

DIGITAL FINANCIAL LITERACY IN FINANCIAL WELL-BEING ON THE MILLENNIAL GENERATION IN RURAL AREA

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Abstract. Financial well-being is one of the issues that are important to study; success in increasing financial well-being means success in reducing poverty levels. Financial well-being is a condition where a person can meet his needs in the present and in the future, feel secure about the future, enjoy life, and overcome unexpected needs in the future. The purpose of this research is to explore the role of digital financial literacy in the financial well-being of the millennial generation in rural areas. This study adopted a verified scale, measuring digital financial literacy adapted from the Setiawan scale with 11 statements (2020), financial behavior was adapted from the Garman scale measurement with eight statements (2014), and financial well-being was adapted from the Prawitz scale with nine statements (2006). All scales are measured using a 7-point Likert scale, and quantitative methods are used as a research approach. Data was collected from 235 millennial generation respondents who used e-commerce and e-wallet platforms, data was collected through an online survey from 18 districts in West Java, and data were analyzed by path analysis technique.

Keywords: Digital Financial Literacy; Financial Behaviour; Financial well-being; Rural Area

1. INTRODUCTION

Financial well-being is an indicator to measure economic prosperity and plan future policy interventions. Companies also use financial welfare at the individual level as an indicator in making product decisions, while financial institutions use financial welfare as a tool for formulating organizational policies. Financial well-being reflects an individual's financial status to have sufficient resources to lead a comfortable life.

Financial well-being measures an individual's perceived financial security and can be influenced by many factors. Financial welfare is an important issue to study; success in increasing financial welfare means success in reducing poverty levels. The study of financial welfare is increasingly important for developing countries like Indonesia because it means reducing poverty levels. The World Bank report shows that 25.9 million or 9.8 percent of Indonesia's population, will still be below the poverty line in 2021, slightly decreasing compared to 2019 of 10.6 percent. Suppose this percentage of the poverty rate is added to the portion of the population that is vulnerable to returning to poverty. In that case, the figure will increase sharply to 73.9 million people or around 30 percent of Indonesia's total population (World Bank, 2022). The majority of Indonesian people live in rural areas or rural areas. Rural area life is defined as a community of less than 50,000 people living in a specific location, usually on a district/city basis. The term "rural area" is also used to describe rural life, where people rely more on natural resources than urban communities. Since rural people are simply non-urban people, people use several main characteristics to describe rural areas.

The results of the Population Census conducted during February-September 2020 show that Indonesia's population is of productive age born in 1981-1996, namely 69.38 million millennials or 25.87%. The millennial generation is the dominant adult generation in Indonesia (BPS data) and is approaching a critical point in making financial decisions; their financial behavior will affect the Indonesian economy. This generation is considered

the generation that is educated and enters the world of work when economic instability occurs. But it's increasingly clear millennials' financial positions are becoming more fragile. This generation has experienced rising educational costs, and, as a result, many Millennials have started their working careers in debt. Research shows that many Millennials are deeply in debt and struggling to meet long-term and short-term repayment obligations. As such, it is becoming increasingly apparent that Millennials' financial position may be fragile, and their ability to achieve financial well-being is a challenge. Research from the CFPB shows that the financial well-being of the millennial generation is lower than that of the previous generation, namely baby boomers, which is lower among young people.

Gerrans et al. (2014) developed a financial well-being model that focuses on financial literacy and found that financial well-being is determined by financial satisfaction, financial status, financial behavior, financial attitudes, and financial knowledge. Bruggen et al. (2017) revealed that financial well-being is influenced by financial behavior, and various financial interventions, such as financial literacy, influence this behavior. Bruggen et al. (2017) also stated that financial behavior is influenced by financial knowledge and skills (Joo & Grable, 2004; Shim et al., 2009; Xiao et al., 2014). On the other hand, financial well-being is influenced by financial behavior (Joo & Grable, 2004; Shim et al., 2009; Xiao et al., 2009).

This research is limited to investigating the role of digital financial literacy and financial behavior as contributing factors to financial well-being. Digital financial literacy is highlighted because of the rapid development of digital-based financial products and services known as Financial Technology or Fintech. Fintech itself is a term used for companies that use software, applications, and digital platforms to provide financial products and services to consumers and businesses through digital devices such as smartphones (Morgan et al., 2019).

Furthermore, it was stated by Panos & Wilson (2020) that improper understanding and use of e-commerce and e-wallet applications is also believed to have a negative impact on the financial well-being of its users. For example, Panos & Wilson (2020) found that someone who does not have good financial planning skills when dealing with online shopping applications that provide special discount offers (which usually have to be executed in a short time), individuals tend to be driven to act impulsively/spontaneously by buying things they do not need, and this behavior will certainly damage their financial well-being. This condition certainly indicates that in this digital era, only financial literacy (conventional or non-digital) is not enough to be able to manage finances properly however, understanding and adequate knowledge are also needed about digital-based financial products and services, known as digital financial literacy. With this digital financial literacy, it is hoped that individuals can manage finances well and also avoid the risks and negative impacts of this Fintech.

An individual's financial well-being depends on the chosen financial behavior. The facts show that individuals often make bad decisions, save too little but spend too much (Sotiropoulos and d'Astous, 2013), do not pay bills on time, and sometimes buy things that they will eventually regret (Abendroth and Diehl, 2006). Literature shows that Millennials are less financially literate and display less healthy behaviors than previous generations (Kim, Anderson, and Seay 2019; Global Financial Literacy Excellence Center and PwC 2015). Implies that Millennials may struggle with higher financial achievements as a result. Worse than other generations, including the Baby Boomers. Based on the existing explanation, it shows that financial well-being is an essential point in a country's economy, and financial literacy and financial behavior influence individual financial well-being.

2. LITERATURE REVIEW

2.1 Financial Well-Being

Financial well-being has many definitions, such as retirement planning (c 2005), financial management (Lusardi & Mitchell, 2007; Vlaev & Elliott, 2013), ability to deal with debt (Tsai et al., 2014), and financial satisfaction (Ali et al., 2014; Xiao et al., 2014). However, the economic landscape has changed a lot in the last few decades. There has been a shift in individual responsibility for saving and investing because today's

individuals face more complex and consequential financial decisions, such as saving for retirement and investing in education.

2.2 Digital Financial Literacy

Digital financial literacy (DFL) consists of two concepts: financial literacy and digital platforms. Financial literacy can be interpreted as a person's attitude, behavior, level of understanding regarding financial products and services, and ability to manage his finances (Tony & Desai, 2020). At the same time, the digital platform is a set of tools consisting of hardware and software that uses computer and internet technology. So digital financial literacy is understanding digital financial products and services related to personal financial management.

2.3 Financial Behaviour

Behavior finance emerged in the 1990s in line with the demands of the development of the business and academic world, which began to address the existence of aspects or elements of behavior in the process of making financial and investment decisions. Behavior finance (behavior finance) is the involvement of behavior that exists in a person, which includes emotions, traits, preferences, and various kinds of things that are inherent in humans as intellectual and social beings that interact and underlie the emergence of decisions to take action, according to Ricciard and Simon (2000).

3. RESEARCH METHODS

The method used in this research is a literature study by looking for sources of theory and references relevant to the problems found. Zed (2008) defines the literature study method as a series of activities related to library data collection methods, reading and taking notes, and processing research materials. The data used in the literature study method is secondary data sourced from books, articles, and databases sourced from the internet.

4. RESULTS AND DISCUSSION

4.1 Digital Financial Literacy

In some literature, several financial definitions are widely used. Lusardi and Mitchell (2014) state that financial literacy is a person's ability to process financial information and make decisions about financial planning, wealth accumulation, debt, and retirement. The Organization for Economic Cooperation and Development and the International Network on Financial Education (OECD/INFE) (2016) defines financial literacy as a combination of awareness, knowledge, skills, attitudes, and behaviors needed to make sound financial decisions and ultimately achieve financial well-being individual. Thus, the concept of financial literacy is multidimensional, reflecting not only knowledge but also fundamental skills, attitudes and behavior.

Financial literacy is the ability or knowledge to manage finances. This is as stated by Miller et al. (M. Azmi Abdullah et al. 2017). Financial literacy is critical for access to finance to create incentives and an environment that manifests the desired financial behavior, such as saving, budgeting, or using credit wisely. Financial literacy is a person's ability to use financial knowledge, skills, and attitudes in managing financial resources (OECD, 2012).

Increasing financial literacy has been on the agenda of global policymakers for more than a decade. However, most traditional financial education focuses only on the basic principles of financial management (savings, budgeting) and the use of traditional financial services, such as current accounts and savings accounts. As technology improves in various aspects, including finance, it has driven the rapid use of digital financial applications. Thus triggering an increase in the risks faced by society, for example, fraud and excess debt. Therefore it is necessary to cover financial literacy that focuses more on digital financial literacy.

Tony and Desai (2020) state that digital financial literacy combines two concepts: financial literacy and digital platforms. Thus, digital financial literacy can be defined as financial literacy in digital financial technology. In addition, Morgan et al. (2019) have

tried to explain digital financial literacy through four conceptual dimensions: understanding of digital financial products and services, awareness of the risks of digital financial products and services, knowledge of digital financial risk control, and knowledge of consumer rights and compensation procedures. Digital financial literacy is defined as "acquiring the knowledge, skills, confidence and competence to safely use digitally delivered financial products and services, to make informed financial decisions and to act in the best financial interest as per individual economic and social circumstances" (Alliance for Financial Inclusion, DFSWG and CEMCWG, 2021).

Digital Financial Literacy is a multidimensional concept that integrates financial literacy, financial capability, and digital literacy. Financial literacy refers to awareness and knowledge of financial concepts and products needed to manage personal finances according to economic and social circumstances. Financial capability refers to an individual's competence in the financial knowledge, skills, and behaviors required to make informed, confident, and relevant decisions and actions regarding personal and household finances to improve one's financial well-being. In this context, financial education refers to equipping people with knowledge, skills, and exposure to access relevant objective information and training to enable them to make informed financial decisions and take actions appropriate to their circumstances. Many countries that have a nationally coordinated approach to financial literacy/education have developed their own definitions based on the realities of their local jurisdictions. On the other hand, digital literacy refers to the ability to read and navigate digital content independently and the competence and knowledge to access and use digital products and services such as mobile phones, tablets, or the internet. Morgan et al. (2020) explain that digital financial literacy is an essential component of education in this digital era and a critical requirement for the effective use of Digital Financial Services (DFS).

Lyons and Kass-Hanna (2021) present a more detailed model for compiling a multidimensional index for digital financial literacy across five dimensions. Overall, this proposed framework can be used as a guide to assist researchers in developing future multidimensional surveys and indices for DFLs to begin establishing multiple benchmarks and consistency in measurement and scoring. The digital financial literacy framework, according to the adaptation from Lyons and Kass Hanna (2021) can be seen in the following table,

Table 1: Dimensions, Sub-Dimensions, and Indicators for the Digital Financial Literacy Framework

Dimensions	Sub-Dimensions	Indicator
Basic knowledge and skill	Basic financial knowledge	<ul style="list-style-type: none"> • Numeral • Compound interest (two items) • Inflation • Risk diversification
	Basic digital knowledge	<ul style="list-style-type: none"> • Basic knowledge of hardware (phone, computer, tablet), including turning on/off, charging, and locking the device • Basic knowledge of the software (eg, creating user accounts, managing passwords, logging into accounts, using privacy settings)
Awareness (the knowing about)	Awareness of available DFS	<ul style="list-style-type: none"> • Know about existing DFS providers • Knowledge of specific purposes and available uses of DFS (e.g., digital payments, savings, loans, and remittances)
	Awareness of positive financial attitudes and behaviors	<ul style="list-style-type: none"> • Be aware of biases (present biases and other cognitive biases, etc.) that influence decision-making, and the benefits of long-term planning • Be aware of the risks of borrowing (e.g., over-indebtedness, abuse, and predatory lending practices)

		<ul style="list-style-type: none"> • Know where to look for financial information and advice • Be aware of positive financial behaviors (e.g., budgeting, saving, preparing for emergencies and retirement, borrowing responsibly)
Practical know-how (the knowing how)	Practical know-how of operating DFS applications	<ul style="list-style-type: none"> • Know how to open an account on the DFS app or platform • Knowing how to navigate the DFS menus • Know how to initiate and complete transactions. • Knowing how to correct mistakes and cancel transactions
Decision-making (attitudes & behaviors)	Positive financial attitudes	<ul style="list-style-type: none"> • Manage day-to-day finances while setting future goals • Prepare for emergencies and retirement • Decide to set aside money and save • Make wise and responsible loan decisions • Send remittances through reliable channels
	Positive financial behaviors through DFS	<ul style="list-style-type: none"> • Ability to choose the right DFS for a particular purpose (e.g., savings, remittance, loan) • Ability to choose a reliable DFS provider
Self-protection	Self-protection from online scams and frauds	<ul style="list-style-type: none"> • Ability to understand DFS-related terms and conditions and avoid fraudulent practices (e.g., disclosure of unclear or unfair fees, overcharging, subscription traps) • Ability to detect DFS-related scams and frauds (e.g., identity & credential theft, malware, phishing attacks) and avoid their traps to protect data and financial resources

4.2 Financial Behavior

Financial behavior is individual behavior related to finance that can affect the welfare of the individual. Financial behavior integrates behavioral and cognitive psychological theory with economic and financial theory to explain the motives of someone who behaves irrationally in financial decisions (Dewi, et al., 2020). Behavioral Finance studies how humans behave in financial terms. In particular, study how psychology influences financial decisions, companies and financial markets (Nofsinger & Baker, 2010). Effective and efficient financial management is needed by individuals to be able to make the right and wise financial decisions in order to achieve financial well-being. This financial management includes basic matters regarding daily financial management such as borrowing, saving, and investing.

Healthy financial behavior is shown by good financial planning, management, and control activities. Indicators of good financial behavior can be seen from the way/attitude of a person in managing the entry and exit of money, credit management, savings, and investment (Hilgert and Hogart, 2003). Financial behavior is closely related to the implementation of financial literacy. Claulagain (2017) explains that financial behavior is part of implementing financial literacy, which is believed to have a positive impact on a person's financial well-being. Gradually, a person's conscious behavior shows in making decisions, comparing opportunity costs, and looking for alternatives to minimize waste.

Financial behavior can be divided into two; consumption and financing. The first relates to how the money is used for consumption expenditure, and the second relates to how the money is used for investment and savings. Lusardi, Mitchell, and Curto (2010)

argue that the fundamental implication of financial literacy is to change one's financial behavior. Therefore, literacy that cannot change behavior is worthless. Similarly, Monticone (2010) argues that there is a dual relationship between financial literacy and behavior; financial literacy affects financial behavior and vice versa.

Based on several definitions of financial behavior above, financial behavior is a science that explains individual behavior related to how individuals treat, manage, regulate and use the financial resources available to them. (Alexander & Pamungkas., 2019). In other words, financial behavior is individual behavior in managing finances to make financial decisions.

4.3 Financial Well Being

Financial well-being is often treated as an objective measure in which certain financial decisions determine what constitutes financial well-being. However, an equally important aspect of financial well-being is how people subjectively feel about their financial situation. The extent to which people feel anxious about the many decisions and uncertainties involved in making financial decisions (Camilla Stromback et al., 2017).

Financial Well-Being is a condition where a person can fulfill current and future financial obligations, prepare to meet future financial needs, and make choices that can be enjoyed (CFPB, 2015). According to Kim et al. (2003), Financial Well-Being is an abstract concept used to explain the financial situation of individuals or families. Four perceptions are used to measure financial well-being: objectively, known as the quantitative approach and subjectively, known as the qualitative approach; financial satisfaction; and financial behavior.

Financial well-being is defined as a state in which an individual has a sense of (1) control over day-to-day and monthly finances; (2) the capacity to absorb financial shocks; (3) actively tracking to meet financial goals; and (4) the ability to make financial choices to enjoy life (CFPB, 2019). Financial well-being is a perception of the ability to maintain current and anticipated desired living standards and financial freedom (Bruggen., et al., 2017). There are several definitions related to financial well-being. First, financial well-being is subjective because it is based on how individuals perceive it rather than how it is objectively represented. This implies that only the individual can judge his well-being. One person cannot make evaluations of other people's financial well-being. This means that perceptions are personal, and individuals may experience high or low financial well-being regardless of their objective financial position. An individual's subjective assessment of financial well-being is driven by his income and other personal factors and changes relative to his social reference group (Ferrer-i-Carbonnel., 2005). Second, the definition has a time dimension in two ways. Unlike many of the other previous definitions, which focus only on the present, it includes both the present and the future situation. Future-based assessments of financial well-being become part of current assessments and behaviors. Finally, financial freedom is an essential concept in financial well-being, meaning that a person does not feel coerced or stressed about making choices regarding his needs or covering his baseline expenses (Cazzin, 2011; Choundhury, 2009). Financial freedom allows individuals to make life decisions without worrying about financial constraints, and achieving this will increase their perception of their financial well-being.

The indicators of financial well-being in this study are based on Soyeon Shim et al. (2009), including objective measures (amount of debt) and subjective measures (financial satisfaction and overcoming financial tensions). In his research, Shim explains the relationship between adults' financial behavioral intentions and financial well-being. However, having the intention to manage cash and debt wisely should offer some protection when opportunities to spend beyond their means arise, and this intention should predict various indicators that signal financial well-being. Furthermore, because positive financial behavior is related to financial satisfaction, a person's intention to engage in positive financial behavior will be related to a person's satisfaction with his financial status and will also be related to reduced debt.

CONCLUSION

Based on the literature review that has been described above, the conclusions drawn by the author are:

1. Digital financial literacy is a person's understanding of online purchases, online payments with various payment modes, and online banking systems.
2. Behavioral finance integrates behavioral and cognitive psychological theory with economic and financial theory to explain the motives of someone who behaves irrationally in financial decisions.
3. Financial well-being as the perceived ability to maintain current and anticipated desired living standards and financial freedom.

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