no vital features of the study have been omitted; and that any discrepancies from the study as planned have been explained. This study followed all ethical practices during writing.

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Appendix

| Variable | Indicator | Source |
|--------------------------|---|--|
| Financial Literacy | Financial literacy can help you... If you invest Rp 100,000 today at an annual interest rate of 4%, the balance in one year will... The main reason for purchasing insurance products is... The market price of bonds is uncertain; it can be higher or lower than the nominal value, depending on various factors, except... | Mandell and Klein [53] and Xiao, et al. [54] |
| Financial Risk Tolerance | I would choose a high-risk investment type for larger returns. I feel worried if most of my investments are high-risk. I prefer capital market investments over bank deposits. I prefer precious metals/jewelry investments over the capital market. I lack knowledge in investing. I am comfortable with significant investment fluctuations. | Grable [22] |
| Financial Behavior | I make plans to achieve my desired financial goals. I set a spending plan for financial allocation. I record all income and daily expenses. I save and invest money by setting aside income. I use credit for purchasing consumer goods. I take out credit to purchase assets. | Potrich, et al. [52] |
| Financial Satisfaction | I am satisfied because my savings can meet my and my family's needs. I am dissatisfied due to high expenses leading to debt. I am satisfied because I have retirement savings. I am satisfied with saving income by reducing expenses. I am satisfied managing finances in detail. | Brüggen, et al. [10] |