

THE DETERMINANTS OF FINANCIAL KNOWLEDGE AMONG COLLEGE STUDENTS – A STUDY

Abstract

The general literacy rate in India is improving but the financial literacy rate is low. Financial knowledge is required for understanding activities such as news about the economy and well informed financial decisions. This study selected Government Degree College for Women, Nalgonda to know the financial knowledge of women students. A total of 95 undergraduate students sample is selected from Arts, Commerce and Science Courses of the college. The students' financial knowledge about liquidity, risk and return, diversification, compound interest, interest rate inflation and purchasing power, earning, spending, saving, investing, financial service and financial product. The results showed that the overall financial knowledge of the sample students of the college about these basic concepts is lower. The financial knowledge of the students of Bachelor of Arts is higher than the students of Bachelor of Commerce and Bachelor of Science. Based on the results of study it is recommended for organizing financial classes and workshops to the students belonging to all the courses in the college.

Keywords: Financial knowledge, College Students, Liquidity, Risk and Return, Diversification, Compound Interest, Purchasing Power, Earning, Spending, Saving, Investment, Financial Knowledge Index.

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I. INTRODUCTION

The general literacy rate in India is 77 percent but the financial literacy rate is 35 percent only [1]. Financial knowledge is an important component of financial literacy, necessary for undertaking activities such as following news about the economy and financial landscape, well informed financial decisions [2]. Scherebern, Lusardi and Yakoboski [3] revealed that college-educated millennial have a low level of financial knowledge and tend to struggle with their personal finances..The purpose of this paper is to know the determinants of financial knowledge among college students. These determinants are important both at individual and aggregate levels. From an individual standpoint, young adults face financial decisions. As college students enter the workforce, they will face retirement, savings and investment decisions. It is critical for young adults to acquire adequate financial knowledge to make optimal personal financial decisions. From a policy perspective, a persistently high-delinquency rate among college graduates combined with a lack of financial knowledge could constrain the ability of young households to make sound financial decisions [4]. Financial literacy means peoples' ability to process economic information and make informed decisions about financial planning wealth accumulation, pensions and debt. Financial knowledge can be cast as a type of investment in human capital [5]

The purpose of this paper is to know the determinants of financial knowledge among the undergraduate college women students. This paper assesses the financial knowledge about liquidity, risk and return; diversification; compound interest; interest rate, inflation and purchasing power; earning spending, saving, investing and concept of financial service and financial product. This study added two new concepts, i.e., earning, spending, saving investing and financial service and financial product, to the existing literature. The present study measures the financial knowledge index to find out the level of each course and the overall financial knowledge of the college.

II. OBJECTIVES OF STUDY

The specific objectives of study are to:

- Know the socio-economic characteristic of the respondents
- Find out the financial knowledge of the respondents by using the basic concepts of financial knowledge.
- To compare the financial knowledge of the students belonging to different courses.
- Measure the financial knowledge index and find out the overall financial knowledge of each course and the college.

III. REVIEW OF LITERATURE

The existing literature shows that there are three types of financial literacy, i.e., financial knowledge, skills and behavior or attitude [6]. Chen and Volpe [7] developed a 52 questions survey to measure financial literacy among college students. Their methodology has been adopted and extended in other papers to specific topics such as, exploring gender differences in personal financial literacy [8] The sample size of these studies vary greatly, ranging from small samples of 41 students [9] and 64 students [10] to large samples above 1000 students [11]. Adult population ranging from recent graduates to adults about to retire,

have been extensively covered in the literature. Amira, et. al [12] focused on undergraduate students and aimed at identifying the key factors that affect their financial knowledge.. They surveyed students about concepts such as numeracy, compound interest and money illusion, among others.. They used questions asked in previous studies in order to compare their results to existing findings Chen and Volpe [13] and 2002 [14]; Mandell, [15]; Lusardi et.al.[16]. Amira, et.al. [17] have modified a number of questions. Using logistic regressions, they explored different covariates including age, gender, race and school of study, which may influence financial knowledge. The paper by Amira, et.al [18] extended the works of Chen and Volpe [19], and [20]. They found that older, female and white students tend to be more financially literate. Chen and Volpe's survey consists of 52 questions of which 36 are multiple choice questions that test college students about their personal financial knowledge. Where as Amira, et.al., [21] collected information on 11 financial knowledge questions. The sample size of Chen and Volpe [22] was 924 respondents belonging to 14 college campuses but it was 553 students only .belonging to single college with an undergraduate population of 3500 students. To explore the determinants of financial knowledge, Chen and Volpe [23] built a financial literacy index defined as a mean score for each respondent. Chen and Volpe [24] and [25] did not report any marginal effects limiting their interpretation of the logistic regression results. Amira, et.al [26] addressed this issue by reporting marginal effects which allowed to better capture the contribution of each covariate in the level of financial knowledge. Their paper extended their results to a population of college students of ages between 18 and 25. The existing literature has documented differences in financial literacy between male and female students (Chen and Volpe [27] and [28], Mandell, [29] Lusardi, Mitcell and Curto [30] Seyedian and Yi [31]. Bucher-Koenen et. al.[32] found that both young and adult women displayed a low level of financial literacy. But the more recent studies found mixed display a low level of financial literacy. Using data from the Jump Start Surveys between 2000 and 2008, Mandell [33] showed that there was little difference in financial literacy by gender.

The present study is different from the existing studies in two ways. Firstly it deals only with financial knowledge and has added new concepts to know the determinants of financial knowledge. It has used the following concepts, ie., liquidity, Risk and Return Diversification; compound Interest; Interest rate, Inflation and Purchasing Power; Earning, Spending, Saving and Investment; and Financial Service and Financial Product. Secondly it deals only with the women students of Government College.. This study fills gap in the existing literature on determinants of financial knowledge.

IV. METHODOLOGY

The study is based on primary data collected, using a questionnaire, from the students of Government Degree College for Women, Nalgonda. This college is purposely selected for the study because it is a leading college for women in the district having three media of instructions, i.e., Telugu, English and Urdu .and having Arts, Commerce and Science Courses. It has attained Autonomous position. Then three courses, i.e., B.A; B.Com and B.Sc are selected for the study. From B.A 33; B.Com 34 and B.Sc 28 students, a total of 95 students are selected randomly. The socio-economic characteristics of these sample students are collected on Caste, Age, Village/Town based, Profession and Income per month of parent.

The students are asked seven basic concepts of financial knowledge, i.e., Liquidity; Risk and Return; Diversification; Compound Interest; Interest Rate, Inflation and Purchasing Power; Earning, Spending, Saving and Investment and Concept of Financial Service and Financial Product. On the basis of correct answers their financial knowledge is judged. The financial knowledge of students of different Courses is compared.

Financial Knowledge Index for B.A; B.Com and B.Sc is prepared by using the following formula:

Financial Knowledge Index = Liquidity + Risk and Return + Diversification + Compound Interest + Interest Rate, Inflation and Purchasing Power + Earning, Spending, Saving and Investment + Financial Service & Product/7.

Finally, the average financial knowledge of the College is measured by adding the financial knowledge of three courses and dividing by 3.

V. DATA ANALYSIS AND RESULTS

1. Socio-Economic Characteristics of the Sample Students:

- **Courses:** Table 1 (A) shows the sample courses selected for study.

Table 1(A): Sample Courses Selected for the Study

Details	Frequency	Percentage
Bachelor of Arts (B.A)	33	34.74
Bachelor of Commerce (B.Com)	34	35.78
Bachelor of Science (B.Sc.)	28	29.48
Total	95	100

Source: Primary data

The table 1 (A) shows that B.A, B.Com and B.Sc courses offered at the college are selected. From B.A 33 students (34.74 percent), B.Com 34 students (35.78 percent) and from B.Sc. 28 (29.48 percent) a total of 95 students are selected for the study.

- **Caste:** Table 1 (B) shows caste of the sample students

Table 1 (B): Caste of the Sample Students

Caste	Frequency	Percentage
Schedule Caste (S.C)	16	16.84
Schedule Tribe (S.T)	04	4.21
Backward Caste (B.C)	59	62.10
Other Caste (O.C)	16	16.85
Total	95	100

Source: Primary data

Table 1 (C) shows caste of the sample students. The highest number of students belong to the backward caste (62.10 percent) and the lowest number belongs to the S.C (4.21 percent). The students belong to O.C are 16.85 percent.

- **Age of the Students:** Table 1 (C) shows age of the sample students

Table 1 (C): Age of the Sample Students

Age	Frequency	Percentage
18 years	27	28.42
19 years	22	23.16
20 years	34	35.78
21 years	06	6.32
22 years	06	6.32
Total	95	100

Source: Primary data

Table 1 (C) shows age of the sample students. The percentage of the 20 years students is the highest (35.78 percent) and it is the lowest for 21 and 22 years (6.32 percent). The percentage of 18 years and 19 years is 28.42 and 23.16 respectively.

- **Rural/Urban Based:** Table 1 (D) shows rural/urban based sample students

Table 1 (D) : Rural / Urban Based Sample Students

Rural/Urban	Frequency	Percentage
Rural	31	32.63
Urban	64	67.37
Total	95	100

Source: Primary data

Table 1 (D) shows rural/urban based sample students. Since the college is based in town the urban based students are more than rural based. The rural and urban based sample students is 32.63 percent and 67.37 percent respectively.

- **Profession of Parent:** Table 1 (E) shows profession of the parent

Table 1 (E): Profession of Parent

Profession of Parent	Frequency	Percentage
Government Employee	19	20
Private Employee	61	64.21
Farmer	15	15.79
Total	95	100

Source: Primary data

Table 1 (E) shows that 64.21 percent parents belong to the private sector, 20 percent are government employees and 15.79 percent are farmers.

- **Income of Parent:** Table 1 (F) shows the income of parent

Table 1 (F): Income of the Parent per Month

Income of Parent	Frequency	Percentage
Below 5000	20	21.05
5001-10000	36	37.90
Above 10000	39	41.05
Total	95	100

Source: Primary data

Table 1 (F) shows that the monthly income of parent for 41.05 percent is above 10,000 rupees per month, 37.90 percent parents' income is between 5001-10,000 rupees per month and the 21.05 percent parents' income per month is below 5000 rupees per month.

2. Financial Knowledge Summary Results:

- **Liquidity:** Table 2 (A) shows financial knowledge concept of Liquidity

Table 2 (A): Concept of Liquidity

Liquidity	Frequency	Percentage
B.A	9	27.27
B.Com	1	2.94
B.Sc	8	28.57
Total	18	18.94

Source: Primary data

Table 2 (A) shows that only 18.94 percentage of the sample students are having financial knowledge concept of liquidity. This result do not confirm the outcome of study by Amira, et.al [34] and Chen and Volpe [35] In which 60 percent students know the concept of liquidity. The remaining 81 percent students do not know the basic concept of liquidity. It is surprising to note that only 2.94 percent of students belonging to B.Com course know this basic concept. Un expectedly 27.27 percent B.A and 28.57 percent B.Sc students know the concept of liquidity.

- **Risk and Return:** Table 2 (B) shows the Concept of Risk and Return.

Table 2 (B): Concept of Risk and Return

Risk and Return	Frequency	Percentage
B.A	28	84.85
B.Com	31	91.17
B.Sc	21	75.00
Total	80	84.20

Source: Primary data

Table 2 (B) shows that 84.20 percent of the sample students know the financial knowledge basic concept of Risk and Return. These results are in line with Amara, et.al. [36] and Atkinson and Messy [37]. As expected more B.Com students are having the financial knowledge of risk and return (91.17 percent). It is 84.85 percent and 75 percent for B.A and B.Sc students respectively.

- **Diversification:** Table 2 (C) shows financial knowledge concept of Diversification

Table 2 (C): Concept of Diversification

Diversification	Frequency	Percentage
B.A	24	72.72
B.Com	16	47.06
B.Sc	21	75.00
Total	61	64.21

Source: Primary data

Table 2 (C) shows that 64.21 percent of the total sample students are having financial knowledge concept of Diversification. This result is in line with the studies by Amira, et.al. [38] and Atkinson and Messy [39]. The students belonging to B.Sc and B.A scored 75 percent and 72.27 percent respectively. The B.Com students are having less knowledge of the basic concept of Diversification comparing to B.Sc and B.A.

- **Compound Interest:** Table 2 (D) shows the Financial Knowledge Concept of Compound Interest

Table 2 (D): Concept of Compound Interest

Compound Interest	Frequency	Percentage
B.A	16	48.48
B.Com	25	73.52
B.Sc	11	39.28
Total	52	54.73

Source: Primary data

Table 2 (D) shows that 54.73 percent sample students know the financial knowledge concept of compound interest. This result confirms the outcome of the study by Amira, et.al [40] where 52 percent respondents answered correctly. The highest percentage of the students belonging to B.Com course, i.e. 73.52 percent, are having the financial knowledge concept of compound interest. The students belonging to B.A and B.Sc have less knowledge of the basic concept of compound interest compared with B.Com students.

- **Interest Rate, Inflation and Purchasing Power:** Table 2 (E) shows the knowledge of interest rate, inflation and purchasing power

Table 2 (E): Knowledge of Interest Rate, Inflation and Purchasing Power

Interest Rate, Inflation and Purchasing Power	Frequency	Percentage
B.A	10	30.30
B.Com	4	11.70
B.Sc.	6	21.42
Total	20	21.05

Source: Primary data

Table 2 (E) shows that only 21 percent of the sample students are having the knowledge of interest rate, inflation and purchasing power. This result do not confirm the result of the study by Amira, et.al [41] where 53 percent of respondents answered correctly and Lusardo and Mitchel [42] where 88.4 percent respondents are having knowledge of this concept. The students belonging to B.A course are more knowledgeable of interest rate, inflation and purchasing power concepts of financial knowledge than the students of B.Com and B.Sc.

- **Earning, Spending, Saving and Investing:** Table 2 (F) shows the knowledge of the students on the basic concepts of earning, spending, saving and investing.

Table 2 (F): Knowledge of Earning, Spending, Saving and Investing

Earning, Spending, Saving and Investing	Frequency	Percentage
B.A	24	72.72
B.Com	15	44.11
B.Sc	18	64.28
Total	57	60

Source: Primary data

Table 2 (F) shows that 60 percent of the students know the concepts of earning, spending, saving and investing. More students of B.A (72.72 percent) are having knowledge of these concepts than the students of B.Com (44.11 percent) and B.Sc (64.28 percent).

- **Financial Service and Financial Product:** Table 2 (G) shows the knowledge of financial service and financial product.

Table 2 (G): Knowledge of Financial Service and Financial Product

Knowledge of Financial Service and Financial Product	Frequency	Percentage
B.A	20	60.60
B.Com	26	76.47
B.Sc	12	42.85
Total	58	61.05

Source: Primary data

Table 2 (G) shows that 61 percent of the sample students know the concepts of financial service and financial product. More students of B.Com (76.47 percent) know these concepts than the students of B.A (60.60 percent) and B.Sc. (42.85 percent).

3. Financial Knowledge Index:

Table 3 (A) shows the financial knowledge index.

Table 3 (A): Financial Knowledge Index

Course	Financial Knowledge Index
B.A	18.71
B.Com	16.87
B.Sc.	13.85
Total	16.47

Source: Primary data

Table 3 (A) shows that the average financial knowledge of sample students is 16.47. The financial knowledge index of the students of B.A is higher than the students of B.Com and B.Sc. It is 18.71, 16.85 and 13.85 respectively. The financial knowledge of the students of B.A and B.Com is higher than the average financial knowledge of the sample. But the financial knowledge of B.Sc students is lower than the average financial knowledge of the sample.

VI. CONSLUSION AND SUGGESTION

The study concluded that the financial knowledge of the college students with the concepts of liquidity, risk and return, diversification, compound interest, interest rate, inflation and purchasing power; earning , spending, saving and investing, financial service and financial product is lower.. The average financial knowledge index for the sample

students is 16.7. It is above average for B.A and B.Com and below average for B.Sc students.

Based on the results of study it is recommended that the personal finance classes should be arranged for all the courses, including the B.Com students. It is also suggested that the personal finance workshops should be arranged to increase the financial knowledge.

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