Research Article

Journal of Business Management and Information Systems
E-ISSN: 2394-3130
Double Blind Peer Reviewed Journal
URL: https://jbmis.qtanalytics.in

Assessing the Role of Financial Literacy in Personal Financial Management

Shah Riya Pranav *1, Shah Vansh Paras †2, Rishita Shah ‡3, and Rajamohan Kavitha §4

[1,2,3,4]Department of Computer Science, Christ University, Bangalore

Abstract

Financial Literacy is essential for people to make wise financial decisions affecting society's well-being and economic prosperity. Through a thorough survey, this study evaluates the level of financial literacy among Indian adults between the ages of 20 and 50. One hundred eighty-six adult respondents from a range of demographics provided primary data. The study investigates how well they comprehend financial management ideas such as tracking expenses, creating a budget, and using financial tools. It also looks at perspectives on the value of financial literacy and the perceived results of educational programs. The analysis aims to pinpoint the differences in financial literacy, routines, expertise, and conduct between various age groups, educational backgrounds, and work situations. The results are anticipated to shed light on the advantages, disadvantages, and necessity of specific laws, initiatives, and technical advancements to improve financial inclusion and literacy. The study emphasizes the potential for wise financial decisions, economic stability, resilience against obstacles, and adopting digital financial services by arming adults with financial knowledge. It acts as a manual for developing an adult population in India that is robust, financially smart, and tech-aware.

Keywords: Finance. Literacy. Data collection. Adults.

QTanalytics®

DOI: 10.48001/jbmis.1101002

Volume: 11
Issue: 1: Jan-Jun
Issue: 2024

Corresponding Author:
Rajamohan Kavitha

Received:
April 14, 2024
Revised:
May 12, 2024
Accepted:
May 18, 2024
Published:
May 25, 2024

1 Introduction

Globally, financial literacy is gaining prominence. The foundation of an economically flourishing society depends highly on financial literacy, which catalyzes informed decision-making and economic empowerment. Regarding the circumstances surrounding India's financial markets, which are rapidly evolving, it becomes crucial to assess the degree of financial awareness among its adult population. However, there is an inadequate level of financial awareness among Indians, making it challenging to navigate the country's increasing complexities regarding financial services and products. While delving into the nuances of financial literacy among adults in India,

*Email: shah.riyapranav@mca.christuniversity.in
†Email: shah.vanshparas@mca.christuniversity.in
‡Email: rishita.shah@mca.christuniversity.in
§Email: kavitha.r@christuniversity.in

it was discovered that the majority of them, including the educated, struggle with basics like budgeting, computing interest, and gauging financial risks (Jora et al., 2022; Mandal, Saxena, & Mittal, 2022). This highly impacts their economic welfare and the nation's overall financial health. With accessible loans and credit card availability, the stakes are ever-increasing.

Alarming gaps in financial literacy have also led to citizens making poor financial decisions, affecting families and community stability. Through survey self-reports, this study aims to decipher the existing state of financial knowledge among adults ages 18-50 years, shedding light on gaps in understanding and potential avenues for improvement. It gathers comprehensive data on various aspects, including but not limited to practical money management, use of financial tools, attitudes on the importance of financial literacy, and discipline. This research is driven by the imperative to understand that a financially literate populace is pivotal for the sustainable development of society. A diverse demographic landscape coexists in India with varying degrees of economic participation. Mining responses unmasks the demographics based on age, education level, or employment status. Findings critically expose the literacy gaps while providing insights into the target areas of policies and reforms tailored to the focused requirements of different population segments. Enhancing the financial skills of adults in India promises immense benefits for society. Savvy consumers make prudent judgments regarding their borrowings and spending and promote economic growth through wiser savings and investments.

Additionally, those financially literate are more resilient to economic downturns, as they can cope skillfully and strategically with challenges such as job loss or unforeseen expenses. Besides direct societal advantages, technical ramifications are associated with boosting financial literacy. A populace well-versed in economic concepts and instruments is more inclined towards accepting digital financial services and innovations, fostering a promotive environment for the growth of financial technologies (FinTech) (Gupta et al., 2022; Mittal & Raghuvaran, 2021). This, in turn, encourages the overall modernization of the financial ecosystem, promoting financial inclusion and digital economic engagement. In essence, this research is a compass that guides the development of regulations, educational initiatives, and technological advances that empower people to understand the complex terrain of personal finance rather than merely evaluating India's current financial knowledge level. By doing this, the study addresses the pressing need and aims to create a digitally savvy, financially literate, and resilient society.

2 Literature Review

Brau, Holmes, and Israelsen's (2019) are conducting an in-depth examination of the financial literacy levels of young people across the globe. They said how different socio-economic and demographic elements impact these levels. They discovered a concerning trend of inadequate financial literacy in the younger generation, highlighting the necessity for enhanced educational and policy measures, which serves as a critical foundation for understanding the present state of financial literacy among youth and underlines the urgency for ongoing research and targeted policy action. Andarsari and Ningtyas's (2019) provides insight into how financially literate women entrepreneurs affect the financial behavior in Malang Municipality, focusing on owners of Micro-, Small, and Medium-sized Enterprises (MSMEs) while making a distinction regarding understanding finances, comparing it with the process of learning about finances and explores the dimensions of awareness and usage. They highlighted the importance of financial knowledge, empirical evidence, and the potential for financially literate individuals to grow their businesses.

Thapa and Nepal's (2015) outlined college students in Nepal enhancing their understanding of financial literacy by exploring several elements that might influence their financial knowledge. They surveyed 436 students across 23 colleges from four major universities. The study uncovered basic financial knowledge, knowledge gaps, influencing factors, and non-influencing factors. Brau, Holmes, and Israelsen's (2019) narrated the body of financial literacy research focusing on young adults' learning processes. They emphasized understanding how the younger generation, particularly students in college, acquire financial literacy. They also discussed a limited understanding of financial matters, wealth management, and targeted educational programs.

Karakurum-Ozdemir, Kokkizil, and Uysal's (2018) talked about the critical role of financial knowledge In middle-income nations that could benefit from tailored educational policies. They focused on the significance of financial awareness in countries like Mexico, Lebanon, Uruguay, Colombia, and Turkey, which talked about Wealth Accumulation as a benefit of financial literacy; financial knowledge significantly influences retirement planning and also discussed how income and regional disparities affect financial literacy, advocating for specialized educational programs to bridge these gaps. De Beckker, De Witte, and Van Campenhout's (2021) analyzed the influence of a financial education course on the purchasing decisions of 8th and 9th-grade students. They focused more on the efficacy of financial awareness programs and the necessity for more focused and captivating initiatives. They analyzed that Financial education increases literacy but may not sufficiently modify consumer behavior, suggesting it alone may not be enough to shape financial decision-making.

Ouachani, Belhassine, and Kammoun's (2020) elucidated a definite examination of the methods for assessing individuals' financial literacy. They talked about a multidimensional aspect of financial literacy and subjective judgments involved in its measurement. They guided future studies on financial literacy measurement methods. Lusardi's (2019) discussed the heightened responsibility of individuals to administer their monetary affairs amidst evolving financial landscapes. Individuals have greater accountability regarding their personal finance management, and rapid changes in markets and products necessitate a deeper understanding of finance. She talked about focused financial education initiatives that are needed for specific demographics to enhance financial literacy effectively.

Rai, Dua, and Yadav's (2019) described Financial Attitude, behavior, and knowledge as critical determinants. Financial Attitude impacts how individuals feel about finance and money management. They discussed that financial behavior affects the day-to-day handling of financial matters, and financial knowledge is essential for understanding and navigating financial products which provides an in-depth review of research on factors influencing financial literacy and suggests a need for more in-depth studies in the Indian context. Kok Fei et al.'s (2021) analyzed the interplay between the financial behavior and psychological factors surrounding emerging adults in Malaysia. They yielded Gender Disparity, Positive Correlations, and specified educational programs for targeted financial education, Parental Guidance in financial upbringing, and Policy Development to foster financial well-being.

3 Data and Methodology of the Study

This study aims to understand the current state of financial literacy among adults and discern financial behavior patterns across demographics. Assess the effect of financial literacy on important financial decisions such as retirement planning, insurance purchasing, and finance management. This can highlight the practical advantages of financial literacy in everyday life. By delving into the nuances, the study aspires to identify and bridge potential gaps in financial knowledge and implemented skills, thereby contributing to future educational initiatives and addressing the unique needs of diverse adult populations in India.

3.1 Data Collection

Primarily, the data for this study was gathered using a Google Form. A total of 187 responses were received, of which 186 were utilized for data analysis. 0.1% of the data was discovered to have missing data with inconsistency and hence was deleted from the analysis. A convenience sampling method was employed for this survey because of its accessibility and ease of reaching potential respondents. The survey link was distributed among professional and personal networks and social media platforms. A broad audience within the specified age range, giving efficiency and cost-effectiveness.The financial literacy section, crucial to the study's primary objective, comprised inquiries that gauged participants' knowledge and conduct related to fiscal matters. The score for financial literacy was calculated by adding the responses to financial behavior questions. Questions in this section encompassed savings practices, budget creation, and expense tracking.

The dataset has four sections. The Demographic Information Section is vital for categorizing survey respondents by age, gender, education, and employment status. This data is essential for customizing financial literacy initiatives and recognizing variations in financial habits among different demographic groups. The Income Section provides crucial insights into income distribution, potential challenges related to income levels, and the impact of additional financial resources on respondents' overall financial situation. The Expenses Section is spending patterns on essentials like housing, utilities, transportation, groceries, and dining. This reveals insights into adults' financial priorities, lifestyles, and areas for targeted financial budgeting. The Finance Literacy Section includes budgeting, self-classification of spending habits, use of economic tools, and confidence in financial decision-making. The section offers insights into adults' financial literacy and their perspectives on the impact and priority of financial education.

3.2 Demographic Information of the survey participants

The summary of the collected data per response is provided in Table 1 and 2. Google Forms was used to carry out a survey, and 186 responses were received to questions regarding financial behavior, financial attitude, and financial skills. The respondents' ages ranged between 20 to 40 years old, with 62.37% belonging to the age group of 20-25. Around 58.06% of the total respondents were males and 41.94% were females. The bigger part of the population, 58% has a Bachelor's degree with 37% being either students or employed at organizations.

Income Statistics specifies that a substantial portion of respondents (38.17%) fall under the "Very Low/Not Applicable" category for monthly income. The majority of respondents (46.24%) have or receive a "No or Very Less" Monthly Allowance. Interestingly, Satisfaction with Monthly Income sees a diverse spread, with 37.10% of respondents feeling "Neutral" about their income. Expenditure Statistics represent utilities and Rent both are notably "High" with 40.86% and 43.01%, respectively. Transportation shows a considerable number of respondents in the "High" bracket at 53.%. Groceries also have most respondents (36.56%) considering their spending on it as "High.

Financial Behaviour and Literacy describes the majority of respondents, 28.49%, as having a "Spending-oriented, not thrifty" attitude towards their finances. Satisfaction with financial knowledge is distributed at 30.65% feeling content. Maintaining a budget seems challenging to many, with only 4.30% adhering to it. Usage of financial applications is prevalent among 28.49% of the respondents. A Significant portion (47.31%) believe that a lack of financial literacy greatly impacts decision-making. Financial Literacy and Confidence says that financial literacy is crucial in educational institutions by 51.61% of respondents. Notably, only 10.75% of respondents believe that financial knowledge shall have a "Positive Impact on the Future." Among the respondents,

Table 1. Assessment of Financial Behaviour

Dataset	Very Low (%)	Low (%)	Neutral (%)	High (%)	Very High (%)
Income Statistics					
Monthly Income (Rs 25000-50000)	38.17 (71)	18.82 (35)	18.28 (34)	12.90 (24)	11.83 (22)
Monthly Allowance (Rs 5000-10000)	46.24 (86)	20.43 (38)	14.52 (27)	9.68 (18)	9.14 (17)
Satisfaction with Monthly Income	19.89 (37)	11.29 (21)	37.10 (69)	19.89 (37)	11.83 (22)
Expenditure Statistics					
Utilities	40.86 (76)	19.89 (37)	13.44 (25)	9.14 (17)	16.67 (31)
Housing Rent	43.01 (71)	17.74 (42)	16.67 (31)	12.90 (24)	9.68 (18)
Transportation	53.76 (100)	25.81 (48)	8.60 (16)	5.38 (10)	6.45 (12)
Grocery	8.06 (15)	11.83 (22)	36.56 (68)	23.12 (43)	20.43 (38)
Recurring Expenses	59.68 (111)	40.32 (75)			

Source: Author's Compilation

31.18% have discipline in savings. Confidence about Financial Knowledge varies, with 28.49% feeling confident.

These insights depict a varied landscape of income, expenditure, financial behavior, and literacy among the respondents, showcasing areas of strengths and weaknesses in their financial management and knowledge.

4 Data Analysis and Results

The demographic profile of this study shows that 60% of respondents were between the age group of 20 to 25 years. Most of the respondents were male (58%) and students (37%). Most of them were college students, bachelor's degree holders, and master's degree holders. Most of the respondents were content with their current income level. More respondents are extremely cautious with their finances and prioritize saving money wherever possible. The majority of individuals spend less than 2000 rupees on transportation. Among those who spend more, a significant portion of males falls within the 2000-4000 rupees range. There is no significant evidence to conclude that the mean 'Financial Literacy Score' is different between the 'Male' and 'Female' groups. More respondents are maintaining their monthly budget because they prefer to use a financial app to manage their expenses. Most of them agree that Improving financial literacy should be a priority for educational institutions. Also, they strongly agree that rising financial literacy among youth can positively impact their future financial well-being. Percentage of Dining and Grocery Expenses based on Employment Status is plotted in Figure 1. This explains that employed people are the most frugal, and most of them spend less than Rs. 500. On the other hand, self-employed people spend more evenly, with the majority spending between Rs. 1501 and Rs. 3000.

The average student budget for food expenses ranges fromRs. 3001 to Rs. 6000. On the other hand, a surprising tendency among the unemployed was noticed, where the largest percentage of them spent at least Rs. 60001. The differences in spending patterns based on job status are

Table 2. Assessment of Financial Behaviour

Dataset	Very Low/Not Applicable (%)	Low (%)	Neutral (%)	High (%)	Very High (%)
Financial Behaviour and Literacy					
Spending oriented, not thrifty	28.49 (53)	25.27 (47)	24.19 (45)	15.05 (28)	6.99 (13)
Satisfaction	7.53 (14)	11.83 (22)	30.65 (57)	26.88 (50)	23.12 (43)
Maintains Budget	4.30 (8)	11.29 (21)	20.43 (38)	38.17 (71)	25.81 (48)
Usage of Financial App	22.58 (42)	28.49 (53)	24.73 (46)	15.05 (28)	9.14 (17)
Lack leads to Poor Decision Making	4.30 (8)	4.30 (8)	12.37 (23)	31.72 (59)	47.31 (88)
Introduction to Educational Institutes	1.61 (3)	3.23 (6)	9.68 (18)	33.87 (63)	51.61 (96)
Disciplined in Savings	5.38 (10)	5.91 (11)	31.18 (58)	34.95 (65)	22.58 (42)
Confidence about Financial Knowledge	4.30 (8)	8.60 (16)	28.49 (53)	34.41 (64)	24.19 (45)
Knowledge Has Positive Future Impact	2.69 (5)	2.69 (5)	10.75 (20)	26.88 (50)	56.99 (106)

Source: Author's Compilation

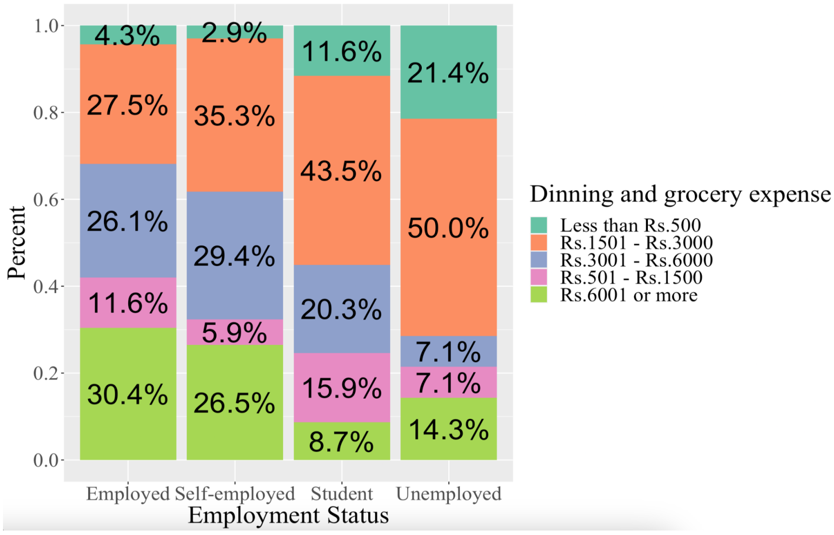

Figure 1. Percentage of Dining and Grocery Expenses based on Employment Status
Source: Developed by the authors, 2024

evident in this comparison.

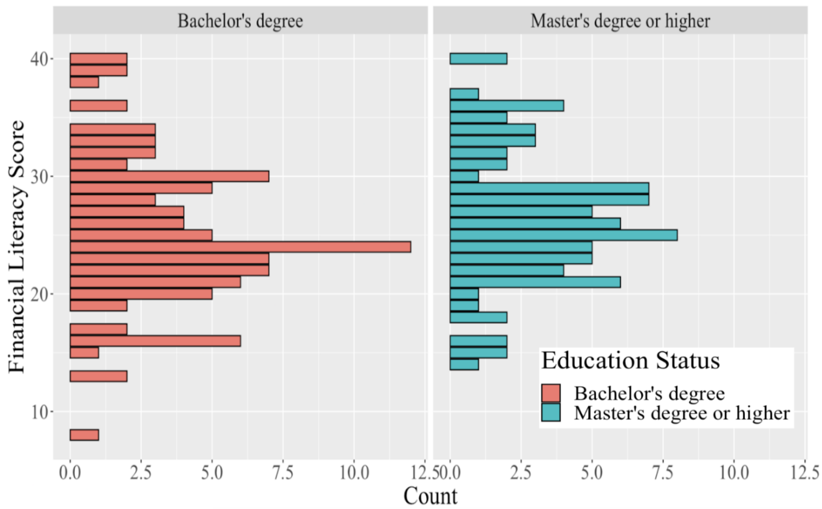

Figure 2. Financial Literacy Score Based on Education Status
Source: Developed by the authors, 2024

Financial Literacy Score based on Education Status is shown as a frequency plot in Figure 2. This plot explains that higher educational attainment, specifically at the graduate level, is linked to greater scores in financial literacy compared to an undergraduate education. This comparison indicates a positive correlation between educational attainment and degree of financial literacy.

The satisfaction level of maintaining the budget based on Employment Status is depicted in Figure 3. This figure explains that the category Employed has a large green section, indicating that many employed people are at level 2 regarding budget management. The category Self-employed has a reasonably even distribution across the levels, with no single level being particularly dominant. The category Student has a prominent blue section, indicating that many students fall into this level. The category Unemployed has a significant portion in green and a small section in yellow at the bottom, which indicates that unemployed people have varying abilities to manage their finances.

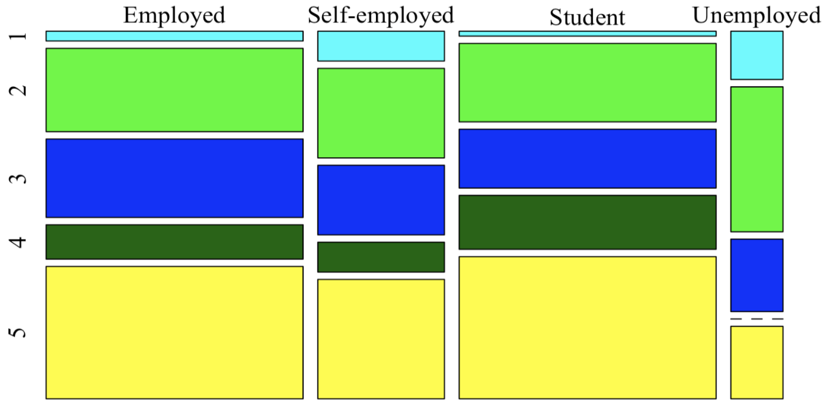

Figure 3. Satisfaction Level of maintaining budget based on Employment Status
Source: Developed by the authors, 2024

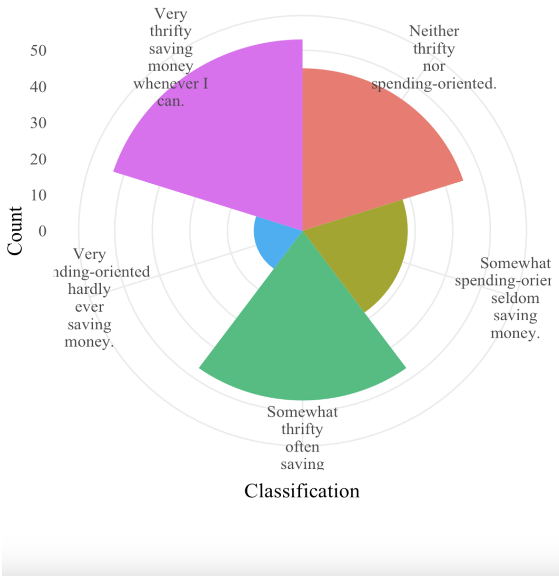

Figure 4. Classification of Financial Literacy
Source: Developed by the authors, 2024

Figure 4 presents the smallest segment displaying contrasts 'Very spending-oriented hardly ever saving money,' indicating fewer people predisposed to spend without saving. The segments 'Very thrifty saving money whenever I can' and 'Somewhat thrifty often saving money' denote a sizable proportion who prioritize saving, with the former being the second largest segment. Meanwhile, the segment 'Somewhat spending-oriented seldom saving money' is moderately sized, showcasing the inclination of those likely to spend rather than save but do not do so as frequently as the very spending-oriented group.

Box plot of expenses score based on the position type is represented in Figure 5. This figure explains that employed and self-employed individuals generally have higher living expenses compared to students and unemployed individuals.

Correlation Matrix of Expenses, Income, and Financial Literacy is plotted in Figure 6. This figure shows The correlation coefficients are almost zero despite all associations being positive. Specifically, the correlation coefficient between the 'Expensescore', which represents the financial burden, and the 'Incomescore', which indicates the financial capacity, is 0.08. This suggests a

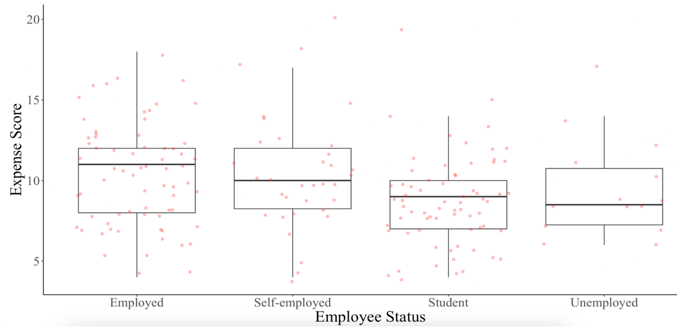

Figure 5. Box plot of Expenses Score based on Position Type
Source: Developed by the authors, 2024

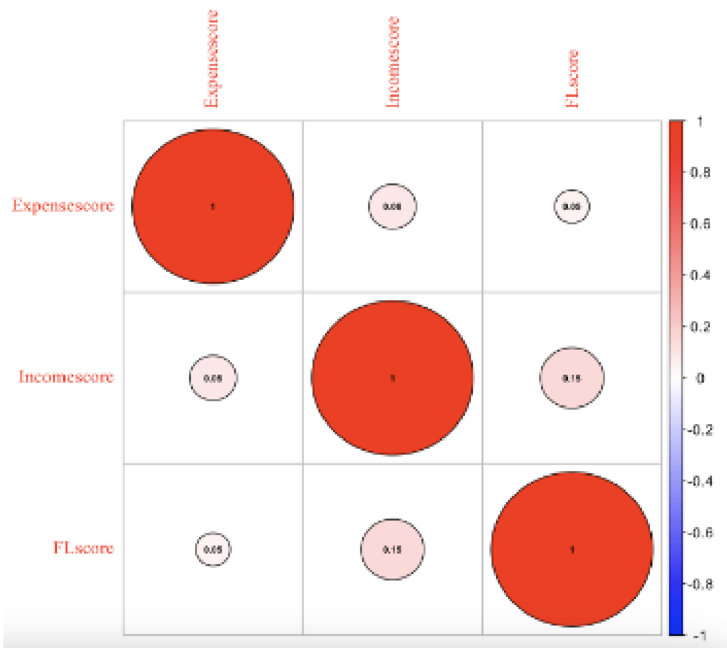

Figure 6. Correlation Matrix of Expenses, Income, and Financial Literacy
Source: Developed by the authors, 2024

very weak positive linear association between the two variables.The correlation between "Expensescore" and "FLscore" is 0.05, which is positive but even weaker.The correlation coefficient between "Incomescore" and "FLscore" is 0.15, indicating a slightly more robust but still weak positive link.

Income Satisfaction Level based on Age Groups is plotted in Figure 7. Responses between the ages of 20 and 25 appear more likely to strongly disagree with the statement under consideration, whereas responses from participants aged 31 and up appear more likely to agree strongly. Age groups show a relatively equal distribution of neutral reactions, with a minor concentration among those in the 26–30 age range. The sparser dots in the "Strongly Agree" and "Strongly Disagree" categories for ages 31 and above suggest that older age groups don't seem to have as much consensus or strong opinion as younger ones do.

Income Satisfaction Level based on Age Groups is plotted in Figure 8. Age groups show a relatively equal distribution of neutral reactions, with a minor concentration among those in the 26–30 age range. The sparser dots in the "Strongly Agree" and "Strongly Disagree" categories for ages 31 and above suggest that older age groups don't seem to have as much consensus or

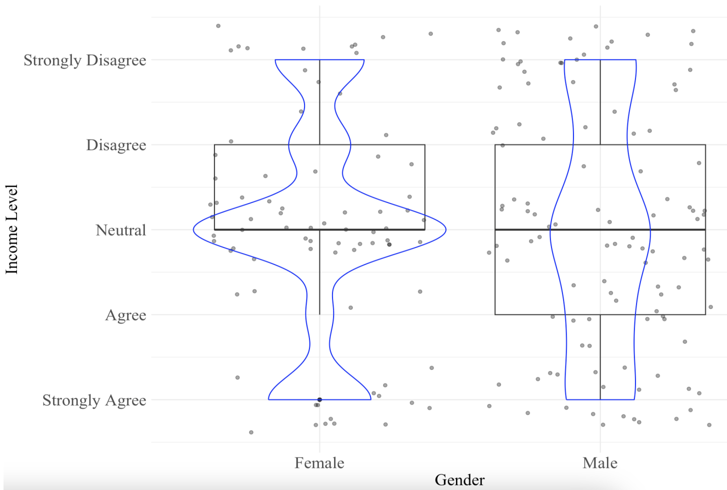

Figure 7. Gender wise Income Satisfaction Level
Source: Developed by the authors, 2024

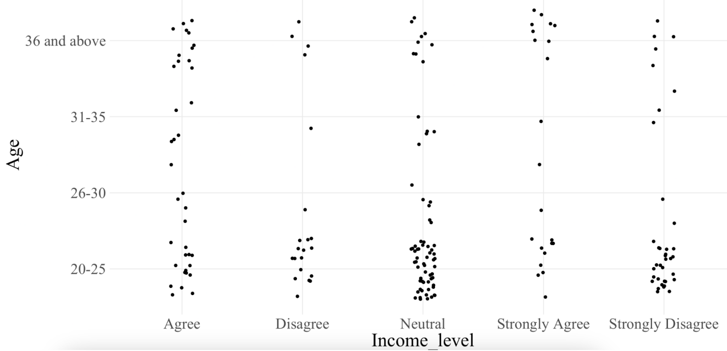

Figure 8. Income Satisfaction Level based on Age Groups
Source: Developed by the authors, 2024

strong opinion as younger ones do.

The participants ' age group wise App usage is plotted as a stacked bar. The younger age group (20-25) actively participated and expressed diverse opinions about AppUsage, while the older age groups had more moderate participation and balanced opinions. Participants' opinion on improving financial literacy education(FLE) is depicted as a line chart figure ??. This chart explains that there is a strong consensus among the various work positions that FLE should be improved and the strongest agreement is "Strongly Agree." Nonetheless, there are some differences: in comparison to the "Employed" and "Self-employed" groups, the "Unemployed" group exhibits a somewhat more significant degree of disagreement, while the "Student" group exhibits a solid agreement but a lower level of simple agreement ("Agree").

5 Conclusion

This survey provides insight into the state of financial literacy among Indian individuals between the ages of 20 and 50. It analyzes survey data across demographic categories and finds strengths, weaknesses, and gaps in this population segment's financial knowledge, attitudes, and behaviors. The results emphasize the need for focused interventions to close the gaps and improve financial literacy, such as customized educational programs, financial education curricula, and utilizing technology. Providing individuals with strong financial literacy has the potential to significantly

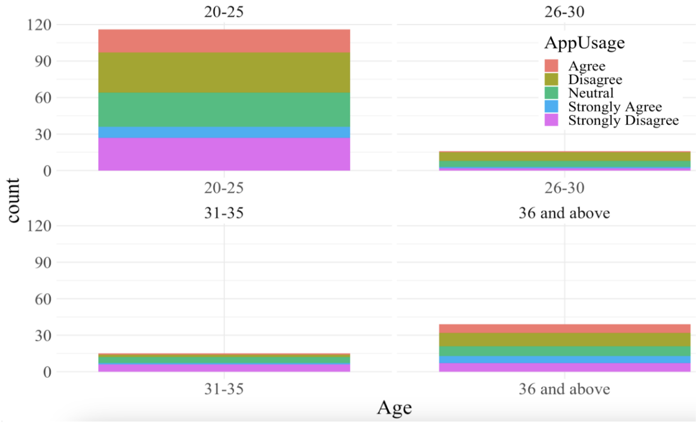

Figure 9. Age group wise App usage of the participants
Source: Developed by the authors, 2024

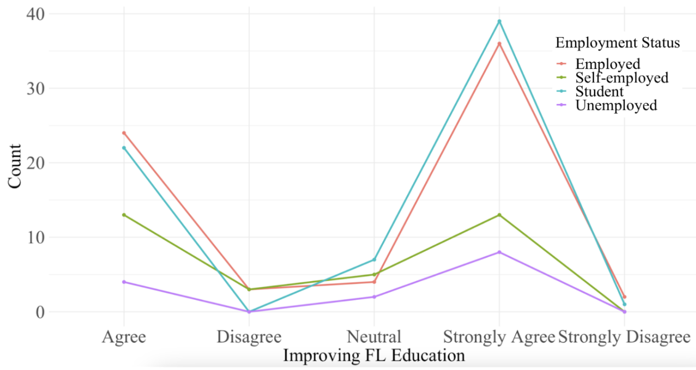

Figure 10. Participants Opinion on Improve Financial Literacy Education
Source: Developed by the authors, 2024

increase the use of digital financial services, build a more resilient financial system, and advance economic prosperity. The study's conclusions encourage stakeholders to prioritize financial literacy as essential to sustainable development plans, eventually opening the door to a more affluent and stable society.

References

Andarsari, P. R., & Ningtyas, M. N. (2019). The role of financial literacy on financial behavior. JABE (JOURNAL of ACCOUNTING and BUSINESS EDUCATION), 4(1), 24. https://doi.org/10.26675/jabe.v4i1.8524

Brau, J. C., Holmes, A. L., & Israelsen, C. L. (2019). Financial literacy among college students: An empirical analysis. Journal of Financial Education, 45(2), 179–205. https://www.jstor.org/stable/48632887

De Beckker, K., De Witte, K., & Van Campenhout, G. (2021). The effect of financial education on students' consumer choices: Evidence from a randomized experiment. Journal of Economic Behavior & Organization, 188, 962–976. https://doi.org/10.1016/j.jebo.2021.06.022

Gupta, A., Mittal, P., Gupta, P. K., & Bansal, S. (2022). Implication of Privacy Laws and Importance of ICTs to Government Vision of the Future. https://doi.org/10.1007/978-981-16-3071-2_32

Jora, R. B., Sodhi, K. K., Mittal, P., & Saxena, P. (2022). Role of Artificial Intelligence (AI) In meeting Diversity, Equality and Inclusion (DEI) Goals. 8th International Conference on Advanced

Computing and Communication Systems, ICACCS 2022, 1687–1690. https://doi.org/10.1109/ICACCS54159.2022.9785266

Karakurum-Ozdemir, K., Kokkizil, M., & Uysal, G. (2018). Financial literacy in developing countries. Social Indicators Research, 143(1), 325–353. https://doi.org/10.1007/s11205-018-1952-x

Kok Fei, C., Fazli, M., Shazana, A., Husniyah, M., Rahim, A., & Nuradibah, M. (2021). The effects of financial literacy, self-efficacy and self-coping on financial behavior of emerging adults. Journal of Asian Finance, 8(3), 905–0915. https://doi.org/10.13106/jafeb.2021.vol8.no3.0905

Lusardi, A. (2019). Financial literacy and the need for financial education: Evidence and implications. Swiss Journal of Economics and Statistics, 155(1), 1–8. https://doi.org/10.1186/s41937-019-0027-5

Mandal, A., Saxena, A., & Mittal, P. (2022). Financial literacy and digital product use for financial inclusion: A GETU model to develop financial literacy. 8th International Conference on Advanced Computing and Communication Systems, ICACCS 2022, 1614–1619. https://doi.org/10.1109/ICACCS54159.2022.9784962

Mittal, P., & Raghuvaran, S. (2021). Entrepreneurship education and employability skills: the mediating role of e-learning courses. Entrepreneurship Education, 4(2), 153–167. https://doi.org/10.1007/s41959-021-00048-6

Ouachani, S., Belhassine, O., & Kammoun, A. (2020). Measuring financial literacy: A literature review. Managerial Finance, 47(2), 266–281. https://doi.org/10.1108/mf-04-2019-0175

Rai, K., Dua, S., & Yadav, M. (2019). Association of financial attitude, financial behaviour and financial knowledge towards financial literacy: A structural equation modeling approach. FIIB Business Review, 8(1), 51–60. https://doi.org/10.1177/2319714519826651

Thapa, B. S., & Nepal, S. R. (2015). Financial literacy in nepal: A survey analysis from college students. NRB Economic Review, 27(1), 49–74. https://doi.org/10.3126/nrber.v27i1.52567