

RESEARCH ARTICLE

Impulse Buying and Financial Literacy Among Public Elementary and High School Teachers in the Philippines

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This paper primarily interrogates the assumption that financial literacy essentially decreases impulse buying. However, this may not necessarily be the case, given that individuals navigate in different social contexts. Teachers in the Philippines are stereotypically perceived as heavy financial borrowers due to their limited income. Given their quick access to private financial loan companies, it is worthy to investigate if teachers also engage in impulse buying.

The first goal of this paper is to describe the financial literacy of public-school teachers. Second, it examines the relationship between financial literacy and impulse buying. In this paper, financial literacy is operationalized in terms of two variables, namely, ownership of financial instruments and use of financial records and record keeping. This paper is based on a survey conducted among 310 public elementary and high school teachers in Metro Manila, Philippines.

Results of the study show that savings accounts and debit cards are the more popular financial instruments that many of the teachers possess. Generally, the teachers also manifest a certain level of use of financial records and of record keeping. The results likewise exhibit a negative but weak correlation between impulse buying and financial literacy in terms of use of financial records and record keeping. This means that impulse buying will likely decline if use of financial records and record keeping are constantly practiced or observed. Results of the multiple regression analysis reveal that use of financial records and record keeping predicted impulse buying. These results necessitate that financial literacy education needs to underscore the importance of the use of financial records and of keeping such records as they can influence individuals to be critical in making decisions concerning purchases.

Keywords: impulse buying, financial literacy, Filipino teachers, financial records, record keeping

JEL Classification:

This paper aims to examine impulse buying among Filipino public elementary teachers. It also investigates their level of financial literacy measured in terms of use of financial records and record keeping and ownership of various financial instruments. In addition, it examines the impact of financial literacy on impulse buying. The paper is based on a private-financial-institution-commissioned research that aimed to look at financial literacy among teachers.

The said research had twofold goals. The first was to understand what individual, familial, and social factors predispose public-school teachers to resort to loans. The second was to conduct a needs assessment to better understand what financial-literacy-related interventions can be given to them to improve their financial decision-making. The private financial institution's CSR (corporate social responsibility) wanted to conduct financial literacy sessions with teachers, as they have been disturbed by the stereotypical notion that teachers are heavy debtors.

An online news reported that Filipino public-school teachers owe a total of PhP 319 billion in debt to private and public financial lending institutions (Gulf News, 2019). According to the same report, the country's Secretary of Education attributed this debt behavior among teachers to a lack of financial literacy. The report indicates that teacher indebtedness "is due to a lack of discipline and sound personal financial management — and a habit of borrowing money from loan sharks."

There is already a body of empirical literature that looks into financially related behaviors among public-school teachers. The study of Ferrer (2017), for instance, examines the financial well-being of 710 public-school teachers. The teachers in his study have had serious debt problems that resulted in low monthly net income. Furthermore, the study attributes the lack of skills in managing money and financial planning as factors for why public-school teachers are "debt trapped."

Another study by Montalbo et al. (2017) similarly depicts a somewhat unfavorable picture of the financial well-being of teachers. Their study, which measured the basic (e.g., numeracy, compound interest, inflation) and sophisticated financial literacy (e.g., the function of the stock market, knowledge on mutual funds) of 924 teachers, revealed a very low level of knowledge in the areas mentioned.

Impulse buying can be attributed to a number of predisposing internal and external factors. At the individual level, this behavior can be facilitated by personality traits (see the study of Sofi and Nikka, 2017), individual motives, and personal financial resources. Externally, individuals may be enticed to engage in impulse buying as a result of appealing market stimuli (Iyer et al., 2020). Most studies looking into impulse buying are heavily focused on individual psychological related factors and financial assets including ownership of credit cards. However, impulse buying is also related to financial literacy. The study of Anisa et al. (2017), participated in by 733 student respondents, reveals that there is a negative relationship between financial literacy and impulse buying. This means that financial literacy can reduce the likelihood of impulse buying.

Given this backdrop, this paper aims to add to the body of knowledge concerning the nexus between financial literacy and impulse buying, albeit in the context of public-school teachers. It tests whether financial literacy lessens the likelihood of impulse buying. For our purposes, such a concept is focused on the functional (practical) rather than the content (cognitive/awareness) type of financial literacy, as most studies are focused on the latter. Hence, financial literacy as operationalized in this paper refers to the practice of keeping personal financial records and using them in making financial decisions and ownership of financial instruments.

IMPULSE BUYING

Impulse buying—also referred to as impulsive buying or impulsive purchase (Efendi et al., 2019)—is generally defined as the behavior that involves the purchase of items that are not precontemplated or are unplanned (Sofi & Nika, 2017). However, several scholars see this definition as being rather "simplistic" (Aragoncillo & Orús, 2017). To address this limitation, scholars argue that while it is unplanned, impulse buying is an agentic decision that can be influenced by external stimuli, including market appeal. The classic work of Applebaum (1951, p.176) defines this as "buying which presumably was not planned by the customer before entering a store, but which resulted from a stimulus created by a sales promotional device in the store."

The literature has identified different typologies of impulsive buying (Stern, 1962). These are pure impulse buying (based on a product's appeal), reminder impulse buying (based on existing possession of an item or based on information derived from advertising), suggestion impulse buying (based on the appeal of a unique or unfamiliar item), and planned impulse buying (intended purchase of an unplanned item based on promotions or special discounts). In a general sense, impulse buying involves "an irrational purchase and is associated with unplanned, conflicted, and emotional motivation" (Halimatussakdiyah et al., 2019, p.76). In most studies, impulse buying is investigated in specific contexts (e.g., buying cosmetics, dining out in restaurants, etc.). However, in this paper, the term is used to refer to the behavior and decision-making of individuals relating to the purchase of items or goods in a general sense.

There are different theoretical compasses regarding the study of impulse buying. In psychology, impulse buying is seen as a defense mechanism to address negative emotions and low self-esteem. It is also considered as a source of pleasure and joy. The concept is also associated with issues of self-control and self-regulation (Verplanken & Sato, 2011; Vijay & Kumar, 2020). Moreover, impulse buying can be socially influenced. The social comparison theory argues that people's behavior (including consumer behavior) is affected by their significant others. In other words, relationships with other people provide buyers with a basis for comparison (Miller et al., 2015). The study of Vijay and Kumar (2020) elucidates that the presence of peers or friends increases the propensity for individuals to engage in impulse buying.

Impulse buying, as Stern (1962) noted, basically signifies the absence of planning ("unplanned buying"). Given the context that planning is absent in impulse buying, it is therefore important to see how financial literacy can minimize such a behavior. Financial literacy is said to facilitate careful planning to arrive at sound financial decision making. Most studies agree that financial literacy (some refer to this as financial education) plays a role in sound financial behavior (e.g., saving, not engaging in impulse buying, avoidance of debt, etc.). For instance, the study of

Lee and Lown (2012) involving 500 Korean college students reveals that financial education statistically predicted saving behavior, which is a functional financial literacy indicator.

The article of Efendi et al. (2019) enumerates three overarching factors that influence impulsive buying. These include product characteristics, marketing characteristics, and consumer characteristics. At the consumer level, certain factors could play a role in impulse buying. Among these are self-control (Efendi et al., 2019; Khoirunnisaa & Johan, 2020), economic literacy (Efendi et al., 2019), peers (Efendi et al., 2019), personality (Farid & Ali, 2018), financial literacy (Khoirunnisaa & Johan, 2020), and consumer's positive emotion (Yi & Jai, 2020).

In the present paper, consumer characteristics in terms of their level of financial literacy are given focus. Financial literacy provides knowledge on financial planning, which would presumably turn individuals away from engaging in impulse buying. In other words, financial literacy provides a frame of reference for individuals to carefully make good decisions, including wise spending and financial planning. As earlier indicated, impulse buying is a behavioral repertoire signifying lack of planning. This article, therefore, assumes that through financial literacy, one is able to do away with impulse buying.

FINANCIAL LITERACY

Financial literacy is a skill that individuals should be able to master, as it is a necessary tool for daily living (Philippas & Avdoulas, 2019). 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. Their study, however, only examined the level of financial literacy and not how financial literacy can impact

teachers in terms of their financial planning, consumer behaviors, and debt behaviors.

Financial literacy (also known as financial knowledge, see Huston, 2010) is broadly defined as the competency of an individual to manage personal finances (Remund, 2010) (see also Coben et al., 2005; Kiviat & Morduch, 2012; Taylor et al., 2010). Worthington (2005, p.2), meanwhile, defines it as “the ability to make informed judgements and to take effective decisions regarding the use and management of money.” Making sense of the varying definitions, financial literacy then pertains to the use of financial information in making sound choices relating to the effective use of financial assets or resources.

The study of Xiao et al. (2010) explains that financial knowledge comes with financial behavioral repertoires. In other words, while financial knowledge is necessary, what is essential is to translate this knowledge into some forms of behavior or to achieve behavioral modifications (e.g., Reswari et al., 2018) geared toward effective financial management. While this is a very important asset, little attention has been given to financial literacy in formal education. In the words of Feslier (2006, p.1), “little formal financial education is provided in schools or in adult learning forums.”

Increasing financial literacy can be achieved through financial literacy education. This informs consumers about their rights and responsibilities and provides them with the information necessary to arrive at informed choices regarding what products and services to use (Orton, 2007). Harnisch (2010, p.3) also notes that financial education can help to achieve a “sustainable, vibrant lifestyle during work years and retirement.” It is assumed that higher financial literacy yields sound financial planning. The study of Tan and Siew (2011) concludes that financially literate individuals have exhibited the ability to financially plan their personal expenses. It is against this background that this paper examines the nexus between financial literacy and impulse buying.

Different countries assess financial literacy differently. For example, in the UK, financial literacy assessment covers ownership of bank accounts and credit cards, possession of loans, insurance, consumer protection, savings, investments, starting a job, pursuing residential arrangement (leaving home or living on your own), starting a family, buying/owning a home, mortgages, retirement, and

funeral plans. In Australia, meanwhile, assessing financial literacy includes budgeting, possession of credit cards, controlling debts, insurance, consumer protection, seeking advice/financial planning, savings, investments, buying a phone, starting work, buying a car, residential arrangements, starting a family, paying for education, losing a partner, losing a job, receiving a windfall, and retirement.

In New Zealand, components of financial education as described by Feslier (2006) include savings, debt management, investments, accumulation of assets for retirement, understanding state provision, entering into a hire purchase, compound interest, housing and business, income and expenditure, transparency in charging fees on financial products, understanding net worth, getting and paying for financial advice, understanding financial disclosure, comparing financial products, taxation effects, making a will, equity release, financial trusts, employer-sponsored retirement savings plans, student loans, and insurance.

Studies on financial literacy have two pathways. One is particularly interested in looking at a specific population’s differing levels of financial literacy. The second theme concerns itself with how financial literacy programs can increase the level of financial literacy (Tippet & Kluvers, 2007). There are existing studies that claim that financial literacy is not simply about numeracy and financial concepts. There are other factors that may influence the level of financial literacy that are not necessarily related to knowledge or cognitive abilities. For example, the study of Gathergood (2012) concludes that consumer overindebtedness happens not only because of low financial literacy but also because of self-control problems. He further adds that being able to manage debts requires self-control as well as financial organization. Moreover, he notes that respondents with self-control problems have been found to be susceptible to consistent use of credit cards, mail order, and home credit and payday loans (Gathergood, 2012).

The National Research and Development Centre for Adult Literacy and Numeracy (in Coben et al., 2005) in the UK identifies several components of financial literacy education that could be used as a basis for gauging the level of financial literacy. These components include different types of money or payments (checks and credit cards), income generation (e.g., benefits/pensions), income disposal (expenditures/taxes), gathering financial information

and record keeping (e.g., bank statements), financial planning (saving, spending, budgeting), risks and return (interest rates, insurance, personal choices, and financial complications [e.g., debt management]), consumer rights and responsibilities, sources of advice, and implications of finance (regulation, financial institutions).

Hogarth and Hilgert (2002) conducted a survey on financial knowledge, experience, and learning preferences involving some 500 households. Their financial literacy survey included knowledge item questions pertaining to credit, mortgages, and general questions (emergency funds, issuance of checks, life insurance policy). Their financial experience indicators include respondents' possession of financial instruments according to type (checking, savings, credit card, house, mutual fund, pension plan, certificate of deposit, public stocks, and bonds), proxies of net worth, and other financial experiences (monthly check verification, financial record keeping system, possession of emergency fund, credit reports review, ownership of investment accounts, and personal net worth calculation).

The systematic documents review conducted by Huston (2010) reveals that there are four major themes insofar as financial literacy is concerned. These are money basics (time value of money, purchasing power, personal financial accounting concepts), borrowing (bringing future resources into the present through credit cards, consumer loans, or mortgages), investing (saving present resources for future use through savings accounts, stocks, bonds, or mutual funds), and

protecting resources (insurance products or other risk management techniques).

CONCEPTUAL FRAMEWORK

This paper is informed by the study of Nye and Hillyard (2013). They opined that financial behavior and impulsive consumption can be influenced by both subjective numeracy and financial (quantitative) literacy. Summarily, their work underscores the idea that financial literacy influences both financial behavior and financial well-being. This means that individuals with high financial literacy are less likely to engage in impulse consumption. The present paper addresses a gap in literature, as most studies have focused on psychological and market-related factors that predispose individuals to engage in impulse buying. This paper, however, interrogates the potential influence of financial literacy to impulse buying.

For our purposes, impulse buying is operationally defined as indiscriminate spending without taking into account future needs, spending beyond one's means, spending rather than saving, using credit without carefully thinking about one's ability to pay, buying items/things that are not necessary, and purchasing items that are not urgently needed. Financial literacy, in this paper, is defined as the possession of financial instruments and use of financial records and record keeping. Financial instruments include possession of a savings account, a checking account, a debit card, a trust fund, a phone payment account, a time deposit

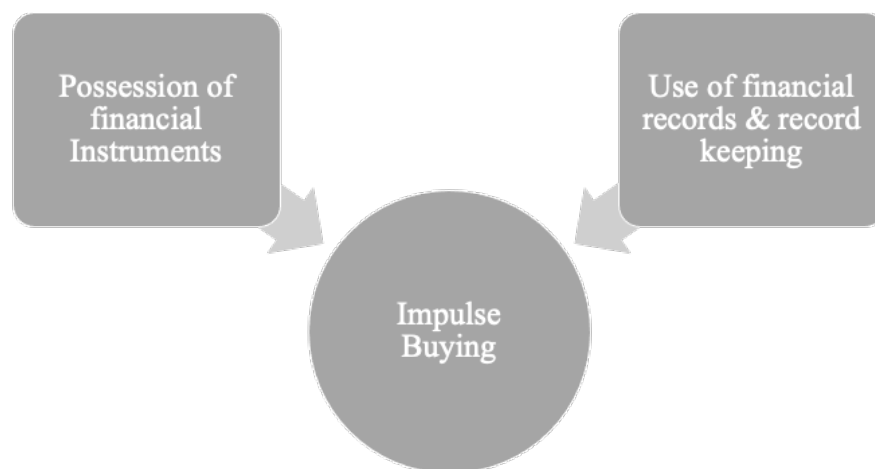


Figure 1. Factors influencing impulse buying

in a bank, stocks, bonds, a life insurance plan, and a nonlife insurance plan.

Meanwhile, financial literacy is operationalized in terms of the use of financial records and record keeping. The scale covers regular updating of passbooks, regular checking of bank statements, recording of weekly expenditures, reviewing of credit reports, keeping personal watch of financial activities, writing financial goals, calculating net worth, keeping receipts for recording, and reading and understanding bills. **Figure 1** shows the assumption of this paper, which argues that individuals who possess different financial instruments, use financial records, and do record keeping are the ones that are less likely to engage in impulse buying.

METHOD

This paper is based on a survey involving 310 teachers coming from six elementary and three high schools in Metro Manila, Philippines. These schools were purposely chosen as they were identified as partner schools of the CSR program of the private financial institution that requested the conduct of the study. The original intent of the survey was to cover all teachers of the nine schools. However, since participation in the survey was voluntary, some teachers declined from taking part. The private financial institution requested the conduct of the survey as a way of determining the financial concerns/challenges as well as the current financial literacy status among public-school teachers.

In the Philippines, debt problem among teachers is becoming serious (Reysio-Cruz, 2019). As a result, many loan companies offer different loan packages to attract teachers. The results of the survey served as a guide to come up with financial literacy learning modules that will be used in the insurance company's CSR initiative targeting public-school teachers. The private-financial-institution-funded research project included the financial literacy survey that was prepared by the researchers themselves, focus group discussions, and a pre- and posttest experiment that aimed to know the effect of financial literacy sessions on impulse buying. However, this current paper is only based on the financial literacy survey conducted with the teachers.

For this paper, financial literacy is operationalized in terms of ownership of financial instruments and use of financial records and record keeping. For the first section of the survey, the teachers were asked if

they owned any of the financial instruments, namely, a savings account, a checking account, a debit card, a phone payment account, a trust fund, a personal pension plan, a time deposit, stocks, bonds, and a life and nonlife insurance plan. In the analysis, ownership of a specific financial instrument was given one point. The highest possible score for this component was 11 points. Higher scores indicated higher financial literacy as evidenced by ownership of a number of financial instruments.

The next section of the survey covered 10 items that asked respondents about their use of financial records and record keeping. The items involved comparing current and previous utility bills, updating bank passbooks regularly, accessing bank statements regularly, recording of weekly expenditures, personally monitoring financial activities, writing down long-term financial goals, calculating net worth, keeping receipts for recording, and reading and understanding monthly bills before payment. The teachers were asked to indicate whether or not such practices were personally observed. The highest possible score for this item was 10, which indicated high financial literacy in terms of record keeping and utilization.

The last section of the survey consisted of the impulse buying scale, which contained six items. The Cronbach alpha is .748. The scale was made by the researchers themselves based on several studies on impulse buying. In the 5-point Likert scales, the teachers were asked to indicate their level of agreement or disagreement with the items (from strongly agree to strongly disagree). The items pertained to spending now without having to worry for the future, buying things beyond one's means, spending now rather than saving for tomorrow, buying things using credit cards without thinking of whether one could afford them, buying things that are not really necessary, and purchasing items that are not urgently needed. In the statistical analysis, the total mean score was computed for each respondent. A higher mean score indicated a higher level of impulse buying. Respondents with a mean score of more than 3 signified a high level of impulse buying.

RESULTS

Profile of the Teachers

As earlier indicated, this survey involved 310 teachers. A little more than half of them had served

Table 1. *Teachers' Profile*

Variables	<i>f</i>	%
Length of Years in Service		
0–10 years	135	43.5
11–20 years	74	24
21–30 years	71	22.8
31–40 years	30	9.6
Average: 15 years		
Range: 0–40 years		
Age		
22–32 years old	67	21.7
33–42 years old	90	29
43–53 years old	97	31.2
54–65 years old	56	18
Average: 42		
Range: 22–65 years old		
Year Level		
Elementary	146	47
High School	164	53
Civil Status		
Single	214	69
Married	81	26
Separated	6	2
Widow/er	9	3
Sex		
Male	40	12.9
Female	270	87.1
Educational Attainment		
College Graduate	206	66.5
Master's	103	33.2
PhD	1	.3

as public-school teachers for more than 10 years (see Table 1). The average length of years in service was 15 years. The teacher with the longest length of service had served for 40 years. Half of the teachers were 42 years old or below. The average age was 41 years. The youngest teacher was 22 years old while the eldest was 65 years old. A little more than half (69%) of the respondent teachers were single, and many of them (87.1%) were female. Three in 10 of the respondents had a master's degree. A little more than half of the respondents were teaching at the high-school level (53%).

Teacher's Impulse Buying

As previously mentioned, the study that this article is based on looked into the impulse buying

propensity among public-school teachers. Results showed that the teachers had a low level of impulse buying, as evidenced by the low mean scores in all the items. These results indicated that such practices were hardly or rarely experienced by them (see Table 2). Lower means scores on the items (with 5 as the highest) suggested that teachers were generally contemplative and did not easily make a purchase with credit cards; thus, they may not have been prone to impulse buying (Arslan, 2015). The item that had the lowest mean pertained to buying items using a credit card without having to worry about capacity to pay. The item that had the highest mean was related to spending without having to worry about the future. Though respondents may not have been inclined to use credit cards in their purchase,

Table 2. *Teachers' Mean Scores of Impulse Buying*

Items	Mean*	SD	Initial Eigenvalues			Component	
			Total	% of Variance	Cumulative %	1	2
I am prepared to spend now and let the future take care of itself.	2.7387	1.15727	2.282	38.028	38.028	.615	.513
I am impulsive and tend to buy things even when I cannot really afford them.	2.4613	.99356	1.055	17.588	55.616	.740	.324
I find it more gratifying to spend now than to save for tomorrow.	2.4871	1.08453	.975	16.249	71.865	.237	.228
I buy things using my credit card without worrying if I have the money to pay for it.	2.1419	1.04239	.684	11.403	83.267	.665	.163
I buy things that are not necessarily needed.	2.2935	1.15510	.516	8.603	91.870	.678	-.504
I sometimes purchase items that are not urgently needed.	2.6323	1.14637	.488	8.130	100.000	.631	-.596
Overall mean	2.4591						

Note. *Scoring: >3.0 (high); <3.0 (low).

Table 3. *Possession of Financial Instruments Among Teachers*

Financial Instrument	Yes	%
Savings Account	133	42.9
Checking Account	74	23.9
Debit Card	102	32.9
Trust Fund	33	10.6
Phone Payment Account	65	21.0
Personal Pension Fund	33	10.6
Time Deposit in a Bank	82	26.5
Stocks	26	8.4
Bonds	31	10.0
Insurance Plan (Life)	54	17.4
Insurance Plan (Nonlife)	21	6.8

we cannot discount the fact that they may have been inclined to spend using cash payments.

Possession of Financial Instruments

The teachers were asked if they had any of the 11 financial instruments identified for the survey. The most popular instrument was the savings account. This was shown by the fact that 42.9% of the teachers reported that they have such an instrument (see Table 3). This was followed by a debit card with 102 teachers indicating that they possess such an instrument. This result was rather expected as teachers may receive their monthly salary either through a savings account or through a debit card. The financial instruments that were least availed of were nonlife insurance (6.8%), stocks (8.4), bonds (10%), and trust funds (10.6). Overall, the most popular financial instruments utilized among the teachers were a savings account, a debit card, and a checking account. These results may imply lower perceived risks associated with financial instruments from banks, a higher familiarity, and higher use of these financial instruments.

The unpopular financial instruments were those that referred to nonlife insurance and stocks. This may imply high perceived risks associated with these financial instruments and/or associated with those financial institutions issuing those financial instruments and lower familiarity with these financial instruments and/or financial institutions.

Use of Financial Records and Record Keeping of Teachers

The teacher respondents were also asked to indicate whether or not they practiced record keeping and used financial records for assessment and monitoring. Results of the survey showed that many of the teachers (93%) claimed that they compared current and previous utility bills (see Table 4). They also reported that they usually read and understood the content of the bills before payments (82%). This may indicate that they have the mathematical skills or numeracy necessary for effective financial decision-making. The practices that were not common included reviewing credit reports, checking of bank statements, recording of weekly expenditures, and writing long-term financial goals. This may indicate that though they may have had the numeracy necessary for effective financial decision-making, they may not have been engaged in certain activities such as financial planning.

Spearman rho correlation was conducted to see the relationship between impulse buying and financial literacy (which in this article is operationalized as ownership of financial instruments and use of financial records and record keeping) (see Table 5). The test yielded no significant correlation between impulse buying and possession of the different financial instruments ($r = -0.045$, $p = 0.429$). However, there was a weak negative correlation between impulse

Table 4. *Teachers' Use of Financial Records and Record Keeping*

Items	Yes	%
I always compare my current utility bills with my previous utility bills.	288	93
I regularly update my passbook.	198	64
I regularly check my bank statement either online or on paper.	183	59
I record my weekly expenditures.	155	50
I do credit reports review.	171	55
I keep a personal record of my financial activities.	236	76
I write down my long-term financial goals.	140	45
I personally calculate my net worth.	186	60
I keep my receipts religiously for recording.	166	54
Every time I receive a bill, I usually read and understand completely what's written on it before paying.	254	82

Table 5. *Spearman Rho Correlation for Impulse Buying and Possession of Financial Instruments and Record Keeping*

Possession of Financial Instruments	Spearman rho	−0.045	—
	<i>p</i> value	0.429	—
	<i>N</i>	310	—
Record Keeping	Spearman rho	−0.122	−0.022
	<i>p</i> value	0.031	0.706
	<i>N</i>	310	310

Table 6. Results of the Linear Regression

Model Fit Measures						
Model	<i>R</i>	Overall Model Test		<i>T</i>	<i>p</i>	
		<i>R</i> ²	Adjusted <i>R</i> ²			
1	0.162	0.0262	0.0199			
Model Coefficients—Impulse Buying						
Predictor	Estimate	SE	95% Confidence Interval		<i>T</i>	<i>p</i>
			Lower	Upper		
Intercept	2.7535	0.1106	2.5359	2.9711	24.899	<.001
Possession of Financial Instrument	−0.0192	0.0200	−0.0587	0.0202	−0.959	0.338
Use of Financial Record and Record Keeping	−0.0398	0.0147	−0.0687	−0.0109	−2.709	0.007

buying and use of financial records and record keeping ($r = -0.122$, $p = 0.031$). This indicates that impulse buying may be avoided, as one uses financial records in decision-making and practices record keeping. Inconsistency in the results of the correlation of these two variables with impulse buying may be attributed to lower order mathematical thinking skills in finance (Kumleh et al., 2017), wherein effective financial decision-making is not evident.

A multiple regression was also conducted to predict impulse buying based on ownership of financial instruments and use of financial records and record keeping as independent variables (see Table 6). These variables statistically significantly predicted impulse buying ($F[2,307] = 4.14$, $p = 0.017$, adjusted $R^2 = 0.0262$). This result means that only 2.6% of the

variance in impulse buying is attributed by the model, particularly by the variable use of financial information and record keeping.

DISCUSSION

Overall, this study presents evidence that financial literacy can create positive outcomes for individuals. The results specifically reveal that financial literacy in terms of use of financial records and record keeping predicted impulse buying. This means that one is likely to engage in the behavior if one is unable to carefully make financial decisions that can be facilitated by use of financial information through personal financial records. The results of this current study resonate with the findings of Chen and Lemieux (2016) and

Yong et al. (2018), which maintained that financial knowledge (which is related to financial literacy) and attitude influenced financial behaviors including impulse buying. The study of Barbić et al. (2019) likewise identified self-control in spending, planning for the future, and seeking information as predictors of financial behaviors.

While it is significant, the results of the regression analysis must be taken with a grain of salt. The low level of propensity of the public-school teachers for impulse buying may not necessarily be because of effective financial planning but because of the very fact that they receive low monthly income and at the same time have to pay off their existing debts. These contexts do not provide them with prospects to indulge in impulse buying.

Results of this current study basically show that individuals who seek financial information, keep financial records, and use them for financial decision-making are less likely to engage in impulse buying. It is likely that individuals who keep and monitor records, write down their long-term financial goals, and use data in financial decisions are the ones who have high self-control or have achieved self-control in the process. A number of studies have shown that self-control predicts consumer behaviors and debt. For instance, the study of Kaur and Singh (2018) found out that impulsive buying behaviors are negatively correlated with self-control. This means that those with high self-control are the ones who are less likely to engage in impulsive consumer behaviors. Financial records and financial information perhaps serve as visual reminders or signals for individuals to control themselves, which in the process promote living within one's means.

The absence of a significant correlation between impulse buying and possession of the different financial instruments should also be noted, as it may be attributed to ineffective financial decision-making due to lower order mathematical thinking skills in finance (Kumleh et al., 2017). Referring to Bloom's taxonomy, thinking happens in different levels of complexity. The taxonomy refers to knowledge as "lower order" thinking (thinking involved in remembering, comprehension, and application) and "higher order" thinking (thinking involved in analysis, synthesis, and evaluation). Kumleh et al. (2017) in their study indicated that there is a hierarchical relationship between the constructs of lower order mathematical thinking skills in finance. Referring to the work of

Kumleh et al. (2017), it can thus be surmised that there is also a hierarchical relationship between lower order thinking skills and higher order thinking skills. Effective financial decision-making would require thinking skills that go beyond lower order thinking skills.

This paper offers important insights as regard to how financial literacy should be understood and how it should be taught in the classroom. As reflected in the findings, using financial information and keeping financial records were found to be associated with impulse buying. This then offers an important insight as to how financial literacy intervention needs to be framed. Instead of merely focusing on a financial knowledge base, interventions can also delve into behavioral aspects of financial literacy (such as record keeping, financial information seeking, and data-driven financial decision-making). It also needs to include ways and means of dealing with impulse buying.

Financial literacy, therefore, 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. Keeping and using personal financial records, therefore, allows an individual to reflect and make sound decisions prior to purchase, as it serves as a visible reminder of one's financial capacity.

CONCLUSIONS

This paper establishes that financial literacy is associated with impulse buying. Specifically, individuals with a high level of financial literacy in terms of use of financial information and record keeping are less likely to engage in impulse buying. However, possession of financial instruments did not have a significant association with impulse buying. It is worth noting that the choice of financial instruments is favored toward those from banks, which may imply lower perceived risks associated with these instruments, and also that the respondents are not as sophisticated in terms of considering other financial instruments.

This paper proposes that teaching financial literacy should not only focus on basic and sophisticated types of literacy but also include the practical aspects of it including development of skills in planning, budgeting,

and using financial records in coming up with sound decisions including purchase behavior. Summarily, this paper demonstrates the connection between financial planning and impulse buying. For one to be able to plan, use of financial records is thus necessary as it provides a visual reminder of one's financial status and obligations. This study indirectly manifests the possibility that debt behavior among public-school teachers may be due to other reasons like the inability to apply higher order thinking skills. It is suggested that the following variables be included in determining whether or not higher order thinking skills are being used in financial literacy and financial planning: analysis of all available financial instruments and their associated risks, review of credit reports to make sense of the available financial instruments, and evaluation of options to align with financial planning and attainment of financial goals. As a recommendation, this article endorses the need for a study to examine the relationship of financial literacy, financial planning, and debt behavior.

DECLARATION OF NO CONFLICT OF INTEREST

The authors declare no conflict of interest.

ETHICAL CONSIDERATION

The study that this paper is based on was approved by the De La Salle University Research Ethics Committee.

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