
Assessing Financial Literacy of Higher Secondary Students in Maldives

M. Shamoon ^{a,*}, S. Ibrahim ^a, R.A. Hameed ^a

^a Maldives National University

A B S T R A C T

This quantitative study aimed at assessing the financial literacy of higher secondary education students residing in Haa Dhaal Atoll (Northern Atoll) of the Maldives. Data was collected from 177 students, and simple random sampling students were randomly selected. The methods of data analysis were Exploratory Factor Analysis along with hypothesis testing to analyze the data. Results indicate that there is a strong relationship between financial awareness and financial self-efficacy while there is moderate relationship between financial experience and financial self-efficacy as well as moderate relationship between financial self-efficacy and financial behavior. Studies to assess financial self-efficacy of students are seldom conducted in the Maldives, hence, this gives two primary implications; one for academia as this study adds to the current body of existing literature. The second implication is to the public; educational ministry and authorities responsible for devising financial programs can curate programs that would equip students with the most crucial financial skills they require. There is limited literature based on the financial literacy of Maldivian students; hence, this is a novel study. While few studies have been conducted on financial literacy based in the Maldives, the analytical studies are limited.

Keywords: Financial Awareness, Financial Behavior, Financial Efficacy, Financial Experience, Financial Literacy

1. Introduction

Research on financial literacy reveals that many consumers lack the knowledge to make sound financial decisions, which impacts their financial well-being. Studies indicate that financial knowledge is linked to positive financial behaviors, yet there is debate over whether financial education directly enhances financial literacy (Munawar., 2023). Lusardi and Mitchell (2023) study found that middle-aged individuals who took a high school financial management course saved a larger portion of their income. However, many respondents could not recall if they had taken such a course, casting doubt on the accuracy of findings about education's long-term impact.

With the various types of financial instruments being introduced every day and the shift of lifestyle changes of most Maldivian families from extended families to nuclear families, managing individual finances is integral for a secure future. According to Lusardi and Mitchell, integrating financial literacy into education is essential. Programs targeting students and employees have shown positive outcomes, leading to improved financial behaviors like saving

* Corresponding author: mohamed.shamoon@mnu.edu.mv

and effective debt management. Schools, workplaces, and governments play pivotal roles in promoting financial literacy through various educational initiatives (Lusardi & Mitchell; Lusardi & Messy, 2023).

Looking into Maldives, Financial literacy is essential for the Maldives' economic resilience, given its dependence on tourism and unique challenges. Although general literacy rates are high, financial literacy remains low, leaving many vulnerable. Key challenges include the lack of school-based financial education, cultural stigmas around money discussions, limited access to financial services, and economic susceptibility to external shocks. Recommended strategies include integrating financial education into school curricula, community programs, partnerships with financial institutions, digital learning tools, and government-led initiatives. Strengthening financial literacy will empower Maldivians to make informed financial decisions, fostering long-term national stability and growth (Empowering Maldivians Through Education and Awareness, 2024). With many students moving to the capital area or to other more populous islands and cities in the Maldives, they depend heavily on managing individual finances to live. Having financial awareness is crucial for a student to manage finances individually and even for the future. This study analyzed the factors that contribute to responsible financial behavior in the northern region of the Maldives among higher secondary schoolers (aged 18 and above). This study tested three hypotheses based on the following three research objectives and the consecutive three research questions.

2. Research Problem

The National Bureau of Economic Research's (NBER) study on financial literacy among college students offers relevant findings for assessing financial knowledge in higher education. It emphasizes students' abilities to understand budgeting, savings, credit, and investment concepts, all critical for managing personal finances after graduation. The study also examines variations in financial literacy based on demographic factors, aligning with efforts to assess financial literacy levels among students in Haa Dhaal Atoll, Maldives.

In findings on financial literacy among higher education students in the Maldives, various sources underline the importance of financial education and literacy for youth. Studies using OECD's PISA data show disparities in financial literacy among students, often linked to socioeconomic factors (Students performance in financial literacy in PISA, 2022). This data indicates that higher socioeconomic status and parental involvement in financial discussions are associated with greater financial literacy. These insights can serve as benchmarks when evaluating similar aspects in Maldivian students from Haa Dhaal Atoll.

Additionally, research demonstrates that introducing financial education early, especially in formal schooling, improves financial behavior and decision-making skills in young adults (Intoccia, 2023). Programs implemented worldwide show that structured financial education in schools leads to better financial outcomes, such as reduced debt and improved savings habits, which can guide Maldivian educational policymakers in designing effective interventions.

According to students' financial literacy behavior and expectation in 2015, The OECD report emphasizes the importance of financial literacy in higher education, identifying key competencies such as budgeting, saving, and credit understanding. The findings suggest that enhancing financial literacy not only benefits individual decision-making but also contributes to broader economic stability. This reinforces the need for targeted educational programs in regions like Haa Dhaal Atoll, Maldives, to equip students with essential financial skills for their future.

Research objectives;

1. To study the relationship between financial experience and financial self-efficacy.
2. To explore the relationship between financial awareness and financial self-efficacy.
3. To evaluate the relationship between financial self-efficacy and financial behavior.

Research questions;

1. What is the relationship between financial experience and financial self-efficacy?
2. What is the relationship between financial awareness and financial self-efficacy?
3. What is the relationship between financial self-efficacy and financial behavior?

3. Literature Review

3.1 Financial Literacy

According to Lusardi and Mitchell (2023), financial literacy is how people's knowledge and ability to use fundamental financial concepts in their economic decision-making and in other important matters.

Lusardi and Mitchell (2023) describe financial literacy as the capacity to understand core financial principles that helps the individuals in decision making. This skill has become crucial in the rapidly evolving financial landscape, where knowledge in budgeting, saving, and investing contributes to better decision-making and resilience against economic shocks, ultimately fostering long-term financial stability.

The demand for financial literacy has grown due to factors like the rise of digital financial services and increasingly complex financial products. Lusardi and Mitchell emphasize the shift toward personal responsibility in retirement planning, which necessitates a solid foundation in financial literacy. Without it, individuals may face challenges in making informed retirement decisions, resulting in inadequate savings and increased dependence on public resources. Lusardi and Mitchell (2023) proposed two hypotheses to explain this discrepancy: first, knowledge from financial education might only become relevant when individuals have resources to apply it; second, economic conditions during the respondents' youth—like fewer credit options and frugality due to parents' experiences in the Depression—may have influenced behavior more than education alone.

The current study builds on this research by examining recent high school graduates from a Midwestern school where some took a personal financial management course. This study assesses whether the course directly influences financial literacy and decision-making, providing clearer insights into education's role in shaping financial behaviors. Adding to it, Financial literacy also benefits communities and societies, as greater financial knowledge correlates with responsible financial behavior, such as lower debt and higher savings. This not only supports individual well-being but also contributes to broader economic stability. Financially informed citizens are better prepared for economic disruptions, as evidenced by the resilience shown during crises like the COVID-19 pandemic (Lusardi & Messy, 2023). According to Lusardi and Mitchell, integrating financial literacy into education is essential. Programs targeting students and employees have shown positive outcomes, leading to improved financial behaviors like saving and effective debt management. Schools, workplaces, and governments play pivotal roles in promoting financial literacy through various educational initiatives (Lusardi & Mitchell; Lusardi & Messy, 2023). Lusardi and Mitchell (2023) argue that financial literacy is a vital life skill, integral to individual and societal well-being. As financial landscapes grow more complex, the need for relevant education and awareness increases

across demographic groups. Addressing gaps through tailored financial education initiatives can help create a more financially secure and informed society.

This is the question Lusardi and Mitchell (2023) raise with their study on financial literacy, whether it aids individuals in making well-informed choices within a complex financial system. They claim that financial literacy is an essential ingredient of human capital, reducing the frictions people face when they come to save (or not), invest or understand concepts as basic as inflation and risk. Now research demonstrates that financial education is not evenly distributed among demographic groups and a subset of society —young people, women, and racial minorities—enter the workforce with lower levels of knowledge in the area. To plug such gaps, they are suggesting personalized financial learning prototypes aimed at demographic requirements while teaching money-management skills to students and employees. Xu et al. (2023) agrees that financial literacy improves the current and long-term participation in pension of the individuals in rural households and makes higher pension contributions. At the same time, the findings also suggest that high financial literacy has comparative advantages in household pension decision making in rural areas and effective financial literacy enhances the “current, long-term and dynamic impacts of residents' financial literacy on NRPP participation and pension contributions”. Nguyen et al. (2022) in their study of understanding financial literacy and associated factors among adults in a low-income country found that lower financial literacy is associated with having lower income and also shows that people with higher financial literacy are more likely to be ‘uncertainty avoidance’ than those with engaging uncertainty.

Annamaria Lusardi's lecture further emphasizes the essential role of financial literacy in today's evolving economy, focusing on key concepts like interest, inflation, and risk diversification. These fundamental questions reveal a lack of understanding globally, with only about a third of adults answering them efficiently even in financially advanced countries. She et al. (2023), in their systematic review findings stated that, several contextual and personal factors influence financial well-being of young adults such as changes in macroeconomic environment, market factors, technological advancement and financial social comparisons, sociodemographic, personality traits and values, skills and attitudes, financial practices, financial socialization, lifestyles and early life experiences, and subjective financial situation and mental health. In another study it was revealed that financial literacy programs are crucial in enhancing knowledge and behavior of children and adolescents and effectiveness of financial literacy programs are enhanced by experiential learning, integration of real-life financial scenarios, and parental involvement (Mancone et al., 2024).

Drexel University's doctoral research investigates financial literacy levels among college students, stressing the urgent need for effective financial education. The study reveals a significant knowledge gap that can lead to poor financial choices and increased debt. By employing quantitative methods to evaluate various aspects of financial literacy, such as budgeting, saving, and investing, this research underscores the importance of integrating financial literacy into higher education curricula, making it especially relevant to study in Haa Dhaal Atoll, Maldives. By providing students with essential financial skills, educational institutions can promote responsible financial behaviors that contribute to individual and community economic stability (Intoccia, 2023; Munawar, 2023).

This study explores college students' financial management, highlighting parental influence on financial behaviors. Using multi-state data, it examines how students gain financial knowledge and identifies risk factors. Findings offer insights into enhancing financial education for students, parents, and educators (Intoccia, 2023).

Financial literacy is increasingly prioritized by financial institutions, educators, and state governments, with several states now mandating personal finance education in schools. Georgia, for example, integrated personal finance into its K-12 curriculum, including an end-of-course test in high school economics. College financial literacy is also critical, as students' financial decisions impact both their post-graduation finances and academic performance. A study conducted in Hungary shows that the financial literacy of the population is improving after Covid-19 pandemic; however, the practical use of financial literacy knowledge is below the international average (Baranyi et al., 2022). In a study by Koskelainen et al. (2023) found that in the recent years, with the development of FinTech, financial literacy and landscape is changing, this changes effects the consumers consumption patterns and money management, consumers ability to adapt their financial behavior according to innovative digital services and tools, and suggest that financial literacy and digital financial literacy should be taught in schools at younger age as both these can be seen as 'survival' skills.

Incorporating financial literacy in the education system would improve financial literacy, financial efficacy and financial behavior. It has been shown that the financial landscape is changing as in any other field and making the field more complicated making it difficult to navigate without proper knowledge. Mansur et al. (2024) in their study of elementary school students shows that education programs enhance financial literacy among elementary school students and involve students in hands-on projects which teaches elements of financial literacy greatly improves the financial knowledge, behavior and attitude, also suggested that collaboration between schools and bank provided a practical platform for financial learning. A Canadian study by Morris et al. (2022) found that financial confidence explains financial behavior and financial behavior is explained by learning capacity and suggests that financial education should be considerably improved and educators need to consider the role of financial confidence in explaining financial behavior. Akinyemi, (2025) found that financial coaching is more effective in improving financial outcomes than traditional financial education and found that financial coaching significantly enhanced financial stability of low-income participants, so that tailored coaching to specific socioeconomic contexts can be key strategies for addressing the wealth gap. In developing countries, the consequences of poor financial decision-making are more severe. While there is strong motivation to improve financial education, evidence of its effectiveness remains mixed, with some studies showing positive results in specific behaviors, while others suggest limited impact. Understanding the factors behind this heterogeneity is crucial for enhancing financial education programs.

3.2 Theoretical Literature

Multiple theories have explained how we learn new skills, knowledge and interactions. These theories also explored how we implement what we have learned into practice in our lives. How we learn financial literacy and implement what we have learned can be explained by 'triarchic theory, financial socialization theory, social leaning theory and theory of consumer socialization.

Analytical intelligence refers to the ability to analyze, evaluate, and compare information and it is required for solving problems and judging the quality of ideas (Bag et al., 2025) which is often measured through conventional IQ tests (Cherry, 2024). It encompasses problem-solving skills and logical reasoning (Yang et al., 2022). Creativity involves the ability to generate novel and appropriate solutions to complex problems (Fang et al., 2025). Creative intelligence involves the capacity to generate novel ideas and think outside the box, which is crucial for innovation and adapting to new situations (Tsatsou-Nikolouli, 2023). Practical intelligence is one of the most important which enables individuals to adapt to change, practical intelligence is the ability to apply knowledge to real-world scenarios (Hammadi et al., 2023), often referred

to as "street smarts," and it emphasizes the importance of context in determining what constitutes intelligent behavior (Kamkar et al., 2021) .

Some critics of the theory argue that triarchic theory does not significantly deviate from the general theories of intelligence and suggested that the triarchic variables may overlap with existing intelligence constructs (Yu et al., 2025; McAndrews & Ha-Brookshire, 2020).

There are various theories that found the importance of financial literacy and how Human Capital Theory, Ross (2024) explains that people improve their economic outcomes by investing in education and skills. Financial literacy is a key part of this investment. In today's complicated financial world, being financially literate helps individuals make informed choices about budgeting, saving, and investing. It allows them to understand and use various financial products effectively. Furthermore, financial literacy contributes to long-term financial stability, helping individuals deal with economic challenges. Becker's work highlights that educated individuals tend to make better financial choices, improving their productivity and economic well-being. Financial literacy is vital not only for personal success but also for broader economic growth. Understanding and managing finances can significantly improve one's quality of life and help achieve financial goals, showing the essential role of education in building financial skills (Ross, 2024).

3.2.1 Investment in human capital

Abdelwahed and Doghan (2023) emphasizes that investing in education and skills can significantly boost individual productivity and economic outcomes. They argued that performance is affected by organizational learning culture and the quality of their work might improve their competency through skills, new knowledge and ability. It was found that financial literacy positively correlates to investment behavior and improves the confidence of young adults' ability to make the right financial decision (Chawla et al., 2022). Pandey et al. (2022) highlighted that financial inclusion, financial literacy and financial initiatives as main drivers' financial stability of the society and the economy at the same time financial literacy enhances sustainable growth. As financial literacy becomes more important in navigating complex financial systems, incorporating it into education can enhance the human capital of future generations. Serhii et al. (2025) argues that there is a pressing need for the development of financial skills via financial literacy programs of the most vulnerable segments of the society (Zaimovic et al., 2023) financial literacy education led to higher financial literacy and intern results in better financial inclusion thereby reducing gender gap.

Behavioral Finance Theory examines the impact of psychological factors and biases on financial decision-making. J. Chen (2024) explores Prospect Theory and how individuals make choices when faced with risk and uncertainty. It emphasizes cognitive biases, such as loss aversion, where people tend to prioritize avoiding losses over pursuing gains. Recognizing these biases is crucial for enhancing financial literacy, as it enables individuals to identify common pitfalls in personal finance. By addressing these psychological elements, financial education can provide strategies to mitigate bias effects and enhance decision-making. This understanding fosters improved financial behaviors, benefiting both individuals and communities (J. Chen, 2024).

J. Chen (2024) reveals that individuals do not always act rationally when facing financial choices; they often fall victim to biases that skew their judgment. Key ideas include loss aversion, where potential losses weigh more heavily than equivalent gains, and framing effects, which show how different ways of presenting the same information can lead to different decisions. These insights are crucial for improving financial literacy, as recognizing these biases helps individuals avoid irrational behaviors in financial decision-making. Including behavioral

finance principles in educational programs can empower individuals to make more informed choices (J. J. Chen, 2024).

J. Chen (2024) also investigates how psychological factors shape consumer behavior, integrating economic theory with psychological insights. He points out that consumers often make decisions based on simple rules and biases, leading to choices that may not align with traditional economic predictions. This exploration is vital for understanding financial decision-making, as it highlights the influence of behavioral factors on economic choices. Thaler's work lays the groundwork for behavioral economics, further explaining consumer choice complexities (J. Chen, 2024).

Theory of Planned Behavior (TPB) suggests that a person's intentions, attitudes, and perceived control over behavior greatly affect their actions. In financial literacy, TPB implies that a positive attitude toward financial education can improve financial behavior. By encouraging positive views of financial learning, educational programs can boost students' confidence in making financial decisions. This theory shows the importance of psychological factors in shaping financial practices (The Theory of Planned Behavior, 2022).

Life Cycle Theory, The Life Cycle Theory of Saving and Investing examines how individuals plan their finances over their lifetime. Kotlikoff and Spivak discuss how people base their financial choices on expected lifetime income, aiming to maintain consistent consumption throughout different life stages. This means saving during high-earning years and spending savings during retirement. Understanding this theory is crucial for improving financial literacy, as it provides insights into effective saving strategies and the importance of planning for long-term financial needs (Firni, 2021).

Bandura's Social Learning Theory emphasizes the role of observation and imitation in learning behaviors. Individuals learn not just from their experiences but by watching others. This is relevant to financial literacy because young people can learn valuable financial skills by observing their peers, family, and mentors. Creating environments where positive financial behaviors are shown can improve financial literacy in communities, leading to better financial decisions overall (Rumjaun & Narod, 2025). Generation Y in particular have a strong influence of peers in shaping their financial behavior and financial behavior of youths are shaped by their interaction with peers (Alshebami & Aldhyani, 2022).

Research conducted in Rwanda by surveying 83 farmers suggests that there is no significant relationship between social learning and community participation with financial literacy. However, this paper suggested making use of existing community gathering of Umuganda to improve financial literacy while focusing on younger people and females (Sanderse, 2023). It was also found in another study that role modeling of peers appears to have negative effects on financial literacy, but parental financial factors have positive financial literacy knowledge in Adolescents (Agnew et al., 2025)

3.3 Financial Experience

According to Chabaeffe and Qutieshet (2024) financial experience is the real life experience a person gains with repeated handling of money in their lifetime. Researchers suggest that having to acquire loans, handle current and saving accounts have led to the increase of financial literacy usage with the need for financial experience mounting (Chabaeffe & Qutieshet, 2023). With the advancement of healthcare facilities, the lifespan of people is increasing, hence, the need for retirement schemes and investments specifically is becoming more crucial, thereby mandating one to acquire proper financial experience to handle one's own retirement investment as well as schemes (Kawamura et al., 2021). According to Siregar and Simatupang

(2023), financial experience significantly affects financial literacy and financial self-efficacy. Today's marketplace being complex, success depends on people's ability to make long-term financial decisions in which financial experience is a deciding factor (Pivoriūtė, 2024).

Financial literacy and financial experience have gained popularity in academia recently due to its relevance to the daily life of people where most purchase homes as well as other assets under loan schemes or some form of credit schemes. A study conducted among the SME owners in Pakistan shows that there is a positive relationship between digital financial literacy of SME owners' and financial success as well as enterprise risk management practices (Al-Hashimy et al., 2022).

Financial self-efficacy is 'conceptualized as the confidence of an individual in his/her ability to acquire information for making effective financial decisions' (Lone & Bhat, 2022) also suggested that financial literacy leads to financial well-being and have a strong positive relationship also financial efficacy have a mediating effect with respect to financial literacy and financial well-being (Lone & Bhat, 2022). Another study reveals that financial self-efficacy mediates the relationship between financial experience and financial behavior (Muslichah et al., 2023). Financial inclusion has a strong positive impact on financial literacy and results in financial stability as financial literacy provides a cognitive framework for sound decision-making (Hosen et al., 2025). Harahap et al. (2022) suggested retirement planning is not directly related to level of financial literacy however mediated by financial risk tolerance and influence of financial literacy over retirement planning is influenced and strengthened by herding behavior. As per Johan et al. (2021), factors such as income, work experience, field of study and often engaging in discussions circulating about money, financial experience and know-how increase versus people who refrain from discussing financial matters. Several studies reveal that younger generations are more likely to be in debt and are in financially challenging situations compared to the older generations, which again raises the importance of attaining financial experience and know-how (Johan et al., 2021).

3.4 Financial Awareness

According to Nogueira et al. (2025), financial knowledge refers to the theoretical understanding of financial concepts, such as interest rates, investments, as well as banking products. According to the OECD (2023) financial knowledge is the individual's basic knowledge of financial concepts to apply them in financial contexts correctly and thus make their choices. Concepts about the effects of inflation on savings, the benefits of savings, interest, and risks are some of the ideas that must be mastered to have financial knowledge. Financial awareness consists of financial knowledge pertaining to financial behaviors such as investing in shares, retirement planning, managing debit-credit cards and saving. Financial literacy and financial knowledge are sometimes used interchangeably.

A study conducted in Singapore portrays that the people who are more financially literate are more likely to engage in responsible financial behaviors and decisions because they are financially more aware, possess more knowledge that aids them (Fong et al., 2021). Another study conducted in Ghana also provides evidence that financial literacy has a significant effect on sound financial behavior and that this leads to better management of finances by those who have the knowledge (Tuffour et al., 2022). Carpena and Zia (2020) argue that during the last decade, financial educational programs have been increasingly popular, while there are counterarguments claiming that financial awareness along with financial knowledge is not imperative when making financial decisions.

A Canadian study shows that financial confidence is positively correlated to financial behavior however financial knowledge is not linked with financial behavior and highlighted the

importance of learning capacity in explaining financial confidence (Morris et al., 2022). Several factors including financial knowledge influences the financial management behavior of students (Rahmawati & Marcella, 2023), and financial literacy is positively associated with entrepreneurial intention while it is shown that Entrepreneurial education does not explain entrepreneurial intentions also shows that financial knowledge contributes the intention to set up a new venture (Tran et al., 2024). Studies show that financial awareness significantly correlates with financial self-efficacy (Ching et al., 2021). At present, due to the complexity, managing finances well, a deeper understanding of financial resources is mandatory, hence, both objective as well as subjective knowledge is vital (Dogra et al., 2023). According to several research studies, a high degree of financial awareness leads to responsible financial decisions and because life expectancy is increasing, the need to manage finances during a long retirement period is essential (Dogra et al., 2023).

3.5 Financial Self-Efficacy

According to Salas-Velasco (2022), studies portray that having proper financial knowledge can better equip students to make strategic financial decisions, some pertaining to the student loans, however, the empirical research shows a contrasting picture, multiple studies showing that there is poor financial literacy among students. Salas-Velasco (2022) further elaborated that both the students as well as parents do not possess optimum financial knowledge to consult students or other. Asmin et al. (2021) defines financial self-efficacy as one's belief as well as confidence in the financial ability and the confidence in making sound financial decisions. A study conducted by Kartawinata, Fakhri, et al. (2021), financial literacy is the knowledge and the ability to comprehend about financial concepts and have the confidence to incorporate such knowledge in order to create successful results. Studies show that there is a significant relationship between financial self-efficacy and financial experience as well as awareness (Noor et al., 2022). As explained by Chong et al. (2021), there is a significant relationship between financial self-efficacy and financial behavior, particularly strategic financial behavior. As per Liu and Zhang (2021), financial experience, financial self-efficacy and financial behavior are linked with financial experience significantly affecting both financial self-efficacy and financial behavior. Another study portrays financial self-efficacy, financial awareness and financial behavior intertwined with each other with each construct having a significant effect on the other construct (Cera et al., 2021). Highlighted by Khawar and Sarwar (2021), the growing need to make better financial decisions are due to the vast changes that are taking place all over the world, with global finances interlinked with each other and trade being open to the entire world, hence, the ability of a person to handle financial instruments are crucial through their entire lifetime.

3.6 Financial Behaviour

According to Kartawinata, Wijayangka, et al. (2021) Financial behavior is the attitude and behavior that a person has in managing their finances. According to Kumar et al. (2022), pandemic made young adults financially vulnerable and financially worse-off leads to psychological problems. Among these young adults, financial well-being is positively associated with and influenced by financial behavior and financial socialization while it is shown that financial literacy has no significant impact of financial well-being. Sabri et al. (2023) in another study suggested that subjective and objective financial literacy are positively associated with financial behavior. A study by Pandey and Utkarsh (2024), confirms that women are more financially averse when compared to men as more women are proven to take meticulous financial planning than most men (Chong et al., 2021). In another study it was concluded that financial knowledge affects financial behavior and financial attitude, perceived behavioral control affects financial behavior (She et al., 2024).

Economic well-being of a society highly depends on earnings, wealth allocation, hence being financially literate would assist a person in their long-term security (Rahman et al., 2021). Furthermore, financial well-being has aspects such as being able to meet short-term expenses with earnings, ability to save, control debt at a limited margin, being able to address financial problems and primarily being content with one's financial status (Rahman et al., 2021).

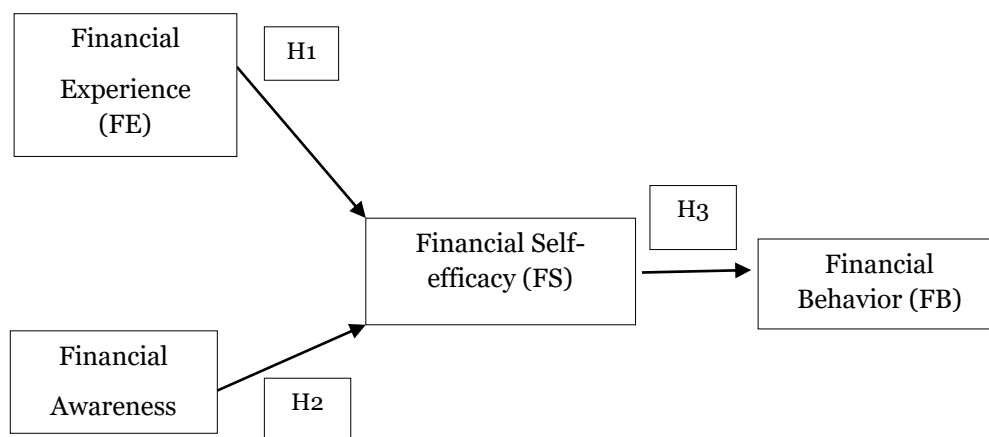


Figure 1: Conceptual Framework

Hypotheses

H1: There is a relationship between financial experience and financial self-efficacy.

H2: There is a relationship between financial awareness and financial self-efficacy.

H3: There is a relationship between financial self-efficacy and financial behavior.

4. Methodology

Research design: This study is quantitative research with factor analysis and structural equation modelling used as the analysis methods to evaluate the data collected. Research design is exploratory and the type is quantitative correlational research which three hypotheses used in this study. There are four variables in this study with two independent variables (financial experience and financial awareness), one mediating variable (financial self-efficacy) and one dependent variable (financial behavior). The conceptual framework has partial mediation as only some of the relationships are moderated by the mediating variable. All the three hypotheses are also non-directional hypotheses and several studies in the literature review evidence the correlations between the variables.

Target population: Target population is the higher secondary students residing in Haa Dhaal atoll and the total sample frame is 320 students. These students are doing all Edexcel A Level and are from all streams; science, arts and business. Final sample size was derived based on the Krejcie and Morgan table (Morgan, 1970), which entails that for a target population of 320 students, 175 should be acquired as respondents by the least. Total of 177 responses were collected for the study.

Unit of analysis: Higher secondary school students are the unit of analysis in this study; hence people are the unit of analysis.

Table 1: Questionnaire Items

Item	Question
Demographic questions	
D1	Gender
D2	Age
D3	Stream
Financial experience (FE)	
FE1	I have the sufficient experience to do my own financial records
FE2	I have experience in managing my own personal assets
FE3	I have experience in managing my own savings
FE4	I do have adequate financial experience to manage finances on my own
FE5	I do believe that my financial experience assists my financial behavior
Financial awareness (FA)	
FA1	I am aware of purchasing stocks and bonds from companies
FA2	I know how to compare alternatives before making a financial decision
FA3	I can advice family/friends on managing finances
FA4	I know how gather information related to financial issues
FA5	I am aware on how to act during a financial crisis
Financial self-efficacy (FS)	
FS1	I can control my expenditure
FS2	I am confident that my financial ability will aid me in my financial behavior
FS3	I can avoid debt as much as possible
FS4	I can find optimum solutions for any possible financial calamity
FS5	I am confident in advocating for finance management
FS6	I worry about not having enough funds during my retirement
FS7	I am confident that I can go as per my financial plans
FS8	I am fully capable of devising financial strategies for others
FS9	I have the capability to make progress towards my financial goals
FS10	I know how to research properly for financial management
Financial behavior (FB)	
FB1	I do advice my parents to pay bills on time
FB2	I am meticulous on my savings
FB3	I do suggest investing options to others
FB4	I advocate on strategies to manage finances within my social groups
FB5	Though it is early, I have a small sketch of my retirement plan
FB6	I purchase products on impulse
FB7	I do engage in making purchases due to peer pressure
FB8	I dismiss “too good to be true” opportunities passed over social media
FB9	I actively research about managing finances
FB10	I analyze cases on the news about corporate failures due to mismanaging finances
FB11	I am a frugal spender
FB12	I have not engaged in credit financing (taking loans or taking products on credit)
FB13	I make specific budgets for my own spending
FB14	I learn from my parent’s past experiences in managing finances
FB15	I do advice my parents to pay bills on time

Sampling technique: Simple random sampling under probability sampling is used as the sampling technique because the sampling frame is available. While probability sampling has other sampling techniques such as cluster, systematic and stratified random sampling, simple

random sampling is the optimum sampling technique for this study as this study focuses on a specific geographic area of the Maldives along with the actual sample frame.

Research Instrument: The instrument used in this study is a questionnaire, having a final sample size of 177, a questionnaire was the most appropriate and feasible. Data was collected online, with a google questionnaire emailed and data gathered for six months. With four variables in the conceptual framework, the questionnaire had thirty-eight questions and questions were adapted from eleven sources.

Data collection timeline: Data was collected six months with on average two questionnaires collected daily.

Pre-testing: Pilot study was not conducted; however, pre-testing was carried out with the questionnaire given to three experts to check both face validity as well as content validity.

Statistical analysis techniques: Factor analysis, reliability analysis and hypothesis testing were used as the data analysis tests; hence, SPSS was used. Demographic tests were also carried out with both inferential and descriptive analysis conducted. Under factor analysis, KMO and Bartlett's test of sphericity, cumulative percentage and rotational matrix were tested. Reliability analyses were carried out to test the reliability of the study, using Cronbach Alpha as the statistical test for reliability. The reason for using Exploratory Factor Analysis without Confirmatory Factor Analysis is due to the small sample size and the fact that SPSS does enable to complete the whole Exploratory Factor Analysis.

5. Results and Findings

5.1 Demographic Analysis and Results

Three demographic questions were used in this study; gender, age group and stream. The results of the respondents are included below.

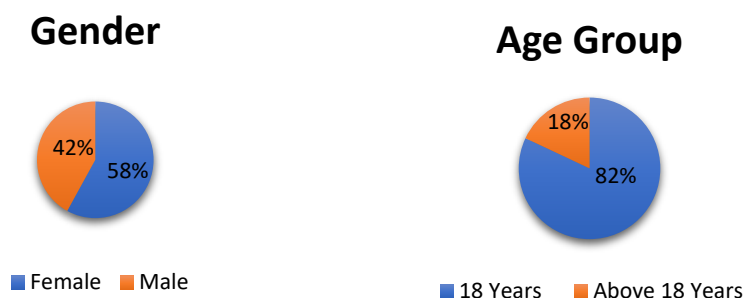


Figure 2: Gender Descriptive

Figure 3: Age Descriptive

Stream

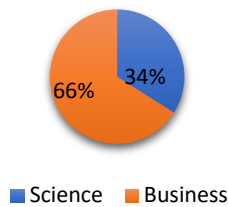


Figure 4: Stream Descriptive

Inference: Majority of the respondents were females, while most of the students who participated in the study are just 18 years old and majority of the participants were from the business stream.

5.2 EFA and Reliability Analysis

Table 2: Exploratory Factor Analysis and Reliability Analysis

Construct	KMO & Bartlett's test	Cum: %	Reliability analysis	Items dropped	Remaining items with Factor loadings	AVE	CR
Financial Experience (FE)	0.786	57.015	0.788	FE1 FE5	FE2 FE3 FE4	0.694 0.857 0.662	
Financial Awareness (FA)	0.848	65.161	0.900	FA1	FA2 FA3 FA4 FA5	0.788 0.726 0.787 0.856	
Financial self-efficacy (FS)	0.853	72.121	0.890	FS1 FS2 FS3 FS6 FS7 FS9	FS4 FS5 FS8 FS10	0.846 0.759 0.803 0.826	
Financial Behavior (FB)	0.815	64.765	0.834	FB2 FB6 FB7 FB11 FB12 FB14	FB1 FB3 FB4 FB5 FB8 FB9 FB10 FB13 FB15	0.794 0.682 0.753 0.649 0.585 0.743 0.751 0.615 0.625	
Overall	0.929	64.189	0.934			0.55	0.96

EFA was conducted using the software SPSS (statistical package for social sciences) instead of excel because of its vast features to analyze quantitative data. Under EFA, five tests were conducted including KMO and Bartlett's test of Sphericity, Cumulative percentage, reliability

analysis, Average Variance Explained (AVE) and Composite Reliability (CR). The various thresholds for the tests are as follows;

- KMO and Bartlett's test of Sphericity - According to Shrestha (2021), KMO and Bartlett's test of Sphericity is a statistical test that determines whether the data set is suitable for factor analysis and the acceptable threshold is 0.6 and above where 0.6 to 0.69 indicates mediocre threshold, while, 0.7 to 0.79 indicates a good significance and 0.8 to 1.0 indicates an excellent significance.
- Cumulative percentage - Explained by Peterson (2000), the acceptable threshold of cumulative percentage for social sciences is 50% and above.
- Reliability analysis - According to Shrestha (2021), the measure to test whether a research medium has reliability is to test the Cronbach Alpha value which should be 0.7 and above. Further elaborated by Shrestha (2021), Cronbach Alpha measures internal consistency, meaning, it measures the consistency of the research medium.
- AVE - Both AVE and CR measure the quality of the measure and any value above 0.5 and above indicates that the study has significant AVE (Cheung et al., 2024).
- CR - According to Hair et al (2021), values higher than 0.60 are deemed as acceptable values in composite reliability while values 0.95 and above indicate redundancy.

5.3 Hypothesis Testing and Mediation Testing

According to Intellectus Consulting (2025), Pearson Correlation Coefficient evaluates the strength of correlation between variables and because the dataset of the study was below 200, using AMOS software could generate errors when conducting hypothesis testing, hence, it was carried out using SPSS. To test the three hypotheses in this study, Pearson Correlation was measured as this test shows the strength of correlation between constructs.

Explained by Intellectus Consulting (2025), Pearson Correlation Coefficient, the thresholds for the measure are as follows;

- Indicates a perfect relationship: ± 1.0
- Indicates a strong relationship: ± 0.7 to ± 1.0
- Indicates a moderate relationship: ± 0.3 to ± 0.69
- Indicates a low relationship: ± 0.1 to ± 0.29
- Indicates no relationship: 0

Table 3: Pearson Correlation Output

	Hypothesis	Pearson Correlation	Interpretation
FE $\square$ FS	H1	0.387	Moderate
FA $\square$ FS	H2	0.821	Strong
FS $\square$ FB	H3	0.691	Moderate

It is seen that H1 of this study measures a Pearson Correlation value of 0.387 indicating that there is a moderate relationship between the first independent variable; Financial Experience and Financial Self-efficacy. H2 of this study measures a Pearson Correlation value of 0.821 indicating that there is a strong relationship between the second independent variable; Financial Awareness and Financial Self-efficacy. H3 of this study measures a Pearson Correlation value of 0.691 indicating that there is a moderate relationship between the mediating variable; Financial Self-efficacy and the dependent variable; Financial Behavior.

Table 4: Mediation Output

	P value	Interpretation
FE□FS	0.769	Not significant, hence do not mediate
FA□FS	0.000	Significant, hence do mediate
FS□FB	0.000	Significant, hence do mediate

According to Preacher and Hayes (2004), the traditional Baron and Kenny approach is one of the approaches to conduct mediation tests in the SPSS. While there are bootstrapping methods such as PROCESS macro in SPSS, this research employed this test and the P value (significance is a value less than 0.05) is reviewed for significance. As seen from the above table, between the first independent variable and the mediating variable, there is no full mediation as the P value is higher than the accepted threshold. However, there is mediation seen between the second independent variable, mediating variable and the dependent variable.

6. Interpretation, Conclusion and Future Research

From the analysis it is interpreted that there is a strong relationship between financial awareness and financial self-efficacy while there is moderate relationship between financial experience and financial self-efficacy as well as between financial self-efficacy and financial behavior. Therefore, it is concluded from this study that students having financial awareness does increase the ability of a student to manage finances. In addition, it is concluded that both financial experience and financial self-efficacy due to a moderate level increase sound financial behavior from students. In conclusion, both financial awareness and financial experience are factors that drive sound financial behavior although financial awareness plays a stronger role.

Q. Chen (2024) elaborates that the Prospect Theory explains how individuals make choices when faced with risk and uncertainty. Explained by Siregar and Simatupang (2023), financial experience immensely affects financial literacy and financial self-efficacy. A study in Singapore shows that the people who are more financially literate are more likely to engage in responsible financial behaviors when they are financially more aware (Fong et al., 2021). Stated by Chong et al. (2021), there is a significant relationship between financial self-efficacy and financial behavior, particularly strategic financial behavior. Another study portrays that financial knowledge affects financial behavior and financial attitude, perceived behavioral control affects financial behavior (She et al., 2024). Based on the correlation findings of this study, the relationship between financial awareness and financial self-efficacy is strong, supporting the study by (Fong et al., 2021). However, because the relationships between financial experience and financial self-efficacy is moderate, this study do not fully support the study by Siregar and Simatupang (2023). Similarly, the relationship between financial self-efficacy and financial behavior is also moderate, indicating that this study do not fully support the study by Chong et al. (2021).

As for the practical implications for the Ministry of Education and financial authorities in the Maldives, this research's findings can be considered to plan more financial literacy lessons that can be taken for students. In addition, teachers can also be trained to educate students on these skills and these teachers can give tests to assess how well the students know about handling money and finance.

One of the limitations of this paper is that it did not attempt to collect data from other regions of the Maldives and with the Maldives having three major regions; northern region, mid region

and southern region, future research could attempt to cover either the two regions unexplored in this study or conduct a study for the whole Maldives. Another limitation is the small sample size of this research which is due to the low student population that resides in Northern atolls of the Maldives, hence, future researchers could attempt to broaden the scope to other atolls or even base the study for the whole Maldives. In addition, SEM was not employed due to the small sample population because, according to Smid and Winter (2020), when using small sample sizes and generating SEM, there could be substantial statistical errors that would ultimately affect the results and the findings. Employment of cross-sectional self-report design is another limitation as this does have the possibility of biases. 18 year olds and above was used in this research because involving younger (younger than 18) mandates individual parent consent and this potentially could lead to a longer data collection. Hence, the researchers used adults (18 and above) to eliminate the probability of a longer data collection. Confining the respondents to majorly business-stream respondents is another limitation, however, the region had business stream students enrolled in higher secondary.

References

- Abdelwahed, N. A. A., & Doghan, M. A. A. (2023). Developing employee productivity and performance through work engagement and organizational factors in an educational society. *Societies*, 13(3), Article 65. <https://doi.org/10.3390/soc13030065>
- Agnew, S., Roger, P., & Roger, T. (2025). Adolescent financial literacy: Viewing peers as good financial role models. *Young Consumers: Insight and Ideas for Responsible Marketers*, 26(3), 464–481. <https://doi.org/10.1108/YC-10-2024-2258>
- Akinyemi, A. (2025). The role of financial literacy in reducing the wealth gap: The effectiveness of financial coaching in low-income communities (a case study of the US and Europe). *Contemporary Journal of Social Science Review*, 3(1), 1921–1949. <https://contemporaryjournal.com/index.php/14/article/view/272>
- Al-Hashimy, H. H., Alabdullah, T. T.Y., Ries, E., Ahmed, M. A., Nor, M. I., & Jamal, K. A.M. (2022). The impact of financial management elements and behavioral intention on the financial performance. *International Journal of Scientific and Management Research*, 5(12), 117–149.
- Alshebami, A. S., & Aldhyani, T. H. H. (2022). The interplay of social influence, financial literacy, and saving behaviour among Saudi youth and the moderating effect of self-control. *Sustainability*, 14(14), Article 8780. <https://doi.org/10.3390/su14148780>
- Asmin, E. A., Ali, M., Nohong, M., & Mardiana, R. (2021). The effect of financial self-efficacy and financial knowledge on financial management behavior. *Golden Ratio of Finance Management*, 1(2), 75–86.
- Bag, S., Choi, T. M., Rahman, M. S., Srivastava, G., & Singh, R. K. (2025). Examining collaborative buyer–supplier relationships and social sustainability in the “new normal” era: The moderating effects of justice and big data analytical intelligence. *Annals of Operations Research*, 348, 1235–1280. <https://doi.org/10.1007/s10479-022-04875-1>
- Baranyi, A., Csernák, J., & Csiszárík-Kocsir, Á. (2022). Methods for developing financial literacy. *Online Journal Modelling the New Europe*, (22), 174–195.
- Carpena, F., & Zia, B. (2020). The causal mechanism of financial education: Evidence from mediation analysis. *Journal of Economic Behavior & Organization*, 177, 143–184.
- Cera, G., Ajaz Khan, K., Mlouk, A., & Brabenec, T. (2021). Improving financial capability: The mediating role of financial behavior. *Economic Research-Ekonomska Istraživanja*, 34(1), 1265–1282.
- Chabaeft, N. N., & Qutieshat, A. (2024). Financial literacy, financial education and financial experience: Conceptual framework. *International Journal of Economics and Financial Issues*, 14(4), 44–55.
- Chawla, D., Bhatia, S., & Singh, S. (2022). Parental influence, financial literacy and investment behaviour of young adults. *Journal of Indian Business Research*, 14(4), 520–539.
- Chen, J. (2024). *Prospect theory: What it is and how it works, with examples*. Investopedia. <https://www.investopedia.com/terms/p/prospecttheory.asp>

- Chen, Q. (2024). Behavioral economics: Understanding the psychological factors driving consumer decisions. *International Journal of Global Economics and Management*, 4(1), 99–104. <https://doi.org/10.62051/ijgem.v4n1.16>
- Cherry, K. (2024, May 10). *Theories of intelligence in psychology*. Verywell Mind. <https://www.verywellmind.com/theories-of-intelligence-2795035>
- Cheung, G. W., Cooper-Thomas, H. D., Lau, R. S., & Wang, L. C. (2024). Reporting reliability, convergent and discriminant validity with structural equation modeling: A review and best-practice recommendations. *Asia Pacific Journal of Management*, 41, 745–783. <https://doi.org/10.1007/s10490-023-09871-y>
- Chong, K. F., Sabri, M. F., Magli, A. S., Abd Rahim, H., Mokthar, N., & Othman, M. A. (2021). The effects of financial literacy, self-efficacy and self-coping on financial behavior of emerging adults. *The Journal of Asian Finance, Economics and Business*, 8(3), 905–915.
- Dogra, P., Kaushal, A., & Sharma, R. R. (2023). Antecedents of the youngster's awareness about financial literacy: A structural equation modelling approach. *Vision*, 27(1), 48–62.
- Fang, X., Chen, Z., Lan, K., Ma, L., Ding, S., Liang, Y., Zhao, Z., Wen, F., Zhang, Z., Zhang, G., Duan, H., Chen, K., & Lin, D. (2025). Creation-MMBench: Assessing context-aware creative intelligence in LLMs. *arXiv* 2503.
- Financial literacy: Empowering Maldivians through education and awareness. (2024 September 10). *Corporate Maldives*. <https://corporatemaldives.com/financial-literacy-empowering-maldivians-through-education-and-awareness/>
- Firni, O. (2021). The life cycle hypothesis and uncertainty: Analyzing aging savings relationship in Tunisia. In [Book Title]. IntechOpen.
- Fong, J. H., Koh, B. S., Mitchell, O. S., & Rohwedder, S. (2021). Financial literacy and financial decision-making at older ages. *Pacific-Basin Finance Journal*, 65, Article 101481. <https://doi.org/10.1016/j.pacfin.2020.101481>
- Hair, J. F., Hult, G. T. M., Ringle, C. M., Sarstedt, M., Danks, N. P., & Ray, S. (2021). Evaluation of reflective measurement models. In *Partial least squares structural equation modeling (PLS-SEM) using R* (Classroom companion: Business). Springer. https://doi.org/10.1007/978-3-030-80519-7_4
- Hammadi, S. S., Majeed, B. H., & Hassan, A. K. (2023). Impact of deep learning strategy in mathematics achievement and practical intelligence among high school students. *International Journal of Emerging Technologies in Learning*, 18(6), 42–52.
- Harahap, S., Thoyib, A., Sumiati, S., & Djazuli, A. (2022). The impact of financial literacy on retirement planning with serial mediation of financial risk tolerance and saving behavior: Evidence of medium entrepreneurs in Indonesia. *International Journal of Financial Studies*, 10, Article 66.
- Hosen, E., Siddik, N. A., & Miah, F. (2025, November). Exploring the impact of financial literacy and financial inclusion on financial stability: An analysis using machine learning approaches. *Borsa Istanbul Review*. <https://doi.org/10.1016/j.bir.2025.11.004>
- Intoccia, T. K. (2023). The financial literacy of college students: A case study of financial attitudes, beliefs, and confidence. [Doctoral dissertation, Drexel University]. Drexel University. <https://researchdiscovery.drexel.edu/esploro/outputs/doctoral/The-Financial-Literacy-of-College-Students/991021119113204721>
- Kartawinata, B. R., Fakhri, M., Pradana, M., Hanifan, N. F., & Akbar, A. (2021). The role of financial self-efficacy: Mediating effects of financial literacy & financial inclusion of students in West Java, Indonesia. *Journal of Management Information and Decision Sciences*, 24(7), 1–9.
- Kartawinata, B. R., Wijayangka, C., Akbar, A., & Hendiarto, R. S. (2021). The influence of lifestyle and financial behavior on personal financial management for the millennial generation. *Proceedings of the International Conference on Industrial Engineering and Operations Management*, 2957–2965.
- Kawamura, T., Mori, T., Motonishi, T., & Ogawa, K. (2021). Is financial literacy dangerous? Financial Literacy, Behavioral Factors, and Financial Choices of Households. *Journal of the Japanese and International Economies*, 60, Article 101131. <https://doi.org/10.1016/j.jjie.2021.101131>

- Khawar, S., & Sarwar, A. (2021). Financial literacy and financial behavior with the mediating effect of family financial socialization. *Future Business Journal*, 7, 1–11.
- Koskelainen, T., Kalmi, P., Scornavacca, E., & Vartiainen, T. (2023). Financial literacy in the digital age—A research agenda. *Journal of Consumer Affairs*, 57(1), 507–528. <https://doi.org/10.1111/joca.12510>
- Kumar, M., Akbarialiabad, H., Kouhanjani, M. F., Kiburi, S., Shidhaye, P., Taghrir, M. H., & Shidhaye, R. (2022). Association of major disease outbreaks with adolescent and youth mental health in low-and middle-income countries: A systematic scoping review. *JAMA Psychiatry*, 79(12), 1232–1240.
- Liu, L., & Zhang, H. (2021). Financial literacy, self-efficacy and risky credit behavior among college students. *Journal of Behavioral and Experimental Finance*, 32, Article 100569.
- Lone, U. M., & Bhat, S. A. (2022). Impact of financial literacy on financial well-being: A mediational role of financial self-efficacy. *Journal of Financial Services Marketing*, 1–16. <https://doi.org/10.1057/s41264-022-00183-8>
- Lusardi, A. (2023). *The importance of financial literacy: Opening a new field* [Lecture slides / Keynote presentation]. Global Financial Literacy Excellence Center. https://gflec.org/wp-content/uploads/2023/11/Presentation-Lusardi-Lucia-Lecture_v3.pdf
- Lusardi, A., & Messy, F. (2023). *The importance of financial literacy and its impact on financial wellbeing*. ResearchGate. https://www.researchgate.net/publication/371517152_The_importance_of_financial_literacy_and_its_impact_on_financial_wellbeing
- Lusardi, A., & Mitchell, O. S. (2023). Financial literacy and its importance. In *Handbook of Financial Education*. Oxford University Press.
- Lusardi, A., & Mitchell, O. S. (2023). *The importance of financial literacy: Opening a new field*. National Bureau of Economic Research.
- Mancone, S., Tosti, B., Corrado, S., Spica, G., Zanon, A., & Diotaiuti, P. (2024). Youth, money, and behavior: The impact of financial literacy programs. *Frontiers in Education*, 9, 1–17. <https://doi.org/10.3389/educ.2024.1397060>
- Mansur, A., Lestari, G. D., & Nugroho, R. (2024). The importance of financial literacy among elementary school students: A case study of savings activities in Menur Pumpungan state elementary school Surabaya. *International Journal of Emerging Research and Review*, 2(3), Article 000074. <https://doi.org/10.56707/ijoerar.v2i3.74>
- McAndrews, L., & Ha-Brookshire, J. E. (2020). Apparel employees' intelligences and satisfaction. *Journal of Fashion Marketing and Management*, 24(1), 33–48.
- Messy, F., & Lusardi, A. (2023). The importance of financial literacy and its impact on financial wellbeing. *Journal of Financial Literacy and Wellbeing*, 1(1), 1–28.
- Morgan, K. (1970). Sample size determination using Krejcie and Morgan table. *Kenya Projects Organization (KENPRO)*, 38(1970), 607–610.
- Morris, T., Maillet, S., & Koffi, V. (2022). Financial knowledge, financial confidence and learning capacity on financial behavior: A Canadian study. *Cogent Social Sciences*, 8(1), Article 1996919. <https://doi.org/10.1080/23311886.2021.1996919>
- Munawar, S. (2023). Effect of financial literacy on financial decisions and consumer behavior. *Pakistan Journal of Human Studies and Social Sciences*, 11(2):2642–2654
- Nguyen, H. V., Ha, G. H., Nguyen, D. N., Doan, A. H., & Phan, H. T. (2022). Understanding financial literacy and associated factors among adult population in a low-middle income country. *Heliyon*, 8(6), 1–12.
- Nogueira, M. C., Almeida, L., & Tavares, F. O. (2025). Financial literacy, financial knowledge, and financial behaviors in OECD countries. *Journal of Risk and Financial Management*, 18(3), Article 167. <https://doi.org/10.3390/jrfm18030167>
- Noor, N., Batool, I., & Rehman, H. U. (2022). Mediating role of financial self efficacy. *Annals of Social Sciences and Perspective*, 3(1), 77–103.
- OECD. (2022). Students' performance in financial literacy in PISA 2022. https://www.oecd-ilibrary.org/education/pisa-2022-results-volume-iv_22ae8b5b-en
- OECD. (2023). OECD/INFE 2023 international survey of adult financial literacy. *OECD Business and Finance Policy Papers*, 39. <https://doi.org/10.1787/56003a32-en>

- Pandey, A., & Utkarsh. (2024). Determinants of positive financial behavior: A parallel mediation model. *International Journal of Emerging Markets*, 19(11), 4073–4093. <https://doi.org/10.1108/IJOEM-01-2022-0124>
- Pandey, A., Kiran, R., & Sharma, R. K. (2022). Investigating the impact of financial inclusion drivers, financial literacy and financial initiatives in fostering sustainable growth in North India. *Sustainability*, 14(17), Article 11061. <https://doi.org/10.3390/su141711061>
- Peterson, R. A. (2000). A meta-analysis of variance accounted for and factor loadings in exploratory factor analysis. *Marketing Letters*, 11, 261–275. <https://doi.org/10.1023/A:1008191211004>
- Pivoriūtė, M. (2024). “How do I find myself, become successful, financially independent and experience the joys of youth?” *Experiences of quarter-life crisis among Lithuanian students* [Doctoral dissertation]. Vilnius universitetas.
- Preacher, K. J., & Hayes, A. F. (2004). SPSS and SAS procedures for estimating indirect effects in simple mediation models. *Behavior research methods, instruments, & computers*, 36(4), 717–731.
- Rahman, M., Isa, C. R., Masud, M. M., Sarker, M., & Chowdhury, N. T. (2021). Financial well-being of B40 group in Malaysia. *Future Business Journal*, 7, 1–18.
- Rahmawati, U., & Marcella, E. (2023). Locus of control, financial knowledge, financial attitude, financial self-efficacy, and social economic status as antecedents of financial management behavior. *Journal of Management and Business Insight*, 1(1), 67–72. <https://doi.org/10.12928/jombi.v1i1.561>
- Ross, K. (2024). *What is human capital theory?* Investopedia. <https://www.investopedia.com/ask/answers/032715>
- Rumjaun, A., & Narod, F. (2025). Social Learning Theory—Albert Bandura. In B. Akpan & T. J. Kennedy (Eds.), *Science Education in Theory and Practice: An Introductory Guide to Learning Theory* (2nd ed., pp. 65–85). Springer Nature Switzerland. https://doi.org/10.1007/978-3-031-81351-1_5
- Sabri, M. F., Anthony, M., Law, S. H., Rahim, H. A., Burhan, N. A. S., & Ithnin, M. (2023). Impact of financial behaviour on financial well-being: Evidence among young adults in Malaysia. *Journal of Financial Services Marketing*, 1–20. <https://doi.org/10.1057/s41264-023-00234-8>
- Salas-Velasco, M. (2022). Effects of financial education on financial knowledge and self-efficacy. *Journal of Risk and Financial Management*, 15(7), Article 284.
- Sanderse, J. (2023). *Social Learning and Community Participation Key Factors for Financial Literacy among Rice-Farmers in Gisagara, Rwanda* [Master's thesis]. from <https://studenttheses.uu.nl/bitstream/handle/20.500.12932/44170/Social%20Learning%20and%20Community%20Participation.pdf?sequence=1&isAllowed=y>
- Serhii, S., Grebeniuk, N., Nazarenko, T., Parshakov, V., & Chasnikova, O. (2025). The role of financial literacy in economic development. *Salud, Ciencia y Tecnología - Serie de Conferencias*, 4, Article 1296. <https://doi.org/10.56294/setconf20251296>
- She, L., Ma, L., Sharif, S. P., & Karim, S. (2024). Millennials' financial behaviour and financial well-being: The moderating role of future orientation. *Journal of Financial Services Marketing*, 29, 1207–1224. <https://doi.org/10.1057/s41264-024-00281-9>
- She, L., Waheed, H., Lim, W. M., & E-Vahdati, S. (2023). Young adults' financial well-being: Current insights and future directions. *International Journal of Bank Marketing*, 41(2), 333–368. <https://doi.org/10.1108/IJBM-04-2022-0147>
- Shrestha, N. (2021). Factor analysis as a tool for survey analysis. *American Journal of Applied Mathematics and Statistics*, 9(1), 4–11. <https://doi.org/10.12691/ajams-9-1-2>
- Siregar, Q. R., & Simatupang, J. (2023). Influence of financial knowledge and experience on satisfaction. *Journal of International Conference Proceedings*, 6(3), 536–546.
- Smid, S. C., & Winter, S. D. (2020). Dangers of the defaults: A tutorial on the impact of default priors when using Bayesian SEM with small samples. *Frontiers in Psychology*, 11, Article 611963. <https://doi.org/10.3389/fpsyg.2020.611963>
- Intellectus Consulting (2025). *Pearson's correlation coefficient*. <https://www.statisticssolutions.com/free-resources/directoryof-statistical-analyses/pearsons-correlation-coefficient/>

- The theory of planned behavior. (2022). Behavioral change theories. <https://sphweb.bumc.bu.edu/otlt/mph-modules/sb/behavioralchangetheories>
- Tran, Q. N., Phung, T. M. T., Nguyen, N. H., & Nguyen, T. H. (2024). Financial knowledge matters entrepreneurial decisions: A survey in the COVID-19 pandemic. *Journal of the Knowledge Economy*, 15, 2274–2297. <https://doi.org/10.1007/s13132-023-01137-8>
- Tsatsou-Nikolouli, S. (2023). Creative intelligence and creative writing. *Journal Plus Education*, 34(2), 26–42.
- Tuffour, J. K., Amoako, A. A., & Amartey, E. O. (2022). Effects of financial literacy among managers. *Global Business Review*, 23(5), 1200–1217.
- Xu, S., Ali, S. T., Yang, Z., & Li, Y. (2023). Effect of household's financial literacy on pension decision making: Evidence from China's new rural pension program. *Kybernetes*, 52(10), 4611–4644. <https://doi.org/10.1108/K-03-2022-0321>
- Yang, M., Sulaiman, R., Yin, Y., Mallamaci, V., & Alrabaiah, H. (2022). The effect of business intelligence, organizational learning and innovation on the financial performance of innovative companies located in Science Park. *Information Processing & Management*, 59(2). <https://doi.org/10.1016/j.ipm.2021.102852>
- Yu, Y., Xu, Y., & Wu, Y. (2025). Developing successful intelligence in global academia: A Triarchic Framework for EAP Pedagogy. *Journal of Intelligence*, 13(11), Article 134. <https://doi.org/10.3390/jintelligence13110134>
- Zaimovic, A., Torlakovic, A., Arnaut-Berilo, A., Zaimovic, T., Dedovic, L., & Nuhic Meskovic, M. (2023). Mapping Financial Literacy: A systematic literature review of determinants and recent trends. *Sustainability*, 15(12), Article 9358. <https://doi.org/10.3390/su15129358>