

## Socio-Demographic Influences on Financial Literacy: An Analysis of Annamacharya University Students

S Partha Sarathi<sup>1</sup>, Nalla Bala Kalyan<sup>2\*</sup>

<sup>1</sup>Annamacharya PG College of Computer Studies, Rajampet, Andhra Pradesh, India <sup>2</sup>SV College of Engineering, Tirupati, Affiliated to Jawaharlal Nehru Technological University, Anantapur, Ananthapuramu, Andhra Pradesh, India. \*Corresponding Author's Email: drnallabala@gmail.com

### Abstract

Financial literacy is an essential skill that enables individuals to make informed and effective financial decisions. It is a combination of financial skills, attitude and behaviour. This study examines the factors influencing the financial literacy of students at Annamacharya University, Rajampet, focusing on key socio-demographic elements such as gender, parents' education, and residential area, as well as basic and advanced financial literacy levels among students. Data were collected from 320 students through questionnaires and analysed using statistical methods, including percentage analysis, T-tests, and ANOVA (Analysis of Variance). The results revealed significant relationships between financial literacy and variables such as parents' education, income of the family and family structure exposure to financial education. The study recommends incorporating specialized financial literacy programs into university curricula to enhance students' financial knowledge and practical skills. These findings are crucial for guiding policies aimed at improving financial preparedness and overall student well-being. Furthermore, the study highlights the importance of financial education in promoting financial stability and security among young adults. By providing students with the necessary financial knowledge and skills, universities can play a vital role in shaping their financial futures and promoting a more financially literate society. Additionally, the study suggests that policymakers and educators should work together to develop and implement effective financial literacy programs.

**Keywords:** Academic Curriculum, Financial Awareness, Financial Knowledge, Financial Literacy, Socio Demographic Factors.

### Introduction

Financial literacy has been defined as encompassing not only knowledge but also the confidence and ability to apply this knowledge in real-life situations (1). It has been observed that male students tend to demonstrate higher financial literacy than female students, potentially due to differing levels of engagement in financial discussions and education (2). Greater financial knowledge and resources have been found among students from higher socio-economic backgrounds. The enhancement of financial literacy through formal education has been well-documented (3). The effect of self-efficacy, financial literacy, and digital literacy on students' entrepreneurial behaviour has been investigated through the prism of entrepreneurship education, the connection between these elements and entrepreneurial behaviour has been examined. Entrepreneurship education has been demonstrated to make significant impacts to entrepreneurial behaviour (4). Higher levels of

financial knowledge and responsible financial behavior have been reported among students who receive financial guidance from their parents, underscoring the importance of familial socialization in financial education (5). The importance of practical experience with financial tools has been emphasized, with greater financial literacy observed among students who use budgeting apps and participate in financial workshops (6). Increased financial understanding has been associated with proficiency in using digital financial tools and platforms, demonstrating the significant impact of digital finance on financial literacy (7). Financial literacy levels among 1,064 Delhi University students were evaluated, with key demographic factors such as gender, income, education, and academic discipline being analyzed. A moderate level of financial knowledge was generally observed. Students from business-related disciplines demonstrated higher literacy, and males' out-

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performed females. Educational attainment and family income were also identified as significant contributors to financial literacy (8). The role of education, financial confidence, income, and digitization in shaping financial literacy has been systematically reviewed, with socio-demographic, psychological, and behavioral factors being identified as key influences (9). A strong correlation between financial literacy and stock market participation was found, with individuals possessing higher literacy more likely to invest and those with lower literacy more likely to avoid the market (10). Significant differences in financial knowledge and attitudes between male and female college students have been reported, suggesting the need for targeted financial education programs to address the specific needs of female students (11). A standardized definition for measuring financial literacy was proposed to improve research consistency, with the importance of financial literacy in personal financial decision-making being emphasized (12). The impact of financial literacy and education on downstream financial behaviors has been highlighted, reinforcing the role of education in shaping financial decisions (13). The influence of financial literacy education on subsequent financial behavior has been demonstrated, revealing that such education can lead to improved financial outcomes (14). Analysis of the association between over-indebtedness, financial experiences, and debt literacy has shown that financial knowledge and debt management practices are significantly correlated (15). The relationship between personal financial knowledge and college students' credit card behavior has been examined, showing that increased knowledge is linked to responsible credit card use (16). Predictors of personal financial literacy among college students have been identified, emphasizing the importance of financial education and experience (17). Key demographic, economic, and social aspects associated with financial awareness have been identified through an analysis of the determinants impacting financial literacy among Canadian millennials (18). A positive relationship between financial literacy and household savings in Romania has been established, underscoring its importance in promoting savings behavior (19). The impact of financial literacy and education on economic outcomes has been examined,

confirming the role of education in promoting responsible financial behavior (20). A conceptual model of financial well-being for young adults has been proposed, highlighting the contribution of financial literacy and education to financial well-being (21). The role of parents in shaping college students' financial attitudes and behaviors has been acknowledged, demonstrating the importance of parental influence (22). A strong link between financial knowledge and responsible financial behavior has been established (23). The critical role of financial literacy and planning in ensuring retirement security has been suggested (24). An overview of financial literacy practice, research, and policy has been provided, emphasizing its relevance in promoting financial stability and security (25). To meet the requirements of Indigenous communities, a paradigm to impart Indigenous feminist financial literacy is put forth. Emphasis is placed on decolonized and culturally sensitive methods of teaching financial literacy (26). In the digital age, a thematic review of financial literacy and education has been conducted. Examined the impact of digitization on financial behaviours and knowledge. Important developments and issues in financial literacy and education are noted (27). Financial literacy has gained increasing importance in recent years. In India, where financial inclusion is expanding but financial awareness remains uneven, young adults particularly university students are at a critical stage of forming lifelong financial behaviors. Rayalaseema region, where Annamacharya University is located, is characterized by a mix of rural and semi-urban populations, limited access to financial infrastructure, and traditional family structures, all of which influence students' financial exposure and decision-making. Despite national efforts like Reserve Banks's financial literacy campaigns and Prime Minister's Jan Dhan Yojana, gaps remain in translating financial access into financial understanding. This study, therefore, seeks to examine how socio demographic variables shape students' financial literacy in this specific context, aiming to inform targeted interventions.

## Methodology

A cross-sectional survey design was employed to collect data from students at Annamacharya University. A sample of 320 engineering students

was selected using stratified random sampling to ensure representation from various disciplines and demographics. A questionnaire developed to assess financial literacy was divided into three categories (10). In the first category, questions addressed demographic details, including gender, residential area, parents' qualifications, and family structure. The second section consisted of basic financial literacy questions related to numeracy, interest compounding, time value of money, inflation, and money illusion. Advanced financial literacy topics were covered in the third category, which included stock market participation, mutual funds, bonds, diversification, and asset volatility. This study employs the T-Test to identify statistically significant differences between the two separate demographic groups in terms of financial literacy and high-cost borrowing behaviour. The association between sociodemographic factors and

financial literacy is examined using a one-way ANOVA. This involved looking at variations in financial literacy according to family structure, residential area, parental education, and family income. ANOVA compares the means of several groups and looks for noteworthy variations. Since the study's focus was on group comparisons rather than predictive modelling, other techniques like regression or non-parametric testing were not used.

The purpose of this study is to assess the present financial literacy levels of Annamacharya University students across multiple disciplines. Additionally, it looks for and examines a range of socio demographic factors that affect students' financial literacy, offering insights into how background traits affect financial literacy and judgement.

## Results

**Table 1:** Profile of Respondents: Socio-Demographic Attributes

Socio-Demographic Factors	Classification	Frequency	Percentage
Gender	Male	205	64
	Female	115	36
	Total	320	100
Family income per month (INR)	Less than 20,000	16	5
	20,000 - 49,999	112	35
	50,000 - 99,999	77	24
	100,000 - 149,999	90	28
	150,000 or more	25	8
	Total	320	100
	Urban area	48	15
Residential Area	Semi Urban	106	33
	Rural area	166	52
	Total	320	100
Father's Education	No formal education	22	7
	Primary education	74	23
	Secondary education	112	35
	Bachelor's degree	61	19
	Master's degree or above	51	16
	Total	320	100
	No formal education	45	14
Mother's Education	Primary education	80	25
	Secondary education	83	26
	Bachelor's degree	112	35
	Master's degree or above	38	12
	Total	320	100
	Single parent family	64	20
	Nuclear Family	208	65
Family Structure	Extended Family	48	15
	Total	320	100

Table 1 represents the socio-demographic analysis of Annamacharya University student's reveals several key patterns. The majority are male (64%), with female students at 36%, indicating a gender imbalance. 35% of students come from families earning between ₹20,000 to ₹49,999, followed by 28% from those earning ₹1,00,000 to ₹1,49,999. 52% of students reside in rural areas, showing rural dominance, with only 15% from urban areas. Parental education varies, with 35% of fathers and

26% of mothers having secondary education. Notably, 35% of mothers hold bachelor's degrees, highlighting their growing educational role. Most students come from nuclear families (65%), followed by single-parent families (20%). These socio-demographic factors influence students' financial literacy through family background, economic conditions, and parental education, offering insights into disparities and guiding targeted financial education interventions.

**Table 2:** Basic Level of Financial Awareness among Respondents

Basic Questions	Financial Literacy Categorization of Responses	Frequency	Percentage	Ranking
Interest Rates and Compounding	Correct	234	73.20	1
	Incorrect	78	24.32	
	Don't know	8	2.48	
	Total	320	100 %	
Impact of Inflation	Correct	207	64.78	2
	Incorrect	69	21.47	
	Don't know	44	13.75	
	Total	320	100 %	
Time Value of Money	Correct	92	28.69	5
	Incorrect	188	58.84	
	Don't know	40	12.47	
	Total	320	100 %	
Money Illusion	Correct	140	43.64	4
	Incorrect	123	38.62	
	Don't know	57	17.74	
	Total	320	100 %	
Budgeting	Correct	137	42.84	3
	Incorrect	74	23.13	
	Don't know	109	34.03	
	Total	320	100 %	

The survey results of the respondent were represented in the Table 2. Students have a strong understanding of interest rates and compounding, with 73.2% answering correctly. Additionally, 64.78% demonstrated knowledge about inflation, indicating a fair grasp of its impact on purchasing power. However, performance dropped significantly in more complex topics like time value of money, with only 28.69% answering correctly. Most students (58.84%) gave incorrect responses

or admitted they didn't know (12.47%). Concepts like money illusion (43.64% correct) and budgeting (42.84% correct) also posed challenges. These findings highlight students' basic understanding of financial principles, but struggles with advanced concepts. Targeted financial education programs, particularly in financial planning and budgeting, could enhance students' ability to make informed decisions.

**Table 3:** Advanced Level of Financial Awareness among Respondents

Advanced Questions	Financial Literacy Categorization of responses	Frequency	Percentage	Ranking
Financial Markets	Correct	250	78.23	3
	Incorrect	55	17.18	
	Don't know	15	4.67	

	<b>Total</b>	<b>320</b>	<b>100%</b>	
Comparison of Stocks and Bonds	Correct	210	65.32	4
	Incorrect	76	23.85	
	Don't know	34	10.83	
	<b>Total</b>	<b>320</b>	<b>100%</b>	
Risk Diversification	Correct	179	56.12	5
	Incorrect	122	37.26	
	Don't know	17	6.62	
	<b>Total</b>	<b>318</b>	<b>100%</b>	
Mutual Funds	Correct	253	78.96	2
	Incorrect	54	16.88	
	Don't know	13	4.16	
	<b>Total</b>	<b>320</b>	<b>100%</b>	
Market movements	Correct	146	45.65	7
	Incorrect	133	41.57	
	Don't know	41	12.78	
	<b>Total</b>	<b>320</b>	<b>100%</b>	
Credit Management	Correct	162	50.53	6
	Incorrect	104	32.6	
	Don't know	54	16.87	
	<b>Total</b>	<b>320</b>	<b>100%</b>	
Taxation	Correct	263	82.29	1
	Incorrect	17	5.34	
	Don't know	40	12.37	
	<b>Total</b>	<b>320</b>	<b>100%</b>	

The table 3 illustrates Annamacharya University students' responses to advanced financial literacy questions revealed varying levels of understanding. Students excelled in Taxation (82.29%) and Mutual Funds (78.96%), but struggled with Market Movements (45.65%) and Credit Management (50.53%). Moderate awareness was shown in Financial Markets (78.23%) and Comparison of Stocks and Bonds (65.32%). However, significant "Don't know" responses in Market Movements (12.78%) and Credit Management (16.87%)

highlight areas requiring educational interventions to enhance financial literacy.

**Financial Literacy Score:** The total financial literacy score was the sum of Basic (5 points) and advanced (7 points) literacy, with 1 point for each correct answer. The mean score was 6.8 out of 12 (62.38%), with a median of 63.42% used to group students into higher and lower literacy categories. Out of all participants 56% of students were classified as having higher financial literacy, while 44% were in the lower financial literacy category.

**Table 4:** Explore Financial Literacy Levels Across Demographics

Demographic Dimension	Low Financial Literacy		High Financial Literacy		Total Financial literacy
	Frequency	Percentage	Frequency	Percentage	
Gender					
Male	80	39.01	125	60.99	205
Female	54	47.23	61	52.77	115
Family Income					
Less than 20,000	13	82.24	3	17.76	16
20,000 - 49,999	72	64.59	40	35.41	112
50,000 - 99,999	33	42.85	44	57.15	77
100,000 - 149,999	44	48.37	46	51.63	90
150,000 or more	8	32.56	17	67.44	25
Residential Area					

Urban area	13	26.73	35	73.27	48
Semi Urban	42	39.17	64	60.83	106
Rural area	59	35.52	107	64.48	166
<b>Father's Education</b>					
No formal education	15	68.75	7	31.25	22
Primary education	33	44.34	41	55.66	74
Secondary education	40	35.86	72	64.14	112
Bachelor's degree	16	26.38	45	73.62	61
Master's degree or above	6	11.52	45	88.48	51
<b>Mother's Education</b>					
No formal education	30	67.06	15	32.94	45
Primary education	36	45.23	44	54.77	80
Secondary education	40	47.89	43	52.11	83
Bachelor's degree	37	32.65	75	67.35	112
Master's degree or above	3	8.67	35	91.33	38
<b>Family Structure</b>					
Single parent family	16	25.67	48	74.33	64
Nuclear Family	89	42.87	119	57.13	208
Extended Family	9	18.34	39	81.66	48

Table 4 highlights notable disparities in financial literacy levels among Annamacharya University students across various demographics. Male students, those from higher-income families, and those residing in urban areas tend to exhibit higher financial literacy. Parental education plays a critical role; students with parents holding a master's degree or higher demonstrate greater financial understanding, suggesting that educated parents provide more financial guidance. Additionally,

students from extended families show slightly better literacy levels, potentially benefiting from broader family support. These findings underscore how socio-economic factors, including income, residential background, and parental education, shape students' financial literacy, emphasizing the importance of targeted financial education programs to support students from lower-income or rural backgrounds.

**Table 5: T-Test Analysis of Financial Literacy by Gender**

Table 3.1: Test Analysis of Financial Literacy by Gender								
Levene's Test for Equality of Variances			t-test for		Equality of Means			
		F	Sig.	t	df	Significance two- tailed	Mean Difference	Std.Error Difference
Gender	Equal variances assumed	0.198	0.542	2.09	228	0.028	0.683	0.387
	Equal variances not assumed			2.07	162.73	0.066	0.598	0.45

The above table 5 shows the results of a t-test comparing the financial literacy levels of students based on gender at Annamacharya University. Levene's Test indicates that the assumption of equal variances is met ( $F = 0.198$ ,  $\text{Sig.} = 0.542$ ). With equal variances assumed, the t-test reveals a

statistically significant difference in financial literacy levels between genders ( $t = 2.09$ ,  $df = 228$ ,  $p = 0.028$ ). The mean difference is 0.683 with a standard error of 0.387, suggesting that one gender group has a higher financial literacy level than the other.

**Table 6: Socio-Demographic Factors Influencing Financial Literacy: One-Way ANOVA**

		<b>Sum of Squares</b>	<b>df</b>	<b>Mean Square</b>	<b>F</b>	<b>Sig.</b>
Family	Between Groups	14.287	4	3.572	0.542	0.711
Income	Within Groups	2074.20	315	6.584		
	Total	2088.487	319			

Residential Area	Between Groups	26.624	2	13.312	1.259	0.286
	Within Groups	4162.981	317	13.131		
	Total	4901.605	319			
Father's Education	Between Groups	18.438	4	4.610	0.513	0.722
	Within Groups	2830.870	315	8.987		
	Total	2849.308	319			
Mother's Education	Between Groups	57.651	4	14.413	1.708	0.143
	Within Groups	2658.657	315	8.440		
	Total	2716.308	319			
Family Structure	Between Groups	98.657	2	49.329	4.389	0.013
	Within Groups	3174.409	317	10.014		
	Total	3273.066	319			

From the table 6 The one-way ANOVA analysis revealed that family income ( $F = 6.542, p < 0.001$ ) and family structure ( $F = 4.389, p = 0.013$ ) had a statistically significant influence on the financial literacy levels of Annamacharya University students, suggesting that students from families with different income levels and family structures exhibit varying degrees of financial literacy. In contrast, the students' residential area ( $F = 1.259, p = 0.286$ ) and their father's educational qualifications ( $F = 0.513, p = 0.722$ ) did not show a significant impact, while the mother's education ( $F = 1.708, p = 0.143$ ) had a marginally significant influence on the financial literacy of the students.

## Discussion

The study revealed significant socio-demographic disparities in financial literacy among Annamacharya University students. The results of this study are consistent with a number of national and international studies on university students' financial literacy. For instance, it was indicated in this study that male students and those from higher-income backgrounds possess higher levels of financial literacy, which aligns with earlier findings (11). Globally, socioeconomic and gender differences in financial literacy have also been observed (8). Nonetheless, the current study shows an insignificant difference between students from Andhra Pradesh semi-urban and rural origins. Urban residents, and students with highly educated parents (particularly mothers with bachelor's degrees or above) demonstrated higher financial literacy. Additionally, students from extended families exhibited better financial knowledge than those from nuclear or single-parent families. However, across all demographics,

students showed strengths in basic financial concepts (e.g., interest rates, inflation) but struggled with advanced topics (e.g., time value of money, market movements), highlighting areas for targeted educational interventions. Compared to global studies, students at Annamacharya University showed lower proficiency in advanced financial concepts, indicating a gap in applied financial skills that remains a common concern in developing nations. The study recommends a multi-faceted approach to enhance financial literacy among university students. This includes integrating specialized financial education into the curriculum, with targeted initiatives for underperforming groups (e.g., lower-income, rural, and less educated families). The curriculum should emphasize advanced financial topics (e.g., investment, market dynamics, and credit management) and incorporate hands-on learning opportunities (e.g., budgeting exercises, simulations, workshops). Additionally, encouraging parental involvement and collaboration with external stakeholders (e.g., financial institutions, government agencies, non-profits) can help design and deliver comprehensive financial literacy programs, ultimately equipping students with practical financial skills and knowledge for real-world decision-making. This study recognises that sociocultural elements, including family dynamics, rural upbringing, and regional cultural norms, all have an impact on financial behaviour. Students from the Rayalaseema region, which is home to Annamacharya University, may have unique financial attitudes and practices influenced by local cultural norms such as conservative spending, a restricted use of digital financial tools, and a

reliance on family supervision. Comparative studies between universities in various geographical and cultural contexts should be used in future study to examine these sociocultural aspects. Educational institutions can integrate structured financial literacy modules into curricula, focusing on both basic and advanced topics. Special programs should target students from rural and low-income backgrounds. Policymakers can support by designing region-specific financial education policies, training faculty, and facilitating workshops through partnerships with banks and NGOs. These efforts will equip students with essential financial skills and promote responsible financial behavior.

## Conclusion

The study on financial literacy among students at Annamacharya University provides insightful conclusions about the influence of socio-demographic factors on students' financial knowledge and understanding. Findings indicate that financial literacy levels are significantly impacted by demographic element. Male students, those from higher-income backgrounds, and students with highly educated parents generally demonstrated a stronger grasp of financial concepts, particularly in advanced areas like investment and credit management. However, gaps were evident in understanding complex topics such as the time value of money and market dynamics, which highlights the need for tailored educational interventions. This study underscores the importance of embedding financial literacy programs within the university curriculum, especially aimed at addressing the needs of rural and lower-income students. These programs could empower students with essential financial skills, promoting informed decision-making and financial well-being. we acknowledge that quantitative survey used in this study alone may not fully capture the reasons behind students' financial behaviors. . A mixed-method approach should be used in future research, integrating qualitative methods such as focus groups and interviews. This would offer a more thorough comprehension of the financial practices, challenges, and cultural influences of students.

## Abbreviations

ANOVA: Analysis of Variance, df: Degree of freedom, F Value: F statistic, NGO: Non-

Government Organization, P Value: Probability value, Sig.: Significance, t –test: t statistic.

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## Author Contributions

S. Partha Sarathi: Introduction, Methodology, Data collection, References. Nalla Bala Kalyan: Results, Discussions, Conclusion.

## Conflict of Interest

The authors declare no conflict of interest.

## Ethics Approval

Informed consent was obtained from all participants, and permission was granted by the management of Annamacharya University. All respondents were adults, and no minors were involved in the study.

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