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Article

Women's Empowerment through Financial Literacy: An Empirical Study with Reference to Karnataka

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Abstract: Financial literacy is the major component of measurement of women’s empowerment and as a crucial element in promoting inclusive economic development developing nations. Women’s access to financial services, involvement in financial decision making and access to formal financial services are plagued with problems in spite of various policy efforts to improve financial inclusion in India. Karnataka is a fast growing state in India, with a diverse socio-economic landscape where women's financial literacy and involvement vary widely across urban and rural areas via the SHG's. It is important to recognize the factors that enable women to become empowered through financial literacy to create effective policies and programs for sustainable development. This study aims to understand the impact of financial literacy about women empowerment in Karnataka and it focuses on the main causes of financial capability and economic independence of women. The study explores various factors including financial literacy, savings behavior, investment awareness, and digital financial literacy, and their impacts on women's economic and social empowerment. The approach of quantitative research design will be used with a structured questionnaire to be administered to the women in different districts of Karnataka. Descriptive statistics, reliability analysis, exploratory factor analysis, confirmatory factor analysis, correlation analysis and multiple regression analysis will be used in the analysis. The purpose of this study is to show that there is a significant financial literacy impact that can be seen in women's ability to make financial decisions,

save more money, develop entrepreneurial skills, and be economically independent in general. The results will provide policymakers, schools, financial institutions and non-governmental organizations focused on women's financial empowerment with valuable insights. Further, this study adds to the literature by providing empirical evidence from Karnataka and suggesting a framework that connects the financial literacy dimensions with women empowerment. In short, this study contributes to the overall sustainable development agenda by advocating for gender equality, financial inclusion, and socioeconomic empowerment of women.
Keywords: Financial Literacy, Women Empowerment, Financial Inclusion, Economic empowerment, Karnataka, Financial Behaviour, Digital Financial Literacy.

1. Introduction:

Financial literacy has become an important determinant of economic development and financial health in the 21st century. Technological developments, the dissemination of digital financial services, the growing complexity of financial markets and the Government's financial inclusion policies have drastically impacted how people handle their financial resources. This has made it essential that people develop their understanding of financial terms and that they can make effective financial choices. Specifically, women benefit from financial literacy, which could increase their financial decision making capacity within the household, increase their savings and investment capacity, access financial formal institutions and actively participate in economic development.

Empowerment of women is now a key priority in both national and international development policies. This empowerment is not limited to economic independence, but it is also about being able to have access to financial resources, participate in decision-making processes, embark on entrepreneurship initiatives, and improve the overall quality of life. One of the key components to attaining these goals is through financial literacy, empowering women with knowledge, confidence, and skills to effectively manage their personal and family finances.

Human capital theory is the basis for this study which posits that making investments in education and financial knowledge will enhance productivity and economic results of individuals. A second claim of Resource Theory is that increased access to economic resources increases bargaining power in households and in society. Behavioural Finance Theory accounts for how financial knowledge, shaped by financial attitudes and behaviours, enhances the decision-making process and financial well-being. These views suggest that financial literacy is an enabling factor that empowers women to make better financial decisions and to increase their empowerment.

2. Review of Literature

Sharma et al. (2024) undertook a conceptual study to explore the linkage between women's financial literacy and economic empowerment in India. The study highlighted that financial literacy impacts the decision making skills of women, urges them to save and invest, financial independence, and boosts their economic activities. The authors maintained that financial literacy is one of the factors contributing to the reduction of financial exclusion gap among women and is a key component in sustainable financial enrichment. The study also revealed that the role of government initiatives, educational institutions and financial institutions in financial awareness building among women women, particularly rural women was also emphasized. The study was conceptual in nature and lacked empirical data collected from primary sources thus necessitating validation with quantifiable data in other regional settings like Karnataka. Balireddy Mohan Nikhil Teja, 2023 and Moksha Singh (2023) did a literature review to gain insights into the relationship between financial literacy and women empowerment. The review collated outcomes of various studies and identified financial literacy as the most critical factors that can influence the empowerment of women. The high level of financial awareness among women was associated with the good savings behaviour, financial planning and investment decisions, and entrepreneurial participation. The authors also found that financial education positively affects women's confidence in managing their personal finances and encourages their formal financial system participation. Barriers listed in the review included gender inequality, insufficient educational opportunities, cultural constraints and lack of financial education opportunities. The study gives extensive theoretical findings, but suggests that there should be further empirical studies at the state and district levels in India. Chavda and Patel (2024) conducted a study of the problems and solutions in enhancing women's financial literacy. The study revealed the following factors that restricts women in achieving financial capability: low education level, social norms, gender discrimination, lack of financial awareness and limited exposure to financial products. Financial literacy is not just about banking but also budgeting, managing debt, planning for investments, accessing digital financial services, and risk management, the authors highlighted. They proposed that women's economic participation and financial independence can be greatly improved with the help of financial education programmes, digital literacy campaigns and government initiatives. The study ended that enhancing monetary literacy is a direct contribution to gender equality and financial well-being of households. The study, however, did not go so far as to measure the scale of the impact of financial literacy on empowerment, but rather talked of challenges and policy strategies to address those challenges. Santhipriya (2025) studied the role of Self-Help Groups (SHGs) in Financial Empowerment of women. The study revealed that, the involvement of women in SHGs significantly raised the awareness of financial literacy by giving opportunities to women to acquire financial skills, savings habit, entrepreneurial skills and credit facilities, financial management in the household increased women's confidence and ability for decision making and their participation in social gathering. The study findings suggest that community based financial education and micro finance program has a remarkable contribution in the economic empowerment of women. It also noted, however, that there is a regional variation in financial education quality and suggested offering structured programmes on financial education along with SHG activity to achieve maximum long-term empowerment. Recent studies on Karnataka reveal that there are significant differences in financial empowerment of women in rural and urban areas, with education, access to finance, access to digital platforms and employment opportunities, among other factors, playing a key role in this. Compared to rural women, the women living in urban areas have higher knowledge about financial literacy and have been able to use digital banking services and make better financial decisions. It is also reported in the studies that financial independence of women has been positively affected by the government welfare schemes, financial inclusion schemes, entrepreneurship development schemes etc. However, certain issues like lack of investment awareness, lack of access to internet and socio-cultural barriers are still impacting women empowerment in several districts in Karnataka. The significance of the study is the results obtained that region-specific research is vital to understand the empowerment of women from financial literacy.

Summary of Literature Review

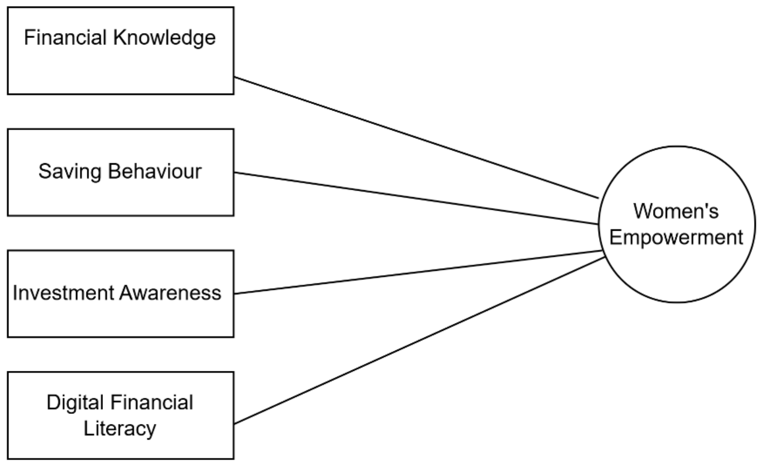
Author(s)	**Year**	**Focus Area**	**Major Findings**
Sharma, Vidyashree & Prathap	2024	Financial literacy and economic empowerment women's	Financial literacy improves financial autonomy, decision-making, and economic participation.
Balireddy Mohan Nikhil Teja & Moksha Singh	2023	Systematic literature review	Financial literacy positively influences women's empowerment, financial planning, and entrepreneurship.
Chavda & Patel	2024	Challenges in financial literacy	Educational, social, and cultural barriers affect women's financial capability; financial education is essential.
Santhipriya	2025	Self-Help Groups and financial empowerment	SHGs improve financial literacy, savings behaviour, entrepreneurship, and financial independence.
Karnataka-based studies	2025–2026	Women's financial empowerment	Urban women generally exhibit higher financial literacy; regional disparities remain in financial inclusion and digital adoption.

Based on the literature examined, the conclusion is that financial literacy is a multidimensional phenomenon, and that it is important for women's empowerment. There is, however, a need for extensive empirical research which has an exclusive focus on Karnataka to explore the role of different aspects of financial literacy on the economic and social empowerment of women. This study aims to fill this gap through the use of strong statistical methods and a multi-dimensional conceptual approach.

Research Gap

The literature review shows that financial literacy has been shown to have a significant positive impact on economic participation, financial decision making and overall empowerment of women. However, most of the existing studies are conceptual, focus only on financial inclusion or examine certain elements of financial literacy. In particularly in the context of Karnataka, there is lack of empirical data that jointly explores financial knowledge, savings behaviour, awareness of investment and digital financial literacy as determinants of women empowerment. Moreover, few studies have employed advanced statistical techniques to validate the constructs and to look into their effect on women empowerment including Regression Analysis and Exploratory Factor Analysis. Therefore, this study is an attempt to fill these gaps by developing an extensive empirical model for Karnataka.

Conceptual Framework



Research Objectives

1. To examine the influence of financial knowledge on women's empowerment in Karnataka.
2. To assess the influence of saving behaviour on women's empowerment in Karnataka.
3. To evaluate the influence of investment awareness on women's empowerment in Karnataka.
4. To evaluate the influence of digital financial literacy on women's empowerment in Karnataka.

Hypotheses

H_0: Financial knowledge has no influence on women's empowerment in Karnataka.

H_1: Financial knowledge has a significant positive influence on women's empowerment in Karnataka.

H_0: Saving behaviour has no influence on women's empowerment in Karnataka.

H_1: Saving behaviour has a significant positive influence on women's empowerment in Karnataka.

H_0: Investment awareness has no significant influence on women's empowerment in Karnataka.

H_1: Investment awareness has a significant positive influence on women's empowerment in Karnataka.

H_0: Digital financial literacy has no significant influence on women's empowerment in Karnataka.

H_1: Digital financial literacy has a significant positive influence on women's empowerment in Karnataka.

3. Research Methodology:

To examine the impact of women's empowerment through the financial literacy in Karnataka, descriptive research is used. Primary data was collected using a standardised questionnaire on Likert scale of 1-5. A random sampling technique was employed to select a sample of 400 female respondents ensuring that both rural and urban areas were represented. Secondary data will come from journals, government reports, publications and published research. IBM SPSS Statistics were use to analyse the data. In order to test the research hypotheses and to achieve the study objectives, descriptive statistics, Cronbach's Alpha, Exploratory Factor Analysis (EFA), Pearson correlation and Linear Regression have been employed.

4. Discussion and interpretation:

Table 1: Summary of Demographic Characteristics:

Variable	Categories	Frequency	Percent	Valid Percent	Cumulative Percent
Age	18 to 25	90	22.5	22.5	22.5

	26 to 35	83	20.8	20.8	43.3
	36 to 45	71	17.8	17.8	61.0
	46 to 55	70	17.5	17.5	78.5
	55 Above	86	21.5	21.5	100.0
	Total	**400**	**100.0**	**100.0**	
Education	Graduate	80	20.0	20.0	20.0
	Postgraduate	77	19.3	19.3	39.3
	Professional Degree	81	20.3	20.3	59.5
	PUC	77	19.3	19.3	78.8
	SSLC	85	21.3	21.3	100.0
	Total	**400**	**100.0**	**100.0**	
Occupation	Government Employee	65	16.3	16.3	16.3
	Homemaker	182	45.5	45.5	61.8
	Private employees	61	15.3	15.3	77.0
	Self employed	92	23.0	23.0	100.0
	Total	400	100.0	100.0	
Income	100000 Above	75	18.8	18.8	18.8
	10000 to 25,000	78	19.5	19.5	38.3
	25001 to 50000	72	18.0	18.0	56.3
	50001 to 75000	87	21.8	21.8	78.0
	75001 to 100000	88	22.0	22.0	100.0
	Total	**400**	**100.0**	**100.0**	
Residence	Rural	206	51.5	51.5	51.5
	Urban	194	48.5	48.5	100.0
	Total	**400**	**100.0**	**100.0**	

Interpretation: the above Table 1 shows the responses distribution among the various demographic groups is displayed. The majority of respondents lived in rural areas (51.5%), were homemakers (45.5%), and earned between ₹75,001 and ₹1,00,000 (22.0%). A wide and representative sample for the study was ensured by the comparatively balanced age and educational distributions.

Table 2 Summary of Descriptive Statistics

Variable	**N**	**Min**	**Max**	**Mean**	**SD**	**Skewness**	**Kurtosis**
	Statistic	**Statistic**	**Statistic**	**Statistic**	**Statistic**	**Statistic**	**Statistic**
Financial_Knowledge_Avg	400	1.40	5.00	3.4870	1.09262	-.224	-1.227
Saving_Behaviour_Avg	400	1.20	5.00	3.4860	1.10809	-.245	-1.251
Investment_Awareness_Avg	400	1.20	5.00	3.4900	1.09008	-.177	-1.313
Digital_Financial_Literacy_Avg	400	1.20	5.00	3.4885	1.09502	-.223	-1.297
Women_Empowerment_Avg	400	1.38	5.00	3.4850	1.09604	-.184	-1.352

Interpretation: According to the descriptive statistics, all study variables have moderate to high mean scores, ranging from 3.485 to 3.490, indicating that most of respondents agreed with the statements about women's empowerment, digital financial literacy, investment awareness, saving behaviour, and financial knowledge. The standard deviation values (1.09–1.11) indicate moderate variability in responses. Furthermore, the skewness values (−0.177 to −0.245) and kurtosis values (−1.227 to −1.352) fall within the acceptable range (±2), confirming that the data are approximately normally distributed and suitable for subsequent parametric analyses such as correlation and regression.

Table 3: Summary of Reliability Analysis (Cronbach's Alpha)

Variables	N of Items	Cronbach's Alpha	Reliability
Financial Knowledge (FK)	5	.986	**Excellent**
Saving Behaviour (SB)	5	.935	**Excellent**
Investment Awareness (IA)	5	.930	**Excellent**
Digital Financial Literacy (DFL)	5	.931	**Excellent**
Women's Empowerment (WE)	8	.956	**Excellent**

Interpretation:

Table 3 presents the reliability analysis of the study constructs using Cronbach's Alpha. With Cronbach's Alpha values ranging from 0.930 to 0.986, which are significantly higher than the suggested threshold of 0.70, the results show that all variables exhibit outstanding internal consistency. The most reliable category was Financial Knowledge ($\alpha = 0.986$), which was followed by Women's Empowerment ($\alpha = 0.956$), Saving Behavior ($\alpha = 0.935$), Digital Financial Literacy ($\alpha = 0.931$), and Investment Awareness ($\alpha = 0.930$). These results attest to the questionnaire items' excellent reliability and consistent measurement of the corresponding constructs. As a result, the tool is thought to be appropriate for other statistical analyses, such as multiple regression analysis, correlation, and exploratory factor analysis (EFA).

Table 4 summary of KMO and Bartlett's Test

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.992
Bartlett's Test of Sphericity	Approx. Chi-Square	13006.419
	df	378
	Sig.	0.000

Interpretation: Table 4 presents the results of the Kaiser–Meyer–Olkin (KMO) and Bartlett's Test of Sphericity. The Excellent sampling adequacy is shown by the KMO score of 0.992, which surpasses the suggested threshold of 0.60 and shows that the data are ideal for exploratory factor analysis (EFA). With 378 degrees of freedom, Bartlett's Test of Sphericity yielded a Chi-square value of 13006.419, which is statistically significant ($p < 0.001$). This shows that there are enough correlations between the variables and that the correlation matrix is not an identity matrix. As a result, the measurement items are appropriate for determining the underlying factor structure, and the dataset is suitable for factor extraction.

Table 5 summary of Exploratory Factor Analysis

Table 5.1 Total Variance Explained

Component	Initial Eigenvalue	% of Variance	Cumulative %
1	20.725	74.016	74.016

Extraction Method: Principal Component Analysis (PCA).

The Total Variance Explained table indicates that only one component was extracted with an With an eigenvalue of 20.725, which accounts for 74.016% of the total variance, just one component was identified, according to the Total Variance Explained table. The factor solution has excellent construct validity because the extracted component explains more than the suggested 60% of the total variance. According to Kaiser's criterion, the other components were not kept because their eigenvalues were less than 1. This finding implies that a single dominating underlying concept is represented by the measurement items taken as a whole.

Table 6: Summary of Correlation Matrix

			Financial_Knowledge_AVG	Saving_Behaviour_Avg	Investment_Awareness_Avg	Digital_Financial_Literacy_Avg	Women_Empowerment_Avg
Spearman's rho	Financial_Knowledge_AVG	Correlation Coefficient	1.000				
	Saving_Behaviour_Avg	Correlation Coefficient	.915**	1.000			
	Investment_Awareness_Avg	Correlation Coefficient	.918**	.922**	1.000		
	Digital_Financial_Literacy_Avg	Correlation Coefficient	.921**	.924**	.920**	1.000	
	Women_Empowerment_Avg	Correlation Coefficient	.927**	.930**	.933**	.929**	1.000
**. Correlation is significant at the 0.01 level (2-tailed).							

Interpretation: Table 6 shows the result of the Spearman's Rank Correlation study between Women Empowerment, Digital Financial Literacy, Investment Awareness, Saving Habits and Financial Knowledge. All the factors have very high positive and statistically significant correlations ($p<0.01$). There is a significant correlation between women empowerment and financial knowledge ($r = 0.927$), indicating that financial knowledge increases with the increase of women's empowerment. Likewise, the correlation between Women's Empowerment and Saving Behavior is 0.930, Investment Awareness 0.933 and Digital Financial Literacy 0.929 respectively. The correlation among the independent variables varies from 0.915 to 0.924, which is considered as a high correlation among the constructs. These results suggest that there is a relationship between women's empowerment and improvements in financial literacy characteristics. Thus, preliminary support for the proposed hypotheses is provided with correlation analysis, which can be further explored through multiple linear regression analysis.

Table 7: Summary of Multiple Regression Analysis

Presentation of Multiple regression analysis statistics								
Model	**DV**	**IV**	**Beta**	**Std. Error**	**t Statistics**	**R Square**	**F Statistics**	Sig.
1	Women Empowerment	Financial Knowledge	.222	.039	5.679	0.941469	1588.383	.000
		Saving Behaviour	.257	.039	6.569			.000

		Investment Awareness	.279	.039	7.125			.000
		Digital Financial Literacy	.239	.042	5.715			.000

Interpretation: The Table 7 present the impact of financial knowledge, saving behaviour, investment awareness, and digital financial literacy on women's empowerment was investigated using multiple linear regression analysis. Excellent explanatory power was demonstrated by the regression model, which explained 94.1% ($R^2 = 0.941$) of the variation in women's empowerment and was statistically significant ($F = 1588.383$, $p < 0.001$). Among the predictors, Investment Awareness emerged as the greatest predictor ($\beta = 0.279$, $t = 7.125$, $p < 0.001$), followed by Saving Behaviour ($\beta = 0.257$, $t = 6.569$, $p < 0.001$), Digital Financial Literacy ($\beta = 0.239$, $t = 5.715$, $p < 0.001$), and Financial Knowledge ($\beta = 0.222$, $t = 5.679$, $p < 0.001$). Therefore, all null hypotheses are rejected because women's empowerment is significantly positively impacted by all four independent variables.

Table 08: Table of summary of Hypothesis Testing

Hypothesis	**β**	**p-value**	**Decision**
H_{11}: Financial Knowledge → Women's Empowerment	0.222	0.000	Accepted
H_{12}: Saving Behaviour → Women's Empowerment	0.257	0.000	Accepted
H_{13}: Investment Awareness → Women's Empowerment	0.279	0.000	Accepted
H_{14}: Digital Financial Literacy → Women's Empowerment	0.239	0.000	Accepted

Interpretation:

All four independent factors had a positive and statistically significant impact on women's empowerment, according to the regression analysis. The best predictor is investment awareness, which is followed by financial knowledge, digital financial literacy, and saving behavior. These findings imply that improving financial literacy can significantly increase women's economic and financial empowerment in Karnataka and support all four alternative hypotheses.

Findings:

According to the study, women's empowerment in Karnataka is greatly increased by financial literacy. Strong positive and statistically significant correlations were found between women's empowerment and financial knowledge, saving behavior, investment awareness, and digital financial literacy. These factors together accounted for 94.1% of the variation in women's empowerment (R2 = 0.941), according to multiple regression analysis, suggesting a highly predictive model. The biggest predictor among the factors was investment awareness, which was followed by saving behavior, digital financial literacy, and financial understanding. The results demonstrate that increasing financial literacy promotes inclusive growth and gender equality by strengthening women's financial decision-making, economic independence, and general empowerment.

Ethical Considerations:

the study complied with ethical research norms. Participants were made aware that they might leave at any time without facing any repercussions. By getting informed consent from each participant, guaranteeing voluntary participation, protecting respondents' identity and confidentiality, and utilizing the data only for academic purposes.

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