## THE INFLUENCE OF DIGITAL FINANCIAL LITERACY ON FINANCIAL WELL-BEING THROUGH SPENDING, SAVING, AND INVESTMENT BEHAVIOR IN INDONESIA

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#### Abstract

This study aims to determine if spending, saving, and investment behavior, via the mediation of digital financial literacy (DFL), influences Indonesians' financial well-being (FWB). An online survey with a sample size of 403 participants received a 77% response rate. The Structural Equation Model using SmartPLS showed that DFL influences FWB by mediating spending, saving, and investment behavior. Based on this result, the government is suggested to improve the level of DFL in Indonesian people through an educational curriculum that can pay attention to spending, saving, and investment behavior to maximize FWB

Keywords: Saving Behavior, Spending Behavior, Digital Financial Literacy, Investment Behavior, Financial Well-Being.

#### Introduction

The use of digital technology has changed how goods and services are offered to customers across all industries, including the financial one. The term "fintech" alludes to the application of advanced innovation within the financial related industry (Setiawan et al., 2020). Indonesia is now the region with the world's fastest-growing market for digital wallets, according to International Finance (2021). Markplus (2020) also reported that the use of digital banking services for spending activities also increased during the Covid-19 pandemic in 2021, particularly with the use of e-wallets (Dana, OVO, etc.), money transfers, periodic payments (electricity, PDAM), and many others. A survey by PwC also indicated that the average monthly e-wallet payment spending has risen by 9.5% to approximately IDR 810,000 (USD 52.71) due to the pandemic. The Deposit Insurance Corporation (LPS) recorded that the number of deposit accounts in digital banks come to 38.2 million in May 2022, such as Allo Bank, Bank Jago, and many others. Study results from Temasek, Google, Bain & Company (2021) showed that the venture esteem of Indonesia's advanced economy during Q1-2021 was USD 4.7 billion and has exceeded the highest value for the last four years. Investments can be made through available applications, such as Bareksa, Bibit, and Stockbit. These transformations prove that the Indonesian government underpins economic growth by improving financial services as a medium for saving, spending, and investing for the community towards digital financial services.

Previous studies exhibit that the massive use of fintech products and services has impacted saving, spending, and investment behavior. Cobla and Osei-Assibey (2018) found that the utilization of digital payments changed the purchasing habits of Ghanaian consumers. According to the survey, college understudies who effectively utilize versatile cash administrations spend more than their peers who don't. According to this result, mobile money services simplify access, encouraging spending and discouraging conserving. One study found that Singapore's excessive expenditure was increased by digital payment transactions (Agarwal & Zhang, 2020). Compared to ATMs, digital transactions are more practical.

Besides spending, saving behavior is also affected by digital financial technology (Moenjak et al., 2020). A 2017 investigation of the Worldwide Findex Database found that the rate of individuals who spared cash at a monetary institution was essentially diverse from the rate of individuals who spared cash somewhere else, counting online. While total saving was increasing, saving at financial institutions tended to decline. However, the policymaker must first include digital savings in the regulated financial sector if it is to have a chance to contribute to the financial system (Setiawan et al., 2020). Varlamova et al. (2020) discovered that online banking services could promote the volume of financial transactions carried out on an individual level and the amount of savings on a national scale. The development of fintech also impacts investment behavior. Yusuf (2019) also concluded that technological advances influence increasing investment interest in Indonesia. Nevertheless, the growth of fintech also led to the emergence of several online investment frauds related to stocks, obligations, commodities, real estate, and others (Albrecht et al., 2019).

Since the growth of fintech might impact saving, spending, and investment behavior, people must have the information and skill set necessary to analyze any possibilities ahead and make the leading choices to maximize their long-term FWB. This is important as the financial markets are complex with a wide variety of digital financial instruments (Andreou & Anyfantaki, 2021). Digital financial literacy (DFL), also known as financial literacy in digital technology, will be crucial in these situations. If consumers are aware of DFL, then overspending, investing, and saving mistakes can be prevented. If DFL improves, saving opportunities may also be expanded. However, research shows that the financial literacy of most people in the world, especially in developing countries is still lacking. This could be a problem as people will be unable to absorb adequate information, leading to ineptitude in facing financial complexities and making the best decisions according to their needs (Vitt et al., 2000).

The Organization for Economic Co-operation and Development (OECD) (2018) advised improving DFL due to financial technology's distinctive traits, benefits, and hazards. Therefore, it is crucial to research how DFL affects consumers' purchasing, saving, and investment habits and their perception of how they will behave financially. Based on the result of the 2019 Indonesia Financial Services Authority (OJK) (2022) National Financial Survey, the financial literacy index increased from 29,7% in 2016 to 38,03% in 2019. This is a good sign. Rahayu et al. (2022) researched 741 millennials living in Indonesia's Sumatra and Java islands. They discovered that a person's saving habit was positively impacted by their DFL level and vice versa. The level of DFL can positively and significantly influence the saving behavior of millennials in Indonesia. A person's spending habits are better the higher their DFL score is. Murwatiningsih et al. (2021) and Zulaihatia et al. (2019) researched students from some schools in Jepara and Jakarta in Indonesia and revealed that low financial literacy adversely and significantly affects spending behavior.

On the other hand, students with high financial literacy can understand the function and role of money for themselves and can manage and utilize their finances well. The latter can also distinguish between primary needs and wants. According to research by Kristanto et al. (2020), among 225 Sharia Bank clients in the Special Region of Yogyakarta, the more speculation choices might be made the more fiscally smart the clients were. Based on Rizaldy et al. (2020), financial literacy has a significant impact on how speculation choices are made, as it improves information processing in decisions making. This signifies that financial literacy consistently affects investment decisions.

Previous research has shown that people with good financial skills demonstrate good financial behavior, including better saving, spending, and investing. Ghazali et al. (2022) observed that financial knowledge and FWB have a significant relationship indirectly mediated by financial behavior among Malaysian adults aged 19 to 29. Ali & Hussain (2021) observed that the financial literacy of 318 Pakistanis has a positive relationship with FWB with the influence of mediation investment behavior in which one with high financial literacy makes their choices way better than others and will appreciate way better FWB. In Indonesia, Rahayu et al. (2022) found that the high DFL of the people of West Sumatra, Indonesia, with good income and education, provides a direct, significant, and positive relationship to FWB. From several studies that have been carried out, it can be inferred that high DFL can provide a positive relationship to saving, investment, and spending behavior to maximize FWB.

Earlier studies about DFL merely focused on how the DFL impacts spending, saving, and investment behavior among millennials. As postulated by Hammond et al. (2017), every stage of life requires effective money management, but as one gets older, making wise financial decisions can become more arduous. The OECD (2020) reported a United Nations prediction that seniors will exceed 2.1 billion by 2050, more than double the 2017 figure of 962 million. The national financial literacy and inclusion survey in 2019 documented that the age group above 50 has the lowest financial literacy, accounting for 26% of the total age in Indonesia. This percentage experienced a positive rise of 4% from 2016 but was still slower than the increase in other age groups. In addition, internet use in the age group 60 years and over is still relatively small, only 24% compared to other age groups, especially the Z generation and millennials, with an age range of 18 to 39. As explained beforehand, DFL knowledge is necessary for everyone to create more astute and more exact money related choices (Ratnawati et al. 2017). DFL is crucial at every stage of human life, not only for the youths but also for senior citizens.

In prior studies in Indonesia regarding DFL, researchers only focused on how DFL affects each spending, saving, or investment behavior and how DFL and each spending, saving, and investment behavior directly affect FWB. Adding a mediating variable that can strengthen the positive relationship between DFL and FWB is necessary. Ali & Hussain (2021) found that investment behavior makes the relationship between financial literacy and FWB positively significant in Pakistan. In addition, Ghazali et al. (2022) also observed that positive saving, spending, and investment behavior correlates positively with financial knowledge and FWB in Malaysia. Therefore, saving, spending, and investing behavior needs to be included as a mediation that strengthens the relationship between DFL and FWB.

Although extensive studies have discussed about the correlation between financial literacy and spending, saving, investment behavior, and FWB, there is still no research on how DFL affects FWB through saving, spending, and investment behavior. In today's digital world, a high level of financial literacy must also be followed by skills in utilizing digital financial services and products to maximize FWB properly. Thus, we hope Indonesian people can maximize their FWB using digital financial technology. Based on these concerns, in this study, we would like to examine how the current DFL level of Indonesian citizens can impact their FWB through their saving, spending, and investment behavior. This research is expected to answer how DFL affects FWB through saving, spending, and investment behavior.

# Literature Review

### **Financial Literacy**

Financial literacy is a term that is widely used in literacy efforts. Financial literacy is defined by OECD-INFE (2016) as "the awareness, knowledge, skill, attitude, and behavior necessary to make wise financial decisions and ultimately achieve individual FWB." Understand and use a variety of financial skills such as investing, budgeting, and personal financial management known as financial literacy (Dowling et al., 2008). The other academic literature describes financial literacy as a vital prerequisite for possessing the knowledge and abilities to manage one's own money and avert financial difficulties (Munoz-Murillo et al., 2020). A complex notion, financial literacy includes information, skills, attitudes, and actual conduct (Sabri et al., 2021).

The first step in good financial management is to have a financially favorable attitude towards the environment in which one lives. Increasing financial literacy is essential to provide people with the skills and knowledge they need to enhance their FWB. Making sensible financial decisions is therefore essential to ensure that we can afford to meet our present and future demands (Braunstein & Welch, 2002). Based on their financial objectives and circumstances, people from all walks of life should be well-prepared to manage their spending and saving, make prudent investments, and take out responsible loans (Sabri et al., 2021).

According to previous studies on this topic conducted in the United States and internationally, there are large gaps in older adults' knowledge of finance principles. Mitchell & Schieber (1998) was one of the first to demonstrate that many American homes were unable to perform basic financial calculations. In their Health and Retirement Study, Lusardi, and Mitchell (2011b) found that only one-third of respondents were able to properly answer the question regarding risk diversification, and only half of Americans over 50 could answer two straightforward questions on inflation and compound interest. A few other industrialized nations, including Germany, the Netherlands, Italy, Sweden, Russia, Japan, and New Zealand, started using the "big three" questions related to interest rates, understanding inflation, and understanding risk diversification (Lusardi and Mitchell, 2008, 2011a, 2011b). The results indicate that many countries have low levels of financial literacy and that older age groups tend to have lower levels of financial literacy than younger age groups (Lusardi and Mitchell, 2011a).

According to Morgan and Trinh (2019a), socioeconomic determinants impact financial literacy in Vietnam and Cambodia. Age, income, and education are socioeconomic factors that affect financial literacy and are included in the study as socioeconomic variables. Xue et al. (2019) studied fifteen thousand Australians and discovered that income and age impacted financial literacy. As a result, it is crucial to consider the mediating factors that might enhance the impact of DFL on FWB in the Indonesian economy.

#### **Digital Financial Technology**

Fintech refers to the utility of virtual technology withinside the monetary industry (Setiawan et al., 2020). According to Li and Xu (2021), several recently created frontier technologies drive fintech, an emerging technical term for financial technology. New business models, technological developments, and innovative products and services have radically changed the financial sector and access to financial services. Due to the following advantages, fintech has drawn much attention: increasing operational effectiveness, lowering operational costs notably, changing current industry organization, obscuring industry distinctions, encouraging deliberate disintermediation, creating new entry points for entrepreneurship, and democratizing financial services access (Cao et al., 2020; Agarwal & Zhang, 2020; Loubere, 2017; Admati & Hellwig, 2014; Suryono et al., 2020; Piniochet et al., 2019; Philippon, 2016; Yang et al., 2020).

In the middle of technological advancements quickly altering the financial services sector, customers must be equipped with more informed financial decisions (Andreou & Anyfantaki, 2021). IFC (2017) discovered that by connecting to the financial ecosystem that the traditional banking system has not yet reached, the value chain link for financial services may be improved through fintech. Fintech offers product solutions for small and medium businesses (SMEs), the payment system, savings, remittances, investments, trading, lending, and insurance.

#### **Digital Financial Literacy**

Four criteria - knowledge of consumers and compensation maker rights, awareness of digital financial risks, understanding of digital financial goods and services, and DFL - were used. Used to describe a person's level of familiarity with digital financial products and services (Rahayu et al., 2022). The OECD (2018) recognizes DFL as a crucial element as part of the agenda for policymakers globally, but no specific phrase with a specific definition was given. In the absence of a standardized definition, Andreou & Anyfantakis (2021) consider DFL as a convergence of skills including elements of digital financial services and products to maintain their financial well-being. DFL combines the concepts of financial literacy with digital platforms (Tony & Desai, 2020). Therefore, in digital financial technology, DFL stands for financial literacy (Setiawan et al., 2020).

The depth and breadth of one's knowledge and financial capabilities can be understood in as many aspects as possible of the DFL concept, enhanced by their mastery of digital goods and services (Andreou & Anyfantakis, 2021). The four dimensions that a definition of DFL should include are outlined by Morgan et al. (2019) in a recent policy brief. They are understanding DFS, understanding the risk of DFS, controlling the digital financial risk, and knowing how to monitor and understand consumer rights and complaint processes. Understanding DFS is the first aspect of DFL. People must know that digital channels, such as the internet and mobile devices, offer non-traditional financial goods and services. Users must be capable of weighing the advantages and disadvantages of each DFS choice in addition to being knowledgeable about digital financial services and products. The second dimension of DFL is understanding digital financial risks. DFS users need to be aware of the hazards associated with cybercrime and online fraud, such as phishing, pharming, spyware, etc. The third aspect of DFL is digital financial risk control. This relates to DFS users' perceptions of how to protect against the risks associated with using DFS. They should understand how software and mobile applications are used to prevent spam, phishing, and other threats. The fourth dimension of DFL is understanding consumer rights and complaints processes in circumstances where DFS users' experience hazards.

#### **Saving Behavior**

Chavali et al. (2021) found that saving behavior is a factor of financial behavior that significantly influences FWB. In their research, saving behavior consisted of saving for planning motives and saving for future motives. Saving money is demonstrated in several ways based on plans, such as preparing estimations of future requirements, avoiding spending money on unimportant items, and consistently saving (Ismail et al., 2013). To satiate wants and desires, it can also be exhibited in responses to the environment or other people (Calderone et al., 2018). Saving activity relates to saving behavior.

There are various definitions of saving behavior. Warneryd (1999) defined it as decision-making regarding routine activity to keep some part of income for a purpose in the future. It is a combination of the perception of mass needs future, savings decisions, and saving actions. Lewis, Webley, & Furnham (1995) defined saving behavior as the result of the decision-making process of saving as a routine action for a particular goal or dream. According to Warneryd (1999), the three following signs can be used to gauge someone's saving behavior:

- A view of future needs related to how one regularly saves to prepare their finances for the future.
- Decision-making on the achievement of a financial goal by how to save.
- Attitude to be frugal with a way of life sufficient and simple so that you can make savings.

#### **Spending Behavior**

Mitchell (2008) asserts that spending is a habit or behavior involving engaging in enjoyable financial activity. Spending behavior may be defined as a pattern of conduct or a habit of spending money. Spending behavior is a combination of one's habits, preferences, and goals in spending money (Setiawan et al., 2020). Spending behavior is an individual actively involved in getting and using items, as well as the decision-making process about purchasing activity preparation and determination (Wahyuningtyas & Susanti, 2021). We cannot escape rising high spending patterns for the community that may negatively affect financial management due to these behaviors or habits, which have the potential to result in high levels of intensity of usage of mobile payment services.

Spending habit is a learned pattern of conduct that is routinely practiced. A person's major instrument for financial success is a solid spending habit. Spending wisely helps you achieve your financial goals and increase your money. Planning is a strategy for prioritizing your expenses according to your needs and for planning your expenses.

#### **Investment Behavior**

Owusu et al. (2022) described investing behavior as an activity carried out by individuals through the careful estimation and planning of current financial resources to achieve higher future returns. According to Baker & Wurgler (2007) and Garling et al. (2009), there are three major attributes in describing investment behavior, i.e., psychological, sociological, and demographic factors. In terms of psychological factors, researchers noted that overconfidence and anchoring bias both majorly impact the investment decisions made by individual investors (Chen et al., 2007). This showed that individuals' investment experience is a solid foundation for investment decisions. Regarding sociological factors, based on the currently available literature, the education level (Al-Ajmi, 2008 and Shaikh, 2011), income level (Rizvi, 2015 and Shaikh, 2011), marital status (Mahmood, 2011 and Shaikh, 2011) are discovered to be critical sociocultural factors affecting investors' behavior and investment choices. For the third attribute, according to Maditinos et al. (2007) and Sadi et al. (2011), the demographic composition is one of the behavioral aspects that have a significant influence on investor behavior and decision-making. Kabra et al. (2010) found that age and gender are the main determinants affecting investment behavior and investor decisions.

Investing is a way to help one achieve a desire and the need to gain profit with the intent of the goal, i.e., accept or gain profits and benefits in the future (Winantyo, 2017). With the rapid development of digital

technology, it is easier for someone to invest through various financial institution services, one of which is the capital market. Fintech makes it easy for the community to invest with various instruments, such as mutual funds, gold, foreign currency exchange, stocks, cryptocurrencies, etc. It is undeniable that fintech makes people more investment literate and opens opportunities for everyone to make investments. People take more risks and are more accountable for their own financial decisions because of the complexity and range of financial and investment products that are expanding (Sabri et al., 2021).

#### **Financial Well-Being**

FWB was described by Joo and Garman (1998) as a person's state of financial well-being. This is consistent with sufficient financial resources and the total aggregate number of financial resources possessed by all parties. Financial wellness, which measures the health of one's financial state and takes happiness with one's financial circumstances into account, is frequently used as a benchmark to gauge one's financial situation (Sabri, Paim, Falahati, & Masud, 2013). The Bureau of Consumer Financial Protection (2015) defined the FWB as a way for us to manage our daily or monthly finances, cover our expenses in case of emergencies, set our financial goals, and have the financial freedom to make decisions to live a fulfilling life. The definition of FWB is also supported in a study by Prendergast et al. (2021), where FWB is a setting where a person may meet both present and future needs, feel secure and manage unforeseen demands in the future, as well as enjoying life.

According to Sabri et al. (2020), financial well-being (FWB) encompasses a variety of dimensions, including financial contentment, the objective state of one's financial circumstances, financial attitudes, and non-measurable behavior. Models of FWB have been constructed in other research Indicators used to measure FWB, according to Iramani et a. (2020), including financial strain, financial comfort, financial satisfaction, financial confidence, and financial comfort, where these variables can be measured on a Likert scale of 1 to 5.

# Spending, Saving, and Investment Behavior Mediating the Relationship Between Digital Financial Literacy and Financial Well-Being

Previous studies have discussed the relationship between DFL and FWB. Previous research has found that financial literacy increases FWB (Bakar et al., 2020; Fernandes et al., 2014). In their study, Rahayu et al. (2022) showed that among 715 respondents in West Sumatra, the greater the DFL, the higher the FWB. Financial literacy is significant in encouraging the FWB of Sri Lankans underprivileged females and other nations (Kumari et al., 2020). Additionally, the study found that financial literacy is crucial for FWB since it would help them achieve their financial level.

On the other hand, FWB is also determined by financial behavior. Chavali et al. (2021) discovered that indicators of financial behavior, saving, spending, and investing, affect the FWB of individuals in India. Rahayu et al. (2022) proved that financial behavior, which includes saving, shopping, and investment behavior, significantly influences the financial welfare of 239 millennial respondents in Pekanbaru, Riau, Indonesia. Another study by Sabri et al. (2020) revealed that saving behavior and investment behavior are essential to achieve higher FWB among women working in the public sector in Malaysia.

A study by Ghazali et al. (2022) on adults in Malaysia aged 19 - 29 years found that sociodemographic factors had been shown to directly affect FWB, resulting in contradictions when assessing how financial knowledge affects FWB. According to the research, the discrepancy is brought about by the respondents' different socioeconomic classes or cultural backgrounds. Consequently, it is assumed that mediating elements are required to strengthen or moderate the association between FWB and financial literacy. According to some, behavioral financial norms may strengthen the association as a mediating element, even though most research focuses on the direct link between financial literacy and FWB. This research is supported by Sehrawa et al. (2021) study on individuals from urban areas in developing India. They discovered that high financial literacy, which consists of knowledge and experience, can be associated with positive financial behavior, such as saving regularly and not excessive spending. This way causes individuals to experience high FWB, where one may fully pay their commitments and feel confident in their financial future and enjoy life in a good financial situation. In addition, Ali & Hussain (2021) in their survey of 318 individuals in Pakistan, investment behavior was a mediating variable that strengthened the relationship between financial literacy and FWB, and financial literacy and investment behavior were positively associated with FWB. Irmani et al. (2020) note that in East Java, Indonesia, the association between financial literacy and household financial status is influenced by financial behavior, proxies of purchasing, saving, and intermediate investment. According to the debate, someone with high financial knowledge will demonstrate and practice good financial behavior, including improved spending, saving, and investing habits, such that financial behavior can mitigate the influence of financial literacy on FWB. The influence of these variables on financial well-being is therefore mediated by financial activity, such as saving, spending, and investing behavior.

H1: DFL positively influences financial well-being through saving behavior.

H2: DFL positively influences financial well-being through spending behavior.

H3: DFL positively influences financial well-being through investment behavior.

#### The Relationship between DFL and Financial Well-Being

According to research by Rahayu et al. (2022) conducted on respondents from West Sumatra, Indonesia, DFL is evaluated based on four aspects (understanding, experiencing, knowing, and awareness of financial goods and services), has a considerable and favorable impact on FWB. A Malaysian study on the impact of financial literacy on FWB, which measures financial literacy, was published by Ghazali et al. (2022), and they observed positive significance. Ali & Hussain (2021) also found that individuals in Pakistan with high financial literacy enjoy better FWB.

Rahayu et al. (2022) and Ghazali et al. (2022) found differences in the influence of socioeconomic factor determinants on the effect of DFL on FWB. Rahayu et al. (2022) showed that the impact of DFL on FWB depends on socioeconomic factors, while Ghazali et al. (2022) observed insignificant differences in the effects of DFL on FWB in different socioeconomic groups. The difference in the influence of socioeconomic factors depends on the research context. Therefore, mediating variables need to be considered to strengthen the relationship of DFL to FWB in various socioeconomic groups of a country.

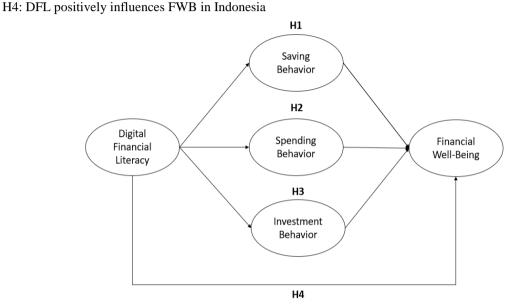


Figure 1. Conceptual Framework

#### Methods

#### **Element of Research Design**

This study used a quantitative method, specifically a descriptive study approach, through hypothesis testing and data analysis. Data was collected through surveys using online questionnaires and was conducted in Indonesia. The online questionnaire used indicators to assess individuals' DFL, spending behavior, saving behavior, investment behavior, and FWB, which was undertaken through a cross-sectional study.

This survey also recorded respondents' demographic and socioeconomic attributes. The targets of this study were Indonesian citizens with several criteria: (1) accept taking part in the survey, (2) be able to read and answer questions, (3) use a mobile phone, and (4) use online shopping or financial services for a short period. This study has minimal interference because variables of interest are not manipulated.

#### **Sampling Method and Process**

Nugroho & Samudera (2018) found that nearly 46% of the Indonesian population aged 15 to 45 use digital platforms to carry out financial activities such as shopping. With 107 million Indonesians in this age range, 49 million people use digital platforms for financial activities. Using the Slovin formula, 399 people made up the study's samples. The minimum sample formula according to the Slovin formula is shown below:

$$n = \frac{N}{1 + Ne^2} \tag{1}$$

Where N is the number of populations, n is the number of samples, and e is the margin of error (5%).

#### **Data Collection Method**

This research used structured surveys with questionnaires as the instrument. The surveys were mobile or internet-based and were conducted in October 2022. The surveyor gave each responder the questionnaire after explaining the study's goal. The questionnaires were divided into three sections. The first part comprised filtering questions about experience with digital financial platforms, and the second part concentrated on the demographic questions, including their gender, age, education level, etc. The third component was a

questionnaire section concentrated on the main research components, i.e., DFL, saving behavior, spending behavior, investment behavior, and FWB. Table 1 depicts the questions used to filter target research to match the sample criteria mentioned in the previous chapter.

Table 1. Filtering Questions List					
Filtering Questions	Answer Choices	Reference			
Do you ever use and access digital financial platforms, such as shops online, purchasing goods and services using mobile devices, or mobile banking?	Yes/No	Lyons & Fontes, 2021			

The comprehensive questionnaire was designed to cover FWB as a dependent variable, saving, spending, and investment behavior as mediating variables, and DFL as independent variables. The respondents were asked to answer 5- Likert scales regarding DFL, saving behavior, spending behavior, investment behavior, and FWB. The 5-Likert scale consisted of the following arrangement: (1) strongly disagree, (2) disagree, (3) neutral, (4) agree, and (5) strongly agree. Table 2 displays general questions included in the questionnaire before starting to relate questions in hypothesis testing. Table VIII also depicts indicators used to measure DFL's impact on FWB directly and through saving behavior, spending behavior, and investment behavior as mediating factors.

Table 2. General Questions List							
General Questions	Answer Choices	References					
Gender	• Male	Nguyen, V. H., et al., 2022					
	• Female						
Age	• Below 25 years old	Nguyen, V. H., et al., 2022					
	• 25 – 40 years old						
	• 41 – 55 years old						
	• Above 55 years old						
Area of Work	Government employee	Nguyen, V. H., et al., 2022					
	Private employee						
	• Entrepreneur						
	• Student						
	Others						
Level of Education	• Lower than High School	Setiawan et al., 2020					
Scale: Mean, Std Deviation	High School Graduate						
	Diploma Graduate						
	Bachelor's degree						
	Master's degree						
Monthly income	• Less than IDR 5 million	Setiawan et al., 2020					
Scale: Mean, Std Deviation	• IDR 5 million to IDR 10						
	million						
	• IDR 10 million to IDR 15						
	million						
Monthly average of savings on	More than IDR 15 million	Setiawan et al., 2020					
digital platforms	• Less than IDR 0.5 million	Setlawall et al., 2020					
Seale. Weally, Sta Deviation							
Monthly average of spending on		Setiawan et al 2020					
		Setuman et al., 2020					
<i>,</i>							
Monthly average of spending on digital platforms Scale: Mean, Std Deviation	<ul> <li>IDR 0.5 million to IDR 1 million</li> <li>More than IDR 1 million</li> <li>None</li> <li>Less than IDR 0.5 million</li> <li>IDR 0.5 million to IDR 1 million</li> <li>More than IDR 1 million</li> <li>None</li> </ul>	Setiawan et al., 2020					

#### **Result and Discusssion**

The model created for the study was tested for fit using the goodness of fit method. In this instance, the R square value was utilized to measure how well the research model fit the data. Table 3 exhibits the R square test results.

Table 3. R Square Test Result					
Variables	R Square	<b>R</b> Square Adjusted			
Saving Behaviour	0.115	0.112			
Spending Behaviour	0.107	0.104			
Investment Behaviour	0.318	0.316			
Financial Well-Being	0.298	0.288			

Structure Model (Hypothesis Test), Table 4 shows the path coefficient result to examine the relationship among variables.

Table 4. Path Coefficient							
Path	Original Sample (O)	Standard Deviation	T Statistics	P Values			
$DFL \rightarrow Saving Behaviour \rightarrow FWB$	0.053	0.027	1.970	0.049			
$DFL \rightarrow Spending Behaviour \rightarrow FWB$	0.079	0.026	2.987	0.003			
$DFL \rightarrow Investment Behaviour \rightarrow FWB$	0.097	0.036	2.699	0.007			
$DFL \rightarrow FWB$	0.229	0.040	5.769	0.000			

#### The Influence of Digital Financial Literacy on Financial Well-Being through Saving Behavior

The results showed that the t-statistic value of the relation DFL on FWB through saving behavior as a mediating variable was higher than 1.96, which was 1.970. The p-value showed a number less than 0.05, which was 0.049. It suggests that saving behavior served as a mediating variable that allowed the amount of DFL to benefit FWB. It means that the better the saving behavior, the better effect of DFL on FWB. This result is supported by a previous study from Chavali et al. (2021), where financial behavior, which is the behavior of saving, spending, and investing, affects the FWB of individuals in India.

#### The Influence of Digital Financial Literacy on Financial Well-Being through Spending Behavior

Regarding spending behavior, the same result also revealed a t-statistics value and p-value for the relationship between DFL and FWB through spending behavior as a mediating variable was respectively higher than 1.96 and lower than 0.05. This suggests that an individual's DFL level influences financial security by mediating spending behavior. The better influence of DFL on financial well-being will follow better spending behavior. Iramani et al. (2020) concur, which showed financial behavior with indicator variables of shopping, saving, and investment behavior as a mediation that influenced the relationship between financial literacy and household financial welfare in East Java, Indonesia.

#### The Influence of Digital Financial Literacy on Financial Well-Being through Investment Behavior

The same finding was revealed in investment behaviors, as mediation influenced the relationship between DFL and FWB. It showed that the relationship between DFL and FWB was positively mediated by investment behavior. It implies that DFL's effect over FWB increases with investing behavior. It was supported by a previous study from Ali & Hussain (2021), which showed research on 318 individuals in Pakistan that financial literacy and investment behavior have a favorable connection with FWB, and investment behavior acts as a mediating variable to reinforce this link.

#### The Influence of Digital Financial Literacy on Financial Well-Being

The t-statistics (5.769) and p-value (0.000) for the association between DFL and FWB were significant. It indicates that DFL had a positive influence on the FWB in Indonesia. It can be concluded that the better a person's DFL, the higher the result on FWB. This outcome was consistent with the research of Rahayu et al. (2022) on respondents from West Sumatra, Indonesia, where it showed that DFL, which is evaluated using four criteria for financial products and services (understanding, experiencing, knowing, and awareness) had a significant positive influence on FWB. This study also found that the direct impact of DFL on FWB was greater than through mediating variables, i.e., saving or spending or investment variables.

#### Conclusion

This study indicated that DFL had a direct impact on FWB. The same things already revealed the same result: saving behavior, spending behavior, and investment as mediating variables influenced the relationship between DFL and FWB. These results demonstrate that the better DFL of one, his/her FWB is better. And then, FWB will be better with better saving, spending, and investment behavior. This result suggests that numerous parties, including the Indonesian government, FinTech companies, and academic institutions were involved. Since the mean value of DFL is still low (mostly around 3) and it means that most of the respondents have minimum knowledge of DFL; consequently, several actions must be taken by the

government, such as educating the masses about DFL. Hopefully, this will improve the level of DFL among citizens in Indonesia. On the Fintech companies' side, to gain more attention from the citizens, they should be able to develop more innovative financial products, especially for saving, investment, and financing products. For academics, since the era is going digital, thus consideration must be given on integrating a lesson on financial literacy, particularly DFL, in the curriculum to raise the next generation's level of understanding on the subject. Despite its strengths, this study still has limitations. In this study, although it has been demonstrated that investing, spending, and saving behavior can all play a part in mediating between DFL and FWB, the impacts are still minimal. Thus, future study is needed to explore other mediating variables which significantly affect the relationship between DFL and FWB, such as financial experience, and financial inclusion.

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