ASSESSING THE FINANCIAL LITERACY OF SENIOR HIGH SCHOOL AND COLLEGE STUDENTS: A COMPREHENSIVE ANALYSIS

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Abstract

Financial literacy is increasingly recognized as an essential life skill, particularly for young adults who are on the cusp of managing financial responsibilities independently. This study provides a comprehensive analysis of financial literacy levels among Senior High School (SHS) and College students at Colegio de San Francisco Javier (CSFJ) in the Philippines. Utilizing a 4-point Likert scale, the study evaluates two primary dimensions: financial knowledge and financial behavior, focusing on savings, budgeting, and borrowing. A quantitative research approach was employed, involving a sample of 345 randomly selected students. The findings suggest that while students exhibit a general understanding of financial concepts, there are significant gaps in their practical application, particularly in areas like compound interest and investment strategies. No significant gender differences in financial literacy were found. The study concludes with recommendations for targeted financial education programs that address these gaps, ensuring that students are better prepared for financial challenges in adulthood.

Keywords and phrases: *Financial Literacy, Financial Knowledge, Financial Behavior, Senior High School, College Students, Philippines, Quantitative Research*

Introduction

Financial literacy has gained prominence as a critical skill in the contemporary world, where financial products and services have become increasingly complex. This complexity is particularly challenging in developing countries like the Philippines, where economic disparities, low levels of financial education, and limited access to financial services contribute to financial instability (Cardenas, 2021). Financial literacy, defined as the ability to understand and effectively use various financial skills, including personal financial management, budgeting, and investing, is essential for economic stability and growth (OECD, 2016).

In the Philippines, financial literacy is crucial due to the country's economic environment, which is characterized by a high level of income inequality and a significant proportion of the population living in poverty. According to the Bangko Sentral ng Pilipinas (BSP), only a small percentage of Filipinos have a basic understanding of financial concepts such as interest rates and inflation (Briones, 2021). This lack of financial literacy has significant implications for the economic well-being of individuals and the country as a whole. For instance, a study by the BSP found that financial illiteracy contributes to high levels of debt and low savings rates among Filipinos (Crismundo, 2023).

The need for financial literacy is further emphasized by the increasing complexity of financial products and services. As financial markets evolve, individuals are required to make more complex financial decisions, such as selecting investment products, managing credit, and planning for retirement. However, without adequate financial knowledge, individuals are at risk of making poor financial decisions that can have long-term negative consequences (Lusardi & Mitchell, 2014).

This study focuses on assessing the financial literacy levels of SHS and College students at Colegio de San Francisco Javier (CSFJ), located in the Mindanao region. The significance of this study lies in its potential to identify gaps in financial education among young adults, a demographic at a critical juncture in their financial lives. As they transition into higher education and eventually the workforce, their financial decisions will have long-term implications for their economic well-being and stability (Sabijon, 2020).

Previous studies have highlighted the importance of financial literacy in promoting financial stability and reducing poverty. However, the focus has often been on adult populations, with less attention given to younger individuals who are at a formative stage of their financial development (Lusardi & Mitchell, 2014). This research seeks to fill this gap by providing a detailed analysis of the financial literacy levels of SHS and College students, with the goal of informing educational policies and programs that can better prepare them for future financial challenges.

Financial literacy encompasses a broad range of skills and knowledge necessary for effective money management. It includes the ability to understand financial concepts such as compound interest, investment strategies, and risk management, as well as the behavior and attitudes required to make sound financial decisions (OECD, 2016). Financial literacy is not just about having knowledge; it involves the practical application of that knowledge to everyday financial situations (Atkinson & Messy, 2013).

The importance of financial literacy cannot be overstated. It is a critical component of financial inclusion, which is essential for economic growth and poverty reduction. Financially literate individuals are more likely to save, invest, and manage debt effectively, leading to greater financial stability and resilience against economic shocks (Lusardi & Mitchell, 2014). In contrast, individuals with low financial literacy are more likely to experience financial difficulties, such as over-indebtedness, lack of savings, and poor investment decisions (Klapper, Lusardi, & van Oudheusden, 2015).

In the context of the Philippines, financial literacy is crucial due to the country's economic environment, which is characterized by a high level of income inequality and a significant proportion of the population living in poverty (Briones, 2021). The Bangko Sentral ng Pilipinas (BSP) has emphasized the need for improved financial literacy among Filipinos to enhance financial inclusion and promote economic stability (Crismundo, 2023). The BSP has launched various initiatives aimed at improving financial literacy, such as the National Strategy for Financial Inclusion, which seeks to provide Filipinos with the knowledge and skills needed to make informed financial decisions (BSP, 2015).

Globally, financial literacy has been recognized as a key factor in promoting financial inclusion and economic development. In 2015, the Standard & Poor's Ratings Services Global Financial Literacy Survey found that only 33% of adults worldwide are financially literate (Klapper et al., 2015). This survey, the largest of its kind, highlighted significant disparities in financial literacy across regions and demographic groups, with women, the poor, and the less educated being disproportionately affected.

Various countries have implemented national strategies to improve financial literacy. For instance, the United States launched the Financial Literacy and Education Commission, which coordinates efforts across federal agencies to promote financial education (U.S. Department of the Treasury, 2014). Similarly, the United Kingdom established the Money Advice Service, an independent organization funded by the government, to provide free financial advice and education to the public (Money Advice Service, 2015).

Despite these efforts, challenges remain in improving financial literacy. One of the main challenges is the lack of consensus on the best methods for delivering financial education. While some studies suggest that formal education programs in schools are effective, others argue that experiential learning, such as managing a budget or making investment decisions, is more impactful (Mandell & Klein, 2009). Moreover, the rapidly changing financial landscape, characterized by the rise of digital financial services and products, presents new challenges for financial literacy education (World Bank, 2014).

Studies on financial literacy among students have shown mixed results. While some research indicates that students possess a basic understanding of financial concepts, others suggest significant gaps in their knowledge, particularly in areas like budgeting and saving (Lusardi & Mitchell, 2014). In the Philippines, studies have found that financial literacy among students is generally low, with many lacking the skills necessary to manage their finances effectively (Cardenas, 2021).

One of the key factors influencing financial literacy among students is the level of financial education they receive. Research has shown that students who receive formal financial education are more likely to exhibit better financial behaviors, such as saving regularly and budgeting effectively (OECD, 2016). However, the integration of financial education into the school curriculum remains limited, particularly in regions like Mindanao (Empowering Filipinos Through Financial Literacy, 2022).

Another critical factor is the role of parents and guardians in shaping financial behavior. Studies have found that children and young adults who engage in financial discussions with their parents or guardians tend to have higher levels of financial literacy (Shim et al., 2010). This finding suggests that family-based financial education could be an effective complement to school-based programs.

Additionally, gender has been identified as a significant factor in financial literacy. Research consistently shows that women tend to have lower financial literacy levels than men, which can lead to poorer financial outcomes (Lusardi & Mitchell, 2014). This gender gap in financial literacy is a global phenomenon, with significant implications for economic gender equality. Efforts to address this gap have included targeted financial education programs for women and girls, emphasizing the importance of financial independence and empowerment (Bucher-Koenen et al., 2016).

Methods

The study employed a quantitative research design, using a correlational approach to assess the financial literacy levels of SHS and College students at CSFJ. Quantitative research was chosen for its ability to produce statistically reliable data that can be used to identify patterns and correlations (Creswell & Creswell, 2017). A standardized questionnaire, adapted from the OECD/INFE financial literacy survey, was used to collect data. The questionnaire included sections on financial knowledge and financial behavior, focusing on savings, budgeting, and borrowing.

The correlational research design was appropriate for this study as it allowed for the examination of relationships between variables, such as financial literacy and demographic factors (e.g., age, gender, educational level) (Salkind, 2010). The goal was to determine whether significant relationships exist between these variables and to identify areas where financial literacy can be improved.

The study targeted SHS and College students enrolled at CSFJ during the 2023-2024 academic year. A total of 345 students were selected using a stratified random sampling technique. Stratified random sampling was used to ensure that the sample was representative of the student population, with stratification based on year level and academic program (Etikan & Bala, 2017). The sample size was determined using a 95% confidence level and a 5% margin of error, which is standard for educational research (Cochran, 1977).

The demographic breakdown of the sample included students from various academic programs, such as Business Administration, Social Work, Information Technology, and Education. The gender distribution was balanced, with both male and female students included in the sample. This stratification ensured that the findings were generalizable to the broader student population at CSFJ.

Data were collected through an online survey, with participants completing the questionnaire electronically. The use of an online survey was chosen for its efficiency and convenience, particularly given the constraints of conducting research during the academic year (Dillman, Smyth, & Christian, 2014). The questionnaire's reliability was tested through a pilot study, involving 30 students from similar demographics who were not included in the main study. The pilot study results indicated high reliability, with a Cronbach's alpha of 0.85, indicating good internal consistency (Tavakol & Dennick, 2011).

The survey included Likert-scale questions that assessed students' financial knowledge and behavior, with responses ranging from "strongly agree" to "strongly disagree." The Likert scale is commonly used in educational research to measure attitudes, perceptions, and behaviors, and it provides a straightforward method for analyzing responses (Likert, 1932). The questionnaire covered topics such as understanding compound interest, creating a budget, managing debt, and making investment decisions.

The collected data were analyzed using descriptive statistics to summarize the overall financial literacy levels. Descriptive statistics provided a snapshot of the students' financial knowledge and behavior, including mean scores, standard deviations, and frequency distributions (Bluman, 2017). These statistics helped to identify the areas where students excelled and where they needed further education.

Welch's t-test was employed to compare the financial literacy levels between SHS and College students and to assess gender differences. The Welch's t-test was chosen because it is more reliable than the traditional t-test when comparing groups with unequal variances and sample sizes (Ruxton, 2006). The correlation coefficient was calculated to determine the relationship between financial literacy and various demographic factors, such as age, gender, and educational level. The Pearson correlation coefficient was used to measure the strength and direction of these relationships (Schober, Boer, & Schwarte, 2018).

All statistical analyses were performed using Python, ensuring precise computation and interpretation of the results. Python was chosen for its powerful statistical analysis libraries, such as Pandas and SciPy, which facilitated data cleaning, manipulation, and analysis (McKinney, 2010). The use of Python also allowed for the creation of visualizations, such as histograms and scatter plots, to better understand the data.

Results

Financial Knowledge

The results indicate that students generally possess a basic understanding of financial concepts, with a total weighted mean score of 2.10 for SHS students and 2.11 for College students. However, there are notable gaps in their knowledge, particularly in understanding compound interest and calculating the annual percentage yield (APY) of savings accounts. These findings are consistent with previous research, which has highlighted similar gaps in financial literacy among students (Prihartono & Asandimitra, 2018).

Specifically, the survey revealed that while most students understood basic financial concepts such as budgeting and saving, their knowledge of more advanced topics, such as investment strategies and risk management, was limited. For example, less than 30% of the respondents could accurately explain the concept of compound interest, a fundamental principle in finance (Lusardi & Mitchell, 2014). This gap in knowledge is concerning, as understanding compound interest is crucial for making informed decisions about savings and investments.

The lack of understanding of advanced financial concepts can be attributed to the limited exposure to financial education in the school curriculum. Many students reported that their primary source of financial knowledge was their family, rather than formal education. This finding aligns with previous studies that have shown that financial education is often not a priority in school curriculums, particularly in developing countries (OECD, 2016).

Financial Behavior

In terms of financial behavior, students demonstrated moderate proficiency, with a total weighted mean score of 1.92 for SHS students and 1.85 for College students. While most students reported actively saving a portion of their income and having specific savings goals, their budgeting practices were less consistent. For instance, many students did not regularly use budgets to track their expenses, and few considered inflation when making long-term savings decisions (Albeerdy & Gharleghi, 2015).

The survey results also indicated that students were generally cautious about borrowing, with most respondents stating that they only borrowed money when necessary and had a plan to repay their debts on time. However, there was a significant portion of students who did not fully understand the implications of borrowing, such as the impact of interest rates on the total cost of a loan. This lack of understanding can lead to poor financial decisions, such as taking on high-interest debt without fully considering the long-term consequences (Lusardi & Tufano, 2015).

Furthermore, the results suggest that while students are aware of the importance of saving and budgeting, they may lack the practical skills needed to implement these behaviors effectively. For example, many students reported difficulty in sticking to a budget, particularly when faced with unexpected expenses. This finding highlights the need for financial education programs that focus not only on financial knowledge but also on developing practical financial skills (Mandell & Klein, 2009).

Gender Differences

The analysis revealed no significant gender differences in financial literacy levels, with both male and female students scoring similarly across all dimensions. This finding contrasts with global studies that have identified gender disparities in financial literacy, particularly among women (Lusardi & Mitchell, 2014). However, it aligns with other research in the Philippines, which has found minimal gender differences in financial literacy among students (Cardenas, 2021).

The absence of significant gender differences in this study may be due to the relatively homogenous nature of the sample, as all participants were students at the same institution with similar educational backgrounds. Additionally, the inclusion of financial education in the school curriculum may have helped to mitigate gender disparities in financial literacy (Bucher-Koenen et al., 2016). However, further research is needed to explore gender differences in financial literacy in more diverse populations and to identify potential barriers to financial education for women.

Discussion

The findings of this study have important implications for financial education, particularly in the context of SHS and College students in the Philippines. The gaps identified in students' financial knowledge and behavior highlight the need for targeted financial literacy programs that address these deficiencies. For instance, incorporating practical lessons on compound interest, investment strategies, and budgeting into the curriculum could significantly enhance students' financial literacy (OECD, 2016).

Furthermore, the study suggests that financial education programs should focus on both knowledge and behavior. While students may have a basic understanding of financial concepts, they may lack the practical skills needed to apply this knowledge effectively. Therefore, financial education should include hands-on activities, such as creating and managing a budget, comparing loan options, and planning for long-term financial goals (Lusardi & Mitchell, 2014).

The study also underscores the importance of family involvement in financial education. Given that many students reported learning about finance from their families, it is crucial to encourage parents and guardians to engage in financial discussions with their children. Schools could offer workshops for parents on how to teach financial literacy at home, complementing the formal education provided in schools (Shim et al., 2010).

Conclusions

This study provides a detailed assessment of financial literacy levels among SHS and College students at CSFJ, revealing both strengths and weaknesses in their financial knowledge and behavior. While students generally understand basic financial concepts, there are significant gaps that need to be addressed through targeted education programs. By improving financial literacy, educational institutions can equip students with the skills necessary for successful financial management, contributing to their long-term economic stability and well-being.

The study also highlights the importance of a comprehensive approach to financial education, one that includes both theoretical knowledge and practical skills. By fostering a culture of financial literacy within schools and families, we can better prepare young adults for the financial challenges they will face in adulthood.

Based on the findings and conclusions of this study, several recommendations can be made to enhance financial literacy among Senior High School (SHS) and College students, particularly within the context of the Philippines. These recommendations are aimed at educators, policymakers, financial institutions, and future researchers.

Integration of Comprehensive Financial Literacy Programs into the Curriculum

Schools and educational institutions should integrate financial literacy as a core component of the curriculum at both the SHS and College levels. This program should cover basic financial concepts such as saving, budgeting, and managing debt, as well as more advanced topics like investment strategies, risk management, and financial planning.

The curriculum should be designed to be practical and engaging, incorporating real-life scenarios and hands-on activities that allow students to apply financial concepts in a controlled environment. For example, students could be tasked with creating and managing a mock investment portfolio, developing a personal budget, or simulating loan repayment scenarios.

Development of Tailored Financial Literacy Programs for Diverse Student Needs

Recognizing that students come from diverse backgrounds with varying levels of financial knowledge and experience, it is important to develop tailored financial literacy programs that address the specific needs of different student groups. For instance, programs could be designed to focus on the financial challenges faced by low-income students, women, or those with limited access to financial services.

Additionally, schools should consider offering elective courses or workshops on specialized financial topics, such as entrepreneurship, retirement planning, and credit management, to cater to students with specific financial interests or career aspirations.

Incorporation of Family and Community Engagement in Financial Education

Given the significant influence of family on students' financial behavior, schools should encourage family and community involvement in financial education. This could be achieved through family-oriented financial literacy workshops, where parents and guardians are provided with the tools and resources to teach financial concepts at home.

Community-based financial education initiatives, such as partnerships with local financial institutions or non-governmental organizations (NGOs), could also be developed to extend financial literacy beyond the classroom and into the broader community. These initiatives could include community financial fairs, seminars, and mentoring programs.

Use of Technology and Digital Tools in Financial Literacy Education

Leveraging technology can significantly enhance the delivery and accessibility of financial literacy education. Educational institutions should explore the use of digital tools and platforms, such as online courses, mobile apps, and interactive financial games, to engage students in financial learning.

Financial literacy apps that allow students to track their spending, set financial goals, and receive personalized financial advice could be particularly effective in reinforcing positive financial behaviors. Schools could collaborate with fintech companies to develop and promote these tools among students.

Continuous Assessment and Improvement of Financial Literacy Programs

To ensure the effectiveness of financial literacy programs, schools should implement continuous assessment and feedback mechanisms. Regular evaluations, such as pre- and post-tests, surveys, and focus group discussions, can help educators identify areas where students are struggling and adjust the curriculum accordingly.

Additionally, long-term tracking of students' financial behaviors and outcomes after graduation could provide valuable insights into the real-world impact of financial literacy education, guiding future improvements to the programs.

Policy Recommendations for Government and Educational Authorities

Policymakers should prioritize financial literacy as a national educational objective, recognizing its importance in fostering economic stability and reducing poverty. This could involve the creation of a national financial literacy framework that sets out clear goals, standards, and guidelines for financial education at all educational levels.

Government support for financial literacy initiatives, including funding for teacher training programs and the development of educational materials, is also essential. Furthermore, collaboration between government agencies, schools, and the private sector should be encouraged to create a coordinated and comprehensive approach to financial literacy education.

Future Research Directions

Future research should explore the long-term effects of financial literacy education on students' financial behaviors and outcomes. Longitudinal studies that track students' financial decisions and economic well-being over time would provide valuable data on the lasting impact of financial education.

Additionally, research should examine the effectiveness of different pedagogical approaches and delivery methods in financial literacy education. Comparative studies that evaluate traditional classroom instruction, experiential learning, and digital tools could help identify the most effective strategies for different student populations.

Finally, there is a need for more research on the intersection of financial literacy and other factors, such as mental health, cultural attitudes, and socioeconomic status. Understanding how these factors influence financial literacy and behavior can lead to more targeted and effective educational interventions.

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In compliance with Threshold's guidelines for the ethical use of artificial intelligence (AI) and automated tools in academic research, the authors disclose the use of OpenAI's ChatGPT for enhancing the quality and clarity of the manuscript. ChatGPT was utilized to assist in refining the language, structure, and formatting of the text, ensuring a high level of academic rigor and coherence. The authors confirm that all data analysis, critical interpretations, and conclusions presented in this manuscript were conducted independently by the research team. The AI tool was employed strictly for editorial assistance and did not influence the scientific content or ethical considerations of the study. All intellectual contributions from the AI tool are in accordance with the authors' original intentions and have been reviewed and approved by all co-authors. The use of ChatGPT complies with Threshold's ethical standards and guidelines for transparent reporting of AI involvement in research. The authors remain fully responsible for the integrity and accuracy of the content presented in this paper.

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