



Financial Literacy among the Students of Junagadh Agricultural University

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Authors' contributions

This work was carried out in collaboration among all authors. All authors have equally contributed to designed, analysed, interpreted and prepared the manuscript. All authors read and approved the final manuscript.

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ABSTRACT

Financial Literacy has become one of the top priorities for most of the world today as it is directly proportional to the economic growth of a country. This is alarming to know that the financial literacy rate in India is way behind other countries, so a study was carried out to measure the financial literacy of students of Junagadh Agricultural University during 2021-2023. The data was collected from 600 students, 300 from Under Graduate (UG) and Post Graduate (PG) each using a structured interview schedule. Financial Literacy Index and Structural Equation Modelling (SEM) were used for the study purpose. The study revealed that, there is a low level of financial literacy especially in terms of financial knowledge among the students. Financial knowledge, behavior, and attitude have significant positive effects on the financial literacy of students hence it is suggested that to enhance the financial literacy of students, training should be imparted on financial attitude, financial behavior, and especially financial knowledge as low level is more prevalent in this area of financial literacy.

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Keywords: Financial literacy; financial attitude; financial behaviour; financial knowledge.

1. INTRODUCTION

Financial Literacy has become one of the top priorities for most of the world today as it is directly proportional to the economic growth of a country. It refers to the ability to understand basic financial concepts and the possession of knowledge and skills required to make informed and effective financial planning and decisions using the available financial resources (Kaiser & Menkhoff, 2020). It is alarming to know that the financial literacy rate in India is way behind other countries (Reswari et al., 2018). According to a global survey, India is home to almost 20% of the world's population, however, 76% of its adult population is not even aware of the basic financial concepts (Kharel et al., 2024). The survey reports that financial literacy in India is significantly poor compared to the rest of the world (Melbha, 2020; Brown et al., 2016; Pranusha, 2023; Sreeja & Sreeraj, 2019).

India has the largest young population in the world. As Biswajit Saha, Director (Vocation and Training), Central Board of Secondary Education (CBSE) puts it, "Financial skill is the 21st century life skill and needs to be imparted to different age groups, especially young minds" (Money Control News, 2019; Dash & Ranjan, 2023; Tavares et al., 2019). Lusardy, 2019 also emphasized that financial literacy is an essential skill in the 21st century (Jain et al., 2024). It increases the confidence and self-control of the student, which in turn facilitates their participation in the formal economic system and leads to their empowerment and well-being (Ambarkhane and Singh, 2015; Reddy & Alemayehu, 2015). Therefore an in-depth study of students' financial literacy will surely be a pointer to modify educational inputs for improvement in Financial Literacy amongst the students. The present study aims to develop a financial literacy model for the students.

Objectives:

1. To measure financial literacy among the students
2. To develop a financial literacy model for the students

2. MATERIALS AND METHODS

The study was confined to Junagadh Agricultural University. 300 students were selected randomly from each UG and PG level. Thus total sample size was 600 students which comprise 25 per cent of total students of university. The primary data were collected through the well-prepared questionnaire.

The Financial Literacy Index used by Trivedi et al., 2023a, was adopted to measure the level of financial literacy of students. The Financial Literacy Index model is as follows:

$$FLI = \sum_{i=1}^n a_i w_i = a_1 w_1 + a_2 w_2 + a_3 w_3 + a_4 w_4 + a_5 w_5 \dots \dots \dots + a_{45} w_{45}$$

Where,

a_i = Various Financial Literacy Aspects
 w_i = Corresponding Weight

The financial literacy indicators and their respective weight are presented in Table 1.

The questions were emphasized in four areas namely General personal finance knowledge, Savings and Borrowings, Insurance and Investment. The questions were related to the Indian situation and pertained to banking, securities market, insurance, and retirement planning which are the areas, envisaged under the national strategy on financial education (Ambarkhane and Singh, 2015).

The Financial Literacy Index (FLI) may take relative values between 0 and 100; zero indicates the lowest financial literacy (complete financial illiteracy) while 100 indicates complete financial literacy. Based on the value of the Financial Literacy Index, three financial literacy levels are identified, i.e., low literacy (FLI<60), medium literacy (FLI: 60-80), and high literacy (FLI>80) (Volpe et al., 2002).

Structural Equation Modeling (SEM) was used to develop a model for the financial literacy of students. Financial knowledge, behavior, and attitude were independent whereas financial literacy level was a dependent variable in the proposed model. The model for the study has taken the form as Fig. 1.

Table 1. Aspects and weights of financial literacy index

Aspects	Level	No. of Questions	Weight	Total
Knowledge	Easy	15	1	15
	Medium	10	1.5	15
	Difficult	10	2	20
Attitude	-	5	5	25
Behaviour	-	5	5	25
Total				100

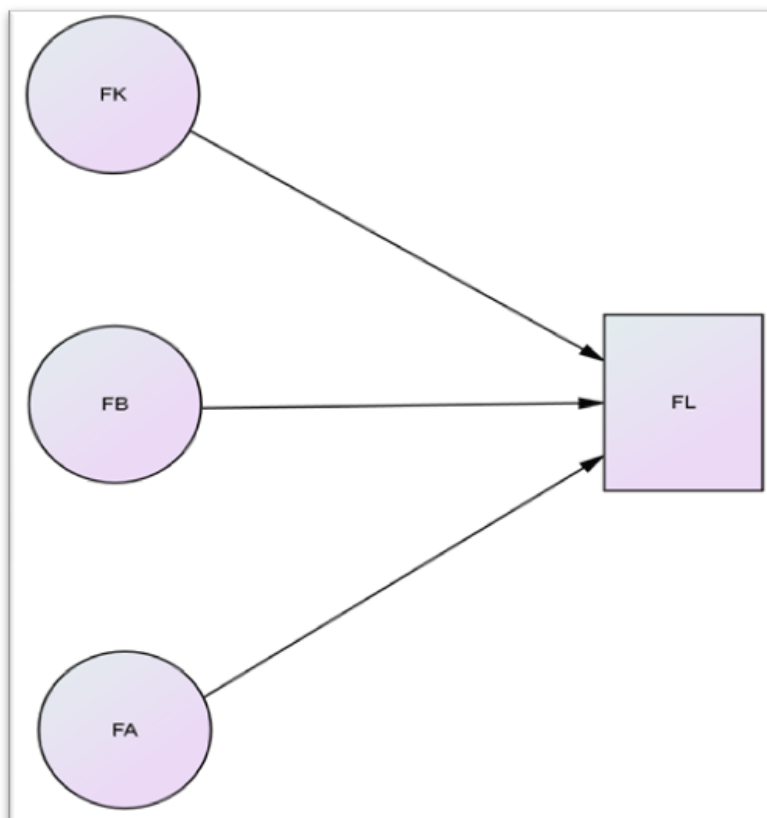


Fig. 1. Proposed model of financial literacy among the students of JAU

3. RESULTS AND DISCUSSION

3.1 Demographic profile of Students

The sample profile of respondent UG and PG students is presented in Table 3. Based on the intake faculties are grouped as Agriculture, ABM, and other which includes engineering, horticulture, fisheries, and veterinary. In the case of UG students, the highest number of students were from the faculty of agriculture (72.33 %) followed by others (27.57%), whereas, ABM faculty offers only PG courses. The age range of the UG students was 18 to 26 years with an average age of 20.23 years. The majority of the students were male (68%) having family income between 1.5 lakhs to 7 lakhs rupees (57.34%).

In the case of PG students, the majority of students were from the agriculture faculty (46%), followed by ABM (34.33%) and other faculty (19.67%). Though the majority of PG students were female (60%), gender distribution in PG students showed an opposite trend as compared to UG students where male students are in the majority. The age range of the PG students was 22 to 36 years with an average age of 29 years. The family income of the majority of the students was between 1.5 lakhs to 7 lakhs rupees (51.67%), whereas, only 19 percent of total students were found with family income above 7 lakh rupees.

Overall results indicate that the majority of students were from agriculture faculty

(59.17%), followed by other (23.67) and range of 18 to 36 years having family ABM faculty (17.17). The majority of income between 1.5 lakhs to 7 lakhs rupees students were male (54%), with an age (54.50%).

Table 2. Demographic profile of students

Faculty	UG		PG		Total	
	No.	%	No.	%	No.	%
Agriculture	217	72.33	138	46.00	355	59.17
ABM	0	0	103	34.33	103	17.17
Other	83	27.57	59	19.67	142	23.67
	300	100	300	100	600	100
Gender	No.	%	No.	%	No.	%
Male	204	68.00	120	40.00	324	54.00
Female	96	32.00	180	60.00	276	46.00
	300	100	300	100	600	100
Family Income	No.	%	No.	%	No.	%
Below 150000	73	24.33	88	29.33	161	26.83
150000 to 700000	172	57.34	155	51.67	327	54.50
Above 700000	55	18.33	57	19.00	112	18.67
	300	100	300	100	600	100
Age	Years		Years		Years	
Maximum	26		36		36	
Minimum	18		22		22	
Average	20.23		29		29	

Table 3. Financial Literacy score among the students

Sr. No.	Dimensions of Financial Literacy	Minimum	Maximum	Mean	SD
UG Students					
1	Knowledge	1.50	30.00	14.96	5.09
1.1	Personal Finance	0.00	9.50	3.98	1.81
1.2	Savings and Borrowing	0.00	11.50	4.37	2.32
1.3	Insurance	0.00	10.50	4.27	2.54
1.4	Investment	0.00	8.00	2.34	1.75
2	Attitude	2.50	25.00	15.37	4.95
3	Behaviour	9.00	25.00	20.11	3.70
FLI		27.50	77.50	50.44	10.37
PG Students					
Sr. No.	Dimensions of Financial Literacy	Minimum	Maximum	Mean	SD
1	Knowledge	2.00	33.00	18.33	6.54
1.1	Personal Finance	0.00	9.50	4.50	2.05
1.2	Savings and Borrowing	0.00	13.00	5.47	2.66
1.3	Insurance	0.00	11.50	5.42	2.60
1.4	Investment	0.00	9.00	2.94	2.12
2	Attitude	5.00	25.00	15.90	4.30
3	Behaviour	12.00	25.00	22.14	3.31
FLI		22.00	83.00	56.36	10.59
All Students					
Sr. No.	Dimensions of Financial Literacy	Minimum	Maximum	Mean	SD
1	Knowledge	1.50	33.00	16.64	6.10
1.1	Personal Finance	0.00	9.50	4.24	1.95
1.2	Savings and Borrowing	0.00	13.00	4.92	2.56
1.3	Insurance	0.00	11.50	4.85	2.63
1.4	Investment	0.00	9.00	2.64	1.96
2	Attitude	2.50	25.00	15.63	4.64
3	Behaviour	9.00	25.00	21.12	3.65
FLI		22.00	83.00	53.40	10.89

Financial literacy among the students: The financial literacy score of UG, PG, and all students is presented in Table 4. The results revealed that the mean value of the financial literacy score obtained by UG students is 50.44, which indicates that on average, students scored around 50 percent of financial literacy. The minimum and maximum score of financial literacy is 27.50 and 77.50, respectively, which indicates that overall financial literacy has a quite high range with a standard deviation (SD) of 10.37 %. Out of the three sub-areas on financial literacy, the UG students scored lowest in knowledge with a mean score of 14.96 and scored highest in behaviour (20.11) followed by attitude (15.37). However, the highest variation in dimensions of financial literacy concerning UG students is observed in knowledge (SD: 5.09), followed by attitude and behaviour with a standard deviation of 4.95 and 3.7, respectively.

The results for PG students revealed that the mean value of the financial literacy score is 56.36, which indicates that on average, students scored around 56 percent of financial literacy. The minimum and maximum scores of financial literacy for PG students is 22 and 83, respectively, which indicates that financial literacy has a comparatively high range of variation with a standard deviation (SD) of 10.59%. Out of the three sub-areas on financial literacy, the PG students scored lowest in attitude with a mean score of 15.90 and scored highest in behaviour (22.14) followed by knowledge (18.33). However, the highest variation in dimensions of financial literacy concerning PG students is observed in knowledge (SD: 6.54), followed by attitude and behavior with a standard deviation of 4.30 and 3.31, respectively.

The range of scores in all four sub-areas on financial knowledge begins with zero in the case of both UG and PG students but the value of mean score of knowledge on savings and borrowings and knowledge of insurance is all most equal, followed by knowledge of personal finance and investment as shown in table.

The overall financial literacy mean score of students at Junagadh Agricultural University is 53.40 with a standard deviation of 10.89 indicates around half the level of financial literacy. The most equal mean score is obtained in knowledge about saving and borrowings and knowledge about insurance (4.92, 4.85) followed by knowledge about personal finance (4.24) and

a poor score of knowledge for investment is observed (2.64).

The level of financial literacy among the students is presented in Table 5. It revealed that the majority of UG students depicted a low level of financial literacy in terms of knowledge (99.67) followed by a medium level in terms of attitude (51.67%) and a high level in terms of behavior (50.67%). Out of the four sub-areas of financial knowledge, low level is more prevalent for investment (97.33%), followed by savings and borrowings (96.33%), personal finance (94.33%), and insurance (80.33%). Overall, around 82 percent of students come under a low level of financial literacy; 18.33 percent under a medium level and no students were found to have a high level of financial literacy.

The financial literacy of PG students showed improved results as compared to UG students perhaps due to a higher level of education. This result is also supported by the findings of Nigam and Jain, 2017 and Kaur, 2023. Though the majority of students fall under a low level of financial literacy with around 58 percent, 41 percent of PG students have a medium level of literacy which is good as compared to their counterparts, whereas, 0.67 percent of PG students have a high level of financial literacy. Financial knowledge of PG students is low in the case of 96.33 percent of respondents, followed by a high level of financial literacy in terms of behaviour and a medium level of attitude with 74 and 67 percent of respondents, respectively.

From the results of the level of financial literacy of UG and PG students, it can be interpreted that the majority of students of Junagadh Agricultural University found to have a low level of financial literacy (70%), followed by a medium level (29.67%) and a few with high level (0.33%). Overall, the majority of students are poor in financial knowledge (98%) with low financial attitude (33.17%) but show high financial behaviour (62.33%). Trivedi et al., 2023_b found the same results. Thus, it can be concluded that there is a low level of financial literacy especially in terms of financial knowledge among the students of Junagadh Agricultural University. Ashok et al., 2023 and Trivedi and Gupta, 2024 find similar results in their study about financial literacy among the university students.

Financial literacy model for the students: The results of a hypothetical SEM model are presented in the following Fig. 2.

Table 4. Level of financial literacy among the students

Sr. No	Dimensions of Financial Literacy	Level of Financial Literacy					
		Low (Below 60%)		Medium (60% to 80%)		High (Above 80%)	
		No.	%	No.	%	No.	%
UG Students							
1	Knowledge	299	99.67	1	0.33	0	0.00
1.1	Personal Finance	283	94.33	17	5.67	0	0.00
1.2	Savings and Borrowing	289	96.33	11	3.67	0	0.00
1.3	Insurance	241	80.33	51	17.00	8	2.67
1.4	Investment	292	97.33	8	2.67	0	0.00
2	Attitude	106	35.33	155	51.67	39	13.00
3	Behaviour	18	6.00	130	43.33	152	50.67
FLI		245	81.67	55	18.33	0	0.00
PG Students							
1	Knowledge	289	96.33	11	3.67	0	0.00
1.1	Personal Finance	267	89.00	33	11.00	0	0.00
1.2	Savings and Borrowing	276	92.00	23	7.67	1	0.33
1.3	Insurance	215	71.67	61	20.33	24	8.00
1.4	Investment	271	90.33	23	7.67	6	2.00
2	Attitude	93	31.00	181	60.33	26	8.67
3	Behaviour	8	2.67	70	23.33	222	74.00
FLI		175	58.33	123	41.00	2	0.67
ALL Students							
1	Knowledge	588	98.00	12	2.00	0	0.00
1.1	Personal Finance	550	91.67	50	8.33	0	0.00
1.2	Savings and Borrowing	565	94.17	34	5.67	1	0.17
1.3	Insurance	456	76.00	112	18.67	32	5.33
1.4	Investment	563	93.83	31	5.17	6	1.00
2	Attitude	199	33.17	0	0.00	65	10.83
3	Behaviour	26	4.33	200	33.33	374	62.33
FLI		420	70.00	178	29.67	2	0.33

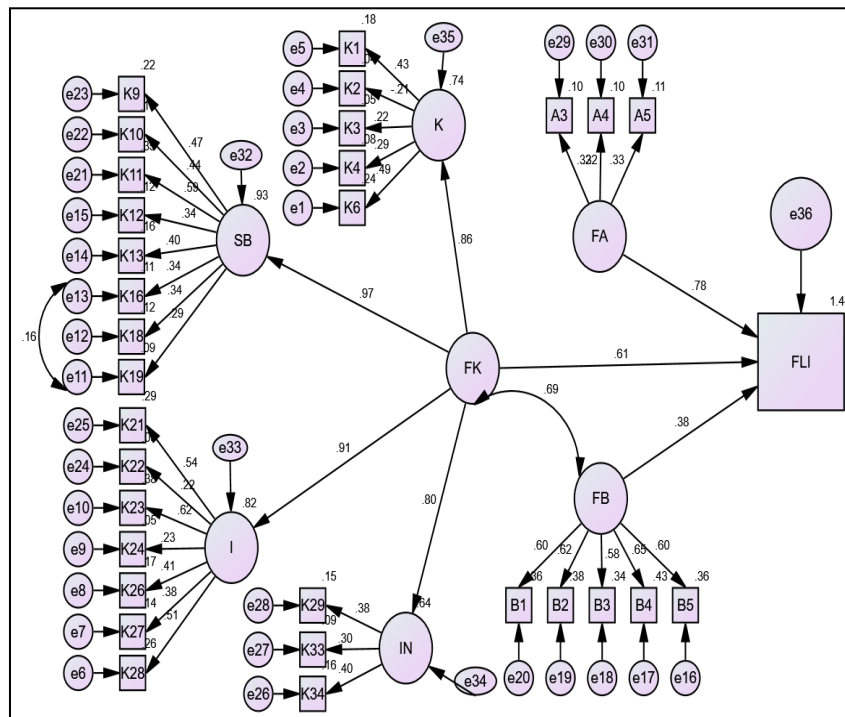


Fig. 2. Model of Financial Literacy among the Students of JAU

Table 5. Model fit measures

Measure	Estimate	Threshold	Interpretation
CMIN	1196.033	--	--
DF	456	--	--
CMIN/DF	2.623	Between 1 and 3	Excellent
CFI	0.816	>0.95	Acceptable
SRMR	0.070	<0.08	Excellent
RMSEA	0.052	<0.06	Excellent
P Close	0.171	>0.05	Excellent

Table 6. Results of hypothesis

Hypothesis	Path	UG		PG		All	
		Std. Coefficient	Result	Std. Coefficient	Result	Std. Coefficient	Result
H ₁	FK → FL	0.615*	0.000	0.700*	0.000	0.612*	0.000
H ₂	FB → FL	0.372*	0.000	0.286*	0.000	0.375*	0.000
H ₃	FA → FL	0.778*	0.000	0.794*	0.000	0.778*	0.000

* Significant at 1%

Fig. 2 shows the SEM model developed based on the conceptual framework of the study which indicates standardized regression coefficients for the hypothetical relationships between financial knowledge, behaviour, attitude, and financial literacy.

Model fit measures for the financial literacy of students are shown in Table 5. Measures are in

the recommended range, which indicates the perfect fit of the model to the data (Gaskin & Lim, 2016).

Table 6 shows the results of the hypothesis of a hypothetical conceptual model for students which proved that H₁, H₂, and H₃ are significant at 1% level of significance and it is positive, which means that financial knowledge, financial

behavior, and financial attitude have significant positive effect on the financial literacy of UG as well as PG students. The findings are supported by Trivedi et al., 2023c and Raut and Twanabasu, 2024.

4. CONCLUSION

Students of Junagadh Agricultural University were found to have a low level of financial literacy. Though, the majority of students are poor in financial knowledge with a medium financial attitude but show high financial behaviour. Thus, it can be concluded that there is a low level of financial literacy especially in terms of financial knowledge among the students of Junagadh Agricultural University. Age, gender, and education of the students have a positive and significant impact on the financial literacy of students. Financial knowledge, behavior, and attitude have a significant positive effect on the financial literacy of students. It is suggested that for enhancing the financial literacy of students, training should be imparted on financial attitude, financial behavior, and especially financial knowledge as low level is more prevalent in this area of financial literacy.

DISCLAIMER (ARTIFICIAL INTELLIGENCE)

Author(s) hereby declare that NO generative AI technologies such as Large Language Models (ChatGPT, COPILOT, etc.) and text-to-image generators have been used during the writing or editing of this manuscript.

COMPETING INTERESTS

Author has declared that no competing interests exist.

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