Gurugram University Business Review (GUBR)
Volume 5 • Issue 1 • January–June 2025
ISSN: 2582-9718 (Online)

Determinants and Constituents of Financial Literacy
Sustainable Finance and Investments

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ABSTRACT

In the current period characterized by increased environmental consciousness and apprehensions over the long-term well-being of our planet, sustainable finance has garnered substantial momentum as a method to synchronize financial activities with environmental, social, and governance (ESG) principles. The crucial aspect of this change highlights the indispensable role of financial literacy, which stimulates individuals as well as institutions to make advisable, morally ethical, and environmentally sustainable financial decisions. However, there is a considerable distance still to be covered in attaining extensive knowledge about financial literacy and tackling the obstacles related to sustainable financing. This research provides a thorough framework of financial literacy to help financial professionals reassess their strategic approach to strengthening and developing financial literacy and successfully traverse the ever-changing field of sustainable finance practices. Using exploratory qualitative methodology, previous research has been consolidated to uncover the constituents and determinants that contribute to financial literacy. The study posits that various aspects of financial literacy, such as financial awareness (FA), financial experience (FE), financial knowledge (FK), financial skills (FS), financial capability (FC), financial behavior (FB), financial attitudes (FAT), financial inclusion (FI), financial goals (FG), and financial self-efficacy (FSE), are the main factors that influence financial literacy and subsequently contribute to sustainable finance. The study can offer valuable insights to assist investors in strategically improving their comprehension of sustainable finance, enabling them to make well-informed investment choices that align with ESG criteria, and effectively incorporating these factors into their long-term financial strategies to create value.

Keywords: Financial Literacy, Sustainable Finance, Financial Knowledge, Financial Attitudes, Financial Behavior.

INTRODUCTION

Sustainable Finance (SF) is an enormous challenge in the global financial industry, and it plays a crucial role in achieving the United Nations' goal of sustainable growth (Zhang & Zhuang, 2024). Sustainable finance is a paradigm shift in the financial sector that involves the inclusion of environmental, social, and governance (ESG) factors in investment and financing decisions (Adedoyin et al., 2024). In the context of financial investments, the environmental component of ESG refers to the practice of considering concerns such as emissions, pollution, and potential for sustainability (Olumekor & Oke, 2024). The social component discusses investments' influence on society and how finance may support adaptability to social circumstances (European Commission,2023; Olumekor & Oke, 2024). In conclusion, governance encompasses the encouragement of a corporate structure that is more accountable and inclusive (Liang & Renneboog, 2020).

In the modern financial world, financial education is widely accepted as essential to an individual's financial well-being and a nation's financial stability. A country's financial success and well-being may be assessed by assessing the Financial Literacy (FL) of its citizens, which is a crucial factor in determining the country's overall wealth (Asthana & Dube, 2021). Financial literacy is outlined as "a combination of awareness, knowledge, skill, attitude, and behavior necessary to make sound financial decisions and ultimately

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achieve individual well-being" by the Organisation for Economic Co-operation and Development (OECD). A significant portion of the Indian population does not have access to formal financial services because they are financially illiterate and so do not get the knowledge and information necessary to participate in the financial services industry (Asthana & Dube, 2021).

Financial literacy for fostering sustainable finance involves possessing the necessary knowledge and skills to select and utilize sustainable financial products and services, such as green bonds, social impact investing, carbon trading, and more. This paper aims to examine the individual concepts and their interplay, as well as the significance of FL in promoting SF.

METHODOLOGY

Objective of the Study

To comprehend the impact of financial literacy on investors' decisions about investments, several empirical research has been accomplished throughout the finance domain (Anshika et al., 2021; Choudhary & Kamboj, 2017; Filippini et al., 2024). A limited amount of research has examined the existing literature on the significance of the multidimensional approach to financial literacy in sustainable finance. This study analyzes the constituents and determinants contributing to financial literacy in sustainable finance by thoroughly reviewing relevant literature.

Methods

To accomplish the objectives of the study, a research descriptive design has been utilized. The researchers have conducted a qualitative analysis of previous literature to uncover the determinants and constituents contributing to financial literacy in sustainable finance. Secondary data is gathered in the study from various sources such as research articles, books, magazines, news articles, previous studies, websites, and more.

LITERATURE REVIEW

Financial Literacy

Financial literacy is a crucial ability that is essential for everyone in the 21st century. The financial decisions necessitated throughout various stages of an individual's life hold significant importance across multiple dimensions. Consequently, individuals must cultivate an awareness of the diverse realms of financial literacy before facing tangible challenges in their lives (Ozkale & Erdogan, 2022). The OECD (2005), a leading research institution globally, has defined financial literacy as the development of skills and the enhancement of access to financial services, grounded in informed decision-making among various financial options. It has also established a connection between financial literacy and the financial well-being of individuals (Chaulagain, 2015).

Determinants of Financial Literacy

Ali (2014) scrutinized factors that influence Kenya's financial literacy levels. The results showed that the employees' overall financial literacy level is low. The study also found that the factors that affect financial literacy levels are gender, age, education, other wealth factors, sources of information, and financial advice. However, financial literacy levels are unaffected by personal income, occupation status, or type. Morgan and Long (2020) examined the factors that influence financial literacy and how they affect inclusion in the financial system and savings. Research revealed some discrepancies as well as supporting the results of investigations conducted in other nations. Studies show that age, employment, income level, and educational attainment are the primary factors influencing financial literacy. Findings indicate that general education levels and financial literacy are both positively and substantially correlated with saving behavior and financial inclusion; these findings typically hold true even after accounting for any endogeneity in the financial literacy data.

Garg and Singh (2018) distinguished different socio-demographic parameters, including gender, age, marital status, income, and educational attainment, all of which have a role in determining the degree of financial literacy among young people. Mancebón et al. (2019) determined that the development of young consumers' financial ability is influenced by their mathematics capabilities, with the family playing a secondary role. Hassan Al-Tamimi and Anood Bin Kalli (2009) conducted an experimental investigation that showed that employment activity, education level, and income level significantly influence financial literacy. Individuals with high salaries, advanced degrees, and work in banking, investing, or the financial business possess a higher level of financial literacy than the public. Nevertheless, there is a widespread deficiency in financial literacy among all age groups, with women exhibiting a lower degree of financial literacy than males. Kadoya and Khan (2020) examined the variables that impact financial literacy and discovered that demographic characteristics, including gender, age, and education, significantly influence the level of financial literacy. Psychological factors such as future perceptions and socioeconomic factors like income and employment also have a substantial role. Additionally, it emphasized the correlation between social contact and an individual's perspective on the future in relation to their level of financial literacy.

In addition, we have also identified other research that examines different factors influencing financial literacy. The summary of these findings is shown in the following Table.

Determinants	*Literature Citation*
Gender	Garg & Singh (2018), Hassan Al-Tamimi & Anood Bin Kalli (2009), Kadoya & Khan (2020b), Fitri (2023)
Age	Fitri (2023), Kadoya & Khan (2020), Fernandes et al. (2014)
Education	Kadoya & Khan (2020), Mawad et al. (2022), Anshika et al. (2021)
Occupation	Kadoya & Khan (2020), Hassan Al-Tamimi & Anood Bin Kalli (2009), Riitsalu & Põder (2016)
Income	Mawad et al. (2022), Choudhary & Kamboj (2017), Lusardi (2011)
Cultural and Social Factors	Kadoya & Khan (2020), Putri & Wijaya (2020), Riitsalu & Põder (2016)
Parental Influence	Mancebón et al. (2019), Behrman et al. (2010), Jorgensen & Savla (2010), Putri & Wijaya (2020)
Psychological, Behavioral, and Educational Influences	(Andarsari & Ningtyas, 2019; Brown et al., 2016; Fernandes et al., 2014; Grohmann, 2017; Lusardi & Mitchell, 2011; Mitchell & Lusardi, 2015)

Source: Authors Compilation

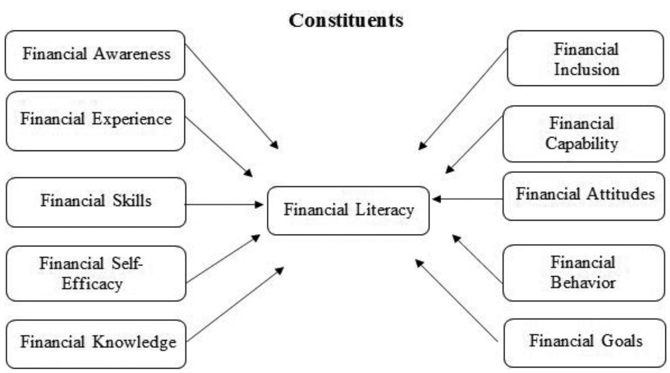
Sustainable Finance

The notion of sustainability originates in the historical recognition of the global warming awareness movement and its effects on the environment and society (Christopher & Nithya, 2024). As the movement gained official recognition and structure via implementing environmental rules at the global level, led by the United Nations, the notion of sustainability was subsequently extended to include other business practices, with a particular focus on finance. More than 50% of the money flowing into European investment goods is attributed to sustainable financial solutions, which aligns with a worldwide pattern (European Commission, 2023).

Financial Literacy and Sustainable Finance

In her discussion of the problems with sustainable finance, Christopher, and Nithya (2024) acknowledged the disparity in wealth between the various social classes that are not included in the recognized financial system. She also emphasized the need to enhance credit delivery mechanisms and promote financial literacy to enhance a nation's socio-economic development. They also mentioned the Indian example, in which the National Centre for Financial Education (NCFE) in India unveiled the National Strategy for Financial Education (NSFE) 2020–2025 to educate different population segments about money through a variety of platforms and channels to foster an empowered and financially aware India. Raising public knowledge of green finance and ESG investment is one of the NSFE's main goals. Chaulagain (2015) involved individuals from both urban and rural areas and examined the importance of financial literacy to expand people's access to and sustainability in the financial system. It concluded that the government should simultaneously promote financial services and financial literacy to achieve sustainability. According to Sivaramakrishnan et al. (2017), financial literacy is the primary resource required to make capital market investments. Scholars have already extensively examined the relationship between investing behavior and financial literacy. Aisa (2023) stated that a person's financial literacy is a crucial sign of their capacity for financial decision-making. Japanese research by Gutsche et al. (2021) revealed that one of the key factors influencing Japanese investors in sustainable investments is financial knowledge. According to (Aristei and Gallo, 2021), financial literacy is one factor that impacts financial market engagement in sustainable investment. In addition, they stress the importance of financial literacy in influencing consumer choices toward more ethical businesses. Aisa (2023) also emphasized that you need to grasp finance basics to participate in the capital market and invest in ethical and environmentally conscious businesses. Sustainable investing is only one of several investment options made available to those with high levels of financial literacy.

Conceptual Framework



DISCUSSION

Financial Awareness

To manage one's own finances and reach one's financial objectives, financial awareness is defined as having a broad understanding of budgeting, knowledge of the financial goods and services provided by financial institutions, and a fundamental understanding of finance. Financial literacy includes financial awareness, which is a crucial component that affects perceived knowledge, which in turn affects decision-making (Dewi et al., 2020). Financial stability depends on financial awareness, which is a necessary component of financial literacy as it affects financial knowledge, which in turn impacts decision-making (Kadoya & Khan, 2020; Mason & Wilson, 2000). This focus aligns with the findings of (Priyadharshini, 2017), which indicated that financial awareness influences financial decisions via financial knowledge and financial capability. In the study conducted by Guiso and Jappelli (2005) regarding financial awareness, it was noted that a deficiency in financial awareness carries significant consequences for comprehending matters related to financial knowledge, particularly concerning financial products and services. This, in turn, influences decision-making and investment behaviors in financial markets.

Financial Experience

Financial experience is summarized as "The practical knowledge that an individual gains in managing and utilizing money" (Chabaefe & Qutieshat, 2024). According to several academics, the growing usage of banking products—such as loans, current accounts, and savings accounts—has boosted financial experience, which in turn has contributed to the development of certain financial literacy abilities (Amagir et al., 2018; Klapper & Lusardi, 2020; Oseifuah, 2018). Research examining the relationship between financial experience and financial literacy is limited; however, empirical studies conducted in both developing and developed nations have tested the hypothesis that financial experience can enhance financial literacy, and the findings indicate that financial experience does indeed augment financial literacy. For example, multiple regressions based on a cross-sectional survey of 483 University of Bengkulu students discovered that gender and financial experience significantly influenced financial literacy. The research assessed students' financial literacy by asking them to do basic mathematical computations, calculate compound interest, understand how inflation affects the value of money, and diversify risk in a portfolio. Students' actual bank account ownership was a proxy for financial experience (Sri et al., 2020). Furthermore, extensive research that included 889 lecturers in Indonesia and used SEM to evaluate the association between financial experience and financial literacy, among other things, discovered that the two are related (Dewi, Febrian, & Anwar, 2020). Moreover, Iramani and Lutfi (2021) found that financial experience constitutes one of the elements influencing financial well-being, and Eberhardt et al. (2019) discovered the intersection of financial knowledge and financial decisions. Finally, research findings indicate that those with more exposure to financial goods also tend to have better levels of financial literacy, indicating that engaging in actual financial activities is an essential means of improving financial literacy. It is important to continue researching and incorporating this relationship between financial literacy and experience into educational frameworks and policy efforts that support financial empowerment since it has significant consequences for individual and communal financial outcomes.

Financial Skills

According to Priyadharshini (2017), financial skills pertain to an individual's capacity to make informed decisions to reduce the likelihood of encountering financial difficulties. Loza et al. (2024) stated that financial skills pertain to an individual's capacity to analyze and use financial data to guide choices and actions. It is the connection between knowledge and the execution of activities related to financial information, from which issues are addressed, circumstances are evaluated, and judgments are rendered. Financial competencies include data analysis, goal formulation, strategic delineation, issue resolution, planning, and oversight. Cramer et al., (2004) developed the Measure of Awareness of Financial Skills (MAFS), a tool for measuring financial skills. Remund (2010) indicated that the four most popular practical definitions of financial literacy are budgeting, saving, borrowing, and investing, all of which highlight the significance of the capacity to apply knowledge and skills to manage money. Hamid and Loke (2021) observed that general money management practices, including budgeting, managing credit, managing bill payments, and maintaining a bank account, are all related to financial management skills. Loza et al. (2024) mention that sustainable financial practices are those individual actions that may support a person's capacity to handle difficult financial circumstances at any point in their life. Financial skills have a beneficial role in that promotion. Research by Dare et al. (2020) notes that various student characteristics in the Netherlands demonstrated that although the financial education program improved students' understanding and skill scores in transaction execution, it did not improve their scores in responsible spending. Programs for financial education enable students to put what they learn into practice right away and may enhance their understanding of and proficiency with key financial abilities. Research highlights how important financial literacy is for promoting responsible decisions, efficient money handling, and long-term financial stability. Given the circumstances, having sound financial skills is crucial for long-term financial sustainability since it enables people to adjust to changing financial situations and obstacles as they arise.

Financial Self-efficacy

A person's perceived capacity to complete a task considering expectations and prior performance is known as self-efficacy. Self-efficacy dictates whether or not someone will follow a certain course of action and how tenaciously they will pursue an exceedingly difficult task (Bandura, 1982). Financial self-efficacy is an individual's confidence in their capacity to get the knowledge necessary for making sound financial choices (Lone & Bhat, 2024). Consequently, a stronger conviction in one's financial capability correlates with more positive future outcomes (Brüggen et al., 2017). Additionally, financial self-efficacy aids in preventing unfavourable financial behavior and, as a result, the anxiety that goes along with it (Hadar et al., 2013). Moreover, it is posited that financial self-efficacy inspires a disciplined approach to realizing long-term financial objectives (Chowdhry & Dholakia, 2019). Further, people with enough financial knowledge and information are self-assured in their ability to execute profitable deals. In addition, self-efficacy indirectly aided the process of cognitive thinking to accomplish desired action motivated by willpower compared to people's abilities (Noor et al., 2020).

Financial Knowledge

A person's level of financial knowledge reflects their understanding of financial subjects. Some basic financial concepts are assessed to determine their comprehension degree, including compound interest, inflation, deposits, time value of money, diversification, interest rates, debt, and assets (Damayanti et al., 2024). Financial knowledge is an individual's understanding of financial concepts and personal financial information necessary for effective financial management and decision-making (Rai et al., 2019). Dhar and Zhu (2006) discovered a correlation between the propensity effect and an investor's level of financial knowledge. Research indicates that those with more financial literacy and employed professionals have less tendency effects. Whether factual or subjective, financial knowledge has a powerful impact on financial attitude and behavior. According to Howlett et al. (2008), those with financial knowledge are better equipped to manage money since they are more financially literate. The research findings indicate that financial knowledge is crucial in evaluating an individual's financial literacy and ability to make sound financial decisions.

Financial Inclusion

As financial literacy grows, there is a greater demand for formal and leisurely financial products and inclusion (Zaimovic et al., 2023). Financial literacy enhances comprehension of intricate financial products; individuals who engage with these products gain deeper insights, thereby elevating their levels of financial literacy significantly. Numerous studies (Adetunji & David-West, 2019; Morgan & Long, 2020) indicated that financial literacy is crucial in determining financial inclusion. The findings indicate a noteworthy and substantial financial literacy and inclusion significance. (Rastogi & Ragabiruntha, 2018) demonstrated the factors that promote financial inclusion, including financial literacy, internet banking, and an awareness of banking services. They also demonstrate how financial inclusion may result in economic progress. Moreover, in the words of (Grohmann et al., 2018), financial inclusion has been recognized as a multi-faceted construct including access to finance, national features, use of financial services, financial infrastructure, and institutional attributes of the country. There is evidence that behavioral factors significantly impact financial inclusion (Zaimovic et al., 2023). Bongomin et al. (2018) showed that the association between financial literacy and financial inclusion of poor populations is significantly moderated by cognition. Furthermore, there are clear correlations between financial inclusion and cognitive and financial literacy. By expanding access to formal financial services, financial inclusion raises financial literacy. Customers inevitably learn more about financial products and services when they utilize digital financial platforms, credit, and banking. Students gain more financial awareness and can make wiser financial decisions due to this hands-on experience. People and the economy gain when financial inclusion increases financial literacy and competence.

Financial Capability

Dewi, Febrian, and Effendi (2020) stated that recent developments in financial literacy have included incorporating financial capabilities. Lusardi (2011) assessed financial capability using criteria that included individuals' abilities to manage their finances, plan, choose and oversee financial goods and services, and enhance their skills and knowledge for making investment decisions. The OECD (2009) created a financial capability model emphasizing the behavioral, knowledge, and attitude components. The model measures six components: meeting needs, tracking, choosing the right product, planning, obtaining, and using information, and obtaining assistance, such as actionable advice, to help people overcome their financial challenges. The OECD (2013) defines financial capability as having the capacity to make long-term plans and manage funds daily.

Financial Attitudes

Financial attitudes refer to beliefs and values about many facets of personal financial resources (Damayanti et al., 2024) and an individual's tendency or disposition regarding financial issues. The capacity to strategize for the future and manage a savings account is what holds significance (Rai et al., 2019). Bhushan and Medury (2014) concluded that cultivating positive financial attitudes among the populace should be the main goal of improving financial literacy among generations. Only then can any financial education program really pay off. According to research by (Sohn et al., 2012), a young person's attitude toward money may influence their financial literacy. Students with a positive outlook on money and finance are more likely to behave in ways that increase their financial literacy and awareness. However, having a bad attitude will make it harder for them to make wise financial decisions. In conclusion, positive financial attitudes like saving and planning may help people become financially literate and make smart choices. Negative attitudes that hamper financial learning might lead to bad financial decisions. To succeed, financial literacy and education programs need healthy financial attitudes, particularly among younger generations.

Financial Behavior

The OECD (2013) emphasizes that financial behavior is a crucial foundational element of financial literacy. Financial behavior refers to human behavior that is relevant to making financial decisions and managing money, such as creating and adhering to an acceptable budget plan, paying bills promptly, and consistently saving money (Bhushan & Medury, 2014). Financial behavior is evident in the actions taken by individuals that highlight both positive and negative conduct. Efficient cash management, emergency savings, credit management, long-term goal planning, risk management, and estate planning are examples of positive financial behavior. Conversely, poor financial practices include squandering money, depending too much on employer-sponsored pension plans, and refraining from having financial conversations (Dewi et al., 2020). Another element discussed by Banthia and Dey (2022) that influences respondents' financial behavior is their current financial situation. An individual's ability to comprehend monetary perspectives is one of the characteristics that determines their degree of financial literacy. The collection of acts carried out regarding financial activity is known as financial behavior. In conclusion, financial behavior is crucial to financial literacy because it turns knowledge into action. Disciplined budgeting and saving demonstrate and strengthen financial knowledge. Poor financial habits may hinder financial comprehension, underlining the symbiotic link between financial behavior and literacy in long-term financial well-being.

Financial Goals

One of the most essential ways to gauge someone's financial literacy is by examining their financial goals. A person lacks a roadmap to help them reach financial independence if they do not have clear, quantifiable financial goals (Priyadharshini, 2017). Dewi (2020) demonstrated that when people have clearly defined their financial goals, it may help them make more informed choices, which can assist them avoid accepting offers of financial goods that are enticing but deceptive. In the words of Hogarth and Hilgert (2002), the secret to succeeding in reaching financial independence is identifying sensible financial goals. While everyone should want to have a good financial status, making bad decisions may nonetheless impact one's financial well-being in the absence of this goal. Naturally, having sound financial literacy allows one to base judgments on accurate facts (Woodyard, 2013). Empirical evidence demonstrates that well-defined and measurable financial goals are critical to financial literacy as they influence financial independence. Those who have clearly stated their goals can better manage their funds, refuse unsolicited offers, and make wise financial decisions. Without goals, even financially astute individuals might suffer. To impact decision-making and attain long-term financial stability, financial literacy entails understanding financial concepts and setting and pursuing reasonable financial goals.

IMPLICATIONS OF THE STUDY

The study emphasizes the value of a comprehensive strategy for financial literacy that incorporates important factors, including inclusion, self-efficacy, skills, behavior, and financial awareness. Financial education programs must go beyond information to promote sustainable financial decision-making and include real-world experience, behavioral change, and practical applications. Prioritizing financial inclusion would help policymakers increase access to sustainable financing and investments while improving financial literacy, especially for underprivileged populations. Long-term behavioral change also requires addressing psychological issues such as self-efficacy and financial attitudes. Promoting practical experience with financial instruments and resources will help people advance their financial knowledge and aptitude, eventually leading to a more sustainable and financially literate society. This study presents significant considerations for policymakers, educators, and consumers. The OECD (2006) underscores that financial literacy among young people is a significant policy issue that necessitates attention from the highest levels of government. The OECD has urged governments globally to address the importance of financial literacy by implementing initiatives to enhance financial education. This study contributes to the existing body of knowledge and practical applications. Stakeholders, including policymakers, the public, researchers, and youth organizations, may utilize the results of this review to enhance focus on elements that contribute to the improvement of financial literacy in finance.

CONCLUSION

Financial literacy is an essential life skill that is vital in achieving financial security, enhancing individual well-being, fostering economic growth, and promoting overall sustainable development. This study's primary goal was to thoroughly evaluate the variables that affect financial literacy in sustainable finance. In summary, various elements, including financial knowledge, inclusion, self-efficacy, skills, behavior, and attitudes, influence financial literacy's complex and varied construct. A comprehensive strategy is necessary to promote significant advances in financial literacy, especially regarding sustainable financing and investments. This entails addressing behavioral and psychological factors that affect decision-making and teaching financial information. To increase access to financial services and empower people to adopt sustainable financial habits, financial inclusion is essential. In the end, integrating practical financial experience with focused educational initiatives will contribute to developing a financially literate populace that can make sustainable financial choices. Enhanced financial knowledge among investors positively influences their financial attitudes, behaviors, financial capabilities, and various additional factors.

Nonetheless, financial literacy in sustainable finance encounters several challenges and obstacles, including insufficient knowledge, information asymmetry, product complexity, elevated costs, little returns, and regulatory uncertainty. Consequently, there is a need for enhanced education and awareness initiatives, improved disclosure and reporting requirements, more innovation and product development, additional incentives and subsidies, and greater cooperation and coordination among stakeholders. Consequently, to progress in sustainability, we must all dedicate ourselves to using financial literacy as a tool in every aspect of our lives to capitalize on the advantages of sustainable finance.

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