Personal Finance Practices of Employees of a Rural Bank in Cebu, Philippines: Towards Innovative Interventions to Enhance Financial Literacy

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Abstract

Technological growth continues to drive future innovation in financial literacy leading individuals to a deeper knowledge of their finance. This advancement in financial education and knowledge helps them manage their finances. This study focused on the personal finance practices of rural bank employees in spending and saving. These employees are perceived to have financial literacy training or have gained financial literacy through their work experience. Thus, they were assumed to be financially literate due to their training and nature of work. The study aimed to identify the demographic profile and describe the current personal finance practices of employees. Further, the study attempted to determine whether there are significant differences among demographic profiles and the employees' planned and actual spending and saving practices. The study applied the Life Cycle Theory of Modigliani (1986).

For the research methodology, this study used a descriptive research design. Self-administered questionnaires were distributed to 97 respondents from one of the rural banks in Cebu, Philippines. Statistical tools were applied, such as t-tests and Analysis of Variance (ANOVA), and the data were evaluated using IBM-SPSS at the 0.05 level.

Results indicated no significant difference in the planned and actual implementation in spending and saving among the rural bank employees, except for communication costs and monthly amortization and frequency of saving. Therefore, these employees practice financial planning by exhibiting proper planning and implementation while applying their financial knowledge even with minimal sources of income from a job and other sources. Finally, this study proposed innovative financial interventions through programs and other financial technologies that would help enhance employees' financial literacy to facilitate their personal financial decisions.

Key Words: financial literacy; personal finance; spending; saving; financial innovation

Introduction

Recently, there has been much attention given to personal finance to achieve individual employees' financial sustainability in the corporate world. Financial literacy is about sustainably managing an individual's wealth. It will likewise provide individuals the financial skills to enable them to make sound financial decisions.

In the World Bank's (2015) survey about enhancing financial capability and inclusion in the Philippines, the survey showed that 59% of Filipinos plan how they spend. In the Philippines, awareness of basic financial principles is an essential obstacle, whereby 16.6% of the population lived below the national poverty line in 2018 (Asian Development Bank, 2020). In their report, Galope et al. (2019) stated that according to the country's financial regulator, the average Filipino's financial literacy level remains alarmingly low—an issue that starts with poor childhood education and continues into adulthood.

Rural banks cater to the rural sector of the society providing financial access (BSP). As of September 2017, 35% of cities and municipalities in the Philippines do not have banking offices (ADB, 2018), resulting in limited access to financial services, including spending and savings. World Bank (2015) indicated that those who live in inner-city areas are more financially literate than those who live in rural areas. The rural bank employees deserve such attention as to this study since rural clients usually ask for advice from such employees for financial advice. This assistance replaces financial literacy in financial decision-making. Given the crucial role that bank employees play in society, not understanding the complexities and levels of their financial literacy can be harmful not only to the banking sector but also to a country's overall economy (Nguyen and Rozsa, 2019). More so, there were few kinds of research done on the saving and spending practices of employees of rural banks.

Financial literacy is essential for employees in the banking sector, as they are expected to advise and manage their clients' savings and investments (Lethepa, & Matemane, 2020). Wamai (2015) mentions in his study of Nairobi bank that bankers' financial knowledge was at a lower level since parents of these bankers come from poor households who are not equipped to teach their children some basic concepts to handle their children's finances.

Researchers like Kumleh et al. (2017) have been convinced that there is an inadequate financial management ability among banks' employees. No formal assessments of the personal financial literacy of rural bank employees have been done yet. Still, it was found that banking employees' personal financial skills were learned at home from parents and were strengthened in schools (Davis & Carnes 2005).

Between 1952 and 1954, Modigliani, together with Richard Brumberg, presented the Life-Cycle Hypothesis (Modigliani, 1986). This view postulates that people spend their savings during their early or later life stages and are likely to accrue their savings during their profitable working ages. Thus, this theory helps to explain the habits of personal spending and saving.

Furthermore, the Theories of Reasoned Action (TRA) and Planned Behavior (TPB) of Ajzen (1991) and Fishbien and Ajzen (1975) stated that the action or conduct of a person is

anticipated by an intention to implement or participate in that behavior. These two theories became helpful in this research.

Review of Related Literature

Personal Finance

According to Hira et al. (2009), personal finance has its economics, finance, and management background and combines conventional decision-making and financial capital management concepts, such as spending, saving, protecting, and investing for individuals and families.

The status in life, in terms of demographic profile, socio-economic, socio-cultural (Alamil & Sauperii, 2012), will contribute much towards financial goals.

The theory of the Life-Cycle Hypothesis (Modigliani, 1986) postulates that people spend their savings during their early or later stages of life and are likely to accrue their savings during their profitable working ages. This theory helped explain the habits of personal spending and saving.

Furthermore, the theories of Reasoned Action (TRA) and Planned Behavior (TPB) of Ajzen (1991) and Fishbien and Ajzen (1975) stated that the action or conduct of a person is anticipated by an intention to implement or participate in that behavior. This theory suggests how financial education at the individual level can be structured to impact financial behavior. The TBP has been widely used across disciplines to explain that his/her behavioral intention espouses an individual's attitude, subjective norm, and perceived control. Based on this theory, this study perceives that rural bank employees are equipped with basic financial literacy to have a positive attitude towards changing their financial behavior. Hence, the socio-demographic profile influences an individual's financial management behavior.

Financial Literacy

Financial literacy is defined by Schagen and Lines (1996) as the ability to formulate decisions founded on information and make intelligent choices regarding handling money. Gachangco (2014) defines personal financial literacy as the capacity to make educated choices and make successful decisions about money use and management. The study of Nyamute and Maina (2011) on banking employees in Kenya concluded that financial literacy influences personal financial management practices.

Komla's (2012) research demonstrated that family traits influence the family's savings and expense attitude. It further showed a negative correlation between family income and savings, which indicated that the more a family earns, the less likely the family would save. This result contradicts some studies that indicate a positive correlation that consumers who have low income have meager savings, and those who have higher income saved more.

South African studies and those conducted by Lusardi and Mitchell (2011), Klapper and Lusardi (2019), as mentioned by Lethepa and Matemane (2020), only focus on the financial literacy levels of ordinary individuals. They have overlooked the critical part of society, namely the banking sector workers, responsible for offering financial advice. Lethepa and Matemane (2020) posited that as a result, knowledge of the degree of financial literacy for banking employees is limited in both developed and emerging economies.

Lucas (2018) mentions in his write-up that according to the nation's financial regulator, the average Filipino's financial literacy level is still appallingly low, an issue that begins with poor childhood education that persists until their adult years. The study of Acedillo (2018) mentions that more than 23,000 retirees cannot get anything from their retirement due to unpaid loans as a result of poor financial literacy.

A study by Ramos, et al. (2016) on the personal financial practices of the faculty of a state university in the Philippines revealed that savings were not a priority for them; their spending practices led them into always being short of cash and have tied their future income with their outstanding loans.

The level of financial literacy of public and private teachers in the Philippines revealed that both have low financial literacy (Montalbo et al., 2017). However, Aldovino et al. (2013) found that University employees' financial literacy and financial management practices in the Philippines are significantly different when grouped according to civil status.

The study of Parcia and Estimo (2017) of a maritime school in the Philippines' found that employees have a moderate financial literacy level. Furthermore, Guliman (2015) posited that micro and small enterprise owners in Iligan City presented a significant relationship between college education and financial knowledge. However, the college graduates in Tarlac, Philippines, found that they used conventional ways of spending cash (Catubay-Panlilio, 2016).

According to Bona (2018) research Filipino college students' spending is heavily influenced by their family system. Parents have a significant influence not only on their children's money management attitudes, but also on their children's overall life attitudes.

Personal Finance Practices

Demographic Profile of Individuals and Personal Finance Practices

It is important to review the demographic profile of employees and their personal finance practices. These are as follows:

Age. The studies of Lusardi and Mitchell (2011); Atkinson and Messy (2012); OECD (2013); Scheresberg (2013), mentions that the average age of 30 to 40 years is correlated with higher levels of financial literacy and financial literacy among young people and older people is low.

Gender. Studies have shown that in explaining financial literacy gaps, gender plays an important role. Most studies have shown that men are more well-informed in financial matters than women (Chen & Volpe, 2002; Atkinson & Messy, 2012; Lusardi & Mitchell, 2007). However, while there is general agreement among scholars that male financial literacy is greater than that of females, some studies have not yet established differences between the two genders in financial literacy levels (Lethepa & Matemane, 2020). Guliman and Uy (2019), in their study indicated that women are more cautious of their financial decisions' long-term results. This could be attributed to the close gender gap in the Philippines. Nevertheless, Botha (2014) and Sallie (2015) found that gender had no influence on financial literacy.

Job Position. Occupation can have an impact on whether someone can be financially literate. This is supported by the study of ANZ Survey (2008) and Worthington (2006,2008), as cited by Mbarire and Ibrahim (2014), wherein individuals who are in the professional and managerial levels scored high in their financial literacy survey. Furthermore, Mbarire and Ibrahim (2014) cited the studies of Al-Tamimi & Bin Kalli (2009) that individuals who worked in finance/banking displayed a higher level of financial literacy than in other fields.

Civil Status. Several studies revealed that financial literacy was positively related to marital status (Bashir et al., 2013). In the study of Brown and Graf (2013), all disclosed that single individuals had lower financial knowledge levels than married individuals. Furthermore, studies by Fonseca et al. (2012) have indicated that marital status decreased the difference between males and females in financial literacy by 25%.

Educational Attainment. Evidence shows that financial education can enhance financial literacy and personal finance practices (Lethepa & Matemane, 2020; Gachango, 2014; Chen and Volpe,1998). According to Xu and Zia (2012), a higher level of schooling will result in higher levels of financial literacy.

Income. Atkinson and Messy (2012) and Monticone (2010) all pointed out that having a low income is associated with low financial literacy levels. However, Reswari et al. (2018) study mentions that income does not affect a person's financial literacy. Notably, Rodgrizuez and Meyer (1988) findings in the Philippines' rural household further mention that income is one of the most important variables that affects their savings.

Personal Finance Practices on Spending

Spending

According to Perculeza et al. (2016), the amount of money spent on anything is an expenditure. Spending becomes a habit when people may procure essential goods, engage in leisure activities, and in any miscellaneous expenses that require money and which makes an individual spend. Demographic and socio-economic factors positively affect the decision-making and practices in spending and savings.

According to Foster (2015), Der Hovanesian (1999), and Percuela et al. (2016), spending will depend on the age group. Extant literature indicated that males and females behave differently

when it comes to personal finance practices on spending. Job position, on the other hand, affects buying power (Lautianinen, 2015). Regardless of the civil status, may they be single or married, they have different spending practices depending on their needs. Spending and saving are contingent on their financial awareness level (Azmi & Ramakrishnan, 2018; Lusardi, 2007). Income plays a vital role as it influences the spending and saving patterns and establishes a person's buying power (Perculeza et al., 2016; Amari et al., 2020). Table 1 shows the spending practices according to demographic and socio-economic factors.

 Table 1

 Literature Review on Personal Finance Practices on Spending

Variables	Authors	Findings				
Age	Foster (2015)	Spending will depend on the age group.				
	Der Hovanesian (1999)	Generation Y are less attentive to money and spends it as soon as they can get hold of it.				
	Percuela et al. (2016)	Mental outlook according to age is a central factor in their perspective in their financial judgment.				
Gender	Charness & Gneezy (2012)	Men & women behave differently when it comes to financial risk-taking thus differ in personal finance practices;				
	Faff & et al (2008); Neelakantan (2010) Fisher (2010); Croson & Gneezy (2004)	Women expend a greater proportion of their earnings on their families than males. Women are more cautious investors than men; Females are more risk reluctant than males. Differences in investing activity are related to investment awareness. Job position and buying power of a customer affect the purchasing decisions and purchasing behavior.				
Job Position	Lautianinen (2015); Juneja (n.d.)					
Civil Status	Hawk (2012)	Singles in their late 20's have a higher pay and invests than singles in their early 20's.				
		Singles and married ages 27-29 are more likely to be homemakers while singles spend on food, housing, clothes and education and less on health care.				
Educational Attainment	Azmi & Ramakrishnan (2018)	Ability of individuals to attain financial management effectively is contingent on their level of financial awareness.				
		Individuals who demonstrate high trust in retirement, practice financial management.				
Income	Perculeza et al., (2016); Amari et al., (2020)	Monthly income plays an important role as it influences the spending patterns and establishes the buying power of a person.				

Note: Compiled by the researchers

Personal Finance Practices on Saving

Saving

Saving is a part of personal finance management, and it needs high-literacy capability. The study of Lusardi (2010) has indicated that it is a vital part of people's lives to save money for emergency and retirement funds. The study further stated that what is excluded from one's disposable income is defined as savings. Socio-cultural, socio-demographic profiles, and socio-economic factors positively affect the decision-making and practices in savings (Alamil and Sauperii, 2012).

According to Hilgert et al., (2003) and Yiing (2017), most employees do not have emergency cash reserves. People ages 40 and below were found to have less planning capability. According to Yiing (2017) and Sereektrakul et al. (2013), women play a significant role in budgeting and saving decisions and have a more positive attitude towards savings compared to men. Hussain (1993) posits that people with better jobs are more likely to save. Bhola et al., (2012) argues that certainty of occupation and income leads to the certainty of savings. Singles have the lowest savings rates, while married couples have the highest (Bosorth et al., 1991 and Yuh & Hanna, 2010). Lee et al. (2000) found that younger couples with no children and older households with no dependent children were more likely to save. Spending and savings are contingent on their financial awareness level (Azmi & Ramakrishnan, 2018; Lusardi, 2008). Income plays an important role as it influences the spending and saving patterns and establishes a person (Perculeza et al., 2016; Amari et al., 2020). Table 2 is a tabulation on the saving practices according to demographic and socio-economic factors.

 Table 2

 Literature Review on Personal Finance Practices on Saving

Variables	Authors	Findings				
Age	Hilgert et al., (2003)	Majority of employees as part of the household do not have emergency cash reserves.				
	Yiing (2017)	People age 40 years and below are less capable of planning.				
Gender	Yiing (2017) Sereetrakul et al.,	Women play a major role in budgeting and saving decisions.				
	(2013)	Males & females have the same saving behavior though females had a more positive attitude towards savings.				
Job Position	Hussain (1993)	People with better jobs are more likely to save.				
	Bhola et al., (2012)	The certainty of occupation and income leads to the certainty of savings.				
Civil Status	Bosorth et al., (1991);	Marital status affect saving habits. Singles have the lowest saving rates while married couples have the highest.				

	Yuh & Hanna (2010) Lee et al, (2000)	Younger couples and older households with no dependents were more likely to save as compared to younger single households and households with dependents.				
Attainment Ra (20	Azmi & Ramakrishnan (2018); Lusardi	Education has a positive effect on savings due to increase awareness as a result of higher level of education.				
	(2008)	Low literacy and inadequate awareness have an effect on people's capability to invest and prepare for a secure retirement.				
Income	Perculeza et al. (2016); Amari et	Low-income households were less likely to invest than those with higher pay.				
	al. (2020)	People with low-income has a shortage of financial knowledge and a hindrance to financial behavior when it comes to savings.				

Note: Compiled by the researchers

Current Innovative Financial Interventions

The development of internet finance with its innovative products already showed increasing trends amidst diversity. The innovation on payment reduces transaction costs and strengthens liquidity (Panos & Wilson, 2020).). Finance technology or FinTech is new financial management that employs technology to enhance financial activities (Schueffel, 2016). FinTech offers access to a wide variety of data, including innovative funding models, crowd-sourced finance, peer-to-peer lending, e-invoicing, and online supply chain funding (Australia: G20 conference on digitizing finance, financial inclusion, and financial literacy, Wiesbaden Germany, (2017).

Apart from the financial innovations mentioned earlier, in the Philippines, the Bangko Sentral ng Pilipinas (BSP) has programs to level up financial literacy. Some of the programs address personal finance topics like savings, credit management, and budgeting, including investing and creating short, medium, and long-term goals. Similarly, a study by Edralin (2011) on Gender-Responsive Budgeting in Pasay City, Philippines, showed that the government's credit programs enabled households to access loans with a low-interest rate and acquired capital for business. These added to their income and increased their savings.

Conceptual Framework

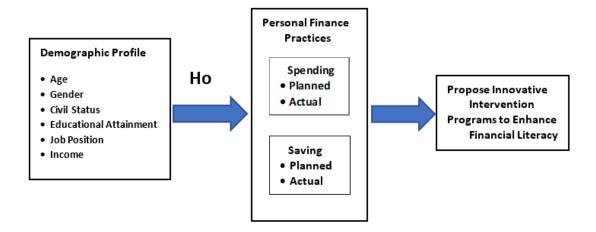
The current study's conceptual framework, as shown in Figure 1, used the demographic profile as an independent variable of the project design of the spending and saving behavior similar to that of Gutter et al. (2010). These authors used the demographics on personal resources, environment, financial knowledge, socialization, and education to analyze individuals' spending and savings behavior. The demographic profile of the rural bank employee's planned and actual

spending and saving practices illustrated the significant differences with the current personal finance practices. Thus, it was hypothesized as follows:

Ho: There are no significant differences between the demographic profile (age, gender, civil status, job position, educational attainment, and income) and those of spending practices of the rural bank employees.

Figure 1

Conceptual Framework of the Study



To achieve personal financial goals, steps are to be made. The conceptual framework shows that demographic profile in terms of age, gender, civil status, educational attainment, and income plays roles in personal finance practices regarding planning to actual spending and saving practices.

The rural bank employees are the subjects of this study in the aspect of personal finance practices. The affiliation of these employees in a bank would assume that they can manage their finances. This study highlighted financial literacy, specifically personal finance, in spending and saving practices using the demographic profile as control variables.

Research Methodology

This study used a descriptive research design using the survey method in the form of a questionnaire. The research was designed to gather information about personal finance practices, particularly on the rural bank employees' spending and saving practices.

Research Environment and Respondents

The research environment is one of the rural banks in Cebu, Philippines, and the researchers had obtained approval from the bank's authorities. There was a total of 231 employees of the several branches of the rural bank. The sampling design used was the estimate of proportion, as follows:

Sample Size to Estimate Proportion

$$n = \frac{z^2 p(1-p)}{e^2}$$

Where n= the sample size

z= the z-score equivalent for 90% confidence level

p= an estimate of the population proportion

E= the margin of error

With a 90% confidence level, the z score equivalent is 1.645 and with an E=0.10. The required sample size is

n=
$$\frac{(1.645)^2(.05)(1-.05)}{(0.10)^2}$$
 = 67.65 or 68

Thus, the minimum sample size is 68. This study was able to obtain a total of 97 rural bank employees.

The number of respondents was determined using the Sample Size to Estimate Proportion using a confidence level of 90% and a 10% margin of error. Since this was a pilot study on personal finance practices on spending and savings of rural bank employees, a 0.50 was used to estimate the population proportion. Based on the formula, the minimum sample size is 68. The researchers requested for 100 respondents to allow for non-response. However, the HR manager was able to collect information from 97 rural bank employees selected by drawing the names of the employees from a box by the HR Manager.

Research Instruments and Procedures

The study applied the use of the primary data collection technique. This research was conducted in all the eleven branches of the rural bank in Cebu, Philippines. Primarily, the researchers requested permission from the bank management to conduct the study. Upon approval, the researchers went over the questionnaires for any clarifications with the Human Resource Unit (HRU) to help the respondents answer the questions accordingly. The HRU, together with its letter of intent to inform the respondents, conducted the data gathering, not the researchers to get an objective response since one of the researchers was affiliated with the bank. The survey questionnaires were handed out by the HRU to the participants at their convenient time and waited

until it was finished and collected them. The responses were achieved through a modified questionnaire based on the questionnaire developed by OECD INFE (2011) Measuring Financial Literacy: Core Questionnaire in Measuring Financial Literacy: Questionnaire and Guidance Notes for conducting an Internationally Comparable Survey of Financial literacy. The questionnaire used closed-ended questions to facilitate the use of quantitative data analysis. The questionnaire also had scale questions (percentage scale) to measure the degree of rating by respondents.

The survey questionnaire was composed of two parts. The first part focused on the respondents' demographic profile, including age, gender, job position, civil status, educational attainment, income, and the number of years of stay in the bank. The second part was on the employees' current personal finance practices in the rural bank in spending and saving, wherein questions were provided for both planned and actual practices.

After all questionnaires were retrieved, the 97 responses were encoded to Microsoft Excel and imported to a statistical software for analysis. The demographic profile of the bank employees was obtained using percentage distribution. These were supplemented with descriptive statistics, specifically the mean and standard deviation. To determine whether there is a significant difference between planned & actual spending and planned and actual saving, the t-test for independent samples was used. The Analysis of Variance (ANOVA) was used to determine whether there are significant differences in the itemized planned and actual spending based on selected demographic profiles.

Statistical software was used for all statistical analyses, and statistical significance was evaluated at the 0.05 level.

Results and Interpretation of Data

Demographic Profile of Bank Employees

The research respondents were ninety-seven (97) rural bank employees. Based on the result of the survey, 32% belong to ages ranging from 26 to 30 years old, 70.1% of the rural bank employee respondents were male, 55.7% were married, 82.5% graduated with a bachelor's degree. Most of them were from the rank and file, comprising 62.9%, whose income was Php10,000 and below at 51.5% where the majority of other sources of income did not specify at 58.8% followed by income from their spouses at 28.9%. The majority at 47.4% of the respondents were living with their parents and relatives. Results imply that the bank employees have other sources of income, but they have some family members living in their household.

 Table 3

 Frequency Distribution of the Demographic Profile of Rural Bank Employees

<u> </u>		0.4
Demographic characteristics	f	%
Age		
25 years old & below	14	14.4
26-30	31	32.0
31-35	24	24.7
36-40	11	11.3
Demographic	f	%
characteristics	-	
Above 40 years old	8	8.2
Did not specify	9	9.3
Gender		
Male	68	70.1
Female	29	29.9
Total	97	100
Civil Status		
Single	39	40.2
Married	54	55.7
Other	2	2.1
Did not specify	$\frac{-}{2}$	2.1
Educational Attainment		
High School Level	5	5.2
Graduate	80	82.5
Undergraduate	2	2.1
Post Graduate	8	8.2
Did not specify	2	2.1
Job Position	_	2.1
Rank & File	61	62.9
Managerial Level	12	12.4
Supervisorial Level	17	17.5
Top Level	3	3.1
Others	1	1.0
Did not specify	3	3.1
Income	3	3.1
Php 10,000 & below	50	51.5
10,001-15,000	35	36.1
15,001-13,000	6	6.2
20,001-20,000	1	1.0
Above 30,000	3	3.1
Did not specify	2	2.1
Did not specify		∠.1

Note. Total number of respondents is 97

Table 4Other Sources of Income and Housing Arrangements

Variables	n	%
Other Sources of Income		
No Response/Did not specify	57	58.8
From Spouse	28	28.9
Own Business	4	4.1
Other Source of Income	8	8.2
Housing Arrangements		
Owned	44	45.4
Rent	7	7.2
Living with Parents/Relatives	46	47.4

Note. Total number of respondents is 97

The majority of the respondents as shown in Table 4 at 58.8%, gave no response to their income source. Though results implied that the bank employees have other income sources, 28.9% comes from their spouses and having their own business at 4.1%. The rest of the respondents, at 8.2%, have other sources of income.

The majority at 47.4%, of the respondents live with their parents and relatives. Research studies indicated that most Filipinos live with their parents to care for their elderly (Domingo & Asis, 1995). It is common to see Filipino married couples continue to live with their parents even long after they have children. The cost savings of living together also provide an opportunity for children to stay with their parents, especially when housing and living costs are high (Cruz et al.,2001). However, 45.4% of the respondents have their own houses.

The study results implied that the bank employees have other income sources, but they have some family members living in their household, as indicated in Table 4.

Spending Practices

Bank employees supposedly manage people's finances and are assumed to have personal financial skills (Kumleh et al. 2017), which should have better financial decisions. However, contrary to Wamai (2015), most bankers come from low-income families. Their parents are less equipped to transfer financial knowledge to their children, thus lowering financial knowledge among the bankers. It can be inferred that bank employees who have lower income are financially literate since, based on the survey result, they plan what they want to spend. When they implement, it is according to what is allocated in the budget. It is also the same as with the saving practice, they plan, and they save in the actual scenario.

Table 5Significant Mean Difference Between Planned and Actual Spending Practices

Indicators	Spending P	ractices	t Value	p Value
	Planned (%)	Actual (%)	-	
Percentage	67.3	73.6	-1.6	0.11
Food	31.7	30.8	0.32	0.751
Necessities	9.7	8.8	0.68	0.499
School expenses	4.7	5.4	-0.67	0.504
Communication	4.2	3.7	0.73	0.465
Transportation	7.7	7.6	0.13	0.9
House rental	0.7	0.5	0.59	0.553
Allowance	4.2	5.1	-0.67	0.501
Medicines	5.3	5.4	-0.11	0.913
Bills	7.1	6.6	0.51	0.609
Monthly amortization	5.5	5.7	-0.12	0.904
Entertainment and leisure	3.3	2.7	0.76	0.446
Others	2.8	2.3	0.38	0.702
Total	86.9	85.3	0.33	0.746

Note: p value significant at 0.05

Significant Difference between overall planned and actual spending practices on each category

Result of the study, as shown in Table 5, used the t-test to determine whether there are significant differences in the itemized planned and actual spending based on selected demographic profiles. The result indicated that there was no significant difference in the planned and actual spending practices on each category with p values as to food (p=0.751), necessities (p=0.499), school expense (p=0.504), communication (p=0.465), transportation (p=0.900), house rental (p=0.553), allowance for parents (p=0.501), medicines (p=0.913), bills, monthly (p=0.609) amortization (p=0.904), entertainment and leisure (p=0.446), and other items (p=0.702), and total spending (p=0.746).

The result means that the rural bank employees plan each income component carefully to be allocated to the related expenses to be incurred. They plan what to spend, and they spend what is planned. Therefore, it is convenient that a regular income is received and expended to where it is intended.

Table 6Significant Mean Differences in Planned and Actual Spending When Respondents are Grouped according to their Demographic Profile

Indicators	Overall Mean	A	ge	Ge	nder	Civil	Status	Н	EA	Job Po	osition	Inc	ome
	Difference (%)	F Value	p Value										
Percentage	-6.15	0.34	0.848	1.31	0.256	0.15	0.931	0.31	0.871	0.82	0.487	0.08	0.972
Food	0.88	0.66	0.620	1.40	0.240	0.57	0.639	1.13	0.349	1.87	0.141	0.40	0.754
Necessities	0.92	0.86	0.489	0.81	0.369	0.11	0.965	0.32	0.862	0.33	0.802	0.55	0.651
School expenses	-0.67	0.96	0.433	1.95	0.166	0.37	0.775	0.06	0.993	0.30	0.827	0.15	0.931
Communicatio n	0.46	1.15	0.336	7.27	0.008*	0.03	0.992	2.56	0.044*	1.72	0.168	0.22	0.881
Transportation	0.14	1.00	0.412	0.85	0.358	0.57	0.633	1.09	0.366	0.65	0.582	0.06	0.979
House rental	0.21	0.87	0.484	0.09	0.759	0.01	0.998	0.03	0.999	0.21	0.950	0.03	0.995
Allowance	-0.85	1.13	0.347	0.25	0.622	0.09	0.963	1.21	0.313	0.34	0.796	0.27	0.847
Medicines	-0.08	0.31	0.870	0.50	0.483	0.50	0.685	1.89	0.118	0.55	0.649	0.03	0.993
Bills	0.45	0.88	0.479	2.67	0.106	0.01	0.998	0.13	0.971	0.79	0.502	0.06	0.981
Monthly amortization	-0.19	0.58	0.680	2.21	0.141	0.24	0.871	0.81	0.522	7.50	*000	0.35	0.787
Entertainment and leisure	0.62	0.17	0.954	2.85	0.094	0.43	0.730	0.42	0.794	1.25	0.295	0.86	0.466
Others	0.48	0.66	0.623	0.81	0.371	0.16	0.922	0.53	0.714	2.57	0.059	1.89	0.137
Total	1.55	0.15	0.964	1.56	0.215	0.23	0.872	1.53	0.201	1.57	0.203	0.02	0.996

Note: *p value significant at 0.05

Significant difference between planned and actual on spending behavior in terms of Age

The Analysis of Variance (ANOVA) was used to determine whether there are significant differences in the itemized planned and actual spending based on selected demographic profiles. There was no significant difference between planned and actual spending (p > 0.05) on each category in terms of age. The survey results implied that rural bank employees spend all budget components as planned in terms of age. Age did not matter much on these spending practices. This age bracket of 26-30 years old, which comprises most of the respondents, has high spending power since they commit their expenses carefully to which and where they can afford to and know how to prioritize and control the income received. Perculeza et al. (2016) indicated that the behavior of young adults towards spending plays an essential role in their financing's sustainable prospects and is a vital variable in financial judgment.

Significant difference in planned and actual spending in terms of Gender

There was no significant difference in both planned and actual spending (p > 0.05) in all categories in terms of gender except on communication planned spending (p=0.008). Except for communication, the result of the survey indicated that there is no significant difference between

planned and actual spending in terms of gender, whether male or female. It can be inferred that the practices are consistent in planning and actual implementation.

According to Sereetraku et al. (2013), the parents' different treatments for sons and daughters can affect male and female teenagers' savings and spending in different ways. The survey showed males as the majority respondents, which more likely will affirm the statement based on previous studies. This has resulted in how gender differences differ in financial behavior and practices.

There was a significant difference in the planned spending practices in communication. The figures indicated that female employees spent significantly higher compared to their male counterpart. According to the VII Social Networks Study conducted by IAB Spain, women (76%) use social networks more than men (72%). In addition, while men tend to use them for business-related issues (networking and making contacts) and to be informed, while women use social media to talk more about their personal life.

Significant differences in planned and actual spending in terms of Civil Status

There was no significant difference in the planned and actual (p > 0.05) spending practices in all categories in terms of Civil Status. According to the study done by Northwestern Mutual on their Planning and Progress (2013), the report entitled "Savings and Spending Habits," singles are more likely than married to consider themselves to be spenders (17% vs. 12%). Whether single or married, they allocate the same budget percentage in all categories. However, for this current study, whether they are single or married, bank employees have the same allocation for the planned budget and actual spending.

Significant Difference between planned and actual spending in terms of Highest Educational Attainment

There was no significant difference in planned and actual (p > 0.05) spending practices in all categories in terms of the highest educational attainment, except for communication spending (p=0.004). This result is contrary to that of Cage (1989) where it demonstrated that after controlling for education and income, the occupation has a significant effect on the probability and level of incurring expenses for food, housing, transportation, personal care products, and personal insurance pensions. The results of this analysis contradicted the findings of the report of Cage (1989) because the level of education did not matter on the study of significant difference in the planned and actual spending practices. The study implied that rural bank employees with a bachelor's degree to a postgraduate degree have financial knowledge of spending.

Significant difference between planned and actual spending practices in terms of Job Position

The study results indicated no significant difference in all categories in planned and actual (p > 0.05) spending practices in terms of Job Position except in the amortization category. There was a significant difference both in planned and actual monthly amortization spending (p = 0.000) among the employees when they are grouped according to their job description. The results indicated that those in the top-level positions spend more in monthly amortizations compared to

the rest of the employees. This supports Lautianinen's (2015) study and Juneja (n.d.) that job position and buying power affect purchasing decisions and behavior.

Significant Differences between planned and actual spending in terms of Income

The study showed no significant difference between planned and actual (p > 0.05) spending practices in all categories in terms of income. The result indicated that rural bank employees at any level of income received could manage to spend it as budgeted. Der Hovanesian (1999) posited that Generation Y is viewed as conscious of money and prefers to expend their money as soon as they get hold of it.

It is highly evident from the result of the study that the employees are mindful of expenses. Modigliani and Brumberg (1952/2005) posited that Life Cycle Theory states that individuals plan for future events using current and future resources to smooth fluctuations in their living standards.

Saving Practices

Significant Difference between planned and actual savings practices

 Table 7

 Significant Difference between planned and actual savings practices

Saving Practices	Mean amount in percentage	t value	<i>p</i> value
Planned	17.03%	0.95	0.226
Actual	13.89%		0.336

Note: p value significant at 0.05

The t-test was used to determine whether there are significant differences between the planned and actual saving. There was no significant difference between planned and actual saving practices of rural bank employees (p=0.336), as shown in Table 7. Modigliani and Brumberg (1952/2005), in their Life Cycle theory, assert that people tend to accumulate savings during the productive working ages and save less during the early and later stages of life. These rural bank employees intended to save. The working life stage is productive, and it was evident from the data that the employees are genuinely saving from the income they receive.

The rural bank employees' top reasons for saving are emergencies and unforeseen circumstances, hospitalization, and children's education. Simultaneously, their least priorities are enhancing educational/professional qualifications, special occasions, and others like purchasing a land.

Rural bank employees' acquired information mostly from relatives, friends, the internet or information technology, seminars/conventions, and factual information obtained from parents and siblings.

The planned frequency of savings was bimonthly but became a monthly approach. It appeared that there is the desire to save more frequently if there are more funds and a lesser need for its use. The data showed the factors that hindered the planned and actual savings. These were low and insufficient income and unexpected expenses that support the study of Perculeza et al. (2016) that monthly income plays a vital role in influencing the spending patterns and establishing a person's buying power. Based on the result of the study, rural bank employees are knowledgeable.

Alamil and Sauperii (2012) stated that the demographic profile would contribute much towards the financial goals, which will significantly affect spending and saving towards achieving these goals, as explained fully in the project model of saving behavior by Gutter et al. (2010). From the study's result on the demographic profile, personal practice in terms of spending and saving is one of the study's relevant and vital factors.

According to the plan made from the rank and file up to the managerial level position, there was implementation except for one item: communication cost. The study found out that rural bank employees spend within their means.

The theory of reasoned action (TRA) and the theory of planned behavior (TBP) of Aizen (1991) and Fishbien and Ajzen (1975) stated that the action or conduct of a person is anticipated by the intent to implement or participate in that activity. This theory validates the results of this study. It showed how financial education at the individual level is structured to impact financial behavior and was manifested through spending practices. Moreover, these rural bank employees validated the life cycle theory of Modigliani & Brumberg (1952/2005) since their financial behavior is shown in their habits in spending and saving aspects.

Proposed Financial Interventions

The study made by Lusardi et al. (2010) showed interventions, learning strategies, and methods in financial literacy education and posited that numerous financial education initiatives are actually in place. The author further mentioned that financial knowledge can be improved through financial education, thereby improving monetary decision making. An example would be providing a retirement program at the onset is an approach of contributing information and education, which is most needed.

The rural bank can connect with Bangko Sentral ng Pilipinas Financial Consumer Protection Department on their programs and seminars on credit awareness. Another means is the Financial Education Expo, whose aim is to raise awareness of Filipinos' accessibility and availability on the various financial education programs

The emergence of the innovative solutions provided by FinTech has transformed the way people invest, make payments, or even get a loan. It has altered the way people deal with their money and interact more effectively, affordably, and efficiently with their finances just right out of their computers or smartphones, or tablets.

Conclusion

The study's main focus was on the rural bank employees' current personal finance practices in spending and saving. It also tried to identify the demographic profile of employees. It attempted to determine whether there are significant differences among demographic profiles and the employees' planned and actual spending and saving practices. Basing on the results, the hypothesis: There are no significant differences between the demographic profile, (age, gender, civil status, job position, educational attainment, and income) and those of spending practices of the rural bank employees are not rejected. Therefore, there is no significant difference between the rural bank employees' demographic profile and their personal finance practices in spending and saving.

In spending practices, there were no significant differences in the planning and actual implementation in the over-all perspective based on the survey in all the demographic aspects of age, gender, civil status, highest educational attainment, and income. There was also no significant difference between planned and actual implementation for all rural bank employees in the overall perspective based on the survey in saving practices. The majority of the rural bank employees have emergency and unforeseen circumstances as the reason for saving. They obtain information mostly from relatives and friends regarding their saving practices, and place their savings in a savings account and save every month. The number one factor that hinders them from saving is insufficient income, and they believe that they should save now.

These rural bank employees validated the Life Cycle Theory of Modigliani and Brumberg (1952/2005). The habits they are exhibiting in spending and saving as they receive income as to their stage of life are spent as planned accordingly and clearly showed that they have a degree of control and knowledge of their financial activities. Moreover, it confirms the project saving model of Gutter et al. (2010), wherein the demographic profile affects personal finance practices.

The results of the study also affirmed the theory of planned behavior in both spending and saving practices of rural bank employees. Finally, it can be concluded that the study contributes to the existing personal finance literature, in particular, among rural bank employees in the Philippine setting.

Recommendations

This study proposed some innovative interventions to improve the spending and saving practices of the rural bank employees, thereby enhancing their financial literacy. While the findings indicated that the employees practice personal finance to attain their personal goals, this study has recommended educational and technological innovations.

This research likewise recommends adopting the programs of the Bangko Sentral ng Pilipinas: (a) programs such as credit management, savings, and budgeting, diversification of saving funds into several asset classes, (b) programs that provide training for retirement and savings offered by the management, and (c) programs focusing on homeownership, buying, and debt.

References

- Acedillo, M.J. (2018). Exploring the personal financial management practices of teachers in the countryside. *The Countryside Development Research Journal*, 6(1), 40-51. https://cdrj.ssu.edu.ph/index.php/CDRJ/article/view/82/119
- Ajzen, Icek. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, *50*, 179-211.https://www.researchgate.net/publication/272790646 _The_Theory_of_Planned_Behavior
- Alamil, L. R., & Sauperii, J. D. (2012). Financial savings disposition and behavior of private and public sector employees in PNG Contemporary PNG studies. *DWU Research Journal*, 7, 94-111.
- Aldovino, C., Pangilinan, A., & Bermudez, R. (2013). Financial literacy and financial management practices of employees in a private university. *Manuel Enverga University Foundation* (*MSEUF*) Research Studies, 15(1), 40-50. https://ejournals.ph/article.php?id=6754
- Amari, M., Salhi, B., & Jarboui, A. (2020). Evaluating the effects of sociodemographic characteristics and financial education on saving behavior. *International Journal of Sociology and Social Policy*. https://www.researchgate.net/publication/341162225
- Asian Development Bank. (2018). Republic of the Philippines: Inclusive finance development program. https://www.adb.org/sites/default/files/project-documents/51309/51309-001-cp-en.pdf
- Asian Development Bank (ADB). Basic Statistics (2020). Poverty data Philippines. https://www.adb.org/countries/philippines/poverty
- Atkinson, A., & Messy, F. (2012). Measuring financial literacy: results of the OECD / International Network on Financial Education (INFE) Pilot Study [Working Paper n. 15]. OECD Publishing.
 - https://www.semanticscholar.org/paper/Measuring-Financial-Literacy%3A-Results-of-the-OECD-%2F-Atkinson-Messy/000b83262e7dd81a2a762d6de999d8173532e6c2
- Australia: G20 conference on digitizing finance, financial inclusion, and financial literacy, Wiesbaden Germany. (2017). MENA Report.
 - https://ministers.treasury.gov.au/ministers/scott-morrison-2015/speeches/g20-conference-digitising-finance-financial-inclusion-and

- Azmi, Nor F. B., & Ramakrishnan, S. (2018). Relationship between financial knowledge and spending habits among faculty of management staff. *Journal of Economic Info*, 5(3), https://readersinsight.net/index.php/JEI/article/view/102
- Bangko Sentral ng Pilipinas (BSP). https://www.bsp.gov.ph/Pages/Regulations/BankingLaws/RA7353.aspx
- Bashir, T., Arshad, A., Nazir, A., & Afzal, N. (2013). Financial literacy and influence of psychosocial factors. *European Scientific Journal, ESJ*, 9(28). https://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.880.9322&rep=rep1&type=pdf
- Bhola, S., Shah, V., & Zanwar, P. (2012). A study of the relationship between occupation and individual investment. *Sinhgad International Business Review*, 5(1),9-13. https://www.researchgate.net/publication/281174892_A_Study_of_Relationship_between_Occupation_and_Individual_Investment
- Bona, J.T.C (2018). Factors affecting the spending behavior of college students. *Journal of Fundamental and Applied Sciences*, 10(3s), 142-152. https://www.ajol.info/index.php/jfas/article/view/171490
- Bosworth, B. P., Burtless, G., & Sabelhaus, J. (1991). The decline in saving: Evidence from household surveys. *Brookings Papers on Economic Activity, 1,* 183-256. https://www.brookings.edu/wpcontent/uploads/1991/01/1991a_bpea_bosworth_burtless_sabelhaus_poterba_summers.pdf
- Botha, M. (2013). A comparative analysis of the financial literacy of final year diploma students in different fields of study at the University of Johannesburg (Order No. 28302740). Available from ProQuest One Academic. (2557512184). Retrieved from http://ezproxy.usc.edu.ph/login?url=https://www.proquest.com.ezproxy.usc.edu.ph/disserta tions-theses/comparative-analysis-financial-literacy-final/docview/2557512184/se-2?accountid=50192
- Brown, M., & Graf, R. (2013). Financial literacy and retirement planning in Switzerland. *Numeracy*, 6(2), 6. http://scholarcommons.usf.edu/numeracy/vol6/iss2/art6.
- Cage, R. (1989). Spending differences across occupational fields. *Monthly Labor Review*. https://www.bls.gov/opub/mlr/1989/12/art5full.pdf
- Catubay-Panlilio, J. C. (2016). Spending and borrowing practices of women entrepreneurs in the province of Tarlac-Philippines. *Review of Integrative Business and Economics Research*, 5(4), 40-46. http://sibresearch.org/uploads/3/4/0/9/34097180/riber_s16-032_40-46.pdf
- Charness, G., & Gneezy, U. (2012). Strong Evidence for Gender Differences in Risk Taking. *Journal of Economic Behavior & Organization*, 83(1), 50–58. https://doi.org/10.1016/j.jebo.2011.06.007
- Chen, H., & Volpe, R. P. (1998). An analysis of personal financial literacy among college students. *Financial Services Review*, 7(2), 107-128. https://www.semanticscholar.org/paper/An-analysis-of-personal-financial-literacy-among-Chen-Volpe/683df4577aa70d87a01c8590a070c55134470cc0
- Chen, Haiyang & Volpe, Ronald. (2002). Gender differences in personal financial literacy among college students. *Financial Services Review*, 11. 289-307. https://www.researchgate.net/publication/285358406_Gender_Differences_in_Personal_Financial_Literacy_Among_College_Students
- Croson, R., & Gneezy, U. (2004). Gender differences in preferences. *Journal of Economic Literature*. 47(2), 448-474.https://rady.ucsd.edu/faculty/directory/gneezy/pub/docs/gender-differences-preference.pdf

- Cruz, G., Laguna, E. & Raymundo, C. (2001). Family influence on the lifestyle of Filipino youth. *East-West Center Working Papers*, 108(8), 4-28. https://www.files.ethz.ch/isn/101308/2001_10_Family_Influences_on.pdf
- Davis, R., & Carnes, L. (2005). Employers' perspectives on employees' personal financial literacy. *Delta Pi Epsilon Journal*, 47(1), 11-19. Retrieved from University of San Carlos website: https://web.b.ebscohost.com.ezproxy.usc.edu.ph
- Der Hovanesian, M. (1999). Spending it, investing it, coming on strong: The children of the baby boomers are affecting spending and investing as significantly as their parents did. *Wall Street Journal*. https://www.wsj.com/articles/SB942785816835228037
- Domingo, L. J., & Asis, M. M. B. (1995). Living arrangements and the flow of support between generations in the Philippines. *Journal of Cross-Cultural Gerontology*, *10*(1-2), 21–51. http://dx.doi.org/doi:10.1007/bf00972030
- Edralin, D.M. (2011). Gender-responsive budgeting and its impact on the status of women and men in Pasay City. *DLSU Business & Economics Review 21*(1), 29-60. https://www.researchgate.net/publication/267969263
- Faff, R., Mulino, D., & Chai, D. (2008). On the linkage between financial risk tolerance and risk aversion. *Journal of Financial Research*, 31(1), 1–23. http://dx.doi.org/10.1111/j.1475-6803.2008.00229.x
- Fishbein, M., & Ajzen, I. (1975). *Belief, attitude, intention, and behavior: an introduction to Theory and research.* Reading, Mass.: Addison-Wesley. http://people.umass.edu/aizen/f&a1975.html
- Fisher, Patti. (2015). Gender differences in saving among low-to-moderate-income households. *Financial Services Review*, 24, 1–13. https://www.researchgate.net/publication/299559659
- Fonseca, R., Mullen, K. J., Zamarro, G., & Zissimopoulo S, J. (2012). What explains the gender gap in financial literacy? The role of household decision making. *Journal of Consumer Affairs*, 46(1), 90–106. http://dx.doi.org/10.1111/j.1745-6606.2011.01221.x
- Foster, Ann (2015). Consumer expenditures vary by age. *Beyond the Numbers*, 4(14). https://www.bls.gov/opub/btn/volume-4/consumer-expenditures-vary-byage.htm?view_full
- Gachango, D.M. (2014). Effect of financial literacy on personal financial management practices: a case of employees in finance and banking institutions in Nairobi, Kenya. (Unpublished master's thesis). University of Nairobi. http://erepository.uonbi.ac.ke/bitstream/handle/11295/76741/Gachango_Effect%20of%20F inancial%20Literacy%20on%20Personal%20Financial%20Management%20Practices%20 a%20Case%20of%20Employees%20in%20Finance%20and%20Banking%20Institutions%20in%20Kenya.pdf?sequence=3&isAllowed=y
- Galope, C., Dimatanday, N., and Villaver, H. and Llanes, T. (2019). Increasing financial literacy among Senior High School non-ABM students through interactive Multimedia. https://www.researchgate.net/publication/332318987
- Guliman, S. D. & Uy, A. O. (2019). The curious case of Filipino micro-entrepreneurs financial sophistication and the triple bottom line. *DLSU Business and Economics Review*. 28(3). 1-10. http://dlsu-ber.com/wp-content/uploads/2019/04/1-guliman-041519.pdf
- Guliman, S. D. (2015). An evaluation of financial literacy of micro and small enterprise owners in Iligan City: Knowledge and skills. *Journal of Global Business Volume*, *4*. 17-23. https://static1.squarespace.com/static/5b85162bcc8fedc767ff5676/t/5bb11c2515fcc09a983 9cc79/1538333737409/v4n1_17.pdf

- Gutter, M. S., Copur, Z., & Garrison, S. (2010). Financial management practices of college students from states with varying financial education policies. *National Endowment for Financial Education*. 1-17.https://www.nefe.org/_images/research/Financial-Education-Mandates-Report-Financial-Education-Mandates-Report-Final-Report.pdf
- Hawk, William. (2011). Household spending by single persons and married couples in their twenties: a comparison. *Consumer Expenditure Survey Anthology*, 40-46. https://www.bls.gov/cex/anthology11/csxanth6.pdf
- Hilgert, M. A., Hogarth, J. M., & Beverly, S. G. (2003). Household financial management: the connection between knowledge and behavior. *Federal Reserve Bulletin*, 309-322.https://www.federalreserve.gov/pubs/bulletin/2003/0703lead.pdf
- Hira, T., Rock, W., & Loibl, C. (2009). Determinants of retirement planning behavior and differences by age. *International Journal of Consumer Studies*, 33, 293-301.https://doi.org/10.1111/j.1470-6431.2009.00742.x
- Hussain, S. K. (1993). Consumers saving behavior: An empirical investigation of consumers attitudes towards commercial banking services with special reference to savings accounts in Iraq. (Doctoral dissertation). University of Sheffield United Kingdom. https://etheses.whiterose.ac.uk/1897/1/DX198541.pdf
- Juneja, Prachi. (n.d.). Personal factors affecting consumer behavior. *Management Study Guide*. https://www.managementstudyguide.com/personal-factors-affecting-consumer-behaviour. htm.
- Komla, Amu M. E. (2012). Demographic influences on Rural households saving and investment: A study of Rural households in the Ho Municipality of Ghana. *International Journal of Applied Sociology*, 2(4), 41-46. http://article.sapub.org/10.5923.j.ijas.20120204.03.html
- Kumleh, S. A., Roodposhti, F. R., Shahvarani, A., & Lotfi, F. H. (2017). Lower-order mathematical thinking skills in Finance, from the viewpoint of financial employees in the Iranian bank of industry and mine. *European Journal of Contemporary Education*, *6*(3), 414-431. https://doi.org/10.13187/ejced.2017.3.414
- Lautianinen, Tanja. (2015). Factors affecting consumers' buying decision in the selection of a coffee brand. (Unpublished master's thesis) Saimaa University, Finland. https://www.theseus.fi/bitstream/handle/10024/94486/Lautiainen_Tanja.pdf?sequence=1& isAllowed=y
- Lee, S., Park, M., & Montalto, P. (2000). The effect of family life cycle and financial management practices on household saving patterns. *Journal of Korean Home Economics Association English Edition*, 1, 79-92. http://citeseerx.ist.psu.edu/viewdoc/download?doi=10.1.1.867.3394&rep=rep1&type=pdf
- Lethepa, A., & Matemane, R. (2020). Bankers and financial advisers in an emerging economy: Are they financially literate? *Banks and Bank Systems*, 15(2), 16-27. http://dx.doi.org/10.21511/bbs.15(2).2020.02
- Lucas, D. (2018, 28 May). Many Filipinos still financially illiterate. *The Philippine Daily Inquirer*.https://business.inquirer.net/251498/many-filipinos-seen-still-financially illiterate #ixzz6lUNVzTqI
- Lusardi, A., & Mitchell, O. S. (2007). Baby Boomer retirement security: the roles of planning, financial literacy, and housing wealth. *Journal of Monetary Economics*, 54, 205-224.https://doi.org/10.1016/j.jmoneco.2006.12.001

- Lusardi, Annamaria. (2008). Household saving behavior: The role of financial literacy, information, and financial education programs. National Bureau of Economic Research, 1-44. https://doi.org/10.3386/w13824
- Lusardi, A. (2010). Financial literacy among the young. *Journal of Consumer Affairs*, 44(2), 358-380. https://doi.org/10.1111/j.1745-6606.2010.01173.x
- Lusardi, A., & Mitchell, O. S. (2011). Financial literacy and retirement planning in the United States. Journal of Pension Economics and Finance, 10(4), 509-525. https://doi.org/10.1017/s147474721100045x
- Mbarire, Trizah & Ali, Abdullah Ibrahim. (2014). Determinants of financial literacy levels among employees of Kenya ports authority in Kenya. *Research Journal of Finance and Accounting*, 5(16), 44-52. https://core.ac.uk/download/pdf/234630096.pdf
- Modigliani, F. (1986). Life cycle, individual thrift, and the wealth of nations. *The American Economic Review*, 76(3), 297-313. Retrieved from University of San Carlos website: https://web.b.ebscohost.com.ezproxy.usc.edu.ph
- Modigliani, F., & Brumberg, R. (1952). Utility analysis and the consumption function: An interpretation of cross-section data. In F. Francesco (Ed). *The collected papers of Franco Modigliani*, 6, 1-45. https://scholar.google.com/scholar?q=Utility+analysis+and+the+consumption+function%3A+An+interpretation+of+crosssection+data+Modigliani+Brumberg
- Montalbo, I. & Pogoy, A. & Villarante, G. & Pepito, G. (2017). Financial literacy of professional and pre-service teachers in the Philippines. *Journal of Global Economics*, 5. https://www.hilarispublisher.com/abstract/financial-literacy-of-professional-and-preservice -teachers-in-the-philippines-32471.html
- Monticone, C. (2010). How much does wealth matter in the acquisition of financial literacy? *Journal of Consumer Affairs*, 44(2), 403–422. http://dx.doi.org/10.1111/j.1745-6606.2010.01175.x
- Neelakantan, Urvi. (2010). Estimation and impact of gender differences in risk tolerance. *Economic Inquiry*, 48(1), pp. 228-233. http://dx.doi.org/10.1111/j.1465-7295.2009.00251.x
- Nguyen, T. A. N., & Rozsa, Z. (2019). Financial literacy and financial advice seeking for retirement investment choice. *Journal of Competitiveness*, 11(1), 70–83. https://www.cjournal.cz/files/316.pdf
- Planning and Progress (2013). Retirement and Longevity. Northwestern Mutual. 1-7.
- Nyamute, W., & Maina, M. (2010). Effect of financial literacy on personal financial management practices: A case study of employees of finance and banking institutions. https://www.semanticscholar.org/paper/EFFECT-OF-FINANCIAL-LITERACY-ON-PERSONAL-FINANCIAL-Nyamute-Maina/401c7344dd5652e8a0996d8d71716cb 6a3257a8d
- OECD INFE. (2011). Measuring financial literacy: Core questionnaire in measuring financial literacy: *Questionnaire and guidance notes for conducting an internationally comparable survey of financial literacy*. Organization for Economic Co-operation and Development. https://www.oecd.org/finance/financial-education/49319977.pdf
- Organization for Economic Co-Operation and Development, OECD. (2013). Financial literacy and inclusion: Results of OECD/INFE survey across countries and by gender. OECD Centre, Paris, France. https://www.oecd.org/daf/fin/financial-education/TrustFund2013_OECD_INFE_Fin_Lit_and_Incl_SurveyResults_by_Country_and_Gender.pdf

- Panos, Geiorgios & Wilson, John. (2020). Financial literacy and responsible finance in the FinTech era: capabilities and challenges. *The European Journal of Finance*, 26(4-5), 297-301.https://doi.org/10.1080/1351847X.2020.1717569
- Parcia, R., & Estimo, E. (2017) Employees' financial literacy, behavior, stress and wellness. *Journal of Human Resource Management*, 5(5), 78-89. https://doi.org/10.11648/j.jhrm.20170505.12
- Perculeza, P., Andal, Y., & Divino, A. (2016). Spending behavior of the teaching personnel in an Asian University. *Asia Pacific Journal of Multidisciplinary Research*, 4(1), 99-108. https://www.apjmr.com/wp-content/uploads/2016/05/APJMR-2016.4.1.12.pdf
- Potrich, A. C. G., Vieira, K. M., & Kirch, G. (2015). Determinants of financial literacy: Analysis of the influence of socioeconomic and demographic variables. *Revista Contabilidade & Finanças*, 26(69), 362–377. https://doi.org/10.1590/1808-057x201501040
- Ramos R. C., Panlilio J. C., & Tamina, R. A. (2016). Personal finance practices of TSU faculty and personnel. *Review of Integrative Business and Economics Research*, *5*(4), 271-279. http://sibresearch.org/uploads/3/4/0/9/34097180/riber_s16-113_271-279.pdf
- Reswari, A., Sudarto, S., & Widyastut, E. (2018). The influence of financial literacy towards financial behavior. *Journal of Research in Management*, 1.
- Rodriguez, J., & Meyer, R. (1988). The analysis of saving behavior: The case of rural households in the Philippines. https://www.researchgate.net/publication/24111155
- Sallie, N. (2015). The impact of socialization factors on financial literacy and financial security amongst employees in the financial services industry (MBA Thesis). Pretoria: Gordon Institute of Business Science, University of Pretoria. Retrieved from http://hdl.handle.net/2263/52308
- Schagen, S., & Lines, A. (1996). Financial literacy in adult life: a report to the Natwest Group Charitable Trust. *National Foundation for Educational Research*, 36-45.https://www.nfer.ac.uk/publications/91091/91091.pdf
- Scheresberg, C. B. (2013). Financial literacy and financial behavior among young adults: evidence and implications. Numeracy, 6(2). https://digitalcommons.usf.edu/cgi/view content.cgi?article=1138&context=numeracy
- Schueffel, P. (2016). Taming the beast: A scientific definition of Fintech. *Journal of Innovation Management*, 4(4), 32-54. https://doi.org/10.24840/2183-0606_004.004_0004
- Sereetrakul, W., Wongveeravuti, S., & Likitapiwat, T. (2013). Gender differences in saving and spending behaviors of Thai Students. *Research in Education*, 90(1), 68–81. https://doi.org/10.7227/rie.90.1.5
- Wamai, A. (2015). Role of financial literacy on personal financial management: A case of bankers in Nairobi City. (Unpublished master thesis). United States International University, Africa.http://erepo.usiu.ac.ke/bitstream/handle/11732/684/ANNE%20WACHE RA%20WAMAE%20EMOD%202015.pdf?sequence=4&isAllowed=y
- World Bank Group (WBG, 2015). Philippines financial education and consumer protection project. Enhancing Financial Capability and Inclusion in the Philippines-A Demand-side Assessment July 2015. International Bank for Reconstruction and Development/TheWorldBankGroup.https://documents1.worldbank.org/curated/en/20909 1467997611506/pdf/99636-v1-WP-P144143.pdf
- Xu, L., & Zia, B. (2012). Financial literacy around the world: An overview of the evidence with practical suggestions for the way forward. World Bank Policy Research Working Paper No. 6107, Available at SSRN: https://ssrn.com/abstract=2094887

- Yiing, Jia Loke (2017). Financial vulnerability of working adults in Malaysia. *Journal Contemporary Economics*, 11(2), 205. https://papers.ssrn.com/sol3/papers.cfm?abstract_id=3177004
- Yuh, Y., & Hanna, S. D. (2010). Which households think they save? *Journal of Consumer Affairs*, 44, 70-97. https://doi.org/doi:10.1111/j.1745-6606.2010.01158.x