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Financial Capability of Public School Teachers in the Philippines

ABSTRACT: *The overarching objective of this research is to investigate the current financial capability of public school teachers in the Philippines. The current study focused on the three key measures of financial capability: money management; ability to plan ahead; and financial literacy. This research followed a descriptive design and utilized survey as its method. Frequencies and percentages were computed to examine the three key measures of financial capability of the respondent-teachers. Data gathered were also compared in terms of regions and school levels. The survey was conducted among public school teachers in two regions: Region IV-A and the NCR (National Capital Region). Results shows that the financial capability of public school teachers is far from what is desired and merely reflects the negative trend on financial capability nationally and all over the world. Contributing to this findings are the respondent-teachers' deficient money management skills, low incidence of financial planning, and inadequate knowledge on basic financial concepts as reflected in their dismal performance in the financial literacy quiz. Integrating financial education in the teacher education curriculum and in-service training of public school teachers can be an effective means not only to enrich the academic training of future teachers, but also to empower them to secure a more wealthy and prosperous future for themselves and for their family. While the current study provided server insights on the current level of financial capability of the public school teachers in terms of its three key measures, further research is necessary to validate these findings.*
KEY WORDS*: Financial Capability; Financial Literacy; Financial Planning; Money Management; Public School Teachers.*

INTRODUCTION

Despite of the positive effects of financial literacy on the welfare of the people (Stango & Zinman, 2009; Atkinson & Messy, 2012; Hung, Yoong & Brown, 2012; and Lusardi & Mitchell, 2013), result of financial literacy survey around the world is depressing (Lusardi, 2008; Brunton, 2009; Van Rooij, Lusardi & Alessie, 2011; WB, 2011; Agarwalla *et al*., 2012; Atkinson & Messy, 2012; Ibrahim & Alqaydi, 2013; Lusardi, 2013; and Lusardi & Mitchell, 2014). All of these researches indicated a disturbing trend of low literacy in specific countries around the globe.

Multi-country reports on financial literacy also resonate the same conclusion (Atkinson & Messy, 2012; Lusardi, 2013; and OECD/INFE, 2013). In the Philippines, two recent

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surveys were conducted to measure the financial literacy of the Filipinos (SoLAR/FLARe, 2013; and WB, 2015). These surveys pointed out the dismal state of financial literacy among many Filipinos, with many struggling to understand basic financial concepts and their application to everyday life.

It is not, therefore, surprising that pyramiding scams (ponzie-styled scams), such as the one perpetuated by Aman Future Group in 2012, which victimized 15,000 investors in Visayas and Mindanao, has been an increasing trend in recent years in the country. These unscrupulous individuals and syndicates may have exploited the low level of financial literacy of many Filipinos in successfully executing their predatory practices (PMT, 2014).[1]

Financial capability, according to World Bank (2013a), is following here:

> *[…] an internal capacity to act in one's best financial interest, given socio-economic environmental conditions. It encompasses the knowledge (literacy), attitudes, skills, and behaviors of consumers with regard to managing their resources, and understanding, selecting, and making use of financial services that fit their needs* (WB, 2013a).

The results of researches on financial capability highlighted the fact that individuals who are able to make sound financial decisions are in a much better position to reach their financial goals and can looking forward to a life that is more financially stable and secure. Looking, therefore, into the status of the financial capability of public school teachers in the Philippines is vital not only in providing empirical evidence to existing theories on the topic, but can also provide a holistic understanding of the financial situation of public school teachers that policy-makers can use to inform public policy on the teachers' financial welfare and protection (*cf* Widdowson & Hailwood, 2007; Vyvyan, Blue & Brimble, 2014; and WB, 2015).

Jose Rizal, the Filipino national hero, once described the youth as the future of our motherland, but what kind of future our youth will become depends on the quality of teaching, mentoring, and caring their teachers are going to impart to them. If the teachers are buried in neck-deep debt, are not well equipped to manage soundly their finances, or are themselves victims of financial scams, what more can we expect from the general populace who are supposed to be trained and educated by them (Osias, 2005; and Alejandrino, 2016).

The result of this research is primarily intended to inform public policy on the welfare and protection of public school teachers, and it is hoped that it also encourage all concerned sector of the society to participate in an advocacy to improve the financial capability of our public school teachers and secure a healthy and prosperous financial well-being for these modern day heroes (*cf* Inciong, 2005; Taylor & Wagland, 2013; and Ulla, Barrera & Acompanado, 2017).

The Concept and Measurement of Financial Literacy and Financial Capability. The advocacy for an enhanced financial capability and financial inclusion among a much boarder segment of the populace has been gaining ground in many countries (Lusardi, 2008; Brunton, 2009; Van Rooij, Lusardi & Alessie, 2011; Agarwalla *et al*., 2012; Ibrahim & Alqaydi, 2013; and Mandigma, 2013). Although most of the early researches in the area of financial education used the term "financial literacy" (Lusardi, 2008; Van Rooij, Lusardi & Alessie, 2011; Atkinson & Messy, 2012; Hung, Yoong & Brown, 2012; OECD/INFE, 2013; and Lusardi & Mitchell, 2014), the most recent researches conducted by the WB (World Bank) already utilized the term "financial capability" (FINRA, 2013; and WB, 2013a, 2013b and 2015).

Even though most researches mentioned above stated that the two terms can be used interchangeably or synonymously, the WB in 2013a and 2013b report defined financial capability as a broader term than financial literacy, which refers only to the knowledge aspect of capability (WB, 2013a and 2013b). This current study adheres to the conceptual

[1]See also, for example, "Mayor Tried to Help Aman Scam Group" in *ABS-CBN News,* on 19 December 2012. Available online also at: https://news.abs-cbn.com/nation/regions/12/19/12/mayor-tried-help-aman-scam-group [viewed in Manila, Philippines: 27 December 2017].

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overlap between the two terms as used in other researches in the area, but prefers to use "financial capability" to be consistent with the 2012 National Financial Capability Survey of the FINRA (Financial Industry Regulatory Authority) Investor Education Foundation, in 2013, whose research instrument was adopted in this survey (FINRA, 2013); and with the latest survey conducted by WB, in 2015, in the Philippines which measured the financial capability and inclusion in the country (WB, 2015). Furthermore, this study also follows the WB's definition of financial capability (WB, 2013a and 2013b).

Although measuring this internal capacity is difficult, because of its multi-dimensional nature, surveys of financial literacy usually focuses on measuring some of the observable aspects of this internal capacity (WB, 2013a). Some of the identified concepts of financial capability are financial knowledge, skills, attitude, and behaviors. For example, Colmar Brunton (2009) survey in New Zealand measured financial knowledge, goal setting, financial planning, budgeting, debt management, saving, investing, and managing risk (Brunton, 2009); while the WB survey in Gaza, in 2011, focused on money management, planning and provisioning for the future, and making financial choices and financial literacy (WB, 2011). The WB survey in the Philippines focused only on knowledge of financial concepts and financial behavior and attitudes (WB, 2015).

On the other hand, M.S. Mandigma (2013), in her study of the financial capability in an academic institution in the Philippines, examined the relationship of financial capability and its elements: knowledge and understanding; skills and competence; and attitude and confidence (Mandigma, 2013). The FINRA survey, in 2013, concentrated on the four key components of financial capability: making ends meet, planning ahead, managing financial product, and financial knowledge and decision making (FINRA, 2013).

Although this current research adapted the FINRA survey instruments, it limits its investigation only on money management, planning ahead, and financial literacy as key components of financial capability of public school teachers in the Philippines.

Results of Financial Capability Surveys. Studies around the world presented an alarming trend of low financial literacy across the general populace and identified target groups (Lusardi, 2008; Brunton, 2009; Van Rooij, Lusardi & Alessie, 2011; WB, 2011; Agarwalla *et al*., 2012; Atkinson & Messy, 2012; Ibrahim & Alqaydi, 2013; Lusardi, 2013; and Lusardi & Mitchell, 2014). This is despite the growing empirical evidence showing the benefits of having a financially literate citizen (Lusardi, 2008; Cohen & Nelson, 2011; Atkinson & Messy, 2012; and Hung, Yoong & Brown, 2012), see also review of literature on the effects of financial literacy.

A. Lusardi & O.S. Mitchell (2014), for example, highlighted the finding of surveys across countries and stated that low levels of financial literacy are widespread in many countries around the world (Lusardi & Mitchell, 2014). A study made by WB (World Bank), in 2011, among the residents of West Bank and Gaza revealed the prevalence of low financial literacy in the area (WB, 2011). Moreover, A. Lusardi (2008) commented that financial illiteracy is not only widespread, it is particularly acute among specific demographic groups, such as the elderly, women, and those with low education (Lusardi, 2008).

This finding was also supported by A. Hung, J. Yoong & E. Brown (2012) which stated that discrepancies in financial literacy puts some of the more economically vulnerable groups at an even greater disadvantage, i.e. the poor, undereducated, and minority households (*cf* Calamato, 2010; WB, 2011; and Hung, Yoong & Brown, 2012). Multi-country surveys also reported the low level of financial literacy across countries (Atkinson & Messy, 2012; Lusardi, 2013; and OECD/INFE, 2013). For a more comprehensive review of empirical researches on financial literacy, see for example A. Lusardi & O.S. Mitchell (2014).

In the Philippines, latest surveys on financial capability were released just recently by the SoLAR/FLARe (Study of

Lifestyles, Attitudes and Relationships/ Financial Literacy Advocacy Reports), in 2013; G.M. Llanto, in 2015; and the WB (World Bank), in 2015. The study of the ADB (Asian Development Bank) revealed the dismal level of financial inclusion in the country, and highlighted one of its findings that many Filipinos have low access to formal financial intitutions (Llanto, 2015). On the other hand, Sun Life Philippines reported that 1 out of 5 Filipinos consider themselves as expert on money matters however, their scores on basic financial literacy quiz showed otherwise with only 8% scored above 80% and none scored more than 90% (SoLAR/FLARe, 2013).

The most recent survey on financial capability in the Philippines was conducted by the WB in 2015. Results of the survey shows understanding basic financial concepts is a big challenge for many adult Filipinos as they were only able to answer correctly less than half (3.2) of the 7 financial-related questions. The findings of these financial capability surveys in the Philippines reflected the result of the financial literacy/capability surveys around the world – that attaining financial capability has been a struggle for many people, and apparently the Filipinos are not exempted from this fact (*cf* Gropello, Tan & Tandon, 2010; and WB, 2013b and 2015).

***Teacher's Financial Literacy*.** The positive association between teacher and student academic achievement has been documented in various researches; however, various studies also confirmed the finding that the teachers understanding of financial concepts is on a decline (Otter, 2010; Han, Yin & Boylan, 2016; and Zhao & Zhang, 2017). C. Loibl (2008), in his study, and others also confirmed that teachers have insufficient knowledge of personal finance concepts (Loibl, 2008; Lusardi, Mitchell & Curto, 2010; and Otter, 2010).

Despite the numerous survey on financial literacy and capability around the world and most recently in the Philippines (SoLAR/ FLARe, 2013; and WB, 2015), there is still no study focusing on the level of financial capability of public school teachers as a significant particular target group in the Philippines. The only study that is somehow related was that of M.S. Mandigma (2013), which assessed the level of financial capability of a select group of academic personnel in a Philippine comprehensive university and how financial capability was influenced by factors, such as knowledge and understanding; skills and competence; attitudes and confidence; and demographic and socio-economic characteristics (Mandigma, 2013). .

***Research Objectives*.** The overarching objective of this research is to investigate the current status of the financial capability of public school teachers. Specifically, the research are: (1) analyzed key measures of financial capability, such as money management, ability to plan ahead, and financial literacy among public school teachers; (2) evaluate how those key measure varies among public school teachers in term of regional and school level assignment; and (3) provide data and estimates that can inform public policy on the welfare and protection of public school teachers.

METHOD

This research followed a descriptive design and utilized survey as its method. A survey has the "ability to measure attitudes, beliefs, and knowledge" (Presser *et al*., 2004; Fraenkel & Wallen, 2006; Otter, 2010; and Blair, Czaja & Blair, 2013); and is also a methodology for describing a population (Glatthorn & Joyner, 2005; Burian, Rogerson & Maffei, 2010; and Otter, 2010). About the survey, according to WB (World Bank), in 2011, states as following here:

> *[…] conducting a survey is a very common method used by policy makers to understand the nature and extent of the issues they want to address through intervention. A survey can also identify possible areas of intervention. This assessment can be repeated over time to measure progress toward the policy objectives* (WB, 2011).

***The Survey Questionnaire*.** This survey adapted the survey questionnaire used by FINRA (Financial Industry Regulatory Authority) Investors Education Foundation, in the 2012, NFSC (National Financial Study

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Capability) in the United States of America. Permission to use an abridged version of the survey questionnaire was sought from FINRA and was given by Mr. Gary Motolla; and of the NFSC, Foundation Research, through an e-mail dated on July 7, 2015 (OECD/INFE, 2011; and FINRA, 2013).

Some modifications on the questionnaire, used in the 2012 NFSC, were to achieve the general objectives of this research and cover the different areas of concern of this study, as well as to better reflect the experiences and contextual condition of the public school teachers in the Philippines. The self-administered questionnaire in this research was designed to assess the financial capability of public school teachers. Specifically, it focuses on measuring financial behavior such the ability to money management and making plan for the future and financial literacy as aspects of financial capability (Kidwell & Turrisi, 2004; and OECD/INFE, 2011).

Participants and Sampling Procedures. This survey was conducted in two regions: the NCR (National Capital Region) and Region IV-A Calabarzon. The regions were purposively selected to capture differences of the financial capability of teachers at the urban/rural level. The NCR represents the urban areas in the country, while Region IV-A Calabarzon typifies the rural areas (Reyes *et al*., 2010; and Ferrer, 2017).

The respondents of the survey are public school teachers from three DepEd (Department of Education) Schools Division in the NCR and two DepEd Schools Division from Region IV-A. The three Schools Divisions in the NCR are all City Schools Division; while the two Schools Divisions in Region IV-A are all Province Divisions. City Schools Divisions in Region IV-A were purposely not included in cluster selection. There are more Schools Divisions selected in the NCR, because it has a larger population not only in terms of number of schools but also in terms of the number of teachers than Region IV-A. The Schools Divisions were randomly selected from each of the two regions.

A four-stage stratified cluster sampling was employed to select the sample respondents of the survey per region (Barbosa *et al*., 2016; Martinez-Mesa *et al*., 2016; and Ferrer, 2017). During the first stage of the clustering, sample respondents were first clustered by Schools Division comprising each of the region. After the two Schools Divisions were, then, randomly identified per region, the respondents were further clustered by Schools District. One Schools District was selected per Schools Division.

Respondents were, then, stratified by school level: Elementary and Secondary Schools. Two Elementary and two Secondary Schools were randomly selected from each of the two Schools Districts. The respondent public school teachers were, then, randomly identified per school. Fifty percent of the teachers on each of the schools were targeted as respondents. A total of 710 teachers participated in the survey: 239 are elementary school teachers and 471 are secondary school teachers. About 499, or 70%, of the teacher-respondents came from NCR; and 211, or 30%, came from the Region IV-A Calabarzon.

Ethical procedures were strictly considered in the research. Respondents were informed that participation in the survey was voluntary and that they could refuse to participate and not answer the questionnaire given to them. In addition, they were given the option to skip any question or set of questions that made them feel uncomfortable by just indicating that they refuse to answer. Finally, the personal identity of the respondents is not asked in the questionnaire; and, thus, all respondents' identity remained confidential throughout the presentation of the results of the survey (*cf* Kelley *et al*., 2003; Jewkes, Dartnall & Sikweyiya, 2012; and Blair, Czaja & Blair, 2013).

Data Analysis. Descriptive statistics was utilized in this research. Frequencies, percentages, and mean scores were computed to examine the data gathered from the survey (Kelley *et al*., 2003; Presser *et al*., 2004; Ali & Bhaskar, 2016; Barbosa *et al*., 2016; and Zhao & Zhang, 2017). Results were also compared between the two regions: Regions IV-A and NCR (National Capital Region); and between the two school levels: Elementary and Secondary.

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Table 1:
Satisfaction with Personal Finance

	Total		Region				Level			
			IV-A		NCR		Elem		HS	
	f	%	f	%	f	%	f	%	f	%
1-3	192	27.1%	67	30.0%	125	25.1%	71	29.8%	121	25.7%
4-7	373	52.6%	109	48.9%	264	52.9%	112	47.1%	261	55.4%
8-10	59	8.3%	27	12.1%	45	9.0%	20	8.4%	39	8.3%
Don't know	85	12.0%	20	9.0%	65	13.0%	35	14.7%	50	10.6%
Total	**709**	**100%**	**223**	**100%**	**499**	**100%**	**238**	**100%**	**471**	**100%**

Note: One respondent did not answer this part of the questionnaire.

THE RESULTS AND DISCUSSION

Following the definition of financial literacy given by WB (World Bank), in 2013, and this research focuses on how the respondents act to secure for themselves the best possible financial well-being by measuring some observable aspects of this capacity, such as: *Money Management*; *Ability to Plan Ahead*; and *Financial Literacy* (WB, 2013a and 2013b).

On the Money Management. The ability to live within one's means, to balance income and expenses, and to cope with the daily nuances of one's finances is an important aspect of financial capability. The ability of managing money on a daily basis can be mirrored from personal satisfaction to one's financial condition, having a written budget, managing income and expenses, making ends meet, and saving and investing (Ferrer, 2017; and Kempson, Finney & Poppe, 2017).

First, **Personal Financial Condition.** One's ability to manage effectively and efficiently his/her finances can be gleaned from the level of satisfaction to one's financial condition (Dobre, 2013; and Kolzow, 2014). In a scale of 1-10, the respondents were asked how satisfied they are with their current personal financial condition. Although, most of the respondents are indifferent with the level of their financial satisfaction with 52.6%, who stated that their feelings are neutral, a significant number reported that they are not satisfied with their current financial condition (27.1%), compared to a smaller number stating that they are satisfied (8.3%).

It seems that there are teacher-respondents from Regions IV-A, who have a more extreme perception regarding their current financial condition as the percentage of those who reported that they are not satisfied with their current financial condition (30%) and those who are satisfied (12.1%) is higher compared to that from NCR or National Capital Region (25.1% & 9%). On the other hand, the percentage of elementary teacher (29.8%), who are not satisfied in their current financial condition is bigger than the percentage of high school teachers (25.7%). See table 1.

Second, **Budgeting.** Having a written budget is an important behavioral indicator of sound financial management. Having a budget allows one not only to plan how to use their money, but also to easily monitor their expenses later. In spite of the benefit of having a budget, close to half of the respondents stated that they do not have a written budget (47.2%), this is higher than those who indicated that they have one (39.3%). Teachers from NCR (National Capital Region) are more likely to have a written budget (40.5%) than from Region IV-A (36.5%); while there are more elementary teachers who have a written budget (44.8%) than high school teachers (36.5%).

This finding is also consistent with the finding of WB (World Bank), in 2015, that Filipino adults are having a hard time with managing their money on the day-to-day basis, especially their ability to make a written budget to plan and track their expenses (WB, 2015). See figure 1.

Third, **Managing Income and Expenses.** Asked about how they balance their income and expenses, 48.5% of the respondents reported that they are spending more than their income,

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while 32.1% are spending about equal to their income, and only 15.5% are spending less than their income. It seems that for many of the respondents, managing their day-to-day finances is a major challenge. This finding merely reflected the over-all difficulty of Filipinos in managing efficiently their finances, especially their day-to-day expenses (WB, 2013a and 2015).

More respondents from Region IV-A (55.5%) reported they are spending more than their income compared to those from NCR or National Capital Region (45.5 %). There are slightly more elementary teachers than high school teachers, who reported that they are spending more than their income (49% versus 48.2%). See figure 2.

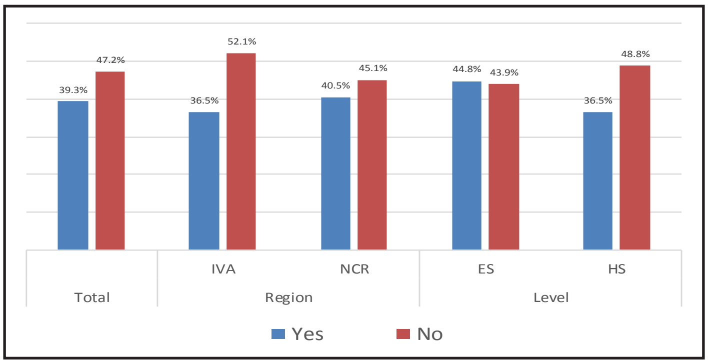

Figure 1:
With Written Budget

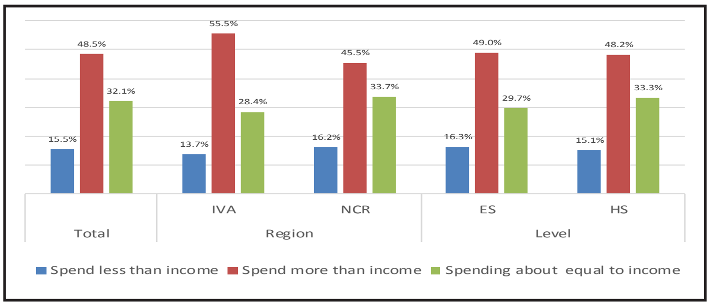

Figure 2:
Household Spending Behavior

Fourth, **Making Ends Meet.** An overwhelming majority (78.2%) of the teacher-respondents are having difficulty meeting their daily expenses. Only a few (17.6%) reported that they are not experiencing difficulty in covering their expenses. This is one of the most worrying findings of this study, many of the respondent-teachers are having a hard time even making ends meet on a daily basis. Making ends meet is maybe just one of the measures of money management, but its centrality to the overall concept of financial capability needs to be emphasized hereon (D'Ortenzio, 2012; and Morton, 2017).

If almost 80% of the teachers are experiencing difficulty in meeting their basic daily expense, it is not therefore surprising that many of them are not satisfied with their current financial condition. Notwithstanding the increases in the salary of teacher in recent years, it seems that it did not substantially improve the well-being of many public school teachers so much so that there are still a lot of them that are finding it hard even to finance their day-to-day expense. This issue needs urgent policy attention and more in-depth investigation (Leithwood *et al.*, 2004; and Lusardi & Mitchell, 2014).

Teachers from Region IV-A are having more difficulty in meeting their expenses (86.3%) than those from NCR or National Capital Region (74.7%); this is consistent with the previous findings that there are also more teachers in Region IV-A, who are having a hard time making ends meet. Also, more teachers from NCR (20.2%) compared with Region IV-A (11.4%) reported not having difficulty covering their daily expenses. More high school teachers (18.7%) reported not having difficulty in covering their expenses than elementary school teachers (15.5%). See table 2.

Fifth, **Saving and Investing.** Saving is a positive indicator of efficient management of one's finances. If a person saves, then, it is an indicator that he/she has the ability to plan ahead for the future, and more importantly has the capability to make investments that can earn him/her extra income, which will enable him/her to save even more (OIEA, 2011; Hastings, Madrian & Skimmyhorn, 2013; and Lusardi & Mitchell, 2014).

However, the survey shows that only 23.2% of the teacher-respondents indicated that they

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Table 2:
Difficulty in Covering Expenses

	Total		Region				Level			
			IV-A		NCR		ES		HS	
	f	%	f	%	f	%	f	%	f	%
Very difficult	151	21.3%	47	22.3%	104	20.8%	66	27.6%	85	18.0%
Some what difficult	404	56.9%	135	64.0%	269	53.9%	121	50.6%	283	60.1%
Not at all difficult	125	17.6%	24	11.4%	101	20.2%	37	15.5%	88	18.7%
Did not indicate	30	4.2%	5	2.4%	25	5.0%	15	6.3%	15	3.2%
Total	**70**	**100%**	**211**	**100%**	**499**	**100%**	**239**	**100%**	**471**	**100%**

Table 3:
Saving Behavior

Which best describes you?	Total		Region				Level			
			I V - A		N C R		E S		HS	
	f	%	f	%	f	%	f	%	f	%
Save money regularly	165	23.2%	35	16.6%	130	26.1%	58	24.3%	107	21.4%
Save money sometimes	267	37.6%	89	42.2 %	178	35.7%	97	40.6%	170	34.1%
Save only during special occasion	212	29.9%	66	31.3%	146	29.3%	68	28.5%	144	28.9%
Can't save, money not enough	152	21.4%	45	21.3%	107	21.4%	43	18.0%	109	21.8%
Dont' save at all	32	4.5%	7	3.3%	25	5.0%	6	2.5%	26	5.2%

save regularly, while 37.6% save money only sometime, 29.9% save for special occasion only, and 21.4% cannot save for reason of not having enough money. More teachers from NCR (National Capital Region) save money regularly (26.1%) than Region IV-A (16.6%). This is consistent with the finding that teachers from Region IV-A are having a hard time making ends meet as compared to teachers from NCR.

Those who save regularly among elementary school teachers (24.3%) are only slightly higher than those who save regularly among high school teachers (21.4%), while more high school teachers (21.8%) indicated that they cannot save money for reason of not having enough money than elementary teachers (18.0%), although again, the difference is only slight. Another important finding to take note is that more teachers from NCR (5%) indicated that they do not save at all than from Region IV-A (3.3%), while more high school teachers (5.2%) do not save at all than elementary school teachers (2.5%). See table 3.

Majority of the respondents have savings account (56.9%) and a significant number have shares in cooperatives (28.6%). However, only a few uses Treasury Bills and Bonds, and UITF (Unit Investment Trust Fund) as an investment tool (1.3% & 2.7% respectively). It seems that majority of teacher-respondents are not yet acquainted with some of the more advanced investment instruments and their financial inclusion is still limited to the traditional savings account. Access to financial services is not a substantial challenge for many public school teachers as the rate of financial inclusion among them is high, albeit comprising significantly of savings account and cooperative shares (Hastings, Madrian & Skimmyhorn, 2013; and Rillo & Miyamoto, 2016).

The problem of low financial inclusion among the general population of Filipinos identified by the ADB (Asian Development Bank) survey (cited in Llanto, 2015) is not prevalent among the public school teachers; concomitantly, data also shows that respondent-teachers have very little exposure to high yielding investment accounts, such as bonds and T-bills, UITF, Mutual Funds, and stocks which limits their capability to accumulate wealth or secure a better retirement life (Llanto, 2015; and Llanto & Rosellon, 2017).

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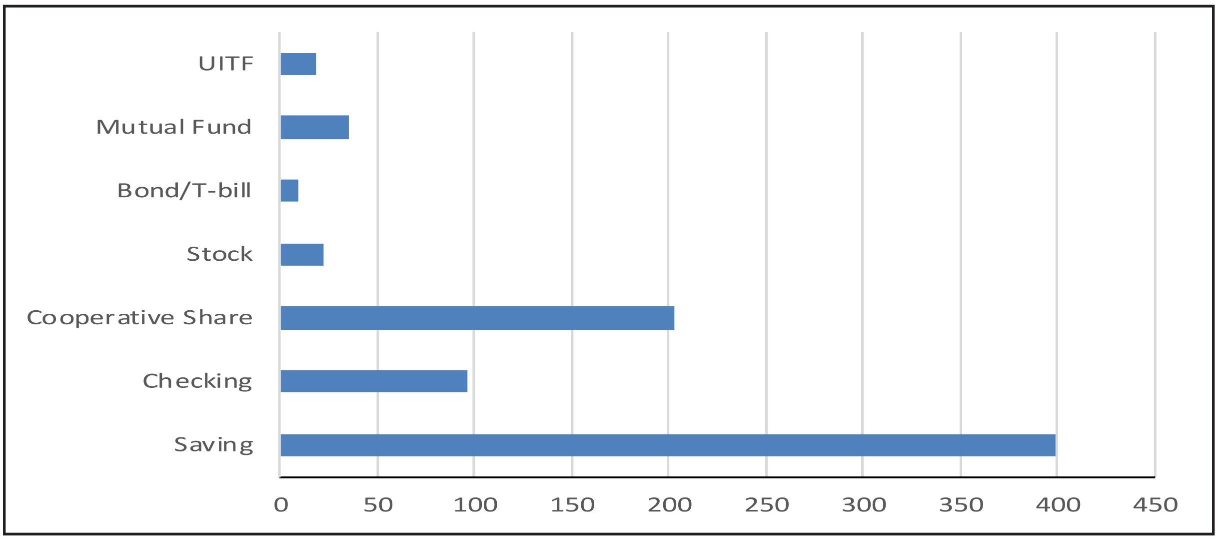

Figure 3:
Types of Account Subscribed

The same finding was also reported in the SoLAR/FLARe (Study of Lifestyles, Attitudes and Relationships/Financial Literacy Advocacy Reports), in 2013, which shows that only 1 out of 10 Filipinos resort to investment as a way to anticipate life events (SoLAR/FLARe, 2013). In the study of M. Van Rooij, A. Lusardi & R.J. Alessie (2011), they concluded that there is positive relation between stock market participation and financial literacy (Van Rooij, Lusardi & Alessie, 2011). Premising on these two studies, it is can be assumed that low level of financial literacy may have prevented many of the respondent-teachers in participating in other forms of high yielding investment accounts. See figure 3.

Ability to Plan Ahead. Life can be viewed as a series of events that are both certain and uncertain. Marriage, starting a family, sickness, retirement, and even death are life events that are certain in almost all person. Financial planning, therefore, is vital to cope with these certainties in life. On the other hand, the intrinsically uncertain nature of the future should compel individuals and households to make provision for any financial emergencies that can come their way (Walsh, 1996; and Diacon & Mahdzan, 2008).

First, **Coping with Financial Emergency.** More respondents reported not having emergency fund in case of medical emergencies, unemployment, economic recession, or other emergencies (54.9%) than those with sufficient emergency fund (39.2%). Many of them are in constant state of insecurity in case an emergency happens in their family, because they know that they do not have a sufficient buffer fund to hurdle any emergency that might occur to them personally or their family.

Although the same result was also reported by FINRA (Financial Industry Regulatory Authority), in 2013, in its own survey among adults in the United States of America, it contradicts the result of the recent survey of WB (World Bank), in 2015, conducted in the country on financial capability which shows that most adult Filipinos as highly capable in provisioning for unexpected expenses (FINRA, 2013; and WB, 2015). This finding that public school teachers in the Philippines have weaker financial capability in provisioning for their future than the general populace are a cause for concern and should be investigated further. More respondents from Region IV-A (62.6%) do not have an emergency fund than those from NCR or National Capital Region (51.7%); while elementary school teachers (55.2%) slightly outnumber those from the high school (54.8%) in not have an emergency fund. See table 4.

Table 4:
Setting Aside Rainy Day Fund to Cover 3 Months Expenses

	Total		Type				Level			
			Rural		Urban		ES		HS	
	f	%	f	%	f	%	f	%	f	%
Yes	278	39.2%	69	32.7%	209	41.9%	89	37.2%	189	40.1%
No	390	54.9%	132	62.6%	258	51.7%	132	55.2%	258	54.8%
Did not indicate	42	5.9%	10	4.7%	32	6.4%	18	7.5%	24	5.1%
Total	**710**	**100%**	**211**	**100%**	**499**	**100%**	**239**	**100%**	**471**	**100%**

Table 5:
Availed of a College Educational Plan

Respondents with financially dependent children who answered	Total		Region				Level			
			IV-A		NCR		ES		HS	
	f	%	f	%	f	%	f	%	f	%
Yes	137	19.3%	27	12.8%	110	22.0%	47	19.7%	90	19.1%
No	310	43.7%	106	50.2%	204	40.9%	112	46.9%	198	42.0%
Not applicable	232	32.7%	70	33.2%	162	32.5%	64	26.8%	168	35.7%
Did not indicate	31	4.4%	8	3.8%	23	4.6%	16	6.7%	15	3.2%
Total	**710**	**100%**	**211**	**100%**	**499**	**100%**	**239**	**100%**	**471**	**100%**

Second, **Provisioning for the Future.** We all know that just like any other commodities, college tuition fees have been raising annually, eating up a larger portion of the family income. The burden of paying the education of their children has been a major concern of all, especially those who already have difficulty managing their financial resources, due to debt problem and making ends meet (Wellen, 2004; UNESCO, 2014; and Ferrer, 2017).

Even with this situation, majority of the respondents who reported to have financially dependent children (63% of the total sample), only close to 20% are setting aside money or have availed of an education plan for their children's college education. The majority (43.7%) is not setting aside money or has not availed of an education plan. This is quite disturbing as we may probably witness an irony that many of our teachers' children are not able to graduate in college. How can we expect our public school teachers to teach effectively if they are constantly worried that their children may not be able to finish their education?

Comparing the regions, there are more teachers from NCR or National Capital Region (22%), who have set aside money or availed themselves of education plan for their children than those from Region IV-A (12.8%). This finding is expected, already having difficulties managing their resources and daily expenses, teachers from Region IV-A will also have a harder time saving money for their their children's college education compared to those from NCR. The same pattern was also observed when comparing the responses per school level. The incidence of subscription to a college educational plan for their children is low for both elementary and high school teachers. See table 5.

Financial Literacy. Following the format of the 2012 FINRA (Financial Industry Regulatory Authority) survey, self-assessment questions on financial literacy and competence, where included and followed by a five item quiz to measure objectively the financial literacy of the respondents (FINRA, 2013).

First, **Self-Perception of Financial Knowledge.** Respondents assessed their over-all level of awareness and understanding of financial knowledge on a scale of 1-7, in which 1 being very low and 7 very high. This was done with a view of comparing later the objective result of the literacy quiz vis-a-vis their subjective assessment of their financial knowledge. The result of the self-assessment

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Table 6:
How Would You Assess Your Overall Financial Knowledge?

	Total		Region				Level			
			IV-A		NCR		ES		HS	
	f	%	f	%	f	%	f	%	f	%
Very Low	25	3.5%	4	1.9%	21	4.2%	10	4.2%	15	3.2%
Low (2-3)	87	12.3%	33	15.6%	54	10.8%	34	14.2%	53	11.3%
Moderate	136	19.2%	48	22.7%	88	17.6%	48	20.1%	88	18.7%
High (5-6)	297	41.8%	85	40.3%	212	42.5%	87	36.4%	210	44.6%
Very High	39	5.5%	15	7.1%	24	4.8%	12	5.0%	27	5.7%
Dont' know	27	3.8%	6	2.8%	21	4.2%	10	4.2%	17	3.6%
Prefer not to say	43	6.1%	9	4.3%	34	6.8%	22	9.2%	21	4.5%
Did not answer	56	7.9%	11	5.2%	45	9.0%	16	6.7%	40	8.5%
Total	**710**	**100%**	**211**	**100%**	**499**	**100%**	**239**	**100%**	**471**	**100%**

seems to be very positive, as almost half of them (47.3%) reported that they have a high level of financial knowledge (scale 5-7), and only a few reported that they have low or very low financial knowledge (12.3% and 3.5% respectively).

Almost the same number of teachers from NCR or National Capital Region (47.3%) and from Region IV-A (47.4.4%) reported that they have high level of financial knowledge, but there are more teachers from NCR (4.2%) who rated themselves to be very low than from Region IV-A (1.9%). On the other hand, more high school teachers reported that they have high knowledge (50.3%) than elementary school teachers (41.4%). See table 6.

On a scale of 1-7 (1 = Strongly Disagree, 7 = Strongly Agree), teacher-respondents were also asked to self-assess how strongly they agree or disagree on the statement that they are "*good in dealing with day-to-day financial matters, such as inflation rate, interest rate, credit and debit cards, and tracking expenses*". Results revealed that the teacher-respondents acknowledged the fact that they are not good (35%) in dealing with everyday financial matters, only a few perceived themselves to be good (19%). Even those who perceived themselves to be good, more than half of them (12%) gave themselves the lowest degree of confidence.

There are more teacher-respondents from Region IV-A (30%) who also acknowledge that their knowledge is not good compared with teacher-respondents from NRC or National Capital Region (25%). On the other hand, there are more elementary teachers (30%) who regard their knowledge of these financial concepts as not good compared with high school teachers (26%). See figure 4.

The result of the two self-assessment questions is conflicting: on one hand, teachers tend to be highly confident on their assessment of their over-all financial knowledge, but when asked with a more specific question pertaining to financial matters, such as inflation rate, interest rate, credit and debit cards and tracking expenses, their perception of their knowledge turns to negative. We can only surmise that respondent-teachers are being overly confident with their perception of their over-all financial knowledge, but when confronted with more specific financial concepts or issues, they suddenly realize that their knowledge about these concepts is quite low (Otter, 2010; D'Ortenzio, 2012; and Sawatzki & Sullivan, 2017). FINRA (Financial Industry Regulatory Authority), in 2013, also reported a similar finding in the USA (United States of America), where respondents tends to over-estimate their financial knowledge (FINRA, 2013).

The self-assessment questions revealed that there seems to be a detachment between what they perceived they know and what they actually know with regards to finances. This overconfidence on their knowledge of personal finance might work against them if it will blind them from realizing the sources of their financial problems and woes, and discourage them to seek sound financial advice or to avail of financial education to

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improve their financial literacy. On a positive note, the teacher-respondents seem to quickly realize their limitation on understanding basic financial concepts when specifically confronted with these concepts. The knowledge of the perception of the teachers with regards to the level of financial literacy is important as it might determine their financial attitude and behavior (Remund, 2010; Ghani, 2013; and Karelaia & Reb, 2015).

M. Van Rooij, A. Lusardi & R.J. Alessie (2011) explained that the personal perception of an individual with regards to his financial knowledge may have an effect on financial outcomes. For example, overconfidence might dissuade one from attending financial training, seeking more information, or soliciting the advice of professional financial advisers. On the other hand, under confidence might prevent one from effectively using his knowledge to enhance his growth potential. Needless to say, this type of self-assessment questions suffers from personal biases, the inclusion of the literacy quiz will provide a more objective measure of their financial knowledge (*cf* Colthart *et al.*, 2008; Van Rooij, Lusardi & Alessie, 2011; and Leichner *et al.*, 2016).

Second, **Result of the Financial Literacy Quiz.** A five-item financial literacy quiz was given to the respondents to measure their knowledge on the basic concepts in financial literacy, such as interest rates and inflation, risk and diversification, bond prices and interest rates, and terms of mortgage or loan (Mandell, 2004; Lusardi, 2008; and Hastings, Madrian & Skimmyhorn, 2013).

With an overall mean score of 1.7 the results reveal a low level of financial literacy among the respondents. This is even lower than the result of 2012 Financial Capability Survey of FINRA (Financial Industry Regulatory Authority) among Americans, which used the same questionnaire and reported a mean score of 2.9; and the WB (World Bank) survey, in 2015, in the Philippines which reported a mean score of 3.2 in a 7-item quiz (FINRA, 2013; and WB, 2015). The respondents are quite good in answering questions on interest rates, but find it difficult to answer the rest of the questions, especially the question of bond prices and risk.

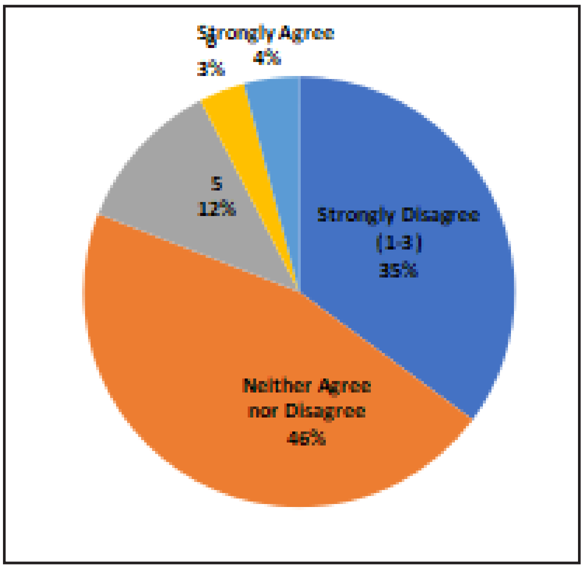

Figure 4:
"I am good in dealing with overall financial matters …"

It is clear from the result of the financial literacy quiz that public school teachers have very low awareness and understanding of advanced investment tools, such as bonds and stocks. Their diminished understanding of these financial concepts may have hindered these teachers from investing in these high yielding investment portfolios, which could have contributed to their long term financial stability and gains. In their study, A. Hung, J. Yoong & E. Brown (2012) found empirical evidence which suggests the positive impact of financial literacy to financial behavior and the financial status of individuals and cited various researches providing empirical evidences that supported this conclusion (Hung, Yoong & Brown, 2012).

It is also important to note that the number of teacher-respondents who indicated they "don't know" the answer to the questions are quite high. On the interest rate question, 13% stated they "don't know" the answer; on the inflation question 32%; bond price question 35%; mortgage/loan question 31%; and finally, on the risk question, a staggering 58% indicated that they "don't know" the answer. On the last three questions, those who indicated that they "don't know" the answer outnumbered those who answered the questions incorrectly. See figure 5.

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Majority of the respondents were able to answer 1 to 2 questions only and less than 1% obtained a perfect score, but the real cause of concern is the 15.3% who were not able to answer any of the questions correctly. These teachers do not seem to have a clear understanding of the financial concepts included in the quiz. Considering that our public school teachers belong to the most educated segment of our population, and the fact that they are supposed to impart financial literacy to their own students, these numbers represent a significant challenge not just to the teachers but to the country, which hopes to have financially literate citizens as the backbone of its economic growth (Lusardi & Mitchell, 2007; and INFE, 2008).

In the research done by M.S. Mandigma (2013), on measuring the financial capability of the academic personnel of a comprehensive university in the Philippines, her major finding was that they have above average financial capability; and she concluded that this maybe brought about by the fact that they belong from a known comprehensive university; thus, they are relatively more financially well-off (Mandigma, 2013). The research, then, concluded that financial circumstance may have an effect on the financial capability of the respondents. Following this conclusion, it can also be infer that one of the reasons for the seemingly low financial capability of our public school teachers is also their inferior financial circumstance and not just the other way around (*cf* Letkiewicz, 2012; Mandigma, 2013; and Ferrer, 2017). This finding needs to be analyzed further and validated in future study. See figure 6.

Looking closer at the mean score, it seems that teacher-respondents from Region IV-A performed better than those from NCR (National Capital Region), while high school teachers outperformed elementary school teachers. See table 6.

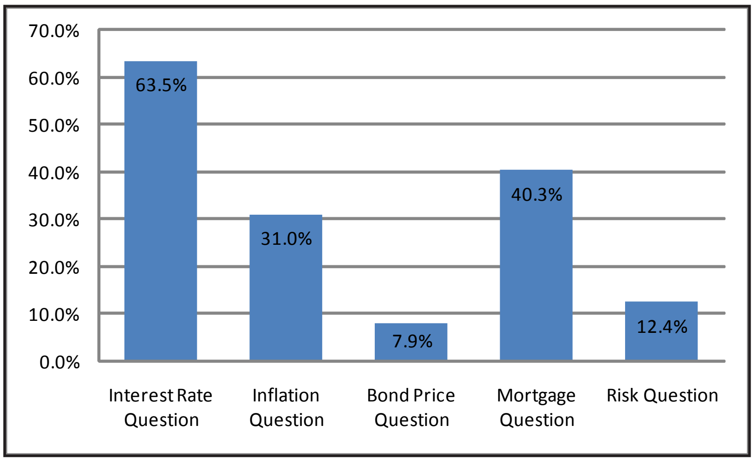

Figure 5:
Percentage of Correct Answer

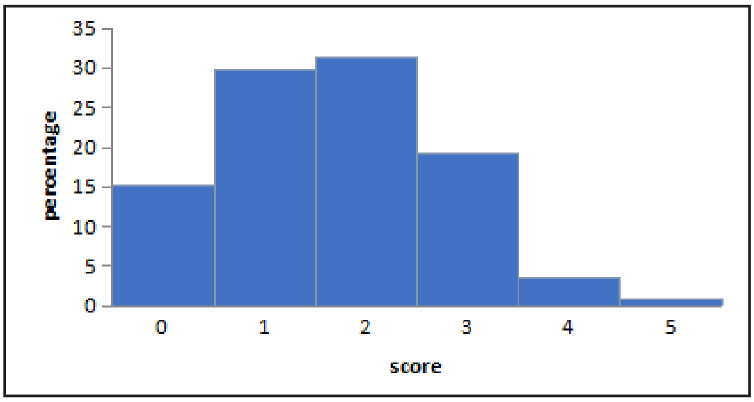

Figure 6:
Frequency of Scores

Discussion. This study assessed the status of the financial capability of public school teachers by looking into their money management ability, ability to plan ahead, and financial literacy. Results shows that the financial capability of public school teachers is far from what is desired and also reflected the negative trend on financial capability nationally (Llanto, 2015) and all over the world (Aizcorbe, Kennickell & Moore, 2003; Lusardi, 2008 and 2013; Brunton, 2009; Van Rooij, Lusardi & Alessie, 2011; WB, 2011; Agarwalla *et al*., 2012; Atkinson & Messy, 2012; Ibrahim & Alqaydi, 2013; and Lusardi & Mitchell, 2014).

Corollary to the above conclusion, the

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Table 6:
Mean Score

	Region				Level		
	Mean	**N**	**SD**		**Mean**	**N**	**SD**
IV-A	1.73	201	1.07	ES	1.63	217	1.06
NCR	1.67	452	1.13	HS	1.72	436	1.13
Total	**1.69**	**653**	**1.11**	**Total**	**1.69**	**653**	**1.11**

ability of the teachers to manage money is deficient. The negative perception of many public school teachers on their current financial condition still reflects the finding of the earlier survey by Project TAO (Tropical Atmosphere Ocean), in 2000, that their living standard is still below than what is considered sustainable, considering the value society attached to them as educators (Project TAO, 2000). Furthermore, their negative perception of their financial condition may also reflect the fact that they are having difficulty managing properly their finances. Being able to manage money effectively and efficiently is an important behavior indicator of financial capability (Project TAO, 2000; and de Guzman, 2008).

It is also important to note that the components of money management are greatly intertwined. Not having a budget means that one does not have a plan on how to use his/her money; thus, may end up overspending especially on non-essential commodities. Not living within one's means will ultimately results in borrowing and even long-term debt, which may eventually impair one's ability to meet his/her daily needs and the vicious cycle goes on. This scenario maybe true for many of these public school teachers (Van Rooij, Lusardi & Alessie, 2007; Ferrer, 2017; and Kempson, Finney & Poppe, 2017).

Findings on savings suggest that for many public school teachers saving regularly is not a habit, and for a significant number of them its underlying cause is not having enough excess money after expenses. Nearly 20% of the respondent Filipinos ran out of money, due to overspending (Llanto, 2015); this may be true also for many of the respondents of this study. Their inability to manage their money forced many of these teachers in a situation where they could hardly save money for future use.

In terms of investing, the low incidence of the participation of the respondents in high yielding accounts, such as Mutual Fund, UITF (Unit Investment Trust Fund), and the stocks due to their lack of awareness and understanding of these financial instruments are limiting their potential to acquire passive income, build-up wealth, and secure a comfortable retirement life in the future (Inciong, 2005; Dayang, 2011; Llanto, 2015; and Llanto & Rosellon, 2017).

Result of the most recent survey on financial capability in the Philippines shows that Filipinos are strong in terms of far-sightedness or the inclination to think about the future and in coping with unexpected expenses (Llanto, 2015; and Llanto & Rosellon, 2017). Unfortunately, the same is not true for the respondent-teachers of this study, for many of them, it is a great challenge to cope with financial emergency and to provide for the education of their children. This is of great concern and needs policy intervention given its implications to the health, well-being, and security of these teachers (Lavy, 2002; Drexler, Fisher & Schoar, 2014; and Ferrer, 2017).

The results of the self-assessment questions reveal a disconnect between what the teachers think they know and what they can actually do. This means that even though they perceived their financial knowledge to be adequate, it is not translated into positive actions that contribute to enhancing their financial capability and economic well-being. The performance of the teacher-respondents in the literacy quiz is a cause of concern. Although this pattern of low financial capability among the populace and target groups is also shown in most financial capability surveys around the world, including rich countries, the result of the

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quiz is quite staggering since not only is the mean score of our teacher-respondents low, it is even lower compared to international benchmark (FINRA, 2013) and the result of the WB (World Bank) survey on the financial capability among adult Filipinos (Demirguc-Kunt & Klapper, 2012; Llanto, 2015; WB, 2015; and Llanto & Rosellon, 2017).

However, since these are different surveys, the results are not necessarily comparable, but what is apparent is that our public school teachers do not have adequate knowledge on basic financial concepts, especially with regard to advanced investment tools such as for example bond and stocks. Considering these results, the government should consider studying the possibility of including financial education in the curriculum of teacher education institution and in in-service training programs given to public school teachers (Johnson & Sherraden, 2007; Jumpstart, 2008; Grifoni & Messy, 2012; and Ferrer, 2017).

CONCLUSION

This research was originally envisioned to be conducted nationally, but due to limited funding, only two regions were included in the survey. The findings, therefore, may have limited generalization ability. Moreover, further refinement of the instrument used is needed to increase its contextualization in the Philippine setting. Future research should consider harmonizing its methodology and instrument to international researches on financial capability, such as those conducted by OECD (Organisation for Economic Co-operation and Development) and WB (World Bank) to allow meaningful comparison of results and benchmarking practices.

Also, while the current study provided server insights on the current level of financial capability of the public school teachers in terms of its three key measures, further research is necessary to validate these findings. Also, the inclusion of provisioning for retirement as a component of financial planning on future research will provide deeper insights not only on the status of the financial capability of the public school teachers but also in evaluating the policy and programs of the government on providing a comfortable and sustainable retirement life for these teachers.[2]

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[2]***Statement*:** I, herewith, declare that this paper is my original work; it is not product of plagiarism and not reviewed or published by other scholarly journals elsewhere.

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Financial Capability in the Philippines
(Source: ASPENSI Document, 2/3/2018)

Result of the most recent survey on financial capability in the Philippines shows that Filipinos are strong in terms of far-sightedness or the inclination to think about the future and in coping with unexpected expenses. Unfortunately, the same is not true for the respondent-teachers of this study, for many of them, it is a great challenge to cope with financial emergency and to provide for the education of their children. This is of great concern and needs policy intervention given its implications to the health, well-being, and security of these teachers.

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