

Money Talks: How Financially Literate Are College Students?

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ABSTRACT

Financial literacy plays a very significant role in an individual's financial well-being, yet many college students exhibit the lack of financial knowledge and skills necessary to make informed financial decisions. This study was thus conducted to assess the financial literacy of college students of Saint Ferdinand College, City of Ilagan, Isabela which focused on three main variables: financial knowledge, financial behavior and financial attitude. Using a descriptive quantitative design and Slovin's formula, data were collected from 423 students who were selected randomly through an adapted structured financial literacy survey questionnaire. The findings revealed that while students showed a high level of both financial behavior and financial attitude, their financial knowledge appears to be low, specifically in areas of inflation and interest rate concepts. Results also showed significant differences in the financial literacy levels based on the students' demographic profiles such as age, sex, course, year level, civil status, and monthly allowance. In addition, a positive relationship was established among the three variables of financial literacy albeit the weak positive relationship found in financial knowledge with both financial behavior and financial attitude. This study thus proposed some suitable programs that may be implemented to improve the students' level of financial knowledge and enhance further their financial behavior and financial attitude thereby achieving better financial decision-making skills.

Keywords: financial literacy, financial knowledge, financial behavior, financial attitude, financial education

INTRODUCTION

Financial education has always been a significant concept that concerns an individual's capability to handle finances effectively. People have different perceptions on managing money; efficiently doing so means achieving ultimate skills in personal financial management. Financial education has in fact become progressively significant that governments and institutions from various countries have launched financial literacy programs in order to advocate comprehensive finance.

The Organization for Economic Co-operation and Development (OECD) is an international organization that formulates programs and policies for economic advantages. It has created the International Network on Financial Education (INFE) and one of the areas it focuses on is the promotion of financial education amongst countries. OECD/INFE views financial education as a means of "equipping people with financial knowledge and skills to help them make informed and sound decisions about their finances which is a tool for sustaining their financial comfort". OECD has thus been accepting and publishing research studies and papers relative to financial education as a means of promoting programs, policies and plans pertaining to

financial literacy that can greatly help in advocating financial inclusion not just with individuals but also with nations.

A lot of individuals tend to exhibit little to least understanding of managing their own money as well as the possible influence it may have on their financial wellness. A low level of financial literacy is thus one of the key factors why Filipinos strive with their finances and financial practices such as saving and investing. As a matter of fact, it was revealed in a report issued by the World Bank during the Financial Stakeholders' Education Expo held in November 2022 that only 25 percent of Filipinos are equipped with financial awareness on basic financial concepts. In another global study, the Philippines was ranked in the lowest 30 out of 144 countries in terms of financial literacy.¹ This just clearly implies that more Filipinos are struggling with financial education.

For young adults, financial literacy poses a great challenge as they have always been dependent on their parents or guardians for financial assistance. According to Moneva & Marijune², the financial support satisfaction of students vary and depend on the amount of their daily school allowance and stated further that a student who is able to manage well his financial resource will incur lesser debts and liabilities which lead to higher satisfaction in financial support. However, in one of the studies published by OECD concerning financial education, it was found out that young adults are among those who have the lowest financial literacy. In other words, college students exhibit the absence of concern in financial planning. Because most college students exercise their own financial freedom once their parents or guardians hand them their allowance either daily, weekly, or monthly, they often neglect the significance of budgeting and saving and thus, they end up with financial difficulties.

College students are indeed one of the ultimate beneficiaries of financial literacy programs as they will eventually join the workforce after graduation. A big part of their responsibility shall be to allocate their money from their salaries and manage their potential investment options and retirement plans.³ Students who are able to handle their own finances is an important development during maturity. If the right priorities are not set, students tend to misuse their money.⁴ Financial literacy among college students should not be ignored therefore and should in fact be given more attention as this will guide them in making informed decisions that can strongly influence their financial safety which will help themselves to develop into more financially literate and financially independent adults.⁵ Thus, their individual responsibility on financial decisions such as allocating their allowance, setting priorities within their limited budget, or pursuing for a scholarship, should all be guided by financial awareness.

In view of the foregoing challenges on financial education amongst young adults, this study was thus conducted to assess the knowledge, behavior and attitudes of college students towards financial literacy. This assessment is considered essential because being financially literate is tantamount to being able to allocate and utilize one's own financial resources in various financial affairs which will thus promote financial wellbeing. Furthermore, this study is also aimed at formulating programs relating to financial education to help increase the financial literacy of college students and train them to be more aware in managing their personal finances in preparation for entering adulthood.

RELATED LITERATURE

In January of 2024, heads of states and political leaders attended a World Economic Forum Annual

¹ <https://mb.com.ph/2024/1/27/financial-literacy-and-adolescence>. Retrieved on August 2, 2024.

² https://www.researchgate.net/publication/339148730_Students'_Level_of_Financial_Support_Satisfaction_Towards_Their_Daily_Allowance. Retrieved on August 2, 2024.

³ https://iaeme.com/MasterAdmin/Journal_uploads/IJM/VOLUME_11_ISSUE_12/IJM_11_12_190.pdf Retrieved on August 2, 2024.

⁴ https://www.academia.edu/39729084/Financial_Literacy_of_Senior_High_School_Students_in_Bacolod_City. Retrieved on August 2, 2024.

⁵ Abichuela, loc cit. Retrieved on August 2, 2024.

Meeting in Switzerland and a fundamental part on one of the economic topics discussed was the strengthening of financial literacy in every country. This was evaluated in the hopes that numerous people can value the activities that can motivate them to move onwards economically and safeguard themselves when needed.⁶ This is in response to the findings of several surveys conducted, including that of the OECD's, stating that the global financial literacy rate is low, and that only 33% of the world population is financially literate.⁷

In line with this, numerous countries have been implementing their own financial literacy approaches because promoting such is crucial in order to grasp immeasurable concepts of financial inclusion and economic development. In Austria for instance, the Oesterreichische Nationalbank (OeNB) works in partnership with the education community to enhance financial literacy.⁸ In Germany, the Financial Literacy Initiative was launched as a means to develop the broad perception of financial concerns across all generations.⁹

Meanwhile, our Philippine government through the Philippine Development Plan (PDP 2011-2016) has specifically recognized the significance of financial literacy as one of the chief strategies in alleviating poverty and inclusive growth. In relation to this, RA 10679 has been enacted to promote entrepreneurship and financial education among the Filipino youth.¹⁰ This just shows that in recent years, substantial emphasis has already been given to financial literacy programs which signifies its importance in the financial environment.

In a study conducted by Dewi et al.¹¹, financial literacy was given utmost emphasis especially on its impact in personal finance. Any person can be a victim of fraudulent financial acts, not just the young ones but also the adults who are in fact mostly targeted by financial scammers. Every now and then, new types of fraudulent proposals are evolving, with the goal of compelling people to make decisions that will eventually allow them to lose their hard-earned money. With improved financial literacy therefore, people will definitely prevent the occurrence of falling into financial traps such as debts and investment frauds. Enhancing financial literacy does not start too early nor too late. When people follow some plans that include financial decisions such as a system of spending, regulating excessive borrowing, and organizing some emergency and retirement goals, financial uncertainties can thus be minimized and financial goals become more possible.

Xiao & Porto¹² have studied the financial literacy of individuals and found out that most have low literacy in terms of debt concepts and even have difficulty understanding the basics of compounding interest. Thus, the authors concluded that those individuals which have a low level of debt literacy tend to engage more in high-cost transactions which would eventually result in higher rates. Ruiz-Palomo et al.¹³ on the other hand, considered the demographic profiles of individuals such as age and gender to determine whether these have significant impact on an individual's financial literacy, specifically financial knowledge. The authors have stressed that apart from these demographic profiles, factors such as socio-economic status, educational attainment, cultural and societal norms also influence the financial knowledge of an individual. Thus, understanding these profiles and factors will help financial educators to develop

⁶ Unjieng, loc cit.

⁷ Ibid.

⁸ <https://ideas.repec.org/a/onb/oenbmp/y2020iq3-20b2.html>. Retrieved on August 5, 2024.

⁹ https://www.oecd.org/en/publications/2024/05/financial-literacy-in-germany_139ac105.html. Retrieved on August 5, 2024.

¹⁰ https://lawphil.net/statutes/repacts/ra2015/ra_10679_2015.html. Retrieved on August 7, 2024.

¹¹ https://www.researchgate.net/publication/346211648_Financial_literacy_and_its_variables_The_evidence_from_Indonesia. Retrieved on August 7, 2024.

¹² <https://www.emerald.com/insight/content/doi/10.1108/ijbm-01-2016-0009/full/html>. Retrieved on August 12, 2024.

¹³ https://www.researchgate.net/publication/369950608_Financial_knowledge_of_pre-university_students_Effects_of_age_and_gender. Retrieved on August 14, 2024.

appropriate financial education programs to enhance the required financial knowledge and skills to make informed financial decisions.

Bangco et al.¹⁴ viewed financial literacy as a means of sustainability and has the ultimate fundamental role of safeguarding the financial capability of individuals, families, businesses, and even national economies. Financial indicators such as obligations, investments and budget management can all be construed to success or bankruptcy which mostly stem from financial literacy. A higher level of financial literacy especially among the young individuals means a more positive level of financial market which can be translated into economic and practical developments. The authors have found out that people living in the region and those that are in developed financial markets have varying level of differences in financial literacy. Furthermore, it was concluded that the absence of financial education was more popular in women and the less educated people, which are crucial findings since system frameworks for investing, saving, and borrowing, are all associated with financial literacy.

For the purpose of this study and to further understand the nature of financial literacy, three essential variables are thus incorporated namely financial knowledge, financial attitude and financial behavior.

Financial knowledge is simply a form of literacy in financial matters. It is the ability to understand the various concepts of managing money and its corresponding tools and strategies. Financial knowledge also includes knowing how to apply practical skills in personal finances such as saving, investing, spending among others. Consequently, it encompasses one's capacity to formulate informed decisions in relation to financial future.

In a 2023 study conducted by the OECD/ INFE¹⁵ financial knowledge is identified as one of the three elements of financial literacy. It concerns having the basic understanding of financial theories and the capacity to carry out numeracy skills in financial concepts. This study focused on assessing the levels of financial knowledge of individuals, with emphasis on financial concepts such as defining inflation and computing for the time value of money as well as the advantages of long-term investing/saving, interest and risk. The survey on financial knowledge was administered to participating OECD countries among adult respondents and the results revealed an average financial knowledge rate indicating that most adults can comprehend the definition of inflation, and are able to calculate a simple numerical interest on a loan. However, very few can explain the effect of inflation on their savings. In addition, compound interest was found to be a more difficult concept. Lusardi & Mitchell¹⁶ have therefore concluded that in the midst of financial crisis, global leaders express their profound distress with the extensive absence of financial knowledge among individuals. This means that even adults have difficulty on understanding the time value of their money, or making decisions on how to effectively manage their savings, which is also used as one of the measuring tools in financial knowledge.

Dewi et al.¹⁷ characterizes financial knowledge as a manifestation of a person's awareness on financial matters. Similarly, various concepts were also used to measure financial knowledge which included topics on compound interest, inflation, deposits, time value of money, diversification, interest rates, debt, and assets. The authors discussed that basic financial literacy, which facilitates in decision making and developing sound financial habits, is based on financial knowledge. In a period when the options of choosing financial goods is becoming more and more complicated, financial knowledge plays an essential part, specifically with those goods that can simply be accessed by several depositors and investors.

¹⁴ Bangco et al., loc cit.

¹⁵ https://www.oecd.org/en/publications/oecd-infe-2023-international-survey-of-adult-financial-literacy_56003a32-en.html. Retrieved on August 8, 2024.

¹⁶ https://www.researchgate.net/publication/256056318_The_Economic_Importance_of_Financial_Literacy_Theory_and_Evidence. Retrieved on November 12, 2024.

¹⁷ Dewi et al., loc cit.

For Mandell & Klein¹⁸, financial knowledge can be obtained through proper financial education. In their study of 79 high school students, it was found out that those who took the proper financial management course have higher financial literacy as compared with those students who have not. However, it was noted that those students who are more financially literate did not assess themselves to be more inclined towards saving, or even have better financial behavior. Thus, the authors suggested the evaluation of financial literacy education programs and its impact on the financial behavior of high school students. Beal & Despatchira¹⁹ have likewise found out that high school students' financial literacy is not high, and that this might be attributed to their lack of financial education particularly in areas of insurance which poorly affect their financial decision-making skills. This just proves the lack of financial education initiatives in high school institutions and the authors suggested for the immediate implementation of suitable financial education programs as this will improve the outcomes of both the students and the economy in general. The studies of Woodyard & Robb²⁰ as well as Khan et al.²¹ emphasized that an understanding of a person's financial behavior requires the understanding of the gap in financial knowledge because an overestimation of financial knowledge can result to precarious financial behavior. The authors stressed that the term financial knowledge is at times used similarly with financial literacy while in other instances, financial knowledge is recognized as one of the components of financial literacy. The study highlighted two types of financial knowledge such as objective and subjective where objective financial knowledge is determined by evaluating an individual's level of comprehension on several concepts of financial markets and products such as assets, debts, savings, and investments. Subjective financial knowledge on the other hand is the ability to gauge one's self-assessment of his own financial knowledge and measuring this simply requires to answer the basic question, "how would you assess your overall financial knowledge?" Nevertheless, both objective and subjective financial knowledge are of utmost importance because of their impact on financial decision-making.

In a local study conducted by Vallespin et al.²², financial knowledge was found out to be influenced by certain factors such as self-actualizing personal values, financial education at home, or formal financial education at school. A survey was administered on young individuals and the results revealed that their financial knowledge was moderate to low. While the respondents displayed high understanding of how money can be divided equally, most of them cannot also understand its time value, or how much financial obligations should they pay their debtors. The authors emphasized that there is a need for young adults to be more financially knowledgeable as this has strong influence on their financial well-being. As financial knowledge is also a concept of financial literacy, informed financial decisions are likewise affected.

Pascual and Santos-Recto²³ likewise studied the financial knowledge and practices of young adults and determined that they are somewhat influenced by their peers in their financial decision-making. Results further showed that young adults are knowledgeable financially, but have limited awareness on disbursement, loans and repayments. This might be due to the fact that most of the respondents' allowance come from their parents and hence, their financial management practices are also affected.

Financial behavior on the other hand, is seemingly the most important concept of financial literacy because formulating plans on how to utilize money in terms of expenses and organizing financial safety nets are

¹⁸ https://www.researchgate.net/publication/254513592_The_Impact_of_Financial_Literacy_Education_on_Subsequent_Financial_Behavior. Retrieved on September 1, 2024.

¹⁹ https://www.researchgate.net/publication/227994004_Financial_Literacy_among_Australian_University_Students. Retrieved on August 15, 2024.

²⁰ <https://newprairiepress.org/cgi/viewcontent.cgi?referer=&httpsredir=1&article=1019&context=jft>. Retrieved on August 8, 2024.

²¹ <https://www.tandfonline.com/doi/full/10.1080/01634372.2017.1317311?scroll=top&needAccess=true>. Retrieved on August 10, 2024.

²² https://papers.ssrn.com/sol3/papers.cfm?abstract_id=4808681&download=yes. Retrieved on August 15, 2024.

²³ <https://www.abacademies.org/articles/the-financial-literacy-and-practices-of-students-in-central-luzon-state-university-philippines-16819.html>. Retrieved on August 17, 2024.

all part of financial behavior that mostly results to monetary wealth or financial security.²⁴ Apart from spending however, financial behavior also includes forms of decisions and actions of individuals relating to saving, investing, handling risk, managing debts and other finances. Oftentimes, financial behavior is characterized by such factors as habits, knowledge, emotions that impacts financial literacy.

For OECD²⁵, financial behavior is the second concept of financial literacy. The behaviors and actions of individuals can influence their financial conditions and welfare that are both short- and long-terms. Such behaviors like delaying payment of bills, not planning for future expenses, or selecting financial products without considering other options, may all undesirably affect a person's financial state and comfort. Thus, it is crucial to assess financial behavior when analyzing the financial literacy. In the survey questionnaire conceptualized by OECD, individuals are investigated if they are behaving in financially literate manners. The behavior aspects include how individuals keep track of their money, their ability to save and plan for the long-term, and how they consider making purchases of financial products and services. Altogether, these financial behavior indicators present an understanding of an individual's actions or behavior which are associated with their finances. The survey conducted to all OECD member countries revealed that there is an average percentage of adult individuals who behave financially, or simply six out of nine who demonstrate financially literate behaviors. This indicates an average level of financial behavior among adult individuals who consider the long-term impact of managing their finances which positively influences their financial conditions.

For Morris et al.²⁶ financial behavior is an essential part of an individual's day-to-day experience. The authors have referenced research studies that link poor financial behavior to financial illiteracy which is mostly illustrated by low or negative rates of personal savings, failure to choose wise investments, and shortage of money that may result to critical and frequently irreparable financial errors. Thus, financial literacy is always viewed as a means to foster healthy financial behavior that will sooner or later end up with improved financial well-being and retirement. For Barber & Odean²⁷ for instance, financial behavior is based on the psychological aspect of overconfidence particularly in investing. According to the authors, men are more likely to have overconfidence than women. Consequently, men are more prone to trading and performing worse in investing than women.

Dewi et al.²⁸ identified two types of financial behavior namely positive and negative behavior. It is stated that positive financial behavior involves activities such as managing cash, allotting money supply for emergency purposes, performing credit management, and developing long-term plans like retirement, risk mitigation through obtaining insurance, and planning on purchasing properties. On the other hand, negative financial behavior refers to extravagance, dependence on pension plans, and avoidance in engaging discussions on financial matters. The study concluded that young individuals who are financially literate are able to perform better and portray good financial behavior for their financial safety. In addition, young generations who have financial literacy have the capacity to promote the community's economic advancement.

Similarly, Mireku et al.²⁹ postulated the theory that financial literacy is relative to financial behavior. The authors posited that individuals who are financial literate are more likely to exhibit sound financial behavior than those who are not. The results of their study have proven that financial literacy is a major

²⁴ http://www.ijfmr.com/journal_file/journal_pdf/14-431-151824097235-40.pdf. Retrieved on August 16, 2024.

²⁵ OECD, loc cit.

²⁶ <https://www.tandfonline.com/doi/full/10.1080/23311886.2021.1996919#abstract>. Retrieved on August 14, 2024.

²⁷ <https://www.sciencedirect.com/science/article/abs/pii/S0165176516301999>. Retrieved on August 8, 2024.

²⁸ Dewi et al., loc cit.

²⁹ <https://www.tandfonline.com/doi/full/10.1080/23322039.2023.2188712?utm#abstract>. Retrieved on August 15, 2024.

factor for financial behavior. It was likewise found out that family characteristics such as father's educational background and home discussions of financial topics are significant predictors of a good financial behavior.

A study conducted by Eloriaga et al.³⁰ focused on the financial literacy and financial behavior of young professionals in Metro Manila. Financial behavior is associated with how individuals manage, treat and utilize existing financial resources. The authors referenced the study of Webley & Nyhus who have highlighted four specific dimensions of financial behavior namely: making the ends meet, preparing for the future, selecting the best financial products, and being updated with the important shifts in the financial environment. Furthermore, young individuals tend to begin dealing with their financial challenges during college and that their financial behaviors will impact their future decisions as soon as they start managing their own money. Thus, it is noted that both age and experience have a positive influence on a person's financial behavior.

Financial attitude encompasses an individual's beliefs and mindset about money matters. It is the third important concept of financial literacy.³¹ Financial attitudes are considered as psychological predispositions that are conveyed when assessing suggested financial management practices with differing levels of agreement and disagreement.³² Dewi et al.³³ gives focus on values and beliefs that shape an individual's financial behavior when formulating decisions such as self-control, patience, long-term thinking, and capacity to solve financial problems. In other words, financial attitude emphasizes a person's capability to control himself in beliefs such as believing that saving is more important, as well as being patient in dealing with financial challenges and looking for means to survive.

The OECD³⁴ considers that attitudes of individuals towards money can likewise impact their decisions and behavior. In the 2023 survey administered by the organization, it distinguishes financial attitudes in the form of questions or statements that evaluate the individual's attitudes towards money and future financial plans. The survey questions center on how the respondents choose to spend their money on a short-term basis by way of "living for today" and respondents are expected to agree or disagree with the statement. The short-term preferences about their attitudes could impede their behaviors that may possibly result to an improved financial flexibility and security. As the survey was conducted across all OECD member countries and economies, the results showed that less than half of the respondents exhibit financial attitudes that are inclined towards long-term plans. It just implies that most individuals prefer spending money rather than saving which is a financial attitude that influences their future financial plans.

Ameliawati & Setiyani³⁵ discussed the attitude of students in allotting their school allowance coming from their parents which impacts their financial behavior. The authors identified two types of student groups who differ in financial attitudes – the ones who spend all the money sent by their parents and even ask for more, and the ones that set aside portion of their allowance for saving and investing. Adiputra et al.³⁶ concluded that financial attitude is a consequence of financial situations encountered by individuals where a person's financial attitude is an indication of the implementation of suitable financial beliefs so as to achieve financial sustainability by way of coming up with informed decisions and managing of resources. Financial attitude therefore is an imperative determinant to the success or failure of personal finance.

³⁰ <https://journal.ijresm.com/index.php/ijresm/article/view/1713/1652>. Retrieved on August 15, 2024.

³¹ Ponio & Timog, loc cit.

³² <https://www.ssbfnct.com/ojs/index.php/ijrbs/article/view/2210/1573>. Retrieved on August 18, 2024.

³³ Dewi et al., loc cit.

³⁴ OECD, loc cit.

³⁵ <https://knepublishing.com/index.php/Kne-Social/article/view/3174/6729#info>. Retrieved on August 20, 2024.

³⁶ https://lntar.untar.ac.id/repository/penelitian/buktipenelitian_10192042_3A010322092020.pdf. Retrieved on August 20, 2024.

Consequently, financial attitude will aid individuals in establishing their attitude and behavior in financial areas such as management, budgeting and decision-making.³⁷

A study conducted by Encio et al.³⁸ evaluated the financial attitudes of students in higher education institution towards various financial activities such as budgeting, saving, borrowing, and investing. The study underscored the significance of financial attitude because it is believed that the higher the financial attitude an individual has, the more enhanced he will be in managing money. The authors likewise referenced the concept of Marsh that states financial attitude as the manner in which an individual perceives his personal financial challenges that are assessed based on the answer to a particular statement or belief. The study also noted Besri's six components of financial attitude including: (1) obsession (individual opinion of money), (2) power (money as an instrument to solve problems), (3) effort (individuals who earn their own money), (4) dissatisfaction (emotions that are not satisfied with the money they have), (5) storage (capacity not to spend the money), and (6) security (opinion that money is better kept personally rather than deposit in banks or financial institutions). Overall, the study conducted to higher education students revealed favorable financial attitudes towards budgeting, saving, borrowing and investing but showed significant differences when grouped according to profiles. The study thus recommended to review and develop the curriculum to include more focus and delivery of instruction in matters relating to budgeting, saving, borrowing, and investing for the general welfare and development of the students.

Financial knowledge, behavior and attitude have always been the three vital concepts of financial literacy that have been utilized by various studies to evaluate an individual's financial status and wellbeing. Numerous studies exist that delved into the connection of these three variables and how each of these significantly impacts a person's informed decisions as well as financial plans for the future.

Nano³⁹ evaluated and concluded a statistically significant relationship between financial knowledge, financial attitude and financial behavior. Results of the survey showed that the respondents who scored more points in financial knowledge likewise scored more points in financial attitude and behavior. In addition, it was found out that financial attitude also plays an interceding correlation between financial knowledge and financial behavior. A student's distinct opinion or mindset (attitude) towards personal finances may thus exhibit best financial knowledge but not necessarily best financial behavior. The study further suggested the significance of a student's financial attitude on money management skills and behavior and that parents as well as schools should indeed assist students to foster good attitude towards money. Khawar & Sarwar⁴⁰ also shared the same findings in their study and stated that children mirror the good financial behavior that their parents show them. Thus, the study concluded that family financial socialization has proven a moderate mediation between financial literacy and financial behavior.

Likewise, the study of Ponio and Timog⁴¹ concluded that financial knowledge and behavior are positively interrelated, and that financial knowledge also impacts financial attitude. The authors noted that having a high level of financial knowledge, for instance, could positively affect both financial behavior and attitude. However, the study also revealed that there is a low significant relationship between financial attitude and financial behavior. The authors thus recommended on integrating financial education to secondary and

³⁷ <https://www.scitepress.org/Papers/2019/93292/93292.pdf>. Retrieved on August 22, 2024.

³⁸ https://repository.cpu.edu.ph/bitstream/handle/20.500.12852/2704/03_CPUMRJ_EncioLT_2022.pdf?sequence=1&isAllowed=y. Retrieved on August 22, 2024.

³⁹ https://knowledgecenter.ubt-uni.net/ijbte/vol4/iss1/9/?utm_source=knowledgecenter.ubt-uni.net%2Fijbte%2Fvol4%2Fiss1%2F9&utm_medium=PDF&utm_campaign=PDFCoverPages. Retrieved on August 25, 2024.

⁴⁰ <https://fbj.springeropen.com/articles/10.1186/s43093-021-00064-x?utm#citeas>. Retrieved on August 29, 2024.

⁴¹ Ponio & Timog, loc cit.

college students as this may help them obtain the necessary financial practice early on in their lives which may facilitate in developing a good financial attitude.

Loza et al.⁴² have similarly concluded that financial knowledge and skills directly and positively influence university students' financial attitude. The authors have found out however, that financial knowledge and skills come before attitude, which leads to financial behavior. The study thus suggested for educational institutions to offer personal finance course programs and workshops to educate students and instill in them a favorable financial attitude, make informed financial decisions and enhance their finance behavior. Knowledge gained from these courses and workshops can then be taught to family members, friends and acquaintances to broaden awareness on financial literacy and its significance.

In addition, Bapat⁴³ discussed that financial course programs which can include socio-psychological factors can enhance financial knowledge and responsible financial behavior through financial attitudes. According to the author, financial education programs should be designed to increase the financial behavior of the students which can be appropriately used to increase the financial knowledge which is tied to financial attitude. As such, these financial educational courses should be participative which means that they must include interesting contents and technological tools as well as videos that can help instill responsible financial behavior among students.

On the other hand, Yao⁴⁴ conducted a study on financial literacy that focused on the financial knowledge and financial behavior among different age groups. The author emphasized that long-term financial behavior included investing and saving on retirement, whereas short-term financial behavior composed of expenses and emergency savings. Subjective financial knowledge was likewise utilized to determine the long-term financial planning of the respondents. The results of the study revealed that as the age increases, financial knowledge of an individual also increases. Consequently, the objective financial knowledge was also used to determine the short-term financial planning of the respondents and the regression results revealed the same relationship with the age. Thus, the authors interpreted that age improves the financial knowledge and behavior of an individual. Similarly, the study of Okamoto et al.⁴⁵ concluded that financial literacy impacts the financial behavior and attitudes of individuals. The study noted that financial literacy increases as the age of a person increases. In addition, the authors pointed out that men are more financially literate than women yet this result can be mitigated through education. The study further suggested that policies may be crafted in order to help adults with their financial decision-making, improve more the women's financial literacy and improve men's financial behaviors and attitudes.

Other authors such as Ameliawati & Setiyani⁴⁶, Moko et al.⁴⁷ and Sugiyanto et al.⁴⁸ also concluded that there is a positive relationship between financial attitude and financial behavior while for Moko et al.,⁴⁹ it was found out that financial knowledge has no significant effect on financial management behavior yet financial attitude has. Dewi et al.⁵⁰ similarly found a positive correlation between financial attitude and financial management behavior but no significant relationship between financial knowledge and financial behavior. Furthermore, Shin et al.⁵¹ studied the relationship of financial learning, attitude and behavior among adolescents and determined the influence of parents which is greater than both experience and

⁴² https://www.scielo.sa.cr/scielo.php?pid=S1659-33592024000100065&script=sci_arttext&utm. Retrieved on September 3, 2024.

⁴³ <https://www.emerald.com/insight/content/doi/10.1108/ijbm-10-2019-0356/full/html>. Retrieved on September 5, 2024.

⁴⁴ https://www.researchgate.net/publication/366741854_Financial_Literacy_and_Financial_Behaviour_in_Four_Different_Age_Groups_in_Malaysia. Retrieved on September 12, 2024.

⁴⁵ https://www.researchgate.net/publication/356307819_Age_gender_and_financial_literacy_in_Japan. Retrieved on September 12, 2024.

⁴⁶ Ameliawati & Setiyani, loc cit.

⁴⁷ Moko et al., loc cit.

⁴⁸ https://www.researchgate.net/publication/336980420_Financial_Literacy_Financial_Attitude_and_Financial_Behavior_of_Young_Pioneering_Business_Entrepreneurs. Retrieved on August 25, 2024.

⁴⁹ Moko et al., loc cit.

⁵⁰ Dewi et al., loc cit.

⁵¹ <https://link.springer.com/article/10.1007/s10964-009-9432-x#citeas>. Retrieved on August 15, 2024.

financial education combined. Robb & Woodyard⁵² also noted that financial knowledge and satisfaction are directly associated with financial behavior and that knowledge improvement may likewise result to behavioral improvement. With all these studies therefore, it is evident that financial attitude significantly affects financial behavior because a better financial attitude of individuals consequently indicates a good behavior in managing their finances. On the other hand, the absence of strong positive correlation between financial knowledge and financial behavior is a result of certain proximities indicating that financial behavior is not a predictor of financial knowledge. Thus, it denotes that acquiring the proper financial knowledge does not necessarily translate into having a good financial behavior. In other words, the relationship between these two variables seem to be more complex because while both financial knowledge and financial behavior are components of financial literacy, other external factors such as financial habits may come in play to alter their relationship with each other.

Hence, this study was also aimed at establishing a correlation among the variables of financial literacy in terms of financial knowledge, financial behavior, and financial attitude to assess if one variable impacts the other and to determine their influence on the level of financial literacy of college students.

CONCEPTUAL FRAMEWORK

The study focused on the assessment of the financial literacy of college students in terms of financial knowledge, financial behavior and financial attitude. In addition, it also sought to determine if there is a significant relationship among these three variables. As such, Figure 1 is conceptualized in order to translate the objectives of this research, as shown below:

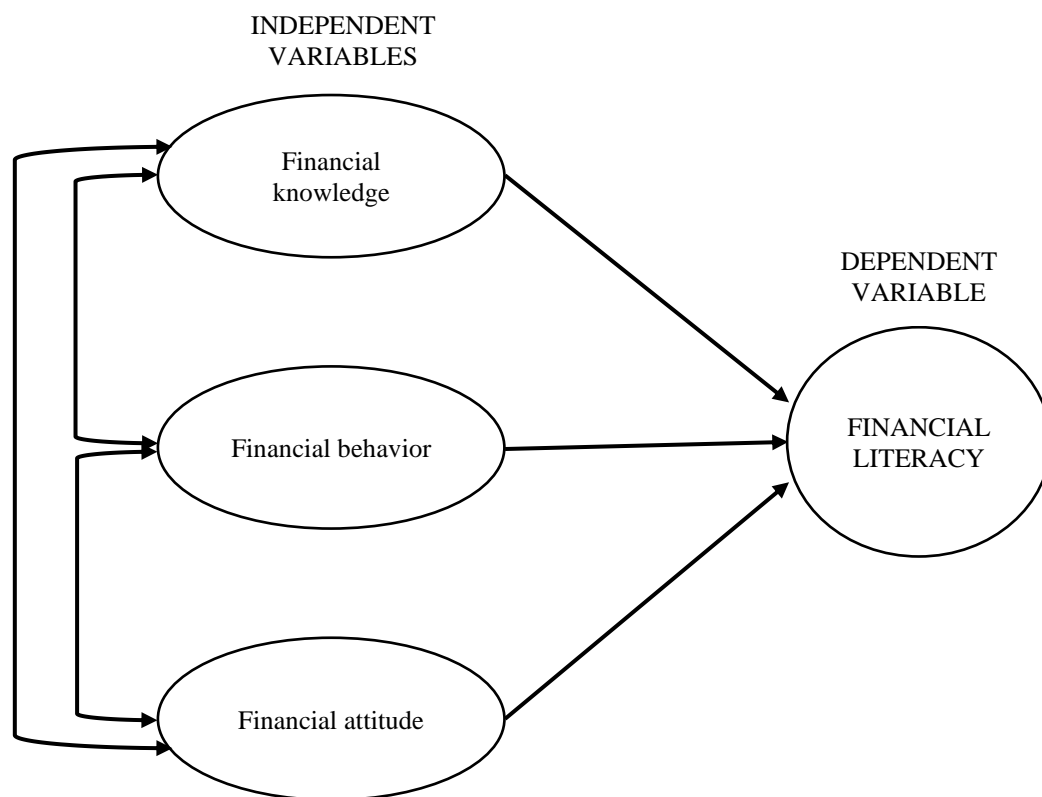


Figure 1. Paradigm of the Study

⁵² https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2061308. Retrieved on October 2, 2024.

STATEMENT OF THE PROBLEM

This research is aimed to evaluate the level of financial literacy of college students in terms of financial knowledge, financial behavior and financial attitude as well as establish a relationship among them. By doing so, it specifically aimed to answer the following questions:

1. What is the profile of the respondents according to:
 - a. age
 - b. sex
 - c. civil status
 - d. course
 - e. year level
 - f. average monthly school allowance
2. What is the level of financial literacy of the college students in terms of:
 - a. financial knowledge
 - b. financial behavior
 - c. financial attitude
3. Is there a significant difference between the students' level of financial literacy in terms of financial knowledge, financial behavior, and financial attitude when grouped according to their demographic profiles?
4. Is there a significant relationship among the three variables in relation to financial literacy?
5. What programs can be proposed in order to further educate college students towards being financially literate?

HYPOTHESES

Based on foregoing questions, the following hypotheses were thus derived:

1. There is no significant difference between the students' level of financial literacy in terms of financial knowledge, financial behavior, and financial attitude when grouped according to their demographic profiles.
2. There is no significant relationship among the three variables in relation to financial literacy.

CHAPTER 2

METHODOLOGY

Research Design

This study utilized a quantitative design to determine the profile of the participants and the level of their financial literacy in terms of financial knowledge, financial attitude and financial behavior. Furthermore, a descriptive correlational method was also used to analyze the relationship among the three independent variables.

Participants of the Study

The participants of this study were derived from a random sampling of the total population. Presently, there are 2,755 college students enrolled at Saint Ferdinand College – Ilagan. These students come from various courses such as Bachelor of Science in Accountancy, Business Administration, Criminology, Education, Information Technology, Nursing, Political Science and Psychology. Using Slovin's formula at 0.05 level of significance, the sample population was therefore computed.

Instrumentation

The survey questionnaire utilized in this study composed of two parts:

Part I. Profile of the Respondents. This was used to obtain information on the demographic profile of the students and were asked about their age, sex, civil status, course, year level, and average monthly school allowance.

Part II. Financial Literacy Questionnaire. This part is divided into three sections:

The first section is the financial knowledge which contains eight (8) questions that were originally adapted from the OECD/INFE financial literacy questionnaire. These are a combination of multiple type questions (5 questions with 3 choices) and True or False (3 statements) which comprised of financial activities such as inflation, tax rates, time value of money, simple and compound interest rates, risk and returns, and diversification. Questions were scored as one (1) point for every correct answer and zero (0) for all other answers. Adapting thus the interpretation of OECD/INFE, a percentage score of at least 71% denotes a passing level of financial knowledge.

The second and third sections of the questionnaire contained the financial behavior and financial attitude respectively which were adapted from Potrich et al.⁵³ The financial behavior section originally contained twenty questions which were aimed to assess the behavior of university students in relation to financial management, with topics concerning personal credit, planned consumption, investments and savings. For this study however, the questions were reduced to ten (10) and questions were selected to better suit the profile of the respondents. Students who scored high indicate a good financial behavior.

The third and last section contained the financial attitude. For the purpose of this study, the nine (9) original questions were reduced to seven (7) which were deemed suitable with the profile of the students and were aimed to identify how they evaluate their financial management. Similarly, a higher score obtained means a better financial attitude.

Furthermore, statistical tools were also utilized, as follows:

Frequency and Percentage Count. This was used to determine the profile of the student participants in terms of their age, sex, civil status, course, year level, and monthly school allowance.

Weighted Mean. This was used to determine the assessment of the students based on their financial knowledge, behavior and attitude.

One-way Analysis of Variance (ANOVA). This was to test the significant difference between the students' responses in financial knowledge, behavior and attitude and their demographic profiles when grouped accordingly.

Pearson's r-test. This was employed to assess the significant relationship among the independent variables of financial knowledge, behavior and attitude.

Data Gathering Procedure

The following were the procedures undertaken during the conduct of this study. First, a permission was sought from the administration of the institution to obtain the total number of college students presently enrolled for the current school year. Second, a formal request was submitted to allow the researcher to administer the survey questionnaires for the college students. Third, the survey questionnaires were distributed through pen and paper and via Google Forms. For those students opting to answer online, data were easily collected once the students were able to submit their answers in the link provided. Although this research was not formally subjected to a research ethics review committee, the students' responses were covered under the Data Privacy Act of 2021. Lastly, the responses were collated and recorded for statistical treatment.

⁵³ https://www.researchgate.net/publication/292984864_Development_of_a_financial_literacy_model_for_university_students. Retrieved on September 5, 2024.

Data Analysis

The data gathered in this study were encoded in Microsoft Excel. The questionnaires were therefore rated using the following:

For the financial literacy:

| Scale | Qualitative Description |
|-----------|-------------------------|
| 0.88-1.00 | Very high |
| 0.76-0.87 | High |
| 0.63-0.75 | Moderate |
| 0.46-0.62 | Low |
| 0.29-0.47 | Very low |

For the financial behavior and financial attitudes:

| Scale | Qualitative Description |
|-------------|-------------------------|
| 3.25 – 4.00 | Very high |
| 2.50 – 3.24 | High |
| 1.75 – 2.49 | Low |
| 1.00 – 1.74 | Very low |

CHAPTER 3

RESULTS AND DISCUSSIONS

1. Profile of the Respondents

| | | Frequency | Percentage |
|--------------|-------------------------|-----------|------------|
| Age | 16-20 | 354 | 83.7 |
| | 21-25 | 65 | 15.4 |
| | 26-30 | 3 | .7 |
| | 31 and above | 1 | .2 |
| Sex | Male | 185 | 43.7 |
| | Female | 238 | 56.3 |
| Civil status | Single | 420 | 99.3 |
| | Married | 3 | .7 |
| Course | Accountancy | 43 | 10.2 |
| | Business Administration | 45 | 10.6 |
| | Hospitality Management | 52 | 12.3 |
| | Criminology | 93 | 22 |
| | Information Technology | 27 | 6.4 |
| | Nursing | 45 | 10.6 |
| | Psychology | 39 | 9.2 |
| | Political Science | 14 | 3.3 |
| | Education | 65 | 15.4 |

| | | | |
|---------------------------|------------------|-----|------|
| | | | |
| Year level | I | 286 | 67.6 |
| | II | 66 | 15.6 |
| | III | 44 | 10.4 |
| | IV | 27 | 6.4 |
| | | | |
| Average monthly allowance | P1,000 and below | 74 | 17.5 |
| | P1,001-P2,000 | 96 | 22.7 |
| | P2,001-P3,000 | 64 | 15.1 |
| | P3,001-P4,000 | 91 | 21.5 |
| | P4,001-P5,000 | 59 | 14 |
| | P5,001 and above | 39 | 9.2 |

Table 1. Frequency and Percentage Distribution of Demographic Profile of Respondents

Table 1 presents the frequency and percentage distribution of the demographic profile of the college students of Saint Ferdinand College, City of Ilagan, Isabela. In terms of the age, the bracket of 16-20 has the highest frequency of 354 or 83.7%. This is because majority of the population of college students currently enrolled belong to this group. The females also dominate the sex profile with a frequency of 238 or 56.3%. As expected, there is a higher population of the female gender as compared with the males. Because the respondents are all college students, majority are single with an obtained frequency of 420 or 99.3% and only 3 of the respondents are married. In terms of the course, the Bachelor of Science in Criminology has the highest number of respondents with a frequency of 93 or 22% as this course has the highest number of enrollees currently. The first-year students also have the highest number of respondents with a total frequency of 286 or 67.6% and this also supports the age bracket of 16-20 mentioned earlier. Lastly, the highest number of respondents has an average monthly allowance of P1,001-P2,000 with a frequency of 96 or 22.7%.

2. Level of Financial Literacy

a. Financial Knowledge

| INDICATOR | QUESTION LABEL | RAW SCORES | WEIGHTED MEAN | INTERPRETATION |
|--|---------------------|------------|---------------|----------------|
| 1. Imagine that five brothers are given a gift of P5,500. If the brothers have to share the money equally, how much does each one get? - Less than P1,000 - Equal to P1,000 - More than P1,000 - Do not know | Time value of money | 278/423 | .66 | Moderate |
| 2. Now imagine that the five brothers will have to wait for one | Inflation | 122/423 | .29 | Very Low |

| | | | | |
|---|-------------------------|------------------|-------------------|------------|
| <p>year to get their share. In one year's time, they will be able to buy:</p> <ul style="list-style-type: none"> - Less than what they could today - Equal to what they could today - More than what they could today - Do not know | | | | |
| <p>3. You lend your friend P100.00 and the gives you back P100.00 the next day. How much interest has he paid on this loan?</p> | Interest on a loan | 331/423 | .78 | High |
| <p>4. Suppose you put P2,000 into a savings account with a guaranteed interest of 2% per year. If no withdrawals or additional deposits have been made, how much would be in your account at the end of the first year, interest included?</p> | Simple interest | 155/423 | .37 | Very Low |
| <p>5. If the same savings account is maintained with the same interest, how much would it be after five years?</p> | Compound interest | 139/423 | .33 | Very Low |
| <p>6. An investment with a high return (income) is likely to be high-risk.</p> <ul style="list-style-type: none"> - True - False | Risk and Return | 378/423 | .89 | Very High |
| <p>7. High inflation means that the cost of living is increasing rapidly.</p> <ul style="list-style-type: none"> - True - False | Definition of Inflation | 366/423 | .87 | Very High |
| <p>8. It is usually possible to reduce the risk of investing in the stock market by buying a wide range of stocks and shares.</p> <ul style="list-style-type: none"> - True - False | Risk diversification | 300/423 | .71 | Very High |
| TOTAL | | 2069/3384 | .61 or 61% | LOW |

Table 2. Level of Financial Literacy of College Students According to Financial Knowledge

Table 2 presents the level of financial literacy of college students according to financial knowledge. As shown in the table, the level of financial knowledge of college students varies, indicating low scores on inflation (29%), compound interest (33%) and simple interest (37%). This implies that students have a weak grasp or limited understanding of these key financial concepts which may impact their ability to make informed financial decisions in the future. These results are consistent with the study of Bingil et al.⁵⁴ which also showed that the student respondents exhibited lack of understanding in inflation. Likewise, it also supported the study of Lusardi & Mitchell⁵⁵ which found out that individuals with low financial literacy particularly in inflation are less likely to plan for retirement and tend to underestimate future financial needs.

On the other hand, questions on interest on a loan, risk and return and definition on inflation gained very high scores. This implies that the fundamental financial concepts are well understood among students and suggest potential economic behaviors such as discipline and control on taking out debts. The result is consistent with the study of Lusardi & Tofano⁵⁶ which concluded that college students who understand interest on loans may be less likely to accumulate excessive credit card debt or take out predatory loans. Overall, the data from the study suggests that the level of financial literacy among college students is low, with an overall weighted mean of 61%. According to OECD, a percentage score of at least 71% indicates a high level of financial knowledge. The results imply that while some students showed proper understanding of significant financial topics, they lack a deeper financial knowledge particularly in inflation and interest. It is through this disparity that students may exhibit uninformed financial decisions, or apply some ineffective financial practices such as low saving habits or inability to recognize inflation's influence on their purchasing power. These results are supported by the study of Lusardi and Mitchell⁵⁷ which concluded that young adults internationally showed low financial literacy, especially in financial concepts of inflation and computation of compounding interest.

b. Financial Behavior

| INDICATOR | WEIGHTED MEAN | QUALITATIVE DESCRIPTION |
|---|---------------|-------------------------|
| 1. I worry about how best to manage my money. | 2.96 | High |
| 2. I take notes and control my personal expenses (e.g., recorded savings and expenses) | 2.77 | High |
| 3. I establish financial targets for the long-term that influences the managing of my expenses. | 2.87 | High |
| 4. I follow a weekly or monthly plan for expenses. | 2.80 | High |
| 5. I am satisfied with the way I control my finances. | 2.76 | High |
| 6. I save monthly. | 2.69 | High |
| 7. I save so I can buy something expensive. | 2.61 | High |
| 8. I compare prices when buying something. | 3.14 | High |
| 9. I analyze my financial situation before a major purchase. | 3.1 | High |

⁵⁴ Bingil et al, loc cit.

⁵⁵ Lusardi & Mitchell, loc cit.

⁵⁶ Xiao & Porto, loc cit.

⁵⁷ Lusardi & Mitchell, loc cit.

| | | |
|-----------------------|-------------|-------------|
| 10. I buy on impulse. | 2.47 | Low |
| TOTAL | 2.82 | HIGH |

Table 3. Level of Financial Literacy of College Students According to Financial Behavior

Table 3 shows the level of financial literacy of college students according to financial behavior. Out of the ten (10) questions that measure their financial behavior, nine was interpreted as high while the last question was interpreted as low. As presented in the table, most college students demonstrate responsible financial habits, such as budgeting (2.8), setting long-term financial targets (2.87), and analyzing financial situations before major purchases (3.1). Moreover, high levels of financial awareness (comparing prices before purchasing, 3.14) indicate that students are conscious consumers, which is beneficial for long-term financial well-being. Nonetheless, the trivial decrease in their monthly savings behavior (2.69) indicates that students do not prioritize financial security in the long run despite being wary of their expenses.

On the other hand, the results also showed that most students do not strive with impulsive buying as the obtained score is low (2.47). This result implies that students displayed ideal financial self-control and effective discipline in their spending habits. This finding is supported by Xiao & Porto⁵⁸ who suggested that individuals with higher financial literacy tend to have lower impulsive spending tendencies and that the low levels of impulse buying among students may indicate that they are aware of the consequences of unplanned spending and practice budgeting strategies.

Overall, the financial behavior of college students scored high with a mean of 2.82. This high financial behavior score implies responsible money management practices, likely influenced by financial education, digital tools, and economic awareness. This result supports the study of Xiao & Porto⁵⁹ which cited that economic conditions such as rising tuition fees and inflation, may influence students to reinforce the need for careful financial planning. The results, however, contradict with the study of Ponio & Timog⁶⁰ indicating an average level of financial behavior of their respondents.

c. Financial Attitude

| INDICATOR | WEIGHTED MEAN | QUALITATIVE DESCRIPTION |
|---|---------------|-------------------------|
| 1. It is important to control my monthly expenses. | 3.26 | Very high |
| 2. It is important to establish financial targets for the future. | 3.27 | Very high |
| 3. It is important to save money on a monthly basis. | 3.24 | High |
| 4. The way I manage my money today will affect my future. | 3.18 | High |
| 5. It is important to have and follow a monthly expense plan. | 3.12 | High |
| 6. It is important to stay within a budget. | 3.18 | High |

⁵⁸ Xiao & Porto, loc cit.

⁵⁹ Ibid.

⁶⁰ Ponio & Timog, loc cit.

| | | |
|---|-------------|-------------|
| 7. It is important to invest regularly to achieve targets in the long term. | 3.14 | High |
| TOTAL | 3.20 | HIGH |

Table 4. Level of Financial Literacy of College Students According to Financial Attitude

Table 4 presents the level of financial literacy of college students according to financial attitude. As seen from the data, the first and second indicators were able to obtain a very high interpretation, while indicators 4 until 7 were marked as high. The results indicate that students strongly recognize the importance of financial management, particularly in areas such as controlling monthly expenses (3.26), and setting financial targets (3.27). However, the slightly lower scores on investment awareness (3.14) suggest that students may not fully prioritize or understand investment as a tool for long-term financial security. This result is in line with OECD⁶¹ which emphasized that while young adults understand financial responsibility, they often lack investment literacy and practical application skills.

Overall, the data reveals that college students exhibit a high level of financial attitude, with an overall weighted mean of 3.20. The findings imply that college students are financially conscious and acknowledge the importance of budgeting, saving, and financial planning. This result however contradicts with the study of Ponio & Timog⁶² which found out that majority of their respondents displayed a low level of financial attitude.

3. Significant Difference Between the Students' Level of Financial Literacy When Grouped According to Profiles

3.1 Age

| Profile Variables | Age | Mean | Standard Deviation | F-ratio | Probability Value | Decision at 0.05 Level |
|---------------------|--------------|-------|--------------------|---------|-------------------|------------------------|
| Financial Knowledge | 16-20 | 0.615 | 0.070 | 1.011 | 0.388 | Accept Ho |
| | 21-25 | 0.596 | 0.132 | | | |
| | 26-30 | 0.458 | 0.099 | | | |
| | 31 and above | 1.000 | 0.000 | | | |
| Financial Behavior | 16-20 | 2.794 | 0.142 | 3.205 | 0.023 | Reject Ho |
| | 21-25 | 2.934 | 0.115 | | | |
| | 26-30 | 3.100 | 0.090 | | | |
| | 31 and above | 2.800 | 0.000 | | | |
| Financial Attitude | 16-20 | 3.129 | 0.300 | 10.371 | 0.000 | Reject Ho |
| | 21-25 | 3.505 | 0.187 | | | |
| | 26-30 | 3.619 | 0.293 | | | |
| | 31 and above | 3.857 | 0.000 | | | |

Table 5. Significant Difference in Students' Financial Literacy When Grouped According to Age

Table 5 presents the significant difference of the respondents' financial literacy when grouped according to age.

⁶¹ OECD, loc. cit.

⁶² Ponio & Timog, loc cit.

For financial knowledge, the probability value of 0.388 is higher than the 0.05 level of significance which indicates that the hypothesis is accepted. This means that there is no significant difference in the financial knowledge of the students regardless of their age. This result implies that age does not play a strong role in determining financial knowledge among the respondents. This finding however is not supported by the study of Palomo et al.⁶³ which concluded that age significantly affects the financial knowledge of individuals.

For financial behavior, the mean scores vary within the age groups, with mean scores ranging from 2.794 to 3.100. The probability value of 0.023 is less than the 0.05 level of significance which indicates rejection of the null hypothesis. This result implies that financial behavior improves as individuals grow older as the highest mean of 3.100 belongs to the age group of 26-30 indicating a more structured financial behavior. This coincides with the study of Yao⁶⁴ concluding that the age group of 20-39 exhibits long-term financial behavior because of their better experience and improved emotions regulation. However, the study of Okamoto & Komamura⁶⁵ revealed that people tend to have a decrease in financial behavior as they get older, and that financial attitude only has significant impact on middle-aged adults.

Lastly, for financial attitude, the mean scores increase significantly with age as the F-ratio (10.371) and p-value (0.000) indicate a highly significant difference between age groups which rejects the null hypothesis at 0.05 level of significance. It can be seen further that the highest mean of 3.857 belong to the age group of 31 and above which implies that older individuals have a more positive and responsible financial attitude than the younger respondents. This result supports the study of Fernandes et al.⁶⁶ which cited that financial mindset and perspectives improve with experience and maturity and that individuals with positive financial attitudes are more likely to save, invest wisely, and avoid financial crises.

3.2 Sex

| Profile Variables | Sex | Mean | Standard Deviation | F-ratio | Probability Value | Decision at 0.05 Level |
|---------------------|--------|-------|--------------------|---------|-------------------|------------------------|
| Financial Knowledge | Male | 0.439 | 0.083 | 174.235 | 0.000 | Reject Ho |
| | Female | 0.747 | 0.036 | | | |
| Financial Behavior | Male | 2.836 | 0.100 | 0.861 | 0.354 | Accept Ho |
| | Female | 2.802 | 0.171 | | | |
| Financial Attitude | Male | 3.245 | 0.244 | 3.144 | 0.077 | Accept Ho |
| | Female | 3.150 | 0.344 | | | |

Table 6. Significant Difference in Students' Financial Literacy When Grouped According to Sex

Table 6 presents the significant difference of the students' financial literacy when grouped according to sex. The table shows that the financial knowledge has a probability value of less than 0.05 which signifies that the null hypothesis is rejected which indicates a significant difference between the male and female students. Moreover, the female students obtained a higher mean of 0.747 which implies that the female students demonstrated significantly higher financial knowledge than the males. This result aligns with Robb & Woodyard⁶⁷ who likewise concluded that there are significant differences in the level of financial

⁶³ Palomo et al., loc cit.

⁶⁴ Yao, loc cit.

⁶⁵ Okamoto & Komamura, loc cit.

⁶⁶ Robb & Woodyard, loc cit.

⁶⁷ Woodyard & Robb, loc cit.

knowledge between men and women, particularly the objective financial knowledge. The study of Palomo et al.⁶⁸ also concluded significant difference between the male and females but conversely, the authors noted that men have higher financial knowledge than women specifically with areas on inflation, simple interest and investment.

On the other hand, the financial behavior and financial attitude have probability values of 0.354 and 0.077 which are both greater than the 0.05 level of significance. Thus, the null hypotheses are both accepted, and it indicates that there are no significant differences in the financial behavior and financial attitudes of both male and female students. This implies that both male and female students have similarities in their financial behavior and financial attitudes and that both genders bear no difference in their approach towards financial decision-making. The results coincide with the study of Cainglet et al.⁶⁹ which specified no significant differences in the financial behavior and financial attitudes of male and female college students, specifically in areas of financial planning, savings, insurance, and credit management. However, it does not coincide with the study of Barber & Odean⁷⁰ which found out that men are more overconfident than women with their financial decision-making leading to poor financial attitudes. In addition, the study of Bannier & Neurbert⁷¹ concluded that women are more risk-averse which indicates more conservative financial behavior for women than men.

3.3 Civil Status

| Profile Variables | Sex | Mean | Standard Deviation | F-ratio | Probability Value | Decision at 0.05 Level |
|---------------------|---------|-------|--------------------|---------|-------------------|------------------------|
| Financial Knowledge | Single | 0.613 | 0.079 | 0.188 | 0.665 | Accept Ho |
| | Married | 0.542 | 0.193 | | | |
| Financial Behavior | Single | 2.817 | 0.141 | 0.148 | 0.701 | Accept Ho |
| | Married | 2.900 | 0.030 | | | |
| Financial Attitude | Single | 3.189 | 0.301 | 1.446 | 0.230 | Accept Ho |
| | Married | 3.571 | 0.245 | | | |

Table 7. Significant Difference in Students' Financial Literacy When Grouped According to Civil Status

Table 7 presents the significant difference in the financial literacy of college students when grouped according to their civil status. As shown in the table, all variables under financial knowledge, financial behavior and financial attitude have probability values of 0.665, 0.701, and 0.230 respectively which are greater than the 0.05 level of significance. Thus, the hypotheses are accepted which indicate that there are no significant differences in the students' financial literacy when grouped according to their civil status. This implies that the financial literacy of the students do not impact their understanding of financial concepts or their financial decision-making, whether they are single or married. This aligns with Lusardi⁷² indicating that financial literacy is more influenced by education, income level, and financial experience rather than civil status alone. However, the results are not supported by the study of Xiao & Porto⁷³ which

⁶⁸ Palomo et al., loc cit.

⁶⁹ Cainglet, et al., loc cit.

⁷⁰ Barber & Odean, loc cit.

⁷¹ Bannier & Neurbert, loc cit.

⁷² Lusardi & Mitchell, loc cit.

⁷³ Xiao & Porto, loc cit.

concluded that married individuals tend to show slightly better financial behavior and attitude, which may be linked to the increased financial responsibilities associated with marriage. The authors further concluded that married couples often engage in long-term financial planning, which may lead to more disciplined financial behavior over time.

3.4 Course

| Profile Variables | Sex | Mean | Standard Deviation | F-ratio | Probability Value | Decision at 0.05 Level |
|---------------------|----------------------|-------|--------------------|---------|-------------------|------------------------|
| Financial Knowledge | BS Accountancy | 0.860 | 0.013 | 229.215 | 0.000 | Reject Ho |
| | BS Business Admin. | 0.608 | 0.023 | | | |
| | BS Criminology | 0.642 | 0.004 | | | |
| | BS Education | 0.459 | 0.033 | | | |
| | BS Hospitality Mngt. | 0.697 | 0.036 | | | |
| | BS Info Technology | 0.519 | 0.002 | | | |
| | BS Nursing | 0.042 | 0.005 | | | |
| | BS Political Science | 0.991 | 0.001 | | | |
| | BS Psychology | 1.000 | 0.000 | | | |
| Financial Behavior | BS Accountancy | 2.953 | 0.086 | 7.934 | 0.000 | Reject Ho |
| | BS Business Admin. | 3.044 | 0.145 | | | |
| | BS Criminology | 2.713 | 0.158 | | | |
| | BS Education | 2.922 | 0.110 | | | |
| | BS Hospitality Mngt. | 2.887 | 0.104 | | | |
| | BS Info Technology | 2.647 | 0.074 | | | |
| | BS Nursing | 2.751 | 0.077 | | | |
| | BS Political Science | 2.736 | 0.032 | | | |
| | BS Psychology | 2.611 | 0.226 | | | |
| Financial Attitude | BS Accountancy | 3.591 | 0.142 | 9.609 | 0.000 | Reject Ho |
| | BS Business Admin. | 3.321 | 0.182 | | | |
| | BS Criminology | 3.002 | 0.423 | | | |
| | BS Education | 3.314 | 0.211 | | | |
| | BS Hospitality Mngt. | 3.338 | 0.193 | | | |

| | | | | | | |
|--|----------------------|-------|-------|--|--|--|
| | BS Info Technology | 3.032 | 0.223 | | | |
| | BS Nursing | 3.210 | 0.284 | | | |
| | BS Political Science | 3.031 | 0.098 | | | |
| | BS Psychology | 2.806 | 0.300 | | | |

Table 8. Significant Difference in Students' Financial Literacy When Grouped According to Course

Table 8 presents the significant difference in the students' financial literacy when grouped according to course. It shows that the probability values for all three variables of financial literacy under financial knowledge, behavior, and attitude are all less than the 0.05 level of significance and hence, the hypotheses are all rejected. This implies that there are significant differences in the financial literacy of college students when grouped according to the courses they are taking.

Under financial knowledge for instance, students taking up Psychology scored the highest mean score of 1.00. This implies that Psychology students are more trained in critical thinking of the human behavior, which leads to their ability to grasp financial concepts more effectively than the other courses. This result is supported by the study of Fernandes et al.⁷⁴ which concluded that financial literacy is more associated with the cognitive ability and that Psychology students have higher analytical skills which lead to better financial knowledge.

Under financial behavior, students taking up Business Administration obtained the highest mean of 3.044 which implies that business courses provide topics on financial management, economics and accounting that mold the students to be more financially responsible particularly in terms of saving and budgeting. This result however does not align with the study of Mandell & Klein⁷⁵ which concluded that students who took financial management course did not demonstrate better financial behavior than those who did not.

Under financial attitude, Accountancy students have the highest mean of 3.591 which implies that they are more exposed to financial trainings such as financial analysis which lead to better financial attitudes. This result however, is not supported by Shin et al.⁷⁶ who emphasized that Psychology and Social Science students tend to develop stronger financial attitudes due to their exposure and understanding of the human behavior and critical thinking.

3.5 Year Level

| Profile Variables | Year Level | Mean | Standard Deviation | F-ratio | Probability Value | Decision at 0.05 Level |
|---------------------|------------|-------|--------------------|---------|-------------------|------------------------|
| Financial Knowledge | I | 0.623 | 0.056 | 22.435 | 0.000 | Reject Ho |
| | II | 0.397 | 0.122 | | | |
| | III | 0.776 | 0.051 | | | |
| | IV | 0.727 | 0.103 | | | |
| | I | 2.775 | 0.159 | 5.117 | 0.002 | Reject Ho |

⁷⁴ Fernandes et al., loc cit.

⁷⁵ Mandell & Klein, loc cit.

⁷⁶ Shim et al., loc cit.

| | | | | | | |
|--------------------|-----|--------|-------|--------|-------|-----------|
| Financial Behavior | II | 2.856 | 0.073 | | | |
| | III | 2.9181 | 0.136 | | | |
| | IV | 3.011 | 0.043 | | | |
| Financial Attitude | I | 3.059 | 0.312 | 23.130 | 0.000 | Reject Ho |
| | II | 3.351 | 0.158 | | | |
| | III | 3.513 | 0.145 | | | |
| | IV | 3.693 | 0.142 | | | |

Table 9. Significant Difference in Students' Financial Literacy When Grouped According to Year Level

Table 9 presents the significant difference in students' financial literacy when grouped according to year level. The data shows that the probability values of financial knowledge, behavior, and attitude are below 0.05 level of significance and hence, the null hypotheses are rejected.

Under financial knowledge, it shows that the third-year students exhibit the highest mean score of 0.776 as compared with other students. This implies that their third year in college education may have exposed them greatly to academic-related financial concepts as well as individual experience through personal saving and budgeting. This finding is supported by the study of Pascual & Recto⁷⁷ which indicated that higher-year level students exhibited greater financial knowledge as compared with their junior counterparts. In addition, the result is also in line with the study of Shin et al⁷⁸ which concluded that as students move up along their academic journey, their financial knowledge are more developed due to their greater exposure to financial decision-making. However, the finding negates the study of Beal & Delpachitra⁷⁹ which emphasized that the differences in the financial knowledge of students across the different academic years are very minimal, further suggesting that personal experiences may play a bigger role for their varying financial literacy levels.

Under financial behavior, the probability value shows that fourth-year students scored the highest mean of 3.011 and implies that the highest year levels demonstrate more responsible financial behavior than the lower-year levels. This result is in line with the study of Shim et al.⁸⁰ which found that students in later academic years tend to adopt better financial behaviors, such as budgeting and saving, due to increased financial responsibilities.

Similarly, under the financial attitude, it shows that fourth-year level students obtained the highest mean of 3.693. This implies that the final academic year of the students exhibit greater financial attitudes because as students progress, they are more likely exposed to better financial decision-making and learning experiences. This result is supported by the study of Bapat⁸¹, which found out that financial attitudes progress as students gain more financial independence, with senior-year level students exhibiting stronger financial planning behaviors than then the lower-year levels.

⁷⁷ Pascual & Recto, loc cit.

⁷⁸ Shin et al., loc cit.

⁷⁹ Beal & Delpachira, loc cit.

⁸⁰ Shim et al, loc cit.

⁸¹ Bapat, loc cit.

3.6 Monthly Allowance

| Profile Variables | Year Level | Mean | Standard Deviation | F-ratio | Probability Value | Decision at 0.05 Level |
|---------------------|------------------|-------|--------------------|---------|-------------------|------------------------|
| Financial Knowledge | P1,000 and below | 0.808 | 0.056 | 41.791 | 0.000 | Reject Ho |
| | P1001-P2000 | 0.716 | 0.033 | | | |
| | P2001-P3000 | 0.668 | 0.016 | | | |
| | P3001-P4000 | 0.507 | 0.068 | | | |
| | P4001-P5000 | 0.298 | 0.149 | | | |
| | P5001 and above | 0.808 | 0.056 | | | |
| Financial Behavior | P1,000 and below | 2.794 | 0.243 | 0.564 | 0.689 | Accept Ho |
| | P1001-P2000 | 2.812 | 0.162 | | | |
| | P2001-P3000 | 2.785 | 0.126 | | | |
| | P3001-P4000 | 2.828 | 0.098 | | | |
| | P4001-P5000 | 2.887 | 0.080 | | | |
| | P5001 and above | 2.794 | 0.243 | | | |
| Financial Attitude | P1,000 and below | 3.052 | 0.329 | 5.543 | 0.000 | Reject Ho |
| | P1001-P2000 | 3.131 | 0.236 | | | |
| | P2001-P3000 | 3.145 | 0.464 | | | |
| | P3001-P4000 | 3.234 | 0.253 | | | |
| | P4001-P5000 | 3.520 | 0.196 | | | |
| | P5001 and above | 3.052 | 0.329 | | | |

Table 10. Significant Difference in Students' Financial Literacy When Grouped According to Monthly Allowance

Table 10 presents the significant difference in the students' financial literacy when grouped according to their monthly allowance.

Under financial knowledge, the probability value is less than the 0.05 level of significance which indicates rejection of the null hypothesis. This means that there is a significant difference in the level of financial knowledge of students when grouped according to their monthly allowance. It can also be noted that the highest mean scores belong to the brackets of P1,000 and below as well as P5,001 and above respectively. This implies that students with extreme scarcity or extreme abundance of financial resources might be compelled to manage more complex financial situations, leading to an increase in financial knowledge. This result aligns with Lusardi & Mitchell⁸² who suggested that financial constraints or abundance can drive individuals to acquire better financial knowledge. Likewise, it is supported by the study of Gudmunson & Danes⁸³ suggesting that financial hardship can sometimes lead to increased financial awareness and learning.

With financial behavior, the results show no statistically significant differences among the allowance groups as the probability value is greater than the 0.05 level and hence, the null hypothesis is accepted. This result implies that there are no significant differences in the financial behavior of the students regardless of the amount of allowance they have, or simply put, their allowance is not a deciding factor for their financial behavior. This aligns with Moneva & Marijune⁸⁴ who found out that the amount of daily allowance of senior high school students have no influence on their financial satisfaction or behavior.

Lastly, under financial attitude, the probability value is lower than the 0.05 level of significance and hence, the null hypothesis is rejected. It can also be noted that the bracket allowance of P4,001-P5000 incurred the highest mean of 3.520. This result implies that students with higher allowance may have greater opportunities to engage in financial activities such as saving and budgeting, thereby increasing their financial attitude. This result coincides with the study of Moneva & Marijune⁸⁵ which concluded that students who have higher financial resources tend to have lesser debts and liabilities and more opportunities to engage in financial decision-making contributing to higher financial attitudes.

4. Significant Relationship Among the Three Variables in Relation to Financial Literacy

| FINANCIAL LITERACY VARIABLES | PEARSON CORRELATION | PROBABILITY VALUES | DECISION |
|--|---------------------|--------------------|-----------|
| Financial Knowledge & Financial Behavior | 0.012 | 0.000 | Reject Ho |
| Financial Behavior & Financial Attitude | 0.580 | 0.000 | Reject Ho |
| Financial Knowledge & Financial Attitude | 0.004 | 0.000 | Reject Ho |

Table 11. Significant Relationship Among Financial Literacy Variables

Table 11 presents the significant relationship among the three financial literacy variables namely financial knowledge, financial behavior and financial attitude.

⁸² Lusardi & Mitchell, loc cit.

⁸³ Gudmunson & Danes

⁸⁴ Moneva & Marijune, loc cit.

⁸⁵ Ibid.

It can be seen from the table that between financial knowledge and financial behavior, the probability value is less than the 0.05 level of significance and hence, the null hypothesis is rejected which indicates that there is a significant relationship between the two variables. However, the result shows a weak positive correlation with a Pearson coefficient of 0.012. The result implies that as financial knowledge increases, there is only a slight marginal improvement in financial behavior. This finding is supported by the study of Khawar & Sarwar⁸⁶ which indicated that while financial knowledge is significant, it might not be sufficient enough for individuals to have responsible financial behavior. Conversely however, it does not align with the study of Mireku et al.⁸⁷ which concluded that individuals with higher financial knowledge exhibits higher financial behavior, further citing that financial literacy is a major input for financial behavior.

Furthermore, the table shows that between financial behavior and financial attitude, the probability value is likewise less than the 0.05 level of significance which also rejects the null hypothesis. Hence, there is a significant relationship between financial behavior and financial attitude and the result shows that with the correlation coefficient of 0.580, a strong positive relationship is present. This finding implies that individuals with positive financial attitudes are more likely to exhibit positive financial behaviors. The result coincides with Xiao & Liu⁸⁸ who suggested that positive financial attitudes, such as risk tolerance and goal-setting, are associated with better financial behaviors.

Lastly, between financial knowledge and financial attitude, the probability value is likewise less than the 0.05 level of significance which indicates the rejection of the null hypothesis. Hence, there exists a significant relationship between these two variables. However, it can be noticed that the correlation coefficient is 0.004 which suggests an extremely weak positive relationship and this implies that financial knowledge has a very weak influence on financial attitude. This result is supported by the study of Loza et al.⁸⁹ which concluded that financial knowledge and skills both have an impact on financial attitude but were found to be weak in some contexts. Likewise, the study of Moko et al.⁹⁰ observed a weak correlation between the financial knowledge and financial behavior and attitude of young entrepreneurs, stating further that financial knowledge alone may not strongly impact financial attitudes.

5. Proposed Programs to Further Educate College Students Towards Being Financially Literate

Based on the findings of this study, the following programs and activities are thus proposed in order to increase the financial knowledge of the college students of Saint Ferdinand College, and to further enhance their financial behavior and financial attitudes:

| PROGRAMS AND ACTIVITIES | OBJECTIVES | TARGET PARTICIPANTS | TARGET PERIOD | RESOURCE SPEAKER/S |
|-------------------------|--|----------------------|---------------|---------------------------------------|
| A. Financial Knowledge | | | | |
| Seminar-Workshop on: | - Enhance students' financial literacy which covers basic topics on budgeting, | All College students | AY 2025-2026 | Bank officials/ Investment experts |

⁸⁶ Khawar & Sarwar, loc cit.

⁸⁷ Mireku et al., loc cit.

⁸⁸ Ibid.

⁸⁹ Loza et al., loc cit.

⁹⁰ Moko et al., loc cit.

| | | | | |
|---|---|---|--------------|--------------------------------------|
| 1. Budgeting and Expense Tracking | saving, investing, and credit/loan management | | | |
| 2. Saving & Investing | | | | |
| 3. Credit Management & Debt Avoidance | | | | |
| B. Financial Behavior & Financial Attitude | | | | |
| Seminar on Psychology in Investing | - Explore the psychological aspects of investing that will impact their financial decision-making such as risk-taking, impulsive investing, and emotional biases. | All College students | AY 2025-2026 | Psychology experts/ Investment gurus |
| C. Strengthening of Financial Education through Collaboration | | | | |
| Partnership with local and national bank, nonbank, and financial education institutions | - Collaboration of possible seminars and workshops and access to financial products and services. | All College students and local banks and nonbank financial institutions | AY 2025-2026 | N/A |

Table 12. Proposed Action Plan for The Enhancement of Financial Literacy Level of College Students

Implementing these programs and activities will ensure a holistic financial literacy framework for college students. Through the application of well-defined courses, peer mentoring, and practical modeling, coupled with experiential tasks and real-life methods, students are assured to achieve an improved level of financial knowledge and a more developed financial behavior and attitude which are all essential for their financial decision-making skills. Incorporating this plan especially in the educational experience will greatly help the students to be better prepared in their financial management practices and make informed financial decisions as they move on to their future.

CONCLUSIONS

The low level of financial knowledge among college students revealed some serious consequences particularly in the concepts of inflation and interest rates, which translate to difficulty in borrowing, saving, as well as investing for long-term increase of wealth. Without proper reinforcements, college students may have problems with making informed financial decisions which will result to debt accumulation, little to no savings, and eventually, economic susceptibility. However, the high level of financial behavior and financial attitude indicates that other factors may come in play such as individual experiences and social influences, that may shape their financial habits despite their low financial knowledge.

The significant relationship that was established among financial knowledge, financial behavior and financial attitude strengthens the perception that these variables are interrelated. Financial knowledge forms as the basis for making well-informed financial decisions while financial behavior pertains to the students' actual financial manners, and financial attitudes impact how they view their finances. The weak correlation between financial knowledge and the other two variables however, signifies that having financial knowledge alone may not precisely convert into having better financial manners particularly if there is lack of assistance in practical financial experiences or behavioral intermediations.

RECOMMENDATIONS

Based on the findings and conclusions, this study generated the following recommendations:

1. Policy makers and educators should give more emphasis on the inclusion of financial literacy in the course curriculum of all programs (e.g., economics, mathematics) as this increases the financial knowledge of students.
2. Government units and educational institutions should organize financial literacy workshops and financial planning activities which will further encourage students to put into actual practice the concepts of budgeting, saving, investing and credit management.
3. Mentorships from investment experts as well as financial gurus must also be implemented to provide counseling and strengthen the behavior and attitudes of students towards handling money.
4. Financial institutions such as banks and investment intermediaries may conduct school campaigns to enhance more the students' financial literacy awareness.
5. Institutions may also introduce the use of technology and mobile apps to encourage students to track their own budgets and expenses and thus make informed financial decisions.

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