



## Assessment of Financial Literacy among Business Students

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### ABSTRACT

Financial literacy indicates the basic knowledge and skills of an individual to understand financial concepts and make good financial choices during investment. The purpose of this study is to assess the financial literacy level among business students as students can shape the economy with their financial knowledge and understanding. Using a survey methodology, self-administered questionnaire was created to collect the necessary data from the business students. Questionnaire includes both basic and advanced level questions so that financial literacy level can be assessed on both the parameters. Although the questionnaire was circulated among 400 students but after eliminating non respondents, the research was conducted on the responses of 292 students. Financial literacy of business students was evaluated on the basis of their responses and their knowledge, attitude, and conduct towards their own finances. The outcome highlights that the financial literacy level is same in case of male and female. Financial literacy is independent from the effect of gender. This study does not break down its findings by race or gender to determine whether the program is appropriate. Culture and environment should be taken into account while developing financial literacy tests. Financial literacy has significant social implications for business students. It empowers business students with practical skills and knowledge that are essential for their future careers and personal financial well-being. They can contribute to economic growth, and promote social well-being.

**Keywords:** Financial Literacy, Principles of Finance Course, Multinomial Logit Model

**Article type:** Empirical Paper

## **I. INTRODUCTION**

Today's customers of all ages may pick and choose from a dizzying assortment of goods, services and providers in the increasingly complicated financial services industry to fulfil their various financial demands [1]. Due to the variety available and the simplicity of making a selection, buyers have a lot of leeway. However, this requires them to have the knowledge, information and abilities necessary to weigh their alternatives under conflicting conditions and choose the best one for themselves [2]. This is particularly true for subsets of the population who have been historically ignored by the banking industry.

Consumers cannot protect themselves against financially damaging transactions without first being able to recognize them for what they are. Financial literacy helps them to become financially aware. Financial literacy means the information, abilities, and understanding of financial ideas and principles necessary to make wise choices with their money [3]. Budgeting, saving, investing, debt management, credit and interest rate education, insurance, taxes, retirement planning, and economic fundamentals are all included [4]. To be financially literate is to be able to handle the challenges of today's personal finance landscape. Financial literacy is the knowledge and skill necessary to earn, save, invest, and spend money wisely in order to achieve immediate and future objectives.

People who are financially literate are better able to manage their own money and make sound decisions [5]. It teaches people how to set and stick to realistic financial goals, how to save and invest sensibly, and how to handle debt responsibly. Making educated financial decisions that fit one's requirements and circumstances requires familiarity with a variety of banking, credit card, loan, and insurance products and services [6].

Annamaria Lusardi, an economist and researcher in the field of financial literacy, defines it as "*the ability to use knowledge and skills to manage financial resources effectively for a lifetime of financial well-being.*"

Robert T. Kiyosaki, known for his book "Rich Dad Poor Dad," defines financial literacy as "*the ability to understand how money works, how it is earned, managed, invested,*

*and used to obtain the things we need and want."*

Financial literacy teaches people how to recognize and prevent scams and how to demand their legal protections as consumers. Improved shopping skills and bargain-hunting abilities are the results of increased financial literacy [2]. This improves the efficiency of their family budgets, giving them more room for discretionary spending, savings, and investment [7]. Individuals can be better prepared for life's financial challenges with the help of financial education programs that cover topics such as saving, budgeting, investing, debt management for retirement or college, and insuring against the unexpected. In order to assist families, manage their short-term responsibilities and maximize their long-term financial well-being, it is important for them to learn the basics of financial planning.

Financial literacy among business students offers numerous benefits that can positively impact their personal and professional lives. Here are some key advantages:

**Enhanced Personal Financial Management:** Students of business may improve their own financial management with the help of financial literacy. They can develop budgets, track expenses, understand credit, and make informed decisions about saving and investing [5]. This leads to better financial well-being, reduced debt, and improved money management habits.

**Improved Entrepreneurial Skills:** Business students with financial literacy gain a competitive edge when starting their own ventures. They can create realistic financial projections, evaluate business opportunities, understand cash flow management, and make informed decisions regarding financing options [6]. This knowledge helps them navigate the financial complexities of entrepreneurship and enhances their chances of success [8].

**Better Career Opportunities:** Financial literacy is highly valued by employers across various industries. Business students who possess financial acumen are more likely to secure internships and job opportunities, particularly in finance, banking, consulting, and related fields [9]. Employers recognize the importance of employees who can

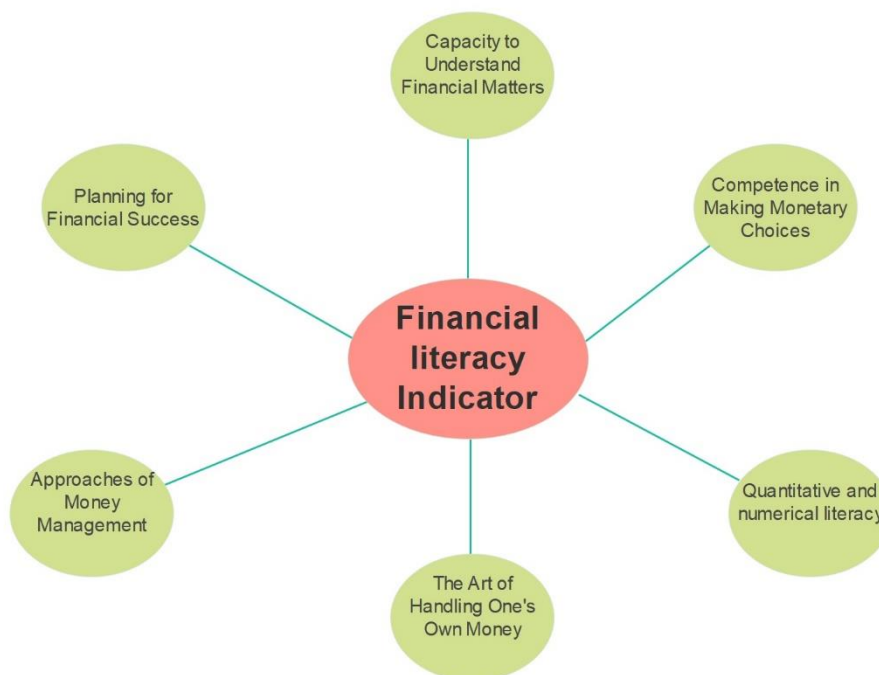
understand and interpret financial data, contribute to financial planning, and make informed business decisions.

**Effective Investment Management:** Financially literate business students are well-equipped to handle their investment portfolios. They can analyze investment options, assess risk and return, diversify their investments, and make informed decisions aligned with their financial goals. This knowledge helps them build wealth over time and make smarter investment choices.

**Understanding Economic Concepts:** Financial literacy provides a foundation for understanding macroeconomic concepts and their implications. Business students can grasp the fundamentals of fiscal and monetary policies, inflation, interest rates, and market trends. This understanding enables them to interpret economic indicators, anticipate market shifts, and adapt their strategies accordingly.

**Ethical Financial Decision-Making:** Financial literacy encourages ethical decision-making by highlighting the importance of integrity, transparency, and accountability in financial matters. Business students, are financially literate are likely to consider ethical implications when faced with financial dilemmas, promoting responsible financial practices and fostering a positive corporate culture.

**Improved Risk Management:** Financial literacy equips business students with the ability to identify, assess, and mitigate financial risks. They can understand insurance options, evaluate risk exposure, and implement strategies to safeguard against potential financial losses. This skill is valuable for both personal and professional contexts, where risk management is crucial for long-term success.

**Figure 1. Conceptual Framework**

## II. LITERATURE REVIEW

The extent to which business students understand money management has been the subject of many studies. The results show that there are substantial differences in financial literacy among business students, even if this group as a whole has a higher average level of financial literacy than the overall population [1,4]. Some studies have reported that business students exhibit limited knowledge in certain areas, such as investment strategies, risk management, and retirement planning.

Research has examined various factors influencing the financial literacy of business students. These factors include socio-economic background, gender, educational background, and personal financial experiences. Socio-economic factors, such as parental education and income level, have been found to positively impact financial literacy [4,10]. Additionally, studies have identified differences in financial literacy levels between female and male business students, with males generally exhibiting higher levels of financial literacy [11]. There have been several analyses of financial

literacy program and their success in enhancing business students' financial understanding and competence [7]. Findings suggest that well-designed educational interventions and curriculum enhancements positively influence financial literacy. Interactive and experiential learning approaches, such as workshops, simulations, and case studies, have been particularly effective in enhancing financial literacy levels among business students [12]. Research with long-term follow-ups shows that financial education program improve students' financial habits and choices. The curriculum and educational institutions play a crucial role in shaping the financial literacy of business students. Studies have highlighted the importance of incorporating financial literacy education into the business school curriculum. Integrating financial literacy courses, modules, or workshops into the curriculum has been found to significantly enhance students' financial knowledge and skills [13]. Furthermore, research has emphasized the role of educational institutions in providing resources, support, and guidance to promote financial literacy among business students. While significant research has been conducted on financial literacy among business students, several gaps exist. Future research should focus on assessing the long-term effects of financial literacy programs on students' financial behaviors and outcomes. Additionally, there is a need to explore the impact of emerging financial technologies and digital platforms on the financial literacy of business students. Furthermore, studies examining the effectiveness of different pedagogical approaches, interventions, and assessment methods would contribute to the existing literature [14]. Understanding the factors influencing financial literacy, implementing effective financial literacy programs, and integrating financial education into the business school curriculum are critical in promoting the financial well-being and success of business students. Further research is needed to bridge the existing gaps and advance our knowledge in this area, facilitating the development of comprehensive and impactful financial literacy initiatives for business students. Before diving into the elements that influence financial literacy, this study thoroughly explores the financial literacy exposure among business students. The research does this by administering questionnaires at the end of the course, one measuring basic financial literacy and the other measuring advanced financial literacy. Second, a multinomial

logit model is used to identify the critical components of an introductory finance course that influence students' financial literacy.

### **III. OBJECTIVE OF THE STUDY**

The purpose of this research study are as follows:

1. To access the financial literacy level of the undergraduate and postgraduate students.
2. To find out the relationship between financial literacy and the students characteristics.

### **IV. Hypothesis of the study**

H01: There is no significant difference in the level of financial literacy on the basis of gender.

H02: There is no significant difference in the level of financial literacy on basis of program enrolled.

### **V. RESEARCH METHODOLOGY**

Experimental research methodology and a structured questionnaire was used to collect data from students. The questionnaire was carefully crafted to test respondents' proficiency in both fundamental and advanced financial concepts. Questions are categorized as either "basic" or "advanced," with the former assuming knowledge of fundamental financial principles and the latter assuming knowledge of more advanced topics. The data gathering was from students of different institutions offering Bachelor's and Master's degrees[7]. A total of 292 students between 2021-2023 completed the survey. Lusardi and Mitchell (2007b) and the Rand American Life Panel (ALP) <https://www.rand.org/labor/alp.html>] questionnaires served as inspiration for the survey's financial literacy and planning questions[9]. Both the questions and the options

for responding to them have been tailored to this study's specific aims.

## VI. Data Analysis and Discussion of Results

The questionnaire consists of a section on basic financial literacy (consisting of five questions) and an advanced financial literacy section (with ten questions). The students' degrees of comprehension have been recorded by dividing their results into three categories: low level knowledge, moderate level knowledge, and high level knowledge. At the conclusion of an introductory finance course, a set of questions has been used to determine whether or not students have acquired the necessary information for financial literacy.

Table 1 provides a statistical overview of all final respondents.

Descriptive Variables / Numbers (Percentages)/Mean (SD)	Respondents
Total Number of Respondents	292
Number of Male Respondents	175 (59.93%)
Number of Female Respondents	117(40.06%)

Table 1: Summary Statistics

According to the statistics, there are somewhat more male than female students who filled out the survey. In addition, the research uses both elementary and complex questions on financial literacy to probe the course's efficacy.

In order to check the difference in the financial literacy level in the basis of gender as well the program enrolled, the researcher has used the T-test.

The Table provides statistics for two groups, BBA and MBA, in terms of Basic Literacy Score, Advanced Literacy Score, and Total Score of Financial Literacy

		Group Statistics			
Program Enrolled		N	Mean	Std. Deviation	Std. Error Mean
Basic Literacy Score	BBA	34	3.74	1.214	.208



	MBA	258	4.06	1.179	.073
Advance Literacy Score	BBA	34	8.18	2.236	.383
	MBA	258	8.55	2.143	.133
Total Score of Financial Literacy	BBA	34	11.91	2.948	.506
	MBA	258	12.62	3.016	.188

The BBA group has a mean total score of 11.91 with a standard deviation of 2.948. The standard error of the mean is 0.506. The MBA group has a higher mean total score of 12.62 and a slightly higher standard deviation of 3.016. The standard error of the mean is 0.188. The data indicates that the MBA group, on average, has a slightly higher total score of financial literacy compared to the BBA group. The results suggest that the MBA group tends to perform slightly better in terms of basic literacy, advanced literacy, and total financial literacy compared to the BBA group.

## VII. RESULTS AND ANALYSIS

**Independent T-test**  
**Financial Literacy on the basis of Program Enrolled**

Variable	Program Enrolled			
	BBA	MBA	p- Value	Decision
	N	N		
Basic Financial Literacy	34	258	.131	Retain the null Hypothesis
Advance Financial literacy	34	258	.337	Retain the null Hypothesis
Financial Literacy	34	258	.200	Retain the null Hypothesis

The results of the table shows that the data assumes the equality of variance as the p-value for advance financial literacy (.763), overall financial literacy (.758) and Basic financial Literacy (.949), is more than 0.05. There is no significant difference in overall financial literacy (0.200), basic financial literacy (0.131), and advanced financial literacy (0.337), between the BBA and MBA programs. This implies that the program enrolled (BBA or MBA) does not have a significant impact on financial literacy scores in this particular analysis.

**Independent T-test**  
**Financial Literacy on the basis of gender**

Variable	Gender of the Respondent				P-Value	Decision
	Male		Female			
	N	Mean	N	Mean		
Basic Financial Literacy	175	3.93	117	4.17	.072	Retain the null hypothesis
Advance Financial literacy	175	8.43	117	8.63	.429	Retain the null hypothesis
Financial Literacy	175	12.35	117	12.80	.212	Retain the null hypothesis

There is no significant difference in advanced financial literacy (.429), overall financial literacy (.212), and basic financial literacy (.072) between males and females. This suggests that gender does not have a significant impact on financial literacy scores in this particular analysis.

**Output of Multinomial logit regression**

Case Processing Summary			
		N	Marginal Percentage
Financial Literacy Level	High Level	220	75.3%
	Moderate Level	47	16.1%
	Low level	25	8.6%
Basic Literacy Score	0	3	1.0%
	1	9	3.1%
	2	24	8.2%
	3	45	15.4%
	4	72	24.7%
	5	139	47.6%
Advance Literacy Score	0	2	.7%
	1	3	1.0%
	2	1	.3%
	3	9	3.1%

	4	7	2.4%
	5	10	3.4%
	6	12	4.1%
	7	19	6.5%
	8	32	11.0%
	9	56	19.2%
	10	141	48.3%
Valid		292	100.0%

The table represents the information about the frequency on the financial literacy level of individuals. The levels are categorized as Low Level, Moderate Level, and High Level. Individuals are assigned a basic literacy score ranging from 0 to 5 based on their financial literacy knowledge. The frequency and percentage distribution of each score level are provided. Individuals are assigned an advance literacy score ranging from 0 to 10 based on their financial literacy knowledge.

The analysis involved fitting a statistical model to the data. The final model had a lower -2 Log Likelihood value compared to the intercept-only model, indicating an improvement in model fit. The chi-square tests for Pearson and Deviance indicate significant differences between the observed and predicted frequencies, suggesting a lack of perfect fit.

Pseudo R-squared measures (Nagelkerke, McFadden, Cox and Snell) are provided, indicating the proportion of variance explained by the model. The values range from 0.619 to 0.813, suggesting a moderate to high level of explanation

Likelihood ratio tests were conducted to compare the final model with reduced models. The chi-square values and degrees of freedom are provided, indicating significant differences in model fit when excluding certain effects.

Financial Literacy Level <sup>a</sup>		B	Std. Error	Wald	df	Sig.
High Level	Intercept	3.632	0.6	36.612	1	0
	[Basic Literacy=0]	-5.061	15.719	0.104	1	0.747
	[Basic Literacy=1]	-3.723	2.487	2.241	1	0.134

	[Basic Literacy =2]	-2.125	1.259	2.848	1	0.091
	[[Basic Literacy =3]	-0.492	1.222	0.162	1	0.687
	[Basic Literacy =4]	0.111	0.991	0.013	1	0.911
	[Basic Literacy =5]	0 <sup>b</sup>			0	
	[Advance Literacy=0]	-11.15	53.836	0.043	1	0.836
	[Advance Literacy=1]	-10.627	40.707	0.068	1	0.794
	[Advance Literacy=2]	-13.2	119.578	0.012	1	0.912
	[Advance Literacy=3]	-11.069	24.86	0.198	1	0.656
	[Advance Literacy=4]	-9.14	69.781	0.017	1	0.896
	[Advance Literacy=5]	-4.051	1.753	5.343	1	0.021
	[Advance Literacy=6]	-2.08	3.332	0.39	1	0.532
	[Advance Literacy=7]	-0.355	3.3	0.012	1	0.914
	[Advance Literacy=8]	-0.13	1.292	0.01	1	0.92
	[Advance Literacy=9]	0.127	1.025	0.015	1	0.901
	[Advance Literacy=10]	0 <sup>b</sup>			0	
Moderate Level	Intercept	0.385	0.727	0.281	1	0.596
	[Basic Literacy=0]	-5.355	3.626	2.181	1	0.14

[Basic Literacy=1]	-2.281	2.179	1.097	1	0.295
[Basic Literacy=2]	0.991	1.256	0.624	1	0.43
[Basic Literacy=3]	1.487	1.268	1.375	1	0.241
[Basic Literacy=4]	0.524	1.084	0.233	1	0.629
[Basic Literacy=5]	0 <sup>b</sup>			0	
[Advance Literacy=0]	-11.096	99.552	0.012	1	0.911
[Advance Literacy=1]	-10.466	71.895	0.021	1	0.884
[Advance Literacy=2]	-11.497	258.7	0.002	1	0.965
[Advance Literacy=3]	-11.098	48.867	0.052	1	0.82
[Advance Literacy=4]	2.912	2.408	1.462	1	0.227
[Advance Literacy=5]	0.808	1.244	0.422	1	0.516
[Advance Literacy=6]	3.873	2.786	1.932	1	0.165
[Advance Literacy=7]	4.026	3.253	1.532	1	0.216
[Advance Literacy=8]	1.445	1.357	1.134	1	0.287
[Advance Literacy=9]	0.391	1.126	0.12	1	0.729
[Advance Literacy=10]	0 <sup>b</sup>			0	

The observed and predicted frequencies for different combinations of advance literacy score and  
19591

financial literacy level are provided, along with Pearson residuals and percentages. This information helps evaluate the model's performance in predicting different literacy levels based on the advance literacy score.

## **VIII. SCOPE FOR FUTURE RESEARCH**

In this study the researcher has accessed only the financial literacy level. Further this research can be extended to measure the impact of level of financial literacy on their shopping habits and investment decision. Limited research studies were conducted towards identifying the impact of investigating the effects of emerging technologies on financial education which leads towards attainment of financial literacy. In the era of industry 4.0, it is crucial to learn how people adjust with the emerging technologies such as blockchain, AI, and robo-advisors and how this influences their economic choices. Further the research can be extended to study the relationship between financial literacy and sustainable finance which helps to study, how people think about environmental, social, and governance (ESG) factors when making financial choices.

## **IX. CONCLUSION**

This research takes a close look at the knowledge level of business undergraduates. The study makes use of the responses of business students throughout many semesters. The Questionnaire included questions covering both elementary and advanced concepts in finance to gauge students' familiarity with these topics. By administering the identical sets of questions of the fundamentals course, the research examines the level of conceptual knowledge among business students. In two ways, this research is exceptional. To begin, rather than focusing on the variables that influence financial literacy, this study thoroughly explores the exposure of financial literacy among business students. Second, a multinomial logit model is used to identify the critical components that influence students' financial literacy. The findings highlight that there is no significant difference in the financial literacy and planning of male and female students. This topic is more relevant than ever in light of the Great Financial Crisis of 2008–2009 and its aftermath in terms of preparing the next generation for economic success. Colleges and universities may do more to prepare their students for

professional and financial success by including interdisciplinary courses along these lines.

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