

## METHODS

# Financial literacy, perspectives, and practices of public secondary teachers in urban municipalities of Nueva Vizcaya

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Financial literacy is one of the biggest problems facing government employees, especially teachers. Based on the Salary Standardization Law 1, public teachers have better compensation than any other government employees, considering their basic salary and all of the benefits. However, teachers were financially challenged in understanding and managing their own finances. Therefore, the study focused on the level of financial literacy, financial perspectives, and financial practices of the public junior high school teachers who are permanent for at least 2 years in their respective schools in the urban municipalities (Bayombong, Bambang, and Solano) of Nueva Vizcaya. Moreover, the concept of the study was drawn from the theories of Maslow's Hierarchy of Needs, areas of personal finance, financial literacy identifiers and core competencies, top-down processing theory, and behavioral finance. In addition, the study used a descriptive-inferential research design, and data were analyzed using several statistical tools. The result of the study showed that public secondary teachers have a high level of financial literacy and financial perspectives. But this is in contrast to the level of financial practices, which yield a low result. Based on the result of the study, the researchers recommend a personal finance model for improving the level of financial literacy and the perspectives and practices of public secondary teachers.

**Keywords:** financial literacy, financial perspectives, financial practices, personal finance, public secondary teachers

## Introduction

### Background the study

Finance is defined as “an art and science of managing money” (1). This definition denotes that finance is a combination of art and science. Moreover, Kottiyam (2) identified four types of finance, which include public finance, private finance, corporate finance, and personal finance. The most common type of finance is personal finance, which is for everyone. It is concerned with how a person manages and allocates cash. It is also the application of principles of finance to the monetary decisions made for an individual's benefit.

Managing personal finances shows how literate a person is, whether in terms of spending, saving, investing, or borrowing money. Financial literacy means having financial

education, such as being familiar with different financial concepts and having financial skills. Moreover, studies revealed that financial education is connected to improving financial literacy, saving habits, wealth accumulation, and debt management (3). Financial literacy is defined as the ability of a person to understand how financial choices help an individual confidently manage and grow his or her personal funds (4). Additionally, it has five components, and these are earning (income), spending (expenditures), saving and investing (savings and investments), protecting (insurance), and borrowing (loans) (5).

Furthermore, financial literacy has a huge impact on managing personal finances (6). Hence, managing personal finances is essential, and it signifies being financially literate. However, the level of financial literacy affects the person's financial perspective. Each individual has a different perspective and behavior when it comes to cash.

This perspective and behavior depend on their ability and knowledge of finance or financial literacy (7). In addition, people who fully understand financial literacy have better financial practices (8).

In the United States of America (USA), based on the data of the US Financial Literacy and Education Commission, only one-third of the adults were able to answer at least four of five financial literacy questions about fundamental concepts such as interest rates, inflation, risk, and mortgage. Around 40% of Americans turn to their families, friends, or work colleagues if they have some questions about their finances. In addition, over 20% of Americans did not feel they had someone to trust about finance, as polled by the National Financial Educators Council. Moreover, 50% of the adults were anxious about personal finances due to a lack of financial literacy (9). Rose (10) added that it turned out many Americans were not financially literate, and they were stressed about it.

Additionally, according to Standard and Poor's Global Financial Literacy Survey (11), across Europe, the level of financial literacy ranges from as high as 71% of the population of the Scandinavian countries down to as low as 13% in the southeast part of Europe. However, in South Africa, according to the S and P Financial Literacy Survey, South Africans are financially literate, with an estimate of 42% (12). According to the Financial Services Board, a government agency in South Africa that oversees the non-banking financial services industry, South Africa's overall financial literacy was 54% in 2012 (13).

In Australia, numerous national studies have shown Australians have a generally poor level of financial literacy. According to the Australian Securities and Investments Commission's (ASIC) (2017) Financial Literacy Capability Survey, only 35% of Australians know the exact value of their retirement. As Deloitte Access Economics added, based on their Financial Consciousness Index (2018), it was found that nearly one-third of the population is "financially vulnerable." This concerned the lack of job security and the ability to retire comfortably at 65 years old (14).

Additionally, Israel, a Middle Eastern country, is considered one of the countries with the highest levels of financial literacy. However, South Asia is home to countries with some of the lowest financial literacy rates, where only one-fourth of adults or fewer are financially literate (15). Most Asian countries have surprisingly low level of financial literacy, specifically in Southeast Asia, where financial literacy is significantly below the global average. Except for Singapore and Myanmar, the remaining Southeast Asian countries have an average of 30% of their adult populations who are financially literate. However, Cambodia has a financial literacy rate of only 18%. Moreover, other Asian countries such as Hong Kong, Japan, Kuwait, and Bahrain have a financial literacy rate above 40% (16).

In Philippines, According to Standard and Poor's, global credit ratings agency, Financial Literacy Report for 2015, the

financial literacy of the country was "not as strong," with a "large or significant" percentage of Filipinos considered financially illiterate. Only 25% of the Filipinos were considered financially literate (17). Moreover, among these Filipinos who were considered financially illiterate were teachers. According to Cabaddu (18), public school teachers in the country have been plagued with loans over the past decades. Most prominent was in 2016, when more than 26,000 teachers failed to avail of their retirement benefits due to several unpaid loans. Furthermore, it shows that most rich countries have a higher rate of financial literacy, while poor countries have a lower rate.

While in fact, teachers have a greater opportunity to have financial freedom, specifically the public teachers, who have more benefits than the other regular employees. Public teachers' salaries in the Philippines vary based on their salary grade and position. The lowest salary grade based on Salary Standardization Law 1 (RA 6758) is SG 13 (Php 20,754.00) for Teacher I, and the highest salary grade is SG 21 (Php 57,805.00) for Master Teacher IV and Principal IV. Aside from the salary, teachers received different incentives such as personnel economic relief allowance (PERA) (Php 2,000.00), mid-year bonus (equivalent to 1 month's salary), year-end bonus (equivalent to 1 month's salary), cash gift (Php 5,000.00), performance-based bonus (PBB) (which ranges from 50 to 65% of the basic monthly salary depending on school performance), productivity enhancement incentive (PEI) (Php 5,000.00), and clothing allowance (Php 6,000.00). For some, they would be able to have loyalty pay (10th year is equivalent to Php 10,000.00 and every additional 5 years is equivalent to Php 5,000.00), a step increment, an anniversary bonus (Php 3,000.00) depending on meeting the necessary criteria (19). Hence, these only show that teachers have more opportunities to become financially independent.

According to an interview with Ms. Rose Marie Fausto, investment banker turned full-time homemaker, author, columnist, and speaker of motivation and financial literacy, as cited by the Philippine Star (20), one of the national newspaper publishers of the country, she quoted that most of the public school teachers here in the Philippines have never-ending lending. It was supported by Department of Education (DepEd) Secretary Leonor Briones, as she cited the study of the Philippine Institute for Developmental Studies (PIDS), which shows that most of the public school teachers are more likely to borrow compared to other government employees. She added that she suggested financial literacy to the teachers, but there was a negative reaction.

The massive negative reaction among public school teachers in terms of financial literacy is actually a huge predicament considering the large volume of teachers in the country. In the Philippines, there are 3,149 public preschools, 3,149 public elementary schools, and 689 public secondary schools. Moreover, there are 981 public preschool teachers, 31,573 public elementary school teachers, and 16,327 public secondary school teachers for the academic

year 2016–2017 (21). These numbers of public teachers and the various benefits show that they have high potential to have financial freedom. However, the negative reaction in financial literacy provides an avenue for the researcher to study such perspectives and practices of public teachers.

Hence, this study was localized in Nueva Vizcaya urban municipalities to be able to clearly understand the predicaments in financial literacy, perspectives, and practices of the public school teachers in the province. Therefore, the result of the study would help in crafting a personal finance model for the public school teachers, thus, helping them achieve personal financial independence.

## Objectives

The study generally aims to determine the level of financial literacy, perspectives, and practices of public secondary teachers in urban municipalities in Nueva Vizcaya.

The study specifically aims to:

1. Determine the respondents' profile.
2. Determine the level of financial literacy, financial perspectives, and financial practices.
3. Determine if there is a significant relationship between the respondents' profile and level of financial literacy, financial perspectives, and financial practices.
4. Determine if there is a significant relationship between the level of financial literacy and financial perspectives; and financial practices of the respondents.
5. Determine if there is a significant relationship between financial perspective and financial practices.
6. Develop a personal finance model for the public secondary teachers in improving their financial perspectives and practices.

## Methodology

### Research design

This study used a descriptive-inferential research design to achieve its main objective of determining the level of financial literacy, financial perspectives, and financial practices of public secondary teachers in urban municipalities. The research design described, interpreted, and revealed the conditions and relationships that existed or did not exist in the study, wherein the information was collected without changing the environment and referred to a correlational type of study. This was used to describe and interpret the data that was gathered from the participants. Such a research design could help to identify the level of financial

literacy, financial perspectives, and financial practices of the respondents for this study.

### Research locale

This study was conducted in the urban municipalities of Nueva Vizcaya, which are Bambang, Bayombong, and Solano. The province has a total land area of 4,37,880 hectares. It is composed of 15 municipalities and 275 barangays, with Bayombong as the provincial capital, Bambang as the agricultural hub, and Solano as the major commercial centers as shown in [Figure 1](#).

### Sources of data

Primary data from the survey and Key Informants' Interview (KII) were used in the study, while secondary data were gathered from books, online articles, news, published theses, and other literature related to the study.

### Data gathering procedure

The researchers performed all activities from survey to KII. Hence, the following procedures were undertaken: revisions in the proposal papers were done, underscoring the comments and suggestions that were made by the panel members to give more meaning, substance, and clarity to the papers; finalization of the research instruments to establish their physical and content validity was done based on the comments and suggestions of the research adviser and panel members. Before administering the survey, the researchers prepared an initial request letter that was sent to the School Division Office in Nueva Vizcaya. Upon endorsement, the request letter was sent to participating schools to request approval for the conduct of the survey and for the list of permanent secondary teachers; to validate the questionnaire, the researchers disseminated the survey

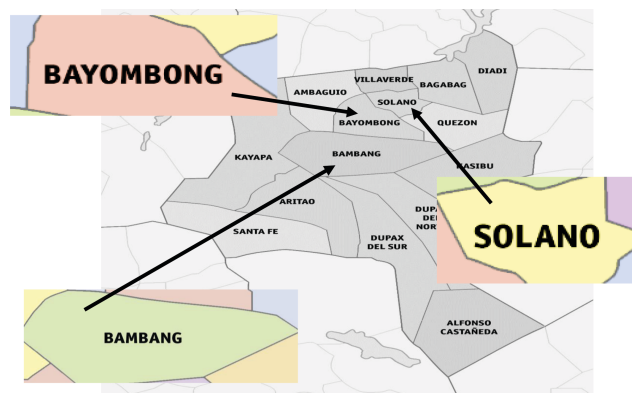


FIGURE 1 |

questionnaires to 40 instructors from the different colleges of Nueva Vizcaya State University, Bayombong Campus. To interpret the data, it underwent Cronbach's alpha. In administering the survey, the researchers printed the survey questionnaire and delivered it to the respective schools. Schedules of pickup for the answered questionnaires were put in place according to the dates assigned by the contact person from each school; Before conducting the interview, the researcher prepared an initial request letter sent to the supervisor of the identified key informants; And interviews were conducted face-to-face and separately by the researchers.

## Respondents of the study

The participants in this study were the public school secondary teachers at Bambang National High School (BNHS), Nueva Vizcaya General Comprehensive High School (NVGCHS), and Solano High School. A total of 178 public school secondary teachers were participants in the study, who hold permanent status and have taught junior high school for at least 2 years and above. Furthermore, key informants were interviewed, such as bank managers and financial advisors. The distribution of the participating public secondary teachers is shown in [Table 1](#).

## Sampling technique

Stratified sampling was used in the selection of the participants of the study. It is a probability sampling to expand precision (less error) in relation to simple random sampling (SRS). The population is divided into strata or non-overlapping groups, according to laterally relevant dimensions like ethnicity, gender, and political affiliation. Then, the researchers collected random samples of the population of respondents from within each section. This technique makes sure that observations from all related sections are included in the sample (22).

A total of 178 public secondary school teachers were the participants in the study, and Slovin's formula with a 5% margin of error was used. After using this formula, a percentage was used to identify the total number of public secondary teachers who participated in the study.

**TABLE 1** | Distribution of participating public secondary teachers.

| Public secondary teachers | Population | Respondents |
|---------------------------|------------|-------------|
| BNHS                      | 107        | 59          |
| NVGCHS                    | 108        | 60          |
| SHS                       | 107        | 59          |
| <b>Total</b>              | <b>322</b> | <b>178</b>  |

Source: DepEd, School Division Office.

The respondents were identified through stratified sampling that was based upon a variety of criteria set for the study and their capability and willingness to participate in the research.

## Research instrument

### Survey

The instrument used in the study was divided into two parts. The first part emphasized the respondents' profiles, which were divided into three portions that include a socio-demographic profile, an employee's profile, and a psychographic profile. The socio-demographic profile includes age (which represented the public secondary teachers in varied ages), civil status (to determine the marital status of the respondents), intercultural community (to determine the cultural belongingness of the respondents), sex (to provide opportunity for both men and women), highest educational attainment (to determine the background formal education of the respondents), household size (to determine the size of the household where the respondents belong), and living condition (to determine the house type and ownership, health condition, lifestyle illness, and education of the respondents' children who are still studying).

The next portion was about the employees' profile, which included position (to determine the respondents' present position at work) and length of employment (to determine how long the respondents have served the government education industry). Lastly, the psychographic profile included hobbies and interests (to determine what most likely the respondents do during their free time and what they want to do), goals (to determine what are the goals in the lives of the respondents), priorities (to determine what are the priorities in the lives of the respondents), peer group (to determine who influences the decision-making of the respondents), and personality traits (to determine the personality traits that might affect the decision-making of the respondents).

The second part concentrated on the level of financial literacy, financial perspectives, and financial practices of the respondents. The level of financial literacy included financial knowledge (to determine how the respondents understood numerous financial skills such as personal financial management on income, expenditures, savings, investments, and loans), financial behavior (to determine how well or poorly the respondents react to any financial situations), and financial attitudes (to determine if the respondents have a positive or negative state of mind, opinion, or judgment about any financial situations).

Moreover, financial perspectives include other sources of income, expenditure, savings, investment, and loans (to determine how the respondents perceive personal finances in terms of income and other sources, expenditures, savings,

investment, and loans). Also, financial practices include other sources of income, expenditures, savings, investment, and loans (to determine how the respondents manage their personal finances in terms of income and other sources, expenditures, savings, investment, and loans).

## **KII**

Some key informants were asked to respond to a set of questions relating to public school teachers applying for savings, investments and loans. The information culled from these was used to validate the quantitative results, the open-ended ideas, the written observations of the proponent, as well as the veracity of some empirical data supplied by other previously conducted studies. There were three different sets of questionnaires: one for each of savings, investments, and loans.

Some of the guide questions for the interview in gathering data for savings are about personal interest, the percentage of teachers, the reason for opening the account, and the progress of the savings account. Likewise, in collecting data on the investments of a sample guide, questions are asked about personal interest, percentage of teachers, and reason for opening an account.

Likewise, in collecting data on the investments, sample guide questions are personal interest, percentage of teachers, reason, account status, payment behavior, and familiarity with the Avail package. Lastly, in collecting data on loans, consider: personal interest, percentage of teachers, purpose, loans availed, frequency, and reason for reapplying for loans.

## **Data analysis**

Descriptive statistics were used to interpret the respondents' profiles and personality traits. Frequency distribution, percentage, range, mean, and standard deviation were used to identify these variables. However, for the level of financial literacy, financial perspectives and financial practices were interpreted using the Likert scale model with the scale interpretation.

## **Statistical treatment**

The respondents' profile and personality traits were determined through descriptive statistics such as percentage, frequency count, range, mean, and standard deviation.

The significant relationships between the respondents' profile and level of financial literacy, financial perspectives, and financial practices were determined using the statistical tools such as Pearson's product moment correlation and Spearman's rho.

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## **Statistical tools**

Statistical tools used to interpret and analyze the data were as follows:

Slovin's formula was used to determine the total number of respondents included in the study.

Percentage was used to express how large or small one quantity is relative to another quantity (23). A percentage was used in identifying the total number of public secondary teachers who participated in the study.

The mean was used to determine the sum (average) of values for each variable, and the relative frequency was used to identify the distribution of the participants according to their profiles and levels of financial literacy, financial perspectives, and financial practices. Also, it measured the participants' views on given Likert-scale questions (23). The most common is 1–5. This method was used in this study to analyze the output from the questionnaire.

Frequency count is a tabulation of how many times a certain variable occurs within a calculation (23).

Standard deviation measures how spread out a number is (23). In this study, it was used to determine respondents' profiles and levels of financial literacy, financial perspectives, and financial practices.

A Likert scale is a psychometric response scale mostly used in surveys to acquire respondents' degree of agreement with or preferences toward a statement or group of statements. Likert scales are unidimensional (only measure a single trait) and a non-comparative scaling technique in nature. Participants were asked to specify their degree of agreement with given statements by way of an ordinal scale (24). It was used to determine the level of financial literacy, financial perspectives, and financial practices of the respondents.

Pearson Product Moment Correlation measures the strength of linear association among two variables and is denoted by  $r$  (25). In this study, it was used to measure the relationship between respondents' profiles, financial literacy, financial perspectives, and financial practices.

Spearman Rho measures the strength and direction of association among two ordered variables (26). In this study, it was used to measure relationship between respondents' profile, financial literacy, financial perspectives, and financial practices.

**TABLE 2** | Sociodemographic profiles of the public secondary teachers.

| Sociodemographic profiles                             | Clusters         | Frequencies | Percentages |
|---|------------------|-------------|-------------|
| Age   | 30–39            | 65          | 36.50       |
| Sex   | Female           | 125         | 70.20       |
| Civil status  | Married          | 122         | 68.50       |
| Intercultural community (ICC)                         | Ilocano          | 144         | 80.90       |
| Highest educational attainment                        | College graduate | 147         | 82.60       |
| <b>Household size</b>                                 |                  |             |             |
| Number of family members living in the same house     | 3–4              | 89          | 50.00       |
| Number of family members working within the household | 2                | 100         | 56.20       |
| <b>Living conditions</b>                              |                  |             |             |
| House type  | Concrete         | 150         | 84.30       |
| House ownership                                       | Owned            | 121         | 68.00       |
| Health conditions                                     | If need arises   | 112         | 63.00       |
| Lifestyle illness                                     | None             | 117         | 65.70       |
| Number of children who are still studying             | None             | 78          | 43.80       |

## Results and discussion

### Respondents' profile

It is divided into three parts: the sociodemographic profiles, the employment profiles, and the psychographic profiles.

**Table 2** showed that 36.50% of the teachers who were teaching in junior high school belonged to the age group of 30–39 years. This only implies there were more millennial teachers in junior high school. In line with the study of Lacco-O et al. (27), millennial teachers were dominating the Philippine schools. Additionally, among the 178 respondents, 70.20% were female teachers in junior high school. This implies that females were more interested in the teaching profession. As Philippine Star (28) stated, there were more female teachers in the country because of the culture and stereotyping that this profession is a woman's job. Maria Mercedes Arzadon, a University of the Philippines education professor said, "The profession, after all, has long been "feminized" such that any male who entertains thoughts of becoming a teacher is branded as weak or dull."

As for the civil status, 68.60% of the teachers in junior high school were married. It only means that married teachers had more reasons, motivations, and determinations to do their job since they needed to provide for their family. This result supported the finding of Unos (29) that the majority of the Filipino teachers were married and more dedicated to teaching. However, according to Alufohai

and Ibhafidon (30), the dedication of the teachers to do their job is affected by psychological problems such as separation and divorce. However, single teachers who were not experiencing any family issues were more dedicated and committed to teaching, and married teachers showed higher job satisfaction compared to separated, divorced, and single teachers.

Furthermore, the most common intercultural community among the respondents was Ilocano; 144, or 80.90%, of the total respondents belonged to this group. This only means Ilocano is dominant among other cultures in the province of Nueva Vizcaya. Likewise, Ilocano is the second native dialect in the province. It was supported by the study of Tucay (31), as she found out in her research that most of the teachers in the province were Ilocano speakers.

In terms of the highest educational attainment, the majority of the teachers were bachelor's degree holders, and only a few had completed master's and doctorate degrees. This is because most of the teachers only earned 30 academic units for their master's degree, which is one of the minimum requirements for applying for ERF. Teachers were not after the degree but only in earning the minimum number of academic units required for the promotion. This result affirmed with Llego (19) that teachers' main reason in studying for a master's degree was not to earn the degree but to only earn the 30 academic units to be qualified for the ERF. Unos (29) added that the majority of the Filipino teachers were bachelor's degree holders only.

Moreover, half of the total number of respondents had an average of four family members who were living with them. Likewise, 56.20% of them, with an average of two family members were already working. This means teachers had an average Filipino family size. Based on the data from Philippine Statistics Authority (21), the average Filipino household consisted of 4.2 people. However, the results contradicted the study of Acedillo (32), wherein the household size of public secondary teachers is 5.5, which is higher than the results provided by the PSA.

In terms of house ownership, among the 178 respondents, 68% owned their house. In addition, the majority of the teacher's house was made of concrete. It only implies that teachers have already settled down and have their own families, or have plans to do so. This conforms with the data from Clever, where the main reason millennials buy or build their own house is because they have or want to have a family (33). In addition, according to Philippine Statistics Authority (34), 64.1% of the Filipinos owned the house and lot they occupied. One of the three regions where people already owned a house and lot they occupied was in the Cagayan Valley region, with 91.5%. Among these, 91.1% of the Filipinos had their house made of strong materials for the roof, and 73.5% had strong materials for the outer walls. Strong materials refer to concrete, galvanized iron or aluminum, tile, and brick stone.

Furthermore, 63% of the teachers visited their doctors once the need arose. The results showed teachers did not prioritize their health as long as they were not in critical condition. It contradicts the recommendation of Moyer (35), a doctor of medicine, that a person who is under 50 years old and in good health must visit the doctor once every 3 years, once a year for those who are 50 years old and up, and more frequently if there is any health condition. Additionally, 65.70% of the respondents do not have any health conditions. The results showed most of the teachers were in good health without any lifestyle illnesses. This contradicts the news of Sun Star Pampanga (36), a daily newspaper: most of the teachers have health conditions, and most of them take it for granted. Until it became too late for them to take care of themselves, and time passed without proper attention. Rivera (37) added that some of the lifestyle diseases of the teachers are hypercholesterolemia, hypertension, arthritis, diabetes mellitus, heart enlargement, cancer, and ischemic heart disease.

However, when it comes to the number of children who are still studying, 43.80% of the respondents either had no children to send to school or had already finished their studies. This means millennial teachers were just starting their families and their children were not yet studying, while other respondents' children were already finished with their education. In addition, parents would not allow their children, who were studying basic education, to enroll in a distant school. This supported the article published by India Today (38), a weekly Indian English-language news magazine, where one of the factors in choosing a school for children is the location. School should not be far from home, be safe in terms of not being close to the highway, and be easily accessible. Likewise, other factors are management, curriculum and co-curricular activities, safety and security, and the quality of teachers.

Employment profile presents and discusses the second portion of respondents' profiles, which includes position and length of employment.

As shown in Table 3, 58.80% of the respondents held the position of Teacher III. This means most of the teachers earned the qualifications to apply for the position of Teacher III, such as earning at least 30 academic units or finishing a master's degree. The data confirms that in terms of sociodemographic profile and highest educational attainment, teachers earned 30 units of academic units in a master's degree, one of the requirements set by the DepEd in promoting teachers to Teacher III. Likewise, this might

confirm the result in length of employment: teachers were already in the service of teaching for more than 5 years and above. Number of years in service is another qualification in promoting teachers. This supported DepEd Order 52, Series of 1999 (39).

However, when it comes to the length of employment, the majority of the respondents have been in the teaching profession for 5 years and above. The results indicate that most of the teachers were loyal, satisfied, and happy with their jobs. This was supported by the result of the sociodemographic profile, which showed that most of the teachers were females. They have the passion and satisfaction to teach, and because of this, they tend to stay longer in their job. Furthermore, the data confirm the result in personality traits that teachers have the conscientious traits, and people who have this trait have higher levels of job satisfaction and are less likely to leave their jobs.

The psychographic profile section presented and discussed the last portion of the respondents' profile, which included hobbies and interests, goals, priorities, peer groups, and personality traits.

Based on the results of the study, teachers rarely spend time doing their hobbies and interests. This only shows how their profession consumed their time and reflects how dedicated they are to their profession. This data supported the study of Bongco and Ancho (2019), based on the global data that teachers tend to work beyond office hours more than any other professionals around the world. Likewise, the teachers' group in the Philippines confirmed that the workload of the teachers compromised their professional well-being.

As the results shown in Table 4 show, most of the respondents target achieving their set goals in a short period of time. This shows teachers were too impulsive in targeting goals and did not even consider if they had enough resources to achieve them in the short term. Likewise, they have a binge decision-making process that possibly affects the people that surround them. This is consistent with the results of the peer group study: teachers' decision-making was somewhat influenced by their family and role models and slightly influenced by their relatives, friends, and colleagues. In addition, teachers do not set goals; they carry out attitudes and provide orders on how goals must be interpreted and set (40).

Outcomes showed respondents' priority level for achieving their set goals is medium. This implied that these were not

**TABLE 3 |** Employment profile of the public secondary teachers.

| Employment profiles  | Clusters          | Frequencies | Percentages |
|----------------------|-------------------|-------------|-------------|
| Position             | Teacher III       | 94          | 58.80       |
| Length of employment | 5 years and above | 134         | 75.30       |

**TABLE 4 |** Psychographic profile of the public secondary teachers.

| Hobbies and interests, goals, priorities, peer group, and personality traits | Mean | Quality descriptions |
|--|------|----------------------|
| Hobbies and interest   | 2.59 | Rarely               |
| Goals  | 2.77 | Short-term goal      |
| Priorities   | 2.52 | Medium               |
| Peer group   | 2.46 | Slightly influential |

the main priorities of the teachers, but they still considered them priorities because they included them in their goals. Similarly, the result contradicted their goals, as they wanted to achieve them in a short period of time, even though they were not part of their main priorities. In addition, Schwartz (41) said, millennials were having a hard time setting short- or long-term personal and professional goals. They do not always know the when, why, and how of the next big things, yet they like to learn.

In terms of peer group, respondents' decision-making was slightly influenced by the people that surround them. This means teachers' decision-making was slightly affected by the comments and suggestions of the people around them. This result contradicted the article published by Ideas for Leaders (42), a website for business school research center, in which millennials marked down the stereotype that their decision-making was influenced by social media, friends, and family. As a matter of fact, they find opportunities and make choices on their own without leaning on their parents, friends, or social media friends.

Based on the results shown in Table 5, 44.90% of the respondents had personality traits of conscientiousness. People who have this trait have honor or uprightness. In contrast, there were some who had the traits of extraversion and neuroticism, with a percentage of 3.40 and 2.20%, respectively. Persons who had the extraversion trait had sociability or outwardness. However, extraversion trait means having anxiety or hysteria. It showed that having integrity, being honest, trustworthy, and fair stood out from other personalities among teachers. Fuchsman and Zamarro (43) state that conscientious workers are more likely to have higher levels of job satisfaction and are less likely to leave their jobs.

### Level of financial literacy perception, financial perspectives, and financial practices

This section presented and discussed the financial literacy, perspectives, and practices of the respondents. The level of financial literacy is the first portion, which is divided into three parts: financial knowledge, financial behavior, and financial attitude.

As shown in Table 6, results showed a mean score of 4.06, which had a quality description of *high*. This result means that respondents had a high level of financial knowledge, behavior, and attitude. This result was proven in the study

of Surendar and Sarma (44), indicating that teachers have a high level of financial literacy in terms of financial knowledge, behavior, and attitude. However, Ferrer (45) found out in his study that when teachers were confronted with more specific financial concepts and theories, they suddenly realized their financial knowledge was quite low.

Results show financial perspectives had a mean score of 3.80 and a quality description of *high*. This result implied teachers had a high level of financial perspective in terms of other sources of income, expenditures, savings, investments, and loans. This result confirms the findings of Ferrer's (45) study that teachers had a high level of financial perspective. However, they were only overly confident with their perspective on finance, and when confronted with more specific financial concepts and theories, teachers suddenly realized their financial literacy was quite low.

Results showed that financial practices had a mean score of 2.52 with a quality description of low. This means teachers had a low level of financial practices in terms of other sources of income, expenditures, savings, investments, and loans. They were not practicing what they knew and perceived in managing their personal finances. Also, it shows that the practices of the respondents contradicted their financial behavior and attitude. This conforms to the study by Acedillo (32), which found that teachers had a low level of financial practice. However, it was evident that the more income available, the better would be their expenditures, savings and investments, money management, and response to unexpected expenses. They needed to improve their financial literacy to help them improve their financial practices.

### Relationships between the respondents' profile and level of financial literacy, financial perspectives, and financial practices

This section presented and discussed the relationship between the respondents' profiles and levels of financial literacy, financial perspectives, and financial practices. It was divided into three parts: the relationship between respondents' profiles and their level of financial literacy; the relationship between respondents' profiles and their financial perspectives; and the relationship between respondents' profiles and their financial practices.

**TABLE 6** | Level of financial literacy, perspectives, and practices of public secondary teachers.

| Financial literacy, perspectives, and practices | Mean | Quality descriptions |
|---|------|----------------------|
| Financial literacy                              | 4.06 | High                 |
| Financial perspectives                          | 3.80 | High                 |
| Financial practices                             | 2.52 | Low                  |

**TABLE 5** | Personality traits of the public secondary teachers.

| Personality trait | Frequency | Percentage |
|-------------------|-----------|------------|
| Conscientiousness | 80        | 44.90      |



**TABLE 7** | Correlation matrix on the relationship between respondents' profiles and level of financial literacy, perspectives, and practices of public secondary teachers.

| Relationship between the level of financial literacy, perspectives, and practices of public secondary teachers | Quality descriptions |
|--|----------------------|
| Respondents' profiles and level of financial literacy  | Significant          |
| Respondents' profiles and financial perspectives   | Significant          |
| Respondents' profiles and financial practices  | Significant          |

As shown in **Table 7**, the respondent's profile and level of financial literacy had a significant relationship. The result implied that teachers who had good health conditions had a high level of financial literacy in terms of financial knowledge, as they already knew that they should save and invest in preparation for any health-related emergencies. They knew the importance of saving for health purposes and investing in health insurance. This reflects the result of financial practices in terms of savings and investment, where they highly saved for health purposes and invested in health insurance. In addition, the results supported the study of James et al. (46) that people who had good health conditions had high financial literacy as they exhibited better health care and better decision-making in their finances. Moreover, teachers who had short-term goals in life show the same result, as they knew what must be achieved first, especially if it required allotment of funds. As well as those who had medium priorities in life, they showed a high level of financial literacy in terms of financial knowledge, as they knew what to prioritize first and which expenses required allotment of money.

The results show that respondents' profiles and financial perspectives had a significant relationship. The result implies that respondents who had a greater number of family members living in the same house had a higher level of financial perspectives in terms of other sources of income, as they perceived that they needed additional funds to cover additional expenses. Also, those who had hobbies (such as eating outside, travelling inside or outside the country, and occasional drinking), had several long-term goals and priorities in life (such as getting married and having children, pursuing career advancement, availing of health care program, and acquiring of properties). The results affirmed the article published by Luenendonk (47) that people highly perceived that they could generate additional income from their hobbies or passions. However, they did not know how to make it real.

The outcome shows respondents' profiles and financial practices had a significant relationship. The result indicates that teachers who own their own homes have low levels of financial practices toward other sources of income, as they have already achieved their goal of owning their own home and no longer foresee any expenses that require additional

revenue. Similarly, the same results occurred with teachers who had a longer period of service as they were too busy with their jobs and no longer capable of managing additional jobs. This result contradicted Startz's (48) finding that even though teachers were too busy with their profession, they still found time to have an additional source of income due to low compensation.

## Relationships between level of financial literacy and financial perspectives and financial practices

The outcome in **Table 8** shows level of financial literacy and financial perspectives have a significant relationship. The statistical analysis indicates that all the variables of financial literacy are significantly and positively correlated, with all variables representing financial perspectives. The result further denotes that the higher the level of financial literacy of the respondents, the better their financial perspectives will be. However, if their financial literacy is low, it would follow that their financial perspectives are also low. These results conformed with the results of the study by Ameliawati and Setiyani (7), which found that the level of financial literacy affects the level of financial perspective of a person. Each individual has a different perspective and behavior when it comes to cash. This perspective and behavior depend on their ability and knowledge of finance, or financial literacy.

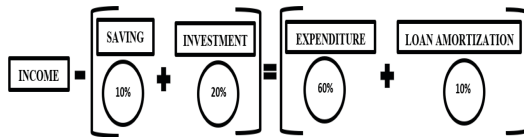
The results show a significant relationship between levels of financial literacy and financial practices. This means teachers who have a high level of financial literacy should have a high level of financial practices. However, based on the results, teachers had a high level of financial literacy but low levels of financial practices. Even though teachers understood numerous financial skills such as personal financial management of income, expenditures, savings, investments, and loans, they still lacked the application. This data contradicted Solution 2021, which states that the more people understand financial literacy, the better they will be at handling their finances.

**TABLE 8** | Correlation matrix on the relationship between level of financial literacy and financial perspectives, and practices of public secondary teachers.

| Relationship between the level of financial literacy, perspectives, and practices of public secondary teachers | Quality descriptions |
|--|----------------------|
| Level of financial literacy and financial perspectives   | Significant          |
| Level of financial literacy and financial practices  | Significant          |

**TABLE 9** | Correlation matrix on the relationship between financial perspectives and financial practices of public secondary teachers.

| Relationship between the financial perspectives and financial practices of public secondary teachers | Quality description |
|--|---------------------|
| Financial perspectives and financial practices   | Significant         |



**FIGURE 2** | Personal finance model in improving the level of financial literacy, financial perspectives, and financial practices.

## Relationships between the financial perspectives and financial practices

Based on the results in [Table 9](#), financial perspectives and financial practices are significantly related. Financial perspectives should have the same level as financial practices; if the perspective is high, then the practices should also be high, or vice versa. However, based on the results of the study, teachers had a high level of financial perspectives, yet their financial practices were low due to a lack of application. Teachers are highly perceived as needing to properly allocate and pay for their expenses. But, due to a lack of practices in properly allocating and managing personal finances, such as debt obligation expenses and personal care expenses, it ended up compromising personal savings and investment. This result confirms Kielar's (2020) assertion that it is essential to understand income, as this will aid in the proper allocation of the budget for the desired expenditures.

## Developed personal finance model for the public secondary teachers in improving their level of financial literacy, financial perspectives, and financial practices

The recommendation highlights the formula and budget rule for properly handling personal finance.

[Figure 2](#) shows the recommended model, which presents the formula for improving the level of financial literacy, financial perspectives, and financial practices. This formula shows income less savings and investments is equal to expenditures and loan amortization, which is applicable on a monthly basis. Likewise, it means that individuals should set aside first their monthly savings and investment (monthly premium) from their monthly income (other sources of income included, if there are any), and the remaining would be allocated for the monthly expenditures and loan amortization.

Moreover, this formula was inspired by the equation:  $\text{income} - \text{expense} = \text{savings}$  and  $\text{income} - \text{savings} = \text{expense}$ .  $\text{Income} - \text{expense} = \text{savings}$  means the amount left over after spending money goes into savings. It shows priority was to pay all the bills, spend for daily needs (and wants), and then save up whatever money was left. This equation never worked, as spending first before saving left me with nothing. However,  $\text{income} - \text{savings} = \text{expense}$  means requiring a person to develop the discipline to save first before spending. Individuals learn to work with the money they have, while the rest is safely stored in the savings account (49).

Furthermore, the formula was incorporated with a budget rule. This rule is 60:20:10:10, which means monthly income would be divided into four parts: 60% goes to monthly expenditures; 20% goes to investment; and 10% each goes to savings and loan amortization. Similarly, this budget rule was inspired by the 70-20-10 budget, the 50-20-30 budget, and the 60-20-20 budget. The 70-20-10 budget rule shows that 70% of an individual's monthly budget should go to monthly expenses, 20% to savings, and 10% for debts (Clayton, 2017). Likewise, the 50-30-20 budget rule means allocating 50% for needs, 30% for wants, and 20% for savings (Whiteside, 2020). However, 60-20-20 budget rule includes 60% on expenses, 20% on wants, and 20% on savings (Wojtowicz, 2019).

The formula and budget rule, when incorporated, mean that upon receiving and calculating the monthly income (other sources of income included if there are any) 10% for savings and 20% for investment should be set aside first. The remaining 60% would be spent for the expenditures and 10% for the loan amortization.

## Conclusion

Public junior high school teachers were dominated by millennial professionals, ages 30–39, female, married, Ilocano, and bachelor's degree holders. Moreover, they had a household size of 4 with 2 working family members, and most of the teachers owned a concrete house, visited doctors once the need arose and had good health conditions. In addition, there were few who were still sending their children to school, mostly in private elementary schools within the province.

Public junior high school teachers were mostly Teachers III, and she has been in the service for more than 5 years.

Public junior high school teachers quarterly spent time going out for shopping and eating in restaurants or fast food restaurants. They had already achieved and prioritized the goal of getting married, no longer considered having a child, considered their family and role models as neutral influencers, and had personality traits of conscientiousness.

Public junior high school teachers' financial literacy and financial perspectives were high, while financial practices were low. They were not applying what they knew, understood, and perceived about finance. Public junior high school teachers' sociodemographic profile and psychographic

profile have significant relationships with financial literacy in terms of financial knowledge, financial behavior, and financial attitude.

The public junior high school teachers' profile has a significant relationship with financial perspectives for other sources of income and investments. Also, psychographic profiles have a significant relationship with financial perspectives for savings and loans.

The public junior high school teachers' sociodemographic profile had a significant relationship with financial practices in terms of other sources of income and investments. The psychographic profile had a significant correlation with financial practices for savings and loans; likewise, financial perspectives for expenditures had a significant relationship with sociodemographic profiles and psychographic profiles.

Public junior high school teachers' financial literacy was significantly and positively correlated with financial perspectives. Public junior high school teachers' financial literacy in terms of financial knowledge significantly correlated with financial practices in terms of expenditures, while financial literacy in terms of financial behavior significantly correlated with financial savings practices. Similarly, financial practices in terms of investment are significantly correlated with financial knowledge and behavior.

Public junior high school teachers' financial practices in terms of expenditures significantly correlated with their financial perspective on other sources of income and savings. Likewise, the financial practices on saving and the financial practices of the respondents on investment significantly and positively correlated from all financial perspectives. Moreover, the financial practices of the respondents in terms of loans were significantly and positively correlated with the following financial perspective variables: other sources of income, investment, and loans.

Overall, the researchers concluded that the higher the financial literacy of the public junior high school teachers, the higher their level of financial perspective and awareness of financial practices. However, the lower the financial literacy of the public junior high school teachers, the lower their financial perspectives and practices. Also, the results would pave the way for uplifting the financial literacy of all public secondary teachers in Nueva Vizcaya.

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