Integrating Financial Literacy into Higher Education: Perspectives from Students and Learning Outcomes

VISHWAS G. MANE¹, SUDHAKAR A. SANGALE²

¹Jawahar Arts, Science and Commerce College Anadur, Tal. Tuljapur, Dist. Dharashiv, Maharashtra, India

²Department of Economic, Jawahar Arts, Science and Commerce College Anadur, Tal. Tuljapur, Dist. Dharashiv, Maharashtra, India

Abstract— This study explores how students perceive financial literacy integration and how it affects their financial knowledge, attitudes, and behaviours. The study uses both quantitative and qualitative methods to examine the integration of financial literacy into higher education and its impact on student perceptions and learning outcomes. A questionnaire created based on existing reliable scales and measures for financial literacy, attitudes towards financial education, and perceived learning outcomes in the university context. The quantitative analysis showed that most students had positive perceptions of integrated financial literacy. Most of them were happy with the financial education initiatives of-fered by their universities, emphasizing the importance and usefulness of the content covered. The qualitative findings showed a significant enhancement in students' financial knowledge and skills after taking part in financial education programmes. The findings have important implications for educational policymakers and practitioners who want to improve financial literacy education in higher education settings. By solving the challenges and using the opportunities identified in this study, higher education institutions can help create a generation of financially literate individuals who can deal with the complexities of the modern economy.

Index Terms- Financial literacy integration, Higher education, Student perceptions, Financial knowledge and attitudes, Educational policy and practice.

I. INTRODUCTION

As individuals, we face many financial challenges and opportunities in today's complex economic environment. To successfully navigate our financial well-being, we need to make informed and prudent financial decisions (Atkinson & Messy, 2012). This is why financial literacy is essential, and why educators and policymakers have been keen to integrate financial education into higher education curricula (OECD, 2005). The goal of this integration is to provide students with the necessary knowledge, skills, and attitudes to effectively manage their personal finances, make wise investment decisions, and plan for their financial futures. Financial literacy covers a wide range of topics, such as budgeting, saving, investing, debt management, and financial products and services. Financial literacy programmes have traditionally focused on adults or high school students, but there is an increasing awareness of the need to extend these programmes to the higher education sector. University students, who are often on the verge of financial independence, can benefit greatly from learning about financial matters during their academic years. (Remund, 2010).

There are many reasons to integrate financial literacy into higher education. One of the main reasons is that higher education institutions are canters of knowledge creation and intellectual development, making them ideal venues for fostering financial literacy (Remund, 2010). By incorporating financial education into the curriculum, universities can reach a diverse group of students, regardless of their fields of study, backgrounds, or career goals. Another reason is that the transition from secondary to higher education is a crucial point in students' lives, where they gain more autonomy and responsibility over their financial choices.

Many students face financial challenges such as loans, part-time jobs, or credit card debt during their university years, making them susceptible to financial mistakes. By offering comprehensive financial education, universities can enable students to make smart choices and avoid financial problems. However, despite the increasing interest in integrating financial literacy into higher education, there is a lack of research on its effectiveness and impact on student perceptions and learning outcomes.

Students' perspectives on the integration of financial literacy into higher education vary. Some studies suggest that students have a sufficient level of financial literacy knowledge and skills, including budgeting, borrowing efficiently, and assessing investment risks (Shim et al., 2010). However, other research indicates that there are significant differences in financial literacy between different ethnic groups, with some groups perceiving financial literacy as less relevant to their day-to-day choices. Additionally, it is important to note that financial literacy deficiencies, both basic and digital, can pose a substantial threat to individual financial management. Therefore, it is crucial to assess the current level of financial literacy among university students, as they will face financial challenges and need to practice sound financial management (Utama & Syarif, 2023). Overall, integrating financial literacy education into higher education can help students develop good financial management skills and support their entrepreneurial potential.

This research aims to fill this gap by exploring how students perceive financial literacy integration and how it affects their financial knowledge, attitudes, and behaviors. By doing so, this study hopes to inform educational policy and practice and contribute to the ongoing debate on the role of financial education in higher education.

II. MATERIALS AND METHODS

A. Theoretical Framework

This study is guided by a theoretical framework that combines principles from behavioural economics and educational psychology to examine the challenges and impacts of integrating financial literacy into higher education and how it affects student perceptions and learning outcomes.

Behavioural economics helps to explain how individuals make financial decisions, considering that these decisions are often influenced by cognitive biases, heuristics, and social factors. This study uses behavioural economics principles, such as prospect theory and bounded rationality, to investigate how students' financial attitudes and behaviours are influenced by their educational experiences. For example, this study examines how framing effects or present bias may impact students' engagement with financial education initiatives and how to design effective intervention strategies accordingly.

Educational psychology provides useful frameworks for understanding the learning process and educational outcomes. Concepts such as self-efficacy, motivation, and learning styles are especially relevant for evaluating the effectiveness of financial literacy integration in higher education. For example, selfefficacy theory suggests that individuals' beliefs in their ability to perform specific tasks affect their motivation and behavior. In the context of financial education, this study explores how students with higher self-efficacy may be more active in seeking financial information and applying financial concepts to real-world situations. The integration of behavioral economics and educational psychology frameworks offers a comprehensive perspective to analyze the integration of financial literacy into higher education. By considering both cognitive and socio-emotional factors, this theoretical framework allows for a nuanced understanding of how financial education interventions may affect student perceptions, attitudes, and behaviors. Moreover, it enables the identification of potential moderators and mediators that may affect the effectiveness of these interventions, such as individual differences in cognitive abilities or socioeconomic background.

In summary, the theoretical framework used in this study provides a holistic view on the integration of financial literacy into higher education, enabling the exploration of complex interactions between educational inputs, psychological processes, and behavioral outcomes.

B. Methodology

This research uses a mixed-methods approach to examine how financial literacy is integrated into higher education and how it affects student perceptions and learning outcomes. The mix of quantitative surveys and qualitative interviews enables a comprehensive understanding of the complex issues involved in financial education initiatives in the higher education setting.

a. Research Design: The study follows an exploratory sequential mixed-methods design, where the quantitative data collection and analysis come before the qualitative data collection and analysis. This sequential approach helps first to collect quantitative data on student perceptions and financial literacy levels and then probe deeper into qualitative insights through interviews.

b. Participants: The participants are undergraduate students from various disciplines at college. A purposive sampling technique will be used to ensure diversity in terms of age, gender, academic majors, and socioeconomic backgrounds. The sample size will be based on the principle of data saturation, ensuring that enough participants are included to capture diverse perspectives and experiences.

c. Data Collection:

Quantitative Phase: A structured questionnaire in the form google form created. Questionnaire form based on existing validated scales and measures of financial literacy, attitudes towards financial education, and perceived learning outcomes. Participants completed the online questionnaire, which allowed for effective data collection.

Qualitative Phase: Semi-structured interviews were conducted with a subset of participants chosen from the quantitative phase. Through interviews investigated the participants' experiences with financial education initiatives, perceptions of the effectiveness of integration efforts, and suggestions for improvement.

d. Data Analysis:

Quantitative Phase: Descriptive statistics, such as frequencies, percentages, and measures of central tendency, are used to summarize quantitative survey data. Inferential statistical techniques, such as correlation analysis and regression analysis, are used to examine relationships between variables.

Qualitative Phase: Thematic analysis used to identify recurring themes and patterns in qualitative interview data.

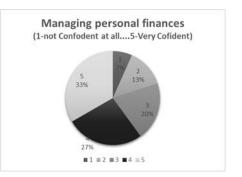
e. Limitations: Potential limitations of the study, such as sampling biases or self-reporting biases, are acknowledged and addressed in the discussion section. This rigorous mixed-methods approach allows for a comprehensive exploration of how financial literacy is integrated into higher education and how it affects student perceptions and learning outcomes.

III. RESULTS

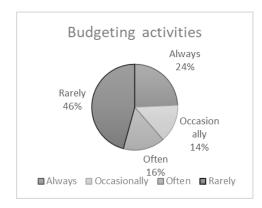
The study explores how financial literacy can be integrated into higher education and how it affects student perceptions and learning outcomes. The findings are based on both quantitative survey data and qualitative interview responses.

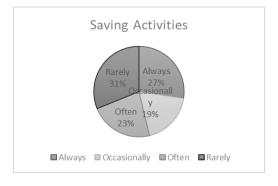
Quantitative Findings: The quantitative analysis shows several important findings about student perceptions and financial literacy levels: The survey participants were students from different disciplines and levels. 56% of them were male and 44% were female. More than half of them reported struggling with their current financial situation. About 40% of them lacked confidence in managing their personal finances. Only 20% of them engaged in budgeting, saving, and investing activities. 70% of them had not received any formal finance education. 86% of them are not satisfied with the financial education offered in their curriculum.

Perceptions of Financial Literacy Integration: Most participants had positive attitudes towards the integration of financial literacy into higher education curricula. More than 80% of them agreed that financial education should be a compulsory part of university programmes.

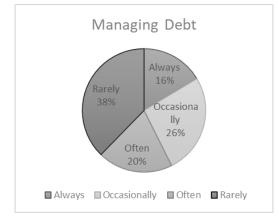


Financial Literacy Levels: Despite the positive attitudes towards financial education, the survey results showed diverse levels of financial literacy among students. Some students had a sufficient knowledge of financial concepts, while others had limited knowledge in areas such as budgeting, saving, and investing.

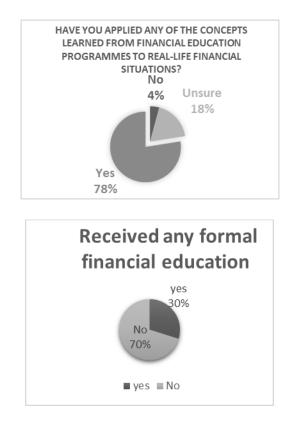








Perceived Learning Outcomes: Participants reported perceived enhancements in their financial knowledge and skills as a result of participating in financial education initiatives. More than 70% of them stated that they felt more confident in managing their personal finances after taking part in financial literacy programmes. 78% of them had applied the concept learned from financial education programmes to reallife financial situations.



The subjective data is converted in numerical values in the form of percentage. Ex. Always, occasionally, often, rarely are converted to numerical values as 100, 75, 50 and 25 to calculate correlation analysis. The correlation coefficient calculated using 2016 Excel workbook formula.

The correlation analysis exploring the relationship between confidence in managing personal finances and abilities in budgeting, saving, investing, and debt management. The findings reveal a minimal correlation overall. Notably, students without any formal financial education before university exhibit a negative correlation across these factors, whereas those with formal financial education display a slight but positive correlation. This suggests that formal financial education plays a crucial role in enhancing financial management skills.

Factors	Correlation Coefficient	Correlation with No Formal Education	Correlation with Formal Education
Confidence vs. Budgeting Ability	0.070648	-0.11036	0.04152
Confidence vs. Saving Ability	0.085863	-0.11036	0.10653
Confidence vs. Investing Ability	0.202727	0.066668	0.163285
Confidence vs. Debt Management Ability	0.010571	-0.22139	-0.03611

Table 1 Correlation Coefficient

The data specifies that confidence in managing personal finances has a low positive correlation with budgeting (0.070648), saving (0.085863), and investing abilities (0.202727), and an almost negligible correlation with debt management ability (0.010571). In contrast, students who have not received any formal financial education show a negative correlation in these areas, with coefficients of -0.11036 for both budgeting and saving abilities, 0.066668 for investing, and -0.22139 for debt management. On the other hand, students who have

received formal financial education before university demonstrate a positive correlation, albeit low, with coefficients of 0.04152 for budgeting, 0.10653 for saving, and 0.163285 for investing, while a slightly negative correlation is observed for debt management (-0.03611).

The regression analysis indicates that formal financial education before university positively influences students' confidence in managing personal finances, with a stronger impact on investing ability. Conversely, the absence of such education correlates negatively, particularly in debt management, highlighting the importance of financial literacy in higher education.

Qualitative Findings: The qualitative analysis of interview transcripts gave additional insights into students' experiences and perceptions of financial literacy integration:

Effectiveness of Integration Efforts: Many participants emphasised the effectiveness of interactive and experiential learning activities, such as workshops, simulation, on field experience in improving their understanding of financial concepts. These methods were seen as more engaging and practical than conventional classroom lectures.

Barriers to Participation: Some students mentioned barriers to participation in financial education activity, such as time limit, competing academic demands, and lack of awareness about available resources and choose them.

Suggestions for Improvement: Participants suggested ways to improve the effectiveness of financial literacy integration, such as increasing the frequency of workshops, using real-life case studies, and offering personalized financial coaching services. These suggestions indicate the need for customized and responsive approaches to meet diverse student needs and preferences.

In summary, the results of the study highlight the importance of integrating financial literacy into higher education and indicate that such initiatives can positively affect student perceptions and learning outcomes. However, the findings also point out the need for continuous efforts to overcome barriers to participation and enhance the quality of educational interventions.

DISCUSSIONS

The study examined how financial literacy can be incorporated into higher education curricula and how it influences student perceptions and learning outcomes. The study used both quantitative survey data and qualitative interview responses to analyse the results. The main findings of the study are as follows: The quantitative analysis showed that most students were positive about the incorporation of financial literacy into higher education curricula, and agreed that financial education should be a compulsory part of university programmes. However, the survey results also showed different levels of financial literacy among students, with some students having a good understanding of financial concepts, while others having limited knowledge in areas such as budgeting, saving, and investing. In addition, participants reported perceived enhancements in their financial knowledge and skills as a result of participating in financial education initiatives, and stated that they felt more confident in managing their personal finances and applied the concepts learned to real-life financial situations. The correlation study underscores the importance of integrating formal financial education into curricula to foster better financial management competencies among students.

The qualitative analysis of interview transcripts gave more insights into students' experiences and perceptions of financial literacy incorporation. Many participants emphasised the effectiveness of interactive and experiential learning activities, such as workshops, simulation, on field experience in improving their understanding of financial concepts. These methods were seen as more engaging and practical than conventional classroom lectures. However, some students mentioned barriers to participation in financial education activity, such as time limit, competing academic demands, and lack of awareness about available resources and choose them. Participants also suggested ways to improve the effectiveness of financial literacy incorporation, such as increasing the frequency of workshops, using reallife case studies, and offering personalized financial

coaching services. These suggestions indicate the need for customized and responsive approaches to meet diverse student needs and preferences.

CONCLUSION

The study found that financial literacy education can help students improve their financial knowledge, skills, confidence, and behaviour, and that interactive and experiential learning methods can make student learning and motivation better. However, the study also showed the difficulties and obstacles that students have in taking part in and benefiting from financial literacy education, and recommended ways to solve them. The study emphasised the importance of incorporating financial literacy into higher education and suggested that such initiatives can have a positive impact on student perceptions and learning outcomes. However, the study also pointed out the need for continuous efforts to remove barriers to participation and improve the quality of educational interventions

ACKNOWLEDGEMENT

Authors are thankful to principal, Jawahar Arts, Science and Commerce College, Anadur for their moral and ethical support to carry out this research. Authors are also thankful to Commerce department Jawahar Arts, Science and Commerce College, Anadur for their valuable help.

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