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Does Fintech Usage Improve or Impair Financial Behavior? Evidence from Indian millennials

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Abstract

The fintech revolution has transformed the landscape of personal finance, but its impact on individual financial behavior remains underexplored. Addressing this gap, the present study examines how fintech usage interacts with financial literacy to shape financial behavior among Indian millennials. Using a proprietary dataset, the study employs PLS-SEM to assess the moderating role of fintech usage in the relationship between financial literacy and financial behavior, considering both objective and subjective dimensions of financial literacy. The findings indicate that while financial literacy positively influences financial behavior, using fintech weakens this association. This negative influence is especially evident among users who overestimate their financial competence. The direct impact of fintech usage on financial behavior is also negative, showcasing the need for fintech services that complement users' financial literacy and promote financially healthy behaviors. These findings shed light on the darker side of fintech adoption and have significant implications for policymakers, fintech service providers, and consumers, emphasizing the need for tailored financial literacy programs that promote responsible fintech usage and encourage financial discipline.

Keywords: Financial literacy, objective financial literacy, subjective financial literacy, financial behavior, fintech usage

1. Introduction

Today's financial landscape vastly differs from what it was a decade ago. Financial markets are constantly evolving, driven by technological advancements and innovations [1]. One of the most transformative developments over the years has been the advent of financial technology (fintech) [2]. Fintech is an umbrella term that covers a wide range of financial services delivered digitally, including but not limited to payments, lending, insurance, wealth management, cryptocurrency, and regulatory technology, and has fundamentally reshaped the industry in a short period by transforming the way people manage their finances [3]. It has played a crucial role in eliminating disparities in financial access and empowering underserved populations, especially in developing countries [4].

With the surge in fintech use, scholarly attention to this area has also risen in recent years. Several researchers have examined the driving forces behind the rapid rise of fintech services, often using frameworks like the Technology Acceptance Model [5] or the Unified Theory of Acceptance and Use of Technology [6], to analyze consumer adoption and usage of fintech products. Researchers have also explored the role of fintech in promoting financial and social inclusion by providing affordable and secure access to financial services, primarily benefiting marginalized and previously unbanked communities [7], [8].

More recently, research in this area has evolved beyond access and adoption to examine how fintech usage (FU) can improve users' financial behavior and capabilities [9], [10], likely by providing timely advice or innovative tools to automate financial management. Contrarily, another crop of studies has highlighted the potential risks and negative consequences associated with fintech, especially for users who lack the financial knowledge and skills required to use these tools responsibly. For such individuals, fintech use leads to impulsive spending, high-cost borrowing, drawing down retirement accounts, and poor financial decision-making [11], [12]. These divergent findings indicate that FU does not yield positive outcomes for all users, and its effectiveness in improving financial capabilities may depend on users' financial literacy (FL).

While fintech offers unprecedented convenience and access, its benefits may be limited or counterproductive for users with low levels of FL [13]. Such

users may struggle to fully understand the risks associated with fintech tools or use them responsibly, which could ultimately lead to poor financial outcomes [14]. This raises serious concerns regarding the extent to which FU influences the effectiveness of FL in shaping positive financial behavior (FB), which is considered a cornerstone of financial wellness.

While the relationship between FL and FB has been studied extensively [15], [16], there is limited understanding of how this relationship may vary depending on the extent of fintech use. There is also a dearth of literature on the behavioural implications of FU. Even within the limited number of studies that investigate this nexus, the focus is mainly on the direct effects of FU on FB, without accounting for users' financial literacy and competence [10], [17]. This oversight highlights a critical gap in understanding how FL and FU jointly shape FB. Addressing this gap is of utmost importance in an emerging market like India, where fintech adoption has outpaced the FL levels of its population [18].

The main objective of this study is to investigate whether FU moderates the relationship between FL and FB among Indian millennials (those born between 1982 and 2000). The focus on millennials is primarily because of their status as the country's largest consumer base for fintech products and services [19]. As digital natives, their reliance on technology makes them an essential cohort for understanding FU's positive and negative consequences. Utilizing a proprietary dataset, the study employs PLS-SEM to assess the hypothesized relationships. The study's findings will provide valuable insights for policymakers and fintech service providers, helping them design more effective FL programs and fintech solutions that enhance users' financial capabilities and well-being. The following sections of the paper provide a comprehensive overview of the literature reviewed, research methodology, empirical findings, discussion, and conclusion.

2. Literature review and hypothesis development

2.1 Financial literacy and financial behavior

Research on FL and FB has always been of great importance to scholars and policymakers alike due to their role in enhancing financial well-being and economic stability. An extensive body of conceptual and empirical research has examined the relationship between financial literacy and behavior across

various disciplines and countries. The findings consistently demonstrate a positive relationship between an individual's understanding of financial concepts and subsequent financial decision-making [15], [20].

A fundamental requirement for making sound financial choices, Lusardi and Mitchell [21] aptly define FL as "one's ability to process economic information and make informed decisions about financial planning, wealth accumulation, debt, and pensions". Research has linked FL to a multitude of positive financial outcomes. For instance, individuals with higher levels of FL are more likely to engage in prudent saving and borrowing behaviors [22], [23], seek financial advice from experts [24], plan for retirement [25], accumulate more wealth and enjoy greater financial well-being [26], than their financially illiterate counterparts.

While research has indisputably established the positive impact of FL on FB, a notable challenge remains in determining the best way to assess FL due to the absence of a standardized definition in the literature. Scholars have approached FL in various ways – some focus on the factual knowledge of financial concepts, referred to as Objective Financial Literacy (OFL) [25], [27], while some focus on the perception of knowledge and confidence in one's abilities, known as Subjective Financial Literacy (SFL) [28], [29]. A growing body of literature advocates for a dual-assessment approach to provide a more comprehensive understanding of how OFL and SFL affect financial decision-making [30], [31]. This study opts for the dual approach, as previous research shows that the two dimensions of FL lead to different financial outcomes [32], [33]. Hence, the interaction effect of FU with two distinct dimensions of FL could also lead to differences in financial behaviors. Based on the consensus in the literature, the study proposes the following hypotheses:

H1: OFL has a positive impact on FB

H2: SFL has a positive impact on FB

2.2 Moderating variable – Fintech usage

The emergence of fintech has made financial transactions more accessible, economical, and convenient [34]. However, the ease and convenience that fintech offers can also elicit unhealthy financial behaviors, especially among individuals who do not possess adequate financial skills or sophistication to manage these tools responsibly. Garrett et al. [35] found that mobile payment

users had trouble making ends meet, used high-cost loans, and engaged in irresponsible credit card behavior. Similar observations were made by Panos and Wilson [36] and de Bassa Scheresberg et al. [37], who stated that fintech users were prone to impulsive and reckless financial decisions. Excessive FU was also linked to undesirable financial behaviors, increased financial stress, and diminished well-being [14], [38]. Among lower-income families in Malaysia, FU weakened the relationship between FB and subjective financial well-being [39].

However, the literature on this subject diverges quite significantly on the effect of FU on individual financial outcomes. Several studies assert that using fintech can improve financial capabilities and greater satisfaction. Ouma et al. [40] found that FU improved household savings across four African countries by enhancing accessibility, affordability, and convenience. Carlin et al. [41] also noted that using fintech applications was linked to improvements in debt management. These fintech applications offer valuable features like real-time expense tracking, automated savings, and personalized financial advice, which help users cultivate desirable financial habits, build resilience, and enhance their confidence in financial decision-making [9], [42]. It was also positively linked to financial satisfaction [43].

Given these mixed results, it is evident that FU affects financial outcomes, but the direction of impact can differ. The conflicting findings suggest that FU could either amplify or weaken the effects of FL on FB. As such, the study proposes that:

H3: FU moderates the relationship between OFL and FB

H4: FU moderates the relationship between SFL and FB

Figure 1 illustrates the conceptual model based on the study's hypotheses.

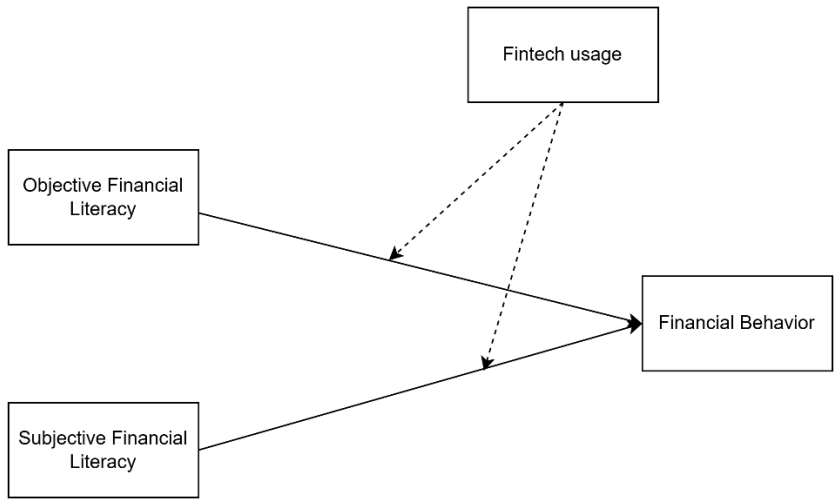

Figure 1. Conceptual framework

3. Methods

3.1 Survey method

The study uses a cross-sectional survey design to explore the moderating role of FU in the relationship between FL and FB among Indian millennials, given their high level of engagement with fintech services [19]. They also face an increasingly unstable financial environment with far greater economic challenges than previous generations and a significant lack of financial competence to navigate them effectively [44]. Hence, understanding how FU interacts with their FL and influences their FB is essential for promoting better financial outcomes.

Convenience sampling was adopted to collect data, given the lack of recent and accurate census data and logistical challenges in accessing a comprehensive list of eligible respondents. This approach has been widely used in research despite its limitations and potential biases, as it allows the researchers to collect data from readily accessible participants, making it a practical choice when targeting specific populations [45].

3.2 Survey instrument

The survey questionnaire was designed after reviewing relevant and established literature. Before responding, participants were briefed about the

study's purpose and requested to provide their informed consent to participate. The first part of the questionnaire elicits information about the participant's socio-demographic characteristics, followed by statements to assess the respondent's SFL, FB, and FU.

The scale for SFL was adopted from Flynn and Goldsmith [46] and modified to the context of FL following the work of Nejad and Javid [30]. The adapted scale consisted of three items assessed on a five-point Likert scale ranging from "Strongly Disagree" to "Strongly Agree". FB was measured using a set of 12 questions on various money management practices, adapted from Dew and Xiao [47]. Respondents had to rate how often they engaged in specific financial behaviors such as making timely bill payments, adhering to a budget, saving and investing regularly, buying insurance, and other fiscally responsible activities in the last six months. The scale for FU captured respondents' frequency of engagement with five different fintech applications – mobile banking, mobile payments, mobile lending, mobile investments, and applications to help with financial tasks. This scale was adapted from Zhang and Fan [14] and modified to add fintech segments relevant to the Indian scenario. Both the scales gathered responses on a five-point scale ranging from "never" to "always". The adoption of a five-point Likert scale for all three constructs was to ensure consistency with the original, validated scales from which they were adopted. Five-point scales were also preferred to minimize response errors without compromising measurement quality and reduce respondent fatigue [48], [49].

The last part of the questionnaire was presented as a quiz to gauge the respondents' OFL. It comprised five questions covering key financial concepts, commonly referred to as the "Big Five", due to their extensive replication and adaptation in FL research [24], [50]. An additive scale was constructed with the total correct answers, ranging from 0 to 5, representing the OFL score.

3.3 Data Collection

Before full-scale data collection, a pilot study was conducted in September 2024 to identify potential flaws in the questionnaire. Reliability and validity were assessed on the data collected from 103 respondents. All constructs showed acceptable Cronbach's alpha values (>0.7). Although some factor loadings were below 0.708, they were retained due to conceptual relevance.

As this was a preliminary analysis, the loading values were expected to improve with the full dataset. However, if the inclusion of any indicator compromised other reliability and validity metrics, it would be removed during final analysis. Additionally, participants found the questionnaire clear and easy to understand, with no significant issues related to wording or structure. As a result, the original instrument was retained without any revision and used for full-scale data collection.

The survey questionnaire was developed on Google Forms and distributed via various social media platforms. Respondents were also requested to share the survey with potential respondents. The data collected using Google Forms was downloaded as an Excel spreadsheet to facilitate data cleaning and analysis. The data was then coded and cleaned to remove incomplete responses and outliers and to address respondent misconduct. Responses exhibiting straight-lining patterns were identified through low standard deviation checks and were removed. Out of the 547 responses received, 512 samples were deemed usable for the final analysis, which exceeded the minimum sample size estimated by the A priori sample size calculator for SEM [51].

4. Results

4.1 Respondent profile

Table 1 displays the respondents' demographic profile. The distribution of respondents' gender and marital status indicates a nearly even split. Most respondents have college-level education, indicating a highly literate sample population. 27.6% of the sample earns less than INR 5,00,000 annually, while 16.2% earn more than INR 20,00,000. The minimum age of respondents is 24, and the maximum is 43, with a mean value of 31. Along with the proposed model that focused only on the key variables, these socio-demographic variables were controlled for in a separate model. Age, gender (ref: male), marital status (ref: unmarried), and education (ref: pre-university course) were used as is, while income was binary coded (ref: annual income lower than INR 10,00,000) and included in the model.

Table 1. Demographic information of the respondents

Variable	N	%
Gender		
Male	257	50.2
Female	255	49.8
Education		
Pre-University Course	18	3.5
College degree or higher	494	96.5
Marital status		
Single	238	46.5
Married	274	53.5
Annual Income		
Less than INR 5,00,000	141	27.6
INR 5,00,001 – 10,00,000	65	12.7
INR 10,00,001 – 15,00,000	98	19.1
INR 15,00,001 – 20,00,000	125	24.4
More than INR 20,00,000	83	16.2

4.2 Structural Equation Modelling

Data analysis was conducted using the SmartPLS 4.0.9.9 version of partial least squares (PLS) modelling. PLS-SEM was chosen for its robustness in dealing with non-normal data, unlike covariance-based SEM [52]. Preliminary assessment of data distribution using skewness and kurtosis values confirmed non-normality in many observed variables, supporting the appropriateness of PLS-SEM for this analysis.

The proposed model was tested using a two-step process: The first step was to evaluate the measurement model to ensure the quality of the constructs, and the second step assessed the structural model to test the hypothesized relationships [52]. The assessment of the measurement model (see Figure 2) involved calculating factor loadings, Cronbach's alpha (α), average variance extracted (AVE), composite reliability (Rhoc), and reliability coefficient (RhoA), and the results are presented in Table 2. According to Joseph F. Hair et al. [52], loading values should be above 0.708 for the indicator reliability to be considered satisfactory. However, items with loadings between 0.4 and 0.708 can be retained if removing them does not significantly improve other

reliability and validity measures. Therefore, three items from the FB scale (FB3, FB7, and FB9) are removed from the study to raise the AVE of the construct. The remaining metrics, including Cronbach's alpha, RhoA, and Rhoc, all exceeded the recommended threshold of 0.7, signifying strong internal consistency and reliability across the constructs [53]. Convergent validity was also established as the AVE values are greater than 0.5, indicating that the constructs adequately capture the variance of their indicators [54].

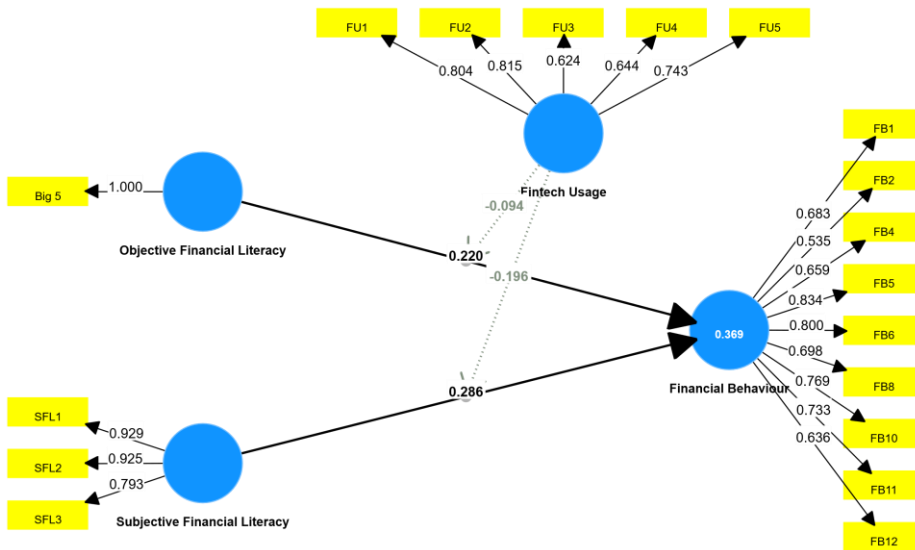

Figure 2. Measurement model

Table 2. Measurement model results

Constructs	Items	Factor loadings	α	Rho_A	Rho_c	AVE
Objective financial literacy	Big 5 Questions	Single-item measure	Not Applicable			
Subjective financial literacy	SFL1	0.929	0.865	0.942	0.915	0.782
	SFL2	0.925				
	SFL3	0.793				
Fintech usage	FU1	0.804	0.802	0.849	0.850	0.534
	FU2	0.815				
	FU3	0.624				
	FU4	0.644				
	FU5	0.743				
Financial behavior	FB1	0.683	0.875	0.889	0.900	0.505
	FB2	0.535				
	FB4	0.659				
	FB5	0.834				
	FB6	0.800				
	FB8	0.698				
	FB10	0.769				
	FB11	0.733				
	FB12	0.636				

The heterotrait-monotrait ratio of correlations (HTMT) criterion proposed by Henseler et al. [56] was used instead of the traditional and more lenient Fornell–Larcker criterion to assess discriminant validity. The HTMT values shown in Table 3 were below the conservative threshold of 0.85, proving that all the constructs were distinct from one another. Overall, the measurement model results were robust and deemed satisfactory for the structural model assessment.

Table 3. Heterotrait-monotrait ratio (HTMT)

	FB	FU	OFL	SFL	FU x SFL	FU x OFL
FB						
FU	0.372					
OFL	0.443	0.161				
SFL	0.320	0.365	0.415			
FU x SFL	0.309	0.261	0.155	0.157		
FU x OFL	0.309	0.155	0.160	0.177	0.338	

The next step involved evaluating the hypothesized relationships between the latent constructs and the proposed model's explanatory and predictive power. To ensure no collinearity issues, the inner and outer variance inflation factor (VIF) values were calculated and found to be below the acceptable threshold. After ruling out collinearity issues, bootstrapping was carried out to test the hypotheses. Bootstrapping is a nonparametric statistical technique used to estimate the distribution of a sample statistic by repeatedly resampling with replacement from the original data. This process helps calculate standard deviations, t-statistics, and p-values for the path coefficients in the structural model [55]. The current study employed bootstrapping with 10,000 samples, as recommended by Streukens and Leroi-Werelds [56], to provide reliable and robust estimates of the path coefficients and their significance levels. The results from the bootstrapping procedure are presented in Table 4 for both the model without controls (see Figure 3) and the model with controls (see Figure 4).

Table 4. Structural model analysis

	Without controls				With controls			
Paths	β	SD	T statistics	p values	β	SD	T statistics	p values
OFL -> FB	0.220	0.044	5.049	0.000	0.214	0.041	5.182	0.000
SFL -> FB	0.286	0.038	7.454	0.000	0.271	0.038	7.060	0.000
FU -> FB	-0.314	0.041	7.729	0.000	-0.237	0.042	5.678	0.000
FU x OFL -> FB	-0.094	0.050	1.862	0.063	-0.092	0.049	1.881	0.060
FU x SFL -> FB	-0.196	0.042	4.613	0.000	-0.175	0.040	4.408	0.000
Age -> FB					0.151	0.047	3.202	0.001
Education -> FB					0.330	0.243	1.358	0.175
Gender -> FB					-0.100	0.072	1.397	0.162
Income -> FB					0.100	0.075	1.331	0.183
Marital status -> FB					0.272	0.091	2.998	0.003

In both models, OFL and SFL have significant positive effects on FB, while FU negatively impacts FB. FU's adverse impact on FB is less pronounced when control variables are included, but remains significant. It also significantly weakens the effect of SFL on FB in both cases. On the contrary, the adverse moderation effect of FU on the OFL-FB relationship is only marginally significant, with t-statistics below the critical value of 1.96. This finding indicates that while FU weakens the impact of FL on FB in general, the effect is much more substantial in the case of perceived financial literacy than actual financial literacy. This implies that the respondents have either overstated their FL capabilities or that their self-confidence in traditional FL does not translate to digital tools, leading to potential misuse or overuse of fintech tools. Among the control variables, age and marital status significantly impact FB. Older and married millennials seem to exhibit better FB than the younger and unmarried ones, potentially due to higher financial responsibilities and stability. Gender and income did not demonstrate a statistically significant effect on FB. In the case of education, the highly skewed sample, where the vast majority of participants held a college degree, likely limited the ability to detect its significance.

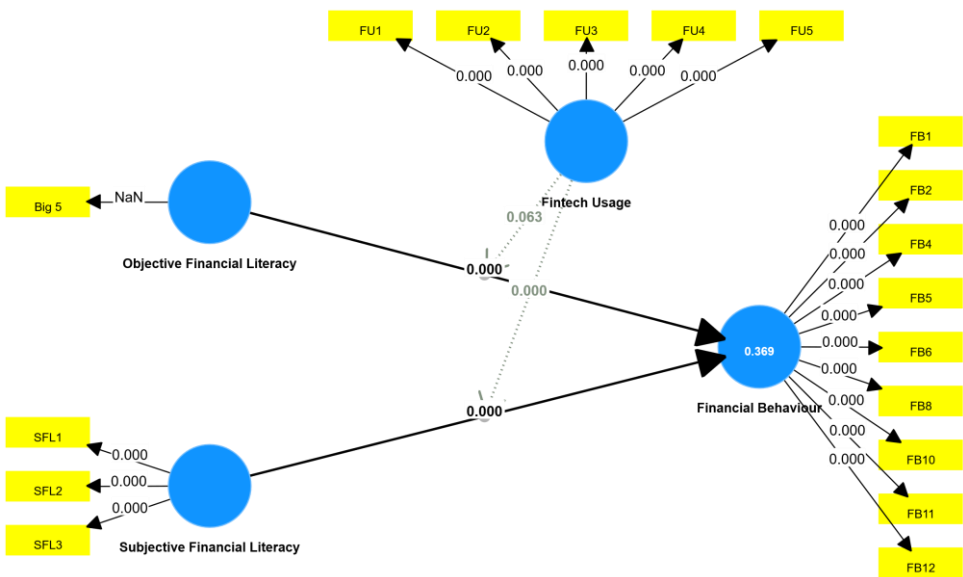

Figure 3. Structural model without control variables

R^2 and Q^2 were used to evaluate the quality of the model. R^2 denotes the model's explanatory power by measuring the proportion of variance in the dependent variable (FB) explained by all the independent variables. In this

study, the model without control variables explains 36.9% of the variance in FB (R^2 = 0.369), while adding control variables increases the R^2 to 0.433. Both models show a moderate level of predictive accuracy, according to threshold values suggested by J. F. Hair et al. [55], where R^2 values of 0.25, 0.50, and 0.75 denote low, moderate, and high predictive accuracy, respectively. Q^2, on the other hand, assesses the model's predictive relevance through a blindfolding procedure. A Q^2 value greater than 0 indicates the model has predictive relevance for a specific endogenous construct [57], as observed in this study.

Additionally, f^2 was used to measure the effect size of each predictor on FB. The findings reveal that SFL (f^2=0.089) and FU (f^2=0.077) have relatively more significant effects on FB than OFL (f^2=0.06), even though all effect sizes fall within the small to moderate range, as per Cohen's [58] guidelines. The interaction effect of SFL and FU on FB is also small (f^2=0.043), whereas the interaction effect of OFL and FU on FB is relatively negligible (f^2=0.01). Among the controls, only age shows a small effect on FB, while the other variables demonstrate very minimal impact.

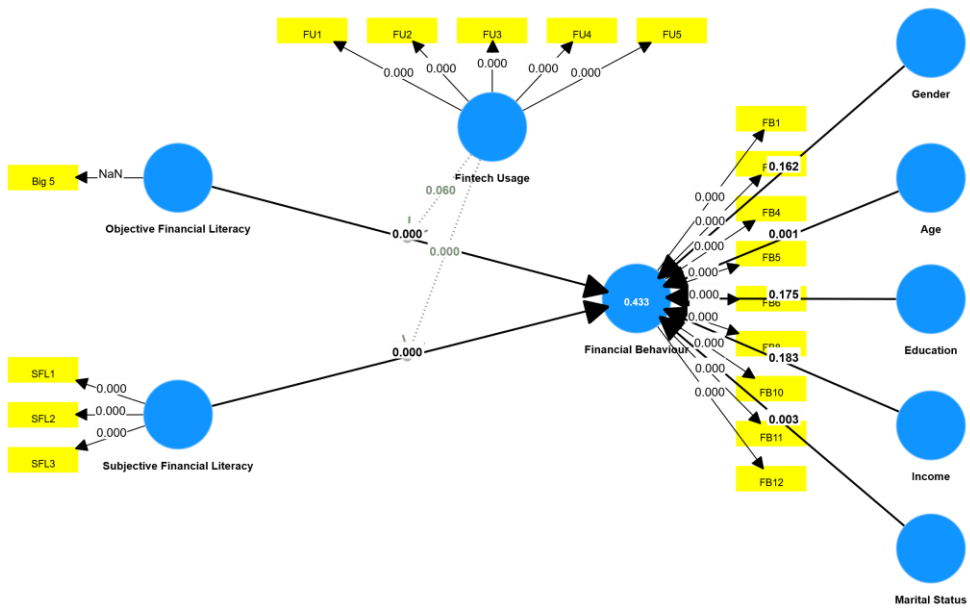

Figure 4. Structural model with control variables

5. Discussion

The study investigated the effect of FL on FB among Indian millennials, with FU acting as a moderator. FL was assessed objectively and subjectively to provide a comprehensive understanding of how these two distinct measures influence FB, especially in the context of FU. The significant positive impact of both dimensions of FL on FB aligns with existing literature [15], [16], [31], [59], which highlights the importance of both OFL and SFL in shaping sound FBs. However, it is important to note that SFL had a far greater impact on FB than OFL. This is in line with the findings of Lind et al. [60], who stated that SFL is a better predictor of financial behavior than OFL, possibly because individuals with higher SFL tend to be proactive in managing their finances, especially when it comes to investing or taking calculated risks. Conversely, financially knowledgeable but underconfident individuals may be hesitant or overly cautious, resulting in inaction and missed opportunities. Other researchers have also asserted the superiority of confidence over competence in influencing financial outcomes [61], [62].

While it is ideal for individuals to possess high levels of OFL and SFL for effective financial management, the findings evince that strong SFL can lead to healthy FBs, even when OFL is lacking. However, the inclusion of FU in this equation yielded unexpected results. As a moderator, FU significantly weakened the relationship between SFL and FB, indicating that using fintech services may diminish the positive influence of SFL on FB. This suggests that fintech users may struggle with optimal financial management despite their perceived financial prowess. This is a notable contribution to the literature, highlighting that although SFL generally improves FB, excessive FU can counteract this effect.

The temptation created by easy access to high-interest credit products, such as payday loans and buy-now-pay-later schemes (BNPL), often fosters a desire for instant gratification, ultimately resulting in impulsive spending [63]. Regular exposure to these products can disrupt financial discipline and erode FB in the long run, even for financially literate individuals. The frequent use of payment applications can also lead to overspending and cause users to deviate from their budget, as observed by Shah et al. [64]. Unlike cash payments, which create a tangible awareness of expenditure and the subsequent pain of paying, digital payments tend to feel less restrictive, leading to higher spending [11]. Fintech applications also incentivize frequent

transactions by offering cash-back rewards and gift coupons, subtly encouraging spending by lowering the perceived cost of purchases and making it harder for users to resist impulsive spending. Such offerings may initially seem rewarding and convenient, but they can also hinder users' ability to apply their financial skills and maintain disciplined FBs. The direct impact of FU on FB is also negative, indicating that the usage of fintech tools can independently lead to poorer FB. This negative impact of fintech adoption on one's finances has been extensively documented in recent studies [37], [65], [66].

On the other hand, FU's moderation effect on the OFL-FB relationship was only marginally negative, indicating that OFL remains relatively stable in its influence on FB, regardless of FU. This finding suggests that individuals with stronger OFL may navigate the fintech landscape more effectively and cautiously than those with stronger SFL, likely using their knowledge to attenuate the risks associated with excessive FU. Studies have shown that financially knowledgeable individuals are less likely to rely on fintech options and prefer traditional banking services [67], [68]. Individuals may also overestimate their financial capabilities beyond their expertise, which is consistent with the Kruger and Dunning [69] effect. Such a mismatch in actual and perceived FL results in overconfidence and potentially detrimental FBs [70]. Coupled with unrestricted FU, these overconfident consumers are more likely to engage in risky financial practices, such as excessive trading or high-cost borrowing through fintech platforms, resulting in poor financial outcomes. The study's findings suggest that fintech tools should be handled cautiously, as they can reduce users' reliance on financial knowledge and skills, potentially derailing their financial plans, especially for users with an inflated sense of SFL. Promoting financial and digital literacy, along with responsible FU, will aid in mitigating the risks associated with over-reliance on technology, ultimately improving financial behavior and well-being.

Among the control variables, only age and marital status significantly impact FB. This finding is consistent with previous studies indicating that older and married individuals exhibit better FB [32], [71], possibly due to experience-based knowledge and increased financial responsibilities such as parenthood, home ownership, and retirement planning.

6. Conclusion and implications

The study offers novel insights into the dual dimensions of FL, their interaction with FU, and their combined impact on FB. The findings hold important implications for policymakers, educators, financial advisors, fintech service providers, and consumers. The role of both OFL and SFL in influencing FB reaffirms the importance of promoting FL initiatives to empower individuals with the knowledge and confidence necessary to make sound financial decisions. Policymakers should consider implementing mandated FL programs in formal education curricula starting from schools so that future generations are better equipped to deal with the changing financial landscape. Tailored financial education programmes for adults should also be developed and made mandatory by the Government and employers to address financial challenges and needs at different life stages, ensuring continuous financial learning and empowerment for all citizens. Given the profound impact of SFL on FB, educators need to incorporate confidence-building activities in FL programs that traditionally focused solely on the knowledge aspect of financial matters. Digital literacy should also be considered an important component of this curriculum to promote responsible FU. Users should be aware of the potential pitfalls of fintech overuse and given adequate guidance to navigate the fintech ecosystem. Regulators should ensure that fintech offerings available in the market are ethically marketed and easy to understand, especially when it comes to high-cost credit options. The negative impact of fintech overuse on financial outcomes also highlights the need for greater oversight and stronger consumer protection laws.

For fintech service providers, the implications are multi-fold. They should focus on designing products and services that encourage responsible financial management rather than enabling impulsive behaviors. They should also prioritize transparency in their product offerings and ensure that the end users fully understand the terms, costs, and risks associated with their products. To mitigate the adverse effects of overuse, they could include additional features like goal-tracking, savings incentives, spending analytics, and in-app nudges to avoid going over budget, excessive speculation, or trading. They could also offer educational resources within their platforms to help users make informed decisions, similar to Zerodha's Varsity initiative [72]. By fostering a more responsible and informed user experience, fintech companies can play

a crucial role in promoting healthier financial behaviors and ensuring long-term financial well-being for their customers.

The findings also hold important implications for finance professionals. Financial advisors and counsellors should assess their clients' financial literacy levels, self-efficacy, education, and attitudes toward fintech before recommending such solutions. Indiscriminate fintech adoption has been shown to affect financial outcomes adversely despite its convenience and cost-effectiveness. As such, finance professionals must exercise due diligence in incorporating fintech into their services, selecting the appropriate tools, and determining the right level of FU to align with their clients' financial needs and objectives. Mindful integration of fintech can improve the relationship between the parties involved, streamline service processes, and promote healthier financial habits. Consumers, for their part, should view fintech as a complementary tool rather than a substitute for financial knowledge. While confidence in financial decision-making is important, users must be self-aware and cautious of overconfidence when using new-age digital tools that could impair their financial health. Maintaining a healthy balance between knowledge and confidence while handling fintech and finances has become essential to safeguard one's financial well-being.

7. Limitations

The findings of this study add to the growing body of knowledge on the consequences of FU. By focusing on a demographic characterized by high engagement with fintech and low financial literacy, the study sheds light on how FU alters the relationship between FL and FB, offering valuable insights into this generation's unique challenges in managing their finances effectively. While these findings significantly contribute to understanding the relationship between FL, FU, and FB, the study is not without limitations. First, the study's cross-sectional design limits the ability to infer causal relationships. Future research could use longitudinal designs to understand the long-term implications of fintech adoption on individuals' financial behavior. Also, the sample used in this study is highly homogeneous and skewed toward urban, educated millennials, which limits the generalisability of the findings. Further research with diverse samples across different demographic and socioeconomic groups can also provide valuable insights into the complex nexus between FU and financial outcomes. Future studies

could explore a broader range of fintech offerings to account for emerging technologies and trends.

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