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Review Article

Gender Differences in Financial Literacy: Evidence from India

Dr. Abdul Azeez N. P[1*] and Prof. S.M. Jawed Akhtar[2]

[1]Assistant Professor, Department of Economics, Aligarh Muslim University, Aligarh, Uttar Pradesh 202001, India
[2]Professor, Department of Economics, Aligarh Muslim University, Aligarh, Uttar Pradesh 202001, India

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***Corresponding author:** Dr. Abdul Azeez N. P

Abstract

The dynamic financial sector of India has been rapidly growing over the last few years. There has been significant development over the previous five years to move India into financial inclusion through cost-effective, convenient, and secure means, which bring the unbanked rural households into the economic mainstream. Despite the rapid growth of the sector, significant sections of the population experience these positive changes at a much slower pace. Although the majority of the households having a bank account, they are unaware of the financial services, products and investment provisions, less financial knowledge, unsatisfactory and adverse financial behavior, and attitudes. Bank accounts are being opened forcefully as part of direct benefit transfer. Many of them are unfamiliar with even the most basic economic and financial concepts required to make sensible financial decisions. This paper tries to assess gender differences in financial literacy among rural households. A comprehensive approach for measuring financial literacy is developed by constructing the Financial Literacy Index (FLI) comprising the indicators like financial knowledge, financial behavior and financial attitude. The study is based on the primary data having five hundred samples, were collected from the rural areas of Aligarh district. The findings indicate the gender differences in different indicators of financial literacy, in which males were more knowledgeable in financial matters than female respondents.

Keywords: Financial Literacy Index, Gender Difference, Financial Knowledge, Financial Behaviour, Financial Attitude.

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INTRODUCTION

The financial literacy is one of the essential competencies an individual should have to deals with financial problems. In the world of escalating financial complexity, there is an increasing need for financial knowledge and at least necessary financial skills. Technological advances have dramatically transformed the countries in the provision of financial services in India and around the world. Individuals must be in a position to differentiate between a wide range of digital and financial products and services. Financial literacy and its inclusion are twin pillars, where financial inclusion acts as the supply-side of proving financial services and financial literacy acts as demand-side making people acquainted that what they should buy.

Financial illiteracy of people often results in a lack of understanding, which in turn makes them distanced themselves from the formal financial institutions. Even though banks have some suitable financial products for all people, due to their lack of knowledge and low literacy levels makes them distanced themselves from financial services. "Financial literacy refers to the knowledge and understanding of concepts and risks related to financial matters and the skills, and the level of confidence to put in such knowledge and understanding in order to make effective financial decisions across a range, to enhance the financial well-being of individuals and community, and to enable participation in economic life" [1].

It is the ability to learn, monitor, and effectively use financial resources to improve the well-being and economic security of an individual. "Financial literacy is a mixture of awareness, knowledge, skill, attitude, and behavior necessary to make sound financial decisions and ultimately attain individual financial well-being [2, 3]". This definition is now globally acknowledged and was also endorsed by G20 leaders in 2012 [4].

Although the majority of the households have a bank account, they are unaware of the financial services, products and investment provisions, less financial knowledge, unsatisfactory and adverse financial behavior, and attitudes. Bank accounts are being opened forcefully as part of drawing MGNREGA wage, old age, and agricultural pension, getting LPG and other subsidies, etc. Many of them are unfamiliar with even the most basic economic and financial concepts needed to make sensible saving and investment decisions and proper utilization of digital tools. All these have led to the financial illiteracy of the people. Their knowledge of various financial institutions, financial activities, and financial products is not adequate. By educating them in this respect, their economic activities will be more fruitful.

It is also evident from the various studies [5, 4, 6-8] conducted in different countries at institutional as well as at the academic research level that financial literacy level is low and needs dangerous policy measures for its enhancement. Although the majority of the households having the bank account which are being opened forcefully and because of lack of digital and financial education lead to improper utilization of services. By educating them in this respect, their economic activities will be more fruitful. Thus, digital and financial literacy is a prerequisite for its useful inclusion and also challenges for policymakers. It will also provide national and global policymakers with an understanding of the issues and challenges associated with the rapid growth of digital financial services, its delivery to the poor, and the risks involved in digital financial inclusion.

This paper tries to assess gender differences in financial literacy among rural households of Aligarh district. A comprehensive approach for measuring financial literacy is developed by constructing the Financial Literacy Index (FLI) comprising the indicators like financial knowledge, financial behavior and financial attitude. The study is based on the primary data having five hundred samples, were collected from the rural areas of Aligarh district. The null hypothesis established here that there is no significant difference in financial literacy among the male and female respondents.

LITERATURE REVIEW

Several studies give clear evidence that gender significantly affects the level of financial literacy. It is clear from the literature review that male is more financially literate as compared to female. "Financial illiteracy is widespread in the USA and other countries among women and old age people [9]". "Women are less financially capable than men between the ages group of 20-70 years" [10]. Men are more financially literate and are well informed compared to women in Hungary. Working women in Pakistan are mostly financially illiterate, and only one-third of them possesses the knowledge of financial services and products. Ibrahim, Harun, & Isa [11] and Lusardi & Mitchell [8] discovered that women considerably take less chance to answer the questions correctly and expected to say they do not know the exact answer to the questions. This fact is found surprisingly similar in the financial literacy of different countries [12]. The women also evaluate their financial literacy level more conventionally to avoid potential risks associated with finance.

According to Lusardi & Mitchell [8], this result is similar in both developed and developing countries. Studies conducted by Chen & Volpe [13] broaden the evidence that women have higher complexity in performing financial calculations and lower financial knowledge levels, which eventually hamper the capability of making accountable financial decisions. A study conducted by Edwards, Allen, & Hayhoe [14] concluded that parents have different expectations for their sons and daughters, as they have high potential expectations regarding work and savings for their sons only. Thus, they are more likely to consider money and other financial decisions with their sons. In against, he observed that parents teach their daughters to be financially reliant since they entertain more financial support and encouragements from their parents than sons at schooling periods. So, it seems that the significant difference can be observed between men and women as men inclined to see money as power and they judge that having money and savings will make them more socially and economically desirable, while women seem to have a rather passive approach to money and financial decisions [15].

Chen and Volpe [5] surveyed university students and argued that there exists a gender gap in financial literacy even after controlling for other related variables. Using path analysis, Hayhoe *et al.*, [16] concluded that there are gender differences in financial attitudes, financial behaviors, and financial performance. According to previous studies, there are gender gaps in financial knowledge, attitudes, and behaviors. This study will examine the pathways of financial knowledge to financial attitude, behavior, and outcome and whether there are gender differences in the pathways. This study will also ascertain whether women have a lower level of financial knowledge than men, and we will focus on gender differences in financial knowledge pathways.

Sources of Data and Methodology

Focusing on gender differences in the financial literacy of rural people of Aligarh district, this study measures the levels of financial literacy in term of financial literacy index and the estimated average score of financial literacy and its indicators and see there exist significant gender differences between male and female respondents. For this study, primary data were gathered for the purpose of analyzing digital and financial

literacy among rural households in Aligarh district. The primary data were collected through survey schedules, telephone interviews of experts and other participatory approaches among various stakeholders. Before finalizing the interview schedule, a pretesting was conducted. The tool was developed after several rounds of interaction with a few informants, banking officials and other experts. Before administering the interview schedule to the sample population, a pre-test was done and checked the reliability. The targeted population of this study is rural people of Aligarh district of Uttar Pradesh, which included all men and women aged 15 years or above.

A comprehensive approach to measuring financial literacy will be employed by comprising financial knowledge, behavior, and attitude for this study, which is used by OECD [17]. The overall financial literacy score is measured through a sum of the three components of financial literacy divided by three. A well-structured questionnaire has been designed to capture information about financial behavior, attitudes, and knowledge to assess levels of basic financial literacy. The overall financial literacy index is measured by taking the three components of financial literacy. Having first defined the minimum and maximum values, the dimension-specific indices are calculated as follows:

$$\text{Dimension Index} = \frac{\text{Actual Value} - \text{Minimum Value}}{\text{Maximum Value} - \text{Minimum Value}}$$

After calculating the indices for the three dimensions, namely Financial Knowledge Index (FKI), Financial Bhaviour Index (FBI) and Financial Attitude Index (FAI), the scores are aggregated into a composite index using the arithmetic mean, which is the average of the three dimensions indices.

$$\textbf{Financial Literacy Index (FLI)} = \frac{\textbf{FKI} + \textbf{FBI} + \textbf{FAI}}{\textbf{3}}$$

In tune with research objectives, the samples were drawn from the rural households of Aligarh district. A multi-stage sampling technique has been used for choosing the respondents for the study. An appropriate sampling method was followed at each stage to select respondents from rural areas. The district has been divided into five administrative tehsils, namely, Atrauli, Gabhana, Khair, Koil and Iglas and for the purpose of this study, all the five tehsils were selected at the first stage. These five tehsils are further subdivided into 12 development blocks. For the purpose of the study, two blocks were selected from each tehsil based on the general literacy rate as per Census 2011 (One highest literate block and one lowest literate block). Thus, a total of 10 blocks out of 12 was selected. The third stage two villages were selected from each selected development block of Aligarh district based on general literacy rate as per Census 2011 (One highest literate village and one lowest literate village). Thus, the totals of 20 villages were selected accordingly. From each selected village, 25 respondents were chosen through a convenience sampling technique in the final stage. Thus, for this study, a total of 1000 samples were taken accordingly.

Financial Knowledge

The knowledge of financial concepts, the ability to apply numeracy skills in financial matters, people able to act and manage the financial crisis, and their reaction to news and events may have the highest implications for the financial well-being of poor rural households. The core questionnaire contains sufficient financial knowledge questions to provide a good overview of a person's basic knowledge, their general willingness to absorb financial information, and the ability to apply knowledge to particular problems. The financial knowledge focused on responses to ten questions framed to test different aspects of knowledge that are widely considered and accepted to be useful to individuals when making financial decisions. The knowledge score is estimated as the number of correct responses to the ten financial knowledge questions, and it ranges between 0 and 10. Thus, awareness of digital technologies is the key to the success of digital financial inclusion. The Financial Knowledge Index (FKI) has been calculated by using a minimum value of zero and a maximum value of 10 points. The normalized index value of the indicator ranges from zero to one where zero represents a lack of financial knowledge, and one shows full knowledge of the same.

Regarding the gender differences and gaps in financial knowledge, the studies [18, 19] found that women have a lower level of self-confidence in financial matters than men on average. Other researchers also found similar results [20, 21]. As for objective financial knowledge, Lusardi and Mitchell [6] found gender differences in financial decision-making, which implies that women are typically less financially literate than men. Similarly, Goldsmith and Goldsmith [22] reported that the financial literacy level of females is lower than male, and female respondents have a lower level of self-confidence in mathematics and science than males. Based on these research studies, women tend to have a lower level of financial knowledge than men.

In support of the literature, the financial knowledge index of male respondents is found highest with the value of 0.48 as against 0.28 for female respondents. Similarly, the average financial knowledge score is higher for male respondents with a score of 4.77 as compared with the female respondent (2.83). The gender differences in terms of financial knowledge index and average financial knowledge scores are 0.20 and 1.94, respectively, in the district of rural Aligarh. Thus, the results show that both indicators clearly show higher gender differences in the rural areas of Aligarh district.

Table-1: Financial Knowledge Index and Average Financial Knowledge Score

Tehsil	Female		Male		Total		Gender Difference (FKI)	Gender Difference (Av. Score)
	FKI	Av. Score	FKI	Av. Score	FKI	Av. Score		
Atrauli	0.24	2.40	0.46	4.64	0.43	4.30	0.22	2.24
Gabhana	0.35	3.50	0.46	4.62	0.45	4.51	0.11	1.12
Iglas	0.27	2.73	0.48	4.85	0.44	4.38	0.21	2.12
Khair	0.37	3.67	0.52	5.22	0.52	5.17	0.15	1.55
Koil	0.27	2.67	0.45	4.53	0.45	4.47	0.18	1.86
Total	**0.28**	**2.83**	**0.48**	**4.77**	**0.46**	**4.57**	**0.20**	**1.94**

Source: Author's Calculation from Field Survey

Table-1 shows the tehsil wise financial knowledge index and average scores of financial knowledge. Surprisingly, the survey results show that the male average score and financial knowledge index are found to be higher in all the tehsils than female respondents. The highest female average score is found in Khair tehsil with 3.67 points represents a good financial knowledge followed by Gabhana with 3.50 score and along with the lowest average score of 2.40 in Atrauli. The highest male average score is found in Khair tehsil with 0.52 points represents good financial knowledge and finds a gap of 1.55 score. The gender difference in financial knowledge index and average scores of financial knowledge are highest in Atrauli tehsil with the value of 0.22 and 2.24 points, respectively. The lowest gender differences in terms of FKI and the average score is found in Ghabana tehsil.

Financial Behaviour

How a person behaves will have a significant impact on their financial wellbeing. It is, therefore, essential to capture evidence of behavior within a financial literacy measure. It focuses on a wide range of financial behaviours with an emphasis on those that can enhance or reduce financial wellbeing. The OECD/ INFE [3] core questionnaire does this by asking a variety of questions in different styles to find out about behaviors such as thinking before making a purchase, paying bills on time and budgeting, saving, and borrowing to make ends meet. The positive results from being financially literate are driven by behavior such as planning expenses and strengthening a financial safety net; conversely, certain practices, such as over-using credit, can reduce financial wellbeing. The financial behaviour comprised of a total of nine questions, which elicit information about various ways in which the respondents manage their money, make financial decisions, keep a tab on their expenses, and timeliness in terms of paying bills, etc. They also included questions on whether people set any long-term goals, have a household budget, and are personally or jointly responsible for it, the way they choose their financial products, and if they have borrowed anything to make ends meet. In order to understand the overall status of the respondents with regard to financial behaviour, a combined score of nine questions was calculated. The Financial Behaviour Index (FBI) was calculated using a minimum value of zero and a maximum value of nine points. The normalized index value of the indicator ranges from zero to one where zero represents a lack of positive financial behaviour and one shows positive financial behaviour.

The number of researches has shown that the state of personal finances, financial behaviours and economic prosperity differ significantly between males and females [23, 24, 5, 25]. In addition, people's behaviour on the financial market is determined and also conditioned by other factors, such as age, status and nature employment, level of education, level of income, number of family members, or experience in financial management [26-31]. The experience achieved in the use of financial products and services affects decisions about financial planning. Understanding the relationship between the knowledge of personal finance and specific behaviours in the financial market among women and men constitutes an increasingly important research problem, in particular, taking into consideration the fact that the level of this specific knowledge has been found to be generally low, especially among women [26, 25, 32, 33].

Table-2: Financial Bahaviour Index and Average Financial Bahaviour Score

Tehsil	Female		Male		Total		Gender Difference (FBI)	Gender Difference (Av. Score)
	FBI	Av. Score	FBI	Av. Score	FBI	Av. Score		
Atrauli	0.32	2.87	0.56	5.05	0.52	4.72	0.24	2.18
Gabhana	0.58	5.20	0.61	5.47	0.60	5.44	0.03	0.27
Iglas	0.28	2.55	0.66	5.90	0.57	5.16	0.38	3.35
khair	0.37	3.33	0.65	5.82	0.64	5.75	0.28	2.49
Koil	0.56	5.00	0.58	5.25	0.58	5.24	0.02	0.25
Total	**0.37**	**3.32**	**0.61**	**5.49**	**0.58**	**5.26**	**0.24**	**2.17**

Source: Author's Calculation from Field Survey

The financial behaviour index of Aligarh district is only 0.58 reveals a good level of financial behaviour. As expected, the financial behaviour index of male respondents is found highest with the value of 0.61 as against 0.37 for female respondents. Similarly, the average financial behaviour score is higher for male respondents with a score of 5.49 as compared with the female respondent (3.32). The gender differences in terms of financial behaviour index and average financial behaviour scores are 0.24 and 2.17, respectively, in the district of rural Aligarh. This variation in gender is visible across the tehsils. Thus, the results show that both indicators clearly show higher gender differences in the rural areas of Aligarh district and the gender difference of financial behaviour is higher than financial knowledge.

Table-2 shows the tehsil wise financial behaviour index and average scores of financial behaviours. Surprisingly, the survey results show that the male average score and financial behaviour index are found to be higher in all the tehsils than female respondents. The highest female average behavioural score is found in Gabhana tehsil with 5.20 points represents a good financial behaviour followed by Koil with 5.00 score and along with the lowest average score of 2.55 in Iglas. The highest male average score is found in Iglas tehsil, with a score of 5.90 represents good financial behaviour. The gender difference in financial behaviour index and average score of financial behaviour are highest in Iglas tehsil with the value of 0.38 and 3.35 points, respectively. The lowest gender differences in terms of FKI and the average score is found in Koil tehsil.

Financial Attitude

The financial attitude is measured from statements that focused on attitudes for the short term aims while living for the present and spending money for the future. The questions asked with households to use a scale to indicate whether they agree or disagree with particular statements. The financial attitudes average score is computed as the sum of the values for the three statements and then divided by three. This score ranges from 1 to 5. The questionnaire adopted for the financial attitude scale is used in the OECD evaluation, which comprised of three attitude related questions with responses captured on a five-point Likert scale. The average score could vary from a minimum of 1 to a maximum of 5. All the individuals who scored three or above were considered as a positive financial attitude, that is, a saving orientation. The financial attitude indicators are first normalized using a minimum value and maximum value of the score and actual value achieved by the respondents. Financial Attitude Index (FAI) is calculated using a minimum value of one and a maximum value of 15 points. The normalized value of the indicator ranges from zero to one where zero represents the lack of or low financial attitude towards financial products and services and one shows a perfect positive attitude.

The financial attitude index of Aligarh district is only 0.42 reveals an average level of financial attitude. Although the financial attitude index of male respondents is found higher (0.42) than female respondents (0.39), it is less significant. In the same way, the average financial attitude score is also higher for male respondents with a score of 2.28 as compared with the female respondent (2.16). The gender differences in terms of financial attitude index and average financial attitude scores are only 0.03 and 0.12, respectively, in the district of rural Aligarh. Thus, the results show that, although both indicators of gender differences in the rural areas of Aligarh district is lightly higher in the case of male as against female respondents, these differences are not found much significant. The gender difference of financial attitude is thus, found less than financial knowledge and financial behaviour.

Table-3: Financial Attitude Index and Average Financial Attitude Score

Tehsil	Female		Male		Total		Gender Difference (FAI)	Gender Difference (Av. Score)
	FAI	Av. Score	FAI	Av. Score	FAI	Av. Score		
Atrauli	0.37	2.04	0.38	2.12	0.38	2.11	0.01	0.08
Gabhana	0.57	3.00	0.43	2.36	0.45	2.42	-0.14	-0.64
Iglas	0.32	1.85	0.44	2.37	0.41	2.25	0.12	0.52
Khair	0.33	1.89	0.47	2.51	0.46	2.49	0.14	0.62
Koil	0.48	2.56	0.37	2.07	0.38	2.08	-0.11	-0.49
Total	**0.39**	**2.16**	**0.42**	**2.28**	**0.42**	**2.27**	**0.03**	**0.12**

Source: Author's Calculation from Field Survey

Table-3 gives the tehsil wise financial attitude index and average scores of financial attitudes. The survey results show that the male average score and financial attitude index are found to be higher in all the tehsils than female respondents except Ghabana and Koil where female respondents are out wights the male. The highest female average attitude score is found in Gabhana tehsil, with 3.00 points represents a satisfactory financial attitude followed by Koil with 2.56 score and along with the lowest average score of only 1.85 in Iglas. The highest male average score is found in Khair tehsil, with a score of 2.51 represents an average financial attitude. The gender difference in financial behaviour index and the average score of

financial attitudes are highest in Khair tehsil with the value of 0.14 and 0.62 points, respectively. The female respondents of Ghabana and Koil tehsils are performed better in terms of their financial attitude score and the index values than male respondents.

Financial Literacy Index (FLI)

The concept of financial literacy is considered to be a complex phenomenon comprising financial knowledge, attitudes, and behaviors of rural households. In order to assess the levels of overall financial literacy, a questionnaire has been developed to capture information about financial behavior, attitudes, and knowledge. The questions cover planning and managing finances, choosing and using financial products, financial knowledge, and a range of attitudes and behaviors that impact on financial literacy and financial well-being. The overall financial literacy score is measured through a sum of the three components of financial literacy. The score can take a minimum value of 1 and a maximum value of 24. After calculating the indices for the three dimensions, the scores are aggregated into a composite index using arithmetic mean, which is the average of the three dimensions indices. This is done by normalizing the indicators into indices whose values range from 0 to 1, using the minimum and maximum values. The overall FLI is then calculated by taking the arithmetic mean of normalized indices measuring achievements in each dimension.

Table-4: Financial Literacy Index and Average Financial Literacy Score

Tehsil	Female		Male		Total		Gender Difference FLI	Gender Difference Av. Score
	FLI	Av. Score	FLI	Av. Score	FLI	Av. Score		
Atrauli	0.31	2.43	0.47	3.93	0.44	3.71	0.16	1.5
Gabhana	0.50	3.90	0.50	4.14	0.50	4.12	0.00	0.24
Iglas	0.29	2.37	0.53	4.37	0.47	3.93	0.24	2.00
Khair	0.36	2.96	0.54	4.51	0.54	4.47	0.18	1.55
Koil	0.43	3.40	0.47	3.94	0.47	3.93	0.04	0.54
Total	0.35	2.77	0.50	4.18	0.49	4.03	0.15	1.41

Source: Author's Calculation from Field Survey

The study found a just satisfactory level of financial literacy in the rural areas of Aligarh district with financial literacy index of 0.49. As shown in the previous research studies, the financial literacy index of male respondents is found higher (0.50) than female respondents (0.35). Similarly, the average financial literacy score is also found to be higher for male respondents with a score of 4.18 as compared with the female respondent (2.77). The gender differences in terms of financial literacy index and average financial literacy scores are 0.15 and 0.14, respectively, in Aligarh district. Thus, the results show that both indicators clearly show higher gender differences in the rural areas of Aligarh district.

Table-4 shows the tehsil wise financial literacy index where the highest index value is found in Khair Tehsil with the value of 0.54 followed by Gabhana tehsils with 0.50 points and along with the least index value of 0.44 in Atruali tehsil. Surprisingly, the survey results show that the male average score of financial literacy and financial literacy index are found to be higher in all the tehsils than female respondents. The highest female average literacy score is found in Gabhana tehsil with 3.90 points represents a good financial literacy followed by Koil with 3.40 score and along with the lowest average score of 2.37 in Iglas. The highest male average score is found in Khair tehsil, with a score of 4.51 represents good financial literacy. The gender difference in financial literacy index and the average score of financial literacy are highest in Iglas tehsil with the value of 0.24 and 2.00 points, respectively. Interestingly, the gender differences in terms of financial literacy index with zero index value in Ghabana tehsil representing no gender differences, while in terms of average financial literacy score of it is found only 0.24 points.

Table-5: Gender-wise Financial Knowledge, Behavior, Attitude and Literacy Indices

Gender	FKI	FBI	FAI	FLI	t	Sig
Female	0.28	0.37	0.39	0.35	8.870	.0000
Male	0.48	0.61	0.42	0.50		
Differences	0.20	0.24	0.03	0.15		
Total	**0.46**	**0.58**	**0.42**	**0.49**		

Source: Author's Calculation from Field Survey

As far as gender is concerned, in support of literature, the larger proportion of male respondents than female respondents scored a high index value of financial literacy. The financial literacy index of males is higher with the value of 0.50 than the females whose index value is only 0.35 and found the differences of 0.15 value, as shown in Table-5. The significant differences are found in indicators like financial

knowledge and behavior. However, financial attitude differences between male and female respondents are less significant. The highest difference between male and female is found in financial behavior index (0.24) followed by the financial knowledge (0.20).

The financial literacy average score of male and females are statistically found highly significant, because the *p* value is less than 0.05. (t=8.870, p< 0.05) showing a significant difference. Therefore, the null hypothesis is rejected implying that there is a significant difference with respect gender of the respondents and their financial literacy.

Table-6: Gender-wise Financial Literacy

Gender	Poor	Satisfactory	Good	Excellent	Total
Female	47.2	39.6	13.2	0.0	100.0
Male	6.0	40.0	49.7	4.3	100.0
Total	**10.4**	**40.0**	**45.8**	**3.8**	**100.0**

Source: Author's Calculation from Field Survey

The major proportions (47.2 percent) of female respondents are categorized under poor financial literacy and 39.6 percent in satisfactory financial literacy. Surprisingly, no female respondents are found in the excellent category of financial literacy. As against females, the major proportions of male respondents say 50 percent is found in good financial literacy and 40 percent in satisfactory financial literacy. 4.3 percent of male respondents are also found in the excellent category of financial literacy.

CONCLUSION

Although the overall average financial literacy score in the rural area of Aligarh district is found to be a satisfactory level, there exists a significant gender difference among the rural people. By emphasizing that gender plays a significant role in the level of financial literacy, the male is more financially literate as compared to females. These results expose that there is a need for persistent and prolonged intervention from all the stakeholders, including policymakers, to educate and improve the level of financial literacy for bright financial decision making of women in the rural areas. There is a need for empowering and enlightening women so that they are knowledgeable about basic finance in a way that is pertinent to their maintenance, and that enables them to use this knowledge to evaluate products and services available and make informed decisions. As a consequence of the changing structure of our economy, financial knowledge has become not just a convenience but an essential survival tool.

REFERENCES

1. OECD. (2019). *PISA 2018 Assessment and Analytical Framework*. https://doi.org/10.1787/b25efab8-en.
2. Atkinson, A., & Messy, F. A. (2012). Measuring Financial Literacy: Results of the OECD. *OECD Working Papers on Finance, Insurance and Private Pensions*, (15). https://doi.org/10.1111/j.1745-6606.2010.01170.x
3. OECD/INFE. (2016). Adult Financial Literacy Competencies CORE COMPETENCIES FRAMEWORK ON. *Financial Literacy and Education Trust Fund*, 1–100.
4. OECD. (2018). *G20/OECD INFE Policy Guidance on Digitalisation and Financial Literacy*. 1–25.
5. Chen, H., & Volpe, R. P. (2002). Gender differences in personal financial literacy among college students. *Financial services review*, *11*(3), 289-307.
6. Lusardi, A., & Mitchell, O. S. (2011). Financial literacy and retirement planning in the United States. *Journal of Pension Economics and Finance*, *10*(4), 509–525.
7. Azeez, Abdul, N. P., & Nasira, B. M. (2019). Rural Transformation through Financial Literacy : A Study of Aligarh District. *International Journal of Innovative Studies in Sociology and Humanities*, *4*(5), 175–185.
8. Lusardi, A., & Mitchell, O. S. (2011). *Financial literacy and retirement planning in the United States* (No. w17108). National Bureau of Economic Research.
9. Lusardi, A., & Mitchell, O. S. (2007). The Economic Importance of Financial Literacy: Theory and Evidence. *Journal of Economic Literature 2014*, *52*(1), 5-44.
10. Taylor, M. (2011). Measuring Financial Capability and its Determinants Using Survey Data. *Social Indicator Research*, *102*, 297–314. https://doi.org/10.1007/s11205-010-9681-9
11. Ibrahim, D., Harun, R., & Isa, Z. M. (2009). A Study on Financial Literacy of Malaysian Degree Students. *Canadian Academy of Oriental and Occidental Culture*, *5*, 51–59.
12. Lusardi, A., & Wallace, D. (2013). Financial Literacy and Quantitative Reasoning in the High School and College Classroom. *Numeracy*, *6*(2).
13. Chen, H., & Volpe, R. P. (1998). An Analysis of Personal Financial Literacy Among College Students Haiyang. *Finacial Services Review*, *7*(2), 107–128.
14. Edwards, R., Allen, M. W., & Hayhoe, C. R. (2007). Financial attitudes and family communication about students' finances: The role of sex differences. *Communication Reports*, *20*(2), 90–100.

15. Calamato, M. P. (2011). Learning Financial Literacy in the Family. *ProQuest*, *1*(December), 1–19.
16. Hayhoe, M., & Ballard, D. (2005). Eye movements in natural behavior. *Trends in cognitive sciences*, *9*(4), 188-194.
17. OECD. (2011). *Nuclear Science Shielding Aspects of Accelerators, Targets and Irradiation Facilities-SATIF 10: Workshop Proceedings, Geneva, Switzerland 2-4 June 2010*. OECD Publishing.
18. Ellis, A. G., Crinis, N. A., & Webster, L. K. (1996). Inhibition of etoposide elimination in the isolated perfused rat liver by Cremophor EL and Tween 80. *Cancer chemotherapy and pharmacology*, *38*(1), 81-87.
19. Lusardi, A., Mitchell, O. S., & Curto, V. (2009). *Financial literacy and financial sophistication among older Americans* (No. w15469). National Bureau of Economic Research.
20. Lusardi, A. (2011). *Americans' financial capability* (No. w17103). National Bureau of Economic Research.
21. Grable, J. E., & Lytton, R. H. (1997). Determinants of retirement savings plan participation: A discriminant analysis. *Personal Finances and Worker Productivity*, *1*(1), 184-189.
22. Goldsmith, A. J., & Chua, S. G. (1997). Variable-rate variable-power MQAM for fading channels. *IEEE transactions on communications*, *45*(10), 1218-1230.
23. Fisher, E. (2010). *Media and new capitalism in the digital age: The spirit of networks*. Springer.
24. Theodos, B., Kalish, E., McKernan, S. M., & Ratcliffe, C. (2014). Do financial knowledge, behavior, and well-being differ by gender?. *Urban Institute*.
25. Lusardi, A., & Mitchell, O. S. (2008). Planning and financial literacy: How do women fare?. *American Economic Review*, *98*(2), 413-17.
26. Abdul Azeez, N. P., & Akhtar, S. J. (2020). Financial literacy for rural India: A case study of Aligarh district. *International Journal of Humanities and Social Science Research*, 6(1):89-95.
27. Borden, L. M., Lee, S. A., Serido, J., & Collins, D. (2008). Changing college students' financial knowledge, attitudes, and behavior through seminar participation. *Journal of family and economic issues*, *29*(1), 23-40.
28. Robb, C. A., & Woodyard, A. (2011). Financial knowledge and best practice behavior. *Journal of Financial Counseling and Planning*, *22*(1).
29. Agarwal, B. D., Broutman, L. J., & Chandrashekhara, K. (2017). *Analysis and performance of fiber composites*. John Wiley & Sons.
30. Shivapour, S. K., Nguyen, C. M., Cole, C. A., & Denburg, N. L. (2012). Effects of age, sex, and neuropsychological performance on financial decision-making. *Frontiers in neuroscience*, *6*, 82.
31. Carter, T. E., Burton, J. W., Fountain, M. O., Rzewnicki, P. E., Villagarcia, M. R., & Bowman, D. T. (2007). Registration of 'N7002'soybean. *Journal of plant registrations*, *1*(2), 93-94.
32. Lusardi, A., Schneider, D., & Tufano, P. (2015). The economic crisis and medical care use: comparative evidence from five high- income countries. *Social Science Quarterly*, *96*(1), 202-213.
33. Fonseca, B. M., Correia-da-Silva, G., Taylor, A. H., Lam, P. M. W., Marczylo, T. H., Bell, S. C., ... & Teixeira, N. A. (2010). The endocannabinoid 2-arachidonoylglycerol (2-AG) and metabolizing enzymes during rat fetoplacental development: a role in uterine remodelling. *The international journal of biochemistry & cell biology*, *42*(11), 1884-1892.