

## Mapping the Knowledge Landscape of Artificial Intelligence and Learning Disability Research: A Bibliometric Analysis (2015-2026)

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### INTRODUCTION & AIM

Artificial Intelligence (AI) is transforming inclusive education and disability support through adaptive learning systems, machine learning, and assistive technologies. AI-driven applications support early diagnosis, personalized learning, and intervention for learners with disabilities.

Despite increasing scholarly interest, limited studies have systematically mapped the intellectual structure and thematic evolution of research in AI and learning disability.

#### Aim of the Study:

- To analyze the publication trends in artificial intelligence and learning disability research.
- To identify the most influential authors, journals, institutions, and countries.
- To examine citation patterns and intellectual structure of the research field.
- To analyze collaboration networks among researchers and institutions.
- To identify major research themes and emerging topics.
- To map the thematic evolution of research over time.

### METHOD

#### METHODOLOGY

Research Design:

Quantitative Bibliometric Analysis

Database:

Scopus

Study Period:

2015–2026

Search Query: ( TITLE-ABS-KEY

( Artificial Intelligence ) AND

TITLE-ABS-KEY ( Learning

Disability ) AND PUBYEAR >

2014 AND PUBYEAR < 2027

AND ( LIMIT-TO ( SUBJAREA ,

"SOCI" ) ) AND ( LIMIT-TO (

DOCTYPE , "ar" ) ) AND (

LIMIT-TO ( LANGUAGE ,

"English" ) ) AND ( LIMIT-TO (

OA , "all" ) )

Inclusion Criteria:

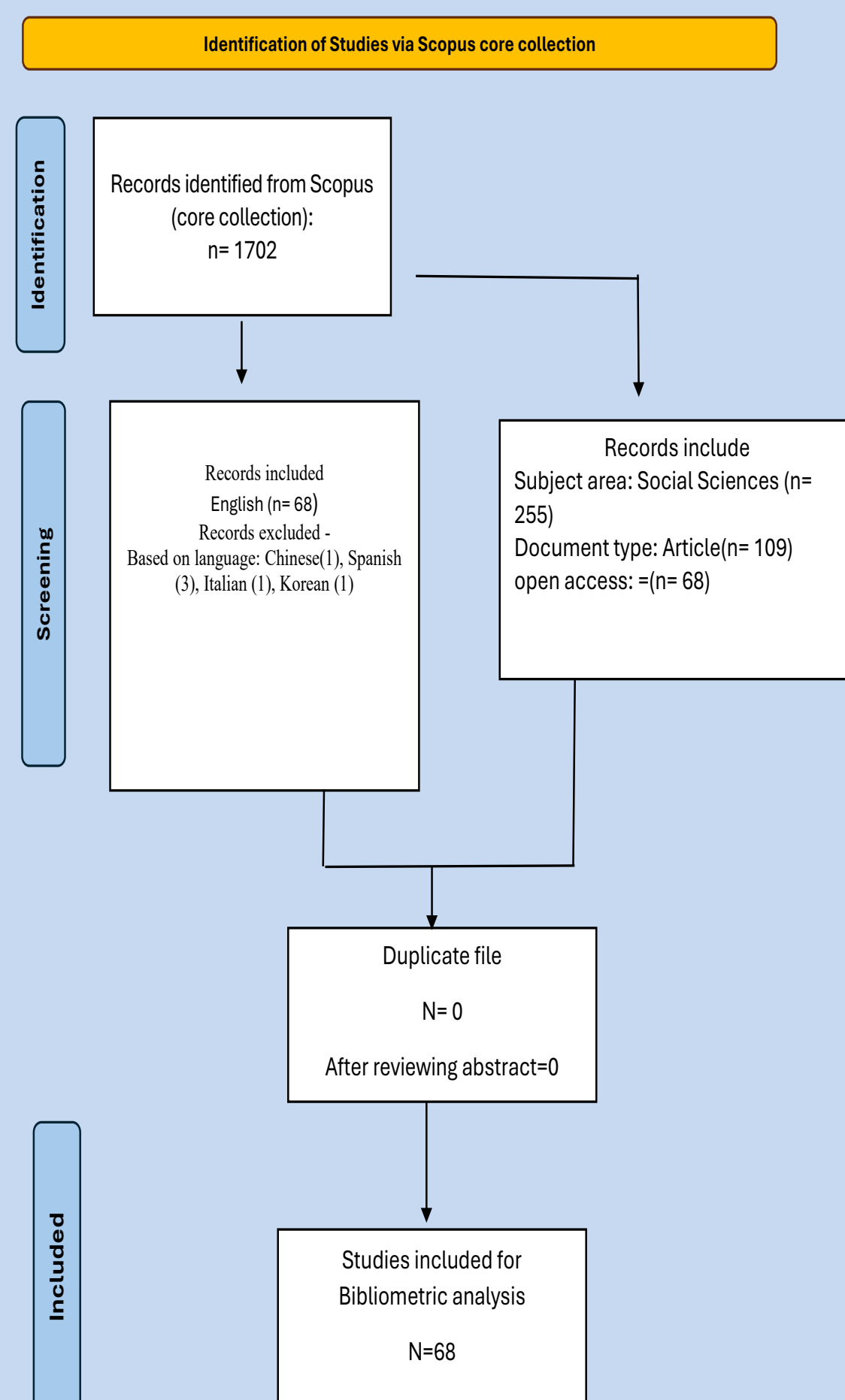
- Peer-reviewed journal articles
- English-language publications
- Open-access studies
- Publications between 2015–2026

Software & Tools:

- VOSviewer
- Biblioshiny (R Package)
- Microsoft Excel

Bibliometric Techniques:

- Citation Analysis
- Co-authorship Analysis
- Keyword Co-occurrence Analysis
- Thematic Evolution Analysis



### RESULTS & DISCUSSION

#### Publication Trends

Research on AI and learning disability increased rapidly after 2023, reaching peak scientific production in 2025.

#### Influential Authors

A small group of recurring authors emerged as the most productive and influential contributors in the field.

#### Influential Sources & Countries

The Journal of Disability Research and Saudi Arabia emerged as the leading contributors in the field.

#### Influential Institutions

The King Salman Center for Disability Research emerged as the most productive institutional contributor.

#### Citation Patterns & Intellectual Structure

Co-citation analysis revealed an interdisciplinary knowledge structure integrating AI, educational technology, and inclusive pedagogy.

#### Research Collaboration Networks

Collaboration among researchers and institutions remains limited, with only small connected research clusters identified.

#### Research Themes & Thematic Evolution

Recent research increasingly emphasizes inclusive education, special education, and learner-centered AI applications.



### CONCLUSION

- Research on artificial intelligence and learning disability has grown rapidly in recent years.
- The field demonstrates increasing integration of AI, inclusive education, and assistive technologies.
- Saudi Arabia, the Journal of Disability Research, and a small group of recurring authors emerged as major contributors to the field.
- Emerging themes indicate a shift from computational experimentation toward learner-centered and inclusive educational applications.
- Limited collaboration networks suggest opportunities for stronger international and interdisciplinary research partnerships.

### REFERENCES/DECLARATION

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