



SBA students' financial literacy and family business success: A correlational study

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ABSTRACT

This research studied the effect of financial literacy on the financial performance of family-owned businesses managed or assisted by students from the School of Business and Accountancy (SBA) at Divine Word College of Laoag, Ilocos Norte, Philippines. Financial literacy was analyzed using the three dimensions: financial knowledge, financial awareness, and financial behavior, while business performance was assessed using return on assets (ROA), net cash flow (NCF), and sales.

Using a descriptive–correlational approach, data were collected from 68 SBA students actively involved in their family enterprises. Findings revealed that students demonstrated strong financial literacy, particularly in financial knowledge and financial awareness. However, statistical analyses showed no significant relationship between financial literacy and financial performance. Among the profile variables, only sex showed a significant association with return on assets, while age, degree program, and year level yielded no meaningful connections.

These results suggest that although SBA students possess strong financial competencies, financial literacy alone does not independently improve the financial performance of family-owned businesses. Contextual and structural factors—such as students' limited decision-making authority, family-driven management practices, operational experience, and prevailing market conditions are likely more influential in determining business results. This study highlights the importance of integrating hands-on learning methods, such as internships, business simulations, and mentorship, to better apply financial concepts in real business settings.

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Introduction

Financial literacy is widely recognized as a fundamental skill in both business and entrepreneurship. According to Seraj et al. (2022), financial literacy significantly enhances an individual's ability to evaluate financial information and make rational, well-informed financial decisions, underscoring its key role in shaping financial behavior and long-term financial planning. Financial literacy is vital for understanding and effectively using financial products and services. Putri et al. (2020) stated that individuals with strong financial knowledge are better equipped to understand the future consequences of their financial decisions, thereby reducing their susceptibility to financial pitfalls.

In academic and entrepreneurial settings, financial literacy is commonly measured using its core dimensions: financial knowledge, financial awareness, and financial behavior. Financial knowledge involves understanding basic financial principles such as budgeting, saving, investing, and handling risk management (Lusardi & Mitchell, 2017). Financial awareness involves the capacity to identify potential financial opportunities, interpret financial information, and assess the implications of financial decisions (Kimunduu et al., 2016). Financial behavior, meanwhile, reflects the actual financial decisions individuals make—such as budgeting, saving habits, investment choices, and responsible use of resources—and is influenced by both attitudes and external factors (Ajzen, 2020; Bai, 2023).

Within the context of family-owned businesses, these dimensions become particularly important. Family enterprises often rely heavily on the financial competence of younger members who assist in daily operations, strategic planning, and cash flow management. Research by Arrubla (2016) and Molina-García et al. (2020) indicates that financial literacy directly influences how family businesses allocate resources, plan investments, and maintain financial stability. Family-run enterprises, especially small and medium-sized ones, operate within dynamic environments where financial decisions must balance both business and household considerations. Limited managerial experience among younger family members can pose challenges, underscoring the importance of financial literacy for sustaining operations and ensuring long-term viability.

As a result, financial performance becomes a crucial metric in understanding how effectively family businesses operate. Financial performance indicators include return on assets (ROA), net cash flow, and sales, which collectively measure a firm's profitability, liquidity, and operational efficiency. Prior studies highlight that good financial performance is linked not only to technical financial skills but also to managerial discipline, budgeting ability, and responsiveness to market conditions (Harrington et al., 2016; Isdory & Mokaya, 2022). In the case of student-managed or student-assisted family businesses, these performance indicators provide insight into how well academic knowledge is translated into real-world entrepreneurial practice.

The motivation for conducting this study comes from the researchers' personal experiences: some of the researchers come from families that operate their own businesses and are actively involved in managing or assisting these enterprises. Their participation in financial tasks such as budgeting, recording transactions, monitoring sales and inventory, and managing cash flow has made them aware of the practical challenges that family businesses face. These firsthand experiences inspired the researchers to investigate how academic training in financial literacy aligns with the realities of business management, particularly among college students balancing school responsibilities with family business operations.

Despite studies exploring financial literacy among students and its influence on entrepreneurial intentions (Ahmad et al., 2021; Šubić et al., 2019), a research gap remains in understanding whether financial literacy genuinely translates into measurable financial performance outcomes in family-owned businesses managed or assisted by college students. While the literature suggests that financial literacy can shape financial behavior and business decision-making, empirical evidence remains limited for student-led family enterprises, especially in the local setting of Ilocos Norte. This study addresses this gap by examining how financial knowledge, awareness, and behavior influence the financial performance of family-owned businesses handled by School of Business and Accountancy students of Divine Word College of Laoag.

By focusing on the School of Business and Accountancy students, this research aims to provide clear, local evidence to improve the quality of school classes and training programs. Specifically, the study examines how financial literacy affects these students' business performance, assessing whether their financial knowledge actually helps them manage, keep going, and grow their businesses, thereby closing the gap between what they learn in class and what happens when they run a business. This seeks to determine whether their financial knowledge influences their capability to manage, sustain, and grow their businesses, closing the gap between what they learn in class and practical entrepreneurial outcomes.

Literature review

This review examined existing literature to determine how financial literacy affects the performance of family businesses of students of the School of Business and Accountancy.

Financial literacy is a critical competency that shapes how individuals make financial decisions, particularly in entrepreneurship and business management. Being financially literate means understanding key financial concepts and making decisions that lead to long-term, desirable financial outcomes.

According to studies, it encompasses knowledge of budgeting, savings, investments, and risk management (Duarte et al., 2022). The concept is especially relevant for young entrepreneurs and college students who may lack formal business training but manage family businesses, making it a crucial factor in ensuring business stability and growth. According to Hartono and Isbanah (2022), financial literacy is indeed a mediating variable in students' saving behavior.

In family businesses, financial literacy is pivotal to ensuring business sustainability and financial performance. According to the studies reviewed, financial literacy involves multiple dimensions, including financial knowledge, financial awareness, and financial behavior (Potrich et al., 2016; Lusardi & Mitchell, 2023). These components collectively determine how well individuals and businesses manage financial resources, plan for the future, and mitigate financial risks.

Empirical evidence (Arrubla, 2016) suggests that financial management procedures in family firms directly affect financial literacy. Family business owners often focus on generating income but may defer decisions about how to save, spend, or invest their earnings. Entrepreneurs with greater financial awareness typically improve their investment plans, control expenses more effectively, and make better budgeting decisions. It indicates that poor financial literacy contributes to poor financial management, which is one of the main reasons small businesses fail.

For college students engaged in managing family businesses, financial literacy is particularly crucial. Their ability to apply financial concepts such as cash flow management, cost control, and financial planning can significantly influence business profitability and sustainability. Growing up in a family with a business background can positively influence students' development of entrepreneurial interests; however, students from family-owned businesses are more likely to start their own ventures rather than take over their family's business (Cieřlik & van Stel, 2017). Research indicates that student entrepreneurs with higher financial literacy are more likely to adopt strategic decision-making methods, leading to improved financial performance and business growth. Students with mothers who are entrepreneurs are much more likely to have the intention to start their own businesses (Israr & Saleem, 2018).

The transition from student life to entrepreneurship requires not only a strong understanding of business but also essential financial literacy skills. A study involving students found that financial literacy improves entrepreneurial capabilities (Suparno & Saptono, 2018). Many young entrepreneurs struggle with making financial decisions due to a lack of formal training in financial management. This study emphasizes the need to focus on understanding financial literacy to bridge this knowledge gap and enhance the financial competencies of young business owners.

Dimension of financial literacy

Financial knowledge. Financial literacy is an important skill that influences how individuals manage their personal and business finances. The foundation of financial literacy is understanding key financial concepts and using them to make wise financial choices. The concept of financial literacy encompasses multiple dimensions, but financial knowledge is the primary dimension that provides the foundation to support sound financial judgment.

Financial knowledge is typically defined as the comprehension of financial concepts, including budgeting, saving, investing, credit management, and risk management. According to Jumawan-Powao et al. (2024), financial knowledge is vital for making informed decisions about personal finances, particularly in budgeting and resource allocation. The authors argued that, for instance, accounting students with stronger financial knowledge are better able to understand and manage their family income, thereby improving financial outcomes.

In the context of students, Tatad et al. (2024) examined how financial knowledge affects financial well-being, particularly among students in finance. They found that financial knowledge plays a significant role in effective budgeting and financial management, ultimately improving students' financial stability. These findings suggest that financial knowledge is more than just theoretical understanding—students must translate their learning into practical financial management skills.

Peralta et al. (2024) expanded on this by exploring the connection between an individual's financial knowledge and their investment decision-making. Their study shows that students with financial knowledge are better at making smart investment decisions, underscoring the importance of financial knowledge not only for day-to-day financial management but also for more complex decisions, such as investments.

Financial awareness. Financial awareness is a fundamental dimension of financial literacy that influences how individuals handle their finances. It means understanding their financial ideas, recognizing financial tools, and evaluating the effects of financial choices. Unlike general financial knowledge, which emphasizes facts and concepts, financial awareness focuses on applying that knowledge to financial decision-making.

Financial awareness refers to a person's capacity to recognize how their finances affect them, make informed decisions about managing finances, and understand the impact of financial choices on their long-term financial health. Jumawan-Powao et al. (2024) define financial awareness as the recognition of the importance of managing personal finances, particularly in budgeting, saving, and investing. They argue that students who are financially aware, for example, are better equipped to manage their income and expenditures effectively, leading to better financial outcomes.

Tatad et al. (2024) highlight that financial awareness is key to improving financial well-being, especially among finance students. Students with greater financial awareness have a better grasp of financial tools, enabling them to make better financial decisions and manage their finances more effectively. These findings suggest that financial awareness involves not only knowing financial concepts but also applying them effectively in everyday life.

Kimunduu et al. (2016) discovered that small entrepreneurs with greater financial awareness tend to make better financial decisions. Their study highlighted that these owners are more adept at managing cash flow, making investment decisions, and allocating resources, which are critical components of business sustainability. Similarly, Koech (2015) demonstrated that businesses with strong budgeting controls, a key component of financial awareness, typically achieve better financial outcomes, particularly in profitability and cost management.

While financial awareness is crucial, ensuring that individuals, especially students, can apply their financial knowledge in real-life scenarios is challenging. Tatad et al. (2024) noted that, despite access to financial education, many students struggle to apply what they have learned effectively. This gap suggests the need for a method that emphasizes real-world use and hands-on financial skills, helping individuals translate financial awareness into everyday decision-making.

Furthermore, Isdory and Mokaya (2022) argue that while financial awareness is essential, it must also be tailored to specific demographic groups, as financial needs and challenges can vary significantly across different life stages and socio-economic backgrounds. For instance, young adults may need to focus on budgeting and debt management, while older individuals may need guidance on retirement planning and investing.

Financial behavior. Financial behavior is a core dimension of financial literacy, which refers to the actions and habits a person demonstrates in managing their finances. While financial knowledge and awareness lay the foundation for making informed decisions, financial behaviour reflects how people use what they know about finances in real-life situations. It encompasses daily money-related activities, such as budgeting, saving, investing, and spending, and reflects an individual's financial choices and actions over time. Financial behaviour is critical in determining long-term financial health and stability. The relationship between financial literacy and financial behaviour is complex, as financial knowledge is necessary but not sufficient for translating good intentions into responsible financial actions. Ajzen's (2020) Theory of Planned Behaviour

provides a framework for understanding this relationship, positing that individuals' financial behaviour is influenced by attitudes toward financial management, subjective norms, and perceived control over their financial circumstances. The theory underscores that an individual's intentions to engage in sound financial practices are shaped by their beliefs about financial management, the social environment, and their perceived ability to act on those beliefs. This indicates that financial education must go beyond teaching concepts and should also strengthen individuals' attitudes and perceived control over their financial decisions.

Self-control is recognized as a crucial factor in financial behavior, particularly in saving and investing. De Ridder and Lensvelt-Mulders (2018) conducted a meta-analysis exploring how self-control relates to a wide range of behaviors, including financial behavior. They concluded that people with stronger self-control tend to practice better financial habits, including budgeting and delaying gratification. This aligns with Bai's (2023) findings, which show that self-control, mental budgeting, and financial literacy significantly contribute to individuals' financial well-being by enabling more deliberate and informed decision-making in areas such as saving and investing.

The influence of social factors, particularly family and peers, on financial behaviour has also been widely studied. Gentina et al. (2018) found that social influences, such as parents' and peers' attitudes toward money, significantly shape adolescents' financial behavior. These social factors contribute to the development of monetary intelligence and consumer ethics, with adolescents from financially literate households or peer groups more likely to adopt sound financial practices. Jamal et al. (2015) similarly found that external social factors and one's financial knowledge significantly impact the savings behavior of university students, suggesting that financial behavior is not solely an individual choice but is also shaped by external social forces.

In higher education, students' financial behaviors are shaped by their financial literacy and the broader social environment. Ahmad et al. (2021) explored the role of financial literacy in individuals' financial behavior in entrepreneurship, motivating accounting and business students. They found that students with strong financial knowledge tend to engage in more responsible financial practices, including budgeting and managing personal finances, which, in turn, enhances their entrepreneurial motivation. This highlights the potential of financial literacy to influence not only personal financial management but also career-related financial decisions.

Furthermore, individuals' financial behavior is influenced by their ability to engage in mental budgeting and self-regulation. Aydin and Akben Selcuk (2019) highlighted that time preferences, or an individual's inclination to prioritize immediate rewards over future benefits, significantly affect financial decision-making. They argue that individuals with a strong preference for delayed gratification are more likely to engage in more responsible financial behavior, such as saving and investing, which are key indicators of financial well-being.

Financial literacy among business students

Financial literacy is a critical competency for college students engaged in entrepreneurial activities because it helps them make informed financial choices, manage their resources effectively, and ensure the sustainability of their ventures.

Sarsale (2021) conducted a study at Southern Leyte State University in the Philippines, revealing a strong, positive relationship between financial literacy and entrepreneurial traits among students. The research highlighted that competencies in financial management are linked to traits such as innovativeness and risk-taking, essential for entrepreneurial success.

Similarly, Ahmad et al. (2019) examined Malaysian accounting students and found that financial literacy directly influences entrepreneurial intentions. The study emphasized that students with stronger financial understanding are more likely to engage in entrepreneurial activities, underscoring the need to include financial education in school programs.

In the context of young entrepreneurs, Radiantowirawan et al. (2019) assessed the financial literacy of college students who were actively managing businesses. The findings indicated that while these students possess practical business experience,

there remains a need for enhanced financial literacy to make well-informed financial choices and business sustainability.

Furthermore, a study by Suratno et al. (2021) examined the mediating role of economic literacy in the relationship between the family setting and students' entrepreneurial intentions. The study found that when families are involved in economic concepts, students' interest in entrepreneurship tends to increase, and their financial literacy tends to strengthen. These studies emphasize the crucial importance of financial literacy in shaping the entrepreneurial trajectories of college students.

Influence of family environment on students' financial literacy

The family environment is a crucial factor in shaping how students handle money and develop management skills. For college students involved in business activities, such as participating in a family-run fish-selling enterprise, the financial practices and attitudes modeled within the family can significantly impact their personal financial management.

Chotimah and Rohayati (2015) conducted a study examining how students' financial knowledge, home setting, and allowance affect their personal finance management. Their findings indicated that students' financial knowledge develops in their home environment, and financial instruction strongly influences how well they manage their personal finances. The study emphasized that the family is the first environment in which individuals learn and develop financial habits, suggesting that parents who teach their children to live frugally and manage finances well instill habits that persist into adulthood.

Further supporting this, Sisilia and Harsono (2022) found that a supportive family environment meaningfully improves students' financial management. Their research revealed that students who are guided and taught about finances at home demonstrated better financial management practices. The study concluded that students' financial knowledge, home background, and allowances shape their overall financial behavior.

In addition, a study by Kaur and Singh (2024) examined how family financial learning shapes young adults' confidence in managing money and their financial behaviors. The research highlighted how parents discuss money, set financial examples, and establish rules; all of these play an important role in building a young person's confidence in handling money, which in turn influences their financial behavior. This plays a crucial role in fostering financial confidence and responsible financial practices among students in the family environment.

Moreover, research by Kim and Chatterjee (2022) examined how parents' financial guidance influences college students' money-related attitudes and behaviors, considering the role of self-esteem in this relationship. The study found that parental guidance on financial matters has a favorable influence on their financial behavior, both directly and through its effects on their self-esteem and financial attitudes. This suggests that the family environment not only imparts financial knowledge but also builds the psychological foundation necessary for effective financial management.

These studies collectively affirm that the family environment is instrumental in shaping students' financial management skills. Incorporating financial literacy into family life prepares children with essential skills to manage financial responsibilities in personal and business contexts.

Financial performance of businesses

Financial performance remains a foundational construct in business and finance, serving as a critical indicator of a company's economic viability, strategic effectiveness, and long-term sustainability. Broadly defined, financial performance refers to how effectively a firm uses its financial and operational resources to achieve profitability, maintain solvency, and support future growth. As noted in contemporary literature, it is a multidimensional concept encompassing various evaluative metrics and qualitative assessments, and it serves as a vital component in both managerial decision-making and external stakeholder analysis (Brigham & Ehrhardt, 2017; Penman, 2016).

Since 2015, scholars and practitioners have increasingly emphasized the dynamic and integrative nature of financial performance within corporate strategy. Primary financial statements, including the balance sheet, income statement, cash flow statement, and the Form 10-K for publicly traded entities, form the core informational basis for evaluating a firm's financial position. These reports provide an overview of the firm's assets, liabilities, revenues, expenditures, and profitability, enabling a robust assessment of economic health (White et al., 2015). As Robinson et al. (2020) assert, synthesizing data from these statements enables analysts and stakeholders to assess both operational efficiency and financial standing with greater precision.

Financial performance is closely linked to a firm's ability to manage its core operations. Metrics such as profitability, liquidity, solvency, and operational efficiency offer insight into how well a company transforms financial inputs into sustainable value (Palepu & Healy, 2016; Damodaran, 2015). These indicators also reflect managerial competence in areas such as cost control, capital allocation, asset utilization, and debt management. Moreover, strong financial performance is not merely indicative of present stability but also a predictor of a firm's future capabilities and strategic potential. It significantly influences investment decisions, credit evaluations, and corporate governance practices (Higgins, 2015; Penman, 2016).

Recent scholarship has further expanded the scope of financial performance by exploring its intersections with non-financial domains, including innovation, strategic planning, and market competitiveness. Robinson et al. (2020) emphasize that consistent financial performance is often associated with effective governance structures and enhanced investor confidence. This suggests a broader, systemic understanding of performance that transcends pure financial metrics.

In addition to its organizational implications, financial performance is increasingly linked to individuals' financial literacy and education within firms, particularly in family-owned SMEs. For example, Arrubla (2016) highlights the role of financial education in enhancing the sustainability and decision-making practices of family-owned SMEs. A firm's financial acumen, particularly among its leadership, is shown to directly affect its ability to interpret financial data and respond effectively to market challenges.

Moreover, financial literacy among future business professionals is essential for influencing individuals' financial behavior and, by extension, the long-term performance of firms. A study by Harrington et al. (2016) indicates that financial education and access to supportive financial networks significantly influence students' grasp of financial principles, budgetary control, and their intent to apply personal financial management practices. These findings highlight the importance of embedding financial literacy within business curriculum to prepare competent decision-makers capable of driving sustainable financial outcomes.

Challenges faced by family businesses

Family businesses, particularly those managed by college students, make an important contribution to global economic activity. However, they face a variety of unique challenges that can significantly impact their sustainability and growth. These challenges stem from the dual pressures of academic responsibilities and business management, resulting in limited time, a lack of managerial experience, and insufficient financial knowledge. According to Hall et al. (2023), these factors contribute to inconsistent financial performance, underscoring the importance of financial literacy and structured business education for long-term success.

Family businesses are truly the backbone of many economies, but face very challenging circumstances in ensuring their survival. One of the major considerations is proper succession, especially between generations. De Massis et al. (2015) emphasized that emotional attachment, founder control, and lack of formal planning are obstacles to successful generational transfer.

Many family firms lack structured decision-making processes and an effective formal board (Basco, 2015). The need for expert management becomes increasingly important as the business progresses, but delays in this evolution are often driven by family members' resistance and concerns about a loss of control. Family dynamics and conflict are also severe

impediments. Kellermanns and Hoy (2016) stated that affective conflicts among family members, such as sibling rivalry or role conflicts, may indeed hinder strategic decision-making. Tensions often spill into business affairs as the former becomes prevalent. Moreover, family firms prefer conservative financial strategies and are reluctant to engage external investors or take on high risk.

A common challenge identified in recent literature is the reluctance of family firms to engage in innovation. This hesitance is often rooted in the desire to preserve socioemotional wealth (SEW), which includes family legacy, identity, and emotional attachment to the business. According to Nieto et al. (2015), many family firms avoid open innovation practices out of fear of losing control or jeopardizing their long-standing traditions. Furthermore, a lack of cognitive diversity and access to external talent can limit their ability to respond to rapidly changing market and technological demands. Ensuring a balance between family cohesion and business efficiency is a recurring theme in post-2015 literature. Baù et al. (2019) noted that overlapping identities (family member, owner, and manager) can blur priorities. Firms often struggle to separate emotional considerations from rational business needs, affecting both strategic planning and operational efficiency.

Conceptual framework

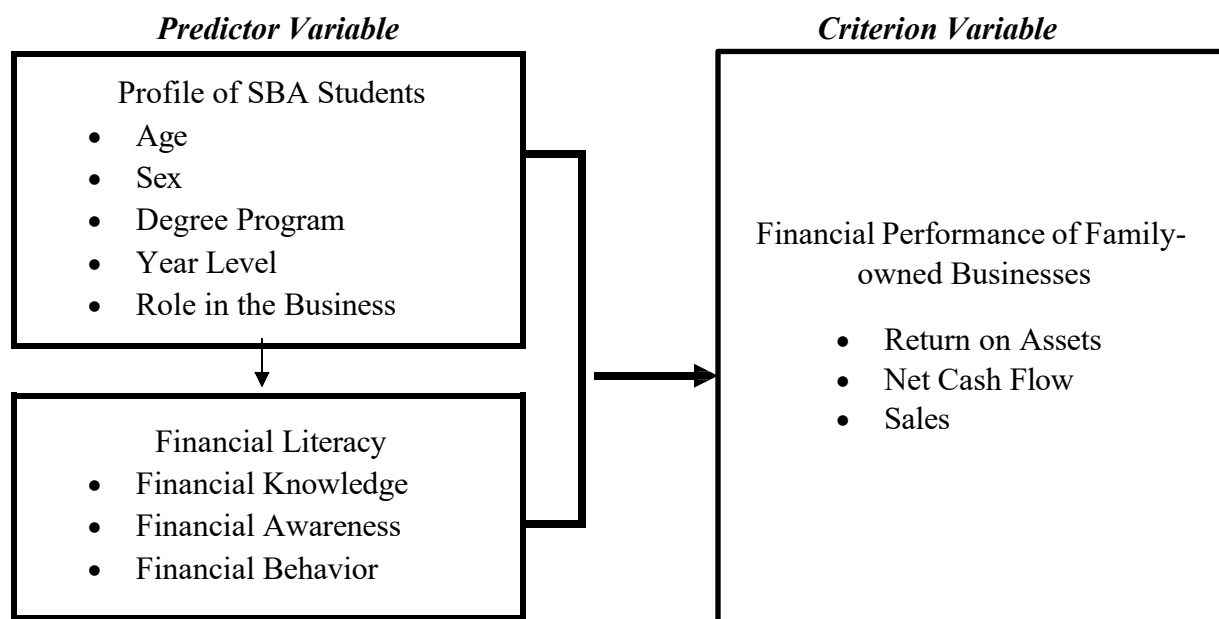


Figure 1. Research Paradigm

This conceptual framework illustrates how students' profiles and financial literacy, covering knowledge, awareness, and behavior, affect the financial performance of their businesses in terms of return on assets, net cash flow, and sales.

Statement of the problem

This study examined the effect of financial literacy on the financial performance of family-owned businesses among students in the School of Business and Accountancy.

Specifically, it answered the following questions:

1. What is the profile of the students in terms of:
 - a. age;
 - b. sex;
 - c. degree program;
 - d. year level; and

- e. Role in the business?
2. What is the extent of financial literacy of the students in terms of:
 - a. Financial knowledge;
 - b. Financial awareness; and
 - c. Financial behavior?
3. What is the level of financial performance of the family-owned businesses of SBA students in terms of:
 - a. return on assets
 - b. net cash flow; and
 - c. sales?
4. Is there a significant relationship between the profile of SBA students and their extent of financial literacy?
5. Is there a significant relationship between the profile of SBA students and the level of financial performance of their family-owned business?
6. Is there a significant relationship between the extent of financial literacy of SBA students and the level of performance of their family-owned business?

Hypothesis

Ha1: There is a significant relationship between the profile of SBA students and their extent of financial literacy.

Ha2: There is a significant relationship between the profile of SBA students and the level of financial performance of their family-owned business.

Ha3: There is a significant relationship between the extent of financial literacy of SBA students and the level of financial performance of their family-owned business.

Scope and limitations of the study

This study assessed the financial literacy of SBA students who are actively managing or assisting in their family-owned businesses, or operating their own businesses, in Ilocos Norte. The respondents were SBA students from Divine Word College of Laoag enrolled in the first semester of the academic year 2025–2026 and involved in operating or managing their family businesses.

The respondents' demographic information was limited to their age, sex, year level, degree program, and role in the business.

The study assessed students' financial literacy in three areas: financial knowledge, financial awareness, and financial behavior. It also evaluated the financial performance of the family-owned businesses of SBA students, using information from student respondents, based on return on assets, cash flows, and sales.

The study did not take into account external economic factors or market conditions that may affect the business performance.

This study was conducted from August to October 2025.

Research design

This study used a descriptive-correlational approach. This approach examines the relationship between SBA students' financial literacy and the financial performance of their family-owned businesses. The descriptive component identified students' profiles, assessed their financial literacy levels, and described the performance of their businesses. Meanwhile, the

Locale of the study

This study was conducted at Divine Word College of Laoag, specifically focusing on SBA students who were actively involved in managing or supporting their family-owned businesses.

Population

The population of this study consisted of SBA students who must have an active stake in the business, whether through ownership, financial management, operations, strategic decision-making, or consistent contributions to management or sustainability.

This study employed total enumeration, including all 68 qualified SBA students who met the inclusion criteria. This approach ensured that every qualified participant was included, providing comprehensive data for the analysis of students' financial literacy and their businesses' performance.

Data gathering procedures

The researchers sought approval from the Dean of the School of Business and Accountancy to conduct a survey involving SBA students at Divine Word College of Laoag. Data were collected using a structured questionnaire adapted from Tabernero (2024). The questionnaire was administered in two formats: a self-administered printed version, personally distributed and collected by the researchers, and an online version made available through Google Forms.

Data gathering instruments

This study used a self-administered questionnaire, including an online version via Google Forms, as its primary data collection tool. The questionnaire was specifically designed to address the key issues identified in the study and to gather relevant information aligned with the variables in the conceptual framework. It was composed of three (3) main parts:

Part I – Profile of the Students. This section collected demographic and personal information from the respondent, including age, sex, degree program, year level, and their significant role in the business.

Part II – Financial Literacy of the Students. This section assessed students' financial literacy across three dimensions: financial knowledge, financial awareness, and financial behavior. The questionnaire items for this part were adapted from Tabernero (2024).

Part III – Level of Firm Performance. This section evaluated the overall performance of the respondents' businesses using key financial indicators. The financial performance component comprised three primary measures: return on assets (ROA), net cash flow (NCF), and sales. The items for this section were adapted from Tabernero (2024).

Ethical review

This study upheld the highest ethical standards to ensure the safety, privacy, and voluntary participation of all respondents. Participants received a detailed explanation of the study's purpose, procedures, and their rights throughout the process. All identifying information was anonymized. Names were not collected, and responses were kept strictly confidential. The data were used solely for academic purposes.

Statistical treatment of data

Frequency and Percentage were applied to analyze the respondents' profiles. Because respondents could select more than one role, the total number of recorded responses for "Role in the Business" exceeds the total number of participants.

Weighted means were used to analyze the extent of financial literacy and the level of financial performance.

For the level of financial literacy and financial performance:

Mean Range	Descriptor	Descriptive Interpretation
4.51 – 5.00	Strongly Agree	Very Highly Literate
3.51 – 4.50	Agree	Highly Literate
2.51 – 3.50	Somewhat Agree	Moderately Literate
1.51 – 2.50	Disagree	Slightly Literate
1.00 – 1.50	Strongly Disagree	Not Literate

To examine how respondents' profiles were related to the extent of their financial literacy, appropriate statistical tools were applied based on the level of measurement. Spearman's Rho was used for ordinal or continuous variables such as age and year level. Nominal variables, such as sex, were analyzed using the Chi-Square Test. One-Way ANOVA was used for the degree program because it has more than two categories.

Since "Role in the Business" is a multiple-response variable, it was not included in the test of relationship with financial literacy, because respondents can select more than one role, and therefore the variable does not satisfy the assumptions for correlation or ANOVA.

To analyze how the students' profile characteristics relate to the indicators of business performance, such as ROA status, net cash flow status, and sales status, Chi-square was used for nominal profile variables such as sex, degree program, and role in the business, while Spearman's Rho was used for ordinal or continuous variables such as age and year level.

To determine how financial literacy is associated with respondents' business performance, Spearman's Rho was used because financial literacy was measured using Likert-scale items, while business performance indicators were ordinal. The corrected coding scheme was applied, with 3 = Increase, 2 = No Change, and 1 = Decrease, so that positive correlation coefficients indicate that higher financial literacy is associated with improved business performance.

All decisions on statistical significance were based on a 0.05 level of significance.

Data presentation and analysis

This chapter presents the data collected, along with their analysis and interpretation, about the financial literacy of students from the School of Business and Accountancy at Divine Word College of Laoag, Laoag City, Ilocos Norte, Philippines.

Problem 1: What is the profile of the students in terms of:

- 1.1. age;
- 1.2. sex;
- 1.3. degree program;
- 1.4. year level; and
- 1.5. Role in the business?

Table 1. Profile of the students (n=68)

	Frequency	Percentage
Age		
17 years old	3	4.41%
18 years old	10	14.71%
19 years old	13	19.12%
20 years old	25	36.76%
21 years old	14	20.59%
22 years old	3	4.41%

Sex		
Female	50	73.53%
Male	18	26.47%
Degree Program		
BSA	20	29.41%
BSMA	28	41.18%
BSBA	20	29.41%
Year Level		
First Year	9	13.24%
Second Year	17	25.00%
Third Year	26	38.24%
Fourth Year	16	23.53%
Role in the Business		
Owner	10	12.05%
Manager	2	2.41%
Cashier	29	34.94%
Bookkeeper	8	9.64%
Inventory Clerk	2	2.41%
Sales Clerk	8	9.64%
Warehouse Personnel	8	9.64%
Marketing Assistant	3	3.61%
Customer Relations	12	14.46%
Back Logger	1	1.20%

Source: Author's own table (2025)

The demographic profile of the respondents, who are SBA students managing family businesses, presents several characteristics that align with and, in some cases, contrast with existing literature on student entrepreneurship and financial behavior.

The majority age of 20 years old (36.76% of respondents) places the students at a critical stage for developing lifelong financial habits, as emphasized by Serido et. al. (2016); This age group is actively transitioning into early adulthood, a period when financial literacy education significantly enhances their capacity to handle financial matters effectively and to make well-informed decisions for the business (Amagir et al., 2018). The concentration of respondents in their early twenties supports the notion that they are in a formative stage for both academic and practical entrepreneurial skill development.

The predominance of female respondents (73.53%) is notable. This composition largely aligns with studies, such as those by Aydin and Akben Selcuk (2019), suggesting that female college students often display more cautious financial behavior and a stronger sense of financial responsibility, which can be an asset in business management.

However, this contrasts with Šubić et al. (2019), who found that male students tend to exhibit higher entrepreneurial intentions due to greater risk tolerance. The high percentage of female managers in the current sample suggests that this group may exhibit distinctive behavioral and motivational patterns in their approach to family business management, leaning toward responsibility and caution rather than high-risk endeavors.

While this indicates a majority were enrolled in BS in Management Accounting (BSMA), the table data shows a strong distribution across BSA (Accountancy), BSMA (Management Accounting), and BSBA (Business Administration). The accounting students (BSA and BSMA) make up a large portion, consistent with the findings of Ahmad et al. (2021). The findings of these studies indicate that accounting and business students generally possess higher levels of financial literacy (Duarte et al., 2022), which directly influences their entrepreneurial motivation and explains their involvement in financial and management roles within their family businesses.

The large proportions of third- and fourth-year students (38.24% and 23.53%) who manage family businesses are significant. This observation supports Gudmunson et al. (2015) and Harrington et al. (2016), who note that when students advance to higher levels of education and are exposed to more comprehensive finance subjects and budgeting exercises, their ability to translate financial theories into practical applications in real business situations is strengthened. The increased academic maturity and specialized knowledge of these students likely enable them to integrate classroom learning into entrepreneurial practice, leading to more informed and efficient business management.

Most respondents' roles are involved, specifically Cashier (34.94%), Bookkeeper (9.64%), and Owner (12.05%), a key finding that reinforces prior literature. The high level of involvement in financial roles aligns with Dahmen and Rodríguez (2017), who highlight that an entrepreneur's financial literacy and accounting proficiency are key determinants of small business success. This suggests that the student entrepreneurs are personally overseeing critical financial activities, which is strongly associated with better business outcomes Kimunduu et. al., 2016). Furthermore, this active financial involvement aligns with the finding that financial decision-making in small firms is often directly influenced by owners' or managers' financial competence and behavioral tendencies (Viale et al., 2018).

Overall, the findings regarding the age, year level, academic background, and primary business role are largely consistent with prior literature. These factors collectively emphasize the importance of academic learning and competence in managing entrepreneurial engagement and financial decision-making of student entrepreneurs.

However, the observed gender distribution suggests potential differences in financial behavior and entrepreneurial motivation, warranting further investigation in future studies.

Problem 2: What is the extent of financial literacy of the students in terms of:

2.1 Financial knowledge,

2.2 Financial awareness; and

2.3 Financial behavior?

Table 2. Extent of financial literacy of the students (n=68)

Indicators	Mean	Descriptive Interpretation
Financial knowledge		
I understand key budgetary terms and concepts used in the business operations where I am involved.	4.34	HL
I am knowledgeable about managing salary expenses and investment decisions relevant to the business I participate in.	4.24	HL
I am aware of the different sources of financing that can fund the business operations I am part of.	4.18	HL
I understand the concept of the time value of money and how unexpected changes can affect the business's cash flows.	4.35	HL
I am aware of the characteristics of different investments and can assess which are suitable for the business.	3.88	HL
Composite Mean	4.19	Highly Literate (HL)
Financial awareness		
I understand that financial statement data can provide information necessary for achieving an organization's goal.	4.34	HL
I can identify signs or indicators that show whether a business is operating in a favorable condition.	4.25	HL
I can understand and can apply financial strategies to help businesses stay competitive.	4.09	HL
I can understand and can apply financial strategies to help businesses stay competitive.	4.15	HL
I am involved in planning or implementing diversification strategies for the products and services offered by the business.	4.19	HL

Composite Mean	4.20	Highly Literate (HL)
Financial behavior		
I help understand the importance of maintaining financial records for the business I am involved in.	4.24	HL
I know how to get business funding, like loans from banks or lending companies.	3.84	HL
I am involved in ensuring timely repayments of loans.	3.46	ML
I help understand how to plan and budget the organization's income every year.	3.87	HL
I help revise business plans when economic conditions change.	3.79	HL
Composite Mean	3.84	Highly Literate (HL)
Overall Mean	4.08	Highly Literate (HL)

Source: Tabernero (2024)

Legend: 1.0-1.50 (Not Literate); 1.51-2.50 (Slightly Literate); 2.51-3.50 (Moderately Literate); 3.51-4.50 (Highly Literate); 4.51-5.00 (Very Highly Literate)

The overall result showed that School of Business and Accountancy (SBA) students exhibited elevated financial literacy, with a grand overall rating of 4.08, classified as *Highly Literate (HL)*. This implies that the students clearly understood many financial concepts and could handle financial management principles well. Their high financial literacy may be linked to their academic exposure to finance, accounting, and business management courses, which helped them learn to make smart, responsible financial decisions.

The highest composite mean score was in Financial Awareness (4.20), which was also described as *Highly Literate*. This indicates that the respondents were highly capable of recognizing and interpreting financial information, such as analyzing financial statements and understanding investment opportunities. It also suggests that they are adept at identifying financial risks and formulating strategies to maintain business competitiveness and stability. This outcome reflects the emphasis of SBA programs on financial analysis and management, which likely enhances students' awareness of how financial data influences business operations and decisions.

Conversely, Financial Behavior shows the lowest composite mean, at 3.84, still in the Highly Literate range but slightly lower than the others. This suggested that while students understood financial theories very well, they are somewhat less consistent in applying these ideas in real-life situations, such as budgeting, saving, spending, and paying loans on time. This gap suggests that students' financial literacy remains more theoretical than behavioral, underscoring the need for stronger experiential learning to translate knowledge into consistent financial practices.

The implications of these results underscore a critical challenge in financial education—bridging the gap between knowing and doing. Ajzen (2020) explains that actual behavior is influenced not only by knowledge and intentions but also by attitudes, subjective norms, and perceived control of their behavior. In this context, while SBA students understand financial concepts and intend to act responsibly, external constraints, such as limited financial autonomy, limited real-world exposure, or weak self-regulation, may hinder their consistent application of financial discipline.

These findings align with those of Ahmad et al. (2021), who noted that although accounting students demonstrated strong financial knowledge, their financial behavior did not always align with their understanding. Both studies showed that while knowledge and awareness were high, actual behavior still needed improvement. This comparison suggested that improving students' financial behavior through real experiences and practical learning could strengthen their motivation and ability to manage finances successfully in entrepreneurship and professional life.

Similarly, Aydin and Akben (2019) found that while financial literacy contributes to strengthened money ethics and more efficient time preferences, behavioral outcomes are still influenced by personal attitudes and self-control. This supports the current study's implication that behavioral competence develops through experience, reflection, and practice rather than solely through academic learning. Bai (2023) emphasized the mediating roles of self-control and mental budgeting in the

relationship between financial literacy and financial well-being. In this light, the SBA students' relatively lower performance in financial behavior could indicate that, despite understanding financial management principles, they still need to strengthen their self-control and financial discipline to achieve sustainable financial outcomes.

Collectively, these results highlight that financial literacy among SBA students is strong in knowledge and awareness but requires further enhancement in behavioral application. Integrating experiential and applied learning—such as business simulations, internships, and financial mentoring—could help bridge this gap. These practical exposures can strengthen students' confidence and consistency in applying financial principles, ultimately improving their decision-making and long-term financial performance.

Problem 3: What is the level of financial performance of the family-owned businesses of SBA students?

- 3.1 Return on assets
- 3.2 net cash flow; and,
- 3.3 sales?

Table 3. Level of financial performance of family-owned business of SBA students (n=68)

	f	%
Return On Asset		
: There was an increase.		
a.1. Increase by less than 5%	19	27.94%
a.2. Increase by 5%-10%	27	39.71%
a.3. Increase by more than 10%	11	16.18%
b. No change.	9	13.24%
c. There was a decrease.		
c.1. Decrease by less than 5%	1	1.47%
c.2. Decrease by 5%-10%	1	1.47%
c.3. Decrease by 10%	0	0%
TOTAL	68	100%
Net Cash Flow: There was an increase.		
a.1. Increase by less than 5%	25	36.76%
a.2. Increase by 5%-10%	23	33.82%
a.3. Increase by more than 10%	3	4.41%
b. No change.	14	20.59%
c. There was a decrease.		
c.1. Decrease by less than 5%	1	1.47%
c.2. Decrease by 5%-10%	1	1.47%
c.3. Decrease by 10%	1	1.47%
TOTAL	68	100%
Sales		
There was an increase.		
a.1. Increase by less than 5%	17	25%
a.2. Increase by 5%-10%	26	38.24%
a.3. Increase by more than 10%	14	20.59%
a.4. No Answer	1	1.47%
b. No change.		
c. There was a decrease.	9	13.24%
c.1. Decrease by less than 5%	1	1.47%
c.2. Decrease by 5%-10%	0	0%
c.3. Decrease by 10%	0	0%
TOTAL	68	100%

Source: Author's own table (2025)

Table 3 reveals that the family-owned businesses of School of Business and Accountancy students experienced substantial improvements in key financial indicators, return on assets, net cash flow, and sales over the past three years. Specifically, 83.82% reported an increase in return on assets, indicating enhanced profitability and more efficient resource utilization. Similarly, 75% reported an increase in net cash flow, suggesting improved liquidity management and operational stability. Furthermore, 85.29% of respondents experienced sales growth, indicating effective marketing and business strategies that contributed to strong revenue. Only a minimal percentage across the indicators reported no change or a slight decline, indicating that overall, respondents maintained financial performance and sustainability.

These outcomes mirror past studies emphasizing the critical role of financial literacy, budgeting skills, and management practices in improving business outcomes. Harrington et al. (2016) highlighted that students' intent to use personal budgets positively influences financial discipline and performance outcomes. Similarly, Isdory and Mokaya (2022) found that budgeting management skills directly enhance financial performance by promoting accountability and efficient allocation of resources. This supports the observed increases in profitability and liquidity among SBA-managed enterprises, as effective budgeting likely contributed to better control over expenses and optimized resource use.

Moreover, the improvement in sales and profitability aligns with the findings of Kimunduu et al. (2016), who demonstrated that financial literacy plays a major role in influencing the financial performance of small and medium enterprises. As student entrepreneurs gain more financial knowledge through academic and experiential learning, they become better able to make informed financial decisions, as reflected in the growth trends observed in this study. In the same vein, Jamal et al. (2015) and Lusardi et al. (2017) emphasized that financial literacy and education empower individuals to make informed financial decisions, thereby improving saving, investing, and budgeting behaviors.

In addition, the findings are supported by Peralta et al. (2024), who reported that strategic budgeting practices among financial management students serve as a foundation for better investment and decision-making outcomes. This indicates that the family-owned businesses likely benefited from integrating budgeting and financial management skills learned academically and applied in their operations.

Furthermore, Molina-García et al. (2020) and Kaur and Singh (2024) discussed the significance of family financial socialization and intergenerational financial literacy, both of which influence individuals' financial behaviors and confidence. Such background factors may have indirectly contributed to the strong performance of student-managed businesses, as financially literate students often demonstrate more prudent resource management.

Overall, the combined findings reflect a positive financial trajectory for family-owned businesses —anchored in effective financial education, sound budgeting, and informed decision-making. These outcomes reinforce the notion that financial literacy and practical management training are vital drivers of business success, as supported by a broad collection of research demonstrating the relationship between financial education, positive financial behavior, and improved business outcomes (Serido et al., 2016; Sarsale, 2021; Šubić et al., 2019).

Problem 4. Is there a significant relationship between the profile and the extent of financial literacy of SBA students?

Table 4. Profile and extent of financial literacy

Profile Variable	Financial Knowledge	Financial Awareness	Financial Behavior
Age	r = 0.178 p-value = 0.146	r = 0.178 p-value = 0.146	r = 0.178 p-value = 0.146
Sex	r = -0.007 p-value = 0.953	r = -0.007 p-value = 0.953	r = -0.007 p-value = 0.953
Degree Program	F= 2.260 p-value = 0.112	F = 0.109 p-value = 0.897	F = 0.1845 p-value = 0.166
Year Level	F = 1.043 p-value = 0.358	F = 1.043 p-value = 0.358	F = 1.043 p-value = 0.358

Role in the Business	F = 0.118	F = 0.497	F = 1.121
	p-value = 0.889	p-value = 0.611	p-value = 0.332

Source: Author's own table (2025)

Specifically, demographic factors such as Age ($p = 0.146$) and Sex ($p = 0.953$), together with academic characteristics such as Degree Program (p values from 0.112 to 0.897) and Year Level ($p = 0.358$), showed no statistical association with Financial Knowledge, Financial Awareness, or Financial Behavior. This observed homogeneity suggests that natural demographic attributes and academic progression within the SBA department are not the primary determinants of students' financial competence. Similar patterns emerge from studies showing that financial literacy is less influenced by demographic factors and more by behavioral, experiential, and contextual factors. For example, Aydin and Akben Selcuk (2019) emphasize the role of self-control, money ethics, and time preferences, while Bai (2023) shows that self-control and mental budgeting significantly shape financial well-being more than age or sex. Likewise, Serido et al. (2016) highlight that coping strategies and financial strain—not demographics—drive students' financial adaptation.

Although most profile variables were clearly non-significant, the Role in the Business variable showed a noteworthy correlation with Financial Behavior ($p = 0.332$). Although still not significant, this value is approaching the 0.05 threshold compared with Age or Sex, suggesting a possible, though unconfirmed, influence of real-world financial engagement on students' behavior. Literature supports this interpretation: Arrubla (2016) showed that involvement in daily financial tasks within family firms enhances practical financial competence, while Viale et al. (2018) argue that decision-making in small businesses is shaped by repeated behavioral experiences rather than formal academic attributes. Molina-García et al. (2020) likewise found that financial literacy varies across family business generations due to accumulated hands-on exposure. Such studies indicate that repeated application of financial skills—such as bookkeeping, cash handling, or inventory monitoring—may help equalize financial behavior across student groups, which explains the low variability observed in this study.

However, these findings diverge from research showing that demographic and academic characteristics can influence financial literacy. For instance, Camisón-Haba et al. (2022) found significant differences in financial competence by students' academic profiles and family backgrounds, while Duarte et al. (2022) reported that financial literacy varies across business and non-business programs. Similarly, Alshebami and Al Marri (2022) found gender-linked differences in saving behavior that shape entrepreneurial intentions, and Ahmad et al. (2021) observed that financial literacy and financial behavior affect the entrepreneurial motivation of accounting students, suggesting that student characteristics may matter in specific contexts. These contrasting findings highlight that while demographic and academic differences may influence financial literacy elsewhere, the SBA student population in this study appears relatively uniform in their financial exposure and experiences, likely due to shared involvement in family businesses or similar academic training.

Overall, the consistent non-significance of demographic and academic variables suggests that financial literacy interventions within the SBA population should be universally applied rather than targeted to specific age groups, genders, or programs. Instead, more effective strategies may focus on practical financial engagement, entrepreneurial skill development, and behavioral training, aligning with Amagir et al. (2018), who emphasize that financial literacy education is most effective when experiential, contextualized, and behavior-focused. The results support the idea, consistent with Ajzen's (2020), that students' financial actions stem more from behavioral intentions, perceived control, and lived experiences than from demographic factors alone.

Therefore H_a^1 is rejected.

Problem 5. Is there a significant relationship between the profile of SBA students and the level of financial performance of their family-owned business?

Table 5. Profile and Level of Financial Performance

Profile Variable	ROA Status	Net Cash Flow	Sales
Age	p : -0.087 p -value: 0.479	p : -0.033 p -value: 0.790	p : -0.040 p -value: 0.746

Sex	χ^2 : 6.546 p-value: 0.038	χ^2 : 2.921 p-value: 0.232	χ^2 : 21.407 p-value: 0.495
Degree Program	χ^2 : 5.912 p-value: 0.268	χ^2 : 2.914 p-value: 0.572	χ^2 : 6.561 p-value: 0.161
Year Level	p : -0.074 p-value: 0.549	p : -0.044 p-value: 0.721	p : -0.002 p-value: 0.984
Role in the Business	χ^2 : 6.467 p-value: 0.487	χ^2 : 8.868 p-value: 0.264	χ^2 : 10.970 p-value: 0.140

Source: Author's own table (2025)

The results showed that the profile variables of SBA students—age, sex, degree program, year level, and role in the business—were significantly related to the financial performance of their student-managed businesses. Financial performance was measured by ROA, net cash flows, and sales.

Age showed *no* significant relationship with ROA status ($p = 0.479$), net cash flows ($p = 0.790$), or sales ($p = 0.746$). These results indicate that age did not affect business profitability, liquidity, or sales generation. Regardless of age, students' financial outcomes remained statistically similar. This aligns with studies such as Camisón-Haba et al. (2022) and Duarte et al. (2022), which determined that age differences among students generally do not predict variations in financial competencies or financial outcomes. However, it contrasts with developmental perspectives, such as those highlighted by Alan and Ertac (2018), which suggest that maturity can influence patience and long-term decision-making traits that may affect business performance in other contexts.

Among the profile variables, sex was the only factor that demonstrated a significant relationship, specifically with ROA status ($p = 0.038$). This indicates that male and female respondents differed in their efficiency in using assets to generate profits. However, sex did not show significant relationships with net cash flows ($p = 0.232$) or sales ($p = 0.495$), suggesting that cash operations and sales activities were managed at comparable levels across genders. Similar gender-based variations in financial behavior have been observed by Aydin and Akben Selcuk (2019) and Šubić et al. (2019), who noted that male and female students often differ in financial confidence and money ethics, which may influence how they handle assets. Conversely, Chung and Park (2014) found that when financial education is adequately provided, gender differences in performance diminish—contrasting the present finding.

The degree program also showed no significant relationship with ROA ($p = 0.268$), net cash flows ($p = 0.572$), or sales ($p = 0.161$). This suggests that being enrolled in different business-related programs—such as Accounting, Marketing, or Management—did not lead to measurable differences in business financial outcomes. This corresponds with the conclusion of Duarte et al. (2022), who reported small differences in financial literacy across academic programs. Meanwhile, Gudmunson et al. (2015) emphasize that applied experiences, rather than academic specialization alone, better predict financial decision-making skills—supporting the present findings.

Similarly, year level did not exhibit any significant association with ROA status ($p = 0.549$), net cash flows ($p = 0.721$), or sales ($p = 0.984$). These results imply that, regardless of academic year, students' profitability, liquidity, and sales output remained comparable. Amagir et al. (2018) argued that improvements in financial literacy and competence typically require structured, long-term interventions rather than simple progression through academic years. However, this contrasts with Alshebami and Al Marri (2022), who observed that financial literacy tends to improve with accumulated experience, a factor that may not have been reflected among the student respondents.

The students' role in the business—whether managerial, operational, or financial—also did not show significant relationships with ROA status ($p = 0.487$), net cash flows ($p = 0.264$), or sales ($p = 0.140$). This indicates that the specific duties they performed did not affect their business outcomes. These results suggest that student-managed enterprises may operate within a collaborative structure in which performance is shared regardless of role. Similar conclusions were noted by Kimunduu et al. (2016), who found that business performance among small ventures depends more on collective financial practices than

on individual roles. However, other research, such as Koech (2015) and Isdory and Mokaya (2022), argues that budgeting and managerial responsibilities typically influence financial outcomes—contrasting the non-significant findings of the present study.

Overall, these results imply that factors beyond demographic profiles, such as financial education, behavioral competencies, and exposure to real-world financial decisions, can be crucial in determining the financial success of student-managed enterprises. This perspective is strongly supported by Ajzen (2020), who suggests that financial behavior and performance are rooted in attitudes, perceived control, and intentions rather than demographic characteristics.

Therefore H_{a2} is partially rejected since only sex has a significant relationship to the financial performance of the students' family-owned businesses, specifically with Return on Assets status.

Problem 6. Is there a significant relationship between the extent of financial literacy of SBA students and the level of performance of their businesses?

Table 6. Financial literacy and level of performance

Business performance indicators	Financial knowledge	Financial awareness	Financial behavior
Return on Asset (ROA)	$p = 0.185$	$p = 0.185$	$p = 0.185$
Net Cash Flow	$p\text{-value} = 0.132$	$p\text{-value} = 0.132$	$p\text{-value} = 0.132$
Sales	$p = 0.126$ $p\text{-value} = 0.306$ $p = 0.208$ $p\text{-value} = 0.089$	$p = 0.126$ $p\text{-value} = 0.306$ $p = 0.208$ $p\text{-value} = 0.089$	$p = 0.126$ $p\text{-value} = 0.306$ $p = 0.208$ $p\text{-value} = 0.089$

Source: Authors own table (2025)

The analysis examined the connection between the three dimensions of financial literacy, namely, Knowledge, Awareness, and Behavior and the three key business performance indicators (Return on Asset, Net Cash Flow, and Sales).

Using Spearman's Rho, the results showed no statistically significant relationships across all variables, as reflected in the p -values for ROA (0.132), Net Cash Flow (0.306), and Sales (0.089), all of which exceeded the 0.05 threshold. The results consistently showed that none of the financial literacy dimensions were significantly related to any measure of business performance. (ROA Status: p -value for all three literacy components is 0.132, Net Cash Flow: p -value for all three literacy components is 0.306, and Sales: p -value for all three literacy components is 0.089).

In every case, the p -values exceed 0.5, indicating statistical significance. Consequently, there is insufficient evidence to reject the null hypothesis, suggesting no significant relationship. While the positive sign indicates that a slight tendency exists for higher financial literacy scores to be associated with better performance outcomes, the extremely weak magnitude (close to zero) and the lack of statistical significance confirm that a student entrepreneur's personal financial literacy score is not a reliable predictor of their family business's performance.

Although the correlation coefficients were positive, their magnitudes were extremely weak, indicating that higher financial literacy scores only very slightly correspond to improved business outcomes, insufficient to suggest a meaningful predictive relationship. This implies that student entrepreneurs' financial literacy does not translate into measurable performance improvements in their family-owned businesses.

These findings align with certain streams of literature. Dahmen and Rodriguez (2017) similarly argue that while financial literacy is beneficial, it seldom guarantees business success in the absence of strong operational systems and contextual enablers. Arrubla (2016) likewise suggests that family-run SMEs often rely more on experience, tradition, and contextual decision-making rather than formal financial knowledge, resulting in weak direct links between literacy and firm performance. Furthermore, studies such as Krasniqi and Desai (2020) emphasize that institutional quality, innovation climate,

and market conditions disproportionately influence firm outcomes compared with individual-level competencies.

The results are also consistent with Molina-García et al. (2020), who note that financial literacy varies across family business environments and that operational outcomes are largely shaped by structural characteristics rather than personal financial skills. This reinforces the idea that external and organizational factors, rather than individual financial competencies, determine firm performance.

However, the findings contrast with numerous studies highlighting the importance of financial literacy for promoting constructive financial behaviors, entrepreneurial motivation, and financial well-being. For instance, Ahmad et al. (2021) and Alshebami et al. (2022) establish a strong link between financial literacy and entrepreneurial motivation. Similarly, Jamal et al. (2015), Aydin and Akben Selcuk (2019), and Bai (2023) show that higher financial literacy is associated with better financial decision-making and positive personal financial outcomes. These studies imply that while literacy meaningfully shapes personal financial behaviors, it may not directly influence organizational performance metrics such as ROA or sales.

Overall, the evidence supports the interpretation that while financial literacy fosters sound personal financial behavior, its direct impact on firm-level financial performance is limited, especially in environments where external conditions, structural constraints, and execution capabilities play a more decisive role (Dahmen & Rodriguez, 2017; Viale et al., 2018). This study reinforces the notion that business success requires more than knowledge—it demands operational effectiveness, strategic decision-making authority, and favorable market dynamics.

Therefore H_a^3 is rejected.

Results and discussion

The findings show that SBA students have a high level of financial literacy, particularly in financial knowledge, awareness, and behavior. This supports the work of Ahmad et al. (2021), Duarte et al. (2022), and Prabawati (2019), who observed that students enrolled in business-related programs often develop stronger financial competencies because of their academic training and access to financial education resources. Despite this strong level of literacy, the financial performance of their family businesses—measured by ROA, net cash flow, and sales—did not show significant improvement. This suggests that having financial knowledge alone does not automatically translate into better financial outcomes.

The analysis also revealed that the students' age, sex, degree program, and year level did not significantly influence their financial literacy. This finding aligns with Xiao and Porto (2017) and Camisón-Haba et al. (2022), who argued that demographic characteristics are generally weak predictors of financial knowledge. Although sex was slightly associated with ROA, the effect was minimal and did not substantially affect overall business performance.

Furthermore, most of the family businesses included in the study reported little to no improvement in financial indicators. This finding is consistent with Arrubla (2016), who explained that financial literacy does not necessarily lead to improved business outcomes when individuals lack authority or participation in financial decision-making. In many Filipino family businesses, financial control is typically retained by older family members, which limits students' opportunities to apply the financial knowledge they acquire in school.

A key insight from the study is the gap between theoretical knowledge and practical application. Although students demonstrate financial literacy, their limited role in family business operations prevents them from translating that knowledge into measurable financial improvements. This observation is supported by the behavioral perspectives of Ajzen (2020) and Bai (2023), who emphasize that positive financial outcomes require not only understanding financial concepts but also decision-making authority, financial discipline, and active participation in financial management.

Overall, the findings suggest that financial literacy is necessary but not sufficient to improve business performance. Without opportunities for practical experience, decision-making authority, and structured involvement in business activities, students' financial knowledge remains largely underutilized. These results highlight the need for experiential learning opportunities and greater involvement of younger family members in family business management to bridge the gap between knowledge

Conclusion

The study shows that SBA students generally have a high level of financial literacy, particularly in financial knowledge, awareness, and behavior. Despite this, their strong financial understanding does not result in noticeable improvements in the financial performance of their family businesses, indicating that financial literacy alone is not enough to produce measurable business gains.

Results also reveal that students' demographic characteristics—such as age, sex, degree program, and year level—do not significantly affect their level of financial literacy, suggesting that financial knowledge is fairly consistent across student groups. These demographic factors likewise show minimal influence on family business performance, aside from a limited association between sex and ROA status, which does not substantially change the overall findings.

Overall, the study highlights a clear gap between financial knowledge and its practical use. While students understand financial concepts well, many are not directly involved in financial decision-making or daily business operations, limiting their ability to apply what they know. Without hands-on experience and meaningful participation in managing the business, financial literacy remains largely theoretical.

These findings suggest that improving family business performance requires more than financial knowledge alone. Greater practical exposure, active involvement in business decisions, and opportunities to apply financial skills in real-world settings are essential for financial literacy to translate into meaningful and sustained business improvements.

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Methodology: G.J.V., C.S.J.B., P.D.A. **Data analysis:** P.D.A., C.L.N.G. **Data gathering:** T.J.P.V., C.L.N.G.

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