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# Financial literacy of secondary school teachers in the Department of Education–Division of La Union

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## **ABSTRACT**

Understanding the financial literacy of public secondary teachers is vital in promoting financial well-being for both educators and students. Using an adapted questionnaire as the main data-gathering tool, this descriptive study investigated the extent of financial literacy of public secondary teachers from a municipality in the Philippines across various aspects like knowledge, management, credit, savings, investments, and challenges they encountered. The results revealed that teachers often face difficulties and constraints with financial management, budgeting, and investing. The teachers indicated a low level of financial literacy due to their limited understanding of and ineffective strategies in utilizing various financial skills and concepts.

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## 1. INTRODUCTION

The Organization for Economic Cooperation and Development (OECD) [1] defines financial literacy as a blend of awareness, knowledge, skill, attitude, and behavior necessary to make informed and effective decisions regarding personal finances in order to accomplish individual well-being. It encompasses a wide range of topics, including budgeting, saving, investing, borrowing, managing debt, and understanding financial products such as loans and credit cards. It also includes a person's plans for retirement or other long-term financial goals [2].

Financial literacy has been recognized globally as a basic apparatus for development [3] and an essential skill in the 21st-century to thrive economically in today's dynamic and fast-changing society [4] considering its potential to address issues in budgeting, savings, investment, planned spending, and the administration of risks that influence individuals, households, professionals, and businesses in their development procedure [5]–[7]. Being financially literate means having the skill set to comprehend financial terminology, analyze financial situations, and make sound financial decisions that are crucial for everyone's well-being. It empowers individuals to effectively manage their money, avoid financial pitfalls, and work towards achieving financial security and stability [3], [5], [7].

Despite the positive and significant impact of possessing a favorable level of financial literacy on sustainable finances and quality of life, financial illiteracy still persists to be a problem for both emerging and developed economies, [8]–[10]. This has led to falling savings rates [11], making wrong financial decisions [12], gaining less access to a range of new financial products [13], and mounting consumer debt [1]. Consequently, there is a growing number of individuals who experience emotional stress, depression, and

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hopelessness [5], [13]. On a larger scale, financial illiteracy presents a barrier to economic growth and financial inclusion [13]–[16].

Unfortunately, teachers, who play a key role in shaping students' financial attitudes [9], [12], [17] were not exempted from financial crisis due to over-indebtedness [18], mistakes in financial decisions, and ineffective spending and financial planning, resulting from lack of financial literacy [9], [19]. The issue of indebtedness or even over-indebtedness of teachers is a perennial problem and pressing issue all over the world [2], [11]. The lack of proper retirement plans [1], [15], and minimal basic financial knowledge [16], [17] were few evidence of near-crisis levels of financial illiteracy among teachers [12] causing adverse impacts on their financial behaviors [15]. The widespread implications of low levels of financial literacy raise various serious global concerns, thus, it necessitates immediate attention [20].

Considering these contexts and the reality that the teachers mold the attitude of students towards financial management, this study was conceptualized to assess the level of financial literacy and to determine the different factors influencing the financial literacy of public secondary teachers in a municipality in the Philippines. Specifically, it examined the teachers' demographic profile, and their level of financial literacy in terms of financial knowledge, financial management, credit management, savings and retirement, and financial investments. The study also identified some problems encountered along with financial literacy.

The results of the study can be beneficial for teachers as these uncover aspects of their financial management that require recalibration and redirection to effectively use their financial skills and concepts to make informed short-term and long-term financial decisions and to minimize unwanted devastating circumstances that are likely to occur due to financial illiteracy. The results can also inform school administrators as to the support needed by their teachers to achieve financial well-being. In return, teachers can gain the confidence to integrate financial topics into their lessons, such as budgeting, saving, managing debts, insurance, and investing.

#### 2. METHOD

This quantitative study employed the descriptive research design. It determined the level of financial literacy, well-being, and challenges encountered by secondary teachers in a public secondary school in the northwestern region of the Philippines. Of the 70 teachers at the said school, only 40 of them indicated their willingness to participate as respondents to this study.

A validated and reliable survey questionnaire on financial literacy was adapted from financial coalition in gathering the needed data to sufficiently address the objectives of the study. Each of the 40 identified respondents was given a copy of the questionnaire to complete. The organization and interpretation of the data gathered employed descriptive statistics. Frequency and percentages were utilized to summarize the demographic characteristics of the respondents and the challenges they encountered along with the various financial aspects.

Their financial literacy level was determined using a five-point scale and was summarized using mean, following the suggested analysis procedures of the adapted questionnaire. A score of 5 (Very highly proficient) means the financial knowledge is consistently superb or excellent, with no need for financial education; 4 (Highly proficient) means the financial knowledge is significantly better. Minimal financial education is required; 3 (Moderately proficient) means the financial knowledge is the average mindset of everyone. Constant financial literacy seminars to assist teachers in a more sound financial decision making; 2 (Slightly proficient) means the teacher needs more financial literacy seminars to avoid taking on numerous debts; and 1 (Not proficient) means the teacher needs to undergo financial education to improve their financial well-being.

# 3. RESULTS AND DISCUSSION

## 3.1. Demographic profile

The respondent teachers were in their 50's, 90% were female, 92.50% were married, 67.57% of spouses were unemployed, and with 3 to 4 children. The majority of them or 77.50% hold an academic position of teacher III with a gross monthly salary of Php 31,320.00 (or approximately \$550.00 US). Moreover, 51.67% of the respondents extend financial help to their parents or still provide for the necessities of their parents.

Interestingly, 65% of the secondary school teachers progressed to earning units in their master's education and had been in the government service through the Department of Education (DepEd) for 16.25 years. Additionally, 92.50% of the teachers indicated that the only source of income is their monthly salary as public-school teachers. However, they only receive a net take-home pay of Php 7,750.03 (or approximately \$136.00 US), which is far below the prescribed poverty threshold of Php 13,797.00 (or approximately \$242.00 US) [21].

With the exemption of only one respondent, the other 39 teachers, equivalent to 97.50%, confirmed that they have existing loans from different lending institutions and/or private individuals. On average, the loan amounts are Php 450,000.49 from government lending institutions (GLIs), Php 337,838.32 from private lending institutions (PLIs), and Php 24,038.46 and Php 15,285.71 from loan sharks or private individuals who offer high monthly interest rates ranging from 5% to 20% per month. These respondents admitted being engaged in a vicious cycle of debt and have consciously resorted to loans for varied reasons such as making both ends meet (57.50%), house construction and renovation (47.50%), and financing children's education (35.00%). Additionally, 85% admitted that they are not familiar with the different essential financial products that they can optimize, such as investments and insurance. The other 15% disclosed that they have savings accounts, time deposit accounts, and investment accounts with average values spanning from Php 1,702.25 to Php 36,875.00 (\$300 US to \$647 US).

One common story among the respondents is their periodic and habitual application for personal loans to get cash instantly, especially during emergencies and calamities. However, their inability to set aside an amount for savings to act as a financial buffer during emergencies and unexpected events pushes the respondents to rely on loans [19], [22]–[25]. Their vulnerability to borrowing money from various sources to cover basic and urgent needs resulted in developing a so-called vicious cycle of debt which negatively affected their financial stability as evidenced in their low amount of savings and low monthly take-home pays [26]–[28].

These financial profiles of the respondents suggest various challenges confronting the teachers along with financial management. On the other hand, these also open vital opportunities for financial experts to mentor teachers in establishing effective strategies for saving and spending [29]. While loans can be beneficial at some points, they should also be made aware of the long-term consequences of these financial products [30].

#### 3.2. Financial literacy training attended

Surprisingly, the study results revealed that attending financial literacy training seems to be not on the priority list among the respondent teachers. Out of the 40 teachers, only five of them have attended financial management training conducted by the government service insurance system (GSIS). Other training that they have attended was conducted during their learning action cell (LAC) sessions, which is a school-based activity. The respondents explain that attending seminars and trainings related to their specializations is their utmost priority considering that they can use these for promotion [12], [31]. Such a result suggests that attendance to financial literacy training should be considered essential among teachers as their financial status can impact their teaching effectiveness and well-being.

## 3.3. Level of financial literacy of the teachers

#### 3.3.1. Financial knowledge

The study also endeavored to determine the financial knowledge of the respondents. This aspect assesses their saving and spending habits based on the indicators provided in Table 1. Accordingly, the survey results highlight that the respondents are highly proficient in deciding whether to buy or not a product based on their power to purchase it or whether they can afford it or not (mean=4.05). When asked to justify, they disclosed that as long as they have enough amount of money to buy the product that they want, the price is not much of a concern. Also, most of them indicated high proficiency in recognizing that spending should be appropriate to their level and income (mean=3.95). This explains their idea that careful planning in spending money must be exercised (mean=3.85). The result also suggests that the respondents are moderately proficient in terms of investing their money in varied or multiple financial instruments (mean=3.00). It can be recalled that only 15% of them have savings or investments. Overall, the respondents demonstrate moderate to high proficiency in terms of financial knowledge (mean=3.51).

Table 1. Financial knowledge

Item	Mean	Description
1. Before I buy something, I carefully consider whether I can afford it	4.05	Highly proficient
2. My spending habit is appropriate to my level and type of income	3.95	Highly proficient
3. Planning for spending money is essential to successfully managing my life	3.85	Highly proficient
4. I believe in developing a regular pattern of saving and sticking to it	3.83	Highly proficient
5. I tend to live within my means	3.83	Highly proficient
6. I invest money in multiple avenues rather than investing in a single avenue	3.00	Moderately proficient
Overall mean	3.51	Highly proficient

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From the results, it can be observed that the respondents are theoretically knowledgeable about spending and saving [32]. They recognize the value of practicing a healthy spending habit that is very much dependent on their level. This is the reason why most of them practice careful budgeting to regulate their expenses [11], [13], [26]. Most importantly, the results emphasize that basic knowledge and skills in understanding financial concepts are present among the respondents. On the other hand, the results suggest the need to take the respondents' financial knowledge to a higher level by introducing them to various financial instruments aligned with savings and investments. Initiated school-based activities, seminars, and training can assist the respondents in optimizing their favorable financial knowledge.

## 3.3.2. Financial management

In Table 2, it can be noted that the respondents are highly proficient in terms of comparing the prices of items before deciding which products to purchase (mean=3.95). They regularly track their expenses (mean=3.60) and make sure that their expenditures are within their allotted budget (mean=3.58). Additionally, the respondents prefer buying products with the best quality and price from stores offering the best services (mean=3.58). It is also noteworthy to discuss that the respondents demonstrate low preferences in buying products that they do not need even if these are on sale. Evidently, the respondents observe desirable financial management practices through developing the discipline of wise spending wherein they carefully compare prices and quality of products, [20], [33], highlighting their view of goods, products, and services as necessities rather than luxuries [27], [29], [34]. Generally, the respondents are highly proficient in terms of financial management.

Table 2. Financial management

Item	Mean	Description
1. I compare prices when shopping for major expenses	3.95	Highly proficient
2. I always keep track of my expenditures and income	3.60	Highly proficient
3. I use a spending plan or budget	3.58	Highly proficient
4. Best price, quality, and service are the things I consider every time I make major purchase	3.58	Highly proficient
5. My expenses are appropriate to my income	3.48	Highly proficient
6. I love to buy items on sale although I do not need them		Slightly proficient
Overall mean	3.40	Highly proficient

## 3.3.3. Credit/debt management

Table 3 reveals the level of financial literacy of the respondents in credit/debt management. This aspect determines the practices of the respondents in terms of availing loans and other similar financial instruments. Accordingly, the respondents consider applying for loans for emergency purposes (mean=3.73), usually on a long-term basis because the monthly amortization is considerably lower (mean=3.70). While these results convey favorable practice, it can be noted from the table that the respondents occasionally avail loans to start a business (mean=2.40). In general, the respondents demonstrate high proficiency in credit/debt management (mean=3.44).

Table 3. Credit/debt management

- 8		
Item	Mean	Description
1. I borrow money to finance emergency purposes	3.73	Highly proficient
2. I always avail loans on a long-term basis because of the cheaper monthly amortization	3.70	Highly proficient
3. I always compute before making loans with the banks and other lending institutions	3.68	Highly proficient
4. I make wise decisions before making loans with banks and other lending institutions	3.60	Highly proficient
5. I am aware of my loan balances with the different credit institutions	3.55	Highly proficient
6. I usually borrow money to start a business	2.40	Slightly proficient
Mean score	3.44	Highly proficient

While the results reflect favorable reasons and practices of the respondents for availing loans, these also convey that the respondents lack emergency savings. Consequently, this forces them to rely on loans during unforeseen circumstances [14], [22]. This result is consistent with ANZ Bank [22], that teachers do not save emergency funds that they can utilize during urgent situations or as a buffer to get out of aforementioned situations [16].

Despite having some basic financial knowledge, teachers struggle to manage their money effectively. This is evidenced by their reliance on loans, particularly for emergencies, which often signifies underlying debt problems [17], [24], [31]. This finding aligns with national concerns about widespread

informal borrowing among teachers [10], [21]. This suggests teachers grasp basic financial concepts but lack the skills to apply them to real-life situations like budgeting, saving, and making wise borrowing decisions. This knowledge gap creates vulnerability to poor financial choices, as acknowledged by teachers themselves [35], [36]. The DepEd recognizes the growing teacher debt issue as a significant challenge, highlighting the concerning financial well-being of public-school teachers [12], [14].

#### 3.3.4. Savings and retirement

From Table 4, the respondents demonstrate moderate proficiency in terms of most of the indicators for savings and retirement. As evidenced in the table, the respondents do not fully recognize the value of saving and the essence of retirement. Overall, they demonstrate moderate proficiency in these aspects of financial management.

The results are in contrast with what existing literature claims about how financially literate people prepare for retirement. Accordingly, financially knowledgeable people are more worried about retirement plans, [5], [16]. Numerous individuals view savings as the real source of retirement [37]. Individuals who do not set some money aside, by and large, anticipate that they will be in employment after retirement and rely on social security amid brilliant years, which may prompt poor retirement fulfillment [13], [28]. Higher financial literacy is emphatically identified with retirement planning and investing in pension funds [26], [29], [38]. As mentioned, financially literate people utilize a mix of debt and equity and incorporate stocks in their portfolios because of their knowledge and understanding of risk diversification [3].

Table 4. Savings and retirement

	Item	Mean	Description		
1.	I prefer saving over spending.	3.35	Moderately proficient		
2.	I believe that the very purpose of retirement I not only to survive but to enjoy life.	3.28	Moderately proficient		
3.	I made plans for an adequate retirement income.	3.08	Moderately proficient		
4.	I am worried that I won't have enough funds to maintain my current standard of living when I retire.	3.00	Moderately proficient		
5.	I believe that savings for my first one million is very hard but my next millions will be as easy as 1, 2, and 3.	3.00	Moderately proficient		
6.	When I retire, my children will support my financial needs.	2.35	Slightly proficient		
	Mean score	3.01	Moderately proficient		

## 3.3.5. Financial investment

Table 5 underscores the level of financial literacy of the respondents regarding investment. As a result of the survey, they admitted that they are moderately knowledgeable about financial investment, particularly in financial planning, and decision-making, short-term and long-term investments and financial assets, gains and losses, and financial risks. These results simply emphasized that the respondents do not have a good understanding of the different financial instruments offered by financial institutions and how they were applied in the financial market. Additionally, they lack proficiency in understanding how financial investments operate and how they can optimize their benefits. Similar findings were also noted in previous studies [2], [38] indicating that the overall level of financial literacy among African-American people was quite low and that how financial markets work was not well understood by them.

Table 5. Financial investment

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	Item	Mean	Description						
1.	I know the difference between long-term and short-term investments and its importance in my	3.48	Highly proficient						
	personal financial planning.								
2.	I believe that a modest decline in the short-term value investment is not losing money but an	3.15	Moderately proficient						
	anticipation of a positive long-term return.								
	I have a good idea for purchasing a financial asset.	3.13	Moderately proficient						
4.	Financial risks of losing money in making an investment is always my fear every time I invest.	3.03	Moderately proficient						
5.	I seek financial advice from financial experts before making investment decisions.	3.00	Moderately proficient						
6.	I invest my money to get a huge return in a short period of time	2.50	Slightly proficient						
	Mean score	3.04	Moderately proficient						

# 3.3.6. Summary of financial literacy of secondary school teachers

Table 6 encapsulates the level of financial literacy of the respondents under its five major competencies: financial knowledge, financial management, credit/debt management, savings and retirement, and financial investments of teachers. The respondents are highly proficient in financial knowledge, financial management, and credit/debt management. Additionally, they possess a moderate financial literacy in terms

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of savings and retirement, and financial investment. Generally, the respondents' financial literacy is at a moderate level.

Since financial literacy is about understanding money, finances, and being able to confidently apply this knowledge to make effective financial decisions, the results suggest aspects of financial literacy that the respondents need to address to effectively utilize their financial knowledge in making financial decisions for their advancement and benefits. Saving money for emergency and unanticipated circumstances is recommended to be taken seriously by the respondents to lessen their reliance on loans which can considerably ruin their budgeting and financial plans due to additional responsibilities to be paid in the form of interests and penalties, in case payment was not made promptly. Moreover, the respondents are encouraged to seek the advice of financial experts to maximize the benefits of financial investments and assets that they can utilize sooner or later. There are various financial trainings and seminars that the respondents can attend to that can effect a significant impact on their financial practices.

Table 6. Summary on financial literacy of the respondents

Financial literacy parameters	Mean	Description
Financial knowledge	3.51	Highly proficient
Financial management	3.40	Highly proficient
Credit/Debt management	3.44	Highly proficient
Savings and retirement	3.01	Moderately proficient
Financial investment	3.04	Moderately proficient
Overall mean	3.28	Moderately proficient

## 3.4. Problems encountered along financial literacy

Table 7 reveals the results of the survey disclosed five financial-related problems that are considered highly serious. These include bankruptcy and foreclosures of properties due to failure to pay debts. The respondents also admitted that their poor investment decisions also led them to depressing and stressful circumstances. Their lack of established emergency funds to address the financial needs of unforeseen events forces them to rely on loans that cause them to pay high interest rates. The respondents are also susceptible to pawning their ATM cards in exchange for an amount of money borrowed from private persons or financial institutions.

Table 7. Problems encountered along financial literacy

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Item	Mean	Description							
Bankruptcy and foreclosures	4.50	Very highly serious							
2. Poor investment decisions	4.33	Very highly serious							
3. No emergency and contingency funds for future unforeseen life events	4.25	Very highly serious							
4. Unplanned retirement	4.20	Very highly serious							
5. ATM cards are pawned in exchange for loan account	4.20	Very highly serious							
6. Have little understanding of basic financial concepts	3.65	Moderately serious							
Mean score	4.19	Highly serious							

# 4. CONCLUSION

The current study aimed to determine the financial literacy of public secondary school teachers in the province of La Union, Philippines. The results showed that the respondents have a moderate level of financial literacy in terms of financial knowledge, financial management, credit/debt management, savings and retirement, and financial investment. Several issues concerning financial literacy were identified. These include heavy reliance on loans, low family savings, and unfavorable perspectives regarding retirement. The study results suggest the need for the respondents to improve their financial literacy in order to achieve efficiency in terms of making sound financial decisions and maximizing available financial assets.

Generally, this study highlighted financial literacy as an essential skill in the 21st century. It is a must to possess in order to thrive economically in today's society and make the most of the plethora of financial products available in the financial market and make sound decision. Finally, the study presented the vital aspects of financial literacy education and the need for targeted interventions for areas of financial literacy that need improvement. By addressing this gap, the respondents can contribute to a more financially literate and empowered population.

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#### AUTHOR CONTRIBUTIONS STATEMENT

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## CONFLICT OF INTEREST STATEMENT

The authors declare no competing interests in relation to this study. While institutional support was received from the Senior High School Department of Tubao National High School and coordination of the Department of Education (DepEd) was undertaken to facilitate data collection, no financial or personal relationships influenced the design, execution, interpretation, or publication of the research titled "Financial literacy of secondary school teachers in the Department of Education – Division of La Union". All authors affirm that the research was conducted independently and objectively.

## DATA AVAILABILITY

The data that supports the findings of this study, "Financial literacy of secondary school teachers in the Department of Education – Division of La Union," are available from the corresponding author [MGPP], upon reasonable request. Due to privacy and ethical considerations, particularly regarding the confidentiality of respondents from various secondary schools, the full dataset is not publicly shared. However, anonymized summaries or specific data segments may be provided upon request, subject to approval by the school's Research Ethics Committee and in accordance with data protection guidelines.

#### REFERENCES

- OECD, "Organization for economic cooperation and development," in *The Palgrave Encyclopedia of Urban and Regional Futures*, R. C. Brears, Ed., Cham: Springer International Publishing, 2022, pp. 1187–1187, doi: 10.1007/978-3-030-87745-3-300463.
- [2] A. Lusardi and O. S. Mitchell, "The importance of financial literacy: Opening a new field," *Journal of Economic Perspectives*, vol. 37, no. 4, pp. 137–154, Nov. 2023, doi: 10.1257/jep.37.4.137.
- [3] R. P. Pradhan, M. B. Arvin, M. S. Nair, J. H. Hall, and S. E. Bennett, "Sustainable economic development in India: The dynamics between financial inclusion, ICT development, and economic growth," *Technological Forecasting and Social Change*, vol. 169, p. 120758, Aug. 2021, doi: 10.1016/j.techfore.2021.120758.
- [4] E. Muñoz-Céspedes, R. Ibar-Alonso, and S. de L. Ros, "Financial literacy and sustainable consumer behavior," *Sustainability*, vol. 13, no. 16, p. 9145, Aug. 2021, doi: 10.3390/su13169145.
- [5] S. E. G. Lea, "Debt and Overindebtedness: psychological evidence and its policy implications," *Social Issues and Policy Review*, vol. 15, no. 1, pp. 146–179, Jan. 2021, doi: 10.1111/sipr.12074.
- [6] J. Noviarini, A. Coleman, H. Roberts, and R. H. Whiting, "Financial literacy, debt, risk tolerance and retirement preparedness: Evidence from New Zealand," *Pacific Basin Finance Journal*, vol. 68, p. 101598, Sep. 2021, doi: 10.1016/j.pacfin.2021.101598.
- [7] D. Asenova, S. J. Bailey, and C. McCann, "Public sector risk managers and spending cuts: Mitigating risks," *Journal of Risk Research*, vol. 18, no. 5, pp. 552–565, May 2015, doi: 10.1080/13669877.2014.910683.
- [8] P. J. Morgan and T. Q. Long, "Financial literacy, financial inclusion, and savings behavior in Laos," *Journal of Asian Economics*, vol. 68, p. 101197, Jun. 2020, doi: 10.1016/j.asieco.2020.101197.
- [9] T. H. Le, A. T. Chuc, and F. Taghizadeh-Hesary, "Financial inclusion and its impact on financial efficiency and sustainability: Empirical evidence from Asia," *Borsa Istanbul Review*, vol. 19, no. 4, pp. 310–322, Dec. 2019, doi: 10.1016/j.bir.2019.07.002.

[10] N. W. Madinga, E. T. Maziriri, T. Chuchu, and Z. Magoda, "An investigation of the impact of financial literacy and financial socialization on financial satisfaction: Mediating role of financial risk attitude," *Global Journal of Emerging Market Economies*, vol. 14, no. 1, pp. 60–75, Jan. 2022, doi: 10.1177/09749101211070952.

- [11] T. Bucher-Koenen, B. Janssen, C. Knebel, and P. Tzamourani, "Financial literacy, stock market participation, and financial wellbeing in Germany," *Journal of Financial Literacy and Wellbeing*, vol. 1, no. 3, pp. 486–513, Oct. 2023, doi: 10.1017/flw.2024.5.
- [12] A. Sconti, "Having trouble making ends meet? Financial literacy makes the difference," *Italian Economic Journal*, vol. 10, no. 1, pp. 377–408, Mar. 2024, doi: 10.1007/s40797-022-00212-4.
- [13] V. W. H. Lam and A. C. Lange, "The Debt Trap: How student loans became a national catastrophe," *Journal of Student Affairs Research and Practice*, vol. 61, no. 1, pp. 130–132, Jan. 2024, doi: 10.1080/19496591.2023.2186243.
- [14] K. J. C. Abaya, R. A. Aguinaldo, A. B. B. Asprec, J. A. Baylon, J. S. Donato, and V. A. Viloria, "Practices on financial literacy of teachers in the schools division office of Cabanatuan City," *International Journal of English Literature and Social Sciences*, vol. 6, no. 4, pp. 152–156, 2021, doi: 10.22161/ijels.64.25.
- [15] J. J. Xiao and R. Yao, "Debt types and burdens by family structures," *International Journal of Bank Marketing*, vol. 38, no. 4, pp. 867–888, Feb. 2020, doi: 10.1108/IJBM-07-2019-0262.
- [16] D. Mhlanga, "FinTech and financial inclusion on economic growth," in FinTech, Financial Inclusion, and Sustainable Development: Disruption, Innovation, and Growth, D. Mhlanga, Ed., London: Routledge, 2024, pp. 24–41, doi: 10.4324/9781032657981-3.
- [17] Ł. Kurowski, "Household's over indebtedness during the COVID-19 crisis: The role of debt and financial literacy," *Risks*, vol. 9, no. 4, p. 62, Mar. 2021, doi: 10.3390/risks9040062.
- [18] M. Z. A. Bakar and S. A. Bakar, "Prudent financial management practices among Malaysian youth: The moderating roles of financial education," *Journal of Asian Finance, Economics and Business*, vol. 7, no. 6, pp. 525–535, Jun. 2020, doi: 10.13106/JAFEB.2020.VOL7.NO6.525.
- [19] A. E. Anthony, "The effect of leadership styles on teacher job satisfaction in Nigerian secondary schools," *International Research in Education*, vol. 11, no. 2, pp. 1–14, May 2023, doi: 10.5296/ire.v11i2.21012.
- [20] F. Salignac, M. Hamilton, J. Noone, A. Marjolin, and K. Muir, "Conceptualizing Financial Wellbeing: An Ecological Life-Course approach," *Journal of Happiness Studies*, vol. 21, no. 5, pp. 1581–1602, Jun. 2020, doi: 10.1007/s10902-019-00145-3.
   [21] A. Balisacan, "44th ASM Message, NEDA Secretary," *Transactions of the National Academy of Science and Technology*, vol. 44,
- [21] A. Balisacan, "44th ASM Message, NEDA Secretary," Transactions of the National Academy of Science and Technology, vol. 44, pp. 1, Dec. 2022, doi: 10.57043/transnastphl.2022.2433.
   [22] Y. Hui Min, "A Study on Australia and New Zealand Banking Group Limited (ANZ) in Australia: Liquidity Risk and its
- [22] Y. Hui Min, "A Study on Australia and New Zealand Banking Group Limited (ANZ) in Australia: Liquidity Risk and it Determinant," SSRN Electronic Journal, pp. 1–46, 2022, doi: 10.2139/ssrn.4177223.
- [23] L. Klapper and A. Lusardi, "Financial literacy and financial resilience: Evidence from around the world," Financial Management, vol. 49, no. 3, pp. 589–614, Sep. 2020, doi: 10.1111/fima.12283.
- [24] P. G. Pimentel, M. V. Abante, F. Vigonte, and A. Caisip, "Examining Monetary Policy: A study on the Bangko Sentral ng Pilipinas' strategies, effectiveness, and socioeconomic impact during the global pandemic (2020-2022)." pp. 1–16, 2024, doi: 10.2139/ssrn.4864352.
- [25] C. Casingal and I. Ancho, "Financial literacy status of public-school teachers: The case of the Philippines," Journal of Management, Economics, and Industrial Organization, vol. 6, no. 1, pp. 63–80, Jan. 2022, doi: 10.31039/jomeino.2022.6.1.4.
- [26] A. B. LeBaron, E. K. Holmes, B. L. Jorgensen, and R. A. Bean, "Parental financial education during childhood and financial behaviors of emerging adults," *Journal of Financial Counseling and Planning*, p. JFCP-18-00021, Mar. 2020, doi: 10.1891/jfcp-18-00021.
- [27] T. Kaiser and L. Menkhoff, "Financial education in schools: A meta-analysis of experimental studies," *Economics of Education Review*, vol. 78, p. 101930, Oct. 2020, doi: 10.1016/j.econedurev.2019.101930.
- [28] P. Janposri, "The role of financial literacy in retirement planning and wealth accumulation among self-employed Thai workers," Journal of Population and Social Studies, vol. 29, pp. 177–194, Dec. 2021, doi: 10.25133/JPSSv292021.011.
- [29] T. M. Staples, A. Rollins-Koons, G. J. Anderson, and B. Gray, "Canadian Retirement Planning behavior: How reliance on a government pension relates to Pre-Retirement savings and planning behaviours," *Financial Planning Research Journal*, vol. 9, no. 1, pp. 1–18, Dec. 2023, doi: 10.2478/fprj-2023-0001.
- [30] J. J. Cao-Alvira, A. Novoa-Hoyos, and A. Núñez-Torres, "On the financial literacy, indebtedness, and wealth of Colombian households," *Review of Development Economics*, vol. 25, no. 2, pp. 978–993, May 2021, doi: 10.1111/rode.12739.
- [31] M. Sebastian, R. Banate, and M. Saquin, "Gender Roles among Public Elementary Teachers: Basis for Gender-Responsive Intervention Activities," *International Online Journal of Primary Education*, vol. 11, no. 2, pp. 401–411, Dec. 2022, doi: 10.55020/iojpe.1222199.
- [32] A. Lusardi, "Financial literacy and the need for financial education: evidence and implications," Swiss Journal of Economics and Statistics, vol. 155, no. 1, pp. 1–8, Dec. 2019, doi: 10.1186/s41937-019-0027-5.
- [33] T. Bucher-Koenen, R. Alessie, A. Lusardi, and M. van Rooij, "Fearless Woman: Financial Literacy and Stock Market Participation," National Bureau of Economic Research, Cambridge, MA, Apr. 2021, doi: 10.3386/w28723.
- [34] V. Frisancho, "The impact of financial education for youth," *Economics of Education Review*, vol. 78, Oct. 2020, doi: 10.1016/j.econedurev.2019.101918.
- [35] M. B. Shaik, M. Kethan, T. Jaggaiah, and M. Khizerulla, "Financial literacy and investment behaviour of IT professional in India," East Asian Journal of Multidisciplinary Research, vol. 1, no. 5, pp. 777–788, Jun. 2022, doi: 10.55927/eajmr.vli5.514.
- [36] J. Ye and K. M. M. C. B. Kulathunga, "How does financial literacy promote sustainability in SMEs? A developing country perspective," Sustainability, vol. 11, no. 10, p. 2990, May 2019, doi: 10.3390/sul1102990.
- [37] L. Ventura and C. Y. Horioka, "The wealth decumulation behavior of the retired elderly in Italy: the importance of bequest motives and precautionary saving," *Review of Economics of the Household*, vol. 18, no. 3, pp. 575–597, Sep. 2020, doi: 10.1007/s11150-020-09486-y.
- [38] Q. Li, "Student loan burden, financial literacy, and financial behavior-evidence from the 2018 FINRA survey," *Journal of Accounting and Finance*, vol. 21, no. 1, pp. 54–67, Jun. 2021, doi: 10.33423/jaf.v21i1.4158.

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