

# **Scientometric Review of Disability Inclusion in the Workplace**

**Neha Kumari**

Department of Management Studies  
Indian Institute of Technology Roorkee  
Roorkee, Uttarakhand-247667, India  
[kneha6157@gmail.com](mailto:kneha6157@gmail.com)

**Dr. Usha Lenka**

Department of Management Studies  
Indian Institute of Technology Roorkee  
Roorkee, Uttarakhand-247667, India  
[usha.lenka@gmail.com](mailto:usha.lenka@gmail.com)

## **Abstract**

There isn't enough research on people with disabilities (PWD), despite the rise in the number of PWD. Although the amount of information concerning disabilities in the workplace is growing, more research is still needed in this field. This study uses bibliometric analysis to discover the most recent publications. Bibliometrics analysis aids in quantitative and graphical analysis, which offers a better understanding of the literature. The authors conduct a bibliometric analysis of the author's publication, country, topics evolution, and keywords. This will be done using Biblioshiny and a web interface for bibliometric analysis based on the R package. This program was selected because it creates and presents bibliometric networks more skillfully. The most influential articles and journals are also identified in the study. This article will help the future researchers in identifying the authors for collaboration and important journals for sending novel articles.

## **Keywords**

Bibliometric, Quantitative, People with disabilities (PWD), Workplace, Topic evolution

## **1. Introduction**

Despite growing the numbers of people with disabilities (PWD), there is a lack of research in “organizational behavior”, “Human resource management,” and “Industrial and organizational psychology” (Stone & Colella 1996). The body of knowledge about disability in the workplace is increasing but still needs more research in this area. This study aims to find the current literature using bibliometrics analysis. Bibliometrics analysis helps in analyzing quantitatively and visually, which provides better insight into the literature. A literature review is done using Biblioshiny and a web interface for bibliometric analysis based on the R package (Moral-Muñoz et. al. 2020); authors will do the bibliometric analysis of the author's publication, country, themes evolution, and keywords. This software is chosen because it generates and visualizes bibliometric networks more effectively. The study produces a co-occurrence network with a higher keyword score and changing trends over time and a co-citation network of authors to find the common themes on which authors have worked.

Despite the passing of Anti-discrimination laws and ratifying the CRPD, the representation of PWD in the workplace is negligible because of stereotypes, prejudice, and myths (Heera & Maini 2019). The main barriers to their employment are the cost of workplace accommodations, the nature of employment, co-workers' attitudes, discomfort and unfamiliarity, and a lack of understanding of disabled people's effectiveness (Houtenville & Kalargyrou 2012). PWD in the workplace face discrimination like not being able to appoint due to disability (Shier et. al. 2009); rigid performance standards (Graffam, et. al. 2002), unwilling supervision, and rejection or delay in promotion (Schur et. al. 2005).

## 2. Problem Description

It is embedded in society's beliefs and culture to whom they include or exclude; PWD are the excluded ones. PWD are considered as not fit for the workplace, so giving them equal representation and making them independent is vital. People from various backgrounds benefit from workplace diversity because it broadens their viewpoints. Discrimination against PWD in the workplace is defined as inappropriate behavior towards employees or candidates with disabilities that seriously restrain their basic living activities. People have a negative attitude and believe that they suffer because of their past life's bad karma and they are seen as a liability or burden.

## 3. Literature Review

In December 2006, the UN passed the convention on the rights of people with disabilities (CRPD), and it is the first legally binding international instrument on those countries that have ratified it. The convention covers all types of disability; article 1 of the convention includes people with physical, mental, intellectual, or sensory impairments and whose participation is hindered because of stereotypes, societal, and environmental factors. CRPD also follows the social model of society (Kayess & French 2008).

Article 8 of the Convention expands on the social model to make governments take action to enhance awareness of disabled people's rights in order to counteract stereotypes, harmful practices, and prejudices (Kayess & French 2008). SDG's goals also promote disability inclusion, the "United Nations Convention on Rights of People with Disabilities (UNCRPD)", the International Labour Organization (ILO), and the World Health Organization (WHO) all talk about equal opportunities for PWD. Several steps have been taken globally for disability inclusion by international treaties, conventions, and laws by different nations, but the result is not much impressive (Heera & Maini 2019).

The employment rate of people with mental illness is significantly less than other types of disabilities (Shier et. al., 2009). Employers Surveys reveal that employers have the perception that PWD have the skills and capabilities to accomplish the task with effectiveness and efficiency, which affects the recruiting and performance evaluation (Stone & Colella 1996).

## 4. Methodology

The scientometric study was conducted to identify clusters depicting the research associations of the authors. The author co-citation analysis illustrates the similar content on which authors have worked and gained citations. Figure 1 visualizes the co-citation network of authors.

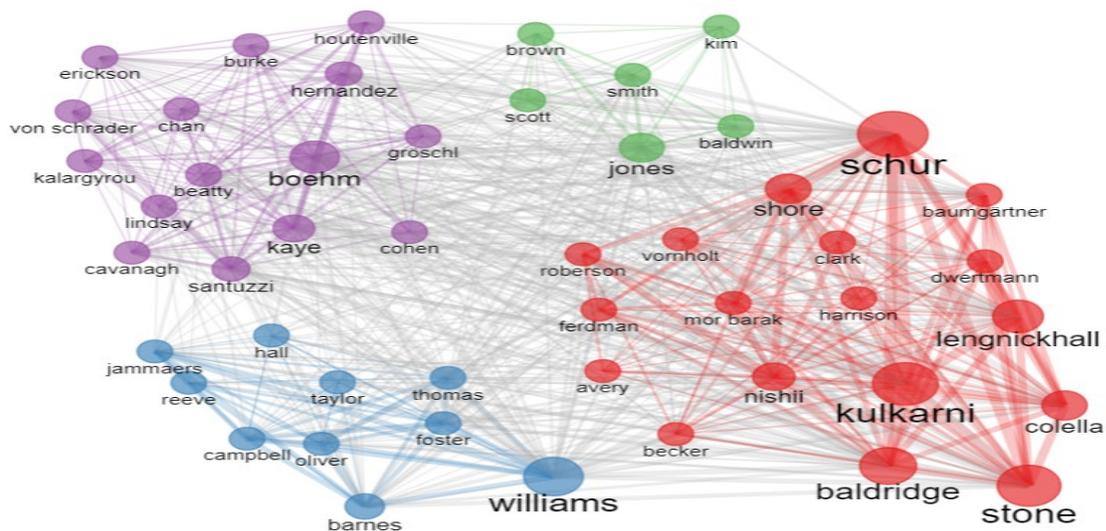


Figure 1. Author Co-citation Analysis

#### **4.1 Cluster 1 (Red): Disability diversity, employment, and treatment in the workplace**

Similar content on which authors have worked are Diversity, workplace inclusion, disability disclosure, discrimination, accommodation, and treatment of PWD in the workplace. Kulkarni, Stone, Baldrige, and Colella have discussed how superiors, subordinates, and coworkers treat PWD in the workplace and how stigma, stereotypes, and negative attitudes impact how they are treated. Stone & Colella 1996 is a highly co-cited article that gave the model of factors (Person, environmental and organizational factors) that affect the treatment of PWD in the workplace. Disability employment depends on the accommodation, help, and Support PWD requires to accomplish their job. Similar content includes job satisfaction, job security, and theories like social identity and self-categorization. PWD gets lower pay, job satisfaction, participation in decision-making, and career growth, and coworkers have a negative attitude (Kayess & French 2008). The employment rate for the disabled was significantly less in the beginning when the Americans with Disabilities (ADA) Act was the pass. However, later on, it increased when understanding regarding ADA coverage increased. Employment for PWD is essential for becoming financially independent and for social inclusion.

#### **4.2 Cluster 2 (Blue): Barriers, social inclusion, social model of disability, and intellectual disability**

Similar contents on which authors have worked are barriers or obstacles in PWD employment, social inclusion of PWD, and intellectual disability. The theory in this cluster discussed is the social model of disability, which gained popularity in 1990 (Shakespeare & Watson 2001). This theory emphasizes the skills and ability, not the shortcomings or inability. This cluster also includes the similar contents of authors like Struggle of PWD, policies, and practices, strategies, Corporate Social responsibility (CSR), and post covid strategies for PWD inclusion in the workplace like virtual or remote working. Disability inclusion is a social issue, and it is beyond the corporate social responsibility (CSR) lens Researchers have worked on social inclusion and discussed the social model of disability. Focus on inclusion of PWD started in the last few years, and there is a struggle for meaningful inclusion of the disabled; it requires more research in this field. The unemployment and underemployment of PWD are related to their social exclusion. Researchers have discussed the emergence of disability studies. People with intellectual disabilities are deprived of employment and inclusion in society. Social inclusion of PWD can make the pathway for their inclusion in the workplace.

#### **4.3 Cluster 3 (Green): Factors affecting hiring and gender discrimination**

The similar contents on which authors have worked are gender and disability, Neurodiversity (learning disability, autism spectrum disorder, and mental illness), and PWD's well-being. Individual and work performance factors significantly impact PWD hiring. Demand-side employment factor is also crucial for hiring PWD. A better understanding of legislation related to the employment of PWD, training, and accommodation increases the employment of PWD. This cluster discusses the disadvantages faced by women with disabilities; they face more discrimination than men with disabilities and women and men without disabilities. Smith and Kim both worked on gender and disability. This study discussed the factor for employment of autism spectrum disorder (ASD). Smith, Jones, and Scott have worked on factors that affect the hiring of PWD.

#### **4.4 Cluster 4 (Purple): Benefits of Hiring and retention of PWD, Workplace culture and climate, and Employer practices**

The similar contents on which authors have worked are the benefits of hiring PWD, workplace culture and climate, employer attitudes and practices, and the hospitality industry. The Co-citation network of Cavanagh, Groschl, and Houtenville has worked in the hospitality industry. PWD are positively related to inclusive corporate culture; corporate culture also impacts the hiring and retaining. The Co-citation network of Boehm, Santuzzi, Kaye, Kalargyrou, Burke, and Houtenville shows that these authors have worked on hiring and retaining PWD. The benefits of hiring PWD are improvement in profit, retention, reliability, punctuality, employee trustworthiness, company brand value, competitive advantage, and low. Co-citation networks of Cavanagh, Erickson, Groschl and Boehm have worked on HR practices. Disability inclusive HR practices integrate PWD into the workplace. Workplace culture and climate facilitator in disability diversity climate, which helps hire and retain PWD. Co-citation networks of Hernandez, Chan, Von Schrader, Erickson, and Houtenville have worked on employer practices and attitudes. Employers have concerns regarding costs related to the employment of the disabled and decreased productivity. Employer characteristics and policy & practices affect hiring and retaining PWD. Employers practice making inclusive culture and climate, including diversity and sensitization training, tackling stigma and discrimination, and job coaching and mentoring of PWD for their inclusion.

## 5. Results and Discussion

The scientometric study also revealed the most relevant articles in the field. The most relevant articles are highlighted in table 1.

Table 1. Most cited articles list

Paper	Journal	Total Citations	TC per Year	Major Findings
“A Model of Factors Affecting the Treatment of Disabled Individuals in Organizations”	“Academy of Management Review”	427	1.9365	This study gives model of factor (personal, environmental, and organizational factors) to finds out how people with disabilities are treated in the workplace.
“Perspectives on disability disclosure: the importance of employer practices and workplace climate”	“Employee Responsibilities and Rights Journal”	94	3.798	Study discovered the factors (employers, managers, and workplace climate) that influence the choice to disclose a disability.
“Status matters: The asymmetric effects of supervisor–subordinate disability incongruence and climate for inclusion”	“Academy of Management journal”	69	2.339	The lowest Leader-Member Exchange (LMX) was found in organisations with a disabled supervisor. Employees with physical disabilities had the best LMX interactions.
“Factors impacting employment for people with autism spectrum disorder: A scoping review”	“Autism”	51	3.4228	Environmental factors operate as both an obstacle and a promoter in the employment of people with ASD.
“A longitudinal study of employment and skill acquisition among individuals with developmental disabilities”	“Research in Developmental Disabilities”	51	1.5	Working in competitive employment increases the adapting skills which results in successful employment of developmental disabilities
“Job satisfaction, quality of work life and work motivation in employees with intellectual disability: A systematic review”	“Journal of Applied Research in Intellectual Disabilities”	38	5.7204	Finding shows high job satisfaction in intellectual disabled. Assessment used for measuring is same as for people without disability
“Gaining a competitive advantage with disability inclusion initiatives”	“Journal of Human Resources in Hospitality & Tourism”	37	1.4949	In order to achieve a competitive advantage in the hospitality and retail industries, researchers looked into disability inclusion initiatives.
“Resources, staff beliefs and organisational culture: first- and second-order factors in the use and implementation of ICT for adults with intellectual disabilities”	“Journal of Applied Research in Intellectual Disabilities”	34	1	Study demonstrated how first-order (e.g., time and money) and second-order (e.g., staff members' beliefs) factors influence ICT use in different situations.
“Thriving of employees with disabilities: The roles of job self-efficacy, inclusion, and team-learning climate”	“Human Resource Management”	33	2.2148	Study shows that high workplace inclusion and team learning climate can minimise the negative effect of disability at the workplace

“Employment and choice-making for adults with intellectual disability, autism, and down syndrome”	“Research in developmental disabilities”	30	3.5593	Results shows that down syndrome has highest employment out of three(Autism, Intellectual Disability and down syndrome) and Intellectual disability has highest choice rate
“Job satisfaction of employees with disabilities: The role of perceived structural flexibility”	“Human Resource Management”	29	1	A decentralised organisational framework results in improved job satisfaction for all but particularly for employees with disabilities.
“Starting a new job: The social and emotional experience of people with intellectual disabilities”	“Journal of Applied Research in Intellectual Disabilities”	29	1.6415	Main stream employment has increases the benefit received by people with intellectual disabilities
“An Evaluation of a Social Skills Intervention for Adults with Autism Spectrum Disorder and Intellectual Disabilities preparing for Employment in Ireland: A Pilot Study”	“Journal of Autism and Developmental Disorders”	26	3.914	Study demonstrated that Walker social skills curriculum increases the necessary communication skills required in workplace
“Disability Inclusion Initiatives in the Hospitality Industry: An Exploratory Study of Industry Leaders”	“Journal of Human Resources in Hospitality & Tourism”	26	1.0505	Experiences of eight hospitality companies helps in identifying how people with disabilities can be successfully employed
“The role of transformational leadership in the mental health and job performance of employees with disabilities”	“The International Journal of Human Resource Management”	25	0.8475	Self-esteem is major obstacle in PWD employment. Transformational Leadership can increase the self-esteem and job performance of people with disabilities
“Coping With Stigma in the Workplace: Understanding the Role of Threat Regulation, Supportive Factors, and Potential Hidden Costs”	“Frontiers in Psychology”	22	1.4765	The study finds out the major obstacles in the workplace equality and how to overcome that barrier.
“Workplace inclusion of persons with a disability: Comparison of Indian and German multinationals”	“Equality, Diversity and Inclusion”	20	0.678	Findings shows that the guiding principles of disability can be same across the globe but their application would be different in every region
“Workplace culture analysis where people with intellectual disabilities work: A case study approach”	“Journal of Intellectual and Developmental Disability”	17	0.5	Results indicated that out of eight, four workplaces has strong workplace culture. Full time employment is necessary to increase the inclusion level.
“Disability and participation: It's about us but still without us!”	“Journal of Community and Applied social psychology”	16	1	Study categorizes the barrier in participation as individual, interpersonal and organizational level of analysis. Organizational planning strategies for equal participation of disabled
“Mainstreaming the rights of persons with disabilities in	“Journal of International Development”	15	0.8491	Study gives recommendations for the PWD inclusion

national frameworks”	development				
-------------------------	-------------	--	--	--	--

Source: Authors

The table 1 shows the most relevant articles on the topic of disability inclusion in the workplace based on the citation. The most important article is Stone & Colella, 1996; published in *Academy of Management Review*, citing for 26 years with highest 427 citations and per year citation is 15.815. This article is significant because it was the first article in disability studies that explains how disabled are treated in the workplace and the factors affecting their treatment. The second most cited article is (Von Schrader et. al. 2014), published in *Employee Responsibilities and Rights Journal* with 94 citations, and per year citation is 10.444. The first two most cited articles both talk about the factors; the first one discusses factor that affects the treatment of the disabled, and the second one discusses factors that influence disability disclosure. Dwertmann & Boehm 2016; is the third most cited article with 69 citations, and per year citation is 9.857. (Scott et. al. 2019) and (Stephens et al.,2005) both have the exact citations, 51 each and per year citation are 12.75 and 2.833, respectively, which shows (Scott et. al. 2019) has high TC per year than (Stephens 2005). (Scott et. al. 2019) is the fourth most cited article published in *Autism* and (Stephens 2005) is the fifth most cited article published in *Research in Developmental Disabilities*. After fifth most cited article the total citations of articles are not very high; the reason could be that articles have published in recent years.

## 6. Conclusion

Disability inclusion in the workplace refers to creating an environment where individuals with disabilities have equal opportunities to succeed and thrive in their careers. This involves making accommodations, implementing policies and procedures, and promoting a culture of diversity and inclusiveness. The goal of disability inclusion is to remove barriers to employment and ensure that people with disabilities have the same access to job opportunities, benefits, and career advancement as their non-disabled peers. Effective disability inclusion practices can benefit both employees with disabilities and the organization as a whole, leading to increased productivity, employee engagement, and a positive company culture.

## 7. Implications of the Study

The policy-makers could frame policies that could help in (i) providing a physically accessible workplace and using assistive technology to support employees with disabilities (ii) Making changes to the workplace to enable employees with disabilities to perform their jobs effectively. (iii) Having clear policies and procedures in place to support employees with disabilities, such as flexible work arrangements and leave policies. (iv) Providing training to employees on disability awareness and inclusion to promote a positive and supportive work environment. (v) Ensuring that the recruitment and retention practices are inclusive and accessible to people with disabilities. (vi) Regularly measuring and monitoring the progress of disability inclusion initiatives to identify areas for improvement. (vii) Providing support and resources for employees with disabilities, such as mentorship programs, counseling services, and wellness programs.

By implementing these practices, organizations can foster a culture of inclusion and create a supportive workplace environment for employees with disabilities. This not only benefits employees with disabilities, but it also leads to a more diverse, productive, and successful workplace.

## References

- Stone, D. L., & Colella, A., A model of factors affecting the treatment of disabled individuals in organizations. *Academy of management review*, 21(2), 352-401, 1996.
- Moral-Muñoz, J. A., Herrera-Viedma, E., Santisteban-Espejo, A., & Cobo, M. J. (2020). Software tools for conducting bibliometric analysis in science: An up-to-date review. *Profesional de la Información*, 29(1).
- Heera, S., & Maini, A. , Examining the antecedents and consequences of disability inclusion at the workplace: a study of persons with disabilities (PWDs) in the union territory (UT) of Jammu And Kashmir, India. *South Asian Journal of Management*, 26(4), 109-132, 2019.
- Houtenville, A., & Kalargyrou, V., People with disabilities: Employers’ perspectives on recruitment practices, strategies, and challenges in leisure and hospitality. *Cornell Hospitality Quarterly*, 53(1), 40-52, 2012.
- Shier, M., Graham, J. R., & Jones, M. E., Barriers to employment as experienced by disabled people: A qualitative analysis in Calgary and Regina, Canada. *Disability & Society*, 24(1), 63-75, 2009.

- Graffam, J., Shinkfield, A., Smith, K., & Polzin, U., Factors that influence employer decisions in hiring and retaining an employee with a disability. *Journal of vocational rehabilitation*, 17(3), 175-181,2002.
- Schur, L., Kruse, D., & Blanck, P., Corporate culture and the employment of persons with disabilities. *Behavioral sciences & the law*, 23(1), 3-20, 2005.
- Kayess, R., & French, P., Out of darkness into light? Introducing the Convention on the Rights of Persons with Disabilities. *Human rights law review*, 8(1), 1-34, 2008.
- Shakespeare, T., & Watson, N. (2001). The social model of disability: an outdated ideology?. In *Exploring theories and expanding methodologies: Where we are and where we need to go*. Emerald Group Publishing Limited.
- Von Schrader, S., Malzer, V., & Bruyère, S., Perspectives on disability disclosure: the importance of employer practices and workplace climate. *Employee Responsibilities and Rights Journal*, 26(4), 237-255, 2014.
- Dwertmann, D. J., & Boehm, S. A., Status matters: The asymmetric effects of supervisor-subordinate disability incongruence and climate for inclusion. *Academy of Management Journal*, 59(1), 44-64, 2016.
- Scott, M., Milbourn, B., Falkmer, M., Black, M., Bölte, S., Halladay, A., ... & Girdler, S., Factors impacting employment for people with autism spectrum disorder: A scoping review. *Autism*, 23(4), 869-901, 2019.
- Stephens, D. L., Collins, M. D., & Dodder, R. A., A longitudinal study of employment and skill acquisition among individuals with developmental disabilities. *Research in developmental disabilities*, 26(5), 469-486, 2005.

## **Biographies**

**Neha Kumari** is Senior Research Fellow at Department of Management Studies, IIT Roorkee. She is currently exploring the area of research on disability inclusion in workplace.

**Dr. Usha Lenka** is Associate Professor at Department of Management Studies, IIT Roorkee. She has been awarded the Shastri Indo Canadian Fellowship twice. She is also the recipient of Prof. Durganand Sinha Gold Medal for Best PhD Dissertation. She has guided 12 PhD degree recipients and has a number of research articles on her name.