

# Are Disability And Employability The Eternal Antagonistics?

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## Systematic Review

**Keywords:** disabilities, employment, people with disability, supported employment

**Posted Date:** September 24th, 2020

**DOI:** <https://doi.org/10.21203/rs.3.rs-20785/v1>

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# Abstract

Traditionally, people with disabilities have been excluded from the workplace despite they want to work, and their disabilities do not prevent them from doing so. They still suffer from stigmatization and this inequitable treatment, together with the lack of societal support, put their career development at risk.

Through a bibliometric analysis, the study reviews more than 1.900 articles published in the last 50 years. It provides an overview of the topics analysed in relation to employment and disability. Thus, this study uncovers the areas that are receiving more attention based on the articles published in the last years.

The results highlight that the topic remains relegated to journal directly connected with disabilities, which indicates a little acknowledgment of people with disabilities and their labour development. The evolution of studies has been congruent so that three differentiated periods have been identified, from merely legislation to social recognition.

## 1. Introduction

People with disability increasingly have access to educational opportunities that were not available to them in the past (Foley and Ferry, 2012). However, despite their potential to contribute to the labour force, people with disabilities are under-represented in both post-secondary education and paid employment (Lindsay et al., 2015). Besides, disability has occupied a minor role to date in development policy and research circles (Mizunova and Mitra, 2013). About 15% of the world's population has a disability, which represents the world's largest minority (WHO, 2015). Regarding the employment, there is a general tendency in developed countries where the unemployment rate of people with disabilities is roughly twice as high as those of people without a disability (ILO, 2019). Thus, most people with disabilities are unemployed although want to work and their disabilities do not prevent them from doing so (HRSDC, 2009). Therefore, people with disabilities are particularly disempowered and isolated in organizations and communities (Kulkarni and Lengnick-Hall, 2011). Despite these figures, the inclusion in the workplace of people with disabilities seems to be a challenge (Lindsay, 2011) what is reflected in the little research in the field of organizational science, particularly in top-tier journals (Dwertmann, 2016).

Stone and Colella (1996) identified individual, organizational, and environmental factors affecting outcomes for workers with disabilities. All workers with disabilities face the possibility of stigmatization as burdensome and incompetent. In the workplace, this is represented by a variety of beliefs such as that workers with disabilities have relatively poor skills and abilities, increase the demands placed on managers, create workplace inequity due to the need for accommodations, increase health care costs, have poor emotional adjustments (Stone-Romero et al., 2006). Thus, stigmatization contributes to inequitable treatment and lack of societal support and can put at risk their career development (Moore et al., 2011). A poor inclusion puts serious pressure on social security systems in many countries (Astor and Duggan, 2003; 2006). Consequently, society should pay attention to the unemployment problem of

people with disabilities as employment plays an important role for people with disabilities who tend to be socially marginalized (Schur, 2002). Thus, certain elements such as workplace accommodations, including the built environment, job restructuring, and other supports have been shown to help people with disabilities maintain employment in inclusive settings (Anand and Sevak, 2017; Stancliffe et al., 2019).

Majority of research on disabilities and employment issues has fallen under the topics of psychology and human resources. According to Fujimoto et al., (2014) research in relation to inclusion of people with disabilities in organizations has focused on: (1) work treatment through formal and informal human resources intervention (Baldrige and Veiga, 2001; Campolieti, 2009), and (2) work accommodation of employees with disabilities (McLaughlin et al., 2004; Kulkarni and Lengnick-Hall, 2011). However, research not directly related to these discipline has also covered topics as diverse as the factors for creating more inclusive organizations (Fujimoto et al., 2014); labour opportunities in sectors that traditionally have denied their incorporation (Newton and Ormerod, 2005; Jasper and Waldhart, 2013); challenges in the implementation of disability discrimination act in firms (Jones and Schmidt, 2004) or the attitude of customers to disabled frontline employees (Rosenbaum et al., 2017).

Although prior reviews have synthesized knowledge in this area, there are a number of studies and methodological limitations to these reviews. For instance, Lindsay et al. (2015) recognize the importance of post-secondary education for people with disabilities as it increases their chances of employability. Thus, they consider mentorship as the best tool for the transition of people with disabilities from education to the workplace. As a result, they found that “mentorship programs are possibly effective for influencing positive outcomes related to school and employment” (pp. 18), where there was less focus on actual job training, work ethic, and practical skills. Similarly, Lefever et al. (2018) systematically analyse the efficacy and efficiency of the disability management programs. This research confirms that disability management program “shows efficacy because of a quicker return to work and improvement of quality of life. However, the effectiveness decreases over the years, but is not influenced by socioeconomic system” (pp. 531). Although some components of the disability management programs are under consensus (e.g. job accommodation, early intervention, facilitation of transitional duty or goodwill and trust in the organization), there is no evidence of how these components can be applied in the real world. More recently, Tripney et al. (2019) try to identify and examine the effects of interventions on labour market participation of adults with physical and/or sensory disabilities. They found limited evidence for specific population subgroups (e.g., no evaluations of interventions specifically targeting women were identified). Furthermore, there was a lack of evaluation research on some types of intervention (e.g., addressing education deficits or discriminatory behaviours).

This situation highlights the need for a review of the literature addressing to cover the different perspectives on the employability of people with disabilities. In this sense, the aim of this study is to provide a general overview of the topics analysed in the relationship between employment and disability. There are three specific goals. The first is to categorize the landscape of topics to expand the existing systematic and meta-analytical reviews. The second goal pretends to provide an overview of the topics

and areas previously analysed and published in the last (almost) 50 years. A third goal is to analyse the change and evolution of the treatment of disabilities in their intersection with labour issues.

This study contributes to employment and disability literature in several ways. First, a bibliometric analysis of the situation of employment and disability highlights and supports the main topics proposed in previous reviews. At the same time, it extends the findings as it identifies how they are related and connected. This eventually shows how the discipline has changed, helping researchers to entering the field under diverse perspectives. Second, the bibliometric analysis identifies the current situation highlighting what areas are receiving more attention based on the articles published in the last years. Ultimately, this can offer researchers an idea of where the field is developing, and the topics that deserve more attention. Lastly, as the results are presented not only tabular but also visually, it favours the identification of patterns and connections that otherwise can be difficult to distinguish, overall when talking about large volumes of data.

This article is organized into three sections. The second section explains research methodology that includes the data collection, the selection of keywords and their combination, and the preliminary results. The third section presents the main results of the bibliometric analysis with a brief description. The last section offers a discussion of the main findings and future research considerations.

## **2. Research Methodology**

The bibliometric analysis aims to analyse relationships among articles, citation, and keywords, which is of relevance to provide comprehensive information in a specific research field (Feng et al., 2017). Thus, it helps readers to identify future research interests easily. A systematic literature review is considered the best form of produce, synthesize and report the evidence of the existing research studies on a specific field form a large number of studies (Denyer and Trandfield, 2009; Trandfield et al. 2003). This is of particular interest in areas such as social science due to its utility to identify areas of consensus and disagreement between researchers (Perkmann et al., 2013).

Accordingly, bibliometric analysis is adopted in this research but following the steps adapted from the systematic literature review. This helps to identify the process and favours the replicability, which improves the quality of the process. The process can be encompassed in three main steps.

### **2.1 Planning the process**

#### **2.1.1. Data collection**

The focus is to identify the relationships among people with disability and their employability. Such focus adopts keywords related to the three different characteristics that defined the issue: the collective, the problem, and the leading solutions. According to this, three main groups of searching terms were generated: (1) people OR person with disabilities/ disabled people OR person; (2) employment OR

employment integration; (3) apposite accommodation OR job adaptation OR open employment OR sheltered employment OR supported employment.

The second searching terms were decided to be as specific as possible to narrow the possibilities as the topic is broad and the purpose of this study is to focus on problems with employability. The third searching terms tried to cover the main options that people with disabilities have had to access the labour market.

## 2.2. Conducting the review

### 2.2.1. Initial search results

The Scopus database has consistently been found to have higher overall coverage of academic journals (Capobianco-Uriarte et al., 2019; Granda-Orive et al. 2013; Hernández-González et al. 2017; Thelwal, 2018). Thus, it has shown to cover 50% more journals in Social Sciences in comparison to those covered by Web of Science (Mongeon and Paul-Hus, 2016). Despite this, and in order to cover the topic to its fullest, both databases are chosen for this bibliometric analysis. This is critical in a topic such as disabilities and employability as it has been approached from different points of view. Therefore, the more extensive the range to cover, the better the results.

Before initiating the search, two main requirements are set. In order to give coherence to the process, the English language is chosen as it is considered the vehicular language in social science. Besides, it is established the time span. To cover a full and finished period, it was decided to select only those articles published before 2019.

Subsequently, the keywords were entered in the databases using excluding syntax in three steps that highlight the three main characteristics defining the issue.

- The first one is related to the group of people or the collective, that is, people with disabilities. Thus, the combination was (TITLE-ABS-KEY (“people with disabilities”) OR TITLE-ABS-KEY (“person with disabilities”) OR TITLE-ABS-KEY (“disabled people”) OR TITLE-ABS-KEY (“disabled person”))
- The second one is related to the problem of people with disabilities in labour matters. Thus, the combination was (TITLE-ABS-KEY (“employment”) OR TITLE-ABS-KEY (“employment integration”). As the objective is to find the connection between the fact express in the first one and the two, these were connected with the logical operator “AND”.
- The third one is related to the leading solutions given to increase the employability of people with disabilities related to the adaptation to them, including the fact of improving the job position. Thus, the combination was (TITLE-ABS-KEY (“apposite accommodation”) OR TITLE-ABS-KEY (“job adaptation”) TITLE-ABS-KEY (“open employment”) TITLE-ABS-KEY (“sheltered employment”) TITLE-ABS-KEY (“supported employment”). As these represent various options or alternative, they are connected with the previous one through the logical operator “OR”.

Consequently, 13,467 articles were returned, 5,731 from Web of Science and 7,736 from Scopus (see Table 1).

### 2.2.2. Refinements of the results

In order to refine the search, other questions were considered. As this topic covers a wide range of disciplines and the objective is to focus on business and/or management studies, the subject areas related with medicine, nursing, neuroscience, biochemistry, genetics, and molecular biology, dentistry, pharmacology, and chemical engineering were excluded. Besides, to enhancing quality control, only published peer-reviewed journals were considered. Finally, because of searching in two different databases with the same scope, some of the articles may be overlapped. Therefore, duplicated articles were excluded so that they only count once.

After considering these exclusion gauges, the number of publications amounted to 1,910, which reflects the specificity of the issue (see Table 1).

*Table 1. Selection of documents in bibliometric analysis*

Steps	Web of Science	Scopus	Total
Time Span & Language	-	-	-
"people with disabilit*" OR "person* with disabilit*" OR "disab* person*" OR "disab* people*"	43,690	54,337	98,027
"employ* OR "employ* integrat*"	3,664	7,729	11,393
"apposite accommodat*" OR "job adaptat*" OR "open employ*" OR "shelt* employ*" OR "support* employ*"	5,731	7,736	13,467
Not related areas	861	1,517	2,378
Peer reviewed	757	1,419	2,176
Duplicated	-	-266	<b>1,910</b>

### 2.3. Preliminary findings

Through initial data analysis, it can be captured the necessary information of the literature (Feng et al., 2017). Thus, the tendency is described by the period distribution of publications and the leading journal that have published articles on this topic.

Figure 1 shows the tendency from the first article in 1972 until 2018. However, the number of articles until 1990 per year is less than 20. It is from this moment when the number of articles progressively increase. Therefore, Figure 1 can be divided into three periods: (1) the initial stage from 1972 to 1990; (2) the sustained growth stage from 1991 to 2008; and (3) the sharp growth stage from 2009 to 2018. It shows that the attention in the topic continuously increases with a growing number of publications. This is of particular relevance in the last ten years as this sharp growth accounts for 52% of the total publications in this field. The tendency indicates that the publications on the topic will continually grow.

A total of 1,910 articles were published in the topic in 868 journals. Table 2 shows the journals that published 10 or more articles on the topic related to disabilities and employability. It should be noted that these 18 journals published 388 out of 1,910, accounting for about 20% of all the searched articles. Among them, the Journal of Disability Policy Studies with 76 articles comes first. Furthermore, Social Security Bulletin and Federal Register follow get closer as the second and third most prominent outlets in this field. However, the last one, despite occupying the third position presents the fewest citations per article. Thus, the journal with the most citation per article (42.18) was Exceptional Children with the fifth position in the ranking. Other journals that are worth to mention beyond the top–5 journals are Critical Social Policy (ranked 12<sup>th</sup>) and Journal of Applied Research in Intellectual Disabilities (ranked nin<sup>th</sup>) with 24.00 and 21.71 citations per article respectively. This variety of results represents the heterogeneity of the topic and also its relevance in different areas of interest such as policy, law, human resources or education.

*Table 2. Journals with 10 or more published articles*

Ranking	Journal name	Country	No. publications	Citations	N/A
1	Journal of Disability Policy Studies	United Kingdom	76	1010	13.29
2	Social Security Bulletin	United States	52	465	8.94
3	Federal Register	United States	39	37	0.95
4	Research in Developmental Disabilities	United Kingdom	28	495	17.68
5	Exceptional Children	United States	22	928	<b>42.18</b>
6	Social Policy and Administration	United Kingdom	20	86	4.30
7	Journal of Intellectual and Developmental Disability	United Kingdom	19	275	14.47
8	Employee Relations Law Journal	United States	17	45	2.65
9	Journal of Applied Research in Intellectual Disabilities	United Kingdom	14	304	<b>21.71</b>
10	Social Policy & Society	United Kingdom	14	65	4.64
11	Behavioral Science and The Law	United States	13	85	6.54
12	Critical Social Policy	United States	12	288	<b>24.00</b>
13	International Labour Review	United States	11	56	5.09
14	Personnel Review	United Kingdom	11	128	11.64
15	Career Development and Transition for Exceptional Individuals	United States	10	138	13.80
16	International Journal of Human Resource Management	United Kingdom	10	76	7.60
17	International Journal of Inclusive Education	United Kingdom	10	79	7.90
18	Social Indicators Research	Netherlands	10	38	3.80
Total			388	4,598	

### 3. Bibliometric Analysis

Three different approaches will be used in this analysis. Firstly, the quantitative approach which pretends to measure productivity in terms of publication. For this purpose, the information provided by Web of Science and Scopus themselves was used. Secondly, the qualitative approach that measures the impact of a publication concerning the number of appointments it receives. Thirdly, the structured approach tries to express the relationships between the publication through main variables such as authors and/or keywords. This analysis was completed with network maps using the VOSviewer processing software. In keywords network maps, some words were eliminated due to their generality or scope (e.g., “article” or

“research”). This software is widely used for processing keywords (Hoppen and de-Souza-Vanz, 2016), undertaking cluster analysis (Van and Waltman, 2009) or the depiction of maps of global scientific collaboration (Mendoza et al., 2017).

### 3. 1. Citation analysis

This analysis is used as a measure of influence. If the citation index of a publication or an author is high, the publication or the author will be considered as influential in such field.

#### 3.1.1. Author influence

Table 3 shows that Schur has the highest scientific production in this topic. Grover and Stein rank as the second and third respectively, followed by the rest of the authors with six publications. In this sense, Schur is a leader in Industrial Relations while Grover tends to Policy Studies, and Stein focuses on Legal Studies. This reflects that there is no dominant author on the subject as a whole yet, perhaps due to the heterogeneity of its scope.

*Table 3.* Top 10 authors with most publications on disability and employability

Authors	Institution	No. of publications
Schur, L.	Rutgers, The State University of New Jersey	8
Grover, C.	Lancaster University	7
Stein, M.A.	Harvard Law School	7
Agovino, M.	University of Naples	6
Kruse, D.	Rutgers, The State University of New Jersey	6
Kulik, C.T.	University of South Australia Business School	6
Kulkarni, M.	Indian Institute of Management Bangalore	6
Mitra, S.	Fordham University	6
Piggott, L.	Lancaster University	6
Stapleton, D.C.	Mathematica Policy Research Inc., Princeton	6

#### 3.1.2. Affiliation statistics

The objective here was to extract the author information about the organizations they work in. Table 4 lists the top 10 organizations publishing the most articles on disabilities and employability. In this vein, the Social Security Administration of the United States, the University of New Hampshire Durham, and Rutgers the State University of New Jersey, all three in the United States, equally contribute with ten articles. This is followed by University of G. d’Annunzio Chieti and Pescara in Italy and Syracuse University in the United States. In this sense, there is a coincidence between the organization contributing the most and the top–1 author (see Table 3). That is the case of Rutgers, the State University of New Jersey and Schur, L. A similar situation happens with Fordham University with seven publications of which six correspond to Mitra, S.

Moreover, the most cited articles correspond to the University of Leeds with 55 cites per article. This is followed by Fordham University (49.70) and Syracuse University. This, again, shows that being the most

productive institution does not mean to be the most influent according to the number of cites received.

*Table 4.* Top 10 organizations contributing to the topic of disabilities and employability

Institution	Location	No. publications	Citation	C/N
Social Security Administration	United States	10	145	14.50
University of New Hampshire Durham	United States	10	96	9.60
Rutgers, The State University of New Jersey	United States	10	297	29.70
University of G. d'Annunzio Chieti and Pescara	Italy	9	62	6.89
Syracuse University	United States	8	360	<b>45.00</b>
Fordham University	United States	7	348	<b>49.70</b>
Pennsylvania State University	United States	7	81	11.60
Vanderbilt University	United States	6	80	13.30
Cornell University	United States	6	53	8.83
University of Leeds	United Kingdom	6	330	<b>55.00</b>

Table 5 shows the geographic distribution of contributing organizations. In conjunction with Table 4, it is clear that the United States is the country with the most significant number of institutions at the top of this issue since eight out of ten leaders' institutions belong to this country. It comprises 258 of the total publications, that is, over 14%. Besides, it has a higher number of citations per article (16.94) followed closely by the United Kingdom that with 150 fewer publications accounts comparatively more citations per article (13.67). In addition, the relevance of the Netherlands has to be highlighted, perhaps not stand out in the number of publications but it does in their impact according to the cites accumulated.

*Table 5.* Geographic distribution of the top 10 countries contributing to the topic

Country	No. publications	Citations	C/A
USA	258	4370	<b>16.94</b>
United Kingdom	111	1517	<b>13.67</b>
Australia	54	390	7.22
Canada	44	390	8.86
India	19	80	4.21
Italy	19	100	5.26
The Netherlands	19	212	<b>11.16</b>
Spain	14	127	9.07
Germany	13	60	4.62
South Africa	12	16	1.33

### 3.2. Leading documents

According to Liao et al., (2018) examining the number of citations shows the quality of a document. Table 6 shows the most cited documents about disability and employability from 1972 to 2018. The document by Stone and Colella (1996) ranks first for the number of citations (269). This document proposes different factors affecting the treatment of disabled people in the workplace. The second most cited article (260) is a document by Fine and Asch (1996) which develops a critic about the situation of people with disabilities in different areas such as education, employment or their access to public programs in the United States. The article by Mitra (2006) ranks third for the number of citations (196)

and explores some implications of the capability approach for analysing the employment and the standard of living of with disabilities.

*Table 6. Top 10 published documents with the most citation about disability and employability*

Ranking	Journal	Citation	Article	Authors	Year	C/Year
1	Academy of Management Review	269	A model of factors affecting the treatment of disabled individuals in organizations	Stone, DL; Colella, A	1996	0.5699
2	Journal of Social Issues	260	Disability Beyond Stigma: Social Interaction, Discrimination, and Activism	Fine M., Asch A.	1988	0.5221
3	Journal of Disability Policy Studies	196	The capability approach and disability	Mitra, S	2006	0.2250
4	Work Employment and Society	155	Disability, work, and welfare: challenging the social exclusion of disabled people	Barnes, C; Mercer, G	2005	0.1330
5	Journal of Applied Research in Intellectual Disabilities	144	Community Integration or Community Exposure? A Review and Discussion in Relation to People with an Intellectual Disability	Cummins R.A., Lau A.L.D.	2003	0.1278
6	American Economic Review	114	The impact of economic conditions on participation in disability programs: Evidence from the coal boom and bust	Black D., Daniel K., Sanders S.	2002	0.1214
7	Harvard Business Review	109	Diversity as strategy	Thomas D.A.	2004	0.1222
8	Work and Occupations	106	The social construction of disability in organizations: Why employers resist reasonable accommodation	Harlan S.L., Robert P.M.	1998	0.1580
9	Critical Social Policy	96	A working social model? Disability, work and disability politics in the 21st century	Barnes C.	2000	0.1358
10	Industrial Relations	93	Employment of people with disabilities following the ADA	Kruse, D; Schur, L	2003	0.0849

In the ranking of the 10 journals that have published more documents in disability and employability (Table 2), only two have published one of the 10 most cited articles in this area of research, Journal of Disability Policy Studies and Journal of Applied Research in Intellectual Disabilities (ranked third and fifth respectively).

### 3.3. Keywords analysis

Keywords analysis is a quantitative approach to scientifically discover linkages among subfields and trace the tendency (He, 1999). It uses keywords in the literature to create a semantic map of the field (Zupic and Cater, 2015).

The sample of 1,910 articles accounted for 4,858 different keywords. Because of the high number of keywords, only those with an occurrence of 90 or more times were selected to create a frequently used keyword list (see Table 7). One interesting thing about the use of keywords is their evolution and incorporation into the field. Thus, Table 7 also shows the distribution of the keywords in the three main stages (the initial, the sustained growth, and the sharp growth).

As can be seen in Table 7 employment and disability are the most common keywords used. Considering the whole period, they appear in the 29.16 and 26.65% of articles respectively. Disabled people and human closely follow this. The only country that appears in keywords are United States, clearly connected with the Americans with disabilities Act of 1990. Another relevant issue is the separation by gender when distinguishing between female and male.

Regarding the evolution of these keywords, during the period 1972–1990 most of the documents focus on the terms disabled people and human. In addition, there is no presence of the word disability as such. The keyword employment has special relevance although it is not predominant while United States retains an important position. The keyword rehabilitation is of special interest in this period since it appears in around 22 of the 108 documents in said period. However, this weight is diluted in the following periods.

During the period 1991–2008 the trend changes with respect to the previous one and it is closer to the general trend. In this sense, most of the documents refer to disabled people followed closely by employment. Unlike the previous period, the word disability is added, which adds a concurrence of approximately half that for disabled people. Likewise, and regarding the previous period, human and United States lose a bit of prominence. On the other hand, legal aspects seem to have a relative importance in the period.

*Table 7.* Most frequently used keywords in the topic of disabilities and employability

Rank	Keywords	Total	% K/N	1972-1990	% K/N	1991-2008	% K/N	2009-2018	% K/N
1	Employment	557	<b>29.16</b>	34	31.48	264	<b>36.77</b>	258	<b>23.80</b>
2	Disability	509	<b>26.65</b>	-	-	119	16.57	387	<b>35.70</b>
3	Disabled People	479	25.08	49	<b>45.37</b>	267	<b>37.19</b>	162	14.94
4	Human	412	21.57	47	<b>43.52</b>	244	33.98	120	11.07
5	United States	281	14.71	31	28.70	199	27.72	50	4.61
6	Legal Aspects	200	10.47	10	9.26	162	22.56	27	2.49
7	Supported Employment	181	9.48	-	-	85	11.84	96	8.86
8	Adult	180	9.42	-	-	62	8.64	92	8.49
9	Female	150	7.85	17	15.74	62	8.64	71	6.55
10	Male	137	7.17	18	16.67	51	7.10	68	6.27
11	Work	94	4.92	-	-	25	3.48	69	6.37
12	Social Security	92	4.82	11	10.19	48	6.69	33	3.04
13	Rehabilitation	90	4.71	22	<b>20.37</b>	31	4.32	37	3.41
	No. Documents (total period)	<b>1910</b>		<b>108</b>		<b>718</b>		<b>1084</b>	

Finally, for the sharp growth period, the trend is very similar to the total period since it comprises around 56% of the total documents. Thus, it can be seen that disability is the dominant word and the use of disabled people decreases. Other words like human and United States also decrease. In the same way, one of the most drastic changes with respect to the previous period is represented by legal aspects that happens to be the last frequent with a residual importance.

The network of relationships between keywords (co-occurrence) is used to identify the most relevant topics in the published documents. According to Chen et al., (2016) each node stands for a high-frequency keyword and the size of the node indicates the frequency. The thicker the line that connect nodes, the higher frequency of co-occurrence. The shorter the distances between the nodes, the stronger the relationship they have (Capobianco-Uriarte et al., 2019). Thus, Figure 2 shows the main keywords used and the size of the nodes. Three clusters were identified, forming heterogeneous groups among them and homogeneous within them.

The most common keywords for each cluster are employment, disabled people and human for red cluster, disability and supported employment for blue cluster and adult, female and male for green cluster.

To see the evolution of the use of keywords a network for each sub-period is generated. Thus, Figure 3 shows the network of relationships between keywords for the initial stage (1972–1990). It shows clear separated clusters covering different aspects and the only connection seems to be the keyword disabled people. It can be seen that legal aspects (included in the red cluster) are clearly disconnected from the rest.

Figure 4 shows the network of relationships between keywords for the sustained growth stage (1991–2008). For this period, four clusters arise. They are homogeneous except for the green cluster related with employment, supported employment and disability. This is the period in which the keyword disability starts to appear reducing the weight of disabled people.

Finally, Figure 5 shows the network of relationships between keywords for the sharp growth stage (2009–2018). This network shows the most homogeneous and harmonic relationships. It has only three clusters clearly separated where employment and disability are dominating the scene.

Figure 6 shows the temporal evolution of the use of keywords. The yellow zones indicate the trend of the most recent documents.

## 4. Discussion

The recent increase in the number of publications about disabilities and employability express a growing awareness on the subject, its importance for the business and the society in general. This fact is consistent with those that highlight the topic as important because its economic, social and political implications for people with disability and the broader community (Cavanagh et al., 2017).

The topic still remains relegated to journals directly connected to disabilities, therefore, a reduced presence of this topic in journals related to management, business or human resources indicates that there is little acknowledgment of people with disabilities in the realm of labour relationships. Likewise, if there is some presence, it mainly covers circumstances or characteristics that prevent people with disabilities from having a normal transition (or incorporation) to work market. The most cited articles have partially achieved these positions because of the journal where are published. However, the topic

they cover is quite similar: reduce the prejudgment and increase the adaptability/acceptation of people with disabilities in the workplace.

Thus, each cluster clearly represents each of the axes of the topic. On the one hand, we find “the problem”, that is, the shock that occurs when we talk about employment and disability. This is determined by the contextualization of the problem where it shows the difficulties faced by people with some type of disability. One of the main solutions/adaptations in the workplace characterizes the second: work with support. That is, it represents “the solution” and shows the existence of elements that partially offset the problem. In this sense, these elements can have a double function: (a) on the part of the company it represents the instructions for labour integration; (b) on the part of people with disabilities, it means hope or motivation as it is a tool that allows them to develop professionally. Finally, the third one represents “the actors” that in this case are adult people and the most important is that both genders are represented. This indicates that despite the possible existence of gender discrimination, the literature overlooks that point and highlights both approaches.

The analysis of keywords by periods highlights the main concerns for each one. Thus, during the period 1972–1990 there is a confrontation between the legal aspects and the socio-sanitary part of the disability. In this sense, Barnes and Mercer (2005) state that people with disability have argued that living with impairment in a society organized around non-disabled lifestyles involves additional time and effort, as well as specialized skills. Therefore, it is a period where a regulatory development that guarantees, protects and values the rights of people with disabilities can be considered necessary. This is also connected with the fact of when an impairment was acquired, that is, those who has a congenital impairment, and other who acquired their impairment when an adult Barnes and Mercer (2005).

During the period 1991–2008, the first actions directly related to the workplace begin to emerge while the legal aspects, still important, go to the background. It is, therefore, a time to act after having obtained legal support. New experimental approaches to the issues demanded arise and current trends are launched. According to Barnes and Mercer (2005, pp. 535), there is “a disparity between anti-discrimination legislation and welfare-to-work measures, as well as between obligatory employment quotas and subsidies for taking positive action”. Therefore, these authors established that the exclusion of people with disabilities from employment opportunities is linked to the social organization of the labour market, not the impairment effects.

Finally, the 2009–2018 period is the one that most closely resembles the general one (1972–2018) because a huge majority of the studies concentrates in this period. It is time to open up to new trends based on the basis that actions should focus less on awareness and more on the versatility of adapted solutions. This is revealed when analysing the temporal evolution of the use of the keywords. Thus, recent research focuses on certain disabilities (e.g., intellectual or developmental) and the efforts for inclusion or participation in the workplace, avoiding discrimination. For instance, Hatton (2017, pp. 343) established that “sheltered workshops are (ostensibly) designed to provide job training and work experience to people who have disabilities that hinder their work capacity”.

One remarkable thing is the use of some words. Most of the time, the use of one or another word to approach the same concept has no relevance. However, in the realm of disabilities this fact can determine a certain perspective. Sometimes the usage is determined by certain perceptions such as discrimination euphemisms, stereotypes, stigma, discrimination or inclusiveness. This makes of great importance to analyse the evolution of certain keywords since reveal the importance of the topic. One of the most controversial words is “disability”, since its use might be perceived as discriminatory. This arises the person-first terminology where the disability should not circumvent the individual who has it. However, this terminology implies that disability is somehow a diminished aspect of the self, rather than an aspect of identity that is a source of pride (Foley and Ferry, 2012).

The contribution of this paper is threefold. First, it provides a general view of the landscape of disability and employability. Once this topic is categorized, researchers would be able to identify and work across promising areas, even when they lay out of their expertise. Second, as the review cover the last 50 years, it will frame the different perspective for the groups identified. Third, it provides an understanding of the current situation of disabilities and employability as it highlights the triggers and constraints of the development of this research area. In addition, it is of great value for practitioners as it also evidences the venues to lead new opportunities for providing the best options through the close collaboration among the different agents implicated.

## 5. Conclusions

For a long time, the study of employability of people with disabilities has been a topic of great interest. This interest has moved from one discipline to another depending on the needs of each moment and the demand of society (e.g., initially from a normative development to continue with a better and more effective awareness). These changing circumstances have led researchers to carry out different approaches, always trying to find the best way to overcome the barriers that society itself imposes. When the approaches have been intimately related to the internal ambit of the companies, difficulties have sharply increased, making difficult the natural incorporation of people with disabilities to the workplace.

This study reveals that the employability of people with disabilities is a matter of general concern (e.g. both at the country level and at the industry level). Increasingly, this issue is encompassing other disciplines beyond social or psychological ones, making the problem something of everyone. This evolution can be observed in how researchers adapt not only to the problem but also the vocabulary used in their research, which is increasingly more respectful and inclusive. This contributes to a dignification and revindication of the need to provide the necessary tools for the labour inclusion of people with disabilities.

Despite these results, this study has diverse limitations. The most important limitation is related to the review process itself as the information gathered comes from a selection of keywords located in the title, abstract and keyword section. Therefore, other types of reviews are needed as a complement to bibliometric analysis to obtain more information about the topic and obtaining a more comprehensive

exploration. In addition, and despite the huge number of articles a bibliometric analysis can process, it represents a sample and, therefore, it does not cover all published articles. In addition, the search terms might not be enough to provide a comprehensive sample, implying that some important articles can be missed.

New research could broaden the keywords used and apply the search to diverse databases trying to cover a higher range. In addition, refining the combination of keywords could improve the results, making it easier to focus on particular areas instead of being general.

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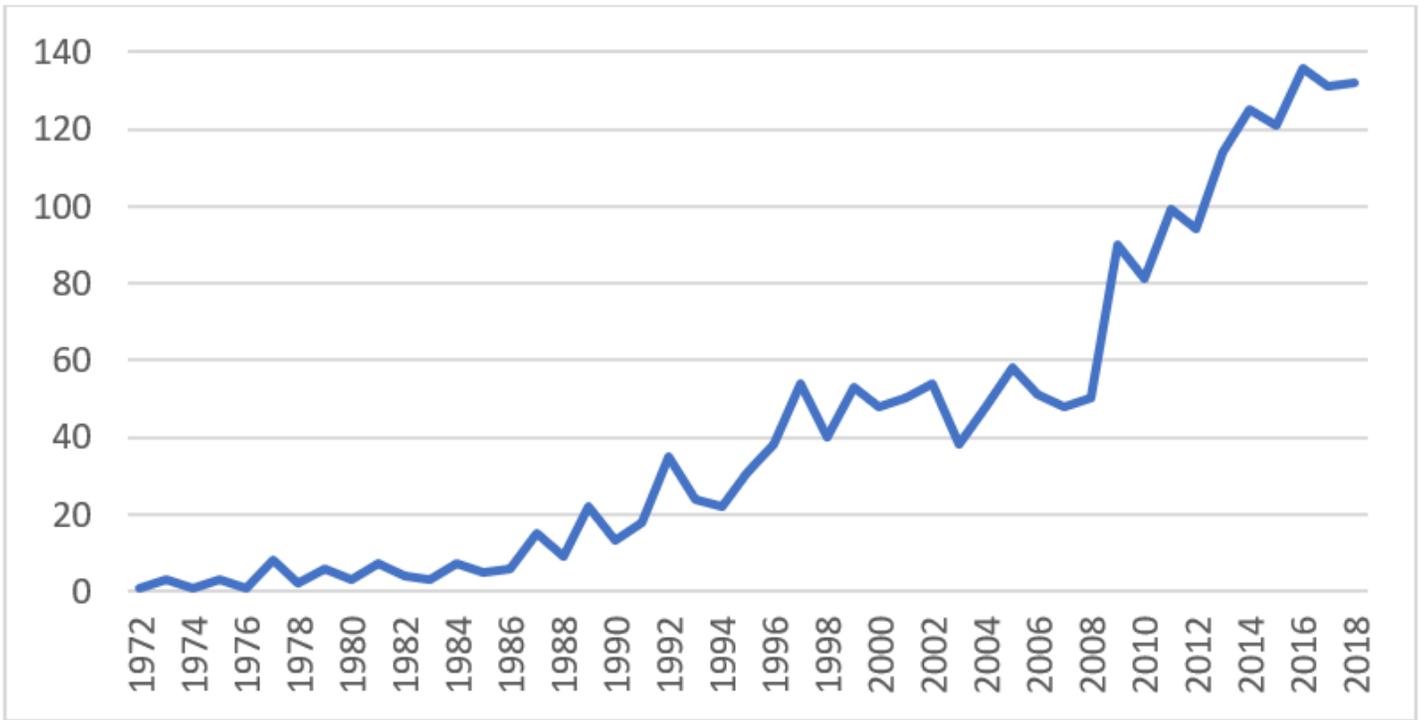
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## Declarations

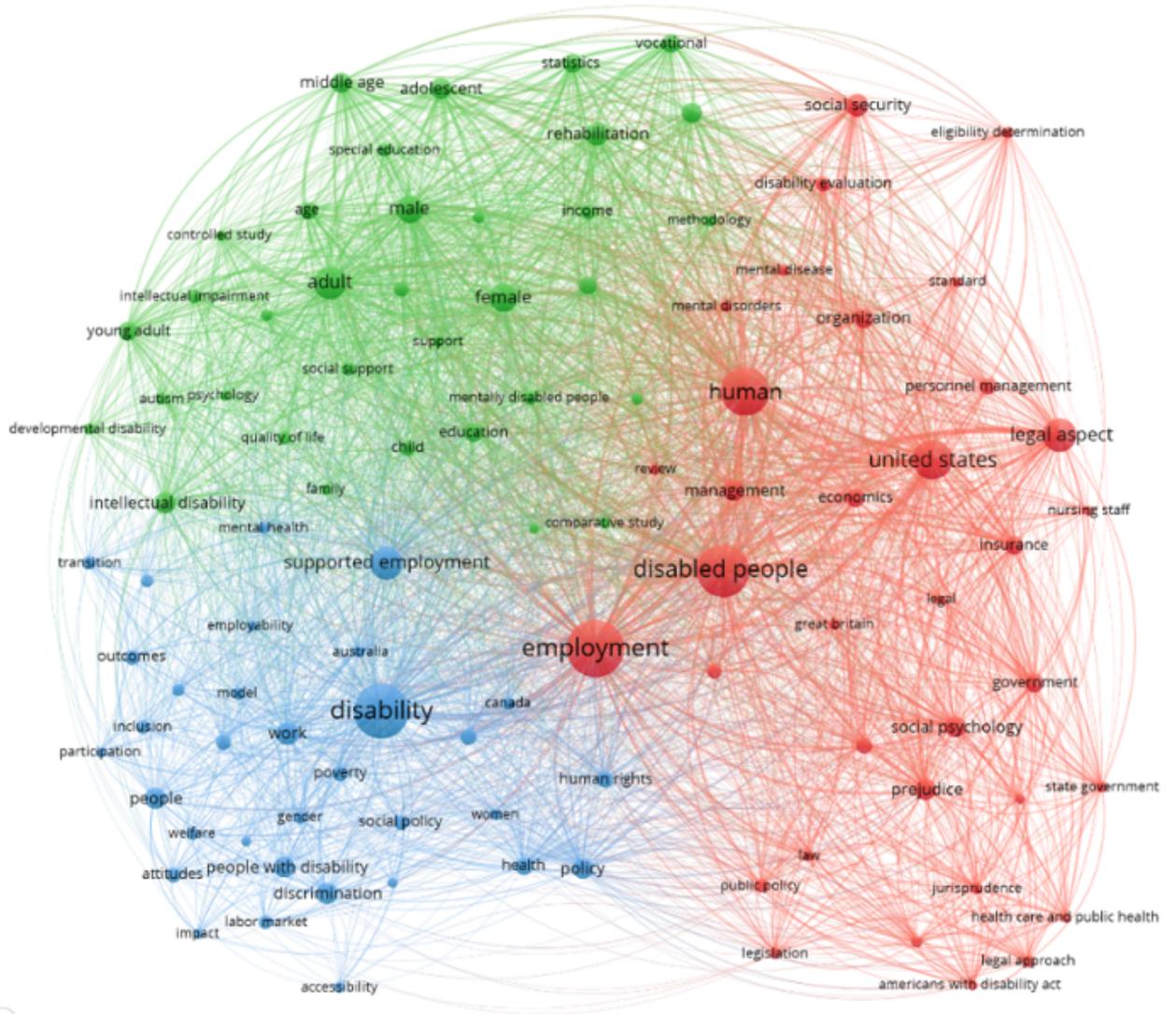
The author declares no competing interest

## Figures



**Figure 1**

Number of publications over the years

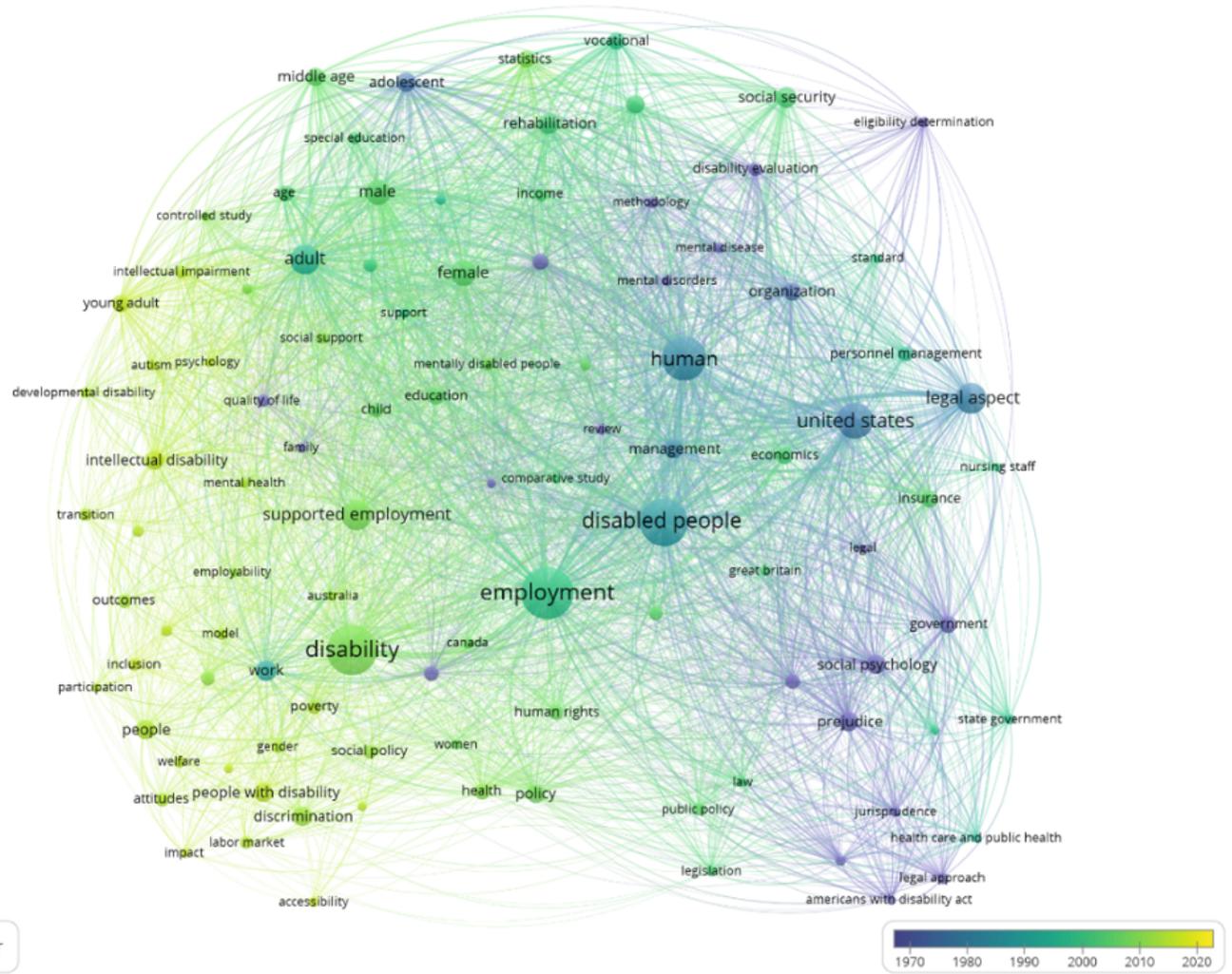


**Figure 2**  
 Network of relationships between keywords (1972-2018)









**Figure 6**

Network of relationships between keywords associated with topics according to their temporal evolution