



Original Article

## Financial Literacy and Its Determinants among Tribal Women: Evidence from Raigarh District, Chhattisgarh, India

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### Abstract

**Introduction:** Financial literacy has gained importance recently as a key to empowerment. It helps individuals manage daily expenses, plan for a secure future, access financial services, and optimize resources, thereby supporting economic development. However, lack of financial literacy not only affects individual financial decisions but also societal development as a whole. **Objectives:** This study explores the level of financial literacy and its determinants among tribal women in Raigarh district, Chhattisgarh. **Methods:** The present study followed a mixed-method approach in which primary data was collected by a structured questionnaire designed to measure three core dimensions of financial literacy—financial knowledge (FK), financial attitude (FA), and financial behavior (FB). Respondents were selected from different blocks of the district to represent varying socio-economic backgrounds. **Results:** Findings of the study revealed that the majority of respondents exhibited moderate levels of financial literacy. Significant variations were observed across socio-demographic variables. Urban residents, younger women, and those with higher education and professional occupations tended to display higher financial literacy levels. Differences were also evident among tribes, with Oraon tribes exhibiting higher financial literacy, suggesting that cultural and contextual factors influence financial understanding and practices. **Conclusion:** The study highlights the need for targeted financial literacy interventions considering the cultural and socio-economic realities of tribal women. The insights from the study seek to help the government, financial institutions, NGOs, financial educators, and policymakers to design context-specific programs to enhance financial capability and promote inclusive growth in tribal regions.

**Keywords:** Chhattisgarh; Financial Attitude (FA); Financial Behaviour (FB); Financial Knowledge (FK); Financial Literacy; Tribal Women

### Introduction

With the growing complexity of financial instruments, the need for financial literacy becomes inevitable (Shyamala & Mahesh, 2022). According to the Organization for Economic Co-operation and Development (OECD), financial literacy refers to “a combination of awareness, knowledge, skill, attitude, and behavior necessary to make sound financial decisions and ultimately achieve individual well-being” (OECD, 2012). This perspective highlights that financial literacy is not limited to theoretical understanding but also involves practical application and responsible decision-making. Financial literacy is crucial because financially literate individuals are empowered to manage financial challenges confidently & thereby build stable foundations (Bhushan & Medury, 2013). Data reveal that in India only 24% of adults are financially literate, with women at just 20%, ranking the lowest among major emerging economies, i.e., the BRICS nations (Klapper et al., 2014), while Chhattisgarh ranks last among all Indian

states, with an overall financial literacy rate of only 9% (National Centre for Financial Education, 2019). Raigarh district, often referred to as the "Cultural Capital of Chhattisgarh," was formed in 1948, and according to the 2011 Census, it has a total population of 14,93,984, out of which the Scheduled Tribe (ST) population is 5,05,609, comprising 33.84% of the total. The overall literacy rate of the district is 73.3%, while the female literacy rate stands at 63.0%, suggesting a need for research on financial literacy among tribal women in this district. Administratively, Raigarh consists of nine blocks, with the major tribes being Kanwar, Oraon, Gond, Bhuiya, and Savra (Directorate of Census Operations, Chhattisgarh, 2014).

### Review of Literature

Recent research highlights that comprehensive financial literacy depends not only on knowledge acquisition but also on cultivating positive attitudes and disciplined behaviors (Huston, 2010; Bhushan & Medury, 2014; Arora, 2016; Bantia & Dey, 2022). Studies consistently highlight the influence of socio-demographic variables like education, gender, occupation, and income on financial literacy (Bhushan & Medury, 2013; Sekar & Gowri, 2015; Shyamala & Mahesh, 2022). Women, particularly in rural and marginalized contexts, exhibit lower financial literacy, restricting their access to financial services and decision-making opportunities (Kumar, 2016; Rani, 2017). Despite ongoing government and institutional initiatives, structured financial literacy interventions remain limited in coverage and effectiveness, highlighting the need for the study (Srivastava, 2018). Collectively, these findings suggest that improving financial literacy in India requires an integrated approach that combines knowledge, attitude, and behavior.

### Research Gap

Although several studies have examined factors influencing financial literacy (FL), no study has explored differences in financial literacy across tribal communities.

### Objectives

1. To assess financial literacy (FL) level of tribal women in the Raigarh district of Chhattisgarh.
2. To explore how financial literacy (FL) differs across various socio-demographic variables in Raigarh district of Chhattisgarh state.

### Research Hypotheses

#### *Primary Hypothesis:*

$H_0$ : Financial literacy levels do not differ significantly across socio-demographic variables of respondents in Raigarh district, Chhattisgarh

$H_1$ : Financial literacy levels differ significantly across socio-demographic variables of respondents in Raigarh district, Chhattisgarh.

#### *Sub-Hypothesis (Null Hypotheses)*

**Blocks:** Financial literacy levels do not differ significantly among tribal respondents from Dharamjaigarh, Lailunga, and Raigarh blocks.

**Locality:** Financial literacy levels do not differ significantly among tribal respondents residing in rural, semi-urban, and urban areas.

**Age:** Financial literacy levels do not differ significantly across tribal respondents of different age groups.

**Tribe:** Financial literacy levels do not differ significantly among tribal respondents belonging to different tribal groups.

**Marital Status:** Financial literacy levels do not differ significantly across respondents with different marital status.

**Education:** Financial literacy levels do not differ significantly across respondents with varying levels of education.

**Occupation:** Financial literacy levels do not differ significantly across respondents engaged in different occupations.

**Monthly Income:** Financial literacy levels do not differ significantly among tribal respondents across different monthly income categories.

## Materials and Methods

### Research and Sample Design

A descriptive-analytical, integrated research design was adopted, combining quantitative and qualitative methods. Purposive sampling was employed to select tribal women from Dharamjaigarh (1,36,915 ST), Lailunga (82,923 ST) and Raigarh (56,498 ST) blocks, chosen for high tribal populations and socio-economic diversity. Out of 134 initial respondents, 130 valid responses were retained. The study examines socio-demographic profiles and differences in financial literacy using the Kruskal-Wallis H test.

### Data Collection

The present study used primary and secondary data wherever applicable. Primary data was collected by a self-administered questionnaire for literate respondents and a structured schedule for non-literate respondents, as recorded by the researcher. Secondary data from government and institutional reports (OECD, RBI, NABARD, Census), research articles, and online databases were used to enrich the analysis.

### Financial Literacy Measurement Strategy

Financial literacy was measured by a 5-point Likert scale via a self-assessment test across three dimensions: financial knowledge (8 items), financial attitude (5 items), and financial behavior (6 items), where items assessed knowledge of banking and investments, attitude toward money, saving and risk, and practical behaviors such as budgeting, tracking expenses, saving, and responsible purchasing and borrowing.

### Data Analysis

Data from 130 valid respondents were analyzed using Jamovi software. The analytical process involved assessing reliability, construct validity, and factor structure of the financial literacy instrument. To ensure data adequacy for factor analysis, Kaiser-Meyer-Oklin (KMO) and Bartlett's Test of Sphericity were applied. Exploratory Factor Analysis (EFA) using Maximum Likelihood extraction with oblimin rotation was conducted to assess the dimensions of financial literacy & confirm item loadings. The Cronbach's alpha was calculated to ensure internal consistency and reliability for each construct. The study then analyzed financial literacy levels through composite mean scores and evaluated differences across socio-demographic variables using the Kruskal-Wallis H test, with pairwise comparisons at a 5% significance level.

## Results

### Exploratory Factor Analysis (EFA)

**Table 1: Result of KMO and Bartlett's Test.**

Kaiser-Meyer-Oklin (KMO)		0.827
Bartlett's Test of Sphericity	Approx. Chi-Square ( $\chi^2$ )	1315
	Df	231
	Sig. (p)	< .001

Source: Authors' computation based on primary data.

With the KMO value of 0.827, the sample met the adequacy criterion of 0.70. Bartlett's Test of Sphericity also yielded a significant result ( $\chi^2 = 1315$ ,  $df = 231$ ,  $p < .001$ ), confirming sufficient inter-item correlations to proceed with factor extraction.

**Table 2: Factor Loadings from EFA**

Items	Factor 1: Financial Knowledge	Factor 2: Financial Behaviour	Factor 3: Financial Attitude	Uniqueness
<b>FK1</b>	0.689	-	-	0.495
<b>FK2</b>	0.641	-	-	0.477
<b>FK4</b>	0.622	-	-	0.620
<b>FK5</b>	0.759	-	-	0.431
<b>FK6</b>	0.757	-	-	0.449
<b>FK7</b>	0.748	-	-	0.347
<b>FK8</b>	0.801	-	-	0.368
<b>FK9</b>	0.635	-	-	0.623
<b>FB1</b>	-	0.636	-	0.543
<b>FB2</b>	-	0.658	-	0.462
<b>FB3</b>	-	0.649	-	0.587
<b>FB4</b>	-	0.759	-	0.464
<b>FB5</b>	-	0.568	-	0.543
<b>FB7</b>	-	0.607	-	0.643
<b>FA1</b>	-	-	0.841	0.319
<b>FA2</b>	-	-	0.707	0.520
<b>FA3</b>	-	-	0.593	0.555
<b>FA4</b>	-	-	0.674	0.464
<b>FA5</b>	-	-	0.727	0.438

Source: Authors' computation based on primary data

EFA yielded three factors based on the Kaiser criterion (Eigenvalues > 1). The retained factors had Eigenvalues of 5.91, 1.97, and 1.60. Factor 1, named Financial Knowledge, comprised items FK1, FK2, FK4 - FK9. Factor 2, Financial Behavior, was defined by items FB1, FB2, FB3, FB4, FB5, and FB7. Finally, items FA1 - FA5 loaded onto factor 3, which was labelled Financial Attitude. Items FK3, FB6, and FB8 removed due to low factor loadings and high uniqueness values (0.694, 0.842, and 0.868, respectively).

#### *Reliability of the Instrument*

**Table 3: Scale Reliability Statistics**

Construct	Cronbach's $\alpha$
Financial knowledge (FK)	0.883
Financial behaviour (FB)	0.822
Financial attitude (FA)	0.838
<b>Financial literacy</b>	<b>0.875</b>

Source: Authors' computation based on calculation of primary data.

The Cronbach's alpha test shows that all constructs have high internal consistency, with values ranging from 0.822 to 0.883 across constructs, while the overall Financial Literacy scale achieves excellent reliability ( $\alpha = 0.875$ ).

#### *Financial Literacy Level*

**Table 4: Descriptive Figures of Financial literacy score**

	Financial Literacy Level Mean Composite
<b>N</b>	130
<b>Missing</b>	0
<b>Mean</b>	3.63
<b>Minimum</b>	1.74
<b>Maximum</b>	4.95

Source: Authors' computation based on primary data.

The average financial literacy score was 3.63, ranging from 1.74 to 4.95. The evaluated the level of financial literacy by calculating composite mean score from the respondents' self-assessment across 19 statements. Following OECD guidelines, the financial literacy level of respondents with a mean score was categorized as:

- High level: Mean > 4
- Moderate level: Mean 3-4
- Low level: Mean < 3

The results have been presented in the table below:

**Table 5: Financial Literacy Level**

Level of Financial Literacy				
		Counts (Frequency)	Percent of Total	Cumulative Percent (%)
Valid	High	45	34.6 %	34.6 %
	Moderate	61	46.9 %	81.5%
	Low	24	18.5 %	100%
	Total	130	100.0 %	

Source: Authors' computation based on primary data.

**Interpretation:** Out of 130 respondents, most tribal women (46.9%) demonstrated a moderate level of financial literacy, 34.6% had high literacy level, and 18.5% had low level of literacy. This suggests that while many tribal women have a fair understanding of financial concepts, a significant minority are positioned at the lower extreme of the measured range.

#### *Differences across Socio-Demographic Variables*

The Kruskal-Wallis H test was applied to determine whether financial literacy levels differed significantly across sociodemographic variables, with hypothesis tests at 5% significance level.

**Table 6: Mean and H values of Financial Literacy Level (Kruskal Wallis Test)**

	Groups Compared	N	Median	H value (X <sup>2</sup> )	Significance	Significant Pairwise Differences (Dwass-Steel-Critchlow-Fligner)
Blocks	Dharamjaigarh	33	3.16	40.6	< .001	Raigarh > Dharamjaigarh (p < .001); Raigarh > Lailunga (p < .001)
	Lailunga	26	3.21			
	Raigarh	71	4.11			
Locality	Rural	68	3.58	27.4	< .001	Urban > Rural (p < .001); Urban > Semi-urban (p < .001)
	Semi-urban	17	3.21			
	Urban	45	4.16			
Age (In Years)	18-22	31	3.42	19.7	0.001	23-27 > 18-22 (p = 0.039); 23-27 > Above 55 (p = 0.025) 28-34 > Above 55 (p = 0.023)
	23-27	13	4.16			
	28-34	23	3.89			
	35-44	32	3.82			
	45-54	18	3.61			
	55 and above	13	3.11			
Tribe	Bhuiya	26	3.34	14.9	0.011	Oraon > Bhuiya (p= 0.006)
	Kanwar	42	3.66			
	Savra	13	3.63			
	Oraon	32	4.11			
	Khadia	04	3.84			
	Gond	13	3.21			
Marital Status	Unmarried	45	3.58	2.84	0.241 (Null hypothesis rejected)	-
	Married	76	3.74			
	Widowed	09	3.89			

<b>Education</b>	Never attended School	15	3.11	55.8	< .001	Graduate > Never attended school ( $p < .001$ ) and Primary class 5 <sup>th</sup> ( $p = 0.009$ );
	Primary (Passed class 5th)	36	3.47			High School 10 <sup>th</sup> > Never attended school ( $p = 0.006$ ) and Primary class 5 <sup>th</sup> ( $p = 0.019$ );
	High School (Passed class 10th)	07	4.21			Post Graduate > Never attended school, Primary class 5 <sup>th</sup> and Higher secondary 12 <sup>th</sup> with all ( $p < .001$ )
	Higher Secondary (Passed class 12th class)	34	3.50			
	Graduate	17	4.11			
	Post Graduate	21	4.47			
<b>Occupation</b>	Student	30	3.24	37.2	< .001	Private/Government jobs > Daily wage workers ( $p = 0.002$ ), Students ( $p < 0.001$ ), and Homemakers ( $p = 0.031$ )
	Homemaker	23	3.61			
	Unemployed	04	4.32			
	Daily wage worker	16	3.24			
	Farmer	27	3.74			
	Private / Government job	27	4.21			
	Self-employed/Business	06	4.24			Unemployed > Daily wage workers ( $p = 0.044$ )
<b>Monthly Income</b>	Nil	57	3.55	36.9	< .001	Above ₹45,000 > Nil income ( $p < 0.001$ ), Below ₹5,000 ( $p < 0.001$ ), and ₹5,001–₹15,000 ( $p = 0.013$ )
	Below ₹5,000	44	3.53			
	₹5,001–₹15,000	13	3.89			
	₹15,001–₹25,000	03	3.84			
	₹25,001–₹35,000	03	4.42			
	₹35,001–45,000	02	4.55			
	Above ₹45,000	11	4.58			

Source: Authors' computation based on primary data.

**Interpretation:** The analysis revealed significant variations in financial literacy (FL) across most socio-demographic groups. Financial literacy differed significantly across blocks ( $H (2) = 40.6, p < .001$ ), with Raigarh respondents scoring higher than Lailunga and Dharamjaigarh. Locality also showed significant differences ( $H (2) = 27.4, p < .001$ ), with urban women outperforming rural and semi-urban women. Age groups varied significantly ( $H (5) = 19.7, p = .001$ ); particularly, the 23–27 age group had significantly higher financial literacy than both the 18–22 age group ( $p = 0.039$ ) and the above 55 group ( $p = 0.025$ ). Additionally, the 28–34 age group had significantly higher financial literacy than the above 55 group ( $p = 0.023$ ). Across tribes, Oraon women had significantly higher financial literacy than Bhuiya women ( $H (5) = 14.9, p = 0.011$ ). No significant differences were observed for marital status ( $H (2) = 2.84, p = 0.241$ ). Education level was strongly associated with literacy ( $H (5) = 55.8, p < .001$ ), with Graduates, Higher Secondary, and Postgraduates scoring higher than lower-educated groups. Occupation differences were significant ( $H (6) = 37.2, p < .001$ ), with private/government job holders and unemployed individuals having higher literacy than students, homemakers, and daily wage workers. Finally, income levels influenced literacy ( $H (6) = 36.9, p < .001$ ), with respondents earning above ₹45,000 outperforming lower- or no-income groups. The analysis resulted in the rejection of the null hypothesis for all variables except marital status, demonstrating that financial literacy significantly varies across most socio-demographic factors, with post-hoc tests elucidating specific group differences.

## Discussion

The findings from the analysis indicate that tribal women in Raigarh district exhibit a moderate level of financial literacy, with a considerable portion showing low literacy, reflecting an increase in awareness

of financial concepts and practices but its uneven distribution across the population. There is a significant difference in financial literacy across socio-demographic factors. Higher financial literacy is found among urban tribal women than rural counterparts. Education also emerged as a strong FL determinant, with educated women having higher financial literacy. Further, FL (financial literacy) also differs across occupation and income factors, with professionally employed women showing higher financial literacy and those with higher income brackets displaying high financial literacy. Similar patterns were observed by Shyamala and Mahesh (2022). The study by Sarkar et al. (2025) confirmed that financial literacy differs across income brackets, i.e., high FL among high-income brackets. It suggests that exposure and income play a major role in shaping financial capabilities. Khuc et al. (2022) noted that income-generating engagement provides women with opportunity and motivation to acquire financial skills, thus strengthening their economic independence, as employed women tend to be more financially literate, and that in turn enhances their participation in economic decision-making. Interestingly, tribes and localities also play a significant role in shaping financial literacy levels, showing differences across tribes and localities, which highlight the influence of socio-cultural and access factors on financial learning. Rehman and Mia (2024) pointed out that cultural values and geographic isolation often constrain exposure to formal financial systems, creating a gap in knowledge and confidence. These findings align with the OECD framework, emphasizing that financial literacy is multidimensional—dependent not only on knowledge but also on attitude and behavior. In brief, the study indicates that tribal women's financial literacy in Raigarh district is influenced by many factors, such as their education, living conditions, and culture. Real empowerment will come only when these factors are addressed, not just by providing access to financial services.

## Conclusion

The overall findings reveal that while most respondents exhibit moderate financial literacy, considerable disparities persist across different socio-demographic groups. Financial literacy was found to be significantly influenced by blocks, locality, age, tribe, education, occupation, and income, reflecting the unequal distribution of financial knowledge and exposure. However, no significant variation in financial literacy was observed based on marital status. Specifically, respondents from Raigarh block, urban areas, younger age groups (23–34 years), the Oraon tribe, higher education respondents, professional occupations, & higher income levels exhibited superior financial literacy (FL) demonstrating stronger financial understanding and confidence in managing resources.

## Suggestions

The findings highlight the need for context-specific interventions to improve financial literacy among tribal women, such as financial education in local languages, simplified banking procedures, awareness of government schemes, and digital access to services. Financial professionals can leverage these insights to design accessible financial literacy programs in local languages, integrate digital banking training, and promote savings and insurance awareness among tribal women. Future research could explore longitudinal and comparative studies to identify effective strategies and behavioral factors, as enhancing financial literacy is vital for both personal financial well-being and broader socio-economic empowerment in Chhattisgarh and other tribal regions.

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## Conflicts of Interest

The authors declared no conflicts of interest.

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