



Systemic literature review and bibliometric analysis identifying emerging patterns in Financial Literacy and Behavioural Bias using Scopus Database 2010-2026

Ayush Kumar Sharma^a, Neeti Mathur^b, Manish Dadhich^c and Kamal Kant Hiran^d

^aNIIT University, Neemrana Rajasthan

^{b,c,d}Sir Padampat Singhania University, Udaipur

Abstract

Purpose: The study aims to explore the research trajectory in the field of financial literacy (Fin Lit), Tax literacy (Tax Lit) and behavioural biases through the lens of bibliometric analysis based on Scopus indexed publication between 2010-2026. The study seeks to unearth the publication trends, impactful authors, most followed journals and dominant thematic bundle shaping the literature around said knowledge. In addition, the study aims to explore the emerging research theme and collaboration network among scholars, institutes and countries.

Design/Methodology/Approach: Bibliometric analysis has been used to explore the literature pattern. The study comprises 2430 articles published and extracted from Scopus dataset from January 2010 to 8th March 2026. The extracted data then has been processed via analytical software packages such as VOSviewer, biblioshiny for conducting performance analysis and science mapping concentrating on publication, citation patterns, authors, institutions involved, and keyword co-occurrence networks.

Novelty: In contrast to prior studies, this review presents more rigorous and systematic visuals with statistical values for scholarly progress in the field of Fin Lit, Tax Lit and behavioural

biases. Further depth to collaboration analysis with structure and thematic focus can be noticed.

Finding: The findings point out a consistent fall in the interest of scholars in behavioural finance during last two decades and evolution of new areas or dimensions of research among global researchers. Keyword analysis indicates the shift of paradigm Financial Literacy, digital Financial Literacy, bias, financial decision and portfolio choice. The review indicates increased multi-dimensionality of Fin Lit and identified areas of under-emphasized regions and emerging economics. The study will help to guide future areas of research.

Limitation: The study is limited to bibliometric data collected from Scopus database which may have ignored significant papers indexed in other academic repositories. The results are also sensitive to Boolean used while sorting paper on covered database and citation-based indicators do not necessarily reflect research quality, as it may be influenced by self-citation, disciplinary citation norms and time biases. Future research may include results from multiple-data base for wider scope and coverage.

Keywords: *Financial Literacy, Tax Literacy, Scopus Dataset, Bibliometric analysis, SDG 4, SDG 8 and Investment decision.*

asxavierian74@gmail

Introduction

The world has gone through many changes and so does the human civilization. Human civilization has seen many changes over last 2 decades with rapid digitalization and use of digital financial instruments. Fin Lit is also affected through this digitalization process and changing demographic participants. Financial Literacy (Fin Lit) can be defined as skills that an educated individual demonstrates, and which help them to create or grow wealth and nation to progress. Economic well-being depends upon Fin Lit, which includes skills, knowledge, attitude, awareness, behaviour and metacognitive abilities required not only to understand financial data but also to make wise decisions (Lusardi, 2014). Fin Lit changed as a personal talent to a vital component of society's resilience and individual empowerment in a period of increasing financial complexity,

fueled by rocky markets, digital banking innovations and new retirement systems. As defined by OECD, Fin Lit encompasses the knowledge, skills and attitude necessary to make rational decisions that enhance financial well-being (FWB).

Fin Lit, as defined by (Mitchell, 2011) is "Knowledge of basic financial concepts and the ability to perform simple calculations." "According to (Huston, 2010) Financial Literacy (Fin Lit) is personal finance knowledge and application. Fraternity links concepts like financial awareness, financial skills, financial well-being, financial behaviour (FB) and financial attitude (FA) to the concept of Fin Lit (Ansari et al., 2022a). According to (Atkinson, 2012) basic financial concepts are futile unless reflection can be seen through behavioural change, therefore Fin Lit and financial capacity are different. Fin Lit is a broader

concept that includes outcome analysis of skills and variable impacting Fin Lit and role of education.

Since early 21st century, there have been enormous academic decisions on FL due to ground-breaking works which proved its empirical support and policy relevance (Wagner, 2019). The growth is reflected in different areas of economics, education, psychology, finance, management and public policy, with the studies increasingly examining its determination (e.g. demographic and interventions), behavioural linkage and outcome in diverse contexts such as investor decision making, workplace productivity, risk diversification and portfolio management (Pearson & Korankye, 2023). However, the vast scope and complex nature of this study exhibit problems for synthesis, highlights and mapping of methods to identify patterns, significant work and knowledge gap (Klapper & Lusardi, 2020).

The present study aims to analysis the core concepts and their current trend in Scopus literature through literature review using structured review systems. Bibliometric analysis is a quantitative approach for reviewing publication trend, citation network, keyword analysis and co-authorship analysis, which provides a comprehensive prospect from origin context to map conceptual framework from investor literacy to wider wellbeing paradigms. The study uses bibliometric techniques to explain the intellectual structure of FL research, identify key authors, journals and clusters while highlighting underexplored areas such as Tax Literacy (TL), cross cultural variations, Generational change, and application of FinTech.

Many scholars (Ansari et al., 2022a, 2022b; Bhatia, 2024; Damayanti et al., 2023a; Hidayat, 2021; Huston, 2010; Iwatsubo et al., 2025) explored the universe of Fin Lit and various connected spheres using bibliometric analysis techniques in early 21st century. Each of these papers have made a significant contribution and identified various uncovered areas and themes using different databases available for scholars. (Agarwal & Sharma, 2025a). Apart from specific databases, the authors have used different visualization software's like VOSviewer, Biblioshiny with R, Citespace and gephi for visualizing their findings with the society and research fraternity (Ansari et al., 2022c, 2022b, 2022a; Bhatia, 2024; Damayanti et al., 2023b, 2023c, 2023a; Hidayat, 2021; Lim & Kumar, 2024a; Wahyuni et al., n.d.). Using bibliometric analysis, (Ahmed, 2022) reviewed AI and ML literature in financial sector and via thematic structure of these keywords (Goodell, 2021) presented an bird-view of AI and ML in finance using co-citation and bibliometric coupling analysis. Most scholars or researchers (Ansari et al., 2022a; Antunes & Veríssimo, 2024a; Damayanti et al., 2023a; Snyder, 2019) focused on single keyword but failed to examine the interplay between Fin Lit, Tax Literacy, Behavioural biases and investment decisions collectively as a cluster.

The following research questions (RQ) were developed in the above context.

RQ 1: What is the prevailing trend in publication of Fin Lit and Tax Lit considering factors such as time, journals, emerging fields, authors and their affiliated countries?

RQ 2: How the intellectual framework has transformed throughout history and the emerging trend that a rising in this domain?

RQ 3: What are the landmark studies or research topics in the field?

RQ 4: What are the research gaps and where are the scopes for future research?

This paper is designed as follows: Section 2 which explains the Material and method used, followed by Section 3 covering analysis of results. Then comes the concluding sections, where Section 4 includes limitations and Section 5 suggests future research avenues in reference to theory, methods, contexts and limitations. The study is concluded in Section 6 whereas Section 7 covers references.

1. Material and Methods

To analyse the Scopus literature on Fin Lit, Tax Lit, Behavioural biases and investment decisions, and to gather insights, the current study used the bibliometric analysis approach via. (i) Performance analysis technique and (ii) Scientific mapping technique under the framework of bibliometric analysis. Under performance analysis, annual publication trends, year wise citation matrix, leading published journal and most cited articles are to be identified. Whereas, for scientific mapping, co-citation analysis, keyword analysis, co-occurrence analysis and bibliometric coupling to be identified (Goyal & Kumar, 2021; Jain & Goyal, n.d.-a; Putri Utami, 2022). Bibliometric analysis is the most widely used technique for conducting systemic literature review with help of PRISMA 2.0 framework for tracing a study's field knowledge or anatomy (Wu, 2017) (Agarwal & Sharma, 2025a). Thus, the technique provides a powerful tool to analyse a specific research area, analyse literature, identify gaps and other valuable insights on a specific field of knowledge.

In this paper, data was retrieved through the most reliable source "Scopus". To enable ease of interpretation, the data was downloaded in March 2026. Scopus database is a trustworthy database (Agarwal & Sharma, 2025b) that offers impartial and comprehensive details about citations and abstract. The database is well suited for bibliometric analysis due to its comprehensive coverage of high-quality journals (Goyal & Kumar, 2021). The search was executed on 8th March 2026, keeping time span between 2010-2026. The data retrieval was done through a well-defined and specific query search in title-abstract-keyword string. The search string used was as follows:

(TITLE-ABS-KEY ("FinTech" OR "Financial literacy" OR "Fin Lit" OR "Financial awareness" OR Financial well-being" OR "Financial behaviour" OR "Financial inclusion" OR "Financial attitude") OR (TITLE-ABS-KEY ("Tax literacy" OR "Tax awareness" OR "Tax Skills" OR Tax Knowledge" OR "Tax behaviour") OR (TITLE-ABS-KEY ("behaviour* Finance" OR "Behavioural bias*" OR "Investor Bias*" OR "Cognitive bias*") AND (TITLE-ABS-KEY ("Investment decision*" OR "Investment behaviour" OR "portfolio decision" OR "Gen Z" OR "Young Investor*" OR "Young adult" OR "Young graduate*" OR "College student*"))

Along with the above given keyword string, certain filters and restrictions were used. The articles published between 1st day of 2010 to 8th of March 2026 were only included. The subject area was restricted to “Economics, Econometrics and Finance”, “Psychology”, “Business Management” and “Social science”. Document type was then limited to “article, book, book chapter, review papers, and conference paper only” and language to “English only”. In the search string, inclusion of “*” marks was done to closing spelling and plural form of words can also be covered in the analysis. The screening and inclusion process has been shown using PRISMA 2.0 flow chart insuring transparency and reproducibility of the selection procedure (Agarwal & Sharma, 2025a).

Fig 1. Data Retrieval Process

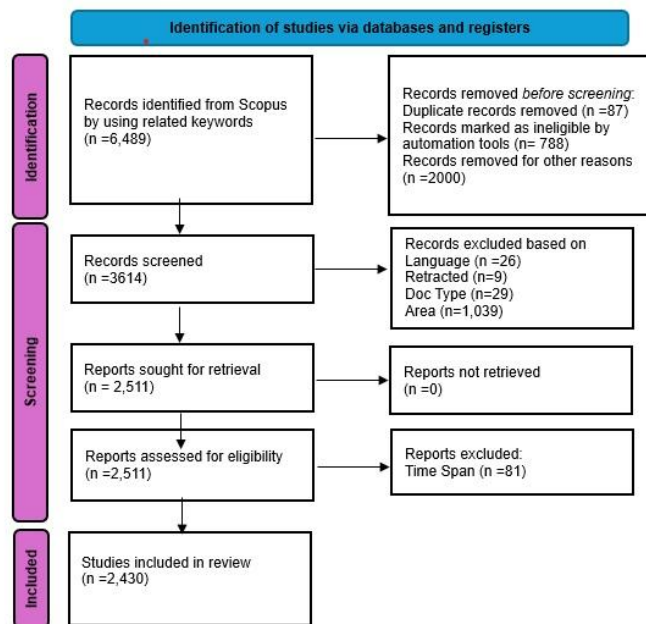


Fig.1 shows the process of data retrieval. This initial query resulted in 6,489 records. Subsequently, 87 duplicates, 2,788 due to eligibility as per automatic tool were removed. Then, the authors systemically used filters, and 29 records were excluded due to document type, 1,039 due to subject restrictions, and 26 records were excluded based on language restrictions. During screening phase, 2430 records were considered for eligibility. No exclusion took place at final review stage, as consequently, all 2,430 records were included in the final dataset for analysis.

2. Bibliometric Analysis using VOSviewer and R

3.1 Publication or Performance Analysis

a. Annual publication trend

Fig 2 explains the year-wise publication trend from 2010 to March 2026 reflects a growing, though uneven, scholarly interest in the relationship between Fin Lit, Tax Literacy, behavioural finance and investment decisions (Roman et al., 1999). The data exhibits an overall increasing pattern till 2025, but with noticeable variability across years (Bikas et al., 2013). An exponential regression model was fitted to capture the growth, yielding the equation $y = 6E-92e^{0.1064x}$. The model suggests that publications have followed an upward movement during selected time frame. However, the coefficient of determination ($R^2 = 0.4491$) indicates that only around 45% of the variation in publication volume can be explained by the passage of time alone, implying that external or field-specific factors may have

significantly influenced year-to-year fluctuation (Shefrin, 2009)

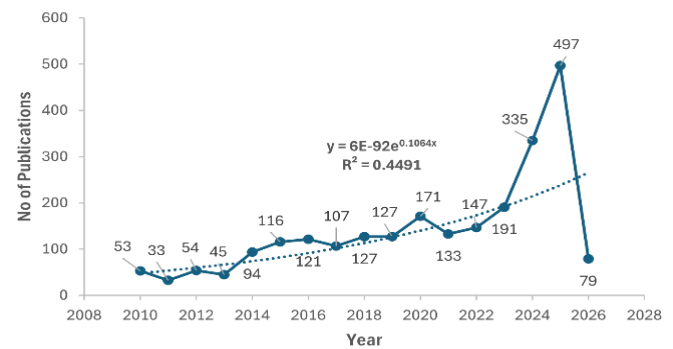


Fig 2: Annual publication trend between 2010-2026

Notably, the data reveals a steady but moderate increase in publication volume between 2010 and 2023 and sudden surges in publication volume were observed in 2024 and 2025. In 2026, we already noticed 79 published papers and identified 252 pre-print papers in the Scopus archive. This spike may be due to linkage of Fin Lit directly with SDG 4 and indirectly with SDG 8 (Elsayed et al., 2025a, 2025b; Pradhan et al., 2023). In contrast, years 2012, 2014, 2015 and 2021, showed relatively modest growth, suggesting loss of academic focus or deviation in research priorities. However, the sudden drop in 2026 should be interpreted carefully, as the data for this year were collected only up to march and do not represent the full publication cycle. This partial data point highlights the importance of temporal context in interpreting publication trends.

b. Yearly Citation Pattern

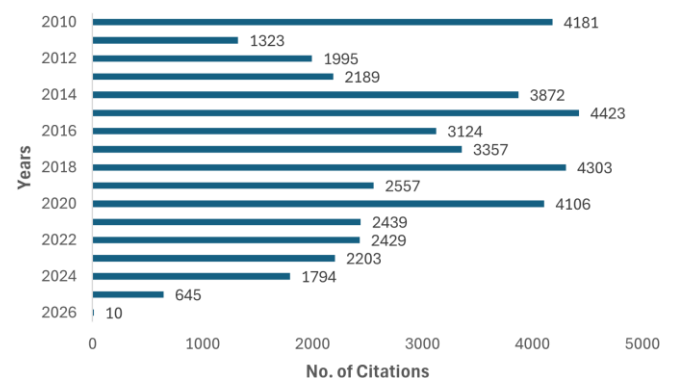


Fig 3: Yearly citation pattern between 2010-2026

The y-o-y citation pattern, as shown in Fig. 3, provides a refined view of the scholarly influence and visibility of research from 2010 to early 2026. The analysis reveals a comparatively stable between 2014 and 2024, ranging citation between 2,189 and 1,794 citations annually. A sharp peak occurred in 2015, where the number reached to 4,423 citations, which may be a sign of maturity of articles citation in the years, especially those in between 2014 to 2020. However, 2021 onwards, the trajectory displays a downward movement in annual citations, with figures falling to 2,439 in 2022, 2,203 in 2023, 1,794 in 2024, and a dramatic drop to just 645 in 2025. This shows that the area concerned was highly explored during 2014 to 2024.

c. Most Influenced Journals

Table 1 Shows the journal-wise metrics reflecting top 10 journal ranked based on total number of articles published and citations in the selected field. The average citations per article were calculated using the formula:

$$\text{Average Citation per article (AC)} = \frac{\text{Total Citation}}{\text{Total Publications}}$$

Among the listed journals, “Journal of Behaviour Therapy and Experimental Psychiatry” records the maximum (57) articles and total citations of 1081, with average citations per article being 18.96 and CiteScore (2024) of 3.5, published by “Elsevier”. In contrast, “Journal of Family and Economic issues” contributed only 33 articles but has the highest AC of 41.55 and a CS of 6.5 with a total 1371 citations during 2010-2016, this journal is published by “Spring Nature”.

“International journal of Bank Marketing” published by Elsevier has the highest CS of 12.5 with only 25 articles and 627 citations having an AC equal to 25.08 only. From Table 1 it can be concluded that Elsevier has the maximum number of journals (3) followed by Spring Nature (2) and Emerald (2) where others are from different journal families.

Table 1: Top 10 Journal

Rank	Journal	Documents	TC	AC	Publisher	CiteScore (2024)
1	Journal Of Behavior Therapy and Experimental Psychiatry	57	1081	18.96	Elsevier	3.5
2	Behaviour Research and Therapy	51	1398	27.41	Elsevier	7.6
3	Cognition And Emotion	38	642	16.89	Taylor & Francis	5.2
4	Journal Of Family and Economic Issues	33	1371	41.55	Springer Nature	6.5
5	Qualitative Research in Financial Markets	28	1151	41.11	Emerald Publishing	5.7
6	Investment Management and Financial Innovations	27	175	6.48	LLC CPC Business Perspective	2.8
7	Journal Of Financial Counseling and Planning	27	452	16.74	Springer Publishing Co	3.9
8	Cognitive Therapy and Research	25	591	23.64	Springer Nature	5.1
9	International Journal of Bank Marketing	25	1003	40.12	Emerald Publishing	12.5
10	Journal Of Affective Disorders	25	627	25.08	Elsevier	9.5

Source: Authors' analysis

d. Most cited Articles

Bibliometric analysis also helps to identify influential publications that have significantly shaped the development of a research field. Table 2 presents the top 10 cited articles published between 2010-2026 related to Fin Lit, Tax Literacy, behavioural finance and FinTech ecosystem. The citation analysis reveals a wide range, from 267 to 1093 citations. The most cited

article being “FinTech: Ecosystem, business model, investment decisions and challenges” by Lee I. et al., 2018 published in “Business Horizons” with 1093 citations. This indicates the growing academic and industry interest in FinTech eco-system and its implication for financial services. The second most cited study is “Financial Literacy among the young” by Annamaria Lusardi et al. (2010) published in “Journal of Consumer Affairs” with 909 citations.

Another highly cited paper is “Financial Socialization of First-year College Students: The Roles of Parents, Work, and Education” by Soyeon Shim (2010) published in “Journal of Financial Economics” with 512 citations. The remaining articles are clustered between 442 to 267 citations. A significant concentration appears in 2010, accounting for majority of the total citations.

Table 2: Top 10 cited Research papers

Rank	Title	Journal	Year	TC	Reference
1	Fintech: Ecosystem, business models, investment decisions, and challenges	Business Horizons	2018	1093	Lee I. et al., 2018
2	Financial literacy among the young	Journal of Consumer Affairs	2010	909	Lusardi et al., 2010
3	Financial Socialization of First-year College Students: The Roles of Parents, Work, and Education	Journal of Youth and Adolescence	2010	521	Shim S. et al., 2010
4	Sentiment and stock prices: The case of aviation disasters	Journal of Financial Economics	2010	442	Kaplans et al., 2010
5	Understanding mechanisms underlying peer effects: Evidence from a field experiment on financial decisions	Econometrica	2014	334	Burszty et al., 2014
6	Financial literacy of young adults: The importance of parental socialization	Family Relations	2010	331	Jorgensen et al., 2010
7	Energy literacy, awareness, and conservation behavior of residential households	Energy Economics	2013	281	Brounen et al., 2013
8	Nurturing a FinTech ecosystem: The case of a youth micro-loan startup in China	International Journal of Information Management	2017	276	Leong C et al., 2017
9	Stock prices and geographic proximity of information: Evidence from the Ebola outbreak	International Review of Financial Analysis	2018	276	Ichev R et al., 2018
10	Financial Behaviors and Financial Well-Being of College Students: Evidence from a National Survey	Journal of Family and Economic Issues	2011	267	Gutter et al., 2011

Source: Author's Analysis

e. Geographical document distribution

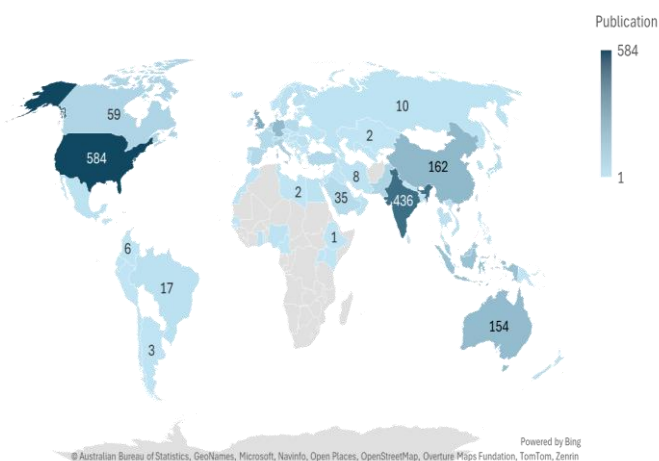
Fig 4 shows the visualization of country-specific publication created through filtered dataset, covering publication between 2010-2026. United States records the highest records with 584 published documents, closing followed by India with 436 published documents on the theme of Fin Lit or Tax Literacy or Behavioural finance impacting investment decisions among young investors. United Kingdom and China contributed around 202 and 162 documents respectively during 2010-2026 in the Scopus level journal, books or book-chapter and conference proceedings.

Country	Publication
United States	584
India	436
United Kingdom	202
China	162
Germany	158
Australia	154
Indonesia	132
Malaysia	98
Netherlands	85
Italy	72

Other countries among the top 10 contributors are Germany (158 articles), Australia (154 articles),

Indonesia (132 articles), Malaysia (98 articles), Netherland (85 articles) and Italy (72 articles).

Fig 4: Country wise publication



Source: VOS viewer

f. Leading Authors

Table 3 represents the top contributing authors in the dataset. The evaluation pinpointed the foremost 10 authors in the discipline based on aggregated number of publications and citations. Joyce Serido ranked first with total 22 articles and 1724 articles citation during 2010-2026, resulting in an AC of 78.36. Soyeon Shim ranks 2nd with 19 articles, 1708 citations and 89.89 AC published. Jin Jian Xiao stands at 3rd position but has the highest AC of 117 with only 11 articles published having citation count of 1287 citations during the 2010-2026 with Scopus. Jinesh Jain stands in fourth position and has published 9 articles with 493 citations and the AC being 54.78. Lu Fan, Satish Kumar, Atul Shiva and others have the same number of articles published i.e., 6 articles each during the period but Satish Kumar has highest citation among position 6th to 10th.

Table 3: Top Contributing Authors

Position	Author	Documents	TC	AC
1	Joyce Serido	22	1724	78.36
2	Soyeon Shim	19	1708	89.89
3	Jing Jian Xiao	11	1287	117.00
4	Jinesh Jain	9	493	54.78
5	Marcella L. Woud	7	146	20.86
6	Lu Fan	6	172	28.67
7	Satish Kumar	6	461	76.83
8	Atul Shiva	6	174	29.00
9	Reinout W. Wiers	6	153	25.50
10	Jenny Yiend	6	242	40.33

Source: Author's Analysis

g. Productive Analysis using Lotka's Law

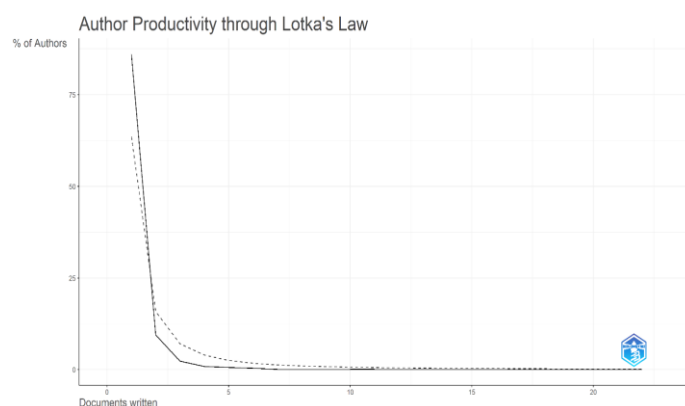


Fig 5. Observed and Theoretical Author Productivity Distribution Based on Lotka's Law

The Graphic shows the author's productivity distribution via Lotka's Law (Gupta, 2025). The number of articles is on X-axis and proportion of authors on Y axis. The Theoretical distribution under the law is predicted via dotted line, while the solid line shows the observed distribution. This shows that most authors contributed to only one article and very few contributed to more than 15 articles in the entire dataset.

h. Top Contribution organisation

Institutional productivity is a very important indicator in bibliometric analysis as it helps to identify the top contributing universities or institutes around selected knowledge. Table 4 presents the top 10 contributing Universities or Institutes based on number of publications, citations and average citation per article. The results reveal that King's college London and The University of Western Australia are the most productive institutions each contributing 36 articles to the dataset. However, their citation impact differs considerably. While King's College has a total 1015 citations with average citation per article been 29.19, The University of Western Australia has only 581 citations results in average citation of 16.14. This indicates that although both institutions have similar publications output, King's College has greater scholarly influence.

The University of Wisconsin-Madison ranks third with 28 publications, but it has received 1,116 citations producing an average citations rate of 39.86 per article. This means that the institute has higher reach with research academia. Others in the race

where UNSW Sydney with 26 articles, Radboud University with 25 articles, Christ University with 23 publication, University of Amsterdam with 23 articles, but the University of Arizona turned out to be most influential institute with 79.11 average citation per articles with only 19 articles.

Table 4: Top 10 contribution organisation

Position	Organisation	Documents	TC	AC
1	King's College London	36	1015	28.19
2	The University of Western Australia	36	581	16.14
3	University of Wisconsin Madison	28	1116	39.86
4	UNSW Sydney	26	550	21.15
5	Radboud Universiteit	25	516	20.64
6	Christ University	23	132	5.74
7	Universiteit van Amsterdam	23	519	22.57
8	University of Minnesota Twin Cities	23	735	31.96
9	Florida State University	20	559	27.95
10	The University of Arizona	19	1503	79.11

Note: Table created by Author

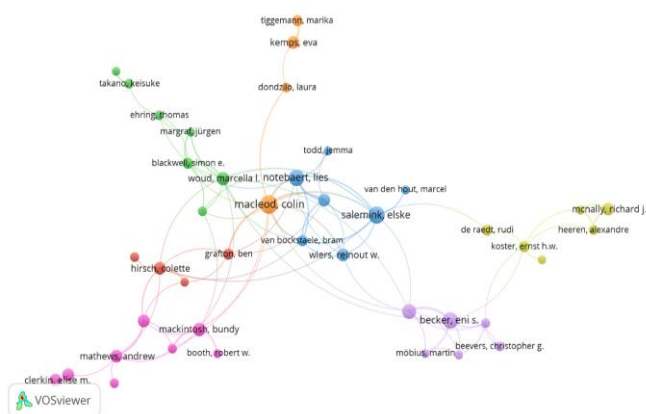
3.2 Science Mapping

a. Co-Authorship Network Analysis

The Analysis of Co-authorship was performed to gain insight into the collaborative network of authors who contributed to literature during selected period.

Fig 6. Co-authorship Network

Source: Authors work via VOS viewer



The criteria applied for the analysis were minimum 3 documents per author and minimum 5 citations per author. From the total of 6,794 authors list, 60 meet the eligibility criteria threshold. Fig 6 illustrates the co-authorship network, visualized using VOSviewer software, shows seven different clusters of authors collaboration. Each node symbolizes various authors, and the size of node reflects number of publications. The thickness and closeness of the connecting lines represent the strength and frequency of co-authorship relationship.

Notably, Colin Macleod and Elske Salemink appear as the most pivotal and closely linked author within the network, reflecting substantial degree of collaboration with various co-authors. In the analysis, seven clusters can be identified with different colors with different item size. Cluster formed with different authors strength and color can be explained in table below:

Table 5: Cluster with authors strength and color

Cluster No	1	2	3	4	5	6	7
Color	Pink	Green	Blue	Yellow	Voilet	Red	Or-ange
Authors Strength	8	7	7	6	6	4	4

Source: Authors Analysis

b. Co-Citation Network Analysis

The co-citation analysis was performed to determine the author who is most frequently cited in relation to intersection of the domain, based on documents. Of a total of 2430 documents, 1932 met the threshold of having received at least 1 citation. The visualized network, developed using VOSviewer, maps the intellectual structure of the field based on how often documents are cited together, thus indicating shared conceptual or theoretical foundations. The size of each node represents the total citation volume, while the link strength and proximity between nodes reflect the frequency of co-citation.

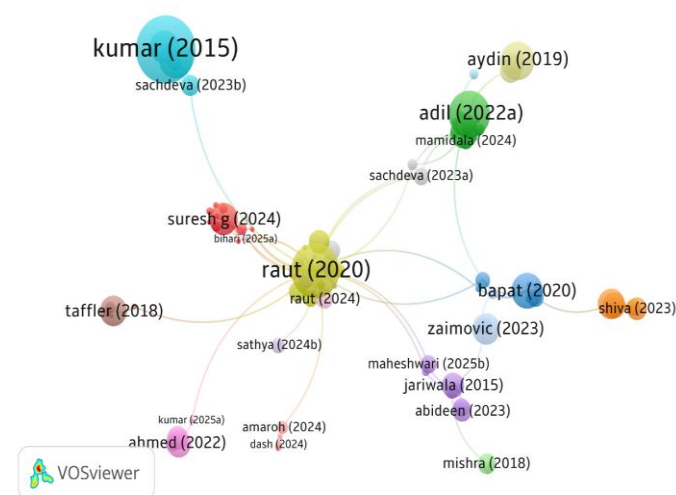


Fig 7. Co-Citation Analysis based on Authors

Source: Authors analysis using VOSviewer

Fig 7 shows the network reveals Twenty-Eight clusters with only nine major clusters having strength greater than 5 authors. Cluster 1 (Red color) has 10 authors strength, led by Suresh G with his publication in 2024 in FIIB business review, followed by Chisti, and Gopal from the year 2025. Cluster 2 (Green Color) also has the same authors strength of 10, led by Adil and Ahmad from the year 2025. Cluster 4 (Yellow) has total of 7 authors, and the cluster is led by Raut. The cluster authors focused on topics like evolution of FinTech and Financial Inclusion and formed the base of next transition to next cluster.

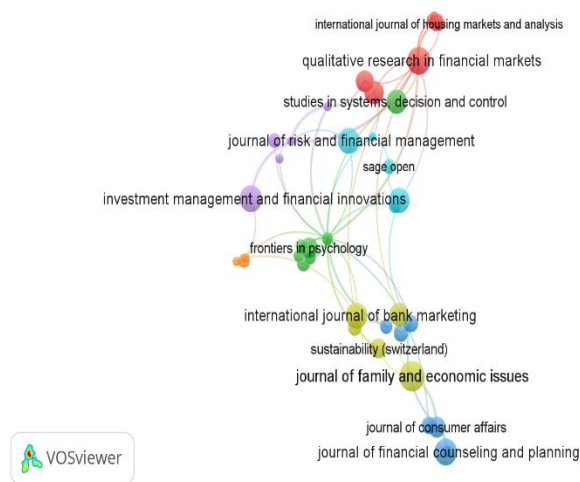


Fig 8. Co-Citation Analysis Based on Source

Source: Authors analysis using VOSviewer

The co-citation network of source reveals the intellectual structure of and knowledge clusters within the area. Using VOSviewer, journals that are frequently cited together are grouped into clusters, indicating shared thematic orientation and scholarly influence. The visualization in Fig 8 shows that several journals occupy central positions having high citation frequency and strong influence. The core influential journals can be “Qualitative Research in Financial Market” and “Journal of Risk and Financial Management”. These are central nodes acting as bridge across clusters. Thematic cluster and be identified as “Red & Purple” cluster with theme as “Financial market & Risk”, “Blue Cluster” with “Financial Innovation and Open access journals” and “Green Cluster” with “Behavioural and Psychological finance”. The presence of “Sustainability” indicates increase interest in the field of ESG and Sustainable Finance. The analysis demonstrates that the field is highly inter-disciplinary with strong integration.

c. Co-Occurrence Network Analysis (Keyword)

The keyword co-occurrence network analysis provides insights into the conceptual structure of research field by identifying frequently co-used terms and grouping them into thematic clusters.

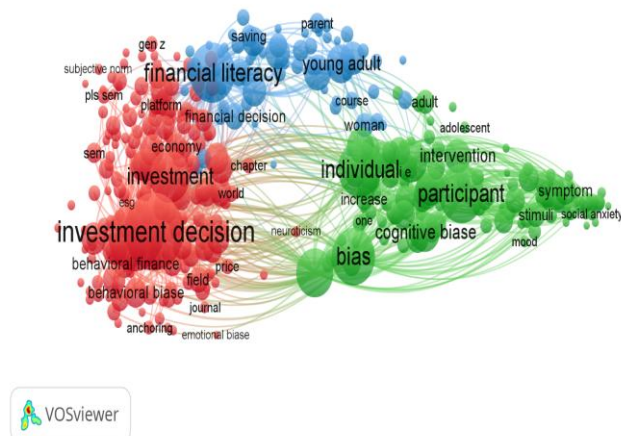


Fig 9. Co-Occurrence Network of Keywords

The Visualization generated using VOSviewer reveals three dominant clusters, namely, ‘Investment decision and Behavioural Finance’ shown in red color and 193-word strength, followed by “Cognitive bias and experimental studies” shown in green color with 118-word strength. The cluster reflects a more psychological and experimental approach, linking finance with cognitive and behavioral science. Lastly, “Financial Literacy and demographic factors” shown in blue color with 69-word strength.

d. Bibliometric Coupling of Authors

Bibliometric coupling examines how documents are related based on shared references, helping to identify current research fronts and thematic developments within a field. Fig 11 (generated using biblioshiny) shows positions clusters along two key dimensions: centrality (X axis) and impact (Y axis). The diagram is divided into four quadrants. The first quadrant (upper right) has high centrality and high impact covering themes such as behavioural finance (75.6%), investment decision (71%). This is a motor cluster of the field, and represents well developed, highly influential and strongly connected. The fourth quadrant (lower-left) is low in centrality and impact with focus on Fin Lit (66%) and behavioural finance (25%). This is the emerging or peripheral cluster. While Fin Lit is important, it appears less integrated and less impactful compared to behavioural finance.

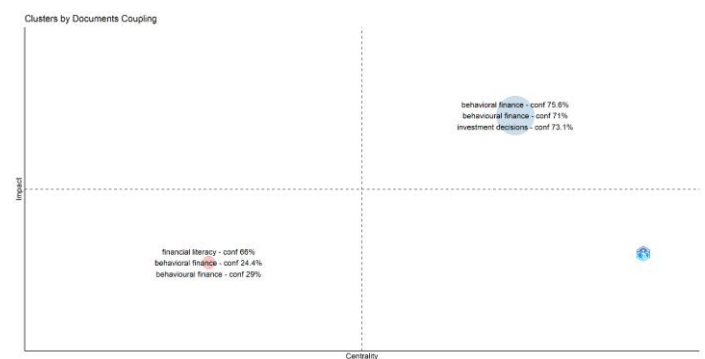


Fig 10. Bibliometric Coupling by document using R

The field is highly concentrated around behavioural finance and there is a shift from traditional finance theories towards psychological and behavioural explanations. The map shows limited cluster diversity, suggesting possible dataset bias or narrow research scope.

3. Limitation

This research, based on a sound bibliometric methodology, is informed by some limitations that should guide its interpretation and extension (Jain & Goyal, n.d.-b). The sole reliance on the Scopus database, although methodologically sound and widely used in bibliometric research, imposes some limitation on the diversity of the dataset (Idris et al., 2023). Scopus’s indexing policies necessarily favor established and English-language journals and thus exclude valuable contributions from regional journals, grey literature, and non-English language publications (Agarwal & Sharma, 2025a). To overcome this limitation, future research would be well-served by a multi-source data approach, combining platforms such as Web of Science, Google Scholar, and Dimensions (Lim & Kumar, 2024b; Pranajaya et al., 2024). Such triangulation would increase cov-

erage and the representativeness of the literature across disciplinary and geographic boundaries (Agarwal & Sharma, 2025b).

The domicile distribution of research output reveals a significant structural imbalance. Nations such as China, America, and the UK materially outweigh the scholarly contribution, whereas Africa, Latin America, and much of Southeast Asia are noticeably underrepresented (Antunes & Veríssimo, 2024b, 2024a; Croitoru et al., 2025). This imbalance restricts the global applicability of existing research and underscores the need for context-specific studies in underexplored regions (Agarwal & Sharma, 2025b).

In research collaboration, bibliographic coupling along with co-authorship shows no academic connection in research landscape with a lack of cross-institutional and inter-disciplinary communication. In brief, while there has been a uniform trend of growing publication volume, a sharp decline in post-2021 citation rates are troubling for the course of the discipline. Tax Literacy is one of area that remained explored by most of research specially in south Asian countries (Kumar Sharma, 2018, 2021). This indicates thematic saturation or methodological insufficiency in recent studies. To revive the scholarship, new studies are expected to aim to focus on conceptual synthesis and formulation of innovative theoretical framework or apply longitudinal research approach.

4. Future Scope

The present study provides a comprehensive overview of the literature on Fin Lit and related fields of studies, however, several avenues remain open for future research. First, in future scholars can expand the dataset covering multiple databases such as Scopus, Web of Science and Google Scholar to improve robustness (Goyal & Kumar, 2021). Secondly, longitudinal analysis may be examined to cover evolution of research themes over time.

Further, advanced science mapping techniques using fewer visualization software can be used, which has been left untouched in present studies (Ansari et al., 2022c; Bhatia, 2024). Another promising direction is the integration of machine learning and AI for automated content analysis for identifying themes inculcated in the full paper text file. Finally, interdisciplinary research combining finance, psychology and technology is expected to further enrich the domain.

5. Conclusion

The study conducted a bibliometric analysis to examine the intellectual structure of research trend in the selected domain of knowledge, which has been focused on by many governmental institutes over last one decade. The finding reveals that the field has experienced notable growth, particularly during last one decade. During this period, researchers' interest has been increasing in financial inclusion, behavioural finance and technological innovation in financial services. The analysis highly cited documents highlight the foundational role of Fin Lit and socialization studies. Institutional analysis indicates that research output is dominated by some prominent institutes of developed countries, but developing countries also put their mark in the race.

The application of "Lotka's Law" confirms that authors productivity patterns follow a typical bibliometric distribution

with a large proportion of authors contribution single paper only, whereas a small group of authors are driving the entire field of knowledge. Overall, the study provides valuable additions in development, structure and future direction of work.

6. References

- Ahmed, S. M. (2022). Artificial intelligence and machine learning in. *Research in International Business and Finance*, 101646.
- Atkinson, A. a.-A. (2012). Measuring Financial Literacy: Results of the OECD/International Network on Financial. *Pilot Study (OECD Working Papers on Finance, Insurance and Private Pensions)*. Paris: OECD Publishing.
- Goodell, J. W. (2021). Artificial intelligence and machine learning in finance. *Journal of Behavioral and Experimental Finance*, 100577.
- Gupta, S. J. (2025). Exploring the Applicability of Lotka's Law: Bibliometric Insights into the Preservation and Conservation of Libraries. *Library Waves*, 78–92.
- Huston, S. J. (2010). Measuring financial literacy. *Journal of Consumer Affairs*, 296–316.
- Lusardi, A. a. (2014). The Economic Importance of Financial Literacy: Theory and Evidence. *Journal of Economic Literature*, 5-44. doi:10.1257/jel.52.1.5
- Mitchell, O. S. (2011). Financial literacy around the world: An overview. *Journal of Pension Economics and*, 497-508.
- S, D., & A, R. (2023). A bibliometric analysis VOSviewer of publication on financial literacy and investment decision. *Multidisciplinary Reviews*, 99-107. doi:https://dx.doi.org/10.31893/multirev.2023043
- Wu, Y.-C. J. (2017). A decade of entrepreneurship education in the Asia Pacific for future directions in theory. *Management Decision*, 1333-50.
- Agarwal, I., & Sharma, A. K. (2025a). Mapping Research on CSR and Firms' Financial Performance: A Bibliometric Analysis from Scopus Data (2014–2025). *International Journal of Academic Research and Development*, 11(2). https://doi.org/10.70381/23951737.v11.n2.i22.2025.8
- Agarwal, I., & Sharma, A. K. (2025b). Mapping Research on CSR and Firms' Financial Performance: A Bibliometric Analysis from Scopus Data (2014–2025). *International Journal of Academic Research and Development*, 11(2). https://doi.org/10.70381/23951737.v11.n2.i22.2025.8
- Ansari, Y., Albarrak, M. S., Sherfudeen, N., & Aman, A. (2022a). A Study of Financial Literacy of Investors—A Bibliometric Analysis. In *International Journal of Financial Studies* (Vol. 10, Number 2). MDPI. https://doi.org/10.3390/ijfs10020036
- Ansari, Y., Albarrak, M. S., Sherfudeen, N., & Aman, A. (2022b). A Study of Financial Literacy of Investors—A Bibliometric Analysis. In *International Journal of Financial Studies* (Vol. 10, Number 2). MDPI. https://doi.org/10.3390/ijfs10020036

- Ansari, Y., Albarrak, M. S., Sherfudeen, N., & Aman, A. (2022c). A Study of Financial Literacy of Investors—A Bibliometric Analysis. In *International Journal of Financial Studies* (Vol. 10, Number 2). MDPI. <https://doi.org/10.3390/ijfs10020036>
- Antunes, I. F. S., & Verissimo, J. M. C. (2024a). A bibliometric review and content analysis of research trends in sensory marketing. In *Cogent Business and Management* (Vol. 11, Number 1). Cogent OA. <https://doi.org/10.1080/23311975.2024.2338879>
- Antunes, I. F. S., & Verissimo, J. M. C. (2024b). A bibliometric review and content analysis of research trends in sensory marketing. In *Cogent Business and Management* (Vol. 11, Number 1). Cogent OA. <https://doi.org/10.1080/23311975.2024.2338879>
- Bhatia, B. (2024). *Financial Literacy and Financial Planning-A Bibliometric Analysis*. 14(2). <http://eelet.org.uk>
- Bikas, E., Jurevičienė, D., Dubinskas, P., & Novickytė, L. (2013). Behavioural Finance: The Emergence and Development Trends. *Procedia - Social and Behavioral Sciences*, 82, 870–876. <https://doi.org/10.1016/j.sbspro.2013.06.363>
- Croitoru, I. M., Dragan, P. P., Ignat, N. D., & Jumanca, R. (2025). Exploring Financial Literacy in Higher Education with the Help of FinTech: A Bibliometric Analysis of Linkages to Access, Behavior, and Well-Being Through Digital Innovation. In *FinTech* (Vol. 4, Number 1). Multidisciplinary Digital Publishing Institute (MDPI). <https://doi.org/10.3390/fintech4010004>
- Damayanti, S., Rahmawati, A., & Wihandaru. (2023a). A bibliometric analysis VOSviewer of publication on financial literacy and investment decision. In *Multidisciplinary Reviews* (Vol. 6, Number 4). Malque Publishing. <https://doi.org/10.31893/multirev.2023043>
- Damayanti, S., Rahmawati, A., & Wihandaru. (2023b). A bibliometric analysis VOSviewer of publication on financial literacy and investment decision. In *Multidisciplinary Reviews* (Vol. 6, Number 4). Malque Publishing. <https://doi.org/10.31893/multirev.2023043>
- Damayanti, S., Rahmawati, A., & Wihandaru. (2023c). A bibliometric analysis VOSviewer of publication on financial literacy and investment decision. In *Multidisciplinary Reviews* (Vol. 6, Number 4). Malque Publishing. <https://doi.org/10.31893/multirev.2023043>
- Elsayed, E. F. E. M., Elkhodary, Y. F. Y., Selmey, M. G., & AL Masabi, A. A. B. A. B. (2025a). Developing a multidimensional sustainable framework for measuring inclusive Growth: Evidence from Egypt. *Global Transitions*, 7, 420–429. <https://doi.org/10.1016/j.glt.2025.06.005>
- Elsayed, E. F. E. M., Elkhodary, Y. F. Y., Selmey, M. G., & AL Masabi, A. A. B. A. B. (2025b). Developing a multidimensional sustainable framework for measuring inclusive Growth: Evidence from Egypt. *Global Transitions*, 7, 420–429. <https://doi.org/10.1016/j.glt.2025.06.005>
- Goyal, K., & Kumar, S. (2021). Financial literacy: A systematic review and bibliometric analysis. In *International Journal of Consumer Studies* (Vol. 45, Number 1, pp. 80–105). Blackwell Publishing Ltd. <https://doi.org/10.1111/ijcs.12605>
- Hidayat, P. (2021). *Bibliometric Study on Financial Literacy between 1984-2021*. www.vosviewer.com
- Huston, S. J. (2010). Measuring Financial Literacy. *Journal of Consumer Affairs*, 44(2), 296–316. <https://doi.org/10.1111/j.1745-6606.2010.01170.x>
- Idris, A., Rahmawati, A., & Surwanti, A. (2023). Theoretical Models of Financial Literacy: A Bibliometric Analysis and Literature Review. *Asian Journal of Business and Accounting*, 16(1), 89–127. <https://doi.org/10.22452/ajba.vol16no1.4>
- Iwatsubo, K., Araki, C., & Yamori, N. (2025). Gender gap in financial literacy – numeracy, financial concepts and retirement financial planning. *Finance Research Open*, 1(4), 100054. <https://doi.org/10.1016/j.fmr.2025.100054>
- Jain, M. A., & Goyal, N. (n.d.-a). *Sachetas BEHAVIOURAL FINANCE: A BIBLIOMETRIC ANALYSIS USING SCOPUS DATABASE*. Retrieved <https://orcid.org/0000-0001-8239-5621>
- Jain, M. A., & Goyal, N. (n.d.-b). *Sachetas BEHAVIOURAL FINANCE: A BIBLIOMETRIC ANALYSIS USING SCOPUS DATABASE*. Retrieved <https://orcid.org/0000-0001-8239-5621>
- Klapper, L., & Lusardi, A. (2020). Financial literacy and financial resilience: Evidence from around the world. *Financial Management*, 49(3), 589–614. <https://doi.org/10.1111/fima.12283>
- Kumar Sharma, A., & Professor, A. (2018). Goods and Service Tax and its impact on petroleum price in India. *International Journal for Research in Engineering Application & Management (IJREAM)*, 04, 2454–9150. <https://doi.org/10.18231/2454-9150.2018.1216>
- Kumar Sharma, A., & Professor, A. (2021). Goods and Service Tax, a revenue loss or gain: A Comparative study of revenue collection in West Bengal. *International Journal for Research in Engineering Application & Management (IJREAM)*, 06, 2454–9150. <https://doi.org/10.35291/2454-9150.2021.0077>
- Lim, W. M., & Kumar, S. (2024a). Guidelines for interpreting the results of bibliometric analysis: A sensemaking approach. *Global Business and Organizational Excellence*, 43(2), 17–26. <https://doi.org/10.1002/joe.22229>
- Lim, W. M., & Kumar, S. (2024b). Guidelines for interpreting the results of bibliometric analysis: A sensemaking approach. *Global Business and Organizational Excellence*, 43(2), 17–26. <https://doi.org/10.1002/joe.22229>
- OECD/INFE 2023 *International Survey of Adult Financial Literacy*. (2023). *OECD Business and Finance Policy Papers*, 39. <https://doi.org/10.1787/56003a32-en>
- Pearson, B., & Korankye, T. (2023). The association between financial literacy confidence and financial satisfaction. *Review of Behavioral Finance*, 15(6), 935–946. <https://doi.org/10.1108/RBF-03-2022-0090>
- Pradhan, B. K., Yadav, S., Ghosh, J., & Prashad, A. (2023). Achieving the Sustainable Development Goals (SDGs) in the Indian State of Odisha: Challenges and Opportunities. *World Development Sustainability*, 3, 100078. <https://doi.org/10.1016/J.WDS.2023.100078>

Pranajaya, E., Alexandri, M. B., Chan, A., & Hermanto, B. (2024). Examining the influence of financial inclusion on investment decision: A bibliometric review. In *Heliyon* (Vol. 10, Number 3). Elsevier Ltd. <https://doi.org/10.1016/j.heliyon.2024.e25779>

Putri Utami, R. A. S. (2022). The Financial Literacy, Investment Knowledge, Investment Motivation on Investment Interest in the Capital Market Using Bibit and Ajaib Applications (Study on Faculty of Economics and Business Students at Bha-yangkara Jakarta Raya University). *Journal of Sustainable Community Development (JSCD)*, 4. <https://doi.org/10.32924/jscd.v4i2.74>

Roman, R. M., Hayibor, S., & Agle, B. R. (1999). The relationship between social and financial performance: Repainting a portrait. *Business and Society*, 38(1), 109–125. <https://doi.org/10.1177/000765039903800105>

Shefrin, H. (2009). Behavioralizing finance. *Foundations and Trends in Finance*, 4(1–2), 1–184. <https://doi.org/10.1561/05000000030>

Snyder, H. (2019). Literature review as a research methodology: An overview and guidelines. *Journal of Business Research*, 104, 333–339. <https://doi.org/10.1016/j.jbusres.2019.07.039>

Wagner, J. (2019). Financial education and financial literacy by income and education groups. *Journal of Financial Counseling and Planning*, 30(1), 132–141. <https://doi.org/10.1891/1052-3073.30.1.132>



Ayush Kumar Sharma is an Assistant Professor in Management (Finance) at NIIT University. He holds a B.Com. (Hons.) from St. Xavier's College, Kolkata, an M.Com. in Accounting and Finance from the University of Calcutta, and an MBA in Finance from Suresh Gyan Vihar University. He is currently pursuing a Ph.D. in Management (Finance) at Sir Padampat Singhanian University, Udaipur. Having completed CA-Inter along with articleship and professional training, his academic and research interests include taxation, financial literacy, behavioural finance, digital skills, and FinTech. He has published research articles in reputed national and international journals and actively contributes to student mentoring and academic development.



Neeti Mathur is a faculty member in the Department of Management Studies at Sir Padampat Singhanian University (SPSU). She holds an MBA in Finance, a Ph.D. in Accounting with research on microfinance and self-help groups, and professional qualifications including Company Secretary (CS), Certified Management Accountant (CMA), NET-JRF in Management, and CA Inter. With over 17 years of teaching and research experience, her areas of expertise include finance, accounting, banking, taxation, and corporate governance. She has published more than 35 research papers in reputed national and international journals and actively contributes as a reviewer for academic journals and conferences.



Manish Dadhich is an Associate Professor at the Faculty of Management, Sir Padampat Singhanian University, Udaipur. He holds a Ph.D. in Commerce along with qualifications including MBA, M.Com., UGC-NET (Commerce and Management), and RPSC-SET (Management). With over 16 years of experience in academia, industry, and research, his areas of expertise include Finance, Banking, FinTech, Econometrics, and Statistics. He has published more than 80 research papers in reputed indexed journals and presented over 60 papers at national and international conferences. He serves as a reviewer and editorial board member for leading journals and conferences and actively supervises doctoral research.



Kamal Kant Hiran is an academician, researcher, and administrator with over 18 years of international experience across Asia, Africa, Europe, and North America. He has authored and edited 21 books published by renowned international publishers, including Wiley, De Gruyter, IGI Global, and BPB Publications. His research interests encompass Artificial Intelligence, Cloud-Edge Computing, Machine and Deep Learning, and Intelligent IoT. He has published over 75 research papers in SCI, Scopus, Web of Science, and IEEE-indexed journals and conferences and holds several patents. He has received numerous national and international awards and recognitions for his contributions to research, innovation, and professional activities.