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## Araştırma Makalesi • Research Article

## Financial Literacy and Digitalization: A Study on Individual Customers of Participation Banks \*

Finansal Okuryazarlık ve Dijitalleşme: Katılım Bankası Bireysel Müşterileri Üzerine İnceleme

Yunus Kutval a,\*\*

<sup>a</sup> Dr. Öğr. Üyesi, Kafkas Üniversitesi, 36000, Kars/ Türkiye ORCID: 0000-0003-0063-9157

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## 1. Introduction

Financial literacy stands out as a fundamental skill that enables individuals to make informed decisions in financial processes such as saving, investing, and debt management, thereby improving their living standards and facilitating the achievement of long-term economic goals (Hung et al.,

Bu araştırmanın amacı, Türkiye'de faaliyet gösteren katılım bankalarının (İslamî Bankacılık) bireysel müşterilerinin finansal okuryazarlık ve dijitalleşme tutumlarını incelemektir. Bu kapsamda, 404 katılımcıya anket uygulanmıştır. Veriler, Smart PLS 4.1.1.2 yazılımıyla Yapısal Eşitlik Modellemesi (YEM) yöntemiyle analiz edilmiştir. Sonuçlar, Finansal Bilgi (FB) değişkeninin Finansal Davranış (FD) ve Finansal Tutum (FT) üzerindeki etkisinin en güçlü ilişki olduğunu göstermiştir. Ayrıca, Dijital Finansal Tutum (DFT) değişkeninin Dijital Finansal Davranış (DFD) ve Finansal Davranış (FD) üzerindeki etkileri dikkat çekicidir. Tüm değişkenler anlamlı etkiler göstermiş, çalışmanın açıklayıcı gücünü artırmıştır. Bulgular, katılım bankalarının müşteri tutumlarını anlamaları ve yenilikçi ürünler sunmaları için önemli veriler sunmaktadır. Türkiye'de bu alanda sınırlı çalışma olduğundan, araştırma literatüre değerli bir katkı sağlamaktadır.

## ABSTRACT

ÖΖ

The purpose of this research is to examine the financial literacy and digitalization attitudes of individual customers of participation banks (Islamic Banking) operating in Turkey. Within this scope, a survey was conducted with 404 participants. The data were analyzed using the Structural Equation Modeling (SEM) method with Smart PLS 4.1.1.2 software. The results revealed that the strongest relationship is the effect of Financial Knowledge (FK) variable on Financial Behavior (FB) and Financial Attitude (FA). Additionally, the effects of Digital Financial Attitude (DFA) variable on Digital Financial Behavior (DFB) and Financial Behavior (FB) are noteworthy. All variables showed significant effects, increasing the explanatory power of the study. The findings provide important data for participation banks to understand customer attitudes and valuable contribution to the literature.

2009; Lusardi et al., 2021). At the same time, financial literacy increases resilience against economic shocks (Calcagno & Monticone, 2015). On the other hand, a low level of financial knowledge directs individuals towards high-cost financial products, increasing both individual and societal financial risks (Lusardi et al., 2010; Wang et al.,

\*\* Sorumlu yazar/Corresponding author.

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e-posta: yunuskutval@hotmail.com

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#### 2024).

Meanwhile, digitalization is transforming individuals' economic and social lives by facilitating access to financial services (Aziz & Naima, 2021), and it enables financial systems to reach broader segments of the population through mobile payment technologies and internet-based financial tools. However, this process requires individuals to have adequate digital skills and financial literacy levels. Otherwise, inequalities such as the digital divide may prevent the full realization of this potential (Zhou et al., 2024; Li et al., 2023). Especially for low-income groups and rural areas, the financial inclusion offered by digitalization plays a major role in reducing economic inequalities (Wu et al., 2024a), and in order for these opportunities to be effectively utilized, the development of digital skills is required (Ali et al., 2023). Targeted financial education programs, which are among the most effective ways to increase financial literacy, enable individuals to make more informed decisions on issues such as retirement planning and entrepreneurship (Atkinson & Messy, 2012).

Digitalization and financial literacy emerge as complementary elements in terms of economic development and social equality. Digital technologies ensure more active participation of individuals in economic life, while financial literacy enables this participation to be conscious and effective (Wu et al., 2024b). In this context, the development of access policies in both areas plays a key role in building an inclusive and sustainable future (Aziz & Naima, 2021; Li et al., 2023).

This banking system, called Islamic banking worldwide and referred to as participation banking in Turkey, has been operating in Turkey since 1984 (Işık & Buluş, 2022). This type of banking, which uses Sharia-compliant financial instruments, may differ in terms of its customer base from traditional banks. Especially, the financial literacy levels and attitudes and behaviors toward digital banking services of participation bank customers with religious sensitivities may differ from those of conventional bank customers. The number of studies prepared specifically for Turkey in the literature for this purpose is quite limited. This situation has formed the main motivation of the study, and a survey was conducted with a total of 404 people selected as the target group consisting of participation bank customers in Turkey. Structural Equation Modeling (SEM) was used as the method in the study. Based on the findings obtained, policy recommendations were made for participation banks operating in Turkey.

The study consists of four sections. In the first two sections, the conceptual framework, literature, and hypotheses are synthesized and presented. In the third section, the research method and demographic structure are addressed. In the final section, the analysis and findings are included.

## **1.Financial Literacy and Digitalization**

Traditionally, financial literacy refers to individuals' understanding of basic financial concepts such as budgeting,

saving, investing, and debt management, and their effective use of this knowledge in decision-making processes (Reddy & Taj, 2024). Today, this definition has expanded with the impact of digitalization to include individuals' digital competencies as well (OECD, 2022). Digital literacy includes individuals' ability to use digital devices (e.g., computers and smartphones) and elements such as digital agility, digital competence, and digital awareness (Grefen, 2021). These two types of literacy are closely related in the modern financial ecosystem and should be considered together (Prete, 2022).

Digitalization has led to profound changes in the financial sector and has significantly transformed the ways individuals access financial services. This transformation has created new opportunities, especially for alternative financing models such as participation banking. Financial literacy can facilitate individuals' understanding of products based on Islamic finance principles such as interest-free financing and profit-loss sharing offered by participation banking, while digital literacy can enable their access to these products through digital platforms and allow them to benefit from these services effectively.

Financial literacy can facilitate individuals' access to financial services and contribute to the adoption of alternative financial models such as participation banking by a broader customer base (AlSuwaidi & Mertzanis, 2024). However, the complexity of the products offered by participation banking may pose a barrier for individuals with low levels of financial literacy. Therefore, increasing financial literacy levels can make it easier for individuals to understand and use these services, making it possible for participation banking services to reach wider audiences (Reddy & Taj, 2024).

On the other hand, with digitalization, digital literacy has become increasingly important in the financial sector. The widespread use of digital technologies has changed the ways individuals access financial services, and digital innovations known as FinTech have led to a transformation in many areas such as retail banking, investment, and payment services (Koskelainen et al., 2023). Services such as digital payment systems and internet banking enable participation banks to reach a broader customer base and diversify their services through digitalization (Prasad et al., 2018).

Digitalization has also deeply affected financial decisionmaking processes. Individuals with high levels of digital literacy can use the digital platforms of participation banks more effectively. For example, digital financial literacy ensures that individuals can use digital banking products securely and benefit from these products (Goel, 2024). This situation further increases the impact of FinTech innovations, which reshape individuals' financial behaviors (Lusardi, 2019).

Studies show that the levels of financial literacy and digital literacy significantly influence consumer preferences towards digital banking (Basri & Leo, 2023). Considering

these two types of literacy together (Prete, 2022) enables individuals to use financial services more consciously and effectively, while also contributing to the development of alternative financial models such as participation banking.

## **2.Conceptual Framework and Hypotheses:** Structural Equation Modeling

Structural inequality modeling is an effective statistical method for analyzing the connections between latent and observed variables (Orme & Fickling, 1992). This approach provides a comprehensive framework by combining multiple regression, confirmatory factor analysis, and path analysis, directly incorporating measurement errors into the model.

SEM is highly useful in solving research questions involving numerous variables and complex relationships (Amorim et al., 2010). This approach makes it possible to formulate and test clinical research hypotheses as structural equation models and facilitates the understanding of causal pathways by visually representing the relationships between constructs (Hoyle & Smith, 1994).

The measurement model and the structural model are the two fundamental components of the structural equation model (Gupta, 2024). The measurement model defines the relationship between observed variables (indicators) and latent variables, functioning as confirmatory factor analysis to assess the validity and reliability of measurements (Iacobucci, 2009). The most important feature that distinguishes SEM from methods that use only observed variables is its ability to handle latent variables (Mueller, 1996). Thanks to this feature, researchers can study theoretical constructs such as attitudes, perceptions, or psychological traits that cannot be directly measured (Pérez-Díaz et al., 2022). In this context, SEM is used as a powerful tool to evaluate complex hypotheses and determine dependencies between variables (McCoach, 2003).

## 2.1. Financial Knowledge (FK)

Financial literacy is defined by the OECD as a combination of attitudes and behaviors necessary to enhance financial well-being and to ensure participation in economic life (OECD, 2023). The foundation of financial literacy is related to the development of financial knowledge levels. In this context, increasing financial knowledge also means increasing financial literacy; it emerges as a crucial concept for understanding the complex structure of the economy, the performance of companies, and the financial situation of households. In addition, it is used as a tool to promote growth and facilitate risk management for various stakeholders such as investors, managers, and government institutions (Yi & Gan, 2019).

Research shows that financial literacy levels are low even in economies with developed financial markets, and only onethird of the global population is familiar with the concepts that form the basis of daily financial decisions (Lusardi, 2019). A lack of financial literacy can lead to serious consequences that threaten the economic well-being of individuals and societies, as evidenced by global financial crises (Abdullah & Chong, 2014). Therefore, increasing financial literacy across the population not only improves individuals' financial situations but also creates widespread positive effects on communities, countries, and the global economy (Lusardi, 2014). In this context, developing financial knowledge and thus financial literacy is considered a strategic priority to support informed decision-making processes and accelerate economic development.

The literature frequently emphasizes that financial knowledge has a positive and significant effect on financial attitudes, and that financial attitudes similarly have a positive impact on financial behaviors (Jufrizen & Ariza, 2022; Yahaya et al., 2019). It is stated that the direct effect of financial knowledge on financial behavior is limited, but this effect can be strengthened through variables such as financial attitudes and self-efficacy (Maulida et al., 2021; Coskun & Dalziel, 2020). Moreover, financial knowledge plays a critical role in improving young individuals' financial literacy and financial well-being; however, education should not only focus on transferring knowledge, but also aim to improve financial attitudes and behaviors (Bhushan & Medury, 2014; Kefela, 2011). Studies conducted on university students show that the level of financial knowledge can be increased through factors such as financial management courses, but also that the social environment, financial self-efficacy, and financial education received from the family are effective (Johan et al., 2021; Sandi et al., 2020; Öner & Canbaz, 2024). Especially when the differences between objective and subjective financial knowledge are examined, it is seen that subjective knowledge has a greater impact on individuals' financial behaviors (Robb & Woodyard, 2011; Losada-Otálora et al., 2020). Furthermore, it is shown that increasing financial literacy and financial socialization positively affects individuals' financial behaviors such as saving, budgeting, and credit management, and that factors such as financial risk attitude also play a mediating role in this process (Madinga et al., 2022). While financial knowledge plays an important role in developing positive financial behaviors and attitudes, financial education programs must target individuals' financial attitudes, behaviors, and self-efficacy in order to increase these effects (Grable & Joo, 1999; Rindivenessia & Fikri, 2021). In this context, our hypotheses are formulated as follows (Alternative hypotheses have been presented instead of null hypotheses):

**H1:** The financial knowledge of participation bank customers has a significant effect on their financial behaviors.

**H2:** The financial knowledge of participation bank customers has a significant effect on their digital financial attitudes.

**H3:** The financial knowledge of participation bank customers has a significant effect on their digital financial

behaviors.

## 2.2. Financial Attitude (FA)

Individuals' tendencies toward financial matters can be defined as financial attitude (Rai et al., 2019). Reddy and Prasad (2024) emphasized the impact of financial attitude on individuals' financial behaviors, while Elicia and Widjaja (2021) examined the factors influencing financial behaviors and revealed that financial attitude plays a decisive role. Jorgensen and Savla (2010) investigated how young adults' financial literacy is influenced by parental socialization and presented findings supporting the importance of financial attitude on behavior.

It has been stated that to improve customer behavior and enhance financial well-being, banks should focus on improving customer experience, increasing financial literacy, and promoting long-term financial planning (Howcroft et al., 2003; Mbama & Ezepue, 2018). Individuals' attitudes toward money are another factor that significantly affects their financial behaviors and overall well-being. Positive financial attitudes lead to healthy behaviors such as saving, investing, and debt management, while negative attitudes may drive individuals into financial distress (Kaur & Sahni, 2023).

A study conducted in India revealed that the financial attitudes and knowledge of working professionals shape their financial behaviors and thus their overall well-being (Bhatia & Singh, 2023). Studies in Turkey also show that individuals' inability to effectively manage personal financial problems leads to financial difficulties, and their attitudes toward money play a significant role in this process (Sayılır et al., 2019; Duvan, 2025). Kadoya and Khan (2020) stated that men are more financially knowledgeable than women, but women have more positive financial attitudes and behaviors. Moreover, while financial knowledge increases with age, financial attitudes and behaviors are more positive among young and elderly individuals compared to middle-aged individuals.

**H4:** The financial knowledge of participation bank customers has a significant effect on their financial attitudes.

## 2.3. Digital Financial Attitude (DFA)

Unlike financial attitude, digital financial attitude refers to individuals' intentions to carry out their financial tendencies through mobile banking, digital wallets, or online payment systems. Digital financial attitude is closely related to trust in digital tools, the tendency to use technology, financial awareness, and behavioral tendencies.

Digital financial attitudes determine individuals' behaviors on digital platforms, and positive digital attitudes encourage the execution of more digital financial transactions (Normawati & Santoso, 2023). These attitudes have the potential to shape individuals' overall financial attitudes. Especially positive attitudes toward digital technologies may contribute to developing a positive approach to financial services as well (Koroleva, 2022).

**H5:** The digital financial attitudes of participation bank customers have a significant effect on their digital financial behaviors.

**H6:** The digital financial attitudes of participation bank customers have a significant effect on their financial attitudes.

**H7:** The digital financial attitudes of participation bank customers have a significant effect on their financial behaviors.

## 2.4. Digital Financial Behavior (DFB)

Unlike financial behavior, digital financial behavior refers to the execution of financial transactions and decisions by individuals and institutions through non-traditional methods such as mobile banking, digital wallets, and cryptocurrency. Advancements in technology have led to transformations in financial services and financial behaviors as well (Koskelainen, et al., 2023; Dubyna, et al., 2022).

Financial behaviors carried out through digital tools may lead to obtaining real-time data from financial markets, which in this context can contribute to the development of individuals' financial knowledge, thereby resulting in more conscious financial behaviors by economic units (Qi, 2023). In addition, digital financial behaviors, such as the use of mobile and contactless payment methods, may accelerate and alter individuals' spending habits (Van Den Akker, 2021). The development of digital financial behaviors may also change saving and investment habits (Varlamova, et al., 2020).

**H8:** The digital financial behaviors of participation bank customers have a significant effect on their financial behaviors.

**H9:** The digital financial behaviors of participation bank customers have a significant effect on their financial attitudes.

## 2.5. Financial Behavior (FB)

Financial behavior is defined as individuals' tendencies toward financial matters (Loix, et al., 2005). Common financial behaviors such as cash handling, credit, and saving are fundamental elements shaping individuals' financial lives (Xiao, 2008). With digitalization, these behaviors have become integrated with technology, becoming faster and more accessible. This transformation has influenced individuals' financial decision-making processes, enabling them to perform their financial behaviors through digital platforms.

Research shows that financial literacy has a positive and significant effect on financial behavior (Andarsari & Ningtyas, 2019). Furthermore, it is stated that choosing the best financial behavior to achieve financial goals is one of the most important decisions individuals can make (Ozmete

& Hira, 2011). Tang & Baker (2016) suggest that the factors determining financial decision-making can provide data to address the inadequacy of financial behavior.

**H10:** The financial attitudes of participation bank customers have a significant effect on their financial behaviors.

## 3. Research Method and Demographic Structure

#### 3.1. Limitation and Scope of the Study

The main objective of the study is to analyze the effects of participation bank customers' financial literacy, financial attitude, digital financial attitude, and digital financial behavior on their financial behaviors. In this context, the available survey scales on the website www.toad.halileksi.net were examined, and the "Financial Literacy and Digitalization Scale" (Uraz Kaya and Kılıç, 2021) was found suitable for the objectives of the research. Ethics committee permission was given by Kafkas University Rectorate Social and Human Sciences Ethics Board Presidency for the survey application of this study, with the decision taken in its session numbered 65 and dated 30/12/2024. In accordance with ethical rules, it was necessary to obtain permission from the scale owners, and the relevant individuals were contacted via e-mail to obtain the required permissions. Subsequently, an application was submitted to the Ethics Committee of Social and Human Sciences at Kafkas University, and the necessary ethical approval was obtained with the decision taken during the committee's session dated 30.01.2024 and numbered 65. The scale used in the questionnaire of the study is presented in Table 1.

## Table 1. Scale Questions

Financial Knowledge	FK1	<b>1.</b> I can understand what changes in inflation rates mean.				
	FK2	2. I can interpret the impacts of external economic developments on the national economy.				
	FK3	3. Faiz oranlarının piyasaya etkisini anlayabilirim.				
	FK4	4. I can understand the impact of interest rates on the market.				
	FK5	5. I can compare the benefits and costs of my economic choices.				
Financial	FA1	6. I compare prices when shopping.				
Attitude	FA2	7. I consider my financial situation when making a purchase.				
	FA3	8. Setting financial goals for the future is important.				
	FA4	<b>9</b> . Saving money monthly is important.				
	FA5	<b>10</b> . The way I manage my money will affect my future.				
	FA6	11. Having a monthly spending plan				

		is important.			
	FA7	<b>12</b> . It is necessary to set aside money for unexpected situations.			
	FA8	13. Regular savings should be made.			
Financial Behavior	FB1	<i>14. I</i> consider my needs when deciding on the product I will choose.			
	FB2	<b>15</b> . I pay my credit card debt on time to avoid extra charges.			
	FB3	16. I control my personal expenses.			
	FB4	<b>17</b> . I set long-term financial goals that influence the management of my expenses.			
	FB5	18. I track my expenses within a plan.			
	FB6	<b>19</b> . I pay my bills on time (without delay).			
Digital Financial Attitude	DFA1	<b>20.</b> I believe that in the future, financial transactions will be conducted entirely through digital channels.			
	DFA2	<b>21.</b> I believe that smart applications in financial transactions are secure.			
	DFA3	22. I believe that digital banking increases individuals' diversity of financial products.			
	DFA4	23. I conduct insurance transactions through digital channels.			
	DFA5	24. The increase in digitalization in financial transactions positively affects the level of financial knowledge.			
Digital Financial Behavior	DFB1	25. When making installment purchases, I compare suitable loan offers online.			
	DFB2	<b>26</b> . Before making a large purchase, I compare prices online.			
	DFB3	27. I use the internet channel to meet my financial information needs.			
	DFB4	28. I believe that digital banking will make financial transactions more practical and accessible.			

#### 3.2. Population of the Study

Users of participation banking (Islamic banking) in Turkey were identified as the target population of the study. Before administering the survey, participants were presented with a consent form, and those who did not accept this form were excluded from the survey. Care was taken to ensure a balanced regional distribution of the sample. The survey was conducted online in Turkish using a 5-point Likert scale (1: Strongly Disagree, 5: Strongly Agree). In line with the purpose of the study, a total of 36 questions, 7 of which determined demographic characteristics, were prepared on the <u>www.surveey.com</u> platform and delivered to appropriate participants from the target population via internet connection. As a result of the conducted studies, a total of 715 participants were reached. Among them, 311 people who answered "No" to the question "Do you use participation banking?" were excluded from the analysis. Thus, the data of 404 participants were deemed suitable for analysis. During the analysis process, the repeated sampling method was preferred to reach a sample size of 5,000, aiming to obtain reliable results.

#### 3.3. Method of the Study

Structural Equation Modeling (SEM) was used in the research. This model represents a group of statistical techniques that examine the relationships between a series of variables (McCoach, 2003). Structural equation modeling, as one of the multivariate statistical analysis methods, offers an approach that combines confirmatory factor analysis (CFA) and structural modeling processes (Brown, 2012). Widely used in the social sciences, Structural Equation Modeling is cited in the literature as one of the most preferred statistical techniques among researchers in this field (Rahman et al., 2015).

Smart PLS (Partial Least Squares), a variance-based software, is considered an effective analysis tool by researchers, especially in structural equation modeling studies (Kim et al., 2008). In this study, the Smart PLS 4.0 program was preferred to perform SEM analysis. Smart PLS has important advantages such as working with small sample sizes, enabling the use of both formative and reflective measurements, and providing detailed reporting (Hair et al., 2012).

### 3.4.Demographic Structure of the Study

Table 2 presents the demographic data of a sample. The data are grouped according to categories such as gender, marital status, age, and education level. An evaluation based on this data is provided below.

The gender distribution of the sample is quite balanced. The number of female participants (205) is slightly higher than the number of male participants (199). This indicates that the study has a gender-balanced sample. The number of single participants (228) is greater than the number of married participants (176). This shows that the majority of the participants in the study are single individuals. Looking at the age distribution, a large portion of the participants consists of young individuals. Especially, participants in the 18-24 age group (176 people) have the highest number compared to other age groups. It is observed that the number of participants decreases noticeably as age increases. In terms of education level, most participants are university (bachelor's) graduates (174 people). Participants with a high school education or lower (102 people) rank second. The number of participants with advanced education (master's

and doctorate) is relatively low (a total of 50 people). This demographic structure shows that young and highly educated individuals participated more in the study.

**Table 2.** Demographic Structure of the Study

Gender	Male	199
	Female	205
Marital Status	Married	176
	Single	228
	18-24	176
	25-29	59
	30-34	43
Age	35-39	39
	40-44	36
	45-49	21
	50 and over	30
	High school and	102
	below	
Education	Associate degree	78
	University	174
	Master's Degree	31
	Doctorate (PhD)	19

#### 4.Findings and Analysis

## 4.1. Model Construction

Uraz Kaya and Kılıç (2021), in the scale development study they conducted, proposed a structural equation model consisting of FK<sub>1-2-3-4</sub>, FA<sub>4-5-8</sub>, FB<sub>1-4-5</sub>, DFB<sub>1-2</sub>, and DFA<sub>3-5</sub> external loads. When this model was tested, it was identified that there were mutual causality or feedback loops among variables in the paths FK  $\rightarrow$  DFA  $\rightarrow$  DFB  $\rightarrow$  FK. This situation led to the misconfiguration of the model and invalidation of the results (Bollen, 1989; Kline, 2023). To eliminate this issue, the direction of the path from DFB to FK was changed to FK to DFB (Figure 1). Thus, the problem of endogeneity was resolved.

#### Figure 1: Structural Equation Model



## 4.2. Measurement Model

In the study, there are 5 variables: Financial Attitude (FTdependent variable), Financial Knowledge (FB), Financial Behavior (FD), Digital Financial Attitude (DFT), and Digital Financial Behavior (DFD). The indicators for each variable and their respective outer loadings are presented in the 2nd and 3rd columns of Table 3.

According to the measurement model results, a very strong model was obtained in terms of reliability and validity (Table 3). The Cronbach's Alpha values ranging between 0.828 and 0.924 and Composite Reliability (CR) values above 0.9 indicate that the scales have excellent internal consistency (Fornell & Larcker, 1981; Hair et al., 2010; Ramayah et al., 2010; Kline, 2023). For convergent validity, the AVE values ranging from 0.815 to 0.891 and outer loadings between 0.886 and 0.949 demonstrate high reliability of the indicators (Hair et al., 2010). In the structural model, the R-squared values were calculated as 80.9% for FB, 69.8% for FA, 59.1% for DFB, and 43.5% for DFA. In this context, the explanatory power of the model was found to be high for FB, moderate for FA and DFB, and low for DFA (Henseler et al., 2009; Hair et al., 2011). Multicollinearity analysis showed no significant issues with VIF values (inner) ranging between 1.00 and 3.31 (Mason and Perreault, 1991; Becker et al., 2015). Additionally, the t-statistic values of all relationships being above 1.96 (lowest 33.4) proved that all relationships in the model are statistically significant (Moore et al., 2009).

Table 3. Model Factor Analysis Results

1	2	3	4	5	6	7	8	9	10
Latent Variable	Indicators	Outer Loadings	Cronbach's Alpha	rho_A	Composite Reliability (CR)	(AVE)	R Square	T Statistic (Ölçüm Modeli)	VIF (İnner model)
DED	DFB1	0.908	0.828	0.850	0.920	0.852	0.591	46.9	$DFB \rightarrow FB (2.99)$
DFB	DFB2	0.938	_					34.5	- DFB $\rightarrow$ FA (2.44)
DEA	DFA3	0.949	0.878	0.883	0.942	0.891	0.435	43	DFA $\rightarrow$ DFB (1.77)
DFA	DFA5	0.939	_					58.7	$DFA \rightarrow FB (2.64)$ $DFA \rightarrow FA (2.49)$
	FK1	0.886	0.924	0.926	0.946	0.815		39.8	$FK \rightarrow DFB (1.77)$
FK	FK2	0.914						41.1	$FK \rightarrow DFA (1.00)$ $FK \rightarrow FB (2.31)$

	FK3	0.913						33.4	$FK \rightarrow FA (1.97)$
	FK4	0.897						37.6	
FB	FB1	0.915	0.905	0.905	0.940	0.840	0.809	49.4	
	FB4	0.913						53.9	
	FB5	0.922	_					59.7	
	FA4	0.920	0.920	0.921	0.949	0.862	0.698	56	$FA \rightarrow FB (3.31)$
FA	FA5	0.949						55.3	
	FA8	0.916	_					50.7	

DFB: Digital Financial Behavior, DFA: Digital Financial Attitude, FK: Financial Knowledge, FA: Financial Attitude

**Table 4.** Discriminant Validity and Goodness-of-FitSummary Values

Fornell-Larcker Criterion						
DFB	0.923					
DFA	0.737	0.944				
FK	0.650	0.660	0.903			
FB	0.795	0.759	0.723	0.916		
FA	0.771	0.722	0.724	0.864	0.92	
					9	
Fit Summary Values: SRMR (0.047), Chi-square (679.1), NFI						
(0.87), <b>d_ULS</b> (0.228), <b>d_G</b> (0.27)						

Table 5. Structural Model

The Fornell-Larcker Criterion analysis is a commonly used method to assess the discriminant validity of the model (Afthanorhan et al., 2021). When examining the bolded diagonal values (Table 4), it is observed that these values are greater than their corresponding row and column values. This indicates that the Fornell-Larcker Criterion analysis is valid. SRMR, NFI, Chi-square, d\_ULS, and d\_G are values representing the fit summary of the model. When analyzing the results, the SRMR value of 0.047 indicates a good fit, the NFI value of 0.87 indicates an acceptable fit, the Chi-square value of 679.1, and other statistical indicators prove that the model is structurally and statistically sound (Kline, 2023; Lohmöller, 2013; Bollen & Stine, 1992). These results clearly demonstrate that the research model is highly reliable and valid.

	Path Coefficients	T statistics ( O/STDEV )	P values	
$FK \rightarrow FB$	0.723	22.148	0.000	H1: Accept
$FK \rightarrow DFA$	0.660	17.256	0.000	H2: Accept
$FK \rightarrow DFB$	0.650	16.483	0.000	H3: Accept
$FK \rightarrow FA$	0.724	22.210	0.000	H4: Accept
$DFA \rightarrow DFB$	0.545	10.514	0.000	H5: Accept
$DFA \rightarrow FA$	0.432	8.028	0.000	H6: Accept
$DFA \rightarrow FB$	0.500	9.490	0.000	H7: Accept
$DFB \rightarrow FB$	0.418	7.982	0.000	H8: Accept
$DFB \rightarrow FA$	0.409	7.109	0.000	H9: Accept
$FA \rightarrow FB$	0.493	9.569	0.000	H10 Accept

FK: Financial Knowledge, FB: Financial Behavior, DFB: Digital Financial Behavior, FA: Financial Attitude, DFA: Digital Financial Attitude.

When examining the path coefficients of the research model (Table 5), it is observed that all relationships are statistically highly significant and all hypotheses are accepted. All T-statistic values are well above the critical value of 1.96 (ranging from 7.109 to 22.210), and the p-values are at the 0.000 level, indicating that all structural relationships in the model are reliable. The strongest structural relationships are the effects of the FK variable on FB and FA, where the path coefficients are calculated as 0.723 (t=22.148) and 0.724 (t=22.210), respectively. The effects of the DFA variable on

DFB and FB are also noteworthy, with coefficients of 0.545 (t=10.514) and 0.500 (t=9.490), respectively. The fact that all paths are positive and significant clearly demonstrates that direct and indirect effects among variables are statistically robustly supported. The obtained results are fully consistent with studies in the literature (Andarsari & Ningtyas 2019 (H1); Koroleva, 2022 (H2); Jufrizen & Ariza, 2022; Yahaya et al., 2019 (H4); Normawati & Santoso, 2023 (H5-H7); Koroleva, 2022 (H6); Van Den Akker, 2021 (H8); Varlamova et al., 2020 (H9); Rai et al. (2019); Reddy and



## Prasad, 2024 (H10)).

#### **Conclusion and Policy Recommendations**

The primary aim of this research is to scientifically examine the digitalization tendencies and financial literacy levels of customers of participation banks operating in Turkey. As a result of the structural equation modeling conducted, significant relationships among the variables were identified. Strong positive relationships were found between financial knowledge level and financial behavior (0.723), financial attitude (0.724), digital financial attitude (0.660), and digital financial behavior (0.650). Additionally, it was observed that the digital financial attitude variable exhibited positive and significant relationships with digital financial behavior (0.545) and financial behavior (0.500). Furthermore, a positive relationship was also identified between digital financial attitude and financial attitude (0.432). In this context, all hypotheses in the study were accepted.

The study highlights the importance of increasing the financial literacy levels of participation bank customers. This situation will facilitate individuals' access to financial services, enabling them to better understand products offered by participation banking such as interest-free financing and profit-loss sharing. Moreover, the rise of digital literacy with digitalization positively influences individuals' financial decision-making processes. In this context, it is crucial for participation banks to diversify and encourage digital banking services for their customers.

Several important policy recommendations can be presented for participation banks in Turkey. Particularly, participation banks should understand customer attitudes, develop new products accordingly, and thus improve customer experiences. Consequently, participation banks can acquire new customers or increase transaction volumes of existing customers by offering many of the services provided by conventional banks.

Considering the limited number of studies in the literature on participation bank customers in Turkey, the significance of this study becomes even more evident. Conducting a parallel survey targeting customer groups benefiting from traditional banking services and comparing the obtained data with the findings of the current research will reinforce the methodological robustness of the study and contribute to the generalizability of the findings.

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