Asian Economic and Financial Review
ISSN(e): 2222-6737/ISSN(p): 2305-2147
journal homepage: http://www.aessweb.com/journals/5002

DETERMINANTS OF FINANCIAL LITERACY AMONG THE NATIONAL UNIVERSITY OF LESOTHO STUDENTS

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ABSTRACT

As per the results gender is important in determining the level of financial literacy among NUL students. Consistent with literature, the results indicate that NUL male students are more financially knowledgeable than their female counterparts. This may be due to the fact that male students, on average, are the ones with less fear of engaging in financial commitments like borrowing from informal financial institutions. They, therefore, in the process get to acquire financial knowledge. In the similar vein, major of study by the respondents was also found important in determining the level of financial literacy among NUL students. However, place of residence was found to have little or no impact on the level of financial knowledge. Age was also not found to have a considerable impact on the level of financial literacy among the students. This could be due to the fact that the students, on average, are of the same age category and hence lack of age variation. To bridge the gap between financial literacy level of male and female students as well as business major and non-business major students, the ministry of education and training should consider introducing financial education into the core curriculum of secondary, middle level and higher learning institutions. Over and above improving financial literacy of students in Lesotho, that would also lead into a financially literate nation in the long run, a condition which could spur productive financial climate on a macro level.

Keywords: Financial literacy, Stratified sampling, Questionnaire, National university of Lesotho, Students, Non-business major.

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DOI: 10.18488/journal.aefr/2015.5.9/102.9.1050.1060
ISSN(e): 2222-6737/ISSN(p): 2305-2147

Contribution/ Originality

This study is one of very few studies which have investigated the determinants of financial literacy in Lesotho if not the first.

1. INTRODUCTION

The terms financial literacy, financial knowledge, and financial education often have been used interchangeably both in academic literature and in the popular media (Huston, 2010). Financial literacy is defined in many ways and different researchers have used distinct meanings depending on, among others, the nature of each particular study, objectives of the study, and type of data used. By the most basic definition, financial literacy refers to the knowledge and or understanding of the importance of money and the use of money. It answers the question; why spend on this as opposed to that (Norman, 2010). In a similar vein, Lusardi and Mitchell (2007) defined financial literacy as one's ability to understand finance. That is, set of skills and knowledge that allows an individual to make informed and effective decisions throughout their understanding of finance.

Financial literacy is one of the pillars of financial well-being of the society, both at micro and macro levels. A financially illiterate society can pose several problems in the economy. Thus, lack of financial literacy has been cited by numerous studies as a major reason for; costly borrowing and high debt (Lusardi and Tufano, 2009) low participation in the formal financial market and stock market (Cole *et al.*, 2008) poor and inadequate planning for retirement (Lusardi and Mitchell, 2006). In essence, this shows how hazardous financial illiteracy for the well-being of individuals, households and the entire economy is. Moreover, it reveals how effectiveness of financial markets can be hindered hence stagnation towards achieving economic growth.

On the other hand, there exist several benefits attached to a financially knowledgeable nation. These benefits range to consumers, the community and the economy. Normally, the microeconomic benefits to individuals extend out to produce macroeconomic benefits for the economy and the financial system. On a household point of view, financial literacy allows individuals to increase and better manage their earnings and therefore better manage life events like education, illness, job loss, or retirement (Rajat, 2007). Similarly, a financially literate community can better assess financial policies of their respective governments and actions of financial system. Finally, the financial sector of an economy with financially knowledgeable citizens can be effective and grow at an alarming rate hence achievement of economic growth. Financial education is therefore important for citizens, especially tertiary students who later will have to participate in the economic activities. Now, it takes a lot more than just studying towards successfully completing an academic program.

Tertiary students, in high and low income countries alike, are faced with a number of challenges to surmount in order to accomplish their optimal academic performance. Some of the challenges are financial in nature owing to lack of proper management of funds. A number of issues such as time management, financial problems, sleep deprivation, social activities, and for some students taking care of their families, can all pose their threats to students' academic performance, (Ansong and Gyensare, 2012).

Tertiary students are faced with certain problems due to lack of financial knowledge among them. Lack of financial literacy can lead to irresponsible overspending on consumption, financial problems, hence poor academic performance among the tertiary students, worldwide. Lyons (2004) states that poor financial management can also affect academic performance, mental and physical well-being, and even the ability to find a job after graduation. NUL students are not exceptional to problems caused by lack of knowledge of financial management.

Tertiary level of education is the stage where students are at a decisive time in their lives as they move from financial dependence to financial independence (Sabri, 2011). Most of the students enter into this stage without having gained adequate knowledge concerning financial management. Consequently, their wrong financial decisions often result into a lot of problems over and above poor academic performance. These range from drugs abuse in an attempt to cope with the financial stress to early and unplanned pregnancies by female students who embark into intimate relationships, with mostly the working-class, in search for financial security. Therefore, the purpose of the study is to establish the determinants of financial literacy among National University of Lesotho (NUL) students.

The rest of the paper is organized as follows. Section two presents literature review, and section three presents data and empirical methodology used in the study. Section four presents empirical results and analysis, and finally section five concludes the study.

2. LITERATURE REVIEW

The issue of financial literacy has recently been one of the top most growing concerns for governments, organizations and the international community alike. Much as there is no single uniform definition of financial literacy, several studies have been conducted on financial literacy and its determinants using different study units, data sets and different methods of analysis. A range of studies carried out on investigating variables that determine financial literacy discovered that age, level of education, gender, major of study, occupation, region, area of residence, race, wealth and ethnical background are important in explaining financial literacy. This section reviews literature on some of possible determinants of financial literacy, relevant for tertiary students, in particular.

An increase in age comes with the accumulation of knowledge based on practical life experiences (Agarwal *et al.*, 2009). Therefore, various studies have found age to be an important factor in explaining financial literacy. In their study of the determinants of financial literacy among working students, Ansong and Gyensare (2012) found that age and work-experience are positive predictors of respondents' financial literacy. In the same vein, Almenberg and Save-Soderberg (2011) observed that the highest levels of literacy are demonstrated by those of 35-50 and those older than 65 were found to perform the worst. In line with Cole *et al.* (2008) who discovered age to be a significant factor to explain financial literacy in India and Indonesia, it is therefore expected that the level of financial literacy among NUL students be correlated with their age groups.

In a number of research works gender is also a demographic character that had been found to be having a relationship with the level of financial literacy. Generally, males are found to be having more knowledge on financial issues than females. According to Guiso and Jappelli (2008) being male is associated with greater financial knowledge in Italy. Furthermore, Bernhein (1998) indicated that males perform better on both financial and macroeconomics questions. In a similar vein, Goldsmith and Goldsmith (1997b) pointed out that women score worse than men score because in general, they are less interested in the topics of investment and personal finance and, consequently, use financial services more seldom. On the basis of the above argument, NUL male students are expected to possess more financial knowledge than females.

The major of study taken by different students has been found to determine financial literacy. There is considerable evidence that people who studied economics or business are more likely to be financially knowledgeable (Olga, 2011). According to Murphy (2005) undergraduate business majors are found to be more financially literate than non-business majors. This is due to the fact that financial literacy is highly correlated with school exposure to business related subjects. Those who studied economics in high schools, college, or at higher levels are much more likely to display higher levels of financial literacy later in life (Van Rooij *et al.*, 2007). In their study of financial literacy among Australian University students, Beal and Delpachitra (2003) came up with the same conclusion, hence NUL business major, students are expected to outstrip non-business major students in financial issues.

Area of residence is also assumed to be related to the level of financial knowledge. Cole *et al.* (2008) found that people who live in rural area demonstrate the lowest level of financial knowledge. Since NUL is composed of both rural-based and urban-based students, area of residence is expected to be correlated with their level of financial knowledge.

3. DATA AND EMPIRICAL METHODOLOGY

Various studies have used different methodologies in an attempt to examine determinants of financial literacy. This study adopts descriptive statistics method of analysis in the form of frequency tables and charts. Descriptive statistics is an appropriate method of data analysis for depicting the magnitude of the relationship between categorical variables.

3.1. Sampling, Data Description and Collection

The study uses primary data, hence questionnaire, as an instrument for data collection, is utilized. The leave and pick method was used whereby respondents were given questionnaires during lecture sessions to fill and were collected later. The leave and pick method during lecture sessions was preferable since it gave the respondents enough time to fill up the questionnaires. In addition, the method saved time since the distribution and collection of questionnaires was done easily. With the application of the methods outlined in the forthcoming paragraphs, respondents were randomly selected from the registered NUL student body of the academic year 2012/2013.

Sampling of study participants was carried out in stages. Firstly, due to the fact that this study considered the population of intrinsic interest (NUL students) to be heterogeneous in terms of not only faculties within which they fall, but also their knowledge of financial issues acquired from their major studies, stratified random sampling method was used to select the study sample in which each faculty was treated as a stratum. The population was divided into seven strata, since the university is constituted by seven faculties. Stratified sampling method does not only ensure element of representativeness, but measurability of sampling errors as well. Ten students were then selected randomly from each stratum. Logically a sample size of 70 students was selected.

3.2. Structure of Questionnaires

The questionnaires are composed of a financial literacy test. Seven questions, testing students on their knowledge of basic financial concepts such as sales, discount and interest rate, time value of money, investment, bonds knowledge, inflation and saving constituted the financial literacy test. The students' performance on the test revealed their financial knowledge and was used as a proxy for financial literacy. In addition, the questionnaires requested respondents to provide information about their demographic characteristics.

Based on answers to the financial literacy test, a financial literacy score, which ranges from 1 to 4 and corresponds to different literacy levels, was constructed as shown in Table 3.1 below.

Table-3.1. Financial Literacy Score

Value	Literacy Level	Number of correct answers	% of correct answers
1	Excellent	5-6	38.6%
2	Good	4-5	32.9%
3	Fair	2-3	21.4%
4	Poor	0-1	7.1%

Source: own computation

4. EMPIRICAL RESULTS AND ANALYSIS

4.1. Financial Literacy and Gender

In the case of the relationship between financial literacy and gender, the results depict that males are indeed more financially literate than females. As shown in Table 4.1 and Figure 4.1, about 53 per cent of males' performance on a financial literacy test fell in the excellent category while only 24 percent of females attained the same performance category. This implies that 53 percent of male students were able to answer 6-7 questions correctly, but only 24 percent of female students answered the same range of questions correctly. Furthermore, only 3 percent males performed poorly in the test as compared to 12 percent males who attained the same performance. This implies that 3 percent of the males and 12 percent of the females, respectively, were only able to answer 0-1 questions correctly. Therefore, NUL male students are more financially literate, than their female counterparts. The findings are consistent with the works of Danes and Hira (1987) and

Beal and Delpachitra (2003) that generally males have an upper hand to females so far as financial literacy and knowledge are concerned.

Table-4.1. Financial literacy * Gender Cross tabulation

Financial Literacy		Gender		Total
		Female	Male	
	Excellent	8	19	27
	Good	12	11	23
	Fair	10	5	15
	Poor	4	1	5
Total		34	36	70

Source: own computation

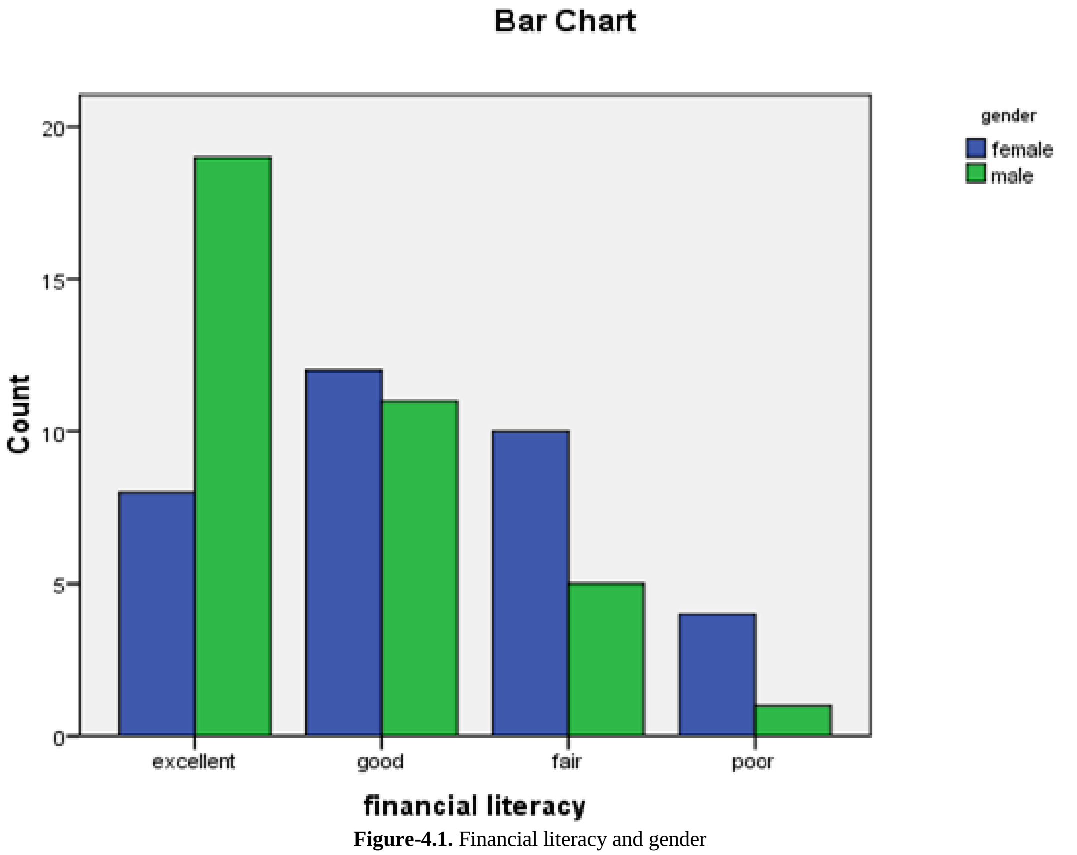

Figure-4.1. Financial literacy and gender

4.2. Financial Literacy and Region

As depicted by Table 4.2 and Figure 4.2, 32 percent of rural-based students received a grade excellent and 45 percent of urban-based students scored excellent. However, 35 percent of the former demonstrated a good performance while 30 percent of the latter the same performance. Logically, it can be argued that the area of residence has little or no impact on the NUL students' level of financial literacy. This result is contrary to the findings of Cole *et al.* (2008) that people who live in rural areas demonstrate the lowest level of financial knowledge. This might be due to the fact that at this level of education, students from different regions might have equally been exposed to the same financial experiences and information hence their financial knowledge does not differ much.

Table-4.2. Financial literacy * region Cross tabulation

Financial Literacy		Region		Total
		Rural	Urban	
	excellent	12	15	27
	Good	13	10	23
	Fair	7	8	15
	Poor	5	0	5
Total		37	33	70

Source: own computation

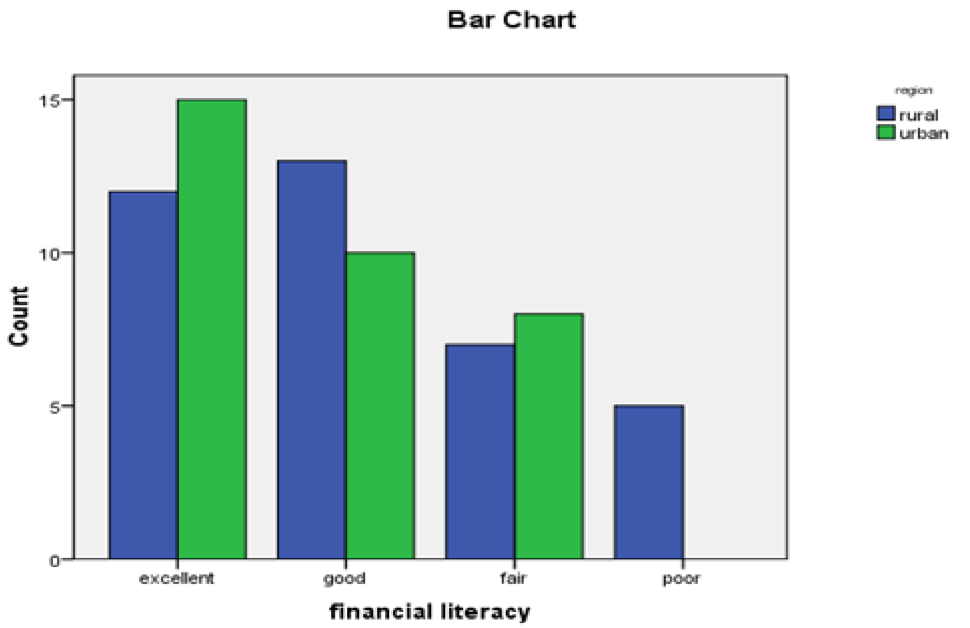

Figure-4.2. Financial literacy and region

4.3. Financial Literacy and Major of Study

As it was expected, NUL business major students outstripped their non-business major counterparts in the financial test. This is shown in Table 4.3 and Figure 4.3 where 80 percent of business major and 32 percent of non-business major students, respectively, managed to answer 6-7 questions correctly. In the similar vein, no business major student attained the lowest grade, which is poor. However, 8 percent of the non-business major, students performed poorly. These results are consistent with the findings of Murphy (2005) that undergraduate business majors are generally more financially literate than non-business majors. The works of Lusardi and Mitchell (2007);

Alessie *et al.* (2008) and Almenberg and Save-Soderberg (2011) also support the argument that people who study economics or business are more likely to be financially literate.

Table-4.3. Financial literacy * major of study Cross tabulation

Financial Literacy		Major of Study		
		Non-business	Business	Total
	excellent	19	8	27
	Good	22	1	23
	Fair	14	1	15
	Poor	5	0	5
Total		60	10	70

Source: own computation

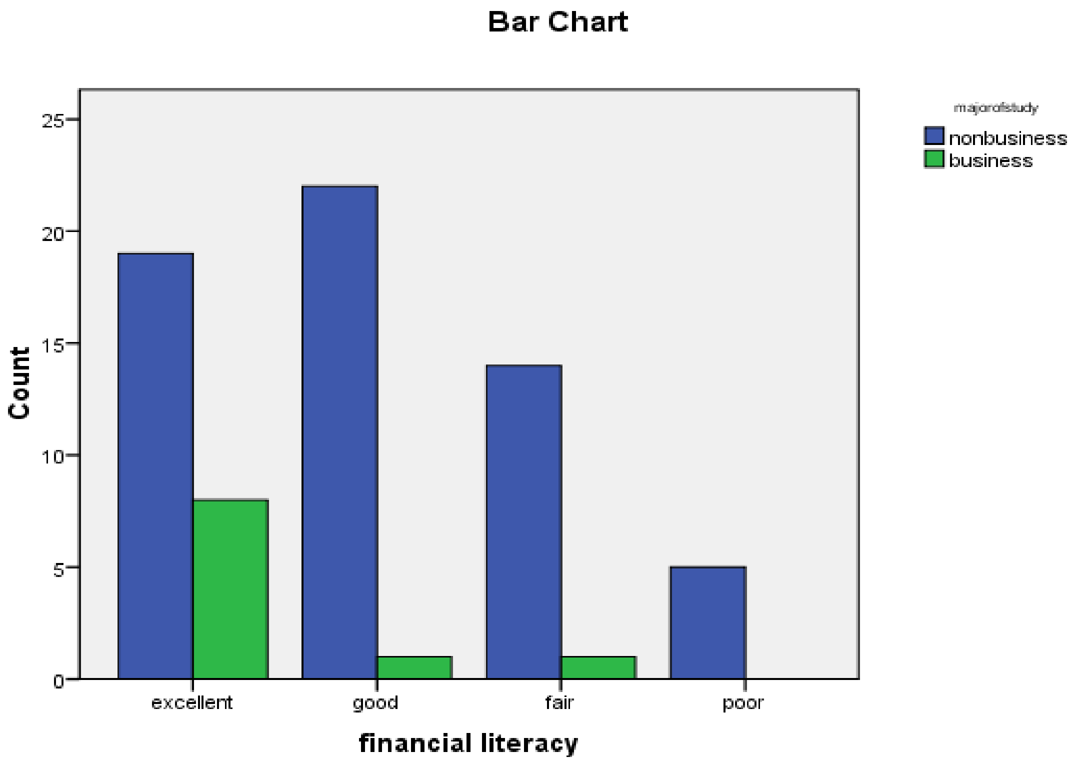

Figure-4.3. Financial literacy and major of study

4.4. Financial Literacy and Age

Table 4.4 and Figure 4.4 depict that 56 percent of those aged between 21 and 23, 18 percent of those aged between 24 and 26 and 0 percent of those above 26 years managed to answer 6-7 questions correctly. Moreover, 2 percent of those aged between 21 and 23, 9 percent of those aged between 24 and 26, and 29 percent of those aged above 26 performed poorly. These results are not consistent with the literature since it suggests that age has a non-linear effect on financial literacy and that financial literacy peaks in middle ages (see (Worthington, 2004; Cole *et al.*, 2008;

Almenberg and Save-Soderberg, 2011)). That is financial literacy improves with age below middle-ages and decreases with age beyond middle-ages.

Table-4.4. financial literacy * age Cross tabulation

Financial Literacy		**Age**			**Total**
		21-23	24-26	>26	
	Excellent	23	4	0	27
	Good	11	10	2	23
	Fair	6	6	3	15
	Poor	1	2	2	5
Total		41	22	7	70

Source: own computation

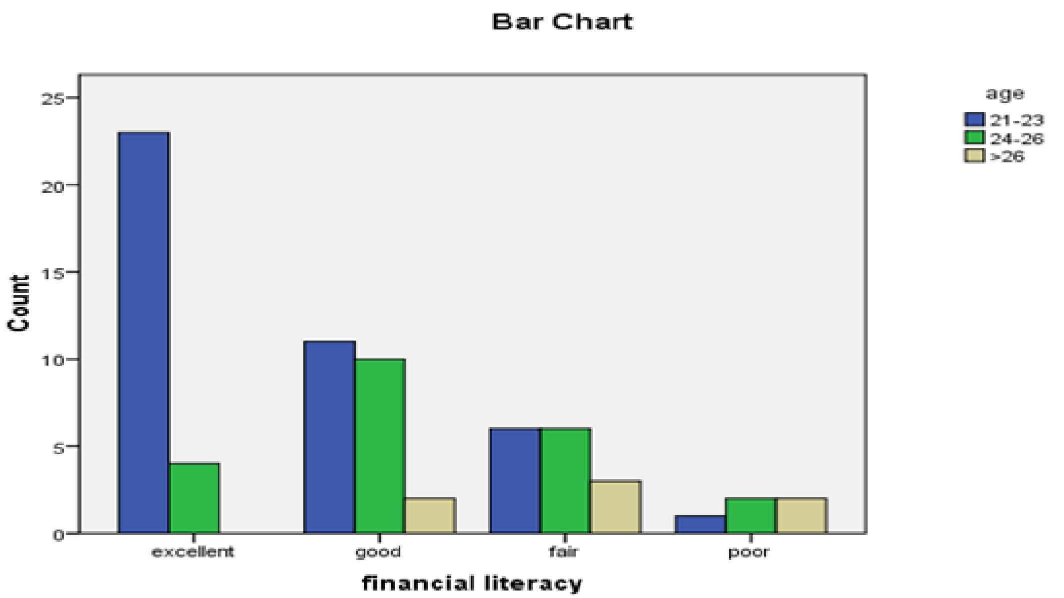

Figure-4.4. Financial literacy and Age

5. CONCLUSION, RECOMMENDATIONS AND LIMITATIONS

5.1. Conclusion

As per the results gender is important in determining the level of financial literacy among NUL students. Consistent with literature, the results indicate that NUL male students are more financially knowledgeable than their female counterparts. This may be due to the fact that male students, on average, are the ones with less fear of engaging in financial commitments like borrowing from informal financial institutions. They, therefore, in the process get to acquire financial knowledge. In the similar vein, major of study by the respondents was also found important in determining the level of financial literacy among NUL students. However, place of residence was found to have little or no impact on the level of financial knowledge. Age was also not found to have a considerable impact on the level of financial literacy among the students. This could be due to the fact that the students, on average, are of the same age category and hence lack of age variation.

5.2. Recommendations

To bridge the gap between financial literacy level of male and female students as well as business major and non-business major students, the ministry of education and training should consider introducing financial education into the core curriculum of secondary, middle level and higher learning institutions. Over and above improving financial literacy of students in Lesotho, that would also lead into a financially literate nation in the long run, a condition which could spur productive financial climate on a macro level.

5.3. Limitations

Some potential determinants of financial literary, according to the literature, such as occupation, parents' level of education, income level, accessibility to media and sources of education on money matters, were left out in the study. Therefore, the study is not exhaustive since only four suggested determinants of financial literacy were captured and analyzed owing to the nature of participants. Proportionally, the sample size appears small. By virtue of having more faculties that are non-business oriented, the sample is skewed in that a significantly greater number of non-business students participated. The aforesaid limitations may have a bearing on the results and hence conclusions drawn.

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