

Relationship of Financial Capability (FC) With Knowledge, Skills and Attitude: Evidence from Philippine Comprehensive University

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While a number of studies were conducted to establish the state of financial capability (FC) in several countries, relatively little research which reviews the extent of people's FC exists in a developing country such as the Philippines. This study contribute to the dearth of knowledge on the importance of FC to Filipinos It assessed the level of FC of a select group of academic personnel in a Philippine comprehensive university and how FC was influenced by factors such as knowledge and understanding, skills and competence, attitudes and confidence, and demographic and socioeconomic characteristics. Data yielded by the questionnaire was treated in-depth through inferential statistics. Results indicate that knowledge, skills and attitudes are positively related to financial behaviour. However, no significant relationship exists between demographic and socioeconomic characteristics and financial behaviour. Interestingly, results show that the academic personnel exhibited popular financial behaviour which redounds to above average FC. Results of this exploratory study may be significant to the Philippine government on a macro level and to the university where the study was conducted because they could serve as a powerful platform for policy proposal, evaluation and adoption on areas like social inclusion, increased financial literacy and financial program effectiveness.

JEL Classification: I22, M10, M12

1. Introduction

Financial capability (FC) is an existing and critical issue that warrants attention. The more financial understanding people have, the more effectively they can manage their day-to-day finances and long-term plans. This means lesser risk and responsibilities to individuals in insuring their financial well-being (Cude 2010; Colmarbrunton 2009; Stone, Wier, & Bryant 2007; SEDI 2005; de la Mata & Selosse 2005). Thus, assessment of the FC of the population has become a top priority of many governments. A number of studies were commissioned by government instrumentality or institutions in countries like the US, UK, New Zealand, and Australia to establish the state of FC of their respective citizens (e. g. Crown Copyright 2007; Atkinson, McKay & Collard 2006; Applied Research and Consulting LLC 2009; Colmarbrunton 2009; and Social Research Center for the ANZ Banking Group 2008, 2005, 2002).

From a narrower perspective, a wide range of educational institutions, major banking companies, community and consumer interest groups, government agencies, and other organizations conducted or commissioned researches on FC (e. g. Lusardi & Mitchell

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2005, 2006, 2007; Shim, Serido & Xiao 2009; McCormick 2005; Martin 2007; Fishbein & Woodall, 2006; O'Connell 2009; Landvogt 2006; Lieberman Research Worldwide 2007; Miller 2009). Most of these researches focused on levels of FC manifested in behaviours and state of financial education without establishing clear links of causality among them.

According to Miller (2009), Senior Economist of CGAP, FC is the combination of knowledge, understanding, skills, attitudes, and especially behaviours which consumers need to demonstrate to make sound personal finance decisions, given their economic and social circumstances. This definition is a clear representation of the conceptual model adapted by researchers of the Personal Finance Research Center, University of Bristol in the UK (Kempson et al. 2005) which consisted of three interrelated elements: knowledge, skills, and attitudes. The present study employed this conceptual model.

The empirical results of this study provide evidence that patterns of behaviour are strongly influenced by knowledge and understanding, skills and competence, and confidence and attitudes. These were consistent with the findings of several quantitative and qualitative researches done previously in several countries using different approaches to assess FC but with varying degrees of success. This study refutes the over-all findings of several researches that differences in demographic and socioeconomic characteristics of individuals affect their financial behaviour.

Relatively little analysis of the Filipino's FC was done in the past. Some organizations in the Philippines, whether public or private, indeed offered financial education programs without first assessing the state of FC of their target clients. Considering the dearth of knowledge on this subject area, the present study attempted to contribute to the priorities shared by institutions in the Philippines which are geared toward making the Filipino society financially informed. *Results of this exploratory study may be significant to the Philippine government on a macro level and to the university where the study was conducted because they could serve as a powerful platform for policy proposal, evaluation and adoption on areas like social inclusion, increased financial literacy and financial program*

The overall problem of this study is to assess the current state of FC of a select group of tenured faculty, guidance counsellors and librarians in an academic institution in the Philippines. Specifically, the study (1) examined the relationship between FC and its elements (knowledge & understanding, skills & competence, and attitude & confidence) and (2) compared the levels of FC across demographic and socioeconomic groups.

The first section of this paper is a summary of the literature surrounding FC manifested in behaviour and its 3 elements, grouped by topic. This is followed by the research model developed based on the literature review and the methodology used. The next section presents the findings and the discussion supporting or rejecting the hypotheses of the study. Lastly, the summary and conclusions are provided which includes the limitations of the study.

2. Literature Review

Financial capability is an important issue to both the individual (*demand side*) and the financial market as a whole (*supply side*). Studies are being conducted to develop a theoretical framework that will specify what financially capable individuals are able to do. O'Connell (2009), for his part, prepared for the Capital Market Development Task Force in

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New Zealand a financial literacy spectrum of skills and abilities that helped individuals make well-informed decisions about managing their money throughout life. The framework includes the dual consequence of improved financial literacy to both the personal financial well being of individuals and to the financial market outcomes.

On the one hand, individual aspect of the framework did not depart from the elements of FC developed for the FSA in the UK by Kempson et al. (2004), and by Atkinson et al. (2006), and the Model of Creditworthiness designed by Courchane & Zorn (2005).

The market component of the framework, on the other hand, is aligned to the alternative model presented by the Social Policy Research Unit of the Good Shepherd Youth and Family Service (Landvogt 2006) which places financial literacy within the broad social context of financial inclusion and takes community development approach to its practice.

Similar to the studies conducted or commissioned by the governments of US, UK, New Zealand, and Australia, the present study used the demand side of the FC framework applied to individuals. The model identifies the three elements that determined FC as demonstrated in the individual behaviour, namely: knowledge and understanding, skills and competence, and confidence and attitudes.

2.1 Financial Behaviour

Financial capability can be perceived in terms of behaviour, that is, what people do and what they should be capable of doing (Kempson et al. 2005). It is also the ability to make appropriate personal life choices about financial issues (Colmarbrunton 2009).

Financial behaviours are manifested in the way people manage their money – the way they keep control over their financial resources. Credit card payments habits, mortgage financing choices, and the ability to budget income and expenditures are examples of money management abilities of a financially capable person.

Saving and financial planning behaviours are important characteristics of FC. Providing for the unexpected and retirement planning are examples of these behaviours.

Undoubtedly, financially capable people are aware of the range of financial products available in the market. Thus, they are expected to shop around and select the inexpensive borrowing mechanisms suited to them.

Finally, a financially capable individual knows when to seek financial advice so he would be informed and confident in making decisions about all aspects of his financial life, including budgeting, financial product use, investing, planning, saving, and use of financial and government services. Lack of access to government and financial services may result to financial and social exclusion (SEDI 2005).

Financial capability is rightfully seen as a passport to full participation in society (Lewis 2005). Many people are disadvantaged and become very socially isolated because of their low levels of literacy, numerical skills, and financial behaviour. Further, people with low level of FC may pay higher cost for basic financial transactions, be vulnerable to uninsured risk, face increased exposure to unregulated and predatory practices, and may not take up, use, benefit from government service (SEDI 2005).

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Focus, therefore, is on changing behaviour. It is assumed that programs, information, and advice that improve financial understanding will increase aptitude and confidence thus enhancing the financial decisions and behaviours of individuals. However, some studies made clear that increased information does not automatically result in improved behaviour. De Meza, Irlenbusch & Reyniers (2008) for their part, averred that two modes of FC work appear to be the most promising. These include the use of 'norms' which means directing people to a particular action such as higher savings, and the use of active intervention by a counsellor and/or individualized advice, rather than passive information. Studies by Clancy et al (2001), and by the National Bureau of Economic Research (Braunstein & Welch 2002) showed how to increase savings among the participants, through education and by strategies and policies that forced savings. In both studies, however, the merit of financial counselling is not acknowledged.

Lastly, it must not be overlooked that household financial behaviour might not fit standard models of economic behaviour (Martin 2007). There are several economically self-destructive aspects of behaviour that FC trainers and counsellors must take into account in designing their training and counselling programs.

The study by NBER (Braunstein & Welch 2002) noted several of these behaviours which include overconfidence (investing in the absence of complete information), overreaction (exaggerated response to new information), selflessness (giving to charity despite one's financial situation), and loss aversion (delayed entry into or exit from a financial situation inconsistent with one's financial best interest). Notably, loss aversion was identified by de Meza et al. (2008) as a deep seated cognitive bias that influences financial decisions. Other biases such as procrastination, mental accounting (common tendency to create artificial budgets covering different categories of spending and saving), status quo bias (tendency for people to stick to their prior choices), and information overload (people may be distracted by too much information and choices) were also recognized.

2.2 Knowledge and Understanding

By and large, financial literacy is complicated and multifaceted (O'Connell 2009). The Applied Research and Consulting LLC (2009) defines it as the ability to do financial calculations and to understand financial concepts. Colmarbrunton (2009), for his part, sought to measure financial knowledge and understanding as they relate to mathematical and standard literacy (essential mathematical, reading, and comprehensive skills) and to financial understanding (understanding of what money is and how it is exchanged; understanding of where money comes from and goes to). Kempson et al. (2005) define financial knowledge and understanding as the ability to make sense of and manipulate money in its different forms, uses and functions.

Financial knowledge can be acquired in various ways: through experience, education and training, and passive receipt of information from different sources such as family and friends, the media, and information materials produced by the financial sectors (Kempson et al. 2005). Results of studies confirmed these acquisition modes.

Jorgensen (2007) found that students who were financially influenced by their parents had higher financial knowledge, attitude, and behaviour scores. Besides parents influencing students' financial knowledge, Shim et al. (2009) found that work experience and formal financial education in high school also have some influence but to a lesser degree than direct teaching by parents.

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Many studies examined the link between financial knowledge and behaviour. Braunstein & Welch (2002) found that knowledgeable consumers demand financial products that meet their short and long term financial needs. The study by Lusardi & Mitchell (2007) revealed that financial literacy is connected to retirement planning. Colvet, Campbell, & Sodini (as cited in Lusardi 2007) found that more financially sophisticated households are more likely to buy risky assets and invest more efficiently. Kimball & Shumway (as cited in Lusardi 2007) reported a large positive correlation between financial sophistication and portfolio choice. Lusardi & Mitchell (2006) also showed that planning and economic literacy are important predictors of savings and investment success. Bernheim (as cited in Lusardi & Mitchell 2007) argued that workers are ill-equipped to make saving decisions as they display little financial literacy.

Some studies examined the chain link between financial education and financial literacy or knowledge and between financial knowledge and financial behaviour (e.g. Hilgert, Hogart, & Beverly 2003, Courchane & Zorn 2005, de Meza et al. 2008, Cohen et al. 2006). In all these studies, a clear correlation may be evident but a causal relationship is not conclusive.

Indeed, the relationship between these variables must be established beyond doubt. Hence, the researcher hypothesizes that:

H₁: Low level of financial knowledge influences individuals to make suboptimal financial decisions.

2.3 Skills and Competence

People need the ability to apply their knowledge and understanding to manage their money and to make appropriate financial decisions. This calls for a range of specific skills, which needs to be underpinned by basic levels of literacy and numeracy (Kempson et al. 2005).

Financial skills and competence is the ability to apply knowledge and understanding across a range of contexts including both predictable and unexpected situations and also including the ability to manage and resolve any financial problems or opportunities (SEDI 2005). The specific areas of interest related to financial competence according to Colmarbrunton (2009) include understanding the main features of basic financial services; financial records; type of payment which is best to use and why; mortgages; attitudes to spending money and saving; awareness of the risk associated with some financial products and appreciation of the relationship between risk and return. Skills involved in personal financial literacy include budgeting, saving, investing, filing taxes, using credit cards responsibly, and purchasing insurance (McCormick 2005).

Many people have poor financial skills and this often leads them to make ill informed decisions on their money matters (Harker 2005). A qualitative research conducted by the Social Research Center (2008) for the ANZ Banking Group identified that one of the causes of financial difficulty among interviewees and focus groups with people who had borrowings is very low financial skills and knowledge. The analytical work on household finances in Canada by Statistica Canada (SEDI 2005) evaluated the skills that may be important to FC, but the relationship has yet to be evaluated properly. According to Gianni (2005), an increase in financial know- how and expertise will improve FC but besides traditional training courses, inputs of the decision making process must be simpler and easier to use.

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Further research on the relationship between financial skills and FC as shown in people's behaviour is important. Hence, the researcher hypothesizes that:

H₂: The lesser the financial expertise of individuals, the lesser the appropriateness of their financial behaviour.

2.4 Attitude and Confidence

Knowledge and skills alone are not enough to ensure that people manage their financial affairs appropriately. They must be prepared to take whatever steps are necessary to apply their knowledge and to exercise their skills. This is largely a question of attitude (Kempson et al. 2005). Financial attitudes are manifested in personal engagement with financial matters (e.g., attention to rates and fees, keeping up with financial news); self-perceptions (e.g. satisfaction with financial condition, perception of one's skills and financial knowledge); and preferences (e.g. appetite for risk).

The 2009 financial knowledge survey for the Retirement Commission of New Zealand (Colmarbrunton 2009) included questions designed to capture how New Zealanders feel about and see their financial situation. Disparities are most evident between the Advanced Knowledge Group and the Lowest Knowledge Group, with the former group demonstrating attitudes and beliefs that suggest more confidence with financial matters.

Two studies by Stone, Wier, & Bryant (2007) were designed to draw conclusions about the relationships between financial attitudes and financial knowledge. The studies adapted a psychological concept "self-determination theory" to develop, test, and refine three measures of "positive" financial attitudes. These are financial efficacy (the belief that one can completely manage one's finances); financial autonomy (the belief that one's financial decisions result from personal choices); and financial community and relatedness (the belief that financial resources can create and sustain community and interpersonal relationships).

The strength of financial attitudes can be measured by assessing the extent to which the willingness, ability, and confidence is reflective of a person's behaviour (de Meza et al. 2008). Thus, people's financial behaviour may primarily depend on their intrinsic psychological attributes rather than information or skills or how they choose to deploy them.

The importance of attitudes rather than teachable specific knowledge in determining FC is also highlighted in the studies done by Frade & Lopes (2005) and by Atkinson et al.(2006) in the UK Baseline Survey.

The study by Cummins, Haskell & Jerkins (2009) revealed that 95% of the students surveyed learned how to manage their money from their parents. The role of parents in moulding the financial attitudes of their children was also tackled in the study done by Shim et al. (2009). Findings of this study suggest that higher parental expectations and students' own positive attitudes toward possible financial behaviour were linked to students engaging in fewer risky behaviours.

From the foregoing discussions, the researcher hypothesizes that:

H₃: The less positive the financial attitude of individuals, the less responsible are their financial behaviours.

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2.5 Standard Demographic and Socioeconomic Characteristics

While knowledge, skills, and attitude are interrelated in determining FC, financial behaviour may vary across demographic and socioeconomic groups. Standard demographic and socioeconomic characteristics that may mitigate the relationship between the interrelated elements and FC include age and gender, race and ethnicity, education, household income, geography, marital status and employment. In fact, several studies were conducted to test the influence of demographic and socioeconomic status on FC.

The qualitative research in the UK for the Financial Services Consumer Panel in 2003 (as cited in Atkinson et al. 2007) showed that regardless of age and social class, people were generally prepared to admit to being fairly uninformed and unsophisticated in regard to financial products. Findings of the research by Fishbein & Woodall (2006) for the Consumer Federation of America reported no significant differences between men and women on their perceived need for financial education. It is the woman's life stage, particularly her marital status that primarily influences her interest in financial education.

Interestingly, most studies showed differences in FC across demographic and socioeconomic groups. The overall results of the benchmark study by the Social Research Center for the ANZ Banking Group (2005) confirm that Australian society is mostly financially literate, but there are groups that have particular challenges. The lowest level of financial literacy were associated with those having lower education, not working for a range of reasons or in unskilled work, with lower incomes, with lower savings level, single people, and people at both extremes of age profile.

Smaller studies showed similar differences but with different combinations of demographic and socioeconomic characteristics.

Building on micro-economic theory and empirical findings, Leskinen & Raijas (2005) developed a framework in which FC depends on age, education, cultural environment, and income. They used the life cycle approach in their framework. Similarly, studies by Stone, Wier, & Bryant (2007) found evidence for life stage differences and financial attitudes and knowledge. Jorgensen (2007) in his study on financial literacy of college students, found that financial knowledge, attitude, and behaviour scores significantly increase each year from freshmen to master level. The Indian Financial Literacy Report Card Write-Up (McCormick 2005) evaluated the financial literacy levels of high school seniors from all regions of the states, all income levels and in both rural and urban settings. Results showed differences in the level of the seniors' financial literacy.

Older Americans are not particularly financially literate as shown by Lusardi & Mitchell (2006). Moreover, women display much lower literacy than men and are much less likely to plan for retirement. Further, minorities and those with low education and low income are more likely to display low levels of financial knowledge. Another research by Lusardi & Mitchell (2007) also reported gender and minority gaps: white students and adults tended to score higher in financial literacy survey than their Black and Hispanic peers; and women scored lower than men. A study by Lusardi alone (2006) found that many older US households have done little or no planning for retirement and that women display much lower levels of financial literacy than men. In the same line of research, Lusardi, Mitchell, & Curto (2009) confirmed widespread illiteracy among the young. It is particularly acute among specific groups such as women, Blacks, and Hispanics, and those with low educational attainments.

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The research on women's financial needs and behaviour done for AARP by Lieberman Research Worldwide (2007) reported that two consistently overarching factors that play the most significant roles in affecting women's financial situation and attitudes are socioeconomic status and life stages. The role of the second factor is confirmed in the study by Danes & Haberman (2007) where high school females believe that managing money affected their futures more than the high school males, but males felt more confident in making money decisions.

From the literature review, women seem more vulnerable than men. This conclusion is also evident in the studies done by Weir & Willis (2000) and by Landvogt (2006). It can also be concluded that the poorer and less educated are more likely to make mistakes than the wealthier and better educated. The studies of Campbell (2006) and Cohen et al. (2006) supported this.

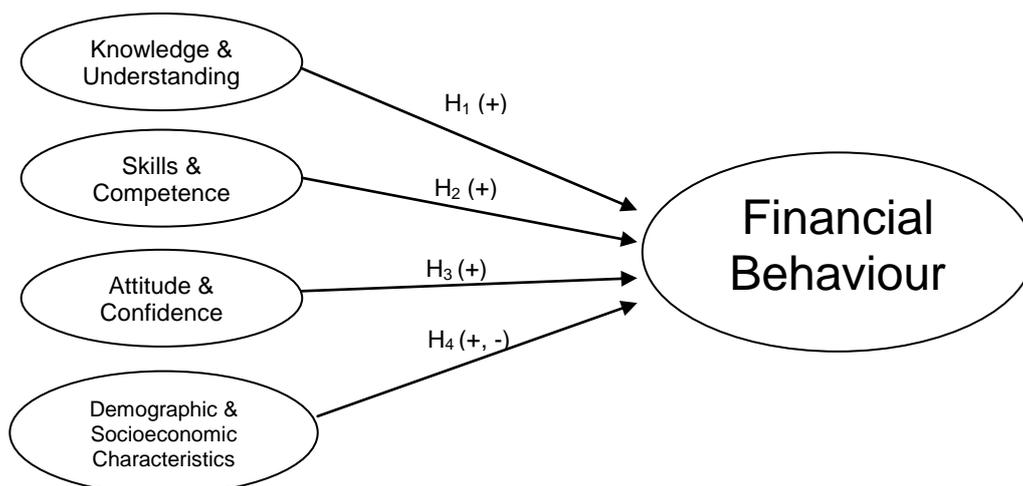
Based on the results of the studies reviewed, the researcher hypothesizes that:

H₄: There are no significant differences in the financial behaviour of individuals when grouped according to demographic and socioeconomic characteristics.

3. The Model and Methodology

Based on the literature review, a research model was developed for this study as shown in Figure 1. Financial capability is demonstrated in the behaviours of individuals. These financial behaviours were hypothesized to be dependent on three (3) constructs: knowledge and understanding, skills and competence, and attitude and confidence, which is similar to the study by Kempson et al. (2005) in the U.K. Additionally, financial behaviour was also hypothesized to be affected by different demographic and socioeconomic characteristics of individuals.

Figure 1: The Hypothesized Model



The sampling population of the study consisted of tenured faculty, guidance counsellors and librarians in 18 colleges and departments in a Philippine comprehensive university where the number of tenured professionals is not less than 1% or more than 10% of the entire population. Respondents were selected by means of a stratified multistage random sampling method. First, a stratified sample was constructed to approximate sampling population distribution by college/department affiliation. Then a stratified sample by

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gender was chosen to be representative of the sampling population distribution. Finally, the sample was set at random to approximate the population for age by gender.

From a total of 912 professionals representing the sampling population, 91 respondents or 10% were selected randomly from the following colleges or departments: Arts and Letters, Accountancy, Architecture, Commerce, Education, Engineering, Fine Arts and Design, Guidance and Counselling, High School, Library, Music, Nursing, IPEA, Pharmacy, Rehabilitation Sciences, Religion, Science and Tourism & Hospitality Management. Faculty members from the Education High School, Elementary and Civil Law were too few (less than 1% of the entire population) while those from the faculty of Medicine and Surgery were too many (more than 20% of the entire population) thus, they were not included in the sampling population.

A self-administered questionnaire was used in the study. This questionnaire was adapted from the survey instrument used by Colmarbrunton in assessing the financial knowledge level of adult New Zealanders in 2009. Permission was sought from Colmarbrunton to use an abridged version of the survey instrument and it was granted by Jocelyn Rout, Director for Social Research Agency.

The survey questions were designed to capture the most important financial knowledge, skills, attitudes and behaviours specified in the FC framework which is the foundation of this study. The following areas were considered in the questionnaire: money management, budgeting, goal-setting, financial planning, debt management, home loans and mortgages, managing risks, savings, planning for retirement and investing.

The instrument was subjected to content validation involving three (3) specialists. Afterwards, a pilot survey was conducted in the College of Commerce with two (10) non-tenured faculty members who were not included in the study population. Specifically, the ten respondents checked on the instruments length and question clarity.

The questions in the survey instrument could be categorized as questions inquiring on the respondents' financial behaviour, knowledge, skills, and attitude.

The questions on financial behaviour were designed to reflect the respondents' FC. The frequencies in each of the behaviour questions were trisected into 'popular', 'less popular', and 'unpopular' categories. The respondents' scores in the knowledge or skills questions were indicative of 'high' or 'low' financial knowledge or skills. For financial attitude questions, the frequencies were divided into 'positive' and 'not so positive' attitudes.

The hypotheses of this study were tested using 2-tailed Pearson correlation evaluated for significance at 0.01 and 0.05 levels. Other statistical tools used to test the hypotheses included the one-way ANOVA, t-test and Pearson chi-square at 0.01 and 0.05 significance levels. To estimate the reliability of the survey instrument, Cronbach's Alpha was used which yielded the following coefficients for the different variables: financial knowledge, .830; financial skills, .8215; financial attitudes, .836; and financial behaviour, .888.

4. The Findings/Discussion

Most of the respondents exhibited financially sound behaviour as 86.81% of them have financial goals, while 67%, do not have a written financial plan. Their savings behaviour

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was reflective of good money as 57.14% of the respondents save money on a regular basis while 33% sometimes save money. Coupled with the extent respondents control expenses (63.73% were keeping a fairly close watch of their expenses), their savings behaviour is above par. Payments method employed were cash (96.7%) and credit cards (63.74%). The respondents were less familiar with electronic means of payment like internet banking, automatic payment, and telephone banking. A great majority of the respondents, 79.12%, generally had no difficulties managing money, and if ever they had some, it is because of increasing prices or inflation. A not so good behaviour was reported as regards the source of financial information or advice. Most respondents (63.74%) obtained some type of financial information or advice from family and friends rather than from knowledgeable persons/institutions like banks and financial adviser.

Table 1 shows the correlations between financial behaviour and the three (3) elements of FC. All coefficients between behaviour and the elements were significant at the 0.05 levels. The correlations between behaviour and skills and between behaviour and attitudes were significant at a higher level which is 0.01. Thus, the first three (3) hypotheses of this study are supported.

Table 1: Significant Relationship between Respondents' Behaviour and FC Elements

FC Elements	Behaviour	
	Pearson Correlation	Significance Level
Knowledge	0.25	0.02*
Skills	0.31	0.00**
Attitude	0.43	0.00**

* significant at $p < .05$, ** significant at $p < .01$

To further support the study hypotheses, cross tabulations of the three elements with behaviour were done. Table 2 shows the significant relationship between respondents' behaviour and FC elements by frequency of occurrence.

It can be seen in the table that the high knowledge group exhibited popular behaviour more than the low knowledge group. In the same vein, the low knowledge group demonstrated less popular behaviour more than the high knowledge group. The low knowledge group even revealed unpopular behaviour. Since the chi-square is significant at $p < 0.05$, hypothesis 1, predicting that low level of financial knowledge causes the respondents to manifest sub-optimal financial behaviour, is supported.

Table 2 also presents the significant relationship between behaviour and skills by frequency of occurrence. The results showed similarities with the first pair of variables, knowledge and behaviour. The chi-square is also significant at $p < 0.05$ thus, hypothesis 2, predicting that the lesser the financial expertise of the respondents, the lesser the appropriateness of their financial behaviour, is supported.

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Table 2: Significant Relationship between Respondents' Behaviour and FC Elements by Frequency of Occurrence

FC Elements	Behaviour								x ² value
	Popular		Less Popular		Unpopular		Total		
	N	%	n	%	N	%	n	%	
Knowledge									0.01*
High	57	82.6	12	17.4			69	100	
Low	13	59.1	7	31.8	2	9.1	22	100	
Skills									0.02*
High	54	83.1	11	16.9			65	100	
Low	16	61.5	8	30.8	2	7.7	26	100	
Attitude									0.00**
Positive	52	86.7	8	13.3			60	100	
Not so positive	18	58.1	11	35.5	2	6.5	31	100	

* significant at $p < .05$, ** significant at $p < .01$

Similarly, the significant relationship between behaviour and the positive and not so positive attitude by frequency of occurrence is provided in Table 2. The results were in line with the findings in the first two cross tabulations as the chi-square is significant at an even higher level, 0.01. Therefore, hypothesis 3, stating that the less positive the financial attitude of the respondents, the less responsible are their financial behaviour, is supported.

Positive attitudes disclosed by the respondents are summarized in Table 3. It is very evident from the table that all survey participants were thinking about financial planning, in fact, all of them (100%) were already thinking of their life expectancy regardless of their present age. This is considered a positive attitude because respondents were aware of how long they need to provide for themselves while still living. In addition, a great majority of them were conscious of how much they can afford to save until retirement knowing the age they want to retire. Further, compared to 12 months ago, many of them were aware of their financial situation now and they were thinking their financial situation is better now or about the same.

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Table 3: Percentage of Respondents Exhibiting Positive Attitudes

Positive Attitude	%
Thinking about financial planning for retirement	
What age they want to retire	80.21
How much they can afford to save until retirement	81.32
Their life expectancy	100.00
How well off they want to be in their retirement	74.73
How much SSS pension they will receive	73.63
How much UST retirement pay will be worth	71.43
Feelings on some financial issues	
They don't feel like spending all their income as they get them	78.02
They don't feel generally out of control with their borrowings and debt	75.82
Even with UST retirement plan, they feel they need to save for retirement	74.73
They feel they are personally responsible for their financial future	71.43
They would take into account ethical, environmental and social factors when deciding where to invest	70.33
They feel it is important to shop around to get the best deal for financial products and services such as insurance, loans and credit cards	74.73
Compared to 12 months	
They think their financial situation is better or about the same	85.72
They are aware of their financial situation	82.42
They are concerned about their financial situation	74.72

The 4th and last hypothesis of the study is supported. Inferential statistics such as one-way ANOVA and t-test (Table 4) are all not significant both at the 0.01 and 0.05 levels. Thus, the hypothesis that there are no significant differences in the financial behaviour of individuals when grouped according to their demographic and socioeconomic characteristics is supported.

Table 4: Significant Differences in the Respondents' Behaviour When Grouped According to Their Demographic and Socioeconomic Profile

Profile	F-ratio / T-value	Significance Level
Age	0.08	0.97
Gender	0.02	0.89
Civil Status	0.51	0.68
Educational Attainment	0.55	0.58
Income	1.11	0.36

* significant at $p < .05$, ** significant at $p < .01$

Financial capability insures individuals to develop the skills and confidence to be aware of financial opportunities, to know where to go for help, to make informed choices, and to take effective action to improve their financial well-being (SEDI 2005). People with low FC may pay higher costs for basic banking transactions and short-term credit, face increased exposure to unregulated and predatory practices, be vulnerable to uninsured risks and may not take up, use, or benefit from government services. Consequently, this lack of

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access to government and financial services may result to financial and social exclusion. In addition, with low levels of FC, it is likely that mis-selling of financial products will continue (Atkinson et al. 2007).

The current study offers a valuable contribution to the dearth of knowledge on FC in the Philippines. Specifically, it could serve as a powerful platform for policy proposal, evaluation and adoption on different policy areas like social inclusion, increased financial literacy, FC program effectiveness.

This paper assessed the state of FC of tenured faculty, guidance counsellors, and librarians in a comprehensive university in the Philippines. A key finding of the study is that the FC of the academic personnel manifested in their behaviour is above par. This means they made informed and confident decisions about aspects of their financial lives, including but not limited to, budgeting, investing, planning, saving, financial product use and access to resources that helped them make important financial decision on their own. However, it is in the last two aforementioned areas where the academic personnel did not excel. This proves that the academic personnel were not familiar with 'more sophisticated' financial products and that it was more convenient for them to turn first to their family and friends whenever they want or need financial advice. These last two findings is quite common in different research studies done in the past (Atkinson et al., 2006). Impliedly, policy makers and financial service providers need to increase their program effectiveness through increased efficacy of program information and delivery to the public.

The empirical results of this study provide evidence that patterns of behaviour are strongly influenced by knowledge and understanding, skills and competence, and confidence and attitudes. These were consistent with the findings of several quantitative and qualitative researches done previously in several countries using different approaches to assess FC but with varying degrees of success.

People's behaviours are drawn from the body of knowledge and understanding acquired through education, training and experience and through passive receipts of information from acquaintances and the media (Kempson et al. 2005). Most studies that examined the link between financial education efforts and personal finance behaviours revealed a relationship, but it should not be taken as a given that there is a causal chain from knowledge to behaviour. Although there is a clear correlation between knowledge and behaviour in personal finance, behaviour differences may be the causal factor (Martin 2007). Additionally, Jean Hogart, Director of Consumer Education and Research for the Federal Reserve Board, Washington (in SEDI 2005) averred that while financial knowledge is important, it is wrong to assume from available research findings that financial knowledge can always correlate with informed financial behaviour.

The ability to apply knowledge and understanding to make sound financial decision require literacy and numeracy skills (Kempson et al. 2005). Further, a person's proficiency in making financial decisions is based on training and experience otherwise known as financial management skills (Sages & Grable 2010). Basic skills surveys evaluate skills that may be important to FC but this relationship has yet to be evaluated properly (SEDI 2005). In the same vein, the correlation between skills and financial behaviour found in the present study is not a concrete proof of the causal relationship between them.

People must be prepared to take whatever steps necessary to apply their knowledge and to exercise their skills. This is largely a question of attitude (Kempson et al. 2005). What people choose to know and what they do with their knowledge may primarily depend on

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their intrinsic psychological attributes (de Meza et al. 2008). Drawing on a large and wide-ranging literature on consumer behaviour, de Meza reported that people's financial behaviour may primarily depend on their intrinsic psychological attributes rather than on information or skills or on how they choose to deploy them. This is supported by the study done by Collard and McKay (2006) where a savings scheme has resulted in positive psychological and attitudinal changes among a significant proportion of participants. Thus, it can be argued that the correlation between attitude and behaviour established in different researches maybe due to psychological rather than informational explanations.

Finally, this study is not consistent with the over-all findings of several researches that differences in demographic and socioeconomic characteristics of individuals affect their financial behaviour. Some studies indicated gender and minority gaps (e.g., Lusardi & Mitchel 2007; Lieberman Research Worldwide 2007), age and education disparities (e.g., Campbell 2006; Stone 2007), social class and income differences (e.g., Miles 2004; Jorgensen 2007) and civil status discrepancies (e.g., the Social Research Center 2008, 2005, 2002). Building on micro-economic theory and empirical findings, Leskinen & Raijas (2005) developed a framework in which FC depends on age, education, cultural environment and income among other factors. Results of the current study were not in accordance with the aforementioned framework. This is a big challenge to the author and it will require further research and analysis.

5. Summary and Conclusions

Financial capability can be rightfully equated to financial behaviour that people demonstrate in making decisions regarding personal finance. Thus, the extent of a person's FC can be measured by inquiring into his behaviour.

This study assessed the state of FC of a select group of tenured faculty, guidance counsellors and librarians. The results confirmed above-average level of FC among the subject of the study in terms of managing money, savings and financial planning behaviours, awareness of financial products available and where to seek financial advice. This is understandable because the subjects of this research are persons from a known Philippine comprehensive university therefore, their financial circumstances are not inferior. This supports the findings of the study made by Kempson et al. (2005) that the nature of FC required by any individual will be determined by their financial circumstances. Findings also attest to the expectation that patterns of financial behaviour are influenced by knowledge and understanding, skills and competence, and attitude and confidence. However, in the case of demographic and socioeconomic variables, no significant relationship with financial behaviour appeared. This shows that financial capability is the concern of everybody regardless of age, gender, civil status, educational attainment and income.

Financial capability is a dynamic phenomenon (Leskinen & Raijas 2005) thus determining a threshold of sufficient capability is dependent on time and trends in the economy (Remund 2010). Studies have shown the tendency of subjects with high levels of FC to adopt a long term view and to upgrade their daily financial behaviour with attitudes and practices related to self finance like budgeting, financial check-up, and savings (Umberto & Gianni 2010). The level of FC of a group of academic personnel evaluated in the present study was found to be adequate as reflected in the ways they manage their money and debt and on how they plan for the future. But they need to update and

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upgrade their knowledge, skills, and confidence continuously because their ability to learn and adapt to new issues is a key to financial prowess.

The process of increasing and updating individual's know-how, expertise and confidence can be done through interventions and workshop programs like consumer education and information (e.g., Huston 2010; Frade & Lopes 2005; Leskinsen & Rajjas 2005; Gianni 2005). Research on the specifics of these programs that could be adopted in the Philippines need to be done by the government, the private sector and the individual Filipinos themselves.

While the current study shows that enhanced financial understanding, competence and confidence exert influence on the quality of financial decision of Filipino academic personnel, further research is necessary to corroborate these findings. Firstly, it is because the subject of the study was limited to a small group of faculty, guidance counsellors and librarians in an academic institution. To the extent that the respondents are from one of the top comprehensive universities in the Philippines, the inferences in this paper may not generalize to other academic personnel. Secondly and more importantly, the questionnaire needs more rigid validation and adaptation. The Cronbach's Alpha may be adequate for this pilot study in the Philippines but future research should aim at increasing the reliability of the survey instrument that is suited to any Filipino respondent.

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