

A Bibliometric Review of Academic Research on University Students with Disabilities: Trends and Insights from The Past 25 Years

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Abstract

University students with disabilities face challenges due to both systemic and attitudinal barriers that seriously impede their full participation in university life. Research focusing on university students with disabilities is gradually gaining attention among scholars worldwide. However, the bibliometric analysis of university students with disabilities remains underdeveloped. This bibliometric review sought to document the historical evolution and geographical distribution of research and identify high-impact scholars, key themes, research trends, and prospective research directions in the domain of university students with disabilities. The Scopus database was utilized to collect indexed literature comprising 1,976 entries under the terms 'university,' 'students,' and 'disability,' published between 2000 and 2025. This study employs bibliometric techniques, including citation, co-citation, and keyword analyses, facilitated by tools such as Bibliophagy and VOS viewer, to analyse the data. The generated bibliometric maps present the current research status, including annual scientific production, most cited articles, and most cited authors whose impact has been sustained for more than a decade. The findings underscore significant growth in research output over the last 25 years, with the USA emerging as the most productive country. Likewise, the findings of this study highlighted the contributions of leading researchers and institutions that have shaped the discourse on university students with disabilities. Further, this study maps potential research areas based on current trends. This would be beneficial for researchers as a guide for future research and for policymakers in addressing the rights of university students with disabilities in today's world.

Keywords: *Bibliometric review, Disabilities, Higher education, University students*

Introduction

It is an axiomatic fact that education is one of the most fundamental human rights. The right to education, including the right to higher education, has been recognised in international law. Article 26 of the Universal Declaration of Human Rights (1948) declares that everyone has the right to education and that higher education shall be equally accessible to all based on merit. Since then, several international and regional human rights instruments and declarations have recognized the right to education. For instance, the International Covenant on Civil and Political Rights (1966, Article 18), the Convention on the Elimination of All Forms of Racial Discrimination (1966, Article 5), and the Convention on the Rights of Persons with Disabilities (2006, Article 24) affirm these rights. The Declaration on the Rights of Persons Belonging to National or Ethnic, Religious and Linguistic Minorities (1992, Article 4), Declaration on the Rights of Indigenous Peoples (2007, Articles 14, 15, 17, and 21), and Declaration on Human Rights Education and Training (2011) further affirm this right to equal access to education for all.

Equally, the right to education is guaranteed by the International Labour Organisation framework, including Convention No. 138 on the minimum age for employment (1973), Convention No. 182 on Worst Forms of Child Labour (1999), and Convention No. 169 concerning Indigenous and Tribal Peoples in Independent Countries (1989). Similarly, the right to education is recognised under International Humanitarian Law. For instance, it is affirmed in Geneva Convention III -Treatment of Prisoners of War, (1949), Geneva Convention IV- Protection of Civilian Persons in Time of War, (1949), Protocol I to the Geneva Conventions - Protection of Victims of International Armed Conflicts, (1977), Protocol II to the Geneva Conventions - Protection of Victims of Non-International Armed Conflicts, (1977). All the aforementioned international instruments unambiguously affirm the right to education as an indispensable right of human beings.

Higher education, as a human right, has been explicitly affirmed by several international treaties adopted by the United Nations, such as the International Covenant on Economic, Social and Cultural Rights (ICESCR), (1966, Article 13), the Convention on the Elimination of All Forms of Discrimination against Women, (1979, Article 10), the Convention on the Rights of the Child, (1989, Article 28). Furthermore, it has been upheld under the United Nations Educational, Scientific and Cultural Organization (UNESCO) framework, such as the Convention against Discrimination in Education (1960, Article 4).

The right to higher education is also embedded in various regional human rights frameworks. In the African framework, it is recognised in the African Charter on the Rights and Welfare of the Child (1990, Article 11) and the African Youth Charter (2006, Article 13). In the Asia-Pacific framework, the Association of Southeast Asian Nations (ASEAN) Human Rights Declaration (2012, Article 31) unambiguously acknowledges this right. Further, in Europe, the right to higher education is affirmed by the European Social Charter (1996, Article 10), the European Charter for Regional or Minority Languages (1992, Article 8), and the European Convention on the Legal Status of Migrant Workers (1977, Article 14). In the Inter-American framework, the right to higher education is enshrined in the Charter of the Organisation of American States (1967, Article 49) and Additional Protocol to the American Convention on Human Rights, Protocol of San Salvador (1988, Article 13).

All of the aforementioned international instruments uphold access to university for people with disabilities as a legally recognised right. Accordingly, all countries and their institutions, including universities, have a legal obligation to accommodate learning environments that facilitate the fullest enjoyment of the rights of university students with disabilities (hereinafter referred to as USWD) without discrimination. Thus, it is essential to establish policies that ensure all students remain in and succeed in their university studies (Thomas, 2016). The number of students with disabilities in universities is growing (Wilson et al., 2000; Cook et al., 2009). However, despite the increasing enrolment of USWD, there remains a question of whether universities are adequately equipped with accessible facilities to accommodate disabled students.

The proliferation of scientific literature on USWD and the challenges they face in accessing education and participating in it reflect the importance of this topic. Borland et al. (1999), in their pioneering work, demonstrated the difficulties faced by students with disabilities and highlighted the practical constraints institutions encounter in accommodating them. Much of the existing academic research on USWD has focused on general aspects, as seen in Hill's work (1992), Fuller et al. (2004), and Shuayb (2020). Other literature on USWD focuses on specific areas or subfields. For example, some

studies focus on access (O'Connor, 1999; Amin, 2019) while others address visual impairments (Browell, 1998; Senge, 1998; Dermody, 2011; Hewett et al., 2017; Stethieh, 2023), hearing impairments, and intellectual impairment (Diaz-Jimenez et al., 2021; Kubiak et al., 2021; Betch et al., 2020). Other studies focus on various disabilities among university students, including those by Chan et al. (2023), Engelbrecht et al. (2014), and Amoah et al. (2023). Additionally, Wai Kin Lau et al. (2016) discussed the challenges faced by university students with visual and physical impairments.

Another segment of scientific literature has concentrated on the barriers encountered by USWD in the learning and teaching process (Bunbury, 2020; Morriña, 2020; Moswela, 2011; Seale et al., 2015; Williams et al., 2016) and on pedagogical approaches (Hanafin et al., 2007; Naumova et al., 2017; Asif et al., 2020). Given the discussions above, it is clear that USWD has been a topic of academic discourse.

Bibliometrics is a well-established and effective technique for examining trends within a specific field of study. Scholars use bibliometric analysis for various purposes, including uncovering emerging trends in article and journal performance and identifying collaboration patterns. Additionally, bibliometric analysis is used to explore the intellectual structure of a specific domain within the existing literature. It enables scholars to gain a comprehensive overview, identify knowledge gaps, derive novel research ideas, and position their intended contributions within the field. (Donthu et al., 2021). A bibliometric analysis of USWD can highlight the significance of publications and identify potential gaps in the literature. Such analyses reveal patterns of knowledge distribution and the global reach of research. Although there is considerable literature on USWD, there is a notable lack of comprehensive bibliometric studies that either holistically examine the most productive countries, institutions, authors, journals, keywords, reviews, etc., or discuss the widespread impact of publications. Such a gap could seriously hinder the development of academic literature on the subject and, consequently, deter the development of jurisprudents on USWD.

Considering the aforementioned discussion, this bibliometric review aims to provide a comprehensive overview of USWD's scientific output, identifying key aspects, including publications, productive countries, institutions, authors, journals, and key keywords. By examining these features, this study aims to identify emerging trends and highlight gaps in the literature, thereby advancing academic knowledge and jurisprudence on USWD.

Materials and methods

The field of study is known as "bibliometrics" (Broadus, 1987; Pritchard, 1969), and it is an effective method for projecting research trends, developments, and recent directions within a particular subject, as discussed by various authors (Pritchard, 1969; Ellegaard & Wallin, 2015). With the assistance of bibliometric indicators, such as co-citation from previous studies, the bibliometric review approach can be utilised to verify the research's validity. (Nerur et al., 2008). The main aim of researchers conducting bibliometric reviews is to identify, assess, and understand the literature within a specific field of study (Öztürk, 2021). This study adopted the bibliometric review methodology, using indicators such as the total number of publications and citations, the number of citations per paper, and the counts of leading authors, journals, institutions, and countries (Merigó et al., 2015a; Merigó et al., 2015b).

This study was conducted to provide a general informative overview of the bibliographic material (Ding et al., 2014; Mingers & Leydesdorff, 2015).

Data Collection

The current study, conducted on the 26th of January 2025, searched the Scopus database for scientific publications on USWD and spans almost 25 years, from 2000 to the 26th of January 2025. Since Scopus is widely regarded as the most comprehensive, leading multidisciplinary abstract and citation database, it was selected to conduct this bibliometric analysis (Zhu et al., 2020). Keywords related to USWD were used as search terms in the article title, abstract, and keywords. The search strategy used to achieve the aim of this paper can be best described in two parts. The initial part used the asterisk (*) search function via the Scopus database to capture a broader range of terms. Specifically, the keywords “disabilit*” AND “students” AND “Universit*” were used, with quotation marks applied to ensure accurate search results. In the second part, several journal articles published between 2000 and 2025 were selected from the list generated by the search engine. At this stage, only publications written in English were considered valid for this study. The entire framework is shown in Figure 1.

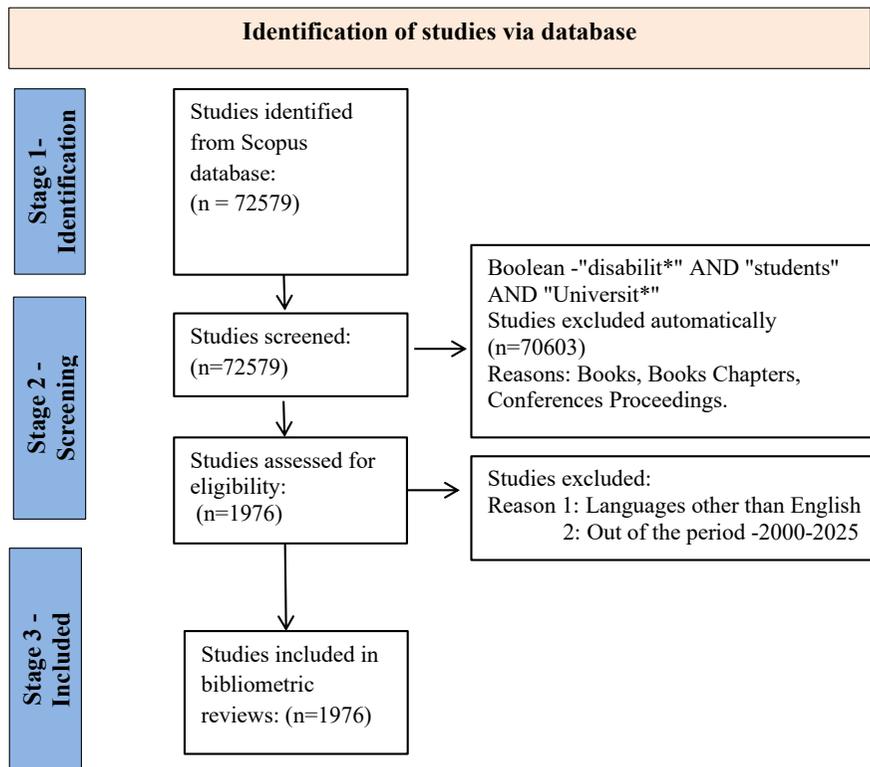


Figure 1: The stages of the bibliometric review

Table 1 summarises the search details. A total of 72579 articles were obtained, and after applying the inclusion and exclusion criteria, 1976 usable documents were selected for analysis. The inclusion criteria established for the selection of the article were: (1) Articles

published in journals, (2) Published in the last 25 years, between 2000 and 2025. (3) Published in English.

Criteria	Description
Source website	Scopus
Timespan	2000-2025
Search terms	'university,' 'students,' 'disability,'
Inclusion criteria	Limited to Journal Articles in the subject area of social sciences, Arts and Humanities Language: English
Exclusion criteria	Excluded books, book chapters, conference papers, surveys, essays, editorial previews, short notes, and review papers. Papers not published in English.
Sample size	1976
Reference size	72579

Table 1: Summary of search details

The exclusion criteria were: (1) Types of documents such as books, book chapters, conference papers, surveys, editorial previews, short notes, and review papers. (2) Papers published before 2000. (3) Paper not published in English. Application of these criteria led to the selection of the 1976 Article

Data extraction

To analyse the collected data and illustrate bibliometric maps of scientific relations, VOSviewer software was used (Knoke, 2008; Van Eck & Waltman, 2010). VOSviewer software was selected for data analysis because it visualises results using bibliometric indicators that provide a general picture, identifying some of the most influential research in this area. This makes it easy to interpret vast amounts of data through bibliometric maps. The article 1,976 retrieved from the Scopus database was saved on a computer in two different formats, i.e., .csv for VOSviewer and .bibtex for Biblioshiny.

Result and discussion

Table 2 presents the main search details. A total of 1,976 articles, published in 760 journals and written by 5059 authors, were retrieved after searching the Scopus database. Among these, 381 documents were single-authored. The annual growth rate was -3.19, and the number of citations per document was 15.75. Further, 1,987 keywords and 3,855 author keywords were identified. The international collaboration rate was 10.93%.

Description	Results
MAIN INFORMATION ABOUT DATA	
Timespan	2000:2025
Sources (Journals, Books, etc.)	760
Documents	1976
Annual Growth Rate %	-3.19
Document Average Age	8.01
Average citations per doc	15.75
References	72579
DOCUMENT CONTENTS	
Keywords Plus (ID)	1987
Author's Keywords (DE)	3855
AUTHORS	
Authors	5059
Authors of single-authored docs	381

AUTHORS COLLABORATION	
Single-authored docs	414
Co-Authors per Doc	2.96
International co-authorships %	10.93
DOCUMENT TYPES	
Article	1976

Table 2: Main information

The preceding sections of this review present the results of the paper. The main focus made on certain key areas such as number of publications, year of publication, country of publication, articles with the highest impact, most impactful authors, most impactful articles, authors with the highest production, top journals, and top institutions, in order to achieve the objectives of this study, especially to reveals the gaps and newest trends in the field of USWD.

Growth of annual scientific publications over the years since 2000

Figure 2 provides an insightful analysis of annual scientific production from 2000 to 2025, while Table 3 presents precise numerical data showing the annual expansion. Together, Figure 2 and Table 3 clearly illustrate the gradual increase in publications on university students with disabilities over the past 25 years. The total number of articles produced was 18 at the start and declined in 2001, reaching a low of 16 publications. However, thereafter it has increased gradually with notable peaks such as in 2007 (36 publications) and 2008 (46 publications) until 2021. A significant upward movement began in 2006, likely driven by the global attention brought to the subject through the introduction of the International Convention on the Rights of Persons with Disabilities. A steady rise in research output began in 2009 with a significant increase in 2015 (83 publications), 2016 (75 publications), 2017 (90 publications), and 2018 (98 publications). This upward trend continues until 2019, followed by a significant surge in the number of publications from 2020 onward. The number of publications increased dramatically to 145 in 2020, 161 in 2021, 167 in 2022 and 2023, and peaked at 263 in 2024. A notable feature of this Figure is the number of articles produced within the first month of 2025, which stands at 8. This figure still allows for additional article publications through the remainder of the year. The sustained growth highlights the growing recognition of the need to address USWD issues in contemporary academic discourse.

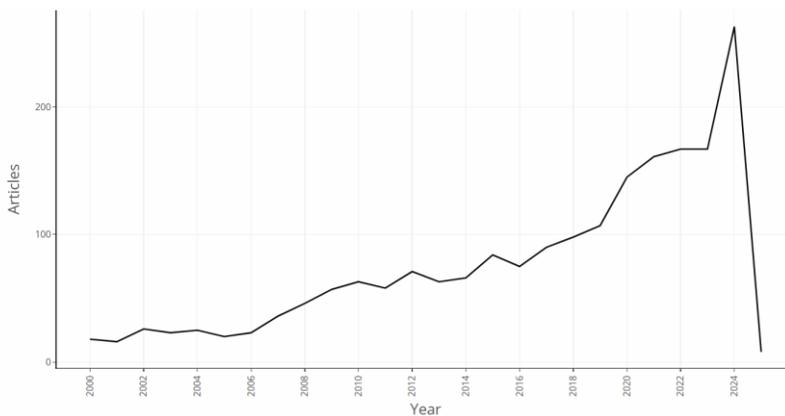


Figure 2: Annual scientific production from 2000-2025

Year	Number of Articles
2000	18
2001	16
2002	26
2003	23
2004	25
2005	20
2006	23
2007	36
2008	46
2009	57
2010	63
2011	58
2012	71
2013	63
2014	66
2015	84
2016	75
2017	90
2018	98
2019	107
2020	145
2021	161
2022	167
2023	167
2024	263
2025	8

Table 3: Number of articles produced from 2000-2025

Overall, the data highlights a clear trend of increasing research activity on university students with disabilities. This pattern underscores the dynamics of research contributions and the field's trends. Understanding these trends is crucial for identifying key areas for improvement and encouraging future research efforts.

Countries' production over time

Research on USWD plays a crucial role in determining the level of recognition and acceptance of USWD within society. Figure 3 represents the production of articles related to USWD in Australia, Canada, Spain, the United Kingdom, and the USA from 2000-2025. Table 4 provides numerical data confirming the countries' production. During this period, the USA, the United Kingdom, Australia, Canada, and Spain produced 1948, 519, 457, 422, and 416 papers, respectively.

Country	Freq
USA	1948
UK	519
AUSTRALIA	457
CANADA	422
SPAIN	416
SOUTH AFRICA	112
IRELAND	107
ITALY	86
NIGERIA	85
SAUDI ARABIA	77

Table 4: Country Production

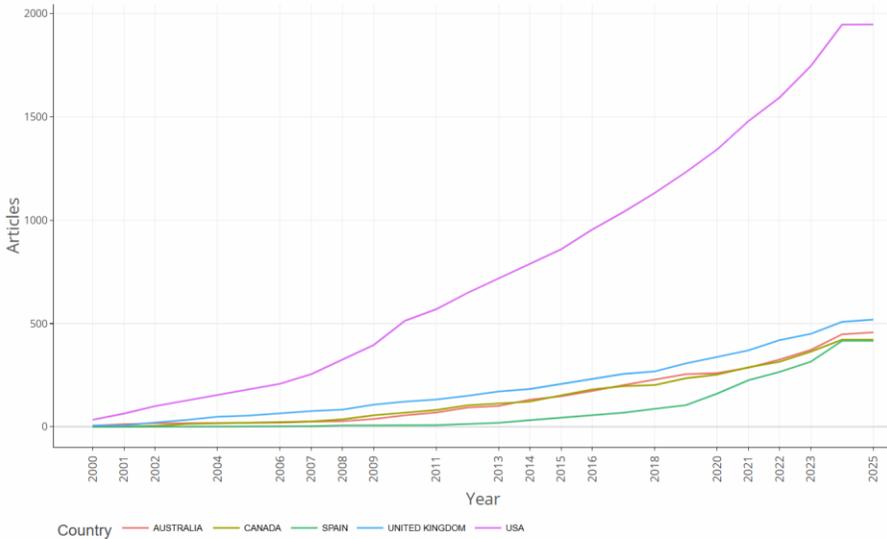


Figure 3- Countries' Production over Time

The United States has emerged as the pre-eminent contributor to research on USWD, with the highest number of publications and the fastest growth. This shows that the USA's academic community has consistently engaged in addressing various aspects of understanding university students with disabilities. The USA started with 34 papers in 2000 and steadily increased its annual production, reaching 1,948 papers by the 26th of January 2025. This could be attributed to factors such as extensive research infrastructure and a high number of research institutions focused on the subject. Although Spain started with zero publications from 2000 to 2006, its contribution began with 3 publications in 2007 and increased annually, ending with 416 by the 26th of January 2025. The other four countries have shown a steady upward trend over the years, but have not been able to surpass the annual production threshold of 500 articles. However, these trends highlight the global commitment to understanding university students with disabilities.

The significance of the research in those five countries has been widely acknowledged. This is proven by Table 5, which portrays the most cited articles on USWD, authored by various researchers.

Country	Average Article Citations
USA	18.10
UNITED KINGDOM	23.90
AUSTRALIA	26.20
CANADA	18.60
SPAIN	13.50
HONG KONG	33.30
TURKEY	19.60
ISRAEL	18.70
SOUTH AFRICA	12.10
IRELAND	14.40

Table 5: Most cited countries on USWD

Figure 4 presents the total number of citations, with the USA receiving the highest number, i.e., 8871. This should have not only influenced but also contributed to the

development of jurisprudence concerning university students with disabilities, shaping its evolution to the present stage.

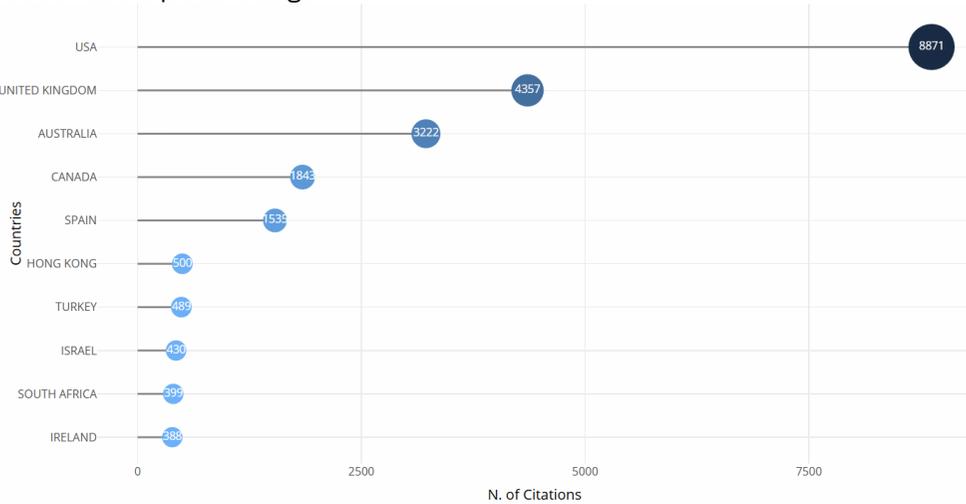


Figure 4: The total number of citations.

Overall, this suggests that studies on USWD are predominantly concentrated in a few jurisdictions, particularly the USA, UK, and Australia.

Most productive and influential institutions in the field of university students with disabilities

Institutions worldwide have researched USWD. This section explains the affiliations that are most productive in publishing articles relating to USWD during the time period.

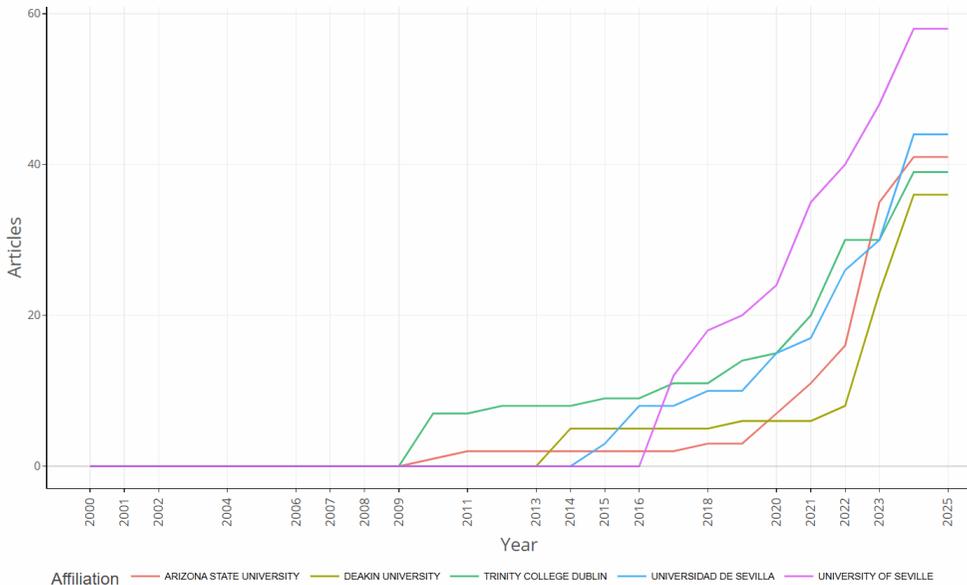


Figure 5: Number of articles published over time (from 2000 to 2025) by different affiliations in the field of university students with disabilities.

Figure 5 presents a comprehensive overview of the number of articles published from 2000 to 2025 by various affiliations specifically focused on university students with disabilities. It includes six prominent affiliations, namely Arizona State University, Deakin University, Trinity College Dublin, the Universidad de Seville, and the University of Seville. All the affiliations show an upward trend in the number of articles published from 2000 to 2025. This indicates the growing interest in the field of university students with disabilities. However, the most visible fact is that the University of Seville pioneered the contribution to the field of university students with disabilities starting in 2000, just 6 years before the adoption of the Convention on the Rights of Persons with Disabilities and its Optional Protocol. This is a remarkable initiative in the field of the Rights of Persons with Disabilities. Although there was no increase until 2009, the same university continued publishing, and the number of publications increased exponentially from 0 to 54 in 2015.

Throughout the years, Arizona State University has consistently published the most articles. Both Deakin University and Universidad de Seville exhibited significant growth during the examined period. However, the other affiliations show relatively moderate growth. The upward trends across all these affiliations provide valuable insights into the activities and outputs of university students with disabilities.

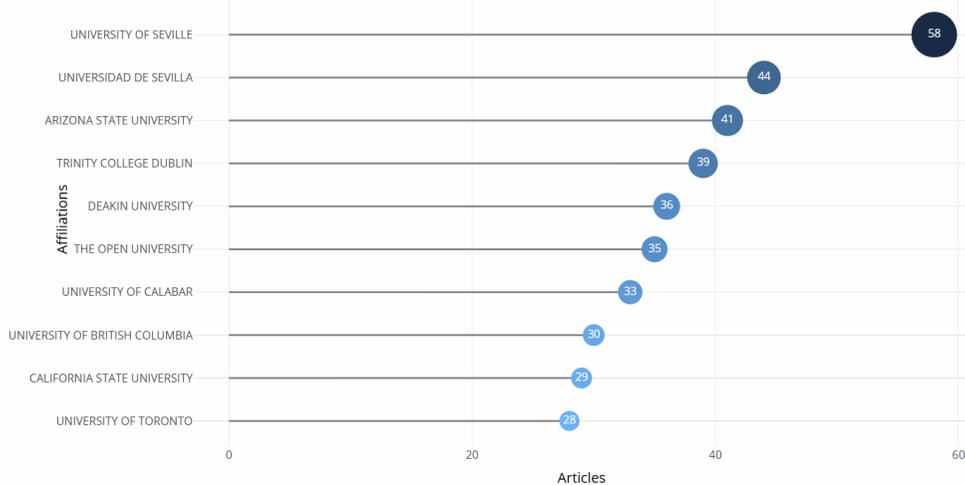


Figure 6 - The 10 most productive affiliations in the field of university students with disabilities

Figure 6 effectively compares the contributions made by various universities to the subject of university students with disabilities. It provides a graphic comparison of their research output. The University of Seville appears to be the pioneer affiliation, having produced 58 articles. Following the University of Seville are Universidad de Sevilla (44), Arizona State University (41), and Trinity College Dublin (39). Moreover, papers published by Deakin University (36), the Open University (35), and the University of Calabar (30) appear to have a greater impact. California State University produced the most papers, with 29, whereas the University of Toronto produced the fewest, 28. Overall, Figure 6 underscores the substantial contribution of the University of Seville, advancing the knowledge of university students with disabilities.

Journals with Most Published Papers

Figure 7 shows the top 10 most relevant journals for the USWD field.

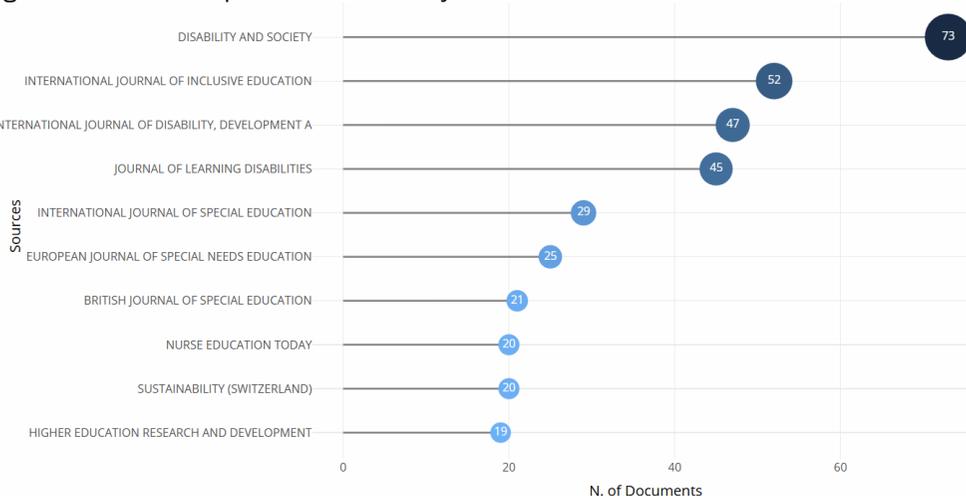


Figure 7 - The top 10 most relevant journals for the USWD

Figure 7 demonstrates that Disability and Society, with 73 publications, has the highest number of publications, followed by the International Journal of Inclusive Education with 52 publications, the International Journal of Disability Development and Education with 47 publications and the Journal of Learning Disabilities with 45 publications. This figure reveals that the above-mentioned four Journals, being the largest contributors to the scientific literature on USWD worldwide, play a pivotal role in this area.

Most Relevant Research Contribution by Authors

Figure 8 represents the most relevant research contributions by various authors, based on the number of publications credited to them. The figure reveals that Moriña is the highest contributor, with 35 publications. The second-highest number of articles, 14, was attributed to Morgado, followed by Carballo with 11 publications. Opoku and Murray each contributed 10 publications, demonstrating significant productivity in the field of university students with disabilities. Richardson and Nketsia contributed 8 publications, while Orozco contributed 7. Horghagen and Kvam contributed 6 publications each.

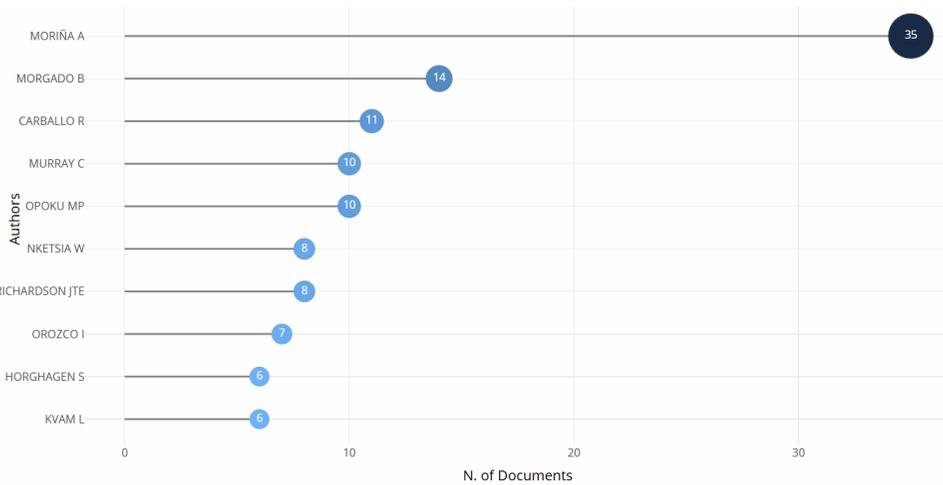


Figure 8: Most relevant research contribution by the authors

The data shows a significant gap between the highest contributor and others, suggesting that Moriña is either more productive on her own or leads much collaboration. The number of publications gradually decreases from the top contributor to the lowest, showing a tiered contribution structure. The similar numbers of publications from Murray and Carballo suggest potential collaboration or shared research interests. Understanding these patterns offers valuable insights into research trends within the dataset, helping identify leading researchers and opportunities for further research and potential collaboration. This analysis can guide institutions, researchers, and research groups in enhancing their research productivity.

This contribution to the scientific literature on USWD has been taking place over time. Figure 9 illustrates the top authors' contributions throughout this period.

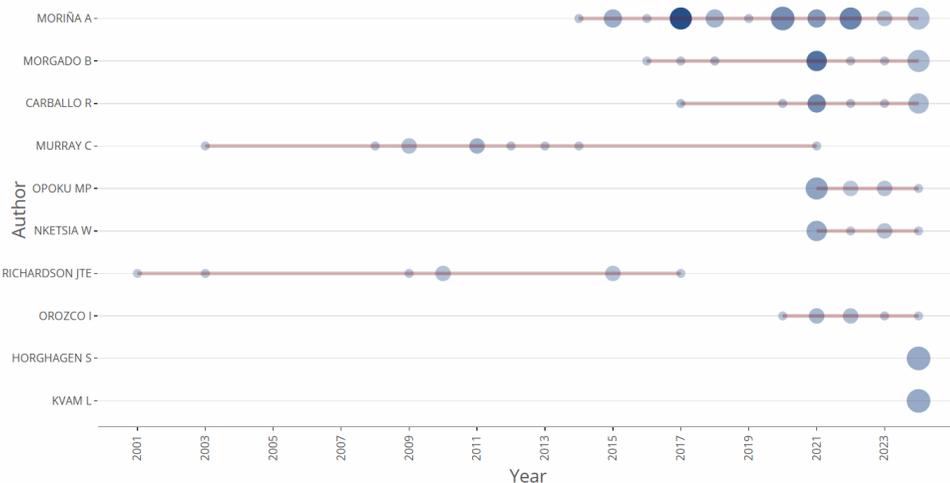


Figure 9: Authors' Production over Time

This analysis reveals that Moriña is a consistently productive author, contributing numerous publications each year from 2014 to 2025, with a particularly high frequency

in recent years. Moriña's outputs indicate a significant and consistent impact on the lives of university students with disabilities. Although Morgado's contribution began in 2016, a consistent, stable, and growing presence in the field is evident from 2021 to 2024. Regarding Carballo's contribution, publications are concentrated between 2021 and 2024, indicating a recent increase in research activity. Opoku and Nketsia have shown a consistent output from 2021 to 2023. However, early contributor Richardson, who contributed for over 16 years, has not contributed to the field since 2017, suggesting a potential shift in focus. Similarly, Murray's contributions began in 2003 and stopped in 2021. Orozco has shown a consistent contribution since 2020, while Horghagen and Kvam have contributed significantly in 2024.

Overall, these patterns of Authors' production over time demonstrate that some of the authors have made continuous contributions, while others have shown periods of heightened activity. Understanding these trends provides valuable insights into research dynamics and can help identify key contributors and potential collaborators in the field of university students with disabilities.

Article trends based on the number of citations

An important issue when analyzing research on USWD is classifying papers by total citations, as a paper's citation count is a key indicator of its importance and scientific value. Although many factors may influence the value of a paper, the number of citations is typically regarded as an accurate indicator of a piece of work's representation of reputation and influence within the scientific community (Merigó & Yang, 2017).

This citation analysis identifies key authors and documents that have shaped the evolution of the scientific literature on USWD. Figure 8 below demonstrates the average local and global citation patterns. It shows the fluctuating research interest in USWD from 2000 to 2024. Peaks in the graph suggest increased academic interest or focus on the topic. The notable peak in citations occurred in 2010, which may correlate with significant studies or developments in the field.

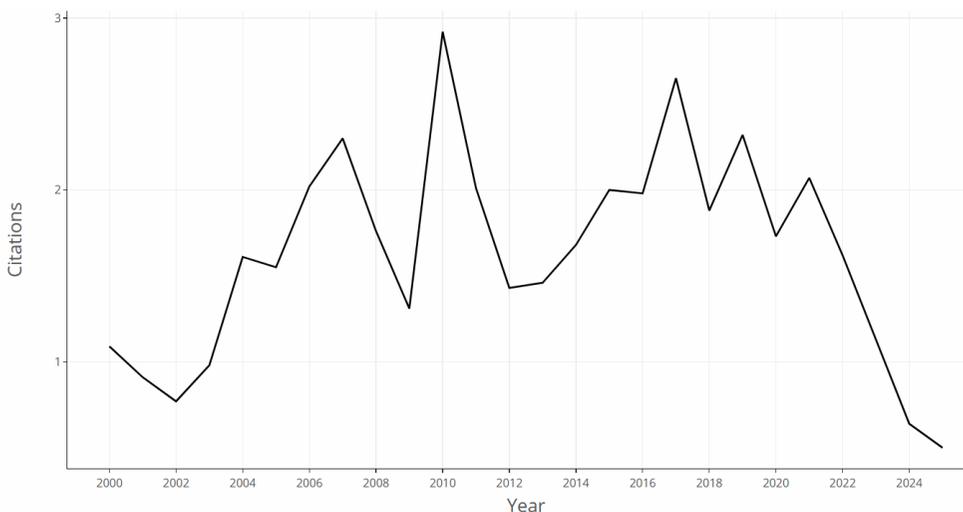


Figure 10: Average citation per year

The average citation per year typically includes both global and local citations. A more comprehensive picture emerges when both locally and globally cited scientific literature is considered. Figure 10 illustrates fluctuations in citations over time, highlighting key periods of academic interest. During 2000-2005, citations remained relatively low with minor fluctuations. Between 2005 and 2010, a steady increase is evident, peaking around 2010, suggesting a surge of scholarly attention to the subject. However, from 2010 to 2020, the trend fluctuated, with both peaks and declines. From 2020 onwards, citations began to decline significantly, which may suggest research saturation, a shift to newer topics, or decreased relevance in the field.

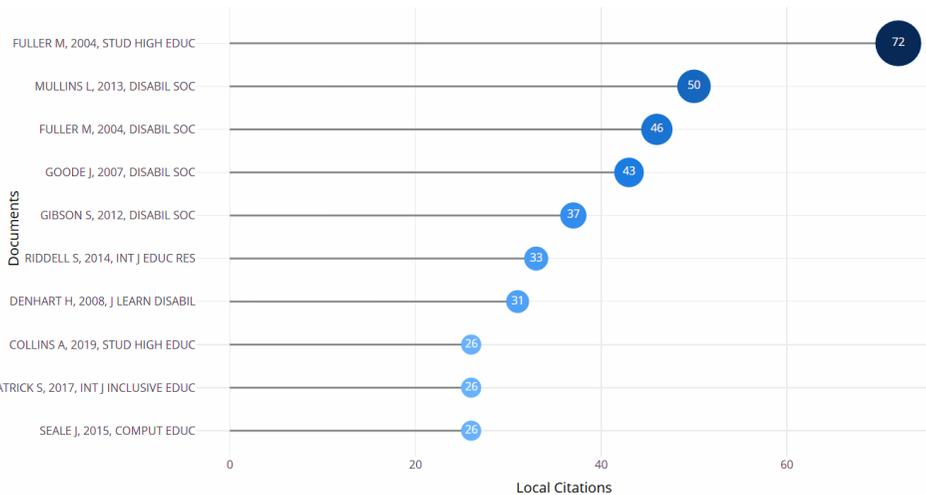


Figure 11: Locally cited scientific literature by the given authors on USWD.

Figure 11 illustrates the key contributions and influential research on USWD within the local academia. The most locally cited and influential article was published by Fuller in 2004 in the *Studies in Higher Education* journal, with 72 citations. This article can be considered a cornerstone of research on USWD, as it is the most influential study, significantly shaping subsequent research in the field. Following this, Fuller published another article in 2004 in the *Disability & Society* journal, which has 46 citations, making it the second most locally cited article. Both these instances highlight Fuller’s continued influence in the field of USWD. Other highly cited articles include those by Mullins, published in 2013 with 50 local citations, and by Goode, published in 2007 with 43 local citations. The total number of citations for a particular paper indicates that it will have a significant impact on future research or even on real-world applications of its findings. Apart from these authors, many others have made substantial contributions to the field of USWD.

No	Cites	Author	Year	Source
1	844	Stallman	2010	Australian Psychologist
2	610	Theoharis	2007	Educational Administration Quarterly
3	308	Forlina	2011	Asia-Pacific Journal of Teacher Education
4	265	Moriña	2017	European Journal of Special Needs
5	228	Fuller	2004	Education Studies in Higher Education

6	210	Ferri et al.	2005	Teachers College Record: The Voice of Scholarship in Education
7	194	Morgan et al.	2008	Journal of Learning Disabilities
8	193	Cambron-McCabe. Richardson	2005	Education Policy
9	191	Carroll	2017	Community Mental Health
10	186		2006	British Journal of Educational Psychology

Table 6: Article trends based on the number of global citations

Table 6 demonstrates the most globally cited articles on USWD, authored by various researchers. Stallman is the most globally cited author, with 844 citations, indicating significant impact in the field in 2010. The second most globally cited article was authored by Theoharis in 2007, with 610 citations. Forlina’s contribution, with 308 global citations, became the third. Taken together, these articles collectively reflect the key contribution to the academic dialogue on USWD.

Most common keywords

As is well known, keywords serve as a high-level synopsis of a paper’s content, highlighting key themes and areas of interest for researchers in a given field. In this study, ‘disability’ was the most frequently searched keyword. Other keywords are ‘higher education,’ ‘inclusive education,’ and ‘inclusion.’



Figure 12 – Word cloud

This word cloud represents the most frequently occurring words related to university students with disabilities. The most prominent terms include ‘human,’ ‘male,’ ‘female,’ ‘student,’ ‘students,’ ‘university,’ ‘education,’ ‘learning,’ ‘disability,’ ‘disabled individuals,’ ‘learning difficulty,’ and ‘psychology.’ These words highlight key themes such as gender distribution, learning difficulties, and psychological aspects that influence students with disabilities.

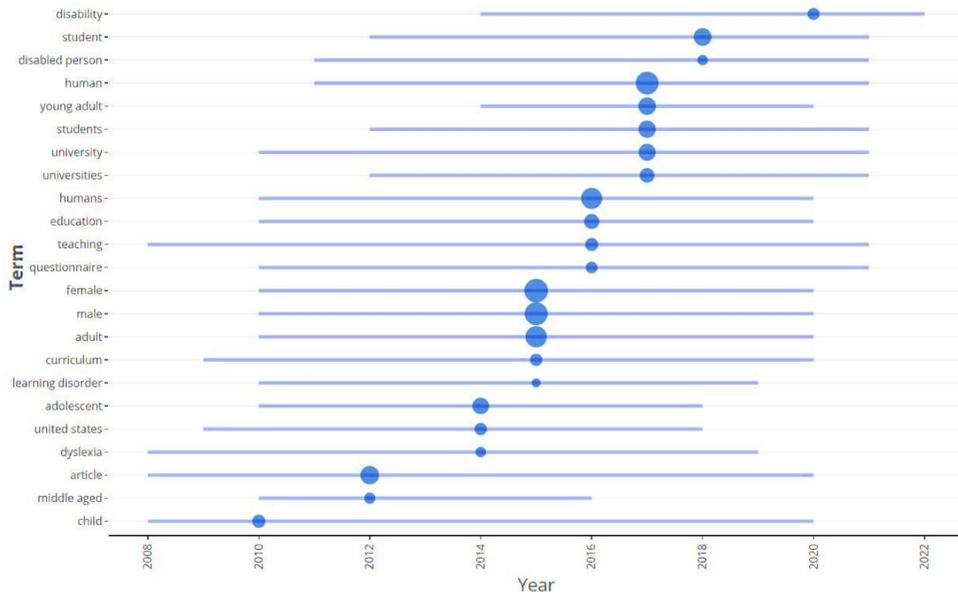


Figure 13: Trends of topics

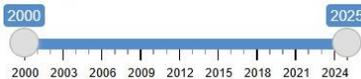
Figure 13 presents a bibliometric analysis of research term trends over the period 2008 to 2022, which is based on the period 2000-2025. The parameters used were: Word minimum frequency of 50 and a maximum of 5 words per year.

Options:

Field

Keywords Plus

Timespan



Text Editing

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Parameters

-

Word Minimum Frequency

50

Number of Words per Year

5

Figure 14: Parameters

were automatically generated based on the degree of similarity among the keywords. This analysis shows that studies on USWD focused on three clusters.

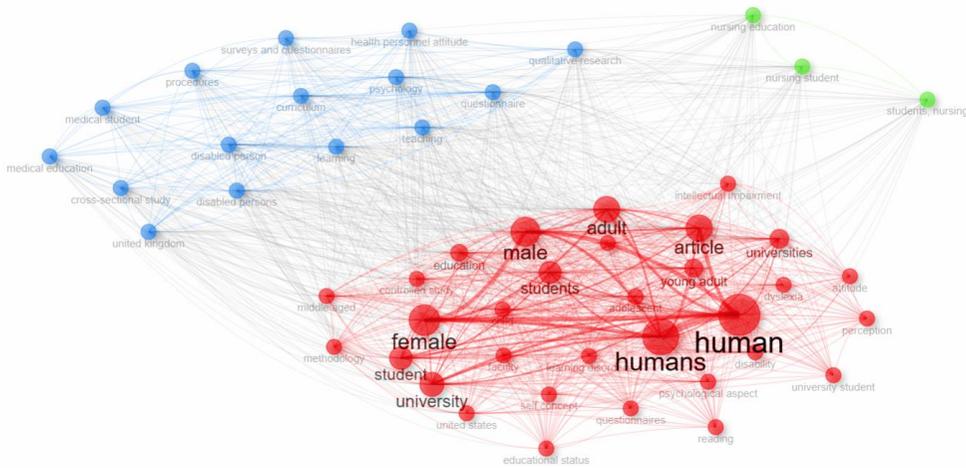


Figure 16: Network of extracted keywords.

Figure 16 provides a visual summary of the research landscape on USWD, where nodes represent terms related to keywords such as 'human,' 'Students,' and 'university' in USWD research, and edges denote relationships between these key terms. The larger nodes indicate more frequently discussed topics in the academic literature. The interconnection between the three clusters suggests that those areas are crucial for understanding the multifaceted experiences of students with disabilities. The interconnection between the three clusters suggests that those areas are crucial for understanding the multifaceted experiences of students with disabilities.

Cluster 1 (Red) focuses on the demographics of key terms related to the present study. Prominent nodes are 'human,' 'humans,' which show their central role in the network. This indicates how different methodologies are applied to various populations. Also, how these terms relate to various demographic and educational research areas, and, similarly, this cluster suggests how different factors, such as gender, influence research within the context of USWD. Overall, this focus suggests that a significant amount of research is dedicated to understanding how various factors, such as gender, affect the educational experiences of students with disabilities, with the cluster emphasising the human dimension of this research domain.

Cluster 2(Blue), focused on the terms related to pedagogy, including educational methodologies and research approaches such as 'qualitative research,' 'cross-sectional study,' and also certain demographic regions such as 'United Kingdom.' The central term 'questionnaire' plays a crucial role in connecting various methodological and educational components, as evidenced by its significant interconnecting function. This cluster suggests a strong emphasis on the methodologies used to study university students with disabilities.

Cluster 3 (green) indicates a specialised focus on nursing studies related to disabilities. It demonstrates a niche yet important area of research, indicating a specific interest in the intersection of nursing education and disabilities. This cluster highlights the specific

interest in the intersection of general education, methodologies, and support systems for nursing students with disabilities.

Moreover, the nodes such as 'human' and 'humans' exhibit high betweenness centrality, acting as bridges within the network. This indicates their role as connectors of various research topics and methodologies. Further, methodological terms in Cluster 2 are connected to demographic terms in Cluster 1, suggesting a multidisciplinary approach in research on USWD. The connection of Cluster 3 with other clusters indicates that demographic research and general educational approaches are being used to inform research on nursing students with disabilities.

In summary, the visual networks help researchers identify central themes, methodological approaches, and demographic focus areas. Similarly, it underscores the importance of multidisciplinary approaches in USWD research, identifies key themes and potential gaps, and suggests areas for future exploration.

Strategic thematic analysis

Figure 17 summarises the themes of this study, providing a clear visual representation of the research field's thematic structure. It allows for the identification of main, specialized, emerging, or disappearing topics in the field of USWD.

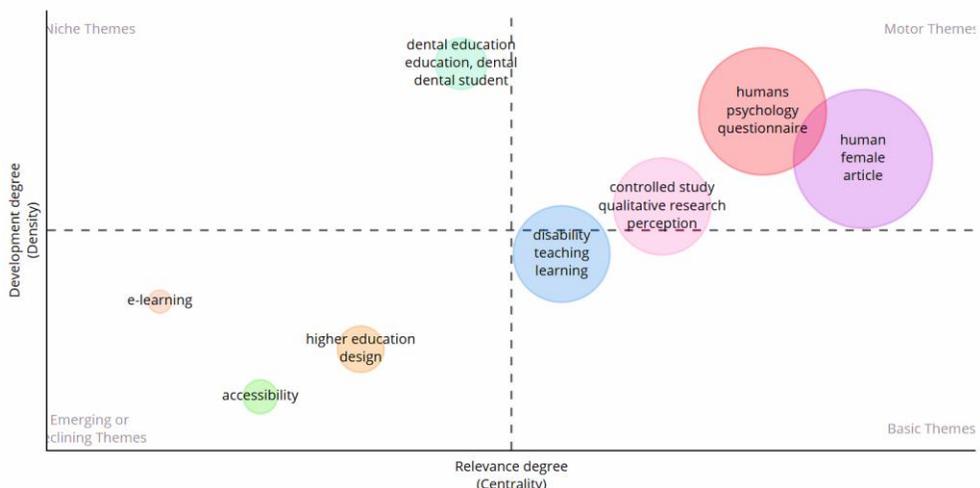


Figure 17: Strategic diagrams of University students with difficulties

The size of the spheres is directly related to the frequency of keyword occurrence. In the upper left quadrant, niche themes are identified as highly specialised yet underexplored or marginalised areas of literature, such as 'Dental education' and 'dental student.' This invites future researchers to investigate further.

In relation to the scientific literature on USWD, displayed in the lower left quadrant, 'E-learning,' 'higher education design,' and 'accessibility' are positioned as either emerging or declining under emerging or declining themes. This may be due to their unstable significance in recent research literature on USWD. However, it seems to be at an intermediate level, suggesting they could become emerging topics given their importance to the study.

The upper right quadrant of Figure 17, representing motor themes, further illustrates that research on USWD is being driven by major topics, 'human' and 'human psychology.' These topics are expected to be highly relevant, well-developed, and significant in the field of USWD.

Finally, under the basic theme, the right lower quadrant, 'disability,' 'teaching,' and 'learning' are noted as a basic theme, the main focus of the current studies.

Implications and Future Research Directions/ Discussion and Conclusion

This bibliometric review aimed to analyse the scientific production of university students with disabilities. It identified emerging trends and distinctive characteristics of the scientific literature in this field. The findings provide a solid understanding of the research focus on the subject matter of the present study and reveal the chronological development of the jurisprudence on USWD.

Starting with 18 publications in 2000, the general trend, despite the annual variations, shows a clear upward trajectory, indicating growing interest in the present subject of the study. The most important point is that the origins of the literature in this field date back as far as 2006, the year of the UN Convention on the Rights of Persons with Disabilities, which highlights the importance of recognising the needs of university students with disabilities and their difficulties.

The authors' analysis shows that a total of 5,059 researchers involved in the production of scientific research on USWD were included in this review. Among the most prominent contributors, Moriña is the highest, with 35 publications, and the second-highest contributor is Morgado, with 14 articles. The third highest contributor is Carballo with 11 articles.

Several universities are at the forefront of research production on USWD. The University of Seville is the pioneer affiliation, having produced 58 articles. The Universidad de Seville and Arizona State University contributed 44 and 41 articles, respectively, ranking second and third among the top ten contributors. The University of Toronto secured tenth place with 28 publications.

The results further reveal the influence of different countries on the development of literature on USWD, and consequently, the development of this field. In terms of the number of publications, the United States stands out with 489, followed by the United Kingdom (182), Australia (123), Spain (114), and Canada (99). No other country could reach the level of fifty. The number of publications and their contribution to the development of the field are supported by the global citations received by those publications. The United States received 8871 citations, and the United Kingdom, Australia, and Canada received 4357, 3222, and 1843, respectively. Despite Spain producing 114 publications- that is, more than 15 articles- ahead of Canada, it could secure fewer citations than Canada.

An analysis of the journals that have made the most paramount contribution to the dissemination of research in the field of USWD provides valuable insight. The Disability and Society is the most prominent, with 72 publications, the highest number of publications. This is followed by the International Journal of Inclusive Education, Journal

of Learning Disabilities, and International Journal of Disability Development and Education.

The thematic analysis conducted for the study identifies the key and emerging areas of research on USWD. Likewise, it shows the need for future researchers to focus on the basic themes identified by the analysis.

All these findings are essential for understanding the future directions of the corpus of scientific research on USWD. A deeper understanding of these trends would help address a new area of USWD, and the dissemination of the generated knowledge will uphold the legal recognition of access to university for people with disabilities as a legally recognised right.

Conclusion

The present study reviewed research on USWD using bibliometric techniques. This review demonstrated the effort invested in exploring USWD. The foregoing figures and graphical presentation reveal emerging trends in the publication of academic literature in the USWD domain. The above examination of top publishing journals in the field of USWD underscores their commendable contribution to the development of jurisprudence on USWD.

This systematic review revealed that many barriers limited the fullest enjoyment of the rights of university students with disabilities. The study identifies the fundamental role of key researchers and prominent journals such as 'Disability and Society' and 'International Journal of Inclusive Education' in advancing knowledge in USWD. It underscores the importance of recognising the issues with USWD and upholding their right to education. This review offers a comprehensive overview of the USWD field, identifying key research areas and emerging trends.

The importance of this research lies in its capacity to provide a thorough and up-to-date understanding of USWD. This analysis offers insights into the current state of the USWD field by examining key research areas, trends, and patterns. Likewise, this study suggests possible directions for future research to further expand knowledge in this area.

However, this review has certain limitations. This review relies solely on data from the Scopus database, which may limit the scope of findings and exclude non-indexed journals. Therefore, further research is suggested using other large databases. Future research could identify other areas not covered by the present study. Furthermore, the present study considered only English-language publications, potentially overlooking significant studies conducted in other languages. Additionally, this study focused on documents in the 'article' format, and other types of literature, such as conference papers, theses, and technical reports, were excluded, which may have led to a loss of valuable insights in USWD.

Despite these limitations, it is expected that the results of this study will contribute to research on USWD by providing guidance and new perspectives on future research topics and directions. Furthermore, the findings will help universities, as educational institutions, accommodate USWD and assist policymakers in formulating and developing appropriate policies and recommendations to address the issues of USWD.

Reference

- Amin, A. S., Zuki, S. Z. M., & Akhir, N. M. (2019). Accessibility to facilities for persons with disabilities at public institutions of higher learning. *International Journal of Recent Technology and Engineering*, 8(2), 21–37.
- Amoah, C., Bamfo-Agyei, E., & Simpeh, F. (2023). Disable access compliance to university infrastructure: Built environment students' perceptions. *Property Management*, 41(5), 681–697. <https://doi.org/10.1108/PM-01-2023-0004>
- Asif, M., Thomas, G., Awan, M. U., & Muhammad Din, A. (2020). Enhancing student engagement through heterogeneous pedagogical approaches: Action research in a university-level course in Saudi Arabia. *International Journal of Educational Management*, 35(1), 1–28.
- Becht, K., Blades, C., Agarwal, R., & Burke, S. (2020). Academic access and progress for students with intellectual disability in inclusive postsecondary education: A systematic review of research. *Inclusion*, 8, 90–104.
- Borland, J., & James, S. (1999). The learning experience of students with disabilities in higher education: A case study of a UK university. *Disability & Society*, 14, 85–101.
- Broadus, R. N. (1987). Toward a definition of “bibliometrics.” *Scientometrics*, 12, 373–379.
- Browell, S. (1998). Visual disability, learning and education: A practical approach. *Industrial and Commercial Training*, 30(1), 24–29.
- Bunbury, S. (2020). Disability in higher education: Do reasonable adjustments contribute to an inclusive curriculum? *International Journal of Inclusive Education*, 24, 964–979.
- Chan, C. C., Yusof, Y., Ahmad Ramli, F. Z., Hillaluddin, A. H., & Mat Saad, Z. (2023). Physical accessibility in Malaysian higher educational institutions: Voices of students with disabilities. *International Social Work*, 66(6), 1669–1685. <https://doi.org/10.1177/00208728221094417>
- Cook, L., Rumrill, P. D., & Tankersley, M. (2009). Priorities and understanding of faculty members regarding college students with disabilities. *International Journal of Teaching and Learning in Higher Education*, 21(1), 84–96.
- Dermody, K., & Majekodunmi, N. (2011). Online databases and the research experience for university students with print disabilities. *Library Hi Tech*, 29(1), 149–160. <https://doi.org/10.1108/07378831111116976>
- Díaz-Jiménez, R. M., Terrón-Caro, T., & Yerga-Míguez, M. D. (2021). University education for people with intellectual disabilities: Evaluation of a training experience in Spain. *Disabilities*, 1(4), 388–405. <https://doi.org/10.3390/disabilities1040027>
- Ding, Y., Rousseau, R., & Wolfram, D. (2014). *Measuring scholarly impact: Methods and practice*. Springer International Publishing.

- Donthu, N., Kumar, S., Mukherjee, D., Pandey, N., & Lim, W. M. (2021). How to conduct a bibliometric analysis: An overview and guidelines. *Journal of Business Research*, 33, 265–296.
- Ellegaard, O., & Wallin, J. A. (2015). The bibliometric analysis of scholarly production: How great is the impact? *Scientometrics*, 105(3), 1809–1831.
- Engelbrecht, L., & de Beer, J. J. (2014). Access constraints experienced by physically disabled students at a South African higher education institution. *Africa Education Review*, 11(4), 544–562. <https://doi.org/10.1080/18146627.2014.935003>
- Fuller, M., Healey, M., Bradley, A., & Hall, T. (2004). Barriers to learning: A systematic study of the experience of disabled students in one university. *Studies in Higher Education*, 29(3), 303–318.
- Hanafin, J., Shevlin, M., Kenny, M., & McNeela, E. (2007). Including young people with disabilities: Assessment challenges in higher education. *Higher Education*, 54(3), 435–448. <https://doi.org/10.1007/s10734-006-9005-9>
- Hewett, R., Douglas, G., McLinden, M., & Keil, S. (2017). Developing an inclusive learning environment for students with visual impairment in higher education: Progressive mutual accommodation and learner experiences in the United Kingdom. *European Journal of Special Needs Education*, 32, 89–109. <https://doi.org/10.1080/08856257.2016.1254971>
- Hill, J. L. (1992). Accessibility: Students with disabilities in universities in Canada. *Canadian Journal of Higher Education*, 22(1), 48–83.
- Knoke, D., & Yang, S. (2008). *Social network analysis* (No. 154). Sage.
- Kubiak, J., Aston, D., Devitt, M., & Ringwood, B. (2021). University students with intellectual disabilities: Empowerment through voice. *Education Sciences*, 11(10), 571.
- Merigó, J. M., & Yang, J. B. (2017). A bibliometric analysis of operations researchers and management science. *Omega*, 73, 37–48.
- Merigó, J. M., Gil-Lafuente, A. M., & Yager, R. R. (2015a). An overview of fuzzy research with bibliometric indicators. *Applied Soft Computing*, 27, 420-433.
- Merigó, J. M., Mas-Tur, A., Roig-Tierno, N., & Ribeiro-Soriano, D. (2015b). A bibliometric overview of the Journal of Business Research between 1973 and 2014. *Journal of Business Research*, 68(12), 2645-2653.
- Mingers, J., & Leydesdorff, L. (2015). A review of theory and practice in scientometrics. *European Journal of Operational Research*, 246(1), 1–19.
- Moriña, A., Perera, V. H., & Melero, N. (2020). Difficulties and reasonable adjustments carried out by Spanish faculty members to include students with disabilities. *British Journal of Special Education*, 47, 6–23.

- Moswela, E., & Mukhopadhyay, S. (2011). Asking for too much? The voices of students with disabilities in Botswana. *Disability & Society*, 26(3), 307–319. <https://doi.org/10.1080/09687599.2011.560414>
- Naumova, T. A., Vytovtova, N. I., Mitiukov, N. W., & Zulfugarzade, T. E. (2017). Model of distant learning educational methods for students with disabilities. *European Journal of Contemporary Education*, 6(3), 565–573.
- Nerur, S. P., Rasheed, A. A., & Natarajan, V. (2008). The intellectual structure of the strategic management field: An author co-citation analysis. *Strategic Management Journal*, 29(3), 319–336. <https://doi.org/10.1002/SMJ.659>
- O'Connor, U., & Robinson, A. (1999). Accession or exclusion? University and the disabled student: A case study of policy and practice. *Higher Education Quarterly*, 53, 88–103. <https://doi.org/10.1111/1468-2273.00114>
- Öztürk, O. (2021). Bibliometric review of resource dependence theory literature: An overview. *Management Review Quarterly*, 71(3), 525–552.
- Pritchard, A. (1969). Statistical bibliography or bibliometrics. *Journal of Documentation*, 25(4), 348–349.
- Seale, J., Geogerson, J., Mamas, C., & Swain, J. (2015). Not the right kind of ‘digital capital’? An examination of the complex relationship between disabled students, their technologies, and higher education institutions. *Computers & Education*, 82, 118–128. <https://doi.org/10.1016/j.compedu.2014.11.007>
- Senge, J. C., & Dote-Kwan, J. (1998). Responsibilities of colleges and universities to provide print access for students with visual impairments. *Journal of Visual Impairment & Blindness*, 92(5), 269–275. <https://doi.org/10.1177/0145482X9809200505>
- Stetieh, H. (2023). Exploring the University of Jordan campus: Is it accessible to persons with visual disabilities? *Open House International*. Advance online publication. <https://doi.org/10.1108/OHI-04-2022-0109>
- Shuayb, I. (2020). Identifying accessibility barriers at university built environment: Findings from the University of Kent. In *Inclusive University Built Environments* (pp. xx–xx). Springer, Cham. https://doi.org/10.1007/978-3-030-35861-7_5
- Thomas, L. (2016). Developing inclusive learning to improve the engagement, belonging, retention, and success of students from diverse groups. In E. M. Shah, A. Bennett, & E. Southgate (Eds.), *Widening higher education participation: A global perspective* (pp. 135–159). Elsevier.
- Van Eck, N. J., & Waltman, L. (2010). Software survey: VOSviewer, a computer program for bibliometric mapping. *Scientometrics*, 84(2), 523–538. <https://doi.org/10.1007/s11192-009-0146-3>
- Wai Kin Lau, Daniel Chi Wing Ho & Yung Yau (2016). Assessing the disability inclusiveness of university buildings in Hong Kong, *International Journal of Strategic Property Management*, 20(2), pp.184-197.

- Williams, S., Rooij, V., & Zirkle, K. (2016). Balancing pedagogy, student readiness and accessibility: A case study in collaborative online course development. *The Internet and Higher Education*, 28, 1-7. <https://doi.org/10.1016/j.iheduc.2015.08.001>
- Wilson, K., Getzel, E., & Brown, T. (2000). Enhancing the post-secondary campus climate for students with disabilities. *Journal of Postsecondary Education and Disability*, 14, 37–50.
- Zhu, J., & Liu, W. (2020). A tale of two databases: The use of Web of Science and Scopus in academic papers. *Scientometrics*, 123, 321–335.