Gujarat Journal of Extension Education Vol. 35 : Issue 2 : June 23 https://doi.org/10.56572/gjoee.2023.35.2.0015

FACTORS AFFECTING FINANCIAL LITERACY OF AGRICULTURAL STUDENTS

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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. Besides, having the largest young population in the world, 76 per cent of Indian adult population is not even aware of the basic financial concepts. Therefore an in-depth study was carried out to measure the financial literacy and to identify the factors affecting financial literacy of students. Total 143 UG and PG level students were selected randomly and the primary data was collected through the well-prepared questionnaire. Financial Literacy Index and ordinal logistic regression model were used for the study purpose. The study revealed that there is low level of financial literacy especially in terms of financial knowledge among the students. Age and education of the students having positive and significant impact on the financial literacy of students.

Keywords : *financial attitude, financial behaviour, financial knowledge, financial literacy, olr*

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, decisions using the available financial resources. It is alarming to know that the financial literacy rate in India is way behind other countries. 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. The survey reports that Financial Literacy in India has been signification poor compared to the rest of the world (Melbha, 2020).

India is having the largest young population in the world. As Biswajit Saha, Director (Vocation and Training), CBSE puts it, "Financial skill is the 21st century life skill and needs to be imparted to different age groups, especially young minds" (Puranik, 2019). It increases confidence and self-control of the student, which in turn facilitates their participation in the formal economic system and lead to their empowerment and well-being (Ambarkhane and Singh, 2015). Therefore an in-depth study was carried out with the objectives to measure the financial literacy among the students and to identify the factors affecting financial literacy of students. This will surely be a pointer to modification of educational inputs for improvement in Financial Literacy amongst the students.

METHODOLOGY

The study was confined to Junagadh Agricultural University. 25 per cent of the first year UG and PG level students were selected randomly from each faculty. Thus the total sample size was 143 students. The primary data were collected through the well-prepared questionnaire.

Financial Literacy Index developed by Ambarkhane and Singh, 2015 was calculated to measure the level of financial literacy of students. The Financial literacy Index model is as follows:

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

Where,

a_i = Various Financial Literacy Aspects

w_i= Corresponding Weight

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

Table 1 : Aspects and weights of financial literacy index

Aspects	Level	No. of Questions	Weight	Total
Knowledge	Easy	15	01	15
	Medium	10	1.5	15
	Difficult	10	02	20
Attitude	-	05	05	25
Behaviour	-	05	05	25
			Total	**100**

The questions were emphasized on four areas namely General personal finance knowledge, Savings and Borrowings, Insurance and Investment. The questions were related to Indian situation and pertain to banking, securities market, insurance and retirement planning which are the areas, envisaged under 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 inclusion levels are identified, i.e., low literacy (FLI<60), medium literacy (FLI: 60-80) and high literacy (FLI>80) (Volpe *et. al.*, 2002).

The ordinal logistic regression model was used to identify the factors affecting the financial literacy of students. As there are several independent variables or predictors used in this study and as the dependent variable (Financial Literacy Index) or the outcome is more than two (low literacy, medium literacy, and high literacy) the best fitting model in this situation is the ordinal logistic regression model. The model for the study has taken form as follows:

Where,

γj = Cumulative probability for the j^{th} category

θj = Threshold for the j^{th} category

$\beta_1 ... \beta_5$ = Regression coefficients

$X_1 ... X_5$ = Predictor variables

$\tau_1 ... \tau_5$ = Coefficients for the scale component

$Z_1 ... Z_5$ = Predictor variables for the scale component

Dependent and explanatory variables along with their coding are presented in Table 2.

Table 2 : Dependent and Explanatory Variables along with their Coding

Variable	Units of Measurement	Code	Category	Value
Financial Literacy	Number	Y	Low	1
			Medium	2
			High	3
Gender	Dummy	X_1	Female	1
			Male	2
Age	Years	X_2	Young	1
			Middle	2
			Old	3
Faculty	Dummy	X_3	Agriculture	1
			Agril. Egg. & Tech.	2
			ABM	3
			VS & AH	4
			Fisheries	5
			Horticulture	6
Education	Years	X_4	Graduate	1
			Post Graduate	2
Income	Number	X_5	<5 lakh	1
			5-10 lakh	2
			>5 lakh	3

The study was confined to Junagadh Agricultural University. 25 per cent of the first year UG and PG level students were selected randomly from each faculty. The primary data were collected through the well prepared questionnaire. The data were analysed using following techniques for the study purpose:

RESULTS AND DISCUSSION

Demographic profile of students

The sample profile of respondent students is presented in Table 3. Based on the intake of concerned faculty, highest (41.96 %) students are from faculty of agriculture, followed by faculty of agricultural engineering & technology

(22.18 %), faculty of veterinary science & animal husbandry (13.99 %); equal (10.49 %) from the faculties of fisheries and horticulture whereas lowest from the faculty of agribusiness management (7.69 %). The age of the students was between 18 and 36 years with an average 21 years. Majority of the students were male (71.33 %), studied at under graduate level (72.73 %) and having family income below Rs. 5 lakhs (92.91 %).

Table 3 : Demographic profile of students (n=143)

A	**Faculty**	**No.**	**%**
1	Faculty of Agriculture	60	41.96
2	Faculty of Agricultural Engineering & Technology	22	15.38
3	Faculty of Agribusiness Management	11	07.69
4	Faculty of Veterinary Science & Animal Husbandry	20	13.99
5	Faculty of Fisheries Science	15	10.49
6	Faculty of Horticulture	15	10.49
B	**Gender**	**No.**	**%**
1	Male	102	71.33
2	Female	41	28.67
C	**Education**	**No.**	**%**
1	Graduation	104	72.73
2	Post Graduate	39	27.27
D	**Family income**	**No.**	**%**
1	Below ₹ 500000	132	92.31
2	₹ 500000 to 100000	08	05.59
3	Above ₹ 1000000	03	02.10
E	**Age**	**Years**	
1	Maximum	36	
2	Minimum	18	
3	Average	21	

Financial literacy among the students

Financial literacy score is presented in table 4. The results revealed that the mean value of the overall score obtained is 54.82%, which indicates that on average, students scored around 50 percent of financial literacy.

The minimum and maximum score of this overall score is 28.50% and 78% respectively, which indicates that the overall financial literacy have a quite high range with a standard deviation (SD) of 10.90%.

Out of the three sub-areas on financial literacy, the students scored lowest (3%) in knowledge and scored highest (100%) in attitude and behaviour. However, the highest variation among the students (SD: 17.14) is observed in terms of attitude while the least variation is observed in terms of the knowledge (SD: 12.29).

The students scored zero in all the four sub-areas on financial knowledge, but scored highest (91.30%) in knowledge on insurance. However, the highest variation among the students (SD: 20.94) is observed in knowledge on insurance whereas the least variation is observed in the knowledge on investment (SD: 15.32).

Table 4 : Financial literacy score among the students (n=143)

Sr. No.	Dimensions of financial literacy	n	Minimum	Maximum	Mean	SD
1	**Knowledge**	**143**	**3.00**	**66.00**	**32.62**	**12.29**
1.1	Personal finance	143	0.00	79.17	32.46	16.08
1.2	Savings and borrowing	143	0.00	83.87	35.15	18.71
1.3	Insurance	143	0.00	91.30	42.60	20.94
1.4	Investment	143	0.00	59.09	18.82	15.32
2	**Attitude**	**143**	**30.00**	**100**	**69.30**	**17.14**
3	**Behaviour**	**143**	**40.00**	**100**	**84.73**	**14.38**
	Overall	**143**	**28.50**	**78.00**	**54.82**	**10.90**

Level of financial literacy among the studentsis presented in Table 5.It revealed that majority of students having low level of financial literacy in terms of knowledge (97.20), medium level in terms of attitude (61.54%) and high level in terms of behaviour (64.34%).

Out of the four sub-areas of financial knowledge, low level is more prevalent to investment (97.90%) followed by general personal financial literacy (93.71%), saving and borrowing (86.71%) and insurance (76.92%).

On an average majority of students (66.43%) comes under low level of financial literacy; 33.57% under medium level and no students under high level.

Thus, there is low level of financial literacy especially in terms of financial knowledge among the students of Junagadh Agricultural University.

Table 5 : Level of financial literacy among the students (n=143)

Sr. No	Dimensions of financial literacy	Low (Below 60%)		Medium (60% to 80%)		High (Above 80%)	
		No.	%	No.	%	No.	%
1	**Knowledge**	**139**	**97.20**	**04**	**2.80**	**00**	**0.00**
1.1	Personal finance	134	93.71	09	6.29	00	0.00
1.2	Savings and borrowing	124	86.71	18	12.59	01	0.70
1.3	Insurance	110	76.92	30	20.98	03	2.10
1.4	Investment	140	97.90	03	2.10	00	0.00
2	**Attitude**	**32**	**22.38**	**88**	**61.54**	**23**	**16.08**
3	**Behaviour**	**08**	**5.59**	**43**	**30.07**	**92**	**64.34**
	Overall	**95**	**66.43**	**48**	**33.57**	**0**	**0.00**

Factors affecting financial literacy of students

The regression analysis results about the factors affecting financial literacy of students is presented in Table 6. The results revealed that the statistically significantchi-square statistic (X^2= 24.72; p <0.05) indicates that the final model gives a significant improvement over the baseline intercept-only model.Deviance Chi-Square statistics (X^2=79.900; p=0.636) is greater than level of confidence (5 %) revealed that observed data are consistent with the fitted model and the model does fit very well. The Pseudo R^2 values (Nagelkerke = 0.195) indicates that only 20 per cent variation in financial literacy was explained by the factors considered in the model and there may be other factors that affect financial literacy of student. There is no any significant impact of faculty, gender and income on financial literacy of students. Age (Wald = 11.746; p = 0.001) and education (Wald = 11.381; p = 0.001) of the students had positive and significant impact on the financial literacy of students.

Table 6 Factors affecting financial literacy of students of JAU (n=143)

	FL Aspects	Estimate	Std. Error	Wald	df	Sig.
Threshold	[FL = 1.00]	1.914	2.327	.677	1	.411
	[FL = 2.00]	5.806	2.373	5.987	1	.014
Location	Age (X_1)	0.335*	.098	11.746	1	.001
	Gender (X_2)	0.621	.459	1.833	1	.176
	Education (X_3)	1.984*	.588	11.381	1	.001
	Faculty (X_4)	-0.447	.301	2.208	1	.137
	Income (X_5)	0.012	.552	.000	1	.982
Link function: Logit; Number of observation = 143; X^2 = 24.722 (p=0.000); Deviance X^2 = 79.900 (p=0.636); Pseudo R^2 = 0.195; * Significant at 1 %						

Table 7 shows parallel line test for general model with chi square value 9.129 and p-value=0.104 which is greater than the 5% level of significance, fail to reject the null hypothesis. Thus, holds the assumption underlying ordinal logistic regression that the slope coefficients in the model are the same across response categories and lines of the same slope are parallel.

Table 7 : Test of Parallel Lines

Model	-2 Log Likelihood	Chi-Square	df	Sig.
Null Hypothesis	119.646			
General	110.517	9.129	5	.104

a. Link function: Logit.

CONCLUSION

Majority of students having low level of financial literacy in terms of knowledge, medium level in terms of attitude and high level in terms of behaviour. Out of the four sub-areas of financial knowledge, low level is more prevalent in investment followed by general personal financial literacy, saving and borrowing and insurance. On an average majority of students comes under low level of financial literacy; and no students under high level. Thus, there is low level of financial literacy especially in terms of financial knowledge among the students of Junagadh Agricultural University. Age and education of the students having positive and significant impact on the financial literacy of students.

IMPLICATION

Financial literacy of students can be strengthen by influencing their financial knowledge, behaviour and attitude. Students should be trained on financial knowledge because low level is more prevalent in this area especially in terms of investment.

ACKNOWLEDGEMENT

Authors are thankful to Junagadh Agricultural University, Junagadh, Gujarat, India.

CONFLICT OF INTEREST

This is to declare that there is “No conflict of interest” among researcher.

REFERENCES

Ambarkhane, D.; Venkataramani, B. and Singh A. S. (2015). Financial Literacy Index for College Students. *Ann. Res. J. Symbiosis Centre for Mang. Studies,* 3: 1-25.

Melbha, D. (2020). Importance of Financial Literacy in Rural Areas. *Int. J. of Sci. Res.,* 9 (5): 1746-1747

Puranik, I. (2019). Making a money smart generation: What are our schools doing? *Money Control News.* Available at https://www.moneycontrol.com/news/business/personal-finance/making-a-money-smart-generation-what-are-our-schools-doing-4164021.html accessed on 27 March, 2021.

Reddy, O. C. and Alemayehu, E. (2015). Ordinal logistic regression analysis to assess the factors that affect health status of students in Ambo University: a case of natural and computational sciences college, Ambo University. *Int. J. Mod. Chem. & App. Sci.,* 2(3): 153-163.

Volpe, R. P.; Kotel J. E. and Chen H. (2002). A Survey of Investment Literacy among Online Investors. *Financial Counseling and Planning,* 13(1): 1-16.

Received : March 2023 : Accepted : May 2023