

# IDENTIFYING THE SIGNIFICANCE OF DIGITAL FINANCIAL LITERACY IN INDIAN EDUCATION: A BIBLIOMETRIC ANALYSIS

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## KEYWORDS

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## ABSTRACT

**D**igital Financial Literacy (DFL) is increasingly creating advancement in financial inclusion and tech-savvy attitudinal aspects of users. It is making the Gen Z capable of making digital payments, enable them to access online banking services and also supporting them in becoming aware about the investments and savings. Various digital payment methods like United Payment Interface (UPI), Aadhaar-enabled payment systems and mobile wallets are creating a user-friendly platform for the fintech users. Today's digital India is having 27% of financially literate population that shows one out of five Indians are capable in dealing or using the digital financial services. Pradhan Mantri Jan Dhan Yojna (PMJDY) and digital India campaign is based on a Government initiative to promote DFL amongst the Indian population. The bibliometric analysis has been done with the help of biblioshiny (R Studio) and VOSviewer software in order to present citation analysis, keyword analysis. There are 135,431 publications that are available in the Dimensions database, out of which 41,603 are open access while 93,828 are closed accessed. 12,819 articles, 12,586 chapters and 10,216 edited books are available as open accessed on the mentioned stream of digital financial literacy in Indian Education.

The data was accessed on 3<sup>rd</sup> October, 2023. This paper will provide policymakers' detailed information regarding the current trends through keywords and co-occurrence analysis, influential authors through authorship analysis, most cited papers through citation analysis, most published journals and funding sponsors. It will indeed help the researchers, scholars and academia fraternities to find more research gaps with the help of the network analysis with the help of bibliometric analysis.

## **1. INTRODUCTION**

Fintech has played an important role in the Indian economy growth and has been a driving element in digital innovation. It has also improved the financial inclusion in India. Mobile payment platforms like Google pay, Phonepe, Jio Payments bank and Paytm Payments Bank to help millions of people in making online transactions. The United Payments Interface (UPI) has made revolutionary changes in digital payment system. Robust startup ecosystem with the support of digital lending to insurance, wealth management, personal finance and regtech.(Fauzi et al., 2021; Jungo et al., 2023; Kozlakidis et al., 2020; Long et al., 2023; Noor et al., 2020; Panakaje et al., 2023; Pandey & Kiran, 2022; Rastogi et al., 2021; Setiawan et al., 2023)

Studies are performed with the help of Structural Equation Modeling in order to understand the significance of digital financial literacy, financial inclusion and Indian education (Adnan et al., 2023; Idris et al., 2023; Vasile & Panait, 2021). The studies executed to identify moderating variables like banking awareness and business modeling due to the requirement of more studies in this field (Al-slehat, 2023).

### **1.1 OBJECTIVES OF THE STUDY**

- To find out the most cited journals of DFL in relation with Indian education.
- To find out the most used keywords for DFL in Indian education.
- To find the most influential authors of the available literatures in the field of DFL with Indian education.

## 2. LITERATURE REVIEW

### • **DIGITAL FINANCIAL LITERACY AND INDIAN EDUCATION**

A study performed by researchers based on examining digital financial literacy among accounting students in Selangor, Malaysia by using PLS-SEM. The authors found a positive impact of Financial Knowledge Score (FSK) and Programme Level (PL) on DFL. This study recommended that academicians and policymakers should focus on improving financial education in schools as well as universities through promotional events, parental involvements as well as social media influence (Adnan et al., 2023).

Researchers examined the relationship between financial literacy and aspirations in rural Tanzania with the help of 1200 households in four regions of Tanzania. The survey includes research questions on financial literacy, aspirations, and a range of demographic and socioeconomic factors. Statistical tools like regression and SEM alongwith sensitivity analysis to test robustness of findings. The authors find evidence to suggest that this relationship is mediated by individuals' sense of control over their lives and their ability to plan for the future. (Melesse et al., 2023)

The researchers executed non-contrived field study in Bangalore and it was cross-sectional, questionnaire used to take 387 responses that use DFS (Digital Financial Services). It has been found that DFL was positively associated with the usage of DFS in India. The study also found that gender did not have a significant impact on digital financial literacy and the usage of DFS. The important determinants came as age, education, income, technology access over DFL and DFS (Ravikumar et al., 2022).

The researchers performed bibliometric and empirical analysis for imbibing significant factors included in several studies of financial inclusion. The findings highlighted convergence among countries, increment in the quality of life after usage of financial inclusion. It also suggested about the gender gap and digital division that requires financial institutions, civil society organizations and Governments (Vasile & Panait, 2021).

There is a study based on two-step approach in order to identify articles exploring theory-based financial literacy. Scopus database has been accessed to perform bibliometric analysis. It identified main variables used in this study like financial knowledge, financial behavior, financial attitudes, skills and awareness. Future research can be done for developing more integrated models of financial literacy (Idris et al., 2023).

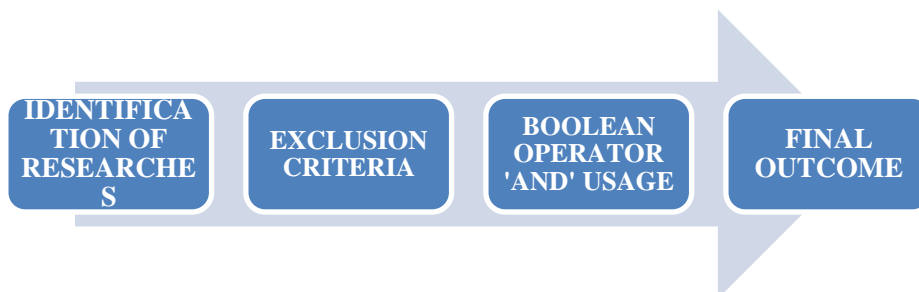
The researchers used both primary and secondary data to gather and analyze reports. Descriptive and inferential analysis to answer research questions and structural equation modeling to evaluate links between financial literacy, financial decision making and financial inclusion and socio-economic empowerment. The findings suggested positive correlation among the variables. The study also found that socio-economic empowerment is directly impacted by financial inclusion (Panakaje et al., 2023).

A study implemented which sheds light on the significant role of financial literacy and social capital in promoting sustainable development through financial inclusion. The paper used survey research through questionnaire from 488 respondents and used convenience sampling. SEM has been executed to test hypothetical model and assess connection between financial inclusion and sustainable development. The study found that social capital does not moderate the relationship between financial inclusion and sustainable development (Lontchi et al., 2022).

#### • **FINANCIAL INCLUSION, LITERACY AND BIBLIOMETRIC ANALYSIS**

Researchers studied the impact of digital marketing on the relationship between fintech and financial inclusion in the Jordanian banking sector. A sample of 345 employees from 13 commercial banks have been considered through Smart PLS. The results showed that commercial banks should pay more attention to fintech by holding training courses for employees in the arena of application of fintech and usage of advanced strategies that enhance technological innovation and digital marketing through the enhancement of financial inclusion (Al-slehat, 2023).

#### 1. **RESEARCH METHODOLOGY**



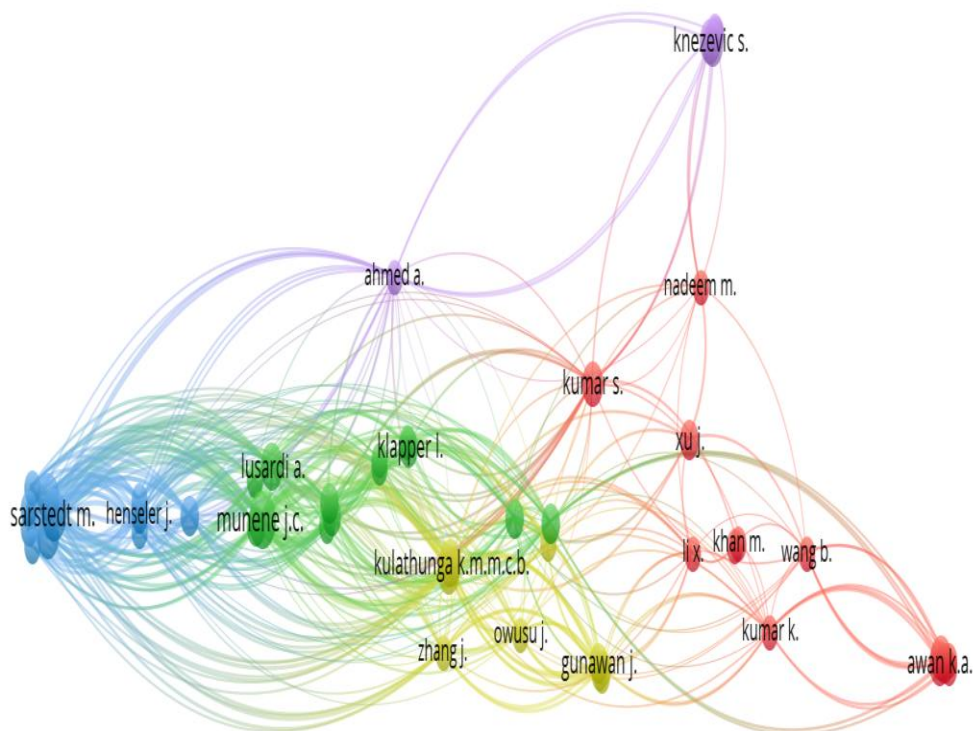
**FIGURE 1 RESEARCH MODEL (AUTHOR'S CREATION)**

- The bibliometric analysis has been done with the help of biblioshiny (R Studio) and VOSviewer software in order to present authorship analysis, citation analysis, and keyword analysis.

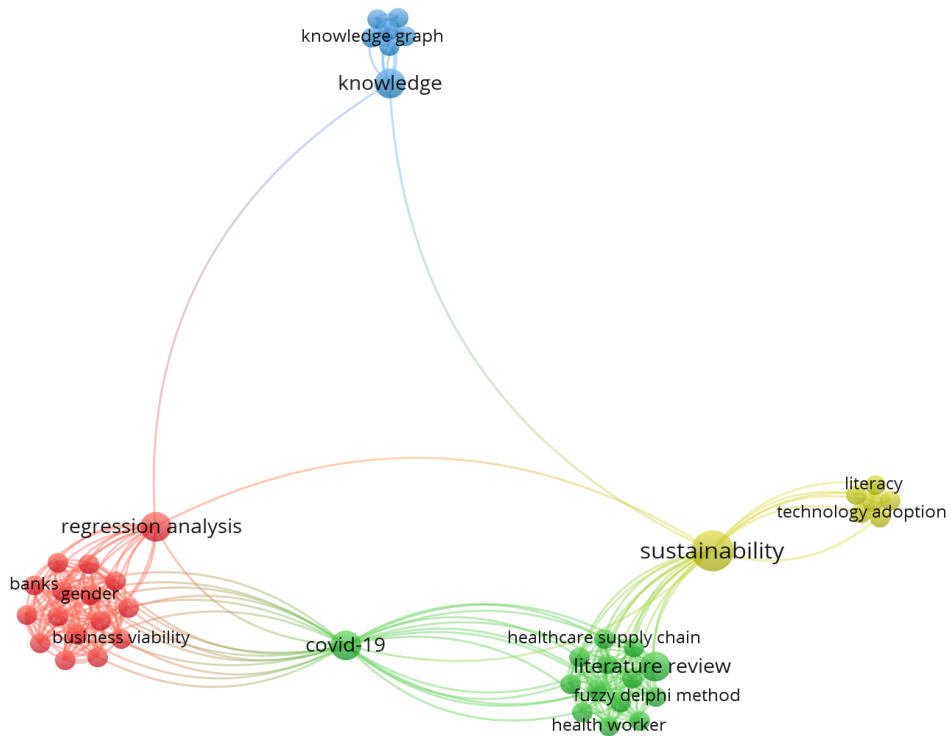
- There are 135,431 publications that are available in the Dimensions database, out of which 41,603 are open access while 93,828 are closed accessed.
- 12,819 articles, 12,586 chapters and 10,216 edited books are available as open accessed on the mentioned stream of digital financial literacy in Indian Education.
- The data was accessed on 3<sup>rd</sup> October, 2023.

## 2. RESULTS AND FINDINGS

Co-authorship link with maximum 6 total link strength is with Sanghmitra Pati and Krushna Chandra Sahoo out of 963 authors, only 20 met with the threshold. The red node, blue nodes, green nodes and purple nodes clusters can be seen having maximum network linkages.

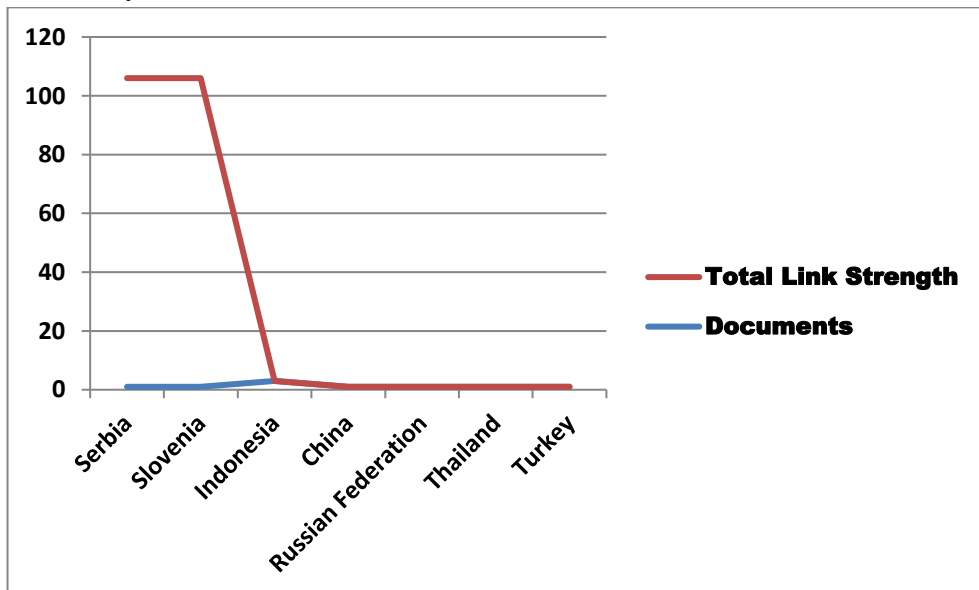


**FIGURE 2 CO-AUTHORSHIP ANALYSIS**



**FIGURE 3 CO-OCCURRENCE ANALYSIS**

Co-occurrence analysis showed with 286 links, 4 clusters and 44 items. Red cluster is having the maximum link strength followed by green clusters, blue and yellow clusters.



**FIGURE 4: COUNTRIES WITH DOCUMENTS AND TOTAL LINK STRENGTHS**

Serbia and Slovenia have the maximum number of researches with 100+ on Digital Financial Literacy & Digital Financial Services.

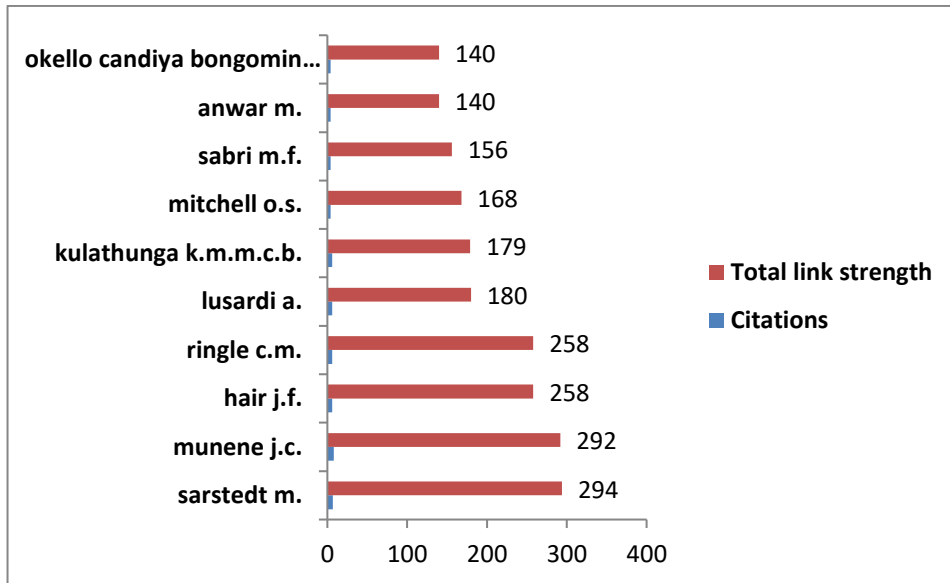


FIGURE 5 CO-CITATION ANALYSIS

Co-citation analysis showed 2580 citations in which 52 met threshold having 469 links and 2694 total link strength with 5 clusters. K.A. Awan has the maximum number of citations in the filed of DFL and Indian education.

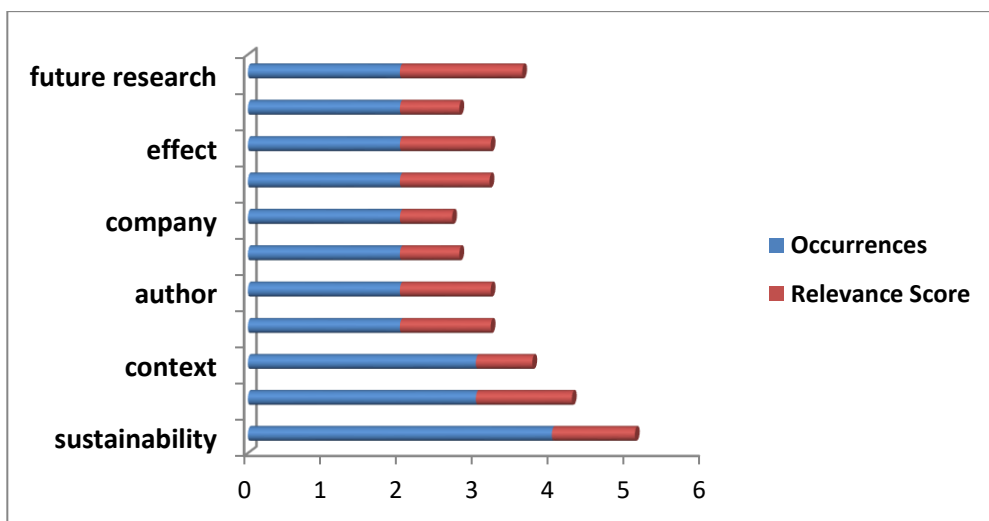


FIGURE 6 KEYWORD ANALYSIS

Keyword analysis performed and outcome showed around 44 items with 4 clusters and 286 links. The term ‘Sustainability’ and ‘Regression Analysis’ in the arena of Digital Financial literacy and Indian education.

### **3. LIMITATIONS & IMPLICATIONS**

- There is a lack of time due to which a thorough empirical analysis with the usage of statistical analytical tools and techniques.
- More exploration can be done in further studies related to find various demographic, social, cultural and behavioral aspects based on digital financial literacy and financial inclusion efficiently.
- This paper will provide policymakers’ detailed information regarding the current trends through keywords and co-occurrence analysis, influential authors through authorship analysis, most cited papers through citation analysis, most published journals and funding sponsors.
- It will indeed help the researchers, scholars and academia fraternities to find more research gaps with the help of the network analysis with the help of bibliometric analysis.

### **4. CONCLUSION AND FUTURE RESEARCH**

- Co-authorship link with maximum 6 total link strength is with Sanghmitra Pati and Krushna Chandra Sahoo out of 963 authors, only 20 met with the threshold.
- Co-citation analysis showed 2580 citations in which 52 met threshold having 469 links and 2694 total link strength with 5 clusters. K.A. Awan has the maximum number of citations in the field of DFL and Indian education.
- Keyword analysis performed and outcome showed around 44 items with 4 clusters and 286 links. The term ‘Sustainability’ and ‘Regression Analysis’ in the arena of Digital Financial literacy and Indian education.
- Serbia and Slovenia have the maximum number of researches on DFL & DFS.
- This analysis has provided an overall scenario related to the expansion and exploration in the field of digital financial literacy, financial



inclusion and Indian education which has been done by several renowned authors and organizations.

- The findings will pave a rich path by providing most influential authors, cited journals, keyword occurrences and trend analysis.

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