Workplace Disability: A Retrospective Evaluation using Bibliometric Analysis

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ABSTRACT
Workplace disability has a great impact on the outcome of employee. Therefore, the field of workplace disability has received increasing attention and is one of the least researched as well as most poorly defined area of human resource management, and it has an enormous effect on companies that hire staff. The present study presents a bibliometric examination and visualization of the workplace disability research discipline along with a comprehensive review of the literature stemming from the database of Scopus. Using visualization tools, we look at a variety of influential authors, organizations, countries, and keywords in detail. Following this, the main resources and locations in the workplace where employees with disabilities work are located in order to identify the most critical research topics using citation analysis and reference co-citation analysis. This research paper will help researchers as well as practitioners who are interested in workplace disability in staying up to date on the most relevant current research and investigate fresh avenues of inquiry.

Keywords: Workplace disability, Discrimination, Bibliometric analysis, Citation analysis, Co-citation analysis.

INTRODUCTION
The term “workplace” is used to describe any location where employees must be or are present in order to perform their job duties, and which is either directly or indirectly supervised by the employer. Examples of commercial structures include offices, factories, farms, building sites, ships, and private residences. PwD employment is facilitated through a coordinated effort that addresses the various needs of people with disabilities, the work environment, the organisation, and legal obligations. In contrast to a disabled individual, a person with a disability is defined as an individual whose prospects for obtaining, returning to, retaining, and advancing in suitable employment are significantly diminished as a result of a duly recognised physical, sensory, intellectual, or mental disability.

K. Vornholt et al. (2017) examined the relationship between disability and employment. The study has three goals. First, since disability definitions vary, this study characterised disability from an organisational standpoint. Second, the study emphasized the regulations enacted in Europe and North America to accommodate persons with disabilities. Third, study revealed employment hurdles and enablers. Both barriers and enablers are sides of the same coin. An employer may be willing to recruit an employee with disabilities or may be reluctant to do so. Thus, an employer’s attitude might either hinder or facilitate the hiring of a disabled employee. Studies show that disabled persons need employment because it minimizes their isolation induced by their handicap. Studies show that disabled persons need employment because it minimizes their isolation induced by their handicap. Work is vital for disabled persons and has a good influence on their health, according to research (Saunders and Nedelec, 2014). When workplace accommodations and job criteria are not satisfied, employment is not always seen as a benefit. Job needs have expanded significantly, requiring social skills to communicate with coworkers. According to reports, this has made it more difficult for employees with impairments to accommodate and do their jobs. Research has linked work inequalities and organisational injustice to sociocultural, structural (lack of accessibility resources), and systemic (a lack of understanding of handicapped people’s rights) factors.

Rationale for the Study
There are a large number of young people and adults in the workforce who have unrecognized abilities, and their potential is overlooked because they are only considered as having disabilities rather than abilities. Disabilities are defined as follows by the World Bank in a report published in 2011: “Disability is a temporary or permanent part of the human condition.” Every individual, whether due to a disease, an accident, or old age, is found to have a temporary or permanent partial disability or impairment that interferes with their ability to function and meet the demands of their environment.
organization’s work requirements. It has long been considered the most crucial and important issue facing society when it comes to employing persons with disabilities.[11] Promotion of equitable employment opportunities has been placed on the ILO’s agenda more prominently in recent years. In an attempt to increase work and training options for disabled persons, the International Labor Organization has also said that there is an increasing need to boost job prospects.[11] Despite the fact that some employees have disabilities, various organisations have begun to see the idea of hiring an employee with a disability as advantageous and profitable.[2] A study done by the World Report on Disability found that firms prefer to hire disabled persons because they frequently possess talents, stay loyal to their employers, and have minimal absenteeism. Fewer than 48% of people with disabilities are working, compared to 80% of able-bodied people (Office for National Statistics, Policy Department A: Economic and Scientific Policy, 2017).[12]

Disability is a problem in the workplace. The foundation for discrimination can be based on actual or perceived physical or mental disabilities, perceived disability, or affiliation with an individual who is physically challenged. Biased Recruitment, job assignments, promotion, pay perks, leave, layoff, and dismissal are all examples of how employers interact with disabled employees in various facets of their jobs. Employment of people with disabilities, particularly women, has been hampered by discrimination (Naami, A. (2015)[13] found that the majority of women with disabilities are discriminated against and live in poverty, that the majority of women with disabilities are unemployed, and that the majority of women with disabilities who are employed work in marginal and menial jobs.

Recruiting and retaining people with special needs may have positive consequences for the organisation. In their research, Buciuniene and Kazlauskaite (2010)[14] found that despite the problems that companies have in employing individuals with special needs, such employees can be extremely dedicated to their jobs and devoted to their employers.

An examination of workplace illness and disability disclosure from the perspective of those who have them offers a prime opportunity for bringing new concepts and concepts for new company practises and employee policies into existence. According to Brown et al. (2009),[15] disability researchers have overlooked the importance of self-identification. Also, the fact that several other author like (Shier et al., 2009)[16] agree that there has been a lack of research on the various viewpoints of disabled individuals and their experiences of attempting to enter and stay in the workforce has been noted. [15] Even numerous previous studies have pointed to the need of telling intimates and casual sex partners about one’s sexual orientation.[18-22]

Despite this, over the last few decades, the perception of PwD and their rights has undergone a paradigm shift, and an emphasis has been placed on equalising opportunities. While looking into the history of the disability rights movement, Mehrotra (2011)[23] discovered that their rise was due to the advent of a crucial piece of legislation known as the Persons with Disabilities (Equal opportunities, Protection of Rights, and Full Participation) Act, which was passed in 1995. Some were dismayed when they learned that this measure was supported by the medical understanding of disability.[24] A huge step forward was taken in December 2006 when the UN General Assembly adopted the Convention on the Rights of Persons with Disabilities (CRPD). This was accepted by the majority of UN member nations, including India. The Rights of Persons with Disabilities (RPWD) Act, 2016, implements the UN Convention on the Rights of Persons with Disabilities (CRPD) and supersedes the Persons with Disabilities Act (PwD Act), 1995. Centred on social and civil rights models of disability, the legislation pushes for equal employment opportunities for PWDs and highlights the use of various policies to empower the organised sector, including implementing policies such as affirmative action in the public sector and providing incentives for the private sector.

However, statistics show that people with disabilities have lower employment rates than the general population, despite all of these efforts and attempts.[25-26] A higher proportion of people with disabilities (PwD) are self-employed as compared to non-disabled workers. In India, around 36 percent of the population is employed, with 23 percent working as cultivators, 31 percent as agricultural labourers, 4 percent in domestic industries, and 42 percent working in other occupations (Ministry of Statistics and Programme Implementation, 2016). In the unorganised sector, the vast majority of employed PWDs are working in non-wage (self-employed) and wage employment roles (sub-contract employees, home-based workers, and so on) (World Bank, 2007). The unorganised sector is frequently described as a “easy-entry sector into which workers can enter to earn some money rather than earning nothing”. As a result of increasing job and income insecurity among workers,[27] as well as working in unsafe environments and unregulated conditions with limited opportunities for advancement, this trend toward informalization of labour markets has been a subject of concern. Despite the fact that some contemporary organisations are making concerted efforts to enhance disability employment and inclusion, people with disabilities (PwD) account for only about 1 percent to 2 percent of their total workforce. This is pitiful and minuscule in comparison to the enormous number of unemployed persons with disabilities,[28] who continue to experience difficulties getting jobs in the organised sector. [29] there have, however, been only few research, to the best of our knowledge, that have presented the rules of scientific
activities in relation to the workplace disability sector, which is concerning. As a result, the following two research issues about the topic of workplace disability are addressed in this paper:

- **What is the present state of the area of workplace disability, including the trend of publications, the types of publications, the top journals, countries, institutions, renowned authors, and the co-occurrence network of categories, in terms of research and practice?**

- **What are some of the managerial implications in the field of workplace disability that organizations might want to look into in the near future?**

To address the two problems raised above, the bibliometric method is used to examine the structure and distribution of knowledge in the subject of occupational disability in order to provide a thorough overview and visualisation. It would be advantageous for researchers interested in workplace disability to gain a quick understanding of the present state of the field and identify prospective research needs. After acquiring, examining, and cleaning 231 academic papers with a strong connection to workplace disability, they were selected for this study. Then, based on the 231 articles, the development route of the area of workplace disability is provided, including the publication trend, publication type, renowned authors, top journals, top countries, affiliations, and co-occurrence network of categories. Additionally, citation analysis can be used to determine the top fifteen publications based on the number of local citations. Additionally, reference co-citation analysis can be used to identify some interesting future research prospects in a certain topic based on the references to published articles. The analysis of citations and reference co-citations is based on two visualisation tools: biblioshiny [30] and VOSviewer (Van Eck and Waltman 2010). Finally, based on prior literature reviews and the results of bibliometric analysis, relevant study gaps and future research possibilities are indicated.

**DATA SOURCE AND METHODOLOGY**

The data source is critical, when undertaking bibliometric analysis. The Scopus core collection was used to obtain data for this study, which comprises around 18,000 high-quality publications and 1.3 billion cited references beginning in 1900. The approach for retrieving literature was advanced search, and the exact strategies are listed below.

- **TITLE-ABS-KEY ("Disability" AND "Workplace") AND (LIMIT-TO (OA,"all") AND (LIMIT-TO (SUBJAREA, "SOCI") OR LIMIT-TO (SUBJAREA, "PSYC") OR LIMIT-TO (SUBJAREA, "BUSI") OR LIMIT-TO (SUBJAREA,"ARTS") ) AND (LIMIT-TO (DOCTYPE, "ar") OR LIMIT-TO (DOCTYPE, "re") ) AND (LIMIT-TO (LANGUAGE,"English") ) AND (LIMIT-TO (SRCTYPE,"j") )**

4,959 publications were retrieved following the retrieval method as shown in Figure 1. However, in spite of their intrinsic disadvantages, retrieval systems generate noise in the raw data of the literature. Therefore, the irrelevant and repeated articles were removed from the raw data. In order to properly clean the raw literature data, after searching through Scopus on September 3rd, 2021, 231 papers relevant to workplace disability were retrieved. Because these publications are peer-reviewed and scientific works, it should be mentioned that these 231 publications included literature reviews. Reviews of previous studies simply give a synopsis of previous findings, which could be potentially noisy in the current study’s data. Though they play a significant role in increasing information sharing and development in the workplace disability sector, literature reviews are only a minor component of knowledge transmission. Their contributions to the growth route of the field of workplace disability should not be overlooked, as they have helped to guide the research in this area. Second, these reviews were largely performed in the workplace by academics from many disciplines related to disabilities, including topics like chronic physical illness and the workplace disparity. Thus, literature reviews are evaluated while using literature data to assure integrity.

A visualisation tool was then used to visualise findings on workplace disability, and the results were conveyed to their target audience. Van Eck and Waltman’s bibliometric mapping tool, VOSviewer, is freely available (2010). The international cooperative collaboration network is visualised using VOSviewer, which is applied to display mapping analysis and density visualisation of the keywords. For analysing of bibliography results, Cuccurullo and Aria’s R-based tool, Biblioshiny, was released in 2017.

**Current Status in the Field of Workplace Disability**

This section summarizes the current state of the field of workplace disability, including the publishing trend, publication types, top journals, and subject area within the field. Figure 2 depicts the number of publications and citations in the subject of employment disability from 1993 to 2021. Additionally, certain intriguing results can be seen based on the number of publications. More precisely, the number of publications in the field of employment disability increased marginally from 2008 to 2010, but significantly increased from 2016 to 2019. Additionally, from 2020 to 2021, there was a decline. Due to the pandemic’s initial stage, it has impacted people’s working lives, and an increasing number of scholars have ceased work as a result of these emergency events, as they are unsure of how to cope with the current situation. As time passes, businesses are attempting to recover and return to
normalcy. Additionally, as illustrated in Figure 2, the number of citations grew in 2001 and then fell.

The subject category co-occurrence analysis method is a powerful tool for identifying the disciplines that have contributed to the development of a specific knowledge domain (Liu et al., 2015). The co-occurrence network of categories in the field of disability, as depicted in Figure 3, was derived from the Scopus database. The findings reveal that the 231 publications have been classified into 11 categories. A circle (category) represents the frequency of a particular part of 231 publications classified into the same category, and each line represents a co-occurrence relationship between a specific publication classified into different subject categories, as shown in Figure 3. The top four categories in the field of workplace disability are humanity, psychology, art and humanity and Management Science, Business and Economics, respectively. Workplace disability is an interdisciplinary area, as these results show. Much workplace disability researches have been conducted by management science and psychology scholars from the point of view of the disabled employee rather than that of the managers. Thus, it may be used in tandem with other promising ideas, such as hospitality and business. Apart from that, the six types of 231 publications that have been downloaded, including articles, proceeding papers, reviews, editorial materials, book reviews, and book chapters. The findings also shown that the vast majority of publications (207, 89.6 percent) are articles and preceding papers, and just a small percentage (10.4 percent) 24 are the review papers.

**Most Productive Journals**

There are 155 journals and proceedings devoted to workplace disability. The top fifteen journals and proceedings in the topic of workplace disability are listed in Table 1. The International Journal of Disability Management is ranked first with seven publications. The result reveals that the International Journal of Disability Management held a prominent position in the field of workplace disability management. Additionally, Safety and Health at Work, Scandinavian Journal of Disability Research, and Work Employment and Society are the top four journals in terms of publications, each with six. Table 1 also shows the Total Citation Score of the top 15 journals and proceedings on workplace disability. There are three journals whose TC (Total Citation) exceeded 100 including Autism, Journal of Autism and Developmental Disorders and Archives of Neurology. The results indicate that the publications about workplace disability included in the three journals with higher TC have great communication and integration with other domains. It is interesting to note that according to the number of citations, Archives of Neurology was respectively higher ranked with 480 citations. These results reveal that the articles published in the International Journal of Disability Management and Autism significantly aided in the advancement of knowledge and progress in the field of workplace disability.

Subsequently, one of the most talked-about topics during authors’ discussion was the study’s objective, which was to examine overall impact factor of the most influential journals.

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**Figure 1:** Flowchart for recording the relevant papers from the above searches. Adapted from (Moher et al. 2009).

**Figure 2:** Yearly publication and Average citations per year of articles published on workplace disability.

**Figure 3:** Categories in the field of workplace disability.
Influence of Authors

Author analysis based solely on the number of publications may be ineffective at revealing authors’ contribution. It is critical to identify core authors who not only have strong publication credentials but also make significant contributions to the discipline’s development. Therefore, Price’s Law is used in the present study to identify key authors in a particular field (e.g., Wang 2018; Zhong 2012). According to Price’s Law (Price 1965), approximately 75% of scholars published only one article, with 10% of scholars authoring half of these articles.

While analysis based on the number of publications might be sufficient to show the contributions of authors, it may not be an effective way to analyze writers. According to the data collected, there are 714 writers who have published papers in the field of workplace disability. BRUYRE SM was the most prolific author, contributing to five publications. Apart from Dmitry Ivanov, the top four prolific authors were: BALDWIN S (2), COSTLEY D (2), and MALZER V. (2). Additionally, Table 2 lists the top 15 most influential authors based on their overall number of citations. AMATO MP, PONZIANI G, SIRACUSA G, SORBI S, and BALDWIN S are the top five authors who have made significant contributions to the topic of employment disability. As shown in Table 2, the findings indicate that, while AMATO MP is not a prolific author in terms of publications, he has made a bigger contribution to the subject of workplace disability development. Additionally, AMATO MP is the only author with a global citation count greater than 400, indicating that his publications had a broader positive impact on other fields.

Here it is concluded that, in the field of workplace disability, year 2014 became the most productive year from the authors perspective as most of the researches have been published in this year.

Co-Authorship of Authors

Collaboration networks can be built up for a variety of different units of analysis, including researchers, research institutions, and countries. In the following discussion, we are referring to researchers as the unit of analysis (e.g., Newman, 2001a, 2001b, 2001c). Here authors want to emphasize however, that the discussion is applicable to other units of analysis as well. Publications with only one author do not provide any information about their co-authorship. As a matter of convenience, author is assuming that each publication included in the analysis has at least two authors in order to keep things simple.

In addition, the tool authors use to perform co-authorship analysis i.e VOS viewer. Which helps to identify the collaborative relationships among various core authors in

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Table 1: Top 15 Journals and Proceedings in the field of Workplace Disability.

| Sources                                      | Articles | TC | g-Index | h-Index | JIF   |
|----------------------------------------------|----------|----|---------|---------|-------|
| International Journal of Disability Management | 7        | 51 | 5       | 7       | 0.29  |
| Safety And Health at Work                    | 6        | 49 | 4       | 5       | 2.707 |
| Scandinavian Journal of Disability Research  | 6        | 24 | 4       | 4       | 0.75  |
| Work Employment and Society                  | 6        | 40 | 2       | 4       | 5.116 |
| Sustainability (Switzerland)                 | 5        | 20 | 3       | 4       | 3.48  |
| Autism                                       | 4        | 115| 3       | 3       | 4.609 |
| Disability And Society                       | 4        | 52 | 2       | 2       | 1.852 |
| Rehabilitation Psychology                    | 4        | 83 | 4       | 4       | 2.564 |
| Frontiers In Psychology                      | 3        | 21 | 2       | 3       | 2.99  |
| Human Resource Management                    | 3        | 81 | 3       | 3       | 0.29  |
| International Journal of Developmental Disabilities | 3      | 17 | 2       | 2       | 0.973 |
| Journal Of Autism and Developmental Disorders | 3   | 148| 3       | 3       | 4.291 |
| Journal Of Intellectual Disability Research  | 3        | 43 | 2       | 2       | 2.424 |
| Journal Of Occupational Medicine and Toxicology | 3     | 78 | 3       | 3       | 2.646 |
| Archives Of Neurology                        | 1        | 480| 1       | 1       | 18.3  |
the field of workplace disability among influential research groups. The collaborative network can be classified into numerous distinct groups, each with a distinct color, according to the degree of collaboration, as shown in Figure 4. The line between the circles refers to the cooperation of the core authors. The thickness of the link between an author’s name and a node indicates the number of publications the author has made and the strength of their collaboration. The author network has 716 nodes and 37 links, which means that only 37 co-authored relationships have been discovered among the 716 authors with the most reputed publications. As shown in Figure 4, most of the researches are done on an individual basis with short-term or no long-term collaborations, and only a few researchers have high-intensity co-operations. The core author in a given group may also have strong collaborative contacts with those in the same group. Lennox N., Durvasula S., Iacono T., Torr J.J, Tracy J. and Trollor J. cooperated in the red group mostly and have strong collaborative relationship on the other hand, Karvala, Bartram T., and Nadvrouzi have the weak collaborative relationship.

**Affiliation, Country Statistics and Analysis**

In this section, authors examined the researcher memberships in order to gather information about the most significant region and country in the world. It is possible to have some level of control or influence over the academic policies, standards, and programmes of an affiliated school (also known as an affiliated college, federated school, or federated college) if the institution has a formal collaborative agreement with another, usually larger institution that has some level of control or influence over its academic policies, standards, and programmes. According to the data in Table 3, out of 570 institutes, authors have taken 15 most productive institutes in the field of workplace disability. As well as among the affiliations with four or more documents, Curtin University, the University of California, the University of Calgary and the University of Leuven emerged as the most productive academic institutions in the field of workplace disability.

The data collected shows that the organisation information for the author’s organisation was obtained using Biblioshiny Software. Table 4 for the top fifteen organisations in the field of workplace disability and their number of publications. The findings show that worldwide, this research has been done, including Iran, Italy, Finland, and so on. of the 12 publications that the curtin university in Australia has produced, is second, the University of California, Cornell University, the University of Calgary, and the University of Leuven to round out the top five.

Additionally, between 1993 and 2021, an increasing number of Australian institutions (e.g. Curtin university, Autism Spectrum Australia (Aspect), Deakin University, And Australian National University) became active in conducting workplace disability research. as a result, Australian institutions placed a greater emphasis on workplace disability in order to provide managerial implications.

**Most Productive Countries**

The impact of various countries on workplace disability research is depicted in Table 3. It displays the top 15 countries in terms of citations, as well as the average number of citations. With 169 publications and 627 citations, the United States clearly ranked first. This research demonstrates the country’s global prominence in the field of workplace disability studies.

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**Table 2: Top 25 Influential Authors based on Total Citation.**

| Sl. No. | Author(s)      | $h$-index | $g$-index | TC   | NP    | PY_start |
|---------|----------------|-----------|-----------|------|-------|----------|
| 1       | Amato MP       | 1         | 1         | 480  | 1     | 2001     |
| 2       | Ponziani G     | 1         | 1         | 480  | 1     | 2001     |
| 3       | Siracusa G     | 1         | 1         | 480  | 1     | 2001     |
| 4       | Sorbi S        | 1         | 1         | 480  | 1     | 2001     |
| 5       | Baldwin S      | 2         | 2         | 205  | 2     | 2014     |
| 6       | Costley D      | 2         | 2         | 205  | 2     | 2014     |
| 7       | Bruyère SM     | 4         | 5         | 136  | 5     | 2004     |
| 8       | Warren A       | 1         | 1         | 131  | 1     | 2014     |
| 9       | Evans-Lack S   | 1         | 1         | 128  | 1     | 2016     |
| 10      | Knapp M        | 1         | 1         | 128  | 1     | 2016     |
| 11      | Albiston CR    | 1         | 1         | 104  | 1     | 2005     |
| 12      | Pinder R       | 1         | 1         | 79   | 1     | 1995     |
| 13      | Malzer V       | 2         | 2         | 78   | 2     | 2014     |
| 14      | Bruyère S      | 1         | 1         | 76   | 1     | 2014     |
| 15      | Dahl AA        | 1         | 1         | 76   | 1     | 2014     |
The United Kingdom came in second place with 104 publications, followed by Australia with 80. It’s worth noting that Italy had the second highest number of citations (493), but only 12 publications. Table 3 was created to highlight the 15 highest-ranked countries’ contributions to workplace disability research. And it is proved that Italy has the highest average number of citations (246.5).

The United States was clearly the country with the best publications. This shows that the country has been at the top of the world’s workplace disability studies since year 1993, followed by UK having number of publications in three digit Figure 5.

Consequently, Countries in Eastern Europe were a little behind, but they still kept up with those in Western Europe and North America. This led us to look into the differences in research on disability inclusion at work overtime and space, especially because there are not as many bibliometrics studies on this topic. Perhaps other authors may look into this phenomenon to increase their level of awareness pertaining to workplace disability studies in future.

Keyword Analysis
The evaluation of an exploration of the author’s keyword helped to study the subject-related flow of knowledge. ‘Outstanding document content or the relative of the paper’ is the term used by Strozzi et al. (2017)[41] and his colleagues to describe it. Consequently, authors have used this type of analysis to see how studies on workplace disability have evolved over time for different organisations.

Table 3: Countries with Highest Citations.

| Sl. No. | Country         | Number of Publication (NP) | Total Citations (TC) | Average Article Citations | Rank (NP) |
|---------|-----------------|-----------------------------|----------------------|---------------------------|-----------|
| 1       | USA             | 169                         | 627                  | 33                        | 1         |
| 2       | United Kingdom  | 104                         | 442                  | 40.2                      | 2         |
| 3       | Australia       | 80                          | 355                  | 32.3                      | 3         |
| 4       | Canada          | 65                          | 53                   | 17.7                      | 4         |
| 5       | Sweden          | 30                          | 39                   | 19.5                      | 5         |
| 6       | Spain           | 27                          | 49                   | 24.5                      | 6         |
| 7       | Norway          | 25                          | 98                   | 49                        | 7         |
| 8       | Germany         | 18                          | 100                  | 33.3                      | 8         |
| 9       | Italy           | 12                          | 493                  | 246.5                     | 9         |
| 10      | Ireland         | 11                          | 60                   | 20                        | 10        |
| 11      | Netherlands     | 10                          | 39                   | 39                        | 11        |
| 12      | Ethiopia        | 8                           | 44                   | 44                        | 12        |
| 13      | Japan           | 6                           | 21                   | 21                        | 13        |
| 14      | Morocco         | 5                           | 31                   | 31                        | 14        |
| 15      | Turkey          | 3                           | 39                   | 39                        | 15        |

The keyword defined by author further clarified that measuring the quality of the paper and determining the relative amount of text. This section assisted in the topic-specific research. A multidisciplinary approach was also used in the current study to examine the latest developments in the field of disability research. To generate new keywords for the authors, we used the author network extracted from a library of 231 similar papers and the text from each author’s document in VOSviewer. A minimum of five occurrences of the targeted keywords are required for optimal performance. The authors used 729 keywords, but only 23 keywords, 4 clusters, and 123 linked together were able to reach the cutoff point. Disability was the most frequently used co-occurring keyword, with a frequency of 58%. When compared to other keywords, ‘employment’ has a high degree of connection strength (27). Color-coordinated keywords are linked to a single group. The term ‘workplace disability’ can be interpreted in a variety of ways, including but not limited to intellectual disability, autism, mental health, people with disabilities, and discrimination (Hurley, 2010).[42] Moreover, as demonstrated in Figure 5, There has been change in workplace disability research themes throughout time. During the last two decades, three main subjects in the field of workplace disability were “disability,” “employment,” and intellectual disability. Following that, workplace and discrimination study started to become popular topics of research. This shows that scholars not only concerned with incorporating people with disabilities, but also interested in addressing workplace discrimination, which causes employees to have lower satisfaction that needs to be rectified by employers.
Table 5: Top 15 papers.

| Title of the paper | Author          | Year | Local Citations | Global Citations | Citation Per Year |
|--------------------|-----------------|------|-----------------|------------------|-------------------|
| Cognitive Dysfunction in Early-Onset Multiple Sclerosis | Amato MP | 2001 | 0 | 480 | 21.8182 |
| Employment Activities and Experiences of Adults with High-Functioning Autism and Asperger’s Disorder | Baldwin S | 2014 | 1 | 131 | 14.5556 |
| Global patterns of workplace productivity for people with depression: absenteeism and presenteeism costs across eight diverse countries | Evans-Lacko S | 2016 | 0 | 128 | 18.2857 |
| Bargaining in the Shadow of Social Institutions: Competing Discourses and Social Change in Workplace Mobilization of Civil Rights | Albiston CR | 2005 | 0 | 104 | 5.7778 |
| Bringing back the body without the blame: the experience of ill and disabled people at work | Pinder R | 1995 | 0 | 79 | 2.8214 |
| Perspectives on Disability Disclosure: The Importance of Employer Practices and Workplace Climate | Von Schrader S | 2014 | 1 | 76 | 8.4444 |
| Childhood and persistent ADHD symptoms associated with educational failure and long-term occupational disability in adult ADHD | Fredriksen M | 2014 | 0 | 76 | 8.4444 |
| The experiences and needs of female adults with high-functioning autism spectrum disorder | Baldwin S | 2016 | 0 | 74 | 10.5714 |
| Disabled students in higher education: Discourses of disability and the negotiation of identity | Riddell S | 2013 | 0 | 67 | 6.7 |
| Accommodating Employees with and Without Disabilities | Schur L | 2014 | 4 | 64 | 7.1111 |
| Psychosocial work-related predictors and consequences of personal burnout among staff working with people with intellectual disabilities | Kozak A | 2013 | 3 | 62 | 6.2 |
| Enhancing job-site training of supported workers with autism: A reemphasis on simulation | Bruyère sm | 2004 | 1 | 52 | 2.7368 |
| Occupational injuries among building construction workers in Addis Ababa, Ethiopia | Tadesse S | 2016 | 0 | 44 | 6.2857 |
| Bringing social identity to work: The influence of manifestation and suppression on perceived discrimination, job satisfaction, and turnover intentions | Madera JM | 2012 | 0 | 43 | 3.9091 |

Figure 5: Co-occurrence network of keywords about the field of workplace disability.

Citation Analysis and Reference Co-citation Analysis

This section describes the citation and reference co-citation analysis of 231 publications and their references. The results of citation analysis and reference co-citation analysis were obtained using Vos-viewer.

Citation Analysis

Citation analysis is a way to figure out how important and good an article, an author, or an institution is, based on how many times other people have used it. Authors have looked at the global citation of 231 articles and the local citations extracted from Scopus database.

Citation analysis is typically quantified using two indices: local citations and global citations. The first one indicates when additional publications have been cited by the 231-node network, while the latter shows the total number of references from different disciplines and fields of study.

Table 5 summarizes the top fifteen articles in the field of workplace disability based on local citations and their corresponding global citations. On the parameter of Global Citation Count, the paper titled ‘Cognitive Dysfunction in Early-Onset Multiple Sclerosis’ authored by Amato MP was having maximum citations i.e., 480 with an average citation per year of 21.8182; whereas on Local Citation count parameter, it was the paper titled ‘Accommodating Employees with and Without Disabilities’ which has received highest citations i.e., 4, with an average citation per year of 7.1111. Conclusively, it was the contribution of Amato MP (2001) to the subject of workplace disability which has garnered more interest from other disciplines and research fields.

Reference Co-Citation Analysis of Workplace Disability

In a reference co-citation mapping, nodes (references) are defined by a list of edges that refer to the references that appear in each of the maps.[43] Accordingly, reference co-citation refers to two documents that are both included in another...
Table 6: Top 20 keywords.

| Sl. No | Keyword               | Occurrences | Total Link Strength | Keyword                              | Occurrences | Total Link Strength |
|--------|-----------------------|-------------|---------------------|--------------------------------------|-------------|---------------------|
| 1      | Disability            | 58          | 51                  | Work                                 | 7           | 14                  |
| 2      | Employment            | 27          | 34                  | Disabilities                         | 6           | 4                   |
| 3      | Intellectual Disability| 17          | 9                   | Workplace Accommodation              | 6           | 6                   |
| 4      | Workplace             | 12          | 15                  | Diversity                            | 5           | 9                   |
| 5      | Discrimination        | 11          | 19                  | People With Disabilities             | 5           | 3                   |
| 6      | Autism                | 9           | 11                  | Supported Employment                 | 5           | 5                   |
| 7      | Inclusion             | 9           | 9                   | Accommodations                       | 4           | 5                   |
| 8      | Gender                | 7           | 8                   | Assessment                           | 4           | 2                   |
| 9      | Mental Health         | 7           | 9                   | Employability                        | 4           | 5                   |
| 10     | Stigma                | 7           | 9                   | Return To Work                       | 4           | 4                   |

publication’s references list, for example, co-citation analysis aids in recognising the growth and evolutionary journey of a particular sector or field. Since it is useful for academics who are interested in this topic to locate possible study possibilities through reference co-citation analysis, it is a good idea for researchers to discover such opportunities by doing a reference co-citation analysis. The three main approaches for co-citation analysis are multidimensional scaling, clustering, and factor analysis. Visualization of Similarities Mapping (VOS) can be utilised for multidimensional scaling, as explained by Waltman, Van Eck, and Noyons (2010). For comparison, the VOSviewer software may be used to do both mapping and clustering to obtain an image of the bibliometric network topology.

As a result, VOSviewer was used to create a network of co-cited references in the field of occupational disability. Five clustered groups were identified, and through reference co-citation analysis, the possible research prospects associated with each clustered group may be evaluated. As illustrated in Figure 6, 64 references out of 3940 were cited more than twice in the publications and Schur L (2014) is the largest node, indicating that it has received the most co-citations in the field of workplace disability to date. This study was published in human resource management in 2014 and made a significant addition to the field of workplace disability’s development. Based on its local citations, it was considered one of the most popular and prestigious publications on employment disability.

Additionally, Figure 6 demonstrates that the 616 references may be classified into five distinct groups in different color, each of which represents well-connected references in the field of occupational disability research.

DISCUSSION

Key Findings

As noted above, this section summarizes the findings from all of the research objectives. As descriptive research revealed a trend in the current topic of publications, authors used bibliometrics to identify the most intriguing authors and journals. Additionally, the citation and Co-citation reviews revealed citation patterns and papers that were actually relevant. The knowing structure of the research topic has been identified through the use of CoC network analysis. The following results were achieved in compliance with the above-mentioned primary study objective.

It has been found that the study of workplace disability has been rapidly increasing from 2016 to 2020. The Curtin University in Australia came in first place with twelve papers; the University of California and Cornell University came in second and third place with ten and eight articles, respectively.

According to the study, Amato MP, Ponziani G, Siracusa G, and Sorbi S are the top writers in the subject of workplace
disability, each receiving 480 citations, and are also the most influential authors in this research arena, as determined by an author-wise analysis.

The authors evaluated the journal’s contribution and recognition in the field. With seven articles, ‘International Journal of Disability Management’ is leading, followed by Journals of ‘Safety and Health at Work, Scandinavian Journal of Disability Research’, And ‘Work Employment and Society’ with six publications each in the area which placed them higher in order.

Disability, Employment, Intellectual Disability, Workplace, and Discrimination are the most often used keywords in the field of workplace disability, with occurrences of 58, 27, 17, 12, and 11 times, respectively.

Countries such as the United States, Italy, and the United Kingdom are more powerful, with 627, 493, and 442 citations, respectively, than Morocco and Japan, with 31, and 21 citations, respectively.

Theoretical and Managerial Implications
The authors are pretty sure that this study will definitely be instrumental to managers along with policy makers in increasing their acquaintance with the phenomenon of workplace disability, the most relevant concerns and the prominent barriers which employees experience in the organisational context. This research clearly establish the ground that the modern corporate houses should place greater emphasis on issues concerning people with disabilities, handicapped persons returning to work, disability, diversity, supported employment, and workplace accommodations for disabled employees (Figure 5). This is an established fact that disability is not a congenital disorder. However, this could be due to a variety of contextual circumstances, and for individuals with disabilities, employment is critical since it alleviates the isolation that is frequently associated with impairment.[2-4] However, employment is not always seen positively for such individuals.[6] Job requirements at the workplace, in particular, have expanded significantly, necessitating the development of social skills necessary for interaction with diverse coworkers. This appears to have exacerbated the challenge of accommodating and performing well for those with special needs at work.[6] Despite the numerous challenges associated with recruiting personnel with special needs, such employees have proven their mettle in exemplifying their utmost dedication and devotion towards their jobs as well as the organisation. (Kazlauskaitė, 2010).[14] As a result, the organisation should hire persons with disabilities in addition to their general counterparts. Two researchers conducted a study to prioritise PwD, in which organisations stressed the importance of taking into account the sensitivity and motivation levels of PwD-related needs and establishing communication forums in order to ensure accessibility at test and interview centres during special recruitment drives for PwD, as well as to address PwD concerns.[6] Similarly, sensitization training is intended to help all stakeholders overcome their preconceived notions and biases.[46]

Resultantly, anti-discrimination policies of the organisation should also be scrutinized in order to prevent rising incidents of workplace harassment. To have the greatest impact, senior management should draft such inclusive policies that promote a respectful work environment for all. Apart from this, Managers necessarily need to replan and resize their workstations taking into account the limitations and potentials of the human operator in a variety of contexts and under the most extreme working conditions. Ergonomics can assist employers in accommodating disabled employees with a variety of disabilities, ranging from muscular-skeletal disabilities to chronic diseases such as lupus and multiple sclerosis, in order to avoid violations or transgressions of rules and laws embedded in complex work systems’ relationships. Managers should also recognise that intellectually disabled individuals, particularly those with autism, were being overlooked for jobs despite possessing the necessary knowledge and intellect. As a result, businesses should consider requiring training for all employees, with and without disabilities, particularly those in management or supervisory roles. The primary objectives of this training should be to increase people’s understanding and empathy for the challenges their colleagues may face, as well as to reduce the stigma associated with disability.

The current study’s findings indicate that, despite the fact that organisations have methods for recruiting and anti-discrimination regulations, gaps persist. According to the present research, sometimes, individuals with disabilities such as acid attack survivors, people with autism and similar other extremities may be hesitant to apply for jobs they believe they are incapable of, leaving their talent and interest undiscovered. Businesses can begin developing a robust recruitment pipeline in part by partnering with organizations that advocate for people with disabilities. Senior-level disabled individuals should strongly consider serving as mentors or champions — both internally and externally. Organizations should foster a more supportive work environment and an inclusive atmosphere for this ‘specially-abled workforce’.

Limitations of the Current Study
Authors performed a literature evaluation on workplace disability and performed predefined inclusive search phrases to search the literature for relevant results on the theme only which yielded a total of 231 papers. If the authors would have used other keywords associated with workplace disability, then the outcomes would wider implications. Another challenge for this review is to develop criteria for exclusion.
Since the pool of studies accessible on the current theme was much smaller, consequently researcher had to incorporate non-peer-reviewed journals and books as well as all other document formats, which could have hindered the quality of the findings. The data so collected in the present study is based on only one database, thus there may be numerous databases dedicated to collecting coding patterns for bibliometric information. Also, the current research made use of only two software packages for data processing i.e., Biblioshiny and VOSviewer. Using some new softwares might present the findings in an alternative manner.

CONCLUSION

The research on workplace disability has increased progressively over time, as academics from all over the world have developed a keen interest in the various facets of workplace disability. Our study contributes significantly to the research on workplace disability theories and associated fields in a variety of businesses. To our knowledge, no such rigorous literature assessment is available in this field that combines review–based bibliometric and network analysis. As a result, this article adds a novel bibliometric approach to this field of study. From a practical standpoint, this analysis will serve as a foundation for comprehending the study area of workplace disability in various businesses, its recent trajectory, and the direction in which research is growing. Additionally, it identifies gaps in the existing body of knowledge and suggests appropriate avenues for further research on the subject. Compiling the presented understanding is a critical component of the SLR’s analytical section. While the study includes 231 papers extracted from the Scopus database, it also has some limitations. Significant research can be conducted in the future, given the availability of multiple datasets. The study explored numerous additional constraints encountered by researchers throughout the current investigation, which were discussed in detail in the preceding section. Despite these limitations, we believe our study stimulates discussion and encourages academics to conduct additional research in the field of employment disability and related fields.

CONFLICT OF INTEREST

The authors declare that there is no conflict of interest.

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