

The Financial Literacy of Non-business University Students in South Africa

Olawale Fatoki

*Department of Business Management, Turfloop Campus, University of Limpopo,
Limpopo Province, South Africa
E-mail: Olawale.fatoki@ul.ac.za*

KEYWORDS Financial Literacy. Non-business. University. Students. South Africa

ABSTRACT The objective of the study was to assess the level of financial literacy of non-business university students in South Africa. Financial literacy impacts on an individual's financial decisions especially in the area of savings, borrowing, retirement planning, or portfolio choice. Data was collected through the use of self-administered questionnaires in a survey. The survey was conducted at two universities located in Gauteng and Limpopo provinces of South Africa. The participants in the study were final year agriculture and chemistry students. Descriptive statistics was used for data analysis. The results indicated that non-business students have a low level of financial literacy. Recommendations to improve the financial literacy of students are suggested

INTRODUCTION

Lusardi and Mitchell (2011) point out that individuals need financial skills to survive in today's volatile economic environment. Less financial literate individuals are less likely to plan for retirement, less likely to participate in the stock markets and more likely to have more costly debt. Financial literacy impacts on an individual's financial decisions especially in the area of savings, borrowing, retirement planning, or portfolio choice. De Bassa Scheresberg (2013) agrees that the financial markets have become more complex in the last twenty years. In this new financial landscape, individuals have greater responsibility for their financial security than in the past. This implies that wise and timely saving and investment decisions can be the key to financial comfort. Failure to plan for a financial future can have dire consequences. According to Lusardi et al. (2010), consumers nowadays must confront complicated financial decisions at a young age. Financial mistakes made early in life can be very costly. Young people often carry large amounts of student loans or credit card debt. This may negatively impact on their ability to create and accumulate wealth. Debt-Free (2014) reports that in South Africa, the number of young people in the 18 to 25 year age group who have become over indebted has grown significantly in the past year. More than 50% of these consumers are battling to pay their debt. Student debt has increased by more than 100% in the last three years. In 2010, less than 10% of students had access to credit cards. 43% now have access to this form of credit.

Financial literacy also impacts on savings by young people. Chowa and Ansong (2010) point out the ability of youths to save and accumulate assets becomes very important as this will impact on their ability to accept financial responsibilities and plan for the future. Kotze and Smit (2008) find that household savings have reduced in South Africa. This has been triggered by mounting personal debts. The demand for information on personal finance is increasing. To assist younger consumers and students, it is of critical importance for researchers to understand financial literacy among young people (Lusardi et al. 2010). Financial education is the key to decrease financial problems, especially among young adults (Ansong and Gyensare 2012). According to Shaari et al. (2013), financial literacy can prevent the university students from engaging in extensive debt especially credit card debt. Cude et al. (2006) point out that financial decisions students make in the university have an important influence on their financial situation after university. Furthermore, the financial situation of students in the university can affect their academic performance. Students need to make financial decision on whether to save, spend or invest based on their financial knowledge. By assessing the financial literacy level of the students, researchers can understand better the financial habits and behaviours of the students.

Objective of the Study

The objective of the study is to assess the level of financial literacy of final-year non-busi-

ness university students. These are students that have not done a lot of finance courses that are one of the key sources of financial knowledge.

Literature Review

Huston (2010) points out that there is no universally accepted definition of financial literacy. Authors have proposed several definitions. Huston (2010) describes financial literacy as measuring how well an individual can understand and use personal finance-related information. In addition, financial literacy includes the ability and confidence of an individual to use his/her financial knowledge to make financial decisions. The Organisation for Economic Cooperation and Development (2005) defines financial education leading to financial literacy as: *“the process by which financial consumers/investors improve their understanding of financial products and concepts and, through information, instruction, and/or objective advice, develop the skills and confidence to become more aware of financial risks and opportunities to make informed choices, to know where to go for help, and to take other effective actions to improve their financial well-being.”* Cude et al. (2006) define personal financial literacy as *“the ability to read, analyse, manage and communicate about the personal financial conditions that affect material well-being”*. The United States Financial Literacy and Education Commission (2007) describes financial literacy as *“the ability to use knowledge and skills to manage financial resources effectively for a lifetime of financial well-being”* ANZ (2008) defines financial literacy as *“the ability to make informed judgments and to take effective decisions regarding the use and management of money”*. ANZ (2011) asserts that financial literacy consists of five separate components. These are keeping track of finances, planning ahead, choosing financial products, staying informed, and financial control.

Lusardi and Mitchell (2013) point out that theoretical models link financial literacy to consumer behaviour especially the aspects of savings and consumption. The theoretical models assume that people are able to formulate and execute saving and consumption plans and these require expertise in dealing with the financial markets, knowledge of purchasing power, and the capacity to undertake complex economic

calculations. Thus consumer behaviour and its link to financial literacy can be linked to the works of Modigliani and Brumberg (1954) and Friedman (1957). According to Modigliani and Brumberg (1954), individual receives utility only from present and prospective consumption. The rate of consumption in any given period is a facet of a plan which extends over the balance of the individual's life, while the income accruing within the same period is but one element which contributes to the shaping of such a plan. Friedman (1957) suggests that the total amount spent on consumption is on the average the same fraction of permanent income, regardless of the size of permanent income. The magnitude of the fraction depends on variables such as interest rate, degree of uncertainty relating to occupation, ratio of wealth to income, family size. This suggests that financial literacy can be used to improve consumer and business behaviour.

Miller et al. (2009) and Glaser and Walther (2013) ascertain that financial literacy is important for several reasons. Financial literacy can help to prepare consumers for tough financial times, by promoting strategies that mitigate risk such as accumulating savings, diversifying assets, and purchasing insurance. Financial literacy also helps to improve behaviour such as the avoidance of over-indebtedness. Financial literacy enables people (individuals and business owners) to make better financial decisions and to understand and manage risk. Financially literate consumers and business owners help to reinforce competitive pressures on financial institutions to offer more appropriately priced and transparent services. Cull and Whitton (2011) point out that the financial literacy of young people is of critical importance as they enter adulthood. Young people are faced with a huge array of financial products and services to choose from at a time when they are also embarking on major financial and life cycle events. Furthermore, lifestyle aspirations encouraged by the influence of advertising and the media are also likely to increase young people's reliance on debt. Thus bad financial decisions early in life can have disastrous consequences later in life. The dire consequences include huge debt, poor credit ratings and bad health. Financial literacy can help to improve saving behaviour, wealth accumulation, retirement planning and debt management and manage debt (Lusardi and Mitchell 2011), (Ludlum et al. 2012). According

to de Bruin et al. (2007), financial literacy is associated with better financial and general life outcomes. Individuals with lower levels of financial literacy are more likely to have costly mortgages. De Bruin et al. (2010) point out that in the course of everyday life, people make a variety of financial decisions about saving, investing and borrowing. Financial decisions at times require accurate assessments of inflation rates. Financial literacy helps individuals to make less volatile estimates of inflation over time.

Opong-Boaky and Kansamba (2013) point out that ineffective financial management can result in behaviours that make consumers vulnerable to severe financial crises. It is important to improve financial literacy of students at the university level so they would have positive attitudes to financial matters before they enter the job market. In addition, students of today are potential entrepreneurs of tomorrow. Financial literacy positively impacts on the success of entrepreneurial ventures. Bruhn and Zia (2011) find that entrepreneurs with higher levels of financial literacy show better business performance and sales. Andoh and Nunoo (2011) find that the financial literacy of owners of SMEs is a very important factor in explaining utilization of financial services by SMEs. Low levels of financial literacy can prevent SMEs from understanding and assessing financial products from financial institutions. According to Kotzè and Smit (2008), lack of personal financial literacy impacts negatively on the financial management of new ventures and can lead to possible failures of SMEs. Sucuahi (2013) points out that a good financial foundation of the entrepreneurs is a significant barometer of the success and growth of the enterprises. In addition, financial literacy impacts on access and payment of loans. A good level of financial literacy can improve access to finance by new ventures (Wise 2013) and reduce the chance of loan default (Kotzè and Smit 2008).

RESEARCH METHODOLOGY

The study was conducted among final year undergraduate students in the Departments of Agriculture and Chemistry at two selected universities located in the Limpopo and Gauteng Provinces of South Africa. The population of students in the two departments was 152. Data was collected through the use of self-adminis-

tered questionnaire in a survey. Questionnaires were distributed in class with the approval of the lecturers. Participation was voluntary and confidentiality was assured. Convenience sampling method was used. The questionnaire was divided into three sections. The first part focused on the gender of the respondents. The second part assessed the questionnaire assessed financial literacy using an adapted version of the Financial Literacy questionnaire for college students by the JumpStart Coalition (JumpStart 2008). The questionnaire consisted of 30 questions grouped under four main sections. The four sections focused on understanding of income, savings and investment, money management and spending and debt. The questionnaire was adapted to fit the South African context. Lucey (2005) points out that the JumpStart surveys possess moderately high inter-correlation consistency overall and some degree of face and content validity. This is consistent with other studies on financial literacy of students such as Bongini et al. (2012) and Boyland and Warren (2013). The third part focused on assessing financial attitudes and behaviour. It consisted of five questions adopted from Jorgensen (2007). Descriptive statistics was used for data analysis.

RESULTS AND DISCUSSION

One hundred and twenty-eight questionnaires were distributed to students that were present in class with the assistance of the lecturers. One hundred and ten questionnaires were returned. The response rate was 86%. The gender distribution of the respondents was forty-one males and sixty-nine females. Eleven questionnaires were found unusable because of missing values. Ninety nine questionnaires were usable. These included thirty five males and sixty four females.

Table 1 depicts the mean of the percentage of the correct scores to the questions. The mean

Table 1: Mean percentage of correct scores

<i>Questions</i>	<i>No. of</i>	<i>No. of</i>	<i>No. of</i>
<i>1-30</i>	<i>right</i>	<i>right</i>	<i>right</i>
	<i>answer</i>	<i>answers</i>	<i>answers</i>
		<i>male</i>	<i>female</i>
Mean of percentage scores	47.01%	44.58%	49.44%

is 47.01%. This is lower than the mean score for all university students (61.95%) obtained by the Jump\$tart survey of 2008. In addition, Chen and Volpe (1998) in an analysis of the personal financial literacy of college students grouped the mean percentage of the correct scores into three. (1) More than 80% which represents a relatively high level of financial knowledge (2) 60%-70% which represents a medium level of financial literacy and 3) below 60% which represents a low level of financial literacy. Using Chen and Volpe's grouping, the results of this study (47.01%) indicates a low level of financial literacy by non-business students. Chen and Volpe (1998) argue that the low level of financial literacy of business students can be attributed to the lack of personal finance in the university curriculum especially for non-business students who have not been exposed to modules on financial management. In addition, most of the students are young and still at the early stage of their financial cycle. At this stage, students in general are exposed to only a limited number of financial issues related to savings and investment because most of their incomes are spent on consumption and not investment.

Ansong and Gyensare (2012) note that non-business students' lower level of financial literacy compared to business students can be attributed to their level of prior knowledge of financial issues. Shaari et al. (2013) point out that there is a relationship between financial courses taken in college and students' knowledge of finance. In addition, the mean percentage of the correct scores of female respondents is 49.44% and that of male respondents is 44.58%. The results suggest a slightly higher level of financial literacy by female students compared to male students. The results are inconsistent with the results of the study by Ansong and Gyensare (2012). The study finds that male working-students demonstrate a higher level of financial literacy than female working-students. Danes and Haberman (2007) and Peng et al. (2007) also find that males scored better in the financial knowledge compared to the females. Ibrahim et al. (2009) however find that there is no difference between the level of financial knowledge between males and females students.

Table 2 depicts the mean of percentage scores of the correct answers for four major measures of financial literacy. The 30 questions on financial literacy can be grouped under four major cate-

gories. (1) Understanding income: this includes the importance of education, skills and location, sources of income and anticipating taxes and other deductions (2) understanding money management. This includes financial goals and plans and understanding insurance (3) understanding savings and investment. This includes budgeting to save, short and long-term savings and investment strategies, risk, return and liquidity and impact of taxes and inflation on savings and investment decisions and 4) understanding spending and debt. This includes spending now versus later, the price of credit, credit history, rights and responsibilities and credit overextension.

Table 2: Mean of percentage scores of correct answers for the groups

	<i>Mean of percentage score of right answers</i>	<i>Mean of percentage score of right answers (Male)</i>	<i>Mean of percentage score of right answers (Female)</i>
Understanding income	56.37%	54.40%	58.34%
Understanding money management	23.54%	25.87%	21.21%
Understanding savings and investment	48.64%	43.69%	53.58%
Understanding spending and debt	49.85%	46.52%	53.17%

The results of the four groups indicate that non-business students scored the lowest in understanding money management. This is the major group that significantly brought down the financial literacy scores of non-business students. Male students (25.87%) did better than female students (21.21%). The mean of the percentage scores of correct answers for understanding savings and investment is slightly below 50%. Females (53.58%) performed better than males (43.69%). Students performed averagely well with understanding spending and debt (49.85%). Females (53.17%) performed better than males (46.52%). Students have their best performance in understanding income (56.37%). The Jump\$tart survey of 2008 also showed that university students performed the best in understanding income (56.1%) and poorly in money management (40.9%). Boyland and Warren (2013) also find that the performance of students

was the greatest in understanding income (59.7%) and lowest in money management (44.8%).

Financial Attitudes and Behaviour

Five questions adapted from Jorgensen (2007) were used to assess the financial attitudes and behaviour of non-business students.

- (1) Ability to manage your own finances. The results indicated that 19 respondents are not sure at all of their ability, 45 respondents are not too sure, 25 respondents are somewhat sure and 10 respondents are very sure of their ability. The results indicate that most of the respondents are not confident about their ability to manage their personal finance.
- (2) Interest in own financial knowledge. 3 respondents are very uninterested in financial knowledge, 5 respondents are somewhat uninterested, 2 respondents are not sure, 32 respondents are somewhat interested and 57 respondents are very interested in financial knowledge. The results indicate that most of the respondents are interested in financial knowledge
- (3) Willingness to take a personal finance course as an elective if offered. 94 respondents are willing and 5 respondents are unwilling to take a personal finance course. The results indicate that most of the respondents are willing to take a personal finance course.
- (4) Keep of transaction records. 94 respondents do not keep any records, 4 keep minimal record and 1 keep detailed record. The results indicate that most of the respondents do not keep transaction records.
- (5) Saving of money. 27 respondents save money and 72 do not save. The results indicate a low saving habit by the respondents.

The results suggest that the financial attitudes and behaviour of non-business students are weak. However, students seem interested in financial knowledge and are also willing to take a course in personal finance.

CONCLUSION

The objective of the study was to assess the level of financial literacy of non-business uni-

versity students in South Africa. Financial literacy impacts on an individual's financial decisions especially in the area of savings, borrowing, retirement planning, or portfolio choice. Financial education is the key to decrease financial problems, especially among young adults. Financial decisions students make in the university have an important influence on their financial situation after university. Students need to make financial decision on whether to save, spend or invest based on their financial knowledge. The mean of the percentage of the correct scores to the questions is 47.01%. This indicates a low level of financial literacy for non-business university students. Female students slightly performed better than male students. The 30 questions on financial literacy were grouped under four major categories. (1) understanding income (2) understanding money management (3) understanding savings and investment and (4) understanding spending and debt. The results of the four groups indicate that non-business students scored the lowest in understanding money management and highest in understanding income. The results suggest that the financial attitudes and behaviour of non-business students are weak. However, students are interested in financial knowledge and are also willing to take a course in personal finance.

RECOMMENDATIONS

The results indicated a low level of financial literacy for non-business university students. To improve financial literacy, the study makes the following recommendations. Financial management and personal finance should be built into the curriculum for non-business students from the first year in the university. Universities should develop a campus-wide, coordinated financial literacy program directed toward students and staff. Universities can offer online hubs of financial education information. This can be promoted through the use of social networking. In addition, seminars and programs should be held by organisations such as the Financial Service Board, National Credit Regulators to increase students' awareness of financial literacy and debt management. University should appoint financial counsellors to advise students on personal finance. The media can also help to promote financial literacy through programmes. This can help to educate parents

and families on financial literacy with positive impact on students.

LIMITATIONS AND AREAS FOR FURTHER STUDY

Data was collected from only two non-business departments at two universities. Therefore, caution must be taken in interpreting the findings and in making generalisations. Data collection could be expanded to include a larger sample from other universities.

REFERENCES

- Andoh FK, Nunoo J 2011. Sustaining Small and Medium Enterprises through Financial Service Utilization: Does Financial Literacy Matter? From <<http://ageconsearch.umn.edu/bitstream/123418/2/Sustaining%20SME%20article.pdf%20Jacob%20Nunoo1.pdf>> (Retrieved on 18 November 2013).
- Ansong A, Gyensare MA 2012. Determinants of university working-students' financial literacy at the University of Cape Coast, Ghana. *Int J of Bus and Man*, 7(9): 126-135.
- ANZ 2008. Survey of Adult Financial Literacy in Australia From <http://www.anz.com/Documents/AU/Aboutanz/AN_5654_Adult_Fin_Lit_Report_08_Web_Report_full.pdf> (Retrieved on 27 November 2013).
- ANZ 2011. Adult Financial Literacy in Australia . From <<http://www.financialliteracy.gov.au/media/465153/2011-adult-financial-literacy-full.pdf.pdf>> (Retrieved on 27 November 2013).
- Bongini P, Trivellato P, Zenga M 2012 Measuring financial literacy among students: An application of Rasch analysis. *Elect J of App Stat Ana Elec*, 5(3): 425-430.
- Boylard J, Warren R 2013. Assessing the Financial Literacy of Domestic and International College Students. From <http://scholarsarchive.jwu.edu/mba_student/18/> (Retrieved on 18 November 2013).
- Bruhn M, Zia B 2011. Stimulating Managerial Capital in Emerging Markets: The Impact of Business and Financial Literacy for Young Entrepreneurs. From <<http://econ.worldbank.org/external/default/main?page>> (Retrieved on 27 March 2014).
- Chen H, Volpe RP 1998. An analysis of personal financial literacy among college students. *Financial Ser Rev*, 7(2): 107-128.
- Chowa G, Ansong D 2010. Youth and savings in assets Africa. *Children and Youth Ser Rev*, 32(11): 1591-1596.
- Cude B, Lawrence F, Lyons A, Metzger K, LeJeune E, Marks L, Machtmes K 2006. College Students and Financial Literacy: What They Know and What We Need to Learn. From <https://www.cgsnet.org/ckfinder/userfiles/files/College_Students_and_Financial_Literacy.pdf> (Retrieved on 27 March 2014).
- Cull M, Whitton D 2011. University students' financial literacy levels: Obstacles and aids. *The Econ and Labour Rel Rev*, 22(1): 99-114.
- Danes SM, Haberman HR 2007. Teen financial knowledge, self-efficacy, and behaviour: A gendered view. *Fin Cou and Plan*, 18(2): 48-60.
- De Bassa Scheresberg C 2013. Financial literacy and financial behavior among young adults: Evidence and implications. *Numeracy*, 6(2): 1-21
- De Bruin B, Parker W, Fischhoff B 2007. Individual differences in adult decision-making competence. *J of Per and Soc Psy*, 92: 938-956.
- De Bruin B, van der Klaauw W, Downs JS, Fischhoff B, Topa G, Armantier O 2010. Expectations of inflation: The role of financial literacy and demographic variables. *J of Con Affairs*, 44: 381-402.
- DebtFree 2014. 43% of Students Reported Having a Credit Card. From <<http://www.bdlive.co.za/economy/2013/07/05/youth-spending-report-finds-student-debt-is-exploding>> (Retrieved on 18 March 2014).
- Friedman M 1957. *A Theory of the Consumption Function*. Princeton: Princeton University Press.
- Glaser M, Walther T 2013. Run, Walk, or Buy? Financial Literacy, Dual-Process Theory, and Investment Behavior From <http://www.busman.qmul.ac.uk/newsandevents/events/eventdownloads/bfwg_conference_2013acceptedpapers/114912.pdf> (Retrieved on 18 March 2014).
- Huston SJ 2010. Measuring financial literacy. *J of Consumer Affairs*, 44(2): 296-316
- Jorgensen BL 2007. Financial Literacy of College Students: Parental and Peer Influences. From <<http://pdf-release.net/3462123/Financial-Literacy-of-College-Students:-Parental-and-...-Virginia-Tech>> (Retrieved on 18 March 2014).
- JumpStart 2008. The Financial Literacy of Young American Adults. From <<http://www.jumpstart.org/assets/files/2008SurveyBook.pdf>> (Retrieved on 22 March 2014).
- Ibrahim D, Harun R, Isa ZM 2009. A study on financial literacy of Malaysian degree students. *Cross Cultural Com*, 5(4): 51-59.
- Kotze L, Smit AvA 2008. Personal financial literacy and personal debt management: The potential relationship with new venture creation. *Southern African J of Entre and Small Bus Man, Pretoria*, 1(1): 35-50.
- Lukey TA 2005. Assessing the reliability and validity of the JumpStart survey of financial literacy. *J of Family and Eco Iss*, 26(2): 283-294.
- Ludlum M, Tilker K, Ritter D, Cowart T, Xu W, Smith BC 2012. Financial literacy and credit cards: A multi campus survey. *Int J of Bus and Soc Sci*, 3(7): 25-33.
- Lusardi A, Mitchell OS, Curto V 2009. Financial Literacy Among the Young: Evidence and Implications for Consumer Policy. From <<http://www.nber.org/papers/w15352>> (Retrieved on 10 March 2014).
- Lusardi A, Mitchell OS 2011. Financial literacy and retirement planning in the United States. *J of Pension Eco and Finance*, 10(4): 509-525.
- Lusardi M, Mitchell O 2013. The Economic Importance of Financial Literacy Theory and Evidence. From <<http://arno.uvt.nl/show.cgi?fid=129675>> (Retrieved on 18 March 2014).

- Miller M, Godfrey N, Levesque B, Stark E 2009. The Case for Financial Literacy in Developing Countries: Promoting Access to Finance by Empowering Consumers. From <<http://brigaders.wdfiles.com/local—files/professional%3Abusiness-project-resources/Financial%20Literacy.pdf>> (Retrieved on 20 February 2014).
- Modigliani F, Brumberg R 1954. *Utility Analysis and the Consumption Function: An Interpretation of Cross-section Data*. New Brunswick: Rutgers University Press.
- Oppong-Boakye PK, Kansamba R 2013. An assessment of financial literacy levels among undergraduate business students in Ghana. *Research J in Fin and Acct*, 4(8): 36-49.
- Organisation for Economic Co-operation and Development 2005. Improving financial literacy: Analysis of Issues and Policies From <<http://titania.sourceoecd.org/v1=4607980/cl=25/nw=1/rpsv/ij/oeecdthemes/9998007x/v2005n30/s1/p11.>> (Retrieved on 20 February 2014).
- Peng TCM, Bartholomae S, Fox JJ, Cravener G 2007. The impact of personal finance education delivered in high school and college courses. *J of Fam and Eco Iss*, 28(2): 265-284.
- Shaari NA, Hasan NA, Kumar R 2013. Financial literacy: A study among the university students. *Int J of Cont Res in Bus*, 5(2): 279-299.
- Sucuahi WT 2013. Determinants of financial literacy of micro entrepreneurs in Davao City. *Int Jof Acc Res*, 1(1): 44-51.
- The United States Agency for International Development 2009. Development of Strategy Options for SME Financial Literacy. From <http://pdf.usaid.gov/pdf_docs/PNADP093.pdf> (Retrieved on 22 March 2014).
- Wise S 2013. The impact of financial literacy on new venture survival. *Int J of Bus and Man*, 8(23): 30-39.