

Barriers to Employment for Individuals with Intellectual Disabilities: A Systematic Review

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ABSTRACT

This study aimed at reviewing the literature published in scientific journals in English language during the period 2012-2019 in order to identify their research designs and methodologies and to discuss the barriers to employment of individuals with intellectual disabilities. The study sought to identify those barriers from the point of view of employers, parents, and employees with intellectual disabilities. After applying inclusion and exclusion criteria, eight references proved to be in conformity with the criteria and were included in this review. The results of the study highlighted the diversity of the research designs used, including quantitative, qualitative and mixed methods research designs. Moreover, the results indicated that there are a number of legal, economic, and employer-related obstacles facing employment of individuals with intellectual disabilities. However, the study identified a number of obstacles that are related to the individuals with intellectual disabilities themselves, the society, and the surrounding environment. The study recommended reviewing the laws and regulations related to company and institutional management so as to preserve the rights of employees with intellectual disabilities. In addition, the study recommended that these companies develop their current infrastructure so that, in future, their facilities are suitable for all groups of society.

Keywords: obstacles, barriers, intellectual disability, employment, work.

1. Introduction

During the past thirty years, legislative and philosophical forces have attempted to enhance the participation of youth and adults with disabilities in the labor market. Since 1970, many public policy initiatives related to employers and the employment of individuals with disability have been made, starting with the Occupational Safety and Health Act (OSHA) (United States) [1], The human rights movement's interest in normalization, integration, and abolishing institutions has led to a change in the attitude towards work of individuals with intellectual disabilities (ID), and to new legislation and policies [2]. In 1975, the United States Congress enacted the Education for All Handicapped Children (EHA) Act, as children with cognitive disabilities (such as Down syndrome, autism, brain injuries ... and others) were excluded from public education. However, after integration of individuals with ID into schools and work programs, research has done proved their ability to perform many functions in society [1]. In addition, in 2006, the inclusion of individuals with ID in the workforce was emphasized by the United Nations in the Convention on the Rights of Individuals with Disabilities (CRPD) [3].

Individuals with ID are considered part of society, and therefore the rights guaranteed to them should not be neglected in any way. Among the most important rights that should be provided to them is the right to get a suitable job that goes with the level of their abilities, which appeared to be a special necessity after the significant increase in unemployment rates among individuals with various disabilities, and [4] indicates that individuals with ID are individuals whose ability to understand new or complex information and learn new skills is significantly reduced, and who have less ability to cope independently. In the United Kingdom, the term "individuals with Learning Disabilities" (LD) is used to describe those who are referred to elsewhere as individuals with ID or "developmental disabilities" as the American Association on Intellectual and Developmental Disabilities (AAIDD) defined it as the deficiency in intellectual functioning, as well as the adaptive behavior represented by the conceptual, social, and practical adaptive behaviors, and this disability appears before the age of 22 [5]. The regulatory guide for special education also states that ID is "a significant decrease in the level of general mental performance in the stage of development, and it is accompanied by a

clear deficit in two or more areas of the following areas of behavior and adaptation: communication, self-care, home life, social skills, use of community resources, self-direction, health and safety, functional academic skills, and Leisure and work skills" [6].

Nord and Hepperlen [7] emphasized that the emergence of the social movement towards employment of individuals with disabilities was a response to public demands. Malakpa [8] defines the employment of individuals with disabilities as "providing work that suits the capabilities and prospects of the disabled, while providing him with a suitable work environment psychologically and financially" [8]. Recurrent public demands for inclusion of individuals with disabilities had many outcomes, such as enacting laws regulating employment of individuals with disabilities and creating disability Support System. Therefore, in recent years, many countries have sought to develop policies and procedures aimed at improving the outcomes for employment of individuals with ID. Research indicates that employment-related support systems in the United States have shown symbolic improvements in employment outcomes. Moreover, US official statistics from 1988 - 2012 confirm that there was a significant increase in the number of individuals who received Integrated Employment Services [7]. Parent et al. [9] emphasized that the Integrated Employment refers to jobs held by individuals with disabilities in typical workplace settings where the individuals with disabilities earn wages consistent with the wages paid to workers without disabilities performing the same or similar work; the individuals earn at least the minimum wage along with the highest possible package of. The goal of attaining integrated employment for the individuals with ID is to have them reach the social position of active citizens who have skills and status, contribute toward public wealth, and earn a fair wage [10].

Over the past decades, there have been many changes in the legal and executive frameworks regarding employment of individuals with ID. Previously, individuals with ID used to be employed in day activities and sheltered workshops. Sheltered workshops are a form of rehabilitation for individuals with ID. Supporters of sheltered workshops often cite them as providing employment opportunities for individuals with ID in a separate environment by building their professional and social skills [11]. However, Wehman [12] emphasized that performing these activities in these environments depended on the medical model of disability and were considered to be interventions to improve the lives and skills of individuals with ID. However, youth with mild to moderate ID also face difficulties in transitioning from sheltered workshops to an open job market [13]. Over the past twenty years, these employment practices have been increasingly replaced by supported employment options that view the job as a real, integrated business [14]. Bond et al. [15] defines Assisted Employment as an evidence-based practice that aims to employ individuals with disabilities in the competitive labor market in jobs they prefer for real pay. Furthermore, Lysaght et al. [16] indicated that employment provides many incentives for individuals with disabilities, specifically those with intellectual and developmental disabilities, such as financial rewards, access to benefits and social insurance programs, while reducing their dependence on social care; adding that employment of individuals with disabilities increases their self-esteem and provides them with access to professional and social networks, in addition to improving their quality of life. Employment can lead to positive psychological and economic benefits for individuals with ID, the feeling that there is a goal in life, opportunities to form new friendships while learning new skills, as well as increased opportunities for financial independence, health and a greater sense of control over one's life [3,17].

Despite the huge efforts made to increase employment opportunities for individuals with ID, Domin and Butterworth [18] asserted that their employment rates around the world remain much lower than those of others. In addition, individuals with ID are not adequately represented in labor markets in most Western economies. For example, rates of employment of individuals with ID in the United States, Canada and the United Kingdom range between 9% and 28%. In contrast, employment rates for the general population ranges from 75% to 90% [19]. According to Cimera et al. [20] and Trembath et al. [21], adults with ID face many challenges with relation to employment and the majority of them are unemployed. In fact, their access to job opportunities is much less than ordinary individuals. In addition, Ellenkamp et al. [3] pointed out that the percentage of individuals with ID who are included in Supported Employment services ranges from 9% to 40% across different countries, while the data collected from several studies confirm that employment is not an available option for many individuals with ID in many areas [14]. For instance, U.S. Bureau of Labor Statistics asserted that, in 2018, the employment rate of individuals with disabilities reached 19.1%; while the employment rate of the general population who do not have a disability reached 65.9% [22]. Thus, the importance of exploring the obstacles facing individuals with ID at work became evident.

The current study shall review a number of the studies conducted in foreign literature in relation to the topic of employment for individuals with ID, from several aspects. For example, the study conducted by Burke et al. [23] for the period from 1987 to 2012, aimed at providing an overview of research results related to employers' attitudes towards disabilities in general, and the potential impacts these attitudes might have on employers, with the purpose of improving employment outcomes for individuals with disabilities. Likewise, Ellenkamp et al. [3] examined studies published between 1993 and 2013, in order to identify factors related to the work environment that facilitate obtaining a job and maintaining a job in our competitive world for individuals with ID. Similarly, in this study, I shall review the literature related to the obstacles facing employment of individuals with ID and identifying their research methodologies focusing mainly on recent studies. Unfortunately, some of the previous reviews on this topic have only included obstacles to employment of individuals with disability as part of a larger study with a wider overall focus, despite its importance to other researchers and decision-makers who seek to make positive future changes. In addition, previous reviews have been limited to the opinions and the attitudes of a small number of individuals, unlike the current study.

Based on the above, this study aims at discussing the obstacles that face employment of individuals with ID and hinder them from obtaining and maintaining a job - from the viewpoints of several groups of individuals, such as employers, parents and employees with ID. The study focuses on the period 2012-2019. In addition, the study identifies the different research methodologies used in previous related studies and literature in order to, finally, make useful recommendations. The current study seeks to answer the following questions:

- (1) What methodologies have been used in studies of the obstacles to employment of individuals with ID?
- (2) What are the obstacles to employment of individuals with ID from the viewpoint of employers, parents, and workers with ID?

2. Methodology

2.1. Searching the Literature:

The search was carried out in four databases (ERIC-EBSCO, ERIC-ProQuest, Education Journals-ProQuest, EBSCO) by using a set of keywords related to the topic of the current study, including: barriers, challenges, hurdles, outcomes, attitudes, perspectives, employer, employment, intellectual disability, mental retardation, and supported employment. As for the comprehensive criteria used, they were as follows:

- 2.1.1. Studies discussing the topic of obstacles to employment for individuals with ID, whether from the point of view of employers, parents or workers with ID;
- 2.1.2. Studies published in the English language;
- 2.1.3. Studies and articles published in scholarly refereed journals, during the period 2012-2019, with an open access full text.

As for the exclusion criteria, they included the following:

- 2.1.1. Books, doctoral and master's theses, research papers and articles not published online;
- 2.1.2. Studies and articles published in any language other than English.

Based on the above, 401 references were identified as may possibly eligible for review. However, after reading the titles, summaries and results of these references over the internet and after applying inclusion and exclusion criteria, only eight references were included in this review.

2.2. Data Extraction and Organization of Information

Data were collected on the methodologies used in studies and articles related to the topic of the obstacles to the employment individuals with ID. The results of these studies were extracted, and the obstacles they identified were summarized in a Table 1. The table includes a number of columns, such as: author, year of publication, sample, research methodology, tools and results.

Table 1. Sample, Methodology, Tools and Results of the Studies under Review

Authors and Publication Date	Sample	Methodology	Tools	Results
1 Kocman et al. [14]	30 HR managers (22 female and 8 male)	Mixed (Blended)	Unstructured interviews and a questionnaire to assess the various barriers affecting persons with intellectual disabilities, physical disabilities, and mental disorders, as well as the Community Living Attitude Scale (CLAS-MR); then the Intellectual Disabilities Ability Questionnaire (IDAQ).	People with intellectual disabilities suffer a noticeable lack of the skills necessary for obtaining employment, with insufficient jobs available as a result of the high job requirements in operating institutions or companies, in addition to the digital transformation that reduced the need for human employees in the workplace. Legal issues related to increasing the protection of persons with intellectual disabilities, security-related impediments, due to the non-compliance of employees with intellectual disabilities with the specified regulations, which may cause legal problems for these companies to bear the consequences, and negative attitudes of managers.
2 Gilson et al. [24]	673 fathers and other family members of people with intellectual and developmental disabilities (409, male, 251 female)	Quantitative	A questionnaire that sought: (A) Understanding family perspectives, priorities and concerns related to work and community participation of children and adults with intellectual and developmental disabilities, and (B) Teaching training paths that they may find most useful in supporting their family members. The questionnaire sections also included: (A) Demographic information of family members of the persons with intellectual and developmental disability, (B) Employment perspectives and experiences, (C) Work priorities and concerns, and (D) Demographic information about the participant.	Most of the obstacles related to employment of persons with intellectual disabilities were related to their ability to apply for the job, the fact that they suffer a lack of social communication skills, in addition to the ability to perform that job, as well as obstacles related to the availability of workplaces, the opportunities that exist to support them during work, and safety during work, in addition to obstacles related to community support such as the lack of reliable transportation, and the inaccessibility of programs that support jobs for individuals with intellectual disabilities.
3 Meltze et al. [25]	51 participants with an intellectual disability (female 25 and male 26)	Qualitative	Semi-structured interviews with people with intellectual disabilities.	The constraints included passive support from employment services for persons with disabilities, the provision of short-term jobs, disrespect, stereotypes and discrimination on the part of colleagues and employers on the basis of disability. In addition, there are fewer opportunities to change or advance tasks.

4	Hemphill and Kulik [26]	64 participants with special needs, 51 of whom had intellectual disabilities.	Quantitative	A five-point likert scale which included questions about job suitability, measures of intent to remain in a protected work position, in addition to an open question.	The person with a disability feeling at ease within protected work is the main obstacle to finding a desire to move to normal or comprehensive work, in addition to their lack of realistic career aspirations.
5	Duvdevany et al. [19]	79 employers (53 and 26 female)	Quantitative	Three main tools were used: <ul style="list-style-type: none"> - Demographic questionnaire related to employers and workers. - A questionnaire on their attitudes towards employing people with severe disabilities - A questionnaire regarding the determinants of employers' attitudes towards employing persons with disabilities. 	Previous experience and knowledge of people with intellectual disability are considered one of the main factors that affect others' predictions concerning employing them. The results of this study demonstrated that others' predictions were mainly negative, due to the negative attitudes of employers, which is considered one of the main obstacles for employing people with intellectual disability. In addition to the unwillingness of society to give persons with intellectual disability an equal opportunity like their non-disabled peers to work and to prove themselves as active members in the society. The stereotypical thinking of the employers, in addition to the lack of opportunities afforded to persons with intellectual disabilities, hinder them from proving their professional qualification.
6	Zappella [27]	30 employers(15 male and 15 female); 6 of whom own their companies, 16 work as HR managers, and 8 are co-workers who have relatives with disabilities.	Qualitative	Interviews with the employees with intellectual disabilities and their employers.	The results indicated that certain set of attitudes affect the decisions of employers. The first is related to the law; for some employers, they view the employment of a person with an intellectual disability as a burden on the organization, in addition to the concerns of employers regarding their employment, such as fear that they may not be productive in comparison to their peers without a disability. The second set of attitudes is related to the emotions of both the employer and the worker with disability, where the lack of knowledge of the needs of workers with intellectual disabilities and the failure to understand the reasons for their taking some positions, impedes the employer from acting on some matters. The results also revealed obstacles related to the possibility of introducing changes in the work environment, and the costs of making the environment accessible to people with disabilities. Finally, some obstacles were related to maintaining the safety of an employee with a disability

or others. Employers fear that the employee will be harmed or pose a danger to his colleagues, and they believe that if all workers are the same, companies will avoid making any changes that may exacerbate differences between workers.

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7	Vinzer and Roth [28]	29 employers (22 male and 7 female) and employees (12 and 13 with intellectual disabilities)	Qualitative	A semi-structured interview on employers' views on employing people with intellectual disabilities	The obstacles included the difficulty of dealing with employees with intellectual disabilities as a result of the loss of support provided by the authorities and the competent bodies and the economic damage resulting from the difficulty of working with employees with intellectual disabilities, in addition to the fact that their employment is considered economically ineffective, as the companies that employ them are not supported in any way or give any incentives. In addition to the inability to provide insurance to the employees with an intellectual disability, as a result of the insurers' unwillingness to provide them insurance coverage, which may represent a burden to the companies. For these reasons, some argue that small companies do not have to hire them or that they should accept a low salary. Finally, the obstacles included customers' fear of dealing with employees with intellectual disability as a result of the trauma of meeting them.
8	Berry and Kymar [29]	34 HR professionals	Quantitative	Questionnaire entitled: (Realization of human resources professionals of the possibility of employing persons with intellectual disabilities) consisting of (10) closed questions on disability issues.	Based on the average score, it was found that the perceived barriers are: Difficulty in balancing work environment, the need to adjust the workplace, insufficient education, lack of acceptance by employers, changing attitudes of the society, lack of experience, lack of support from family and friends, associated disability, access difficulty, attitudes of co-workers.

3. Results and Discussion

3.1. The First Question: What methodologies have been used in studies of the obstacles to employment of individuals with ID?

The results demonstrate that a number of different methodologies were used in the studies conducted on the topic of the obstacles to employing individuals with ID, as summarized in Table 1. The samples across the eight selected studies size and category. In total there were 972 participants, 96 of whom were human resources managers and employees, 89 were company owners and employers, and 114 were employees with ID; finally, there were 673 family members and parents.

Six of the studies identified the gender of the respondents (male or female) [24, 19, 14, 25, 28]. Kocman et al. [14] intended this diversity and considered it an important target for all corporate recruitment strategies, and their study had high levels of diversity with regard to gender, age and nationality, while moderate levels of disability appeared. Several tests were also conducted to assess differences in employment with respect to age, gender and nationality, and revealed a close relationship to gender. It also showed the importance of the presence of family members in community employment, and showed a negative correlation with males gender ID, degree of disability, and race. Full-time employment expectations had the strongest positive correlation with work, while the strongest negative correlations were between gender, ID, severity of disability, and race [24]. All studies focused specifically on employment of individuals with ID, except for the study conducted by Kocman et al. [14] which compared the perceived obstacles to employing individuals with physical and ID and mental disorders, and the study conducted by Hemphill and Kulik [26], which included 64 workers with special needs, 80% of whom were intellectually disabled.

The research designs used in the selected studies were of three types: the quantitative descriptive approach was used in four studies, and three used the qualitative approach, and one study used a mixed approach combining qualitative and quantitative approaches. We note that there were no empirical studies, and this may be due to the nature of the goal and the subject of the study, as the previous approaches are considered more appropriate to the topic of identifying obstacles to employment.

The types of variables that were measured in the questionnaires used in the descriptive quantitative studies were also diverse. It appears that two types of tools were used, namely questionnaires and scales. In the studies conducted by Berry and Kymar [29], Duvdevany et al. [19] and Gilson et al. [24], questionnaires were used to measure attitudes, including measuring the extent of human resource professionals' awareness of the possibility of employing individuals with ID, as well as the demographic variables of employers, attitudes towards employing individuals with severe ID, and the attitudes of employers towards employing individuals with disabilities in general. They also looked at understanding family perspectives and concerns related to work and community participation of individuals with ID, and training paths that could be useful for supporting their family members. As for Hemphill and Kulik [26], it was the only study that examined protected work with a scale of suitability and intent to remain in this type of work.

Three studies were distinguished by the use of the qualitative approach, and all of these used semi-structured interviews with employees with ID and employers. The interviews were conducted individually or in pairs, but none of the studies mentioned the details of the interviewer, the interview, its duration, or its guidelines [25, 28, 27].

Only one study used a mixed approach, and its tools included the unstructured interview, where the details of the interviewer and the interview's average duration were identified, in addition to including the interview guidelines, in clear detail and comprehensiveness. The first section of the interview was on general information about the company, the second section focused on current practices and preferences related to the employment of individuals with disabilities, the third section: looked at specific challenges and barriers for the employment of individuals with ID, and the final section aimed to assess useful strategies for increasing employment rates for individuals with ID. This section consisted of an open question and seven closed questions. The study also included a questionnaire to assess the various barriers that affect individuals with ID, physical disabilities, and mental disorders, and the Community Living Attitude Scale (CLAS-MR) to assess attitudes towards individuals with ID was used. The scale consists of forty items on four dimensions: empowerment, exclusion, accommodation, and likeness. In addition, the Intellectual Disability-Ability- (IDAQ) questionnaire was used to assess expectations towards the skills of individuals with ID in two areas: activities of daily life and activities beneficial to daily life, and it consisted of nine points [14].

3.2. The Second Question: What are the obstacles to employment of individuals with ID from the viewpoint of employers, parents, and workers with ID?

The results reviewed in Table 1 indicate the existence of a number of obstacles from the point of view of employers, parents and individuals with ID. These obstacles fall into a number of categories: legal and

legislative obstacles, economic obstacles, obstacles related to employers and individuals with ID and obstacles related to society and the surrounding environment. The results confirmed that the obstacles related to employers were the most serious obstacles facing the employment of individuals with ID. The following is a review of those obstacles which were most frequently cited.

3.2.1. Obstacles Related to the Employers

Seven studies [19, 24, 26, 14, 25, 28, 27] shed light on a number of the obstacles related to employers, as attitudes ranged from the positive of those who believed in the necessity of embracing and integrating individuals with ID, with their full right to employment, to the negative view that there was no benefit from their employment due to the large burdens involved in several fields.

After reviewing the results, we found that employers mentioned many obstacles to employing individuals with disabilities, including the recent significant rise in job requirements and standards, which was led to the difficulty of matching these standards with the capabilities of individuals with ID, and thus the negative impact on their employment prospects, in addition to the digital transformation sought by some institutions and companies, which has led to reducing the need for the human presence in the workplace [14].

Supporting the employers' views, some parents emphasized the same obstacles, as they saw that companies had an important role in preserving their employees' safety and securing their protection at work. Failure to protect their offspring represented a major concern to parents and prevents them from employing their relatives who suffer ID [24].

Some employers indicated that the employment of a individual with an ID add burdens to the operating company and they raised many concerns regarding the employment of individuals with ID, such as the possibility that their productivity may be low compared to their ordinary peers [27].

Moreover, the obstacles that prevented individuals with ID from continuing to work included the disrespectful treatment they may receive from their employers – not to mention negative stereotypes and discrimination on the basis of their disability. In addition, jobs for individuals with ID tended to be short term [25]. One of the main obstacles was also the comfort felt by individuals with ID within a protected work environment, which led to their having no desire to move to an integrated or comprehensive work environment. This obstacle is somehow related to those employers who assign employees with an ID very simple responsibilities and tasks below their level of capability, merely because this does not pose any challenges but at the same time it hinders their development. However, this practice discourages employees with ID from having realistic aspirations to join the integrated work environment and thus hinders their professional development and their transfer out of protected work [26].

The results of the selected studies showed another impact of the attitudes of employers regarding the obstacles to employing individuals with ID. The employers who showed preference for placing these individuals in isolated parts of the work place, tended to have greater perception of the obstacles to employment compared with employers who viewed intellectually disabled individuals as a group society similar to themselves and others. The unbiased employers' perceptions were that the obstacles were lower and surmountable [14].

Previous negative experiences were one of the main factors predicting attitudes towards employing individuals with ID, as familiarity with a person with an ID may negatively affect individuals' attitudes towards employment of other individuals with intellectual disability [19]. In addition, the employment of individuals with ID depends on the willingness of employers to handle the risks or face the difficulties involved in their employment, such as infrastructure problems and other economic consequences [28].

A further aspect discussed in the studies under review was the emotional aspect, including the feelings of the individuals involved, ignorance of the needs of workers with disabilities and lack of understanding of the reasons behind their behavior was the main concern of some employers. These employers asserted that they found this situation very difficult due to their lack of awareness of the correct way to deal with individuals with ID. Thus, they found themselves forced to avoid employing them. This same situation led employees with ID to leave work and stop working within the particular environment [27].

Employers showed a number of differing expectations and reservations towards employing individuals with ID, with a clear preference for employing individuals without disabilities or those with a physical disability. However, these expectations and reservations were mostly based on wrong information about individuals with ID. In fact, many employers acknowledged their lack of knowledge in this respect and emphasized the role of media campaigns in increasing the visibility of job opportunities for individuals with ID and promoting inclusive or integrated employment systems [14].

3.2.2. Obstacles Related to Individuals with ID

Six studies identified a number of obstacles related to the individuals with ID. However, these obstacles were not thoroughly discussed, but were referred to briefly through mentioning two main axes. The first showed

obstacles related to the low skills which individuals with ID have at work. The other axis included obstacles related to other individuals' attitudes towards their employment situation [29, 24, 26, 14, 25, 28].

It is clear that some individuals with ID lack a number of skills, such as: social communication skills, the ability to apply for a job, and the ability to perform that job [24, 14]. In addition, there are obstacles related to the ability of individuals with ID to achieve a balance in work life. Furthermore, individuals with ID have usually had insufficient education during the early stages of their life – not to mention their lack of work experience. With their ID and the consequences it has on their behavior, these factors hinder their success and progress at work [29].

A number of employers pointed out the difficulty they faced when dealing with employees with ID, and that this was the reason for their reluctance to employ them anymore. In addition, the employers stated that employees with ID face difficulty to perform daily tasks within the work environment, as one of them confirmed: "It is very difficult to deal with workers with disabilities, special needs or individuals with ID, unless they get some support and assistance, most of which are related to the authorities, and this is what we lack" [28].

Concerning open versus protected work environments, some individuals with ID in open jobs highlighted the obstacles in such jobs related to the lack of opportunities for them to change their assigned tasks or even to move on to more advanced tasks. Having a more advanced task may require them to stay for longer periods of time at work, and this caused some of these employees to drop out and leave work, or turn to protected and social work, given the fewer obstacles they would face finding and maintaining a job in this field [25]. On the other hand, more than half of the participants who worked in protected work environments showed no realistic job aspirations, as there were no goals or intentions to move on to jobs in open work environments. Rather, they felt satisfied with their own protected work, as they were from any challenges they would face in an integrated employment environment. Thus, this study revealed that their lack of future aspirations was one of the obstacles to improving their current job conditions [26].

3.2.3. Obstacles Related to Society and the Surrounding Environment

The results showed the diversity of these obstacles, as they were associated with family, friends, colleagues and the surrounding environment. According to the results of four of the eight studies [29, 19, 24, 28], society is not ready to give individuals with ID a fair and equal opportunity to be employed like others. It is not easy for individuals with ID to find work and prove themselves in this field, because of stereotypical thinking and lack of suitable job opportunities, which are considered major obstacles preventing individuals with ID from proving their professional qualification and their ability to work. This highlighted the need to change those negative societal attitudes [19].

The employers testified that, despite a sense of responsibility towards the employee with an ID, they faced a number of obstacles, as one of them stated: "When a person faces a problem, he feels traumatized, and if individuals come and see the person with a disability they are shocked.". This means that employing individuals with ID usually causes a feeling of bewilderment and sense of unpredictability in dealing with them. In short, it can be said that the employment of individuals with disabilities is accompanied by fear of direct interaction with them, in addition to customers' fear of dealing with employees with ID and, sometimes, their fear of meeting individuals with disability [28].

Moreover, the studies highlighted a lack of support from family members, friends and some human resources specialists, which presented a number of obstacles preventing the employment of individuals with disabilities. Some of these studies emphasized the existence of an obstacle related to the difficulty of access [29]; lack of reliable transportation; and inaccessibility of the programs that support employment of individuals with ID - as stated by some family members and parents [24].

3.2.4. Legal and Legislative Obstacles

The studies by [14] and [27] referred to a number of obstacles related to laws and legislation, which mainly affect the employment of individuals with ID. The legal obstacles resulting from the employment of individuals with disabilities were the requirements to provide special protection to these individuals, as there is a possibility of facing risks – whether by the employee with an ID or others in the workplace, due to inadequacy of the infrastructure for some individuals. In this sense, employers fear that the employee with disability may be exposed to any harm, or that his presence will pose a danger to their workers. On the other hand, employing ordinary individuals in the same positions would not require the companies to make any such changes in the workplace. The studies also shed light on some security and safety concerns, given the possibility that employees with ID may not comply with security regulations, which could cause legal problems, the consequences of which would be borne by the companies or institutions employing them.

3.2.5. Economic Obstacles

The economic obstacles affecting the employment of individuals with ID were discussed in two studies [28, 27], in which one employer confirmed that employing individuals with ID is not economically feasible, by saying: "Mostly it is a matter of taxes". Another employer said: "This should be absolutely clear: there is no funding to hire individuals with ID". This is an indication of the priority of the economic aspect for employers, as there is an increase in the expenses of the operating company or institution. In addition to that, there could be commercial damage to those companies as a result of employing individuals with ID which may cause harm to the rest of the employees. One employer stated: "In general, it is not worth it for small companies to employ those with an intellectual disability, as there is a difficulty in retaining an employee for whom the company is highly responsible". The impact of the economic side was also highlighted by the employees, in terms of encouraging employment, as some employees said: "Employers should be given incentives to employ them". Here, the financial aspect was highlighted in terms of cost versus benefit and, if employers think like this, they will only consider costs in comparison to the advantages of employing such individuals. Furthermore, an additional difficulty is of the inability to insure employees with ID and the evident lack of cooperation from insurance companies, which may burden the institutions employing them, as one employer commented: "It is difficult to bear the costs of insurance, as insurance companies did not want to insure them,". Another employer admitted that this point was a deterrent to employing a person with an intellectual disability: so that difficulties related to the daily performance at work, could cause further economic damage [28].

Additional economic obstacles to the employment of individuals with ID arise from the requirement to provisioned protection-related resources due to the characteristics of these workers. One employer indicated that employing individuals with disabilities required making changes in the work environment, such as making it accessible, which was an additional cost. From their point of view, the individual with the disability is the sole beneficiary of this employment [27].

4. Suggestions for Future Research

4.1. For Scientific Research

It is evident from the previous results that, over the past seven years, some studies have focused on the factors related to the obstacles to employing individuals with ID. This study suggests that suggest that there is a need to do more such studies in various countries, as these efforts will enhance the creation and development of awareness among employers and workers in the field of employing individuals with ID, in both sectors – government and private. The current study also suggest holding relevant conferences and training courses, to explain that current exclusionary practices explicitly violate modern global trends calling for justice and equality. There is need for those involved to receive appropriate training and qualification to deal with individuals with ID and to understand their characteristics.

4.2. Laws and Regulations

There is a need to develop legislation that preserves the rights of individuals with ID, specifically those related to their employment, and guarantees them justice in comparison with their non-disabled peers. There is a need to help companies and institutions large and small. to support employment for these individuals and not overburden them. In addition there is a need for legislation that supports increased access to inclusive/integrated employment options in the post-school period, and for post-secondary education options for students with ID.

4.3. Employer Companies and Institutions

Companies have a responsibility to develop their current infrastructure and for future facilities, designs should be available to all segments of society from the planning stage for all types of buildings, in order to facilitate access for individuals with ID and to ensure safety for all employees. There is also a need to find smart electronic applications and develop a database to facilitate job searching for individuals with ID. A strategic partnership should be developed and implemented between vocational rehabilitation and human resource specialists to promote comprehensive / integrated employment. In addition, the way should be opened in these companies to provide training for students with ID according to their own standards and in line with the characteristics of these members of our society.

4.4 Education

The education sector should provide transportation services related to employment training at an early age so that individuals with ID would be able to acquire necessary work experience while at school. This should be done in partnership with the local community and its institutions in order to evaluate and develop post-secondary education options, with the aim of providing goals for comprehensive competitive work opportunities instead of protected work options, in order to raise the efficiency and skills of these students to help them find work opportunities after leaving school.

REFERENCES

1. Sauer, A. L., Parks, A. and Heyn, P. C. 2010. Assistive technology effects on the employment outcomes for people with cognitive disabilities: a systematic review. *Disability and Rehabilitation: Assistive Technology*, 5, 377-391. <https://doi.org/10.3109/17483101003746360>.
2. Mank, D., Cioffi, A. and Yovanoff, P. 1997. Patterns of support for employees with severe disabilities. *Mental Retardation*, 35, 433-447. [https://doi.org/10.1352/0047-6765\(1997\)035<0433:POSFEW>2.0.CO;2](https://doi.org/10.1352/0047-6765(1997)035<0433:POSFEW>2.0.CO;2)
3. Ellenkamp, J. J., Brouwers, E. P., Embregts, P. J., Joosen, M. C. and van Weeghel, J. 2016. Work environment-related factors in obtaining and maintaining work in a competitive employment setting for employees with intellectual disabilities: A systematic review. *Journal of occupational rehabilitation*, 26, 56-69. <https://doi.org/10.1007/s10926-015-9586-1>.
4. Nevala, N., Pehkonen, I., Teittinen, A., Vesala, H. T., Pörfors, P. and Anttila, H. 2019. The Effectiveness of Rehabilitation Interventions on the Employment and Functioning of People with Intellectual Disabilities: A Systematic Review. *Journal of occupational rehabilitation*, 29, 773-802. <https://doi.org/10.1007/s10926-019-09837-2>
5. American Association on Intellectual and Developmental Disabilities (AAIDD). 2021. *definition of intellectual disability*. [online] Available at: <http://www.aaidd.org/content_100.cfm> [Accessed 22 February 2021].
6. The Ministry of Education. 2015. Organizational and procedural guide for special education institutes and programs in the Kingdom of Saudi Arabia. *King Abdullah bin Abdulaziz Project for the Development of Public Education*.
7. Nord, D. and Hepperlen, R. 2016. More job services—Better employment outcomes: increasing job attainment for people with IDD. *Intellectual and developmental disabilities*, 54, 402-411. <https://doi.org/10.1352/1934-9556-54.6.402>.
8. Malakpa, S. W. 2007. Problems and Prospects in Employment and Job Retention of the Blind and Visually Impaired in the United States: A Future Concern of Special Education. *International Journal of Special Education*, 22, 53-58.
9. Parent, W. S., Cone, A. A., Turner, E. and Wehman, P. 1998. *Supported employment: Consumers leading the way*. Brookes Publishing Co.
10. Migliore, A., Mank, D., Grossi, T. and Rogan, P. 2007. Integrated employment or sheltered workshops: Preferences of adults with intellectual disabilities, their families, and staff. *Journal of Vocational Rehabilitation*, 26, 5-19.
11. Rosen, M., Bussone, A., Dakunchak, P. and Cramp, J. 1993. Sheltered employment and the second generation workshop. *Journal of Rehabilitation*, 59, 30.
12. Wehman, P. 2012. Supported employment: What is it?. *Journal of Vocational Rehabilitation* 27, 139–142. <https://doi.org/10.3233/JVR-2012-0607>
13. Hsu, T. H., Ososkie, J. and Huang, Y. T. 2009. Challenges in Transition from Sheltered Workshop to Competitive Employment: Perspectives of Taiwan Social Enterprise Transition Specialists. *Journal of Rehabilitation*, 75.
14. Kocman, A., Fischer, L. and Weber, G. 2018. The Employers’ perspective on barriers and facilitators to employment of people with intellectual disability: A differential mixed-method approach. *Journal of Applied Research in Intellectual Disabilities*, 31, 120-131. doi: <https://doi.org/10.1111/jar.12375>.
15. Bond, G. R., Becker, D. R., Drake, R. E., Rapp, C. A., Meisler, N. and Lehman, A. F. BELL, MD & BLYLER, CR. 2001. Implementing supported employment as an evidence based practice. *Psychiatric Services*, 52-313. <https://doi.org/10.1176/appi.ps.52.3.313>
16. Lysaght, R., Petner-Arrey, J., Howell-Moneta, A. and Cobigo, V. 2017. Inclusion through work and productivity for persons with intellectual and developmental disabilities. *Journal of Applied Research in Intellectual Disabilities*, 30, 922-935. <https://doi.org/10.1111/jar.12284>.
17. Holwerda, A., van der Klink, J. J., de Boer, M. R., Groothoff, J. W. and Brouwer, S. 2013. Predictors of work participation of young adults with mild intellectual disabilities. *Research in developmental disabilities*, 34, 1982-1990. <https://doi.org/10.1016/j.ridd.2013.03.018>
18. Domin, D. and Butterworth, J. 2013. The role of community rehabilitation providers in employment for persons with intellectual and developmental disabilities: Results of the 2010–2011 national survey. *Intellectual and Developmental Disabilities*, 51, 215-225.
19. Duvdevany, I., Or-Chen, K. and Fine, M. 2016. Employers’ willingness to hire a person with intellectual disability in light of the regulations for adjusted minimum wages. *Journal of Vocational Rehabilitation*, 44, 33-41. <https://doi.org/10.3233/jvr-150778>.

20. Cimera, R. E., Burgess, S. and Bedesem, P. L. 2014. Does providing transition services by age 14 produce better vocational outcomes for students with intellectual disability?. *Research and Practice for Persons with Severe Disabilities*, 39, 47-54. <https://doi.org/10.1177/1540796914534633>.
21. Trembath, D., Balandin, S., Stancliffe, R. J., and Togher, L. 2010. Employment and volunteering for adults with intellectual disability. *Journal of Policy and Practice in Intellectual Disabilities*, 7, 235-238. <https://doi.org/10.1111/j.1741-1130.2010.00271.x>.
22. Bureau of Labor Statistics (BLS), 2019. *Persons with a Disability: Labor Force Characteristics Summary*. [online] Available at: <<https://www.bls.gov/news.release/disabl.nr0.htm>> [Accessed 3 April 2019].
23. Burke, J., Bezyak, J., Fraser, R. T., Pete, J., Ditchman, N. and Chan, F. 2013. Employers' attitudes towards hiring and retaining people with disabilities: A review of the literature. *The Australian Journal of Rehabilitation Counselling*, 19, 21-38. <https://doi.org/10.1017/jrc.2013.2>
24. Gilson, C. B., Carter, E. W., Bumble, J. L. and McMillan, E. D. 2018. Family perspectives on integrated employment for adults with intellectual and developmental disabilities. *Research and Practice for Persons with Severe Disabilities*, 43, 20-37. <https://doi.org/10.1177/1540796917751134>.
25. Meltzer, A., Kayess, R. and Bates, S. 2018. Perspectives of people with intellectual disability about open, sheltered and social enterprise employment. *Social Enterprise Journal*, 14, 225-244. <https://doi.org/10.1108/SEJ-06-2017-0034>.
26. Hemphill, E. and Kulik, C. T. 2017. The tyranny of fit: Yet another barrier to mainstream employment for disabled people in sheltered employment. *Social Policy & Administration*, 51, 1119-1134. <https://doi.org/10.1111/spol.12220>.
27. Zappella, E. 2015. Employers' attitudes on hiring workers with intellectual disabilities in small and medium enterprises: an Italian research. *Journal of Intellectual Disabilities*, 19, 381-392. <https://doi.org/10.1177/1744629515580883>
28. Vinzer, Y., and Roth, M. 2013. General Attitudes towards Employment of Individuals with Mental Disabilities in Israeli Society: The Employers' Perspectives. *Social Work Review/Revista de Asistentia Sociala*, 12, 95-110.
29. Berry, B. S. and Kymar, K. R. 2012. Human Resource professionals' perception on disability related barriers to employment of Persons with intellectual disability. *The Indian Journal of Occupational Therapy*, 44, 21-29.