Exploring Levels of Financial Literacy among University of Zambia Final Year Students

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Abstract

This paper explored the levels of knowledge of financial literacy among University of Zambia final year students. A questionnaire was administered to 172 pre-final graduates who were sampled systematically. SPSS version 22 was used to analyse the data. The results generally indicate that the level of financial literacy among University of Zambia final year students shows that they were well versed with the benefits of financial literacy. There levels of financial literacy were rather high because there were more students who had knowledge about financial literacy than those who did not know in the three domains, which were assessed, and these are: a) General personal finance knowledge; b) Your knowledge of savings and borrowing and investments and d) Exposure to financial and monetary issues. In terms of personal financial management practices there was no significant difference by gender in terms of holding an account across all types of accounts except for student account, which had a significant value $p < 0.05$ (Table 2). The conclusion is that the majority of students have knowledge of financial literacy. The level of financial literacy among students at the University of Zambia is above average and gender is not a factor regarding personal financial management practices in terms of holding an account across all types of accounts except for the student account, which was significant $p < 0.05$. The results are not generalizable to the wider population of University students and in order to allow such generalization, a study should be conducted using a larger sample and embracing all university students in the country. This paper describes a pioneer study on levels of financial literacy. This topic can be improved as the need for rigorous evaluation of financial literacy grows at the same speed as the creation of more complex financial products.

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1. Introduction (10pt)

Financial literacy is one of the subjects the Zambian government has been hoping could have been adopted by now in colleges and Universities'. Globally, it has gained so much interest such that it has been recognized as critically essential especially for young persons who have been found to operate in an increasingly complex environment (KPMG, 1995; Oppenheimer Funds/GirlsInc., 1997; Chen and Volpe, 1998; Greenspan, 2003; Lusardi, 2008). There has been a movement among governments around the world to spur interests in young people to be endowed with financial literacy (Atkinson and Messy, 2012). Numerous studies have been dedicated to this theme across the globe (Hira, 1993; O'Neill, 1993; Beal and Delpachitra, 2003; Cude et al, 2006; Padoan, 2008; Cole and Fernando, 2008; The Adult Financial Literacy Advisory **Group**, 2008; Remund, 2010; Cameron et al., 2014).

Research on financial literacy especially among university students in Zambia is limiting. So far, the only notable publications on the subject are about adults (DFID, 2008; FinScope Zambia, 2009; 2010; 2015;

National Financial Strategy Education for Zambia). Only one study relating to a business college in the private sector by Oppong-Boakye and Kansanba, (2013) has been done and this study was composed of a very small sample. There are however numerous gaps in knowledge relating to the adoption of financial literacy from these publications. These studies did not consider adoption of financial literacy as well as key variables related to financial literacy like general finance knowledge, savings & borrowing knowledge, investment knowledge and insurance knowledge). The purpose of this study was to explore and build evidence on the levels of knowledge of financial literacy among University of Zambia final year students.

2. Research Method

This was an exploratory and descriptive study, which was inductively driven. An exploratory research was chosen because there was no empirical evidence from earlier studies to which one can refer for information about the issue or problem. Thus, exploratory research was considered handy to aid in formulating relevant hypothesis for more definite investigation in the future (**Kotler** et al, 2006; Babbie, 2007). The descriptive component was meant to render an accurate description of the characteristics of the subject the researcher was investigating (Robson, 2002) as well as offering a comprehensive and clear picture by describing the characteristic of variables in the phenomena of interest to the researcher. A descriptive study provides a comprehensive and clear picture by describing the characteristic of variables in the phenomena of interest (Neuman, 2000; Sekaran, 2003; Shields and Rangarajan, 2013).

A survey methodology was adopted as it is the commonest form of methodology employed in many financial literacy studies (Beal and Delpachitra, 2002; and Chen and Volpe, 2002; Hastings and Mitchell, 2011; Ansong and Gyensare, 2012; Lusardi, 2012).

For this study, the study population consisted pre-final graduates from the University of Zambia. The following were the reasons that justified the decision to use University of Zamnia students for this study:

1. The first one is that the Bank of Zambia in its immediate past strategic plan had indicated to target public universities in rolling out its financial literacy programme;
2. The second is that financial literacy is not widely explored in the academic environment especially when considering emergent markets such as Zambia; and
3. It was noted that university students at the time of the study had more responsibilities than before and as such are obliged to make decisions that would define their financial independence and wealth wellbeing and security.

For this study, the study population consisted pre-final graduates who were enlisted to pursue economics in the fourth year at the University of Zambia. Data on the estimated total population of fourth year university students at the time of the study was about 275. Yamane Taro's formula of estimating the sample size when the population is known was used in this study. At 95% confidence level, a sample of 172 was considered to be adequate. The demographic yearbook from the dean of students was used as a sampling frame to select the students. Systematic sampling was the technique used to tease out students for this study.

Recognising that there is not an operationally existing valid instrument to measure financial literacy in its entirety (Remund, 2010), a proxy was developed inductively using the guidelines from previous research (see Shim et al., 2010; Knoll and Houts, 2012; Atkinson and Messy, 2012) that have evaluated literacy with various factors. A questionnaire composed of categorical nominal and Likert items was designed to measure the key variables and was employed to obtain self-reported information. The questionnaire captured information on major aspects of financial literacy, covering the following thematic areas:

a) General personal finance knowledge

b) Your knowledge of savings and borrowing and investments

c) Personal financial management practices

d) Exposure to financial and monetary issues

Exploratory Factor analyses were conducted to examine the underlying reliability patterns of the measurement scales. Cronbach's α as a reliability coefficient analyses were applied tend to measure internal consistency of the constructs. Following the analysis, inter item consistency was found to fall within the range of 0.80 – 0.97. The alpha reliability for the domains were as follows: a) General personal

finance knowledge (0.895), b) Your knowledge of savings and borrowing and investments, (0.835), c) Personal financial management practices (0.892) and d) Exposure to financial and monetary issues (0.874) which in all cases indicated a very high reliability (See Table: 1).

Table: 1. Factor Analysis Results of the Constructs of Financial literacy

	Factors	*Factor loading range for each variable*	*Variance Explained*	*Reliability*
a)	**General personal finance knowledge**	0.86 - 0.92	45.67	0.895
b)	**Your knowledge of savings and borrowing and investments**	0.80 - 0.97	34.81	0.835
c)	**Personal financial management practices**	0.81 - 0.94	15.65	0.892
d)	**Exposure to financial and monetary issues**	0.83 - 0.89	24.66	0.874

Data were analysed using SPSS software version 22 and are presented in the form of Tables and association tests. This approach is very consistent with existing literature (Danes and Hira, 1987; Volpe et al., 1996; Chen and Volpe, 1998). The analyses cover the descriptive statistics of the sample and the literacy level of students.

3. Results

Demographic Profile of Students

A number of observations can be made from Tables 2 and 3. Table 1 shows students who were enlisted according to the major programme they were pursuing. Most of the students majoring picked courses from the school of humanities (Public Administration, Social Work, Political Science, Economics, Development Studies, Business Administration, Sociology, Psychology and Demography), a few from the schools of engineering and mines and 1 only from the school of law.

Table 2 Respondents by Major of study

	Frequency	
	N	*%*
Study		
Engineering	62	36.0
Public Administration	9	5.2
Social Work	42	24.4
Political Science	9	5.2
Economics	29	16.9
Development Studies	5	2.9
Business Administration	2	1.2
Sociology	10	5.8
Psychology	2	1.2
Law	1	.6
Demography	1	.6
Total	172	100.0

Table 2 shows that about three quarters of the respondents enlisted were males as compared to just a quarter of females. The sample was rather youthful. The μ age was 24 (± 4 SD). The youngest enrolee was 19 and the oldest was 46. There were more male respondents n = 124 (72.1%) as compared to females n = 48 (27.9%). The female sample was under represented by about 7%. Over half n = 111 (64.5%) were engaged in a non-science program considered as a bachelors programme (BA) which included pursing education, law and humanities based courses whereas n = 61 (35.5%) were in a science based programme pursuing courses

like mining, engineering (considered as bachelors of Science Engineering(BSc Engineering). Within the sample, majority of the respondents n = 140 (81.9%) were in employment as compared to only n = 31 (18.1%) who were not. It turned out that all female respondents were not employed. In this sample, employment was associated with age.

Table 2 Demographic profile

	Frequency	
	N	***%***
Sex		
Male	124	72.1
Female	48	27.9
Study Programme		
BA	111	64.5
BSc Engineering	61	35.5
Employment status		
Yes	31	18.1
No	140	81.9

Just over half n = 118 (68.6%) of the respondents in the study were sponsored by the government and n = 54 (31.4%) were not. These were either self-sponsored or were sponsored some organisation. Sponsorship in form of wages or salary or a stipend and some other sources of revenue were the sources of personal income (table 3). There was however, no significant association between employment status and source of income in this sample ($p > 0.853$).

Table 3 Income Source and Sponsorship

	Frequency	
	n	***%***
Main source of income for a living on campus		
Formal employment	54	31.4
Other sources of revenue	55	32.0
Stipend from sponsor	63	36.6
Student Loan/Bursary		
Yes	118	68.6
No	54	31.4

Personal Financial Management Practices

In this sample, the respondents operated more of savings accounts as well as a student account than any other type of account. Generally, there were more female respondents who had no accounts within their population as compared to men. There was no significant difference by gender in terms of holding an account across all types of accounts except for Student Account, which had a significant value $p < 0.05$ (Table 4).

Table 4. Type of Bank Account and Associations by Gender

	Account type		***Significance***		
	Males N = 124 (72.1%)	***Females N = 48 (27.9%)***	***X^2***	***Df***	***P value***
	f	***f***			
Savings Account					
Yes	60	27	.856	1	.355
No	64	21			
Student Account					
Yes	38	23	4.510	1	.034
No	86	25			
Fixed Deposit Account					
Yes	17	2	3.207	1	.073
No	107	46			
Mutual Fund Account					
Yes	124	48	-	-	-
No	-	-			
Stock Account					
Yes	124	48	-	-	-
No	-	-			
Bond Account					
Yes	8	7	.783	1	.376
No	116	41			
Current Account					
Yes	24	6	1.129	1	.288
No	100	42			

Level of financial literacy

The level of financial literacy was measured by analysing respondents' answers to questions in the stated knowledge domains as shown below.

General Personal Finance Knowledge

This aspect of financial literacy assessed knowledge in seven areas which included:

1) Personal finance literacy
2) Personal financial planning
3) Personal budget
4) Turning items into cash easily
5) Net value of a person's asset
6) Interest rate on savings account
7) What usually pays the most

Regarding knowledge on what personal finance literacy could help respondents, it was noted that respondents were well versed with the benefits of financial literacy especially avoiding being victimised by financial scams, learning the right approach to invest in your future needs and buy the right kind of insurance and lead

a financially secure life through forming healthy spending habits. Being victimised by financial scams and learning the right approach to invest in your future needs and buying the right kind of insurance had the lowest scores (table 4).

Table 4: Knowledge about Help from Personal Finance Literacy

	Frequency	***Percent***
Avoid being victimised by financial scams	5	2.9
Learn the right approach to invest in your future needs and buy the right kind of insurance	12	7.0
Lead a financially secure life through forming healthy spending habits	33	19.2
Do all of the above	115	66.9
I don't know	7	4.1
Total	***172***	***100.0***

Considering personal finance literacy which is the financial management in which an individual performs to budget, save, and spend monetary resources over time, taking into account various financial risks and future life events, only 18 n = 32 (18.6%) did not know. The majority knew about personal finance panning especially when it comes to establishing an adequate financial record keeping system, developing a sound yearly budget of expenses and income and especially preparing plans for future financial needs and goals (Table 5).

Table 5: Knowledge about Personal financial planning

	Frequency	***Percent***
Establishing an adequate financial record keeping system	14	8.1
Developing a sound yearly budget of expenses and income	19	11.0
Preparing plans for future financial needs and goals	41	23.8
All the above	66	38.4
I don't know	32	18.6
Total	***172***	***100.0***

Relating to personal budgeting, when a person would prepare a finance plan that would be handy in allocating future personal income towards expenses, savings and debt repayment, it was evident that nearly every respondent had knowledge in this domain. A greater number of them n = 61 (35.5%) selected making priorities on spending with a few n = 12 (7%) selected monitoring the sources of income (Table 6).

Table 6: Knowledge about Personal financial planning

	Frequency	***Percent***
Allocate future personal income towards expenses	30	17.4
Prioritise your spending	61	35.5
Monitor the sources of your income	12	7.0
All the above	69	40.1
Total	172	100.0
Total	***172***	***100.0***

Relating to the conversion into cash ready to be used of current assets like money in a fixed deposit account, money in a current account and a car into or other liquid assets, only n = 13 (7.6%) of the respondents were aware of converting such current assets as compared to n = 146 (84.9%) who were aware. Most of them favoured converting cash from money in a Current Account than money in a Fixed Deposit Account or A car (table 7).

Table 7: Knowledge about Cash Conversion

	Frequency	***Percent***
Money in a Fixed Deposit Account	26	15.1
Money in a Current Account	119	69.2
A car	14	8.1
I don't know	13	7.6
Total	172	100.0
Total	***172***	***100.0***

When the respondents were asked about their net asset value (NAV) of assets being the value of a person's assets minus the value of the liabilities held, only n = 47 (27.3%) had the right knowledge being the difference between liabilities and assets. The rest n = 125 (73.7%) did not – though within this, n 37 (21%) were honest and admitted they did not know what the net value of assets was (Table 8).

Table 8: Knowledge about Net value of assets

	Frequency	***Percent***
The difference between your expenditures and income	32	18.6
The difference between liabilities and assets	47	27.3
The difference between your cash inflow and outflow	13	7.6
The difference between your assets and expenditures	43	25.0
I don't know	37	21.5
Total	***172***	***100.0***

In terms of an account with the most value to a customer, just over three quarters of the respondents n = 133 (77.3%), indicated that the fixed deposit account had the most value and n = 9 (52%) did not know (Table 9).

Table 9: Knowledge about Account type of most value

	Frequency	***Percent***
Fixed Deposit	133	77.3
Current Account	30	17.4
I don't know	9	5.2
Total	***172***	***100.0***

Knowledge of Savings and Borrowing and Investments

This aspect of financial literacy assessed knowledge in seven areas which included:

a) Guaranteeing a loan for a friend

b) Interest

c) Sources charging a higher interest on the loan

d) Overdraft

e) Factor that a lender/bank uses when deciding whether to approve a loan

f) Listed/issued shares

g) Short-term investment

In this study, knowledge about guaranteeing a loan was rather high as n = 112 (65.1%) answered correctly if one signed a guarantee for a friend or family member, and as such was a guarantor of the loan. As for all the other responses, they were incorrect and it cab taken as 'not aware (Table 10).

Table 10: Knowledge about guaranteeing a loan

	Frequency	*Percent*
You become responsible for the loan payments if your friend defaults	112	65.1
It means that your friend cannot receive the loan by himself	24	14.0
You are entitled to receive part of the loan	8	4.7
You are in a better position to earn a personal loan	5	2.9
I don't know	23	13.4
Total	172	100.0

When respondents were asked whether they knew what happened in relation to compounding interest in the event that they invested K10, 000 at 20% for a year. relating to the balance at the end of the year, n = 110 (64%) got the correct answers being (a) Interest is higher when compounded daily rather than monthly, (b) interest rate is higher when compounded yearly rather than quarterly and (c) it would be K1,200 no matter how the interest is compounded. N = 62 (36%) got it wrong by answering that interest rate was higher when compounded yearly (Table 11).

Table 11: Knowledge about Compounding Interest

	Frequency	*Percent*
Interest is higher when compounded daily rather than monthly	42	24.4
Interest rate is higher when compounded yearly rather than quarterly	10	5.8
K1,200 no matter how the interest is compounded	58	33.7
Higher if the interest rate is compounded	62	36.0
Total	**172**	**100.0**

In the sample, just about half n = 97 (56.4) of the respondents in the sample understood what a bank overdraft was when a customer had a deficit in a bank account caused by drawing more money than the account holds and less than half n = 75 (43.6%) did not understand what it was (Table 12).

Table 12: Knowledge about An overdraft

	Frequency	*Percent*
Occurs when you write a K1,000 cheque when you have K500 in your current	97	56.4

account		
Is a stop-payment order written by the payee	10	5.8
Will result in fines	14	8.1
All of the above	25	14.5
I don't know	26	15.1
Total	**172**	**100.0**

Nearly every respondent n = 153 (89%) was aware of the critical factor that borders on the various sources of information that provides consumer credit information on individual consumers if they wanted to get a loan for a variety of uses as compared to n = 19 who were no aware and though that education and occupation were factors (Table 13).

Table 13: Knowledge about factors for approve a loan

	Frequency	*Percent*
Education and Occupation	9	5.2
Payment Record (Credit Reference Bureau Record), income and collateral security	153	89.0
I don't know	10	5.8
Total	**172**	**100.0**

Knowledge about, regulation of shareholding, listing of companies and selling as well as buying of shares was well known by respondents. One hundred and twenty two (76.1%) were aware as compared to n = 41 (23.8%) who were not aware (Table 14).

Table 14: Knowledge about shares

	Frequency	*Percent*
Lusaka Stock Exchange	122	70.9
Securities and Exchange Commission	9	5.2
I don't know	41	23.8
Total	**172**	**100.0**

Knowledge on short-term investments were any asset that is anticipated to expire within one to three years and has low risk offering low returns was assessed among respondents. Within the sample, n = 40 were not aware of what short-term investments were while others though that .mortgages were a type of short investments (Table 14).

Table 14: Knowledge about short-term investment

	Frequency	*Percent*
Shares	34	19.8
Treasury Bills	82	47.7
Bonds	16	9.3
Mortgage	4	2.3
I don't know	36	20.9
Total	**172**	**100.0**

4. Discussion and Analysis

Generally level of financial literacy among University of Zambia final year students were well versed with the benefits of financial literacy. There levels of financial literacy could be considered to be rather high because there were more students who had knowledge about financial literacy than those who did not know in the three domains which were assessed and these are:

a) General personal finance knowledge.
b) Your knowledge of savings and borrowing and investments
d) Exposure to financial and monetary issues

In terms of personal financial management practices there was no significant difference by gender in terms of holding an account across all types of accounts except for student account which had a significant value $p < 0.05$ as shown in Table 2.

There are similar outcomes of this study and notably Mandell (1997), Huddleston-Casas et al. (1999), Williams-Harold (1999) and the National Council on Economic Education (NCEE, 2005). The only difference is that the University of Zambia study did not look for differences on opinions and decisions across business and non-business students. The researcher is arguing that the results provide important insight into financial literacy knowledge among students. There is therefore reason to believe that the majority of students possess adequate knowledge relating to financial literacy.

The implications of such findings do not require urgent need to ratify and develop effective actions. What is needed is to foster financial illiteracy. One of the possible measures to be taken to foster this is the inclusion of matters of personal financial management and financial literacy promoting in all economic courses. An additional possible measure relates to promoting personal financial literacy in the University and the Central Bank can achieve this through the National Strategy for Financial Education .

Significance and limitations of this study

Like all studies, this study has notable limitations. These results are not affirmative and seem to suggest that students could be influenced to have these knowledge levels as a result of learning from family economics, and consumer economics. These may have been taught in the university or from other sources like the family or friends. Since there are no robust tests done to determine whether programmes may have an influence on the lower levels of knowledge, it is not possible to account for those students who had low levels of financial literacy. There might be need in future to test personal finance theories such as social exchange theory and Andragogy (adult learning theory). These results are not generalisable beyond the University of Zambia. There may be need to include students from other students and to consider conducting comparative studies between business students and non-business students.

However, in spite of these limitations, this study is significant for a number of reasons. The study's results could:

1) Buttress the need for government to strengthen strategies in financial education and literacy, which may have been implemented. This is critical in that understanding financial literacy can help policy makers design effective interventions targeted at the young population, hence the need for this research.

2) Help in curriculum review that could remove the danger among students of beginning a downward financial spiral of debt that they will not easily repay while in university or after they have gained fulltime entry into the workplace following the government's plan to introduce the Loan Scheme , hence the need for this research.

3) Provide a methodology trail for future research and this is because, to the best of the researcher's knowledge, this is the first comprehensive study on financial literacy of university students in Zambia and the methodology that will be used could be replicated for a much more wide study involving other tertiary institutions.

4) The results of the study could be of interest to policymakers in the Ministries of Higher Education and Finance who may be concerned with financial well - being and the balance between personal and institutional responsibility.

The results are not generalizable to the wider population of University students and in order to allow such generalization, a study should be conducted using a larger sample and embracing all university students in the country. This paper describes a pioneer study on levels of financial literacy. This topic can be improved as the need for rigorous evaluation of financial literacy grows at the same speed as the creation of more complex financial products.

5. Conclusion

The data which has been presented reveals that the majority of students have knowledge of financial literacy. The level of financial literacy among students at the University of Zambia is above average and gender is not a factor regarding personal financial management practices in terms of holding an account across all types of accounts except for the student account which was significant $p < 0.05$. The results provide evidence of the current state of affairs and it is possible that knowledge of financial literacy may change over the years. The results are important because they provide evidence of the current state of affairs and it is possible that the views held by new students may change over the years.

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