

The Moderating Role of Big Five Personality in the Relationship between Digital Financial Literacy, Fintech Skills, and Financial Well-Being among MSMEs in Kupang City

Maria Imakulata Pongge^{1*}, M. E. Perseveranda², Marianus Antonius Deo Datus Banase³

^{1,2,3} Faculty of Economics and Business, Widya Mandira Catholic University, Indonesia

*Corresponding Author: mariaimakulatapongge2@gmail.com

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ABSTRACT

This study examines the relationship between digital financial literacy, fintech skills, Big Five Personality, and financial well-being among micro-enterprise owners in Kupang City, Indonesia. The study applies a quantitative explanatory design using survey data collected from 283 active micro-enterprise owners. The data were analyzed using Partial Least Squares Structural Equation Modeling (PLS-SEM) with SmartPLS 4, including measurement model evaluation, structural model evaluation, and bootstrapping with 5,000 subsamples. The results show that digital financial literacy has a positive and significant effect on fintech skills, but it does not directly affect financial well-being. Fintech skills have a positive and significant effect on financial well-being and fully mediate the relationship between digital financial literacy and financial well-being. Big Five Personality has a direct effect on financial well-being, but it does not significantly affect fintech skills and does not moderate the relationship between digital financial literacy and fintech skills or financial well-being. These findings indicate that digital financial literacy contributes to financial well-being when it is translated into practical fintech skills. The study suggests that financial education for micro-enterprises should move beyond conceptual literacy and focus on hands-on fintech training related to digital payments, cash-flow recording, and business financial management.

INTRODUCTION

Micro, Small, and Medium Enterprises (MSMEs) play a major role in the Indonesian economy as a source of household income, employment absorption, and regional economic activity. Nationally, MSMEs contribute approximately 61 percent to Gross Domestic Product and employ more than 117 million workers. In recent years, MSME activities have been increasingly shaped by digital technology, particularly in payment transactions, business recordkeeping, marketing, and access to financing. Services such as mobile banking, electronic wallets, QRIS, digital bookkeeping applications, and fintech platforms provide

opportunities for business owners to manage transactions and business finances more efficiently. However, the availability of digital financial services is not always accompanied by the ability of business owners to use them appropriately in financial decision-making. In this context, digital financial literacy is important because it involves not only knowledge of technology-based financial products and services, but also attitudes, risk awareness, and behavior in using digital financial services safely and productively. Lyons and Kass-hanna (2021) explain that digital financial literacy should be understood as a multidimensional concept, as it includes the ability to access, understand, evaluate, and use digital financial services. In Indonesia, a gap remains between access to financial services and public understanding of how to use them effectively. The Financial Services Authority, through the 2022 National Survey of Financial Literacy and Inclusion, reported that the financial inclusion index had reached 85.10 percent, while the financial literacy index stood at 49.68 percent. This gap indicates that access to financial services does not necessarily reflect the ability of society to use these services effectively.

This condition is relevant to the development of MSMEs in Kupang City. Based on data from the Kupang City Office of Cooperatives and SMEs, the number of MSMEs increased from 17,175 units in 2019 to 17,609 units in 2024, spread across six districts. This growth indicates that local economic activity continues to develop, although some business owners still face limitations in financial management, the use of digital applications, and the utilization of fintech in daily business activities. Among micro-enterprise owners, these challenges activity continues to develop, although some business owners are reflected in irregular financial recordkeeping, the limited use of digital payments mainly for transactions, and the frequent mixing of business funds with household needs. This condition suggests that the financial well-being of micro-enterprise owners cannot be explained solely by access to technology, but also by their ability to manage income, control expenses, cope with financial pressure, and maintain business sustainability. Rahman et al. (2021) show that financial well-being is associated with financial literacy, financial behavior, financial stress, and individuals' ability to manage their financial conditions.

Previous studies have shown that financial literacy and financial behavior are associated with financial well-being. Choowan et al. (2025), through a meta-analytical review, found that financial literacy and financial behavior are related to financial well-being, while Asrini et al. (2025) showed that financial literacy and digital innovation contribute to improving MSME performance. These findings provide a basis for understanding that digital financial literacy may be linked to the economic outcomes of business owners, although its effect may not always occur directly. Business owners may understand digital financial services, but they do not necessarily apply this knowledge to record cash flow, separate business and household finances, control expenses, or make financing decisions. In this context, fintech skills serve as a mechanism that connects digital knowledge with perceived financial benefits. In this study, fintech skills refer to the practical ability of micro-enterprise owners to use digital financial

services, such as QRIS, e-wallets, mobile banking, financial recordkeeping applications, and digital financing services. Nugraha, Setiawan, and Nathan (2022) showed that fintech adoption among SMEs in Indonesia is influenced by perceived usefulness, ease of use, financial literacy, user innovativeness, government support, and trust. Edo et al. (2024) also positioned fintech adoption as an issue related to MSME development. In micro-enterprises, fintech skills do not necessarily involve complex technology use, but can be reflected in the ability to receive digital payments, check incoming transactions, store payment records, record income and expenses, and use transaction data for simple business decisions.

In addition to knowledge and skills, business owners' personality traits should also be considered in explaining financial well-being. The Big Five Personality framework, which consists of openness to experience, conscientiousness, extraversion, agreeableness, and neuroticism, helps explain how individuals respond to change, manage risk, make decisions, and maintain behavioral consistency. Ramon et al. (2021) showed that behavioral data can be used to identify personality tendencies in financial contexts, while Ahmetoğulları and Rizelioğlu, (2025) positioned Big Five Personality and financial well-being as relevant psychological aspects in understanding individual behavior. Among micro-enterprise owners, traits such as discipline, openness to change, cooperation, and emotional stability may be reflected in how they manage capital, respond to declining sales, deal with digital transaction risks, and prevent business funds from being mixed with daily household consumption. Studies linking digital financial literacy, fintech skills, Big Five Personality, and financial well-being within a single structural model remain limited, particularly in the context of micro-enterprises in eastern Indonesia. Kupang City provides a relevant setting because it has a considerable number of MSMEs, while digital readiness and fintech utilization are still developing gradually. In such a business environment, digital financial literacy should be viewed not only as knowledge, but also as a capability that needs to be translated into fintech use and business financial management practices, while considering business owners' personality traits as part of the decision-making process.

This study examines a structural model that positions Digital Financial Literacy as an exogenous variable, Fintech Skills as a mediating variable, Big Five Personality as both an independent and moderating variable, and Financial Well-Being as the final endogenous variable. The model explains the relationship between digital financial literacy, fintech skills, and financial well-being; the role of fintech skills as a pathway linking digital financial literacy to financial well-being; and the role of personality traits in strengthening or weakening these relationships. The use of PLS-SEM is appropriate because the model involves multiple latent constructs, direct effects, indirect effects, and interaction effects among variables. This study aims to analyze the effect of Digital Financial Literacy on Fintech Skills and Financial Well-Being among micro-enterprise owners in Kupang City, examine the effect of Big Five Personality on Fintech Skills and Financial Well-Being, and test the mediating role of Fintech Skills and the moderating role of Big Five Personality. The

findings are expected to provide empirical contributions to digital financial literacy and behavioral economics studies, particularly by explaining that the financial well-being of micro-enterprise owners is shaped not only by their understanding of digital financial services, but also by their practical fintech skills and personality traits in managing financial pressure. The findings may also inform local governments, financial institutions, and fintech providers in designing digital financial education programs that better match the needs of micro-enterprise owners.

RESEARCH METHOD

Research Approach, Location, Population, and Sample

This study employs a quantitative explanatory research design to examine the structural relationships among the latent variables of Digital Financial Literacy (DFL), Big Five Personality (BFP), Fintech Skills (FS), and Financial Well-Being (FWB) among micro-enterprise owners. This approach is appropriate because the study not only describes the variables but also investigates direct effects, indirect effects through mediation, and the moderating role of personality traits within the research model. Quantitative explanatory research is commonly used in financial behavior and financial technology adoption studies because it enables the analysis of complex relationships among latent constructs through structural models (J. F. Hair & Ringle, 2022). Previous studies on digital financial literacy and financial well-being also indicate that these relationships may involve mediation and moderation mechanisms, making SEM-based analysis suitable for obtaining comprehensive estimates (Lyons & Kass-hanna, 2021).

The study was conducted in Kupang City, East Nusa Tenggara Province, Indonesia, and focused on active micro-enterprise owners. According to the Kupang City Office of Cooperatives and SMEs (2024), there are 17,609 MSMEs distributed across six districts. Micro-enterprises were selected because they commonly face challenges in financial record-keeping, access to formal financing, and the use of digital financial services, while most financial decisions are made directly by owners or managers. The sample consisted of 283 micro-enterprise owners, which is considered adequate for Partial Least Squares Structural Equation Modeling (PLS-SEM) because the model includes several latent constructs, measurement indicators, direct relationships, mediation, and moderation effects. J. Hair and Alamer, (2022) emphasize that sample size determination in PLS-SEM should consider model complexity, the number of structural paths, and statistical power requirements. Respondents were selected using a combination of cluster-stratified sampling and purposive sampling. Initially, they were grouped based on district location and business characteristics to improve representation, and then selected according to the study objectives. The inclusion criteria required respondents to be active micro-enterprise owners operating in Kupang City, willing to participate, familiar with or users of digital financial services such as QRIS, e-wallets, mobile banking, digital bookkeeping applications, or other fintech services, and able to provide information regarding their business financial management practices.

Research Variables and Operational Definitions

This study employs four main variables: Digital Financial Literacy (DFL), Big Five Personality (BFP), Fintech Skills (FS), and Financial Well-Being (FWB). These four variables are used to explain the relationship between digital financial understanding, fintech usage capabilities, entrepreneurs' personality characteristics, and financial well-being among micro-enterprise owners in Kupang City. A summary of the operational definitions of the variables is presented in the following table 2.

Table 2. Operational Definitions of Research Variables

Variable	Position in the Model	Operational Definition	Indicators/Measurement Aspects
Digital Financial Literacy (DFL)	Independent/ Exogenous Variable	The ability of micro-enterprise owners to understand, evaluate, and use digital financial services safely and productively in business activities	Knowledge of digital financial products and services; understanding of digital transaction risks; ability to select appropriate services; attitudes and behaviors related to the use of financial technology in business.
Big Five Personality (BFP)	Independent and Moderating Variable	The personality traits of micro-enterprise owners that influence how they respond to change, make decisions, manage risks, and maintain consistency in financial behavior	<i>Openness to experience, conscientiousness, extraversion, agreeableness, and neuroticism.</i> Negative indicators are adjusted through <i>reverse coding</i> .
Fintech Skills (FS)	Mediating/ Intervening Variable	The practical ability of micro-enterprise owners to use digital financial services to support transactions, record-keeping, financing, and business management.	Ability to use QRIS, e-wallets, mobile banking, digital bookkeeping applications, digital financing services, and the ability to adapt to financial technology
Financial Well-Being (FWB)	Dependent/ Final Endogenous Variable	The perception of micro-enterprise owners regarding their ability to meet financial needs, manage risks, sustain business operations, and maintain a sense of financial security and control.	Ability to meet financial needs; risk management; business sustainability; financial security; control over business financial conditions.

Based on Table 2, DFL is positioned as an exogenous variable because it reflects entrepreneurs' knowledge, attitudes, and behaviors in using digital financial services. This concept is grounded in Lyons & Kass-hanna (2021), who emphasize the ability to understand and effectively use digital financial services, and is reinforced by Hapsari et al. (2026), who

highlight its importance in adapting to digital economic transformation. FS functions as a mediating variable because it represents the technical capabilities that connect digital financial understanding with financial well-being. This view aligns with Ryu and Ko (2020), who identify fintech skills as essential for utilizing digital financial services, and Syahrir (2025), who shows their contribution to effective business management. Meanwhile, FWB serves as the final endogenous variable, reflecting entrepreneurs' perceived financial condition, including financial needs fulfillment, financial control, and business sustainability (Nuraeni et al., 2024; Rokhman et al., 2023).

BFP occupies a dual role as an independent and moderating variable and is treated as a composite construct representing the personality profile of micro-enterprise owners. Its use is based on Aydin & Selcuk, (2019) and Ferlia (2023), who show that personality traits influence economic behavior, decision-making, and adaptation to technological change. Negative indicators are adjusted through reverse coding to maintain interpretive consistency, while reliability and convergent validity assessments focus on the reflective constructs of DFL, FS, and FWB. In the structural model, BFP is examined through its direct effects on FS and FWB and through its interaction with DFL. Distinguishing DFL from FS is important because DFL emphasizes knowledge, attitudes, and behaviors toward digital financial services, whereas FS focuses on the technical ability to use fintech services. Consequently, entrepreneurs may understand digital financial services well but still lack the skills needed to apply them consistently in managing their businesses.

Data Collection and Analysis Techniques

Research data were collected through offline and online surveys using structured questionnaires. All indicators were measured on a five-point Likert scale ranging from strongly disagree (1) to strongly agree (5), which is suitable for assessing perceptions, attitudes, and behaviors toward latent constructs. Prior to the main survey, the instrument underwent content validation to ensure alignment with the theoretical concepts of each variable. Enumerators provided technical assistance to respondents when needed without influencing their responses. The collected data were subsequently checked for completeness, coded, entered, and cleaned before analysis.

Data analysis was conducted using Partial Least Squares Structural Equation Modeling (PLS-SEM) with SmartPLS version 4. This method was chosen because the model includes latent constructs, direct and indirect effects, as well as moderation relationships, and does not require strict multivariate normality assumptions (J. Hair & Alamer, 2022). The analysis involved evaluating the measurement model through outer loadings, Cronbach's Alpha, Composite Reliability, Average Variance Extracted (AVE), and discriminant validity. Indicators were considered acceptable when outer loadings exceeded 0.70, reliability coefficients were above 0.70, and AVE values were greater than 0.50 (Sudaryono et al., 2024). Discriminant validity was assessed using the Heterotrait-Monotrait Ratio (HTMT), with values below 0.90 indicating adequate distinction between constructs. Although Digital

Financial Literacy and Fintech Skills are conceptually related, they remain distinct because the former reflects knowledge, attitudes, and behaviors toward digital financial services, whereas the latter emphasizes technical and practical abilities in using fintech services.

The structural model was evaluated using the coefficient of determination (R^2), adjusted R^2 , Standardized Root Mean Square Residual (SRMR), and path coefficients. R^2 indicates the proportion of variance explained by exogenous variables, while SRMR values below 0.08 indicate acceptable model fit. Hypothesis testing was performed using bootstrapping with 5,000 subsamples, with significance determined by t-statistics greater than 1.96 and p-values below 0.05. Mediation was examined through the indirect effect of Digital Financial Literacy on Financial Well-Being via Fintech Skills, while moderation was tested through the interaction between Big Five Personality and Digital Financial Literacy on Fintech Skills and Financial Well-Being.

Structural Model and Research Hypotheses

This structural model examines the relationships among Digital Financial Literacy (DFL), Fintech Skills (FS), Big Five Personality (BFP), and Financial Well-Being (FWB). DFL is treated as an exogenous variable, FS as a mediating variable, BFP as both an independent and moderating variable, and FWB as the final endogenous variable. The proposed relationships are presented in Table 3.

Tabel 3. Hubungan Antarvariabel dan Hipotesis Penelitian

Hypothesis	Relationship	Type of Effect
H1	DFL $\rightarrow$ FS	Direct effect
H2	DFL $\rightarrow$ FWB	Direct effect
H3	FS $\rightarrow$ FWB	Direct effect
H4	BFP $\rightarrow$ FS	Direct effect
H5	BFP $\rightarrow$ FWB	Direct effect
H6	DFL $\rightarrow$ FS $\rightarrow$ FWB	Mediation effect
H7	BFP $\times$ DFL $\rightarrow$ FS	Moderation effect
H8	BFP $\times$ DFL $\rightarrow$ FWB	Moderation effect

The model evaluates three key relationships: direct effects among variables, indirect effects through the mediating role of FS, and the moderating role of BFP in the relationships between DFL and both FS and FWB. This framework is particularly relevant for micro-enterprises, where financial decisions are typically made directly by business owners or managers. In this context, DFL reflects knowledge of digital financial services, FS represents the practical ability to use fintech services, BFP captures individual psychological traits, and FWB indicates perceptions of financial security, control, and sustainability. The model helps determine whether digital financial literacy directly enhances financial well-being or whether its impact operates through the development of practical fintech-related skills.

RESULTS AND DISCUSSION

Measurement Model Evaluation (Outer Model)

The measurement model evaluation was conducted to assess whether the indicators reliably and validly represented the research constructs. The evaluation focused on outer loadings, internal reliability, convergent validity, and discriminant validity. The constructs examined in the main measurement model were Digital Financial Literacy (DFL), Fintech Skills (FS), and Financial Well-Being (FWB), while Big Five Personality (BFP) was assessed in the structural model as a composite construct.

The outer loading results show that all indicators of DFL, FS, and FWB exceeded the minimum threshold of 0.70. The outer loading values ranged from 0.709 to 0.935 for DFL, from 0.717 to 0.936 for FS, and from 0.862 to 0.922 for FWB. These values indicate that the indicators adequately reflected their respective constructs. In PLS-SEM, indicators with loading values above 0.70 are generally considered acceptable because they explain a sufficient proportion of variance in the measured construct.

Table 4. Construct Reliability and Convergent Validity

Construct	Cronbach's Alpha	Composite Reliability	AVE	Description
DFL	0,958	0,965	0,777	Reliable and valid
FS	0,959	0,966	0,781	Reliable and valid
FWB	0,928	0,946	0,777	Reliable and valid

Source: SmartPLS 4 output.

Based on Table 4, all constructs had Cronbach's Alpha and Composite Reliability values above 0.70 and AVE values above 0.50. This indicates that DFL, FS, and FWB met the criteria for internal reliability and convergent validity. In other words, the indicators used in this study consistently measured the intended latent variables. Discriminant validity was assessed using the Heterotrait-Monotrait Ratio (HTMT). Most construct relationships met the accepted criterion of below 0.90. However, the HTMT value between DFL and FS was 0.954, indicating a strong conceptual closeness between digital financial literacy and fintech skills. This result is treated as a methodological note because DFL theoretically represents knowledge, attitudes, and behavior toward digital financial services, whereas FS emphasizes the technical ability to operate fintech services.

Structural Model Evaluation (Inner Model)

The structural model evaluation was conducted to assess the model's ability to explain the variance of the endogenous constructs, namely Fintech Skills (FS) and Financial Well-Being (FWB). The assessment was based on the coefficient of determination (R^2), adjusted R^2 , and model fit. The results are presented in Table 5.

Table 5. Coefficient of Determination (R^2)

Endogenous Variable	R^2	R^2 Adjusted	Interpretation
FS	0,846	0,845	Very strong
FWB	0,609	0,603	Moderate to strong

Source: SmartPLS 4 output.

Based on Table 5, the R^2 value for FS was 0.846, indicating that 84.6 percent of the variance in fintech skills among micro-enterprise owners can be explained by digital financial literacy, Big Five Personality, and the interaction between Big Five Personality and digital financial literacy. This value indicates that the model has strong explanatory power for fintech skills. The R^2 value for FWB was 0.609, meaning that 60.9 percent of the variance in financial well-being can be explained by digital financial literacy, fintech skills, Big Five Personality, and the interaction variables tested in the model. This result shows that the model has a reasonably strong ability to explain the financial well-being of micro-enterprise owners in Kupang City. In addition to the coefficient of determination, model fit was assessed using the Standardized Root Mean Square Residual (SRMR). The SRMR value was 0.048, which is below the threshold of 0.08, indicating that the model has an acceptable fit for explaining the relationships among digital financial literacy, fintech skills, Big Five Personality, and financial well-being.

Figure 1 presents the PLS-SEM structural model estimation results, including outer loading values, path coefficients, and R^2 values for the endogenous constructs. The path from Digital Financial Literacy to Fintech Skills had the largest coefficient, at 0.840, indicating a strong relationship between digital financial literacy and fintech skills among micro-enterprise owners. Meanwhile, the path from Digital Financial Literacy to Financial Well-Being had a coefficient of 0.087, indicating that the direct relationship between digital financial literacy and financial well-being was relatively weak compared with other paths in the model.

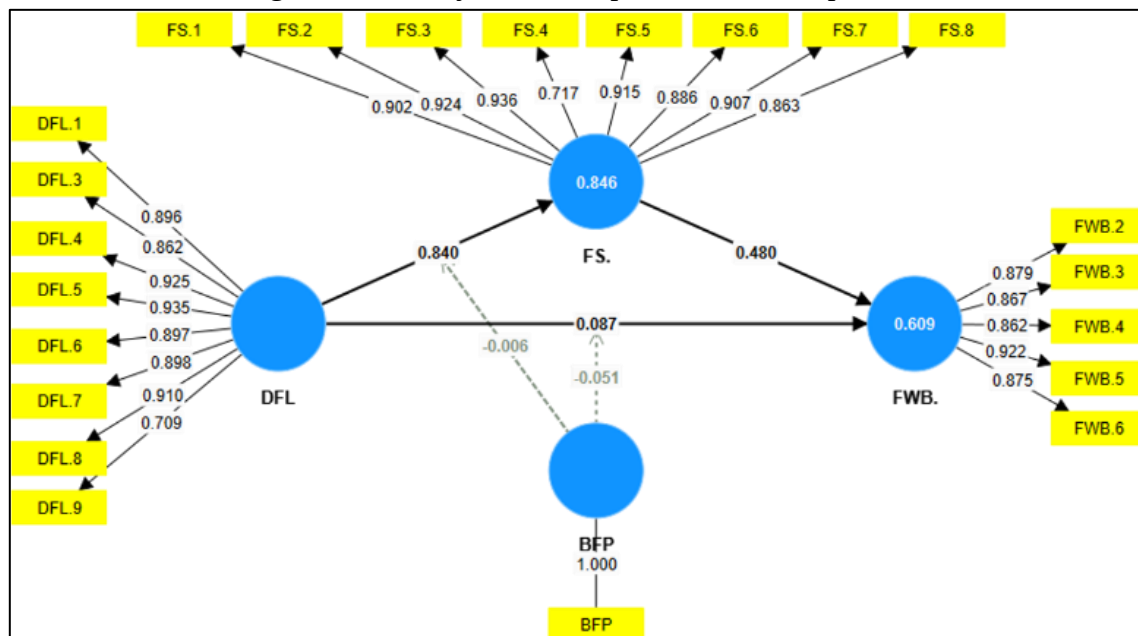


Figure 1. PLS-SEM Structural Model Results

Hypothesis Testing Results

Hypothesis testing was conducted using a bootstrapping procedure with 5,000 subsamples. A hypothesis was considered supported if the t-statistic was greater than 1.96 and

the p-value was less than 0.05. A summary of the hypothesis testing results is presented in Table 6.

Table 6. Hypothesis Testing Results of the Structural Model

Hypothesis	Relationship	B Coefficient	t-statistics	p-value	Decision
H1	DFL → FS	0,840	13,590	0,000	Supported
H2	DFL → FWB	0,087	0,612	0,540	Not supported
H3	FS → FWB	0,480	3,219	0,001	Supported
H4	BFP → FS	0,111	1,900	0,057	Not supported
H5	BFP → FWB	0,235	4,199	0,000	Supported
H6	DFL → FS → FWB	0,404	3,613	0,000	Supported
H7	BFP × DFL → FS	-0,006	0,381	0,704	Not supported
H8	BFP × DFL → FWB	-0,051	1,693	0,091	Not supported

Source: SmartPLS 4 bootstrapping output

The Effect of Digital Financial Literacy on Fintech Skills

The results show that Digital Financial Literacy has a positive and significant effect on Fintech Skills, with a coefficient of 0.840 and a p-value of less than 0.001. This finding supports Hypothesis 1 (H1), which states that digital financial literacy affects fintech skills. The positive coefficient indicates that the higher the level of digital financial literacy among micro-enterprise owners, the better their ability to use fintech services to support business activities.

This finding indicates that digital financial literacy is not limited to knowledge of technology-based financial services, but also serves as a foundation for developing fintech skills. Business owners who understand the benefits, risks, transaction costs, and security aspects of digital services tend to be more capable of using QRIS, digital wallets, mobile banking, and financial recordkeeping applications. In this sense, digital financial literacy helps business owners transform knowledge into practical skills in using financial technology. This result is consistent with Lyons and Kass-hanna (2021) who found that digital financial literacy improves individuals' ability to use digital financial services effectively.

In the context of micro-enterprises in Kupang City, business owners with better digital financial literacy tend to adapt more easily to digital transactions, manage cash flow, and maintain financial records. This finding is also in line with Lidiana et al. (2024), who state that financial capability encourages the use of fintech services. Thus, digital financial literacy is an important factor in building fintech skills that support micro-enterprise financial management in the digital era.

The Effect of Digital Financial Literacy on Financial Well-Being

The results show that Digital Financial Literacy does not have a significant effect on Financial Well-Being, with a coefficient of 0.087 and a p-value of 0.540. This finding does not support Hypothesis 2 (H2), which states that digital financial literacy affects financial well-being. It indicates that micro-enterprise owners' understanding of digital financial

services is not sufficient to directly improve their sense of financial security, control, and business financial stability.

This result differs from Choung et al. (2023), who found that digital financial literacy is associated with financial well-being, particularly through the ability to understand digital services and avoid digital fraud risks. Hwang and Park, (2022) also showed that financial literacy has a positive relationship with financial behavior and financial well-being. However, the finding of this study is closer to Sajid et al. (2024), who emphasize that the effect of financial literacy on financial well-being often operates through financial behavior. This means that financial knowledge does not automatically lead to financial well-being unless it is transformed into consistent financial decisions and management practices.

In the context of micro-enterprises in Kupang City, this condition can be understood from daily business realities. Some business owners are already familiar with QRIS, digital wallets, mobile banking, or simple digital recordkeeping, but the use of these services is not always followed by the separation of business and household finances, proper cash-flow recording, debt control, or business capital planning. Micro-enterprises also often face unstable daily income, urgent household needs, limited capital, and technology use that still depends on customer habits. Under these conditions, digital financial literacy serves mainly as initial knowledge. Its effect on financial well-being becomes more evident when this knowledge is applied in business practices, especially through fintech skills in transactions, recordkeeping, cash-flow control, and financial decision-making.

The Effect of Fintech Skills on Financial Well-Being

The results show that Fintech Skills has a positive and significant effect on Financial Well-Being, with a coefficient of 0.480 and a p-value of 0.001. This finding supports Hypothesis 3 (H3), which states that fintech skills affect financial well-being. The positive coefficient indicates that micro-enterprise owners with better ability to use fintech services tend to have higher financial well-being.

This finding is supported by Gafoor and Amilan (2024) who show that fintech adoption is related to financial well-being through improved financial access, financial knowledge, and financial behavior. It is also consistent with Kamble et al. (2024), who identify digital financial inclusion as an important factor in explaining financial well-being, and Sharma et al. (2024), who found that fintech adoption contributes to small business sustainability, with financial well-being acting as a mechanism that strengthens this relationship. These findings indicate that the benefits of fintech depend not only on the availability of technology, but also on users' ability to apply it in financial management. Among micro-enterprise owners in Kupang City, fintech skills are reflected in the ability to use QRIS, mobile banking, digital wallets, and financial recordkeeping applications to monitor transactions and manage business cash flow. These skills help business owners accept non-cash payments, track money circulation more quickly, and manage fluctuating income, thereby supporting financial well-being and business sustainability.

The Effect of Big Five Personality on Fintech Skills

The results show that Big Five Personality does not have a significant effect on Fintech Skills, with a coefficient of 0.111 and a p-value of 0.057. This finding addresses Hypothesis 4 (H4), which states that Big Five Personality affects fintech skills. Based on this result, H4 is not supported at the 5 percent significance level. Although the p-value is close to the significance threshold, the result indicates that personality traits are not strong enough to explain the technical ability of micro-enterprise owners to use fintech services.

In the context of micro-enterprises in Kupang City, the ability to use fintech services appears to develop more through experience and business needs than through specific personality traits. The use of QRIS, mobile banking, and digital wallets is generally driven by operational needs, changing customer preferences toward digital payments, and support from socialization and assistance programs. Even business owners with more cautious personality traits may still be able to master fintech use when the available systems are easy to use, provide clear benefits, and are supported by adequate technical assistance. This finding indicates that fintech skills are shaped more by learning processes, usage intensity, and support from the business environment than by Big Five Personality dimensions.

This finding also suggests that fintech skills among micro-enterprise owners are more closely related to knowledge, usage experience, application ease of use, trust in digital services, and business transaction needs than to general personality traits.. Nugraha et al. (2022) found that fintech adoption among SMEs in Indonesia is influenced by perceived ease of use, perceived usefulness, financial literacy, user innovativeness, government support, and trust. Edo et al. (2024) also showed that fintech adoption among MSMEs in Bandung is largely explained by ease of use, perceived usefulness, financial literacy, user innovativeness, government support, and trust.

The Effect of Big Five Personality on Financial Well-Being

Big Five Personality has a positive and significant effect on Financial Well-Being, with a coefficient of 0.235 and a p-value of less than 0.001. This finding supports Hypothesis 5 (H5), which states that Big Five Personality affects financial well-being. The positive coefficient indicates that micro-enterprise owners with more adaptive personality traits tend to have better financial well-being.

This finding can be explained by the role of personality traits in shaping how business owners manage pressure, make decisions, and maintain financial consistency. Andriansyah et al. (2025) show that neurotic personality traits are related to financial behavior and financial satisfaction, particularly when individuals face economic pressure. Rahman et al. (2021) also found that financial well-being is determined not only by financial literacy, but also by financial behavior and financial stress. Similarly, Ahmetoğulları and Rizelioğlu, (2025) position Big Five Personality and financial well-being as relevant psychological aspects in understanding individual behavior. This study supports the view that financial well-being is related not only to knowledge or technology, but also to individuals' ability to manage

themselves in changing financial situations. In the context of micro-enterprise owners in Kupang City, personality traits are reflected in the ability to manage business finances, maintain discipline in the use of capital, and cope with business uncertainty. More disciplined and emotionally stable business owners tend to be better able to manage cash flow, separate business and household finances, and respond to business pressure more rationally. Since financial decisions in micro-enterprises are generally made directly by the owner, personality traits become an important factor in supporting financial well-being and business sustainability.

The Mediating Role of Fintech Skills in the Relationship between Digital Financial Literacy and Financial Well-Being

The indirect effect test shows that Fintech Skills mediates the relationship between Digital Financial Literacy and Financial Well-Being, with a coefficient of 0.404 and a p-value of less than 0.001. This finding supports Hypothesis 6 (H6), which states that fintech skills mediate the relationship between digital financial literacy and financial well-being. Since the direct effect of Digital Financial Literacy on Financial Well-Being is not significant, while the indirect effect through Fintech Skills is significant, Fintech Skills serves as a full mediator in this research model. In the context of micro-enterprise owners in Kupang City, this full mediation can be understood from daily business practices. Business owners may understand the benefits of QRIS, digital wallets, mobile banking, or digital recordkeeping, but such knowledge does not directly improve financial security and stability unless it is applied in business activities. Its impact becomes more visible when business owners are able to receive digital payments, check incoming transactions, record income and expenses, monitor cash flow, and use transaction data to make simple decisions, such as increasing stock, controlling expenses, or estimating capital needs.

At the micro-enterprise level, where income is often earned daily and frequently mixed with household needs, fintech skills act as a bridge linking digital financial literacy to perceived financial well-being. This finding indicates that digital financial literacy alone is not sufficient to improve financial well-being without practical skills in using fintech services. Kumar et al. (2023) show that skills, digital financial literacy, capabilities, and autonomy play a role in financial decision-making and perceived well-being. Rahman et al. (2021) also found that financial well-being is more strongly explained by financial behavior, financial stress, and financial literacy, suggesting that knowledge needs to be translated into financial management practices. In the SME context, financial literacy can support sustainable performance through fintech adoption. The present study follows the same direction but emphasizes fintech skills as the pathway connecting digital financial literacy with the financial well-being of micro-enterprise owners.

The Moderating Role of Big Five Personality in the Relationship between DFL and FS

The results show that the interaction between Big Five Personality and Digital Financial Literacy does not have a significant effect on Fintech Skills, with a coefficient of -

0.006 and a p-value of 0.704. This finding addresses Hypothesis 7 (H7), which states that Big Five Personality moderates the relationship between digital financial literacy and fintech skills. Based on this result, H7 is not supported. This means that the personality traits of micro-enterprise owners do not significantly strengthen or weaken the relationship between digital financial literacy and fintech skills. In the context of micro-enterprises in Kupang City, fintech skills appear to be more influenced by understanding of digital financial services, usage experience, and daily business transaction needs than by differences in personality traits. Business owners with different personality profiles can still use QRIS, mobile banking, or digital wallets when they understand their benefits and become accustomed to using them in business activities. Therefore, the relationship between digital financial literacy and fintech skills tends to be similar across different personality types.

This finding is consistent with Nugraha et al. (2022) who show that fintech adoption among SMEs in Indonesia is more strongly influenced by perceived usefulness, ease of use, trust, user innovativeness, government support, and financial literacy than by individual personality factors. Nugraha, Setiawan, and Nathan (2022) also found that user attitude and user innovativeness are important factors in encouraging fintech use in Indonesia. Digital financial literacy plays an important role in improving individuals' ability to use digital financial services effectively. These findings support the view that knowledge and skills related to financial technology are more decisive in developing fintech skills than users' personality characteristics.

The Moderating Role of Big Five Personality in the Relationship between DFL and FWB

The results show that the interaction between Big Five Personality and Digital Financial Literacy does not have a significant effect on Financial Well-Being, with a coefficient of -0.051 and a p-value of 0.091. Therefore, Hypothesis 8 (H8), which states that Big Five Personality moderates the relationship between digital financial literacy and financial well-being, is not supported. This finding indicates that differences in personality traits among micro-enterprise owners in Kupang City are not strong enough to strengthen or weaken the effect of digital financial literacy on financial well-being. This may occur because the benefits of digital financial literacy have not been fully translated into daily business financial management practices. In practice, many micro-enterprise owners, such as kiosk owners, food sellers, and home-based business owners, are already familiar with QRIS, mobile banking, or digital wallets. However, their use is still mainly limited to making and receiving payments and has not been optimally applied to financial planning, cash-flow control, transaction recording, or business decision-making. As a result, even when business owners are more disciplined, open to new experiences, or confident, their digital financial literacy does not directly improve financial well-being. This condition is also influenced by fluctuating business income, limited capital, and the frequent mixing of business and

household finances, which reduce the perceived benefits of digital financial knowledge in improving financial conditions.

This finding suggests that digital financial literacy is not directly related to financial well-being, even when business owners have different personality traits. Rahman et al. (2021) explain that financial well-being is not only related to financial literacy but is also influenced by financial behavior and financial stress. Ahmetoğulları and Rizelioğlu, (2025) also position Big Five Personality and financial well-being as relevant psychological aspects in understanding individual behavior. However, the findings of this study indicate that personality traits are more evident as a direct factor influencing financial well-being rather than as a factor that strengthens the relationship between digital financial literacy and financial well-being. This result is also consistent with the mediation finding of this study, which shows that digital financial literacy becomes more meaningful for financial well-being when it is translated into fintech skill.

Summary of Findings and Research Implications

The findings show that Digital Financial Literacy has a strong effect on Fintech Skills, but does not directly affect Financial Well-Being. In contrast, Fintech Skills and Big Five Personality have direct effects on Financial Well-Being. This indicates that digital financial literacy contributes to financial well-being only when it is translated into the ability to use fintech services to support business financial management. This result is consistent with Rahman et al. (2021) and, Lyons and Kass-hanna (2021), who emphasize the importance of applying digital financial capabilities to improve financial well-being..

The implications of this study suggest that digital financial education for micro-enterprise owners should focus on strengthening practical fintech skills through training and assistance that are relevant to business activities. The non-significant moderating role of Big Five Personality indicates that such interventions can be applied across different personality traits, although personality still contributes directly to Financial Well-Being. Future studies should further clarify the conceptual and measurement boundaries between Digital Financial Literacy and Fintech Skills, considering the high HTMT value, so that both constructs can be measured more accurately.

CONCLUSION AND RECOMMENDATION

The conclusion of this study shows that the improvement of financial well-being among micro-enterprise owners in Kupang City is not directly determined by digital financial literacy, but rather by the ability of business owners to apply such knowledge in using fintech services. In other words, fintech skills serve as a key factor that bridges the transformation of digital knowledge into tangible financial benefits. Big Five Personality is also found to contribute directly to financial well-being, but it does not play a role in improving fintech skills or in strengthening the relationship between digital financial literacy, fintech skills, and financial well-being. These findings indicate that the success of micro-enterprise owners in

achieving better financial conditions depends more on their practical ability to use financial technology than on digital knowledge alone. Theoretically, this study reinforces the important role of technology-use capability as a mechanism that links literacy to financial well-being outcomes.

This study has several limitations. It was conducted only among micro-enterprise owners in Kupang City, used a cross-sectional design that cannot capture long-term changes, and may still contain conceptual overlap between the measurement of digital financial literacy and fintech skills. Future studies are therefore recommended to expand the research area, refine the measurement indicators, and consider additional variables such as income, business experience, business environment, and financial behavior. Practically, local governments, financial institutions, fintech providers, and MSME facilitators should focus digital financial education on strengthening fintech-use skills through training and assistance, so that fintech utilization can more effectively improve the financial well-being of micro-enterprise owners.

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