

Factors Affecting Financial Literacy of Teachers: A Logit Analysis

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Abstract:- The purpose of the study was to determine the influence of socio-demographic variables and factors on the financial literacy of teachers in Cluster IV, Davao City division. A total of 122 teachers in the public secondary Schools in Cluster IV Davao City division were identified through stratified random sampling. The study utilized a descriptive-predictive design. Adapted survey questionnaires which focused on the factors affecting financial literacy of teachers were utilized in the gathering of data. Frequency and Percentage, Mean, and Logistic Regression analysis were used as statistical tools of the study. Results revealed that the socio-demographic profile of the teachers which composed of age, gender, income, and educational qualifications highlighted higher number of female respondents than their male counterpart. Most teacher-respondents were under the age bracket of 31-40, with an income of Php 30,000 to 40,000, and were about to acquire their master's degree. The level of the factors revealed very high ratings on financial knowledge, financial behavior, financial attitudes, and investing and savings. Financial attitudes obtained the highest mean rating while financial behavior recorded the lowest mean rating. The profile of financial literacy of teachers showed higher number of teachers who were not financially literate. Financial knowledge and financial attitudes significantly influenced financial literacy of teachers. Financial knowledge has the highest degree of influence to the financial literacy of teachers. This study also recommended that School Administrators should provide an intervention program or conference may be conducted by school administrators to guide and reinforce teachers understanding regarding financial literacy.

Keywords:- Factors, Financial, Literacy, Financial Literacy, Teachers, Logit, Davao City, Philippines.

I. INTRODUCTION

Concerns regarding the low level of financial literacy among its citizens have been voiced by nations everywhere. Numerous researchers worldwide have amply demonstrated the substantial costs associated with low financial literacy for the general public (Capuano & Ramsay, 2011). Significant issues including inadequate retirement planning and low savings can be attributed to the public's ignorance or lack of understanding of financial affairs (Abaya et al., 2021).

Although teachers teach financial literacy on a daily basis, educational research has Until now, not much thought has been given to how educators view and carry out this duty. Few studies have examined the actual teaching of financial literacy (Farsagli, Filotto, & Tracò, 2016; Tisdell, Taylor, & Forte, 2013), and even fewer have examined how teachers conceptualize and frame the concept (Leumann, 2017). Empirical research conducted internationally reveals that instructors have low levels of financial and economic literacy (Holtz & Eberle, 2016). The dearth of economics and finance classes in teacher education programs across the nation is one of the primary barriers to teachers gaining financial literacy (Sasser & Grimes, 2010).

Many Filipinos in the Philippines lack a firm understanding of basic financial principles and are financially illiterate. Concerningly, the public's perspective on saving and spending is widespread (Asian Development Bank, 2015). It is more a matter of not having the necessary skills to understand the knowledge than a lack of it. A lot of people don't seem to understand the financial burden that they will eventually have to bear as a result of taking out loans at outrageous interest rates. How many people are making bad decisions is hard to gauge. The nation's pre-service and professional teachers are incredibly financially illiterate (Montalbo et al., 2017).

Due to a shortage of financial courses and skills, teacher development programs raise questions and concerns in the field of teacher education (Opletalová, 2015, De Moor & Verschete, 2017). Teachers' professional development in financial literacy is inadequate, even in spite of the rise in the implementation of financial literacy programs (Compen, De Witte & Schelfhout, 2019). Teachers' financial literacy is low in the local environment due to low participation in financial literacy programs and activities. In order to give instructors appropriate financial guidance, this issue needs to be investigated.

With the above manifestations, the researcher is prompted to pursue this study since it is important to determine the factors influencing the financial literacy of teachers. There is literature that has been identified that focuses on analyzing the financial literacy of teachers; however, there are only limited studies in the local context that highlight such analyses of financial skills. In this regard, it is essential for teachers to be reminded of how to manage their finances. Therefore, the conduct of this study is put on urgent

notice since the majority of teachers are falling into serious financial debt or traps that enable them to lose their commitment to delivering quality education.

The purpose of the study was to determine the influence of socio-demographic variables and factors on the financial literacy of teachers in Davao City division. Specifically, it sought answer to the following questions:

A. What is the socio-demographic profile of teachers in terms of:

- Age,
- Gender,
- Income, and
- Educational Qualifications?

B. What is the level of the factors influencing financial literacy of teachers in terms of:

- Financial knowledge,
- Financial attitudes,
- Financial behavior, and
- Investing savings?

C. What is the profile of financial literacy of teachers?

- Do socio-demographic variables and the factors significantly influence teachers' financial literacy?

The hypothesis was tested at alpha 0.05 in the level of significance:

Ho 1: Socio-demographic variables and the factors do not significantly influence teachers' financial literacy.

II. *METHOD*

This study utilized descriptive-predictive design. Descriptive research design is a type of research design that aims to systematically obtain information to describe a phenomenon, situation, or population. More specifically, it helps answer the what, when, where, and how questions regarding the research problem rather than the why (Voxco, 2021). In this context, this design aimed to describe the distribution of socio-demographic profile such as age, gender, income, educational qualification, and profile of financial literacy of teachers, and described other variables such as financial knowledge, financial behavior, financial attitude, and investing savings.

The respondents of this study were the Junior High School teachers teaching in Cluster IV, Davao City division. A total of 114 teachers were utilized as the respondents of the study using Tabachnick and Fidell (2007) calculation of sample size in running regression analysis. The formula is $n = 50 + 8(m)$ where 50 and 8 were constant numbers while m represents the number of independent variables. Hence, there were 8 indicators of independent variables, the resulting sample size is 114. The teachers were selected via stratified random sampling. Stratified random sampling is a type of

probability method using which a research organization can branch off the entire population into multiple non-overlapping, homogeneous groups (strata) and randomly choose final members from the various strata for research which reduces cost and improves efficiency. This study adhered to the inclusion and exclusion criteria observed in this study. The inclusion criteria covered teachers who were teaching in the Junior High School Department with any fields of specialization in the Cluster IV, division of Davao City. Additionally, a teacher must be a regular or holds a permanent teaching position regardless of any designation or rank. He/she must be serving the school for more than 3 years or more. Also, these teachers have experienced borrowing money, loan or have invested their finances to a secured financing activity.

An adapted survey questionnaire pertaining to factors influencing financial literacy of teachers was utilized. The questionnaire was taken from Surendar and Sarma (2018). It is composed of 20-item statements. The indicators were financial knowledge with 5 items, and financial behavior, financial attitude, and investing savings with 5 items respectively. The questionnaires were subjected to content validation by a panel of experts. These experts came from different institutions. The experts rated the questionnaire based on criteria. Comments and suggestions from the experts were given weight by the researcher. Before the final administration of the instrument, it was subjected to pilot testing. The reliability index of financial knowledge questionnaire was .869, financial behavior with .878, financial attitudes with .834, and investing and savings with .859.

The data-gathering procedure of the study began with a written request submitted to the Dean of the Graduate School of Rizal Memorial Colleges and the Office of the Division Superintendent for permission to conduct the research. Upon approval, the permission letter was presented to the principals of the schools where the teacher-respondents worked. Before administering the survey questionnaires, a panel of experts conducted a content validation using a validation sheet to assess the items based on specific criteria, which took place face-to-face, with the experts providing their signatures and feedback. Following this, a pilot test was conducted with 30 teachers not included in the main study to evaluate the reliability of the questionnaire, and this test also occurred face-to-face. The survey questionnaires were then distributed using both face-to-face and online modalities, allowing respondents sufficient time to complete them. Respondents could return the completed questionnaires either online, in person, or via a dropbox. After collection, the responses were analyzed and interpreted using statistical methods.

This research rigorously followed ethical standards to protect the well-being and rights of the respondents. Informed consent was obtained from all participants, clearly explaining the study's objectives, potential risks, and confidentiality measures. Participation was entirely voluntary, with

respondents free to withdraw at any time without any consequences. Great care was taken to ensure data anonymity, and any sensitive information was managed with the utmost discretion.

Frequency and Percentage, Mean, and Logistic Regression Analysis were the statistical tools used to answer the research questions.

III. RESULTS AND DISCUSSIONS

➤ *Socio-Demographic Profile of Teachers*

Table 1 presented the socio-demographic profile of teachers. This is comprised of age, gender, income, and educational qualifications. In terms of age, 50 out of 122 respondents are aged between 31-40, which also registered the highest percentage of 41%. This was followed by 39 teacher-respondents aged between 20-30 years of age, which was equivalent to 32%, then 19 of the respondents in the 41–50 age group with 15.60%. With 11.50%, the 14 teachers who were 50 years of age and older obtained the lowest percentage. The result indicates that more than 40 percent of the respondents are in 31-40 age bracket.

Another profile variable is gender, which shows a higher percentage of female respondents with 50.80% compared to male respondents with 49.20%. This means that the disparity between male and female respondents is not that high.

In terms of income, the highest percentage was obtained by 53 teachers with an income ranging from ₱30,001-40,000, which was equivalent to with 43.40%, while the least percentage was claimed by 10 teachers with an income of ₱50,000 and above with 8.20%. This means that almost half of the respondents have an income greater than ₱30,000 but do not exceed ₱40,000.

Further, the educational qualification shows that the highest percentage was obtained by 44 teachers, which is equivalent to 36.10% with a Master's CAR. This was followed by a bachelor's degree with 34.40%, or 42 of the respondents have completed a bachelor's degree, a master's degree with 14.80 percent, or 18, and the least percentage, both with 7.40 percent, were teachers with a doctorate degree and with complete academic requirements. Further, the result points out that more teacher-respondents are in the process of acquiring their master's degree.

Table 1. Socio-Demographic Profile of Teachers

Socio-demographic Variables	Frequency	Percentage
Age		
20-30	39	32.00%
31-40	50	41.00%
41-50	19	15.60%
50 and above	14	11.50%
TOTAL	122	100%
Gender		
Male	60	49.20%
Female	62	50.80%
TOTAL	122	100
Income		
₱20,000-30,000	45	36.90%
₱30,001-40,000	53	43.40%
₱40,001-50,000	14	11.50%
₱50,000 and above	10	8.20%
TOTAL	122	100%
Educational Qualification		
Bachelor's Degree	42	34.40%
Master's CAR	44	36.10%
Master's Degree	18	14.80%
Doctorate CAR	9	7.40%
Doctorate Degree	9	7.40%
TOTAL	122	100%

➤ *Level of the Factors Influencing Financial Literacy of Teachers in Terms of Financial Knowledge*

Table 2 flaunted the data on the level of the factors influencing financial literacy of teachers in terms of financial knowledge. The mean scores of each indicator are shown in a tabular and textual format. The presentation was chronologically arranged from highest to lowest to convey meaning and clarity: Inflation does shrink the value of money over time (4.71) which was described as Very High. Fundamental knowledge of finance helped me for effective economic decision making (4.66) which was described as Very

High. I know the difference among a pension fund, an investment account, an insurance policy and a credit card (4.65) which was described as Very High. I know about interest rates charged by bank, borrowing rates charged by financial institution, Credit ratings done by companies and why it is done (4.63) which was described as Very High. Investing money into multiple avenues keeps me safer rather investing into single avenue (4.55) which was described as Very high. The overall mean rating on this domain marked (4.64) which described as Very High. This means that the level of the factors influencing financial literacy of teachers in terms of financial knowledge was always demonstrated.

Table 2. Level of the Factors Influencing Financial Literacy of Teachers in Terms of Financial Knowledge

No.	Items	Mean	Descriptive Interpretation
1	Fundamental knowledge of finance helped me for effective economic decision making.	4.66	Very High
2	Inflation does shrink the value of money over time.	4.71	Very High
3	Investing money into multiple avenues keeps me safer rather investing into single avenue.	4.55	Very High
4	I know the difference among a pension fund, an investment account, an insurance policy and a credit card.	4.65	Very High
5	I know about interest rates charged by bank, borrowing rates charged by financial institution, Credit ratings done by companies and why it is done.	4.63	Very High
Mean		4.64	Very High

The result above aligns with the idea of Rafinda and Gal (2020) that the surrounding environment such as family and friends are one of the sources of financial knowledge. The study of Xiao et al., (2011) also explains that financial knowledge comes with financial behavioural repertoires. In other words, Reswari et al., (2018) indicated that while financial knowledge is necessary, what is essential is to translate this knowledge into some forms of behaviour or to achieve behavioural modifications geared toward effective financial management.

➤ *Level of the Factors Influencing Financial Literacy of Teachers in Terms of Financial Attitudes*

Table 3 showed the data on the level of the factors influencing financial literacy of teachers in terms of financial attitudes. The mean scores of each indicator are shown in a tabular and textual format. The presentation was chronologically arranged from highest to lowest to convey meaning and clarity: As long as I meet monthly payments, there is no need to worry about the length of time it will take me to pay off outstanding debts (4.86) which was described as Very High and Money is to be spent, Saving is not important (4.86) has the same mean as the aforementioned statement, which was described as Very High. It does not matter how much I save as long as I do save (4.84) which was described as Very High. I believe in developing a regular pattern of saving and stick to it (4.82) which was described as Very High. I find more satisfying to spend than save money for the future (4.80) which was described as Very High. The overall mean rating on this domain marked (4.84) which described as Very High. This means that the level of the factors influencing financial literacy of teachers in terms of financial attitude was always demonstrated.

Table 3. Level of the Factors Influencing Financial Literacy of Teachers in Terms of Financial Attitude

No.	Items	Mean	Descriptive Interpretation
1	I find more satisfying to spend than save money for the future.	4.80	Very High
2	I believe in developing a regular pattern of saving and stick to it.	4.82	Very High
3	Money is to be spent, Saving is not important.	4.86	Very High
4	As long as I meet monthly payments, there is no need to worry about the length of time it will take me to pay off outstanding debts.	4.86	Very High
5	It does not matter how much I save as long as I do save.	4.84	Very High
Mean		4.84	Very High

The result is in accordance to the statement of Rai, Dua, and Yadav (2019) that financial attitudes are the outcome of certain behaviour of a decision-maker and the attitude can be entrenched through their economic and non-economic beliefs. Ibrahim and Alqaydi (2013) concluded that education can improve personal financial attitude, thereby reducing dependence on credit cards. Financial attitudes along with financial behaviour can also affect financial well-being. Past researches concluded that there is a link between financial attitudes and financial literacy among youth (Kasman, Heuberger, & Hammond, 2018).

➤ *Level of the Factors Influencing Financial Literacy of Teachers in Terms of Financial Behavior*

Table 4 showed the data on the level of the factors influencing financial literacy of teachers in terms of financial behavior. The mean scores of each indicator are shown in a tabular and textual format. The presentation was chronologically arranged from highest to lowest to convey meaning and clarity: Before I buy something, I consider whether I can afford it (4.75) which was described as Very High. I have my financial goals in terms of short-term (less than one year)/long-term (more than a year) (4.70) which was described as Very High. I keep close personal watch on my financial affairs (4.70) which was described as Very High. I consider several products from different companies before making the decision to buy (4.66) which was described as Very High. I have my own financial plan and I strictly go accordingly (4.65) which was described as Very High. The overall mean rating on this domain marked (4.69) which described as Very High. This means that the level of the factors influencing financial literacy of teachers in terms of financial behavior was always demonstrated.

Table 4. Level of the Factors Influencing Financial Literacy of Teachers in Terms of Financial Behavior

No.	Items	Mean	Descriptive Interpretation
1	I have my financial goals in terms of short-term (less than one year)/long-term (more than a year).	4.70	Very High
2	I have my own financial plan and I strictly go accordingly.	4.65	Very High
3	Before I buy something, I consider whether I can afford it.	4.75	Very High
4	I consider several products from different companies before making the decision to buy.	4.66	Very High
5	I keep close personal watch on my financial affairs.	4.70	Very High
Mean		4.69	Very High

The result affirms the statement of OECD (2013) that financial behaviour is very important and a fundamental component of financial literacy. For Atkinson and Messy (2012), a positive financial behaviour of individual such as appropriate planning for expenditures and caring financial stability enhances their financial literacy level, whereas negative financial behaviour like largely depending upon credits and loans weaken their financial well-being.

➤ *Level of the Factors Influencing Financial Literacy of Teachers in Terms of Investing Savings*

Table 5 showed the data on the level of the factors influencing financial literacy of teachers in terms of Investing Savings. The mean scores of each indicator are shown in a tabular and textual format. The presentation was chronologically arranged from highest to lowest to convey meaning and clarity: I invest my money based on the opinions of others such as friends and family (4.76) which was described as Very High. I continually reassess my investment portfolio (4.70) which was described as Very High. My investments are appropriate to my income (4.67) which was described as Very High. I know the differences between long term and short term investments and its importance in personal financial planning (4.63) which was described as Very High. I can assess the risk of my various investments (4.60) which was described as Very High. The overall mean rating on this domain marked (4.67) which described as Very High. This means that the level of the factors influencing financial literacy of teachers in terms of Investing Savings was always demonstrated.

Table 5. Level of the Factors Influencing Financial Literacy of Teachers in Terms of Investing Savings

No.	Items	Mean	Descriptive Interpretation
1	My investments are appropriate to my income	4.67	Very High
2	I know the differences between long term and short term investments and its importance in personal financial planning.	4.63	Very High
3	I can assess the risk of my various investments.	4.60	Very High
4	I continually reassess my investment portfolio.	4.70	Very High
5	I invest my money based on the opinions of others such as friends and family.	4.76	Very High
Mean		4.67	Very High

The result affirms the statement of Kenton (2021) who stated that people with good financial knowledge about money can arrange their finances better and have a greater degree of financial literacy. Sarma (2018) posited that with respect to quality of savings is concerned, many teachers agreed that it does not matter how much they save as long as they do save.

➤ *Summary on the Level of the Factors Influencing Financial Literacy of Teachers*

Table 6 presented the summary on the level of factors influencing the financial literacy of teachers which are measured by four indicators namely: (1) financial knowledge, (2) financial behavior, (3) financial attitudes, and (4) investing savings. The mean ratings of these indicators are as follows: (1) financial knowledge (4.64) which was described as Very High, (2) financial attitudes (4.34) which was described as Very High, (3) financial behavior (4.69) which was described as Very High, and (4) investing savings (4.67) which was described as Very High. The overall mean rating on this domain marked (4.71) which describes as Very High. This means that the summary on the level of factors influencing the financial literacy of teachers is always demonstrated. The results below have showed that among the indicators of factors influencing financial literacy of teachers, the financial attitude have garnered the highest mean which was described as Very High. Thus, the financial attitude of the teacher-respondents are always demonstrated

Table 6. Summary on the Level of Factors Influencing the Financial Literacy of Teachers

No.	Factors	Mean	Descriptive Interpretation
1	Financial Knowledge	4.64	Very High
2	Financial Behavior	4.69	Very High
3	Financial Attitudes	4.84	Very High
4	Investing and Savings	4.67	Very High
	Overall Mean	4.71	Very High

The result agrees with the statement of Jabar and Delayco (2021) that financial literacy takes the business of suppressing psychological or personality-related traits that predispose an individual to engage in impulse buying. It provides an emotional push for individuals to be able to control their emotions and to provide a basis for coming up with rational choices regarding purchases. Further, Mahdzan and Tabiani (2013) suggested that individuals who are financially literate can manage their personal savings, understand how financial institutions operate and have analytical skills in relation to finance.

➤ *Profile of Financial Literacy of Teachers*

Table 7 displays the profile of financial literacy of teachers. This is classified as financially literate or not financially literate. Result shows that 74 respondents or 60.70 percent of the teachers were claiming that they were not financially literate due to may be higher debts in the bank and poor or low savings and investments. On the other hand, 49 or 39.30 percent indicated that to be financially literate. This means that more than half of the respondents believed that they were not financially literate.

Table 7. Profile of Financial Literacy of Teachers

Variable	Frequency	Percentage
Financially Literate		
✓ Yes	48	39.30
✓ No	74	60.70
TOTAL	122	100

Studies on financial literacy among Filipino teachers are rather limited. One such study done was by Montalbo et al., (2017), and it was conducted among professional teachers. They examined basic financial literacy in terms of number numeracy, compound interest, inflation, time value of money, and money illusion. The authors also examined “sophisticated knowledge” of financial instruments, which included function of the stock market, knowledge of mutual funds, relationship between interest and bonds, safer company stock or mutual funds, riskier stocks or bonds, long period returns, highest fluctuations, and risk diversifications. Results of their study indicated that teachers have both low basic and low sophisticated financial literacy.

➤ *Significant Influence of Socio-Demographic Profile and Factors on the Financial Literacy of Teachers*

Table 8 highlights the influence of the socio-demographic variables and factors on the financial literacy of teachers. The results showed that financial knowledge obtained an exponentiated beta of 2.075 with a p-value of .031. This means that for every increase in the financial knowledge of teachers, 2.075 times are more likely will become financially literate. In addition, financial attitudes garner an Exponentiated beta of 1.382 with a p-value of .020. This indicates that for every increase in the financial attitudes of teachers, 1.382 times more likely teachers will become financially literate. Further, the results show that financial knowledge and financial attitudes significantly influenced the financial literacy of teachers.

Moreover, the Omnibus test records a Chi-square value of 8.04 with a p-value of .022 indicating significant. This indicates that the model with variables performs better with the null model. In addition, the Cox and Snell and Nagelkerke R-squared indicated .064 and .086 respectively. These are the variances explained by the predictor variables regarding the financial literacy of teachers.

Table 8. Significant Influence of Socio-Demographic Profile and Factors on the Financial Literacy of Teachers

Financial Literacy					
Factors	B	S.E	Wald	Sig.	Exp (B)
age	.639	.483	1.748	.186	1.894
gender	-.440	.407	1.170	.279	.644
Income	.709	.714	.985	.321	2.031
Educational qualifications	-.328	.485	.458	.499	.720
Financial knowledge	.730	.521	1.961	.031	2.075
Financial behavior	.677	.666	1.035	.309	1.968
Investing and savings	-.854	.698	1.498	.221	.426
Financial attitudes	.324	.786	.170	.020	1.382
Chi-square	8.04				
p-value	.022				
Cox and Snell R ²	.064				
Nagelkerke R ²	.086				

The results agree with the findings of Haque and Zulfiqar (2015), concluded that strong and positive relationship exists between the aforementioned parameters of financial literacy. Dwivedi, Purohit, and Mehta (2015) analyzed the NCFE report on financial literacy and financial inclusion in India. The study showcased that financial literacy level is different for men and women. Men possess more financial understanding than women. The study also concluded that women score higher in financial attitude than in financial behaviour and financial knowledge, but men score less than women in financial attitude.

IV. CONCLUSIONS AND RECOMMENDATIONS

➤ *From the findings of the study, the following conclusions were drawn:*

The socio-demographic profile of the teachers which composed of age, gender, income, and educational qualifications highlighted higher number of female respondents than their male counterpart. Most teacher-respondents were under the age bracket of 31-40, with an income of Php 30000 to 40,000, and were about to acquire their master's degree.

The level of the factors revealed very high ratings on financial knowledge, financial behavior, financial attitudes, and investing and savings. Financial attitudes obtained the highest mean rating while financial behavior recorded the lowest mean rating.

The profile of financial literacy of teachers showed higher number of teachers who were not financially literate.

Financial knowledge and financial attitudes significantly influenced financial literacy of teachers. Financial knowledge has the highest degree of influence to the financial literacy of teachers.

RECOMMENDATIONS

➤ *From the conclusions drawn, the following recommendations are offered.*

School Administrators should provide an intervention program or conference may be conducted by school administrators to guide and reinforce teachers understanding regarding financial literacy.

Teachers should determine what seems to be the problem with their financial management. And should give them ideas how they could improve and make better financial decisions.

Students should acquire basic financial literacy information since this will be imparted by their teachers. In doing so, they will be informed on the benefits of being financially literate.

The results of the study will be used as basis by future researchers to test the influence of the variables to other financial related concerns.

REFERENCES

- [1]. Abaya, K. J., Aguinaldo, R., Asprec, A. B., Baylon, J., Donato, J., & Vilorio, V. A. (2021). Practices on financial literacy of teachers in the schools division office of Cabanatuan City. *International Journal of English Literature and Social Sciences*, 6(4), 152-156.
- [2]. Asian Development Bank (2015). Financial education in asia: assessment and recommendations, ADBI Working Paper Series No. 534. Retrieved from <https://www.adb.org/publication/adbiwp534>
- [3]. Atkinson, A., & Messy, F. (2012). Measuring Financial Literacy: Results of the OECD/ International Network on Financial Education (INFE) Pilot Study. OECD Working Papers on Finance, Insurance and Private Pensions, No. 15. OECD Publishing.

- [4]. Capuano, A., & Ramsay, I. (2011). What Causes Suboptimal Financial Behaviour? An Exploration of Financial Literacy, Social Influences and Behavioural Economics, Melbourne Legal Studies Research Paper, doi:10.2139/ssrn.1793502
- [5]. Compen, B., De Witte, K., & Schelfhout, W. (2019). The role of teacher professional development in financial literacy education: A systematic literature review. *Educational Research Review*, 26, 16-31.
- [6]. De Moor, L., & Verschete, L. (2017). Student teachers' capacity and willingness to teach financial literacy in Flanders. *Journal of Financial Counseling and Planning*, 28(2), 313-321.
- [7]. Dwivedi, M., Purohit, H., & Mehta, D. (2015). Improving financial literacy among women: The role of universities
https://papers.ssrn.com/sol3/papers.cfm?abstract_id=2668034
- [8]. Farsagli, S., Filotto, U., & Tracò, F. (2016). Educating people about finance and economics. approaching curriculum design: An Italian experience. In C. Aprea, E. Wuttke, K. Breuer, N. K. Koh, P. Davies, B. Greimel-Fuhrmann & J. S. Lopus (Eds.), *International handbook of financial literacy* (1st. ed., pp. 531). Singapore: Springer Singapore.
- [9]. Haque, A., & Zulfiqar, M. (2015). Women's economic empowerment through financial literacy, financial attitude and financial wellbeing. *Research Journal of Finance and Accounting*, 6(21), 57-66.
- [10]. Holsch, D., & Eberle, F. (2016). Teachers' financial literacy from a Swiss perspective. In *International handbook of financial literacy* (pp. 697-713). Springer, Singapore.
- [11]. Ibrahim, M. E., & Alqaydi, F. R. (2013). Financial literacy, personal financial attitude, and forms of personal debt among residents of the UAE. *International Journal of Economics and Finance*, 5(7), 126.
- [12]. Jabar, M., & Delayco, M. L. (2021). Impulse buying and financial literacy among public elementary and high school teachers in the Philippines. *DLSU Business and Economics Review*, 31(1), 42-54.
- [13]. Kasman, M., Heuberger, B., & Hammond, R. A. (2018). Recommendations for improving youth financial literacy education.
https://www.brookings.edu/wpcontent/uploads/20181001_Financial-LiteracyRecommendations.pdf
- [14]. Kenton, W. (2021). Personal finance. <https://www.kenton.com/terms/p/personalfinance.asp>
- [15]. Leumann, S. (2017). Representing Swiss vocational education and training teachers' domain-specific conceptions of financial literacy using concept maps. *Citizenship, Social and Economics Education*, 16(1), 19-38.
- [16]. Mahdzan, N. E., & Tabiani, S. (2013). The Impact of financial literacy on individual saving: An exploratory study in the Malaysian context. *Transformations in Business & Economics*, 12(1), 41-55.
- [17]. Montalbo, I., Pogoy, A., Villerante, G., & Pepito, G. (2017). Financial literacy of professional and pre-service in the Philippines. *Journal of Global Economics*, 5(4), 1-8.
- [18]. OECD. (2013). Improving Financial Education Effectiveness through Behavioural Economics: OECD Key Findings and Way Forward
- [19]. Opletalová, A. (2015). Financial education and financial literacy in the Czech education system. *Procedia-Social and Behavioral Sciences*, 171, 1176-1184.
- [20]. Rafinda, A., & Gal, T. (2020). Financial literacy of economics and non-economics students. *International Review of Management and Marketing*, 10(3), 35-38.
- [21]. Rai, K., Dua, S., & Yadav, M. (2019). Association of financial attitude, financial behaviour and financial knowledge towards financial literacy: A structural equation modeling approach. *FIIB Business Review*, 8(1) 51-60.
- [22]. Reswari, A. D., Sudarto, S., & Widiastuti, E. (2018). The influence of financial literacy towards financial behaviours. *Journal of Research in Management*, 1(2), 11-17.
- [23]. Sarma, S. (2018). Financial literacy and financial planning among teachers of higher education – A study of critical factors of select variables. *International Journal of Pure and Applied Mathematics*, 118(18), 1627-1649.
- [24]. Sasser, S. L., & Grimes, P. W. (2010). Personal financial literacy: A baseline analysis of teacher knowledge in Oklahoma. *Franklin Business & Law Journal*, 3(5), 68-82.
- [25]. Surendar, G., & Sarma, V. V. S. (2018). Financial literacy and financial planning among teachers of higher education- A study of critical factors of select variables. *International Journal of Pure and Applied Mathematics*, 118(18), 1627-1649.
- [26]. Tisdell, E. J., Taylor, E. W., & Forte, K. S. (2013). Community-based financial literacy education in a cultural context: A study of teacher beliefs and pedagogical practice. *Adult Education Quarterly*, 63(4), 338-356
- [27]. Xiao, J.J., Tang, C., Serido, J., & Shim, S. (2011). Antecedents and consequences of risky credit behavior among college students: Application and extension of the theory of planned behavior. *Journal of Public Policy and Marketing*, 30(2), 239-245.