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Employers' Perspectives on Individuals With IDD in Community Integrated Employment Settings: A Scoping Review

Lindsay S. Athamanah, Keeley White, Connie Sung, Marisa H. Fisher, and Geraldine Leader

Abstract

Individuals with intellectual and developmental disabilities (IDD) experience high rates of unemployment and underemployment. Although research often focuses on job training and preparing people with IDD for work, few address the perspectives of the employers toward the employment of people with IDD. In this scoping review, research on the perspectives of employers of individuals with IDD working in community integrated employment settings were identified and evaluated. Findings revealed varying research trends by country and journal type since the 1960s, such as the finding that <50% of employers have prior experience working/hiring individuals with IDD and that studies have been conducted globally using primarily a quantitative/descriptive methodology and informal nonvalidated survey tools. Limitations and implications for future research are provided.

Keywords: intellectual and developmental disabilities, autism spectrum disorder, employment, employer perspectives, scoping review

Employment is a socially normative activity that often defines adulthood and is critical to individuals' personal autonomy and quality of life (Grun et al., 2010; Saleh & Bruyere, 2018; Walsh et al., 2014). People with intellectual and developmental disabilities (IDD), including those with autism spectrum disorder (ASD) and intellectual disability (ID), and their families have expressed strong desires to be employed (Ali et al., 2011; Kocman & Weber, 2016) and prefer to work in integrated employment settings (Migliore et al., 2007; Scott et al., 2017; Simonsen & Neubert, 2013). National and global inclusion efforts have attempted to improve employment outcomes for people with IDD, including United States legislative efforts such as the Higher Education Opportunity Act (2008) and the Workforce Innovation and Opportunity Act (2014), as well as global efforts through the United Nations Convention on the Rights of Persons with Disabilities (The United Nations, 2006). Despite these efforts, only 15% of adults with IDD in the United States are

competitively employed in individual jobs (Hiersteiner et al., 2018) and global employment ratios of individuals with disabilities vary between 30–31% in South Africa and Japan to 81–92% in Switzerland and Malawi (World Health Organization, 2011).

Barriers to employment have been recently categorized as supply-side and demand-side barriers (Erickson et al., 2014). Supply-side barriers are associated with a paucity of employment-related hard and/or soft skills and limited evidence-based training to prepare people with IDD for employment. Moreover, demand-side barriers are related to the employer, such as organizational culture, beliefs on additional costs, and negative attitudes of staff. Demand-side research has shown that employers have unfavorable attitudes toward hiring people with IDD (Scott et al., 2019; Solomon, 2020), report concerns with perceived lack of skills and legal issues (Kocman et al., 2017; Scott et al., 2017), have limited knowledge regarding disability

(Bowman, 2020; Ju et al., 2013), and worry about poor productivity (Graffam et al., 2002; Scott et al., 2017). Further research has found that employers lack the motivation to employ an individual with IDD or to improve the accessibility of the work environment (e.g., provide reasonable accommodations; Waisman-Nitzan et al., 2019). These demand-side barriers may contribute not only to poor employment outcomes but also to negative societal attitudes toward individuals with IDD (Johnson & Joshi, 2014; Scott et al., 2019; Solomon, 2020) and a lack of organizational leadership to create positive employment opportunities (Bowman, 2020). Thus, it is imperative to investigate employers' capacity, perspectives, and concerns in supporting individuals with IDD in integrated employment.

Recent research has determined that these demand-side barriers are present even when individuals with IDD receive proper training and employment preparation and have skills that are beneficial to the workplace, including cognitive strengths, attention to detail, expertise in specific areas, scientific dispositions, and fairness (de Schipper et al., 2016; Scott et al., 2017). For example, Hedley and colleagues (2017) conducted a systematic literature review to identify effective employment support programs and program factors that resulted in successful outcomes for individuals with ASD. The authors found that when people with ASD were enrolled in a comprehensive employment support program, employment outcomes improved, including obtaining and maintaining work, wages, and number of hours worked. Despite participation in these employment training programs, however, employers continued to perceive those with ASD as having severe limitations in their work abilities and failed to build a supportive workplace that focused on the strengths of individuals with ASD (Hedley et al., 2017).

In another systematic review, Rashid et al. (2017) identified studies examining employer capacity or the competence of employers to hire and support employment for individuals with IDD in the workforce. Their findings revealed that employers reported job coaches as a primary tool to support employer capacity and comfort with hiring. However, Rashid and colleagues determined that job coaches were continually used to support the individuals with IDD and not the employer. Moreover, their findings identified

minimal research was conducted regarding employers' perspectives of individuals with IDD in the workforce and ways to change the social environment, such as coworker education and diversity acceptance.

Therefore, even though people with IDD have shown to meet workplace requirements, improve the organizational inclusion culture, and have not shown to increase costs to employers (Hedley et al., 2017; Rashid et al., 2017; Scott et al., 2017), those with IDD continue to be un- or under-employed in the community. Thus, research on demand-side barriers specifically focusing on employer capacity, perspectives, and strategies to improve the social environment is critical. Such information may provide insights on how to build employer knowledge and capacity to create an inclusive employment culture and potentially diminish prejudice and discrimination that is a barrier for individuals with IDD (Erickson et al., 2014).

Current Review

Decreased revenue, adverse interactions between employees, and increased assistance/accommodation for only one employee are just a few of the negative perceptions employers have of people with IDD in the workplace (Scott et al., 2017). However, when employers have these mis- and negative perceptions, it deprives individuals with IDD an opportunity to improve their financial stability, quality of life, and social opportunities (Jahoda et al., 2009). Hedley et al. (2017) and Rashid et al. (2017) have examined employment support programs and employer capacity to hire and support individuals with IDD in the workforce, but there are no reviews aggregating research on employers' perspectives of individuals with IDD in integrated employment settings. Therefore, the current scoping review was conducted to provide a thorough picture of the employers' experience of hiring and working with individuals with IDD. This review posed the following four research questions:

1. What are the publication trends of studies focusing on employer perspectives of individuals with IDD in integrated employment settings?
2. What demographic characteristics have been represented in the employer perspectives literature?

3. What methodological approaches have been utilized when examining employers' perspectives?
4. What have been the employers' perspectives toward hiring and working with individuals with IDD in integrated employment settings?

Method

Search Procedures

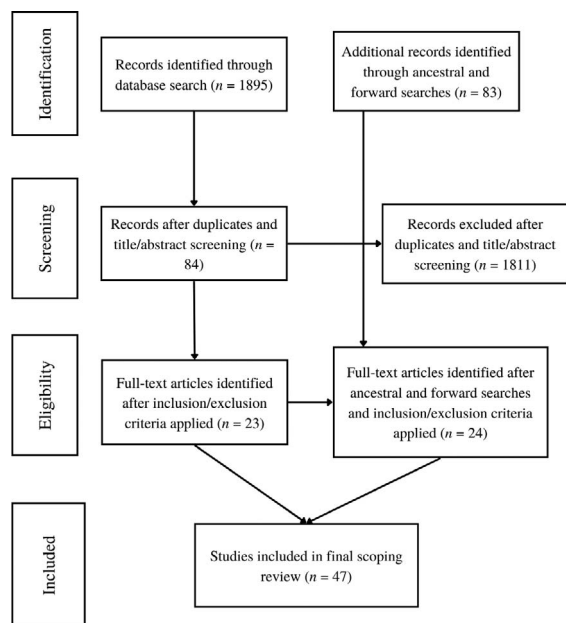
A scoping review was conducted to identify the employer perspective literature as well as to describe the methodologies and data collection methods utilized to examine employer perspectives and determine gaps in the literature (Arksey & O'Malley, 2005; Munn et al., 2018). To conduct this scoping review, we followed the Preferred Reporting Items for Systematic reviews and Meta-Analyses extension for Scoping Reviews statement (PRISMA-ScR; Tricco et al., 2018; see Figure 1). An extensive search was conducted using eight educational and social sciences databases: CINHAL Plus, Education Full Text, ERIC, PsycArticles, PsychInfo, SCOPUS, Sociological Abstracts, and Social Sciences Citation Index. Databases were initially searched in January 2018 and updated in January 2020 with the following

search terms used: participant characteristics (*employer, supervisor, manager, compan**), outcomes (*perspective, perception, belief, view*), disability (*autism, intellectual disabilit*, cognitive impair*, mental retard**), and settings (*employment, support* employ-ment, experience, internship, vocational, support*, rehab*, work, job, career, customiz* employment*). The terms were combined using the Boolean search operator “and” to include participant characteristics, outcomes, disabilities, and settings. The search was not limited by publication date and yielded 1,895 articles. Publication date was not limited in this search because we wanted to include all published articles that potentially discussed employers prior to the national call for integrated employment of the 1980s.

Inclusion and Exclusion Criteria

For this review, the term *employer* was defined as someone who employs, hires, or supervises employees in an internship, job, or vocational setting. Examples of employers include administrators, directors, human resource personnel, managers, supervisors, and owners. A *community integrated employment setting* was defined as a workplace situated in a local area that employed both individuals with and without disabilities. These employees would be working or interning together in the same spaces and have the same or similar work expectations. If a study used the term *competitive integrated employment* instead of *community integrated employment*, the study still met the inclusion criteria due to the similarities in definitions between the two terms. Articles included in this review had to meet the following criteria: (a) include employers in the participant pool; (b) employers were from community integrated employment settings; (c) collect employer perspectives about people with IDD in the workplace (could include a mixed sample of individuals with IDD and other types of disabilities); (d) collect the perspectives via self-report; (e) be a research study (e.g., quantitative, qualitative, mixed methods); and (f) published in English. Exclusion criteria included: (a) perspectives not collected directly from the employers (e.g., perspectives reported by parents or educators); (b) did not discuss individuals with IDD; (c) was not a data-based research article (e.g., conceptual or theoretical manuscripts); and (d) took place in a segregated employment setting.

Figure 1
PRISMA-ScR Flow Diagram of the Identification Process for the Sample of Articles in This Review



Study Selection

The first two authors screened titles and abstracts to identify potential articles following the inclusion and exclusion criteria. A reliability check to decrease researcher bias was conducted across 30.5% ($n = 578$) of the articles by two trained graduate students and averaged 85% reliability. After this initial screening, full-text copies were retrieved, and the first two authors conducted a second more in-depth screening confirming the collection of employer perspectives through self-report and to verify type of disability. Any discrepancies were resolved through discussion. Following this second screening, a total of 23 articles were identified to be included in this review. Ancestral (i.e., reference list review) and forward searches (i.e., Google citations) were conducted on these 23 articles, resulting in an additional 24 articles for a total of 47 articles included in this review (see Table 1).

Data Extraction

To extract data from the 47 articles, a code book was written and refined to collect data regarding (a) participant demographics (e.g., number of participants, ethnicity, gender, age, education level); (b) disability types (e.g., ASD, ID); and (c) countries and settings (e.g., urban, rural, suburban). Then, the research methodology used was collected. Quantitative articles were defined as (a) evaluating an intervention using a group design or single case design or (b) conducting a survey with statistical analyses of the results (e.g., descriptive, correlational). Qualitative research designs such as phenomenological, ethnography, or case study were collected. Mixed method studies were defined as implementing both quantitative and qualitative methodologies during data collection and/or analysis. The category “other” was defined as using both qualitative and quantitative methods but not analyzing the data at any stage. Next, data collection methods were gathered. Data collection methods were broken down into the following categories: (a) measures with reliability/validity; (b) informal or researcher-created measures with limited to no reliability/validity; (c) direct observation; (d) interviews; (e) focus groups; and (f) other, which used a different data collection method not previously mentioned. Finally, data analysis information was collected and categorized as: (a) descriptive statistics; (b) inferential statistics; (c) thematic analysis (qualitative data were ana-

lyzed through an iterative process and themes emerged from the data); (d) content analysis (predetermined topics and themes identified and analyzed in the data); and (e) other (e.g., frequency counts, rank order of topics).

Extracted data were entered into an excel spreadsheet and the total items in each category were tallied. For example, the total number of employers in the study was entered into the column “employers.” Then, the number of male and female employers in the study were entered into the designated “male” or “female” columns. If the study did not explicitly mention how many male/female employers were included, the total number of employers was entered into the “Not Clearly Specified” column. For yes/no categories such as experience with people with IDD or data collection methods, a “1” or a “0” was entered in the column. For example, if a study used an informal survey created by the researchers to collect data, a “1” was entered into the “Informal Survey” column and a “0” was entered into the other data collection method options. Extracted data were tallied and the specific number of category items (e.g., employers, male employers) or the number of studies included that category (e.g., experience working with individuals with IDD, data collected by interviews) were reported. Finally, the outcomes specific to employer perspectives were recorded and same outcomes across studies were identified and tallied. Examples of these outcomes included employer perspectives on inclusion, correlations between demographic data (e.g., age, education, size of company) and employer perspectives, and employer expectations for individuals with IDD in the workplace. A reliability check on the data extraction was conducted by the first two authors on 38.3% ($n = 18$) of the articles and found to be 89% reliable. Discrepancies were resolved through discussion.

Results

Results are presented within the four research questions proposed in this review. First, we present trends in publication of research across the years, countries, and types of journals. Next, demographic characteristics included in the studies are described. Then, types of research designs, data collection methods, and data analyses used in these particular studies are presented. Finally, employer perspectives of individuals with IDD in the workplace are reported.

Research Question 1: Publication Trends

For trends in publications, the year the study was published, where the study took place (e.g., country, setting), and type of journal the study was published in were extracted. Research on employer perspectives of individuals with IDD began in the 1960s (see Figure 2). The number of studies has been variable since then, but a peak happened in the 1990s ($n = 11$) and the 2010s ($n = 14$), with nine of those 14 studies published between 2016–2019. Out of the 47 articles, 27 studies (55%) were conducted in the United States, with only one study conducted between 2006–2019. Canada completed six studies (12.2%) between 1989–2019. The remaining studies were conducted in Australia ($n = 4$), Israel ($n = 4$), United Kingdom ($n = 3$), Italy ($n = 2$), Taiwan ($n = 1$), Austria ($n = 1$), and Sweden ($n = 1$). Black et al. (2019) conducted a study utilizing data from three countries, Australia, the United States, and Sweden.

Studies were also categorized according to the type of journal that published the article. Twenty articles were published in disability-specific journals (e.g., *American Journal on Intellectual and Developmental Disabilities*, *Journal of Applied Research in Intellectual Disabilities*), seven articles in journals focused on special education (e.g., *Career*

Development and Transition for Exceptional Individuals, *Education and Training in Autism and Developmental Disabilities*), seven studies in general rehabilitation or medical journals (e.g., *Global Pediatric Health*, *Journal of Rehabilitation*), and eight studies in vocational rehabilitation journals (e.g., *Journal of Vocational Rehabilitation*, *Rehabilitation Counseling Bulletin*, *Vocational Evaluation & Work Adjustment Bulletin*). Only two articles were published in general education journals (e.g., *Canadian Journal of Education*) and three articles in human resource or business ethics journals (e.g., *Journal of Human Resources in Hospitality*).

Research Question 2: Demographic Characteristics

Participant demographic data were collected across seven categories: (a) types of participants, (b) ethnicity, (c) gender, (d) age, (e) employer education level, (f) employer experience working/interacting with individuals with IDD, (g) type of IDD, and (h) company size (see Table 2).

Employer Demographics

There were 4,902 employers included in the 47 studies and 1,017 other participants (e.g., co-

Figure 2
Publishing Trends of Studies Conducted Across Decades and Country

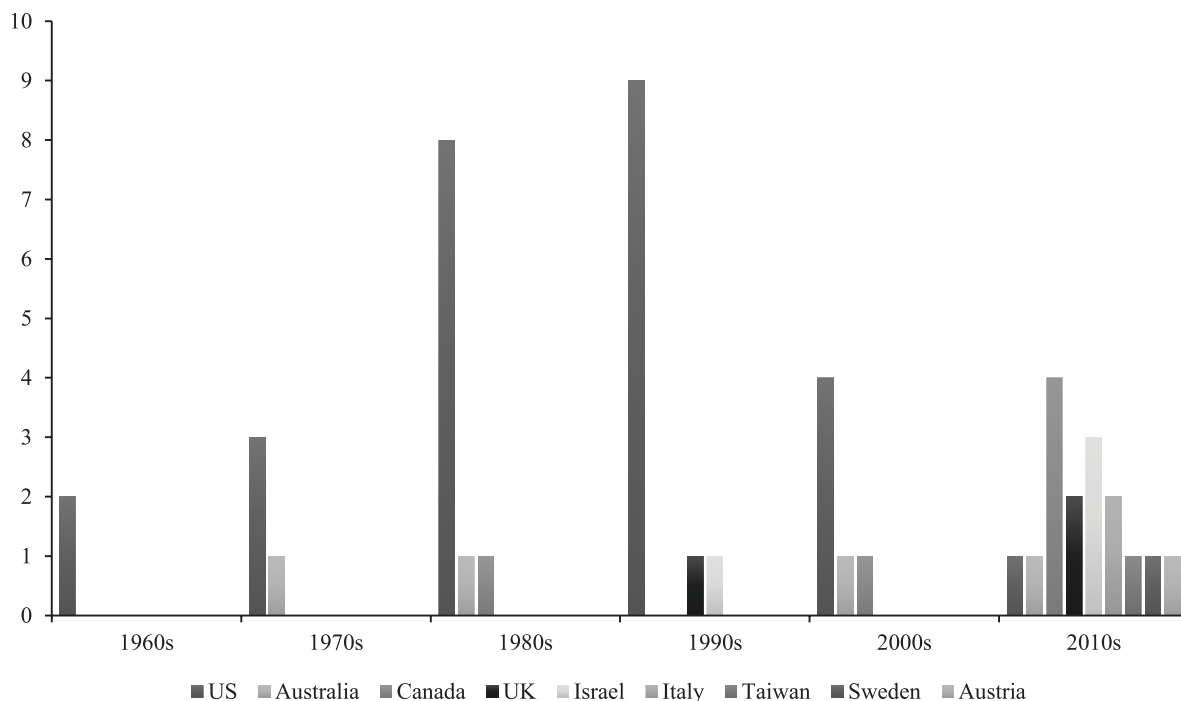


Table 1
Study Information for Included Articles in This Review

Authors, Year	Country	Participants (Employer/ Employee)	Disability	Data Collection Tool
Bennett & Gallagher (2013)	Canada	20, 21	ID	Adapted survey from Gething (1991)
Beyer et. al. (2016)	United Kingdom	247, 297	ASD, ID	Researcher-created survey
Black et al. (2019)	United States, Sweden, Australia	11, 19	ASD	Researcher-created interview, focus group, and community forum protocols focused on facilitators/barriers and strengths & benefits for employment
Burnham & Housley (1992)	United States	90, 0	ID, LD	<i>The Successful Employment Survey</i>
Byrd et al. (1977)	United States	25, 0	ID	Researcher-created survey
Chadsey-Rusch et al. (1997)	United States	20, 47	ID	Researcher-created survey
Chamberlain (1988)	United States	46, 0	ID	Researcher-created survey
Chi & Qu (2005)	United States	70, 0	ID	Researcher-created survey
Cohen (1963)	United States	177, 0	ID	Researcher-created survey
DeHart-Bennett & Relf (1990)	United States	557, 0	ID	Researcher-created survey
Duvdevany et al. (2016)	Israel	79, 0	ID	<i>Attitudes Toward the Employability of Persons With Severe Disabilities (ATEPSD)</i>
Eigenbrood & Retish (1988)	United States	38, 0	LD, ID, BD	Researcher-created survey
Fuqua et al. (1984)	United States	50, 0	ID, other disabilities	Adapted survey from Hartlage (1964, 1965)

(Table 1 continued)

Table 1
Extended

Top Findings

- Participants hold similar values related to inclusion and the rights of students to appropriate educational program delivery
- Job coaches and parents have the most positive attitudes—parents for both the classroom and workplace
- Employers were satisfied with the performance of the young people in all significant areas of performance
- Employers reported that they were now likely to employ another person with similar disabilities to the person placed
- Content analysis and linking to the ICF ASD Core-sets revealed that employment outcomes for autistic individuals are influenced by a complex interaction of factors related to autistic individuals, their work involvement and activities, and the environment within which they are situated
- Certain aspects of social interaction and communication were limited among autistic individuals, contributing to core difficulties in the workplace
- Students ranked “pride in work” considerably lower than employers/service providers
- Service providers and employers had similar expectations about what individuals with disabilities need in order to succeed
- All groups differed in ranking the disabilities
- Similarities between counselors and employers may be due to their frequent contacts during placement activity and awareness of limitations on employment
- Groups agreed that all but 7 items on the 45-item questionnaire related to social integration
- Participants did not believe that task-related interactions were really an indication of integration through social participation
- 96% of employers surveyed confirmed they would hire an individual with severe disabilities
- Work-related factors ranked most important—working independently of direct supervision, following instructions, able to adapt to new work situations, responding appropriately to supervisor correction, and understanding work routine
- Overall mean of 2.57 revealed a somewhat favorable attitude towards workers with disabilities
- Employees with disabilities viewed most positively in terms of their ‘loyalty’ to the company and their ‘punctuality’ in the job
- Significant negative relationship between attitude and reported educational level
- Significant positive relationship between education and realistic concept
- Perceptions regarding safety and use of equipment was more favorable among employers with hiring experience
- 60% of employers agreed individuals with ID could perform entry-level skills
- Positive relationship was found between employment of persons with ID and their positive impact on the workplace
- No relationship found between employer’s level of education and three attitude components
- Agreed or strongly agreed that individuals with disabilities could work successfully in their businesses
- 84.2% of employers said their involvement in the work experience made it more likely that they would hire special education grads in the future
- 11 out of 12 significant differences on the worker problem areas and the greatest variability across eight disability categories was emotional stability and productivity and have the highest concerns about productivity, accident rates, and workman compensation problems
- Employers had most concerns about hiring individuals with visual impairments and ID, least concern was indicated for hiring individuals with epilepsy

(Table 1 continued)

Table 1
Continued

Authors, Year	Country	Participants (Employer/ Employee)	Disability	Data Collection Tool
Gallagher & Bennett (2013)	Canada	20, 21	ID	Adapted student survey from Sprankle (2009) and Riegert (2006); Researcher-created survey for employers
Gruenhagen (1982)	United States	24, 0	ID	Researcher-created survey
Hagner & Cooney (2005)	United States	14, 14	ASD	Semistructured interviews
Haines & Davidson (1982)	Australia	39, 0	ID	Researcher-created survey
Harrison & Tomes (1990)	United Kingdom	57, 0	ID	Researcher-created survey
Hill & Wehman (1979)	United States	16, 25	ID	Researcher-created survey
Huang & Chen (2015)	Taiwan	12, 0	ID, other disabilities	Semistructured interviews
Irvine & Lupart (2008)	Canada	10, 18	DD	Semistructured interviews
Kocman et al. (2017)	Austria	30, 0	ID	Semistructured interviews; Researcher-created survey; <i>Community Living Attitude Scale</i> ; <i>ID-Ability-Questionnaire</i>
Levy et al. (1992)	United States	341, 0	ID	<i>Attitudes Towards the Employability of Persons With Severe Handicaps Scale</i> ; <i>Attitudes Towards Disabled Persons Scale</i>

(Table 1 continued)

Table 1
Continued, Extended

Top Findings

- Both job coaches and employers reported positive attitudes towards inclusion; employers expressed positive attitudes about the inclusion of students in the workplace noting that as they get to know the students they simply notice the person and not the disability
- Principal commented on how administrators established a culture of inclusion in their school sites
- Statistically significant between level of experience with people with disabilities and willingness to hire
- Not significant was the level of experience and optimal placement in society and optimal placement in society and willingness to hire
- Identified specific supervisory accommodation strategies that were commonly associated with successful supervision—maintaining a consistent schedule and set of job responsibilities, using organizers to structure the job, reducing idle or unstructured time, being direct when communicating with the employee, and providing reminders and reassurances
- Supervisors believed that the assistance they and the individual received from a rehabilitation agency was critical to successful employment.
- Employers’ willingness to cooperate in this type of program was strongly related to their willingness to hire successful candidates from such programs on a permanent basis
- Employers <39 years at larger companies, and those with higher education were more favorable toward individuals with ID
- The label of ID is not always understood accurately by employers
- People with ID were expected to perform better than counterparts without ID on four of these: job satisfaction, genuineness, grafting, and loyalty but less well on productive capacity, supervision and risk and learning capacity
- Coworkers and supervisors reported predominantly positive perceptions of coworkers with ID
- High rates of agreement between coworkers and supervisors on coworkers with ID abilities but supervisors had stronger feelings than coworkers with ID might have difficulty in retaining their jobs if initial on-site supervision was not provided
- Four main reasons that led to hiring—personal experience relating to people with disabilities, economic concerns, charitable perspectives and policy implications
- Although the employers were highly willing to collaborate with vocational rehabilitation systems, their needs for services rendered differed in the distinct employment processes and employers expressed greater concern about the employability of applicants with disabilities during the recruitment and selection process than during the placement and accommodation stages
- Majority of employers described employees with disabilities as having positive traits
- Employees with DD had positive relationships with their bosses or supervisors
- Employers perceive more barriers for hiring people with ID than physical disabilities
- Barriers seem to be perceived more for employing people with ID than people with physical disabilities and employment for people with ID is hampered by a perceived lack of skills, low number of applicants, and perceived legal issues
- Favorable attitudes of the employment of persons with severe disabilities
- More positive attitudes existing when the organization had hired persons with severe disabilities in the past three years and the respondent had previous work experience with people with disabilities and positive evaluations of that experience

(Table 1 continued)

Table 1
Continued

Authors, Year	Country	Participants (Employer/ Employee)	Disability	Data Collection Tool
Levy et al. (1993)	United States	418, 0	ID	<i>Attitudes Towards the Employability of Persons With Severe Handicaps Scale; Attitudes Towards Disabled Persons Scale</i>
Mahoney (1976)	Australia	65, 0	ID	Researcher-created survey
Marcouiller et al. (1987)	United States	152, 0	ID	Adapted survey from Yuker et al., (1966)
Morgan & Alexander (2005)	United States	534, 0	ID	Researcher-created survey
Nicholas et al. (2019)	Canada	82, 0	ASD	Researcher-created survey; Semistructured interviews
Nicholas et al. (2019b)	Canada	85, 76	ASD	<i>Peabody Picture Vocabulary Test-4; Waisman Activities of Daily Living; Social Responsiveness Scale – 2; Work Readiness Inventory; Social Skills Improvement System</i>
Nietupski et al. (1996)	United States	98, 0	ID	Researcher-created survey
Nota et al. (2013)	Italy	80, 0	ID, sensory disorders, ED, BD	Researcher-created survey
Olson et al. (2001)	United States	126, 0	ID	Researcher-created survey
Petty & Fussell (1997)	United States	47, 0	ID, PD	Researcher-created survey

(Table 1 continued)

Table 1
Continued, Extended

Top Findings

- Favorable attitudes towards severe disabilities by employers
- Individual and company characteristics make a difference in attitudes

- There was a slight tendency for respondents 39 years and younger to have a more favorable attitude toward hiring individuals with ID
- Older employers felt individuals with ID more liable than those without to act on impulse and behavior would be an employment risk
- Respondents from commercial and for-profit establishments reported that more individuals with ID were hired in the past five years than those from institutional and not-for-profit establishments
- No gender difference in attitudes
- Most respondents with experience indicated the employment usually or sometimes worked well and they were likely to hire again and those with experience identified advantages to employing individuals with disabilities at higher rates than inexperienced respondents
- Experienced respondents also identified more concerns than inexperienced respondents such as safety issues
- Employers' participation in job readiness initiative nurtured knowledge gain and pro-inclusion attitudinal shifts and intention to hire individuals with ASD
- Employers reported numerous positive experiences and benefits from working with individuals with ASD (workplace productivity, greater recognition of the contributions, improved quality of work) which viewed to improve employer amenity for inclusive hiring
- Positive changes as reflected in participants decreased concerns about their responsibility, flexibility, job skills, communication, self-view, and health & safety
- Identified gains in personal development, employment exposure, work proficiency, and comfort in work settings

- More positive perceptions of supported employment by employers who had hired supported employees in comparison to those who had not
- Employee dedication was found to be the highest ranked benefit of supported employment across participants as a whole, as well as across respondent groups
- Employers were more negative toward individuals with psychological problems than sensory problems or ID
- Presented with disability only = negative attitudes but when provided with additional information about previous work = more positive attitudes (all disabilities)
- Companies of all sizes reported positive experiences in employing people with ID
- Training coworkers and supervisors is valuable
- Employers had favorable attitudes toward supported employment
- Employers reported favorable attitudes toward supported employees; however, 30% indicated they had experienced a problem with the employee

(Table 1 continued)

Table 1
Continued

Authors, Year	Country	Participants (Employer/ Employee)	Disability	Data Collection Tool
Phelps (1965)	United States	132, 0	ID	Adapted survey from Minnesota (1961)
Riches & Green (2003)	Australia	65, 71	ID, multiple disabilities	Researcher-created survey
Rimmerman (1998)	Israel	120, 0	ID	Adapted survey from Schmelkin & Berkell (1989)
Schloss & Soda (1989)	United States	80, 0	ID	Researcher-created survey
Shafer et al. (1987)	United States	261, 0	ID	Researcher-created survey
Sitlington & Easterday (1992)	United States	84, 0	ID	Researcher-created survey
Skellern & Astbury (2012)	United Kingdom	5, 8	ID	Semistructured interviews
Smith (1981)	United States	74, 0	ID	Researcher-created survey
Stewart (1977)	United States	200, 0	ID	Researcher-created survey
Unger (1999)	United States	53, 37	ID, TBI, mental illness	<i>Employer Support Questionnaire; Community and Workplace Support Form</i>
Vinzer & Roth (2013)	Israel	25, 4	ID	Semistructured interviews
Waisman-Nitzan et al. (2019)	Israel	11, 0	ASD	Semistructured interviews

(Table 1 continued)

Table 1
Continued, Extended

Top Findings

- Hospital and motel personnel managers were more favorable to hiring people with ID than hotel, laundry-dry cleaners, restaurant, & nursing home personnel managers
- Positive relationships between educational level of managers and favorable attitude responses toward people with ID
- Strong overall agreement that employees with disabilities should be physically and socially integrated into the work force and friendships could occur
- Disparity between perceptions of employment specialists and supervisors as to whether the employees worked side by side with others or basically alone
- In general, Israeli executives had favorable attitudes towards the employability of persons with ID
- Corporation executives with larger numbers of employees and larger annual sales had favorable attitudes when compared to smaller companies
- Regardless of unemployment levels in the county, employers exhibited lower expectations for success of applicants who had ID
- Didn't believe that the employee couldn't do the work but that the employee wouldn't be able to perform socially
- Employers hired employees with ID due to a commitment that they deserve the chance to work
- Employers of job-coached individuals evaluated their work performance of the employees more favorably than job-placement or no known support services employers
- Top four incentives—probability of regular attendance, ongoing availability of person to call for assistance, high probability of long-term employment, and availability of person for on-site training
- Lowest incentives were subminimum wage and tax credits
- Perceived roles of interviewees: protector, rescuer, and worker
- If expectations were too high, expressed lower support from others—could have a negative impact on self-identify & self-esteem
- Majority indicated they were both willing to hire and had jobs suitable for people with disabilities even without written policies
- Several desired characteristics included responsible on the job, being clean, being punctual, not exhibiting inappropriate social behavior, and getting along well with coworkers
- Favorable employment climates are clerical, food services, custodial, service stations, and upholstery
- Employer reluctance to employ people with disabilities in sales and laundry/dry cleaning
- Employers indicated a variety of workplace accommodations were available—beginning to identify and develop formal and informal types of support existing within the workplace
- Employers were providing accommodations beyond a reasonable accommodation
- The integration of people with disabilities in the work market is characterized as a dual perception, involving a spectrum of views ranging from deep emotional aspects through stigma and prejudice, to economic aspects as barriers
- Employment of people with disabilities dependent on employers' good will and believe in the right of them to work and they believe in the potential value of embracing those with disabilities and integrating them
- Findings identify importance of factors in the work environment that serve to either inhabit or facilitate the inclusion of people with ASD in the open labor market as much as their personal characteristics

(Table 1 continued)

Table 1
Continued

Authors, Year	Country	Participants (Employer/ Employee)	Disability	Data Collection Tool
Wilgosh & Mueller (1989)	Canada	82, 0	ID	Adapted survey from Etter (1982)
Zapella (2015)	Italy	30, 30	ID	Semistructured interviews

Note. ID = Intellectual disability, ASD = Autism spectrum disorders; LD = Learning disability; BD = Behavior disorder; DD = Developmental disability; TBI = Traumatic brain injury; ED = Emotional Disorder; PD = Physical Disability.

workers, parents). Employers included supervisors, managers, human resource personnel, and owners of the company. Based on the available data reported in the articles, the majority of employers were White and male; however, ethnicity and gender were not reported for 86.2% and 60.4% of participants respectively. Ages for employers ranged between 16–77 years old. Employers’ education ranged from graduating from high school or attending a technical school to earning a bachelor’s degree or a postgraduate degree (e.g., masters or doctorate); yet, education level was not reported for 70.5% of employers (gender was not provided).

Employer experience was coded into two different categories, length as an employer and previous experience with an employee with IDD. Employers were in their current position ranging from 1 to 25 years; however, 70.2% ($n = 33$) of studies did not report the length the employer participants were in their current position. In terms of experience, 36 studies reported the employers (76.6%) had previous experience working with or hiring an employee with IDD.

Employee Demographics

There were 688 employees with IDD included across the studies. Employees with IDD ranged in age from 15–48 years old. Types of disabilities of employees were separated into three subcategories of disabilities identified under the umbrella term IDD: ASD, ID, and Other (e.g., learning disabilities, traumatic brain injury, cerebral palsy). Employers focused their attention and perspectives toward people with ID in 41 studies; six studies concentrated on ASD, and

seven studies included individuals with additional disabilities.

Company Demographics

The majority of studies included companies that were either defined as “small” (less than 50 employees) or “medium” (between 50–250 employees; Organisation for Economic Cooperation and Development, 2020), ranging from food service, hotels/motels, manufacturing, retail, and hospitality. However, 23 studies did not report the size or type of companies.

Research Question 3: Methodology, Data Collection Methods, and Data Analyses

Studies were categorized into four types of methodologies, including quantitative, qualitative, mixed methods, or other. The primary methodology used to explore employer perspectives was quantitative ($n = 34$, 72.3%) with descriptive and inferential statistics (e.g., Pearson’s r , t tests, regressions, chi-square tests) to analyze the data. Although six studies (12.8%) used validated measures (e.g., the Community Living Attitude Scale), the majority of studies ($n = 34$, 72.3%) used author-created or adapted surveys to collect data. Among those 34 studies, some kind of psychometric properties (e.g., content validity, internal consistency reliability) of the author-created measures were provided in 16 studies (34%); no validity or reliability information was provided in the remaining 18 studies (38.3%). Eight studies (17.0%) used a qualitative methodology with interviews and focus groups to gather data and several types of analyses were conducted (e.g., thematic analysis, content analysis) to identify

Table 1
Continued, Extended

Top Findings
<ul style="list-style-type: none">• Employers with previous experience of hiring had more positive attitudes for placement• Employers who declined to hire believed workers may have problems such as irritating co-workers, unnecessarily expensive to the company• The concept of disability together with the past experiences of the employers as well as that of the organization was significant—employers had different views• When employer had a positive experience in the past, more prepared to hire workers with disabilities

emerging or predetermined themes in the data. There were three mixed methods studies (6.4%) using quantitative methods (e.g., surveys) and qualitative methods (e.g., interviews) to collect data and merge the data during analyses. Two studies (e.g., Beyer et al., 2016; Smith, 1981) utilized both quantitative and qualitative data collection methods but did not mix or synthesize the data at the collection or analysis stage. There were no intervention studies, group designs, or single case designs implemented to explore employers' perspectives.

Research Question 4: Employer Perspectives

Across the 6 decades, an increase in positive perspectives about people with IDD in the workplace began after 1990. Coincidentally, this is the same year the Americans with Disabilities Act (ADA) was enacted and the Individuals With Disabilities Education Act (IDEA) was reauthorized (originally the Education for All Handicapped Children Act) to prohibit discrimination against and to provide a free and public education for individuals with disabilities. Across the identified studies, 10 (21.3%) indicated that employers reported having low expectations or perceived more barriers for people with IDD; 80% of the studies with these negative findings were conducted prior to 1990 (e.g., Mahoney, 1976; Shafer et al., 1987). Alternatively, 18 studies (38.3%) reported employers having high expectations of individuals with IDD in the workplace, with close to 40% of these studies with positive findings conducted prior to 1990 (e.g., Chamberlain, 1988; Hill & Wehman, 1979). Only three studies (6.4%) published prior to 1990 included employers' positive experiences working with individuals with

IDD (e.g., Harrison & Tomes, 1990; Marcouiller et al., 1987; Wilgosh & Mueller, 1989). Furthermore, similar positive beliefs and perspectives of people with IDD in the workplace have also been seen globally, ranging from the United States ($n = 7$) and Canada ($n = 5$) to the United Kingdom ($n = 2$), Israel ($n = 2$), Taiwan ($n = 1$), and Italy ($n = 1$).

Employers who had previous experience with employees with IDD in the workplace had more positive perspectives about people with IDD, felt that they had a positive effect on the workplace, and were more likely to hire them in the future (e.g., Huang & Chen, 2015). The employers believed that the employees with IDD could be successful in their place of work, were loyal and punctual, and could perform entry-level skills. On the other hand, employers who did not have any experience with individuals with IDD reported concerns with safety in the workplace (e.g., Marcouiller et al., 1987; Morgan & Alexander, 2005). Additionally, employers who had participated in an employer preparation program reported positive perceptions of working with and hiring individuals with IDD in the workforce (e.g., Nicholas, Mitchell, Zulla, & Dudley, 2019; Nicholas, Mitchell, Zulla, Solomatin, et al., 2019).

The education level of the employers (e.g., beyond high school) and the age of the employers (e.g., younger than 39) were commonly reported outcome factors that demonstrated slightly more positive perspectives of people with IDD in the workplace than those who were older or had less education. Additionally, when compared with small and medium-sized enterprises, employers of reported larger companies demonstrated a more positive perception about working with and hiring individuals with IDD. Although employers overall desired employees with IDD to be independent in

Table 2
Demographic Participant Information

Category	Frequency	Percentage
Participants		
Employers	4902	74.2%
Employees with disabilities	688	10.4%
Others (e.g., coworkers)	1017	15.4%
Ethnicity of Employers^a		
Asian/Pacific Islander	12	<1%
Caucasian/White	663	13.5%
Not Clearly Specified	4227	86.2%
Ethnicity of Employees^b		
African American/Black	9	1.3%
Asian/Pacific Islander	1	<1%
Caucasian/White	26	3.8%
Latinx	1	<1%
Not clearly specified	651	94.6%
Gender of Employers		
Male	1174	23.9%
Female	767	15.6%
Not clearly specified	2961	60.4%
Gender of Employees		
Male	368	53.5%
Female	222	32.3%
Not clearly specified	98	14.2%
Age		
Employers	16–77 years	
Employees	15–48 years	
No ages reported	25 studies	53.2%
Employer Information		
Length as an employer	1–25 years	
Not clearly specified	33	70.2%
Experience with hiring/working with individuals with IDD	36 studies	76.6%
Employer Education		
High school	516	10.5%
Technical school/Some college	123	2.5%
BA/BS	527	10.8%
Graduate degree (Masters, Doctorate)	280	5.7%
Not clearly specified	3456	70.5%
Company Size^c		
Small (<50 employees)	19	26.8%
Medium (50–250 employees)	17	23.9%
Large (>250 employees)	12	16.9%
Not reported	23	32.4%

^aThere were no Black/African American, Latinx, or Native American/First Nation employers.

^bThere were no Native American/First Nation employees.

^cStudy could include several businesses of different sizes.

the workplace (e.g., complete tasks, seek clarification if needed), employers reported they were open to job coaches in the workplace to support employees with IDD as they believe adequate support was critical for the employees with IDD to be successful (e.g., Gallagher & Bennett, 2013; Hill & Wehman, 1979; Irvine & Lupart, 2008).

Discussion

The purpose of this review was to aggregate and review the employer perspectives' literature about people with IDD working in the community. We examined 47 international articles across journals from various disciplines published between 1960–2019. Although employer perceptions have been studied internationally utilizing different methodologies and methods for almost 60 years, the literature remains limited. However, several important findings emerged from this scoping review.

First, although community integrated employment has been deemed a universal right for individuals with IDD (The United Nations, 2006), research on employers' perspectives has only been conducted in nine countries (United States, Australia, Canada, the United Kingdom, Israel, Italy, Taiwan, Austria, and Sweden) with the majority taking place in the United States. Although the United States may have led the initial surge in research, only one study was conducted in the United States between 2006 and 2019, with Canada moving into the lead with five studies conducted since 2006. Despite the limited research across countries, an important finding was that employers, globally, appeared to hold similar beliefs about the inclusion of individuals with IDD in the workforce (e.g., positive effect on the workplace, generally satisfied with the performance of employees with IDD, positive perspectives with previous experience working with employees with IDD). This is interesting because not every country has the same workforce, experience, or type of business; yet, they harbor similar perspectives. Employers in other countries may have different strategies that have improved employment outcomes based on the respective business culture (World Health Organization, 2011). Increasing the research to encompass a more diverse and global employer population could potentially provide critical information to improve employers' perspectives, hiring practices of those with IDD, and integrated

employment models that could be applied to other employment and cultural contexts.

Second, the studies on employers' perspectives were primarily published in disability-specific journals, vocational rehabilitation journals, special education journals, and general rehabilitation journals focused on mental health, occupational therapy, or psychology. Whereas general education and human resource or business journals published the least. The audience of these types of journals are likely to be stakeholders who have already been involved in preparing individuals with IDD (e.g., special educators, rehabilitation counselors, occupational therapists) for postschool employment and are familiar with this area of research and knowledge. However, employers who are hiring and working with individuals with IDD may not be exposed to or familiar with IDD-type journals that more extensively address the positive outcomes of inclusive employment than business-type journals (e.g., *Journal of Finance*, *Journal of Labor Economics*, *Management Science*). Therefore, researchers should consider publishing in different types of journals to reach a wider audience and potentially change the perceptions of employers with regards to working directly with and/or hiring individuals with IDD in the workplace.

Third, there is a dearth of demographic information included in the studies on the employers themselves. The vast majority of studies did not report ethnicity, gender, age, or education level of the employer participants. With the ever-changing global markets, there is a more diverse employer pool than ever before (Beazley et al., 2017; Nathan & Lee, 2013); thus, demographic information is critical to identify trends in perspectives as well as generalizability of findings. This information can provide an in-depth understanding of the employers themselves, as well as how their perspectives may have evolved due to their education, access, and experiences. In addition, demographic information can provide a starting point for researchers to develop training and interventions for employer groups to potentially change their perspectives and attitudes towards people with IDD working in the community and ultimately improve employment outcomes for people with IDD.

Most of the research focused on employers' perspectives about people with ID compared to ASD or other disabilities working in the community. Although there may have been an increase in employing those with ID in the 1980s due to the

national call for integrated employment opportunities by Madeleine Will (1986), the working population with disabilities has changed (Grinker, 2020; Wehman et al., 2013). Given the increase in prevalence of transition-age individuals with ASD (Centers for Disease Control and Prevention, 2019; Shattuck et al., 2014), there has been an increase in postsecondary education programs and vocational rehabilitation services that specifically target the ASD population to improve their postschool employment (Gerhardt et al., 2014). In addition, employers have increased recruitment efforts to specifically hire individuals with ASD based on their unique and diverse talents (Office of Disability Employment Policy, n.d.). Despite all these efforts initiated by the vocational rehabilitation services and employers, employment outcomes among people with ASD have not necessarily improved (Burgess & Cimera, 2014; Scott et al., 2019). Given only six studies were identified specific to the population, research exploring employers' perspectives, knowledge, and organizational leadership about individuals with ASD in the workforce is critical with the increased number of potential employees with ASD (Bowman, 2020; Solomon, 2020).

A fourth finding identified that the majority of studies examined employer perceptions primarily using informal measures through quantitative methods (e.g., surveys) that were created by the study authors. There were few studies that gathered employer perspectives using formal measures that were deemed reliable and valid. The informal measures focused on specific constructs (e.g., employability of those with IDD, experience with inclusion, hiring practices, attitudes) that the authors wanted to pursue and understand. This poses a problem when attempting to compare employer perspectives across studies as the data gathered are not necessarily comparable. Additionally, there were no intervention studies or longitudinal studies conducted examining potential effective strategies and/or factors that could lead to changes in the employers' perspectives across time. Finally, there were a limited number of studies utilizing a qualitative methodology (e.g., ethnography, case study, phenomenology) and methods (e.g., interviews, focus groups) to investigate how the employers' perspectives were potentially developed based on their experiences. This information could be important to develop interventions or

programs potentially changing employer perspectives of people with IDD.

Overall, employers from multiple countries reported perceiving people with IDD in the workplace positively and felt those with IDD made an impact on organizational culture and outcomes (e.g., Beyer et al., 2016; Levy et al., 1993; Waisman-Nitzan et al., 2019). Most positive attitudes were related to previous experience either hiring or working with individuals with IDD in the workplace, the education level of the employers (i.e., more education), and the age of the employers (i.e., younger). Similar to previous research (Ju et al., 2013; Kregel & Tomiyasu, 1994; Scott et al., 2017), the company size (i.e., larger) also appeared to impact this positive perspective as reported in the studies. Furthermore, employers continued to report job coaching as a critical support for employees with IDD to be successful (Rashid et al., 2017).

Despite progress in more positive perspectives toward working with and hiring individuals with IDD, those with IDD continue to be un- and under-employed in community integrated employment settings (Chen et al., 2015; Baldwin et al., 2014). As some studies found that employers continued to harbor negative attitudes and low expectations of individuals with IDD engaging in work (e.g., Morgan & Alexander, 2005; Zappella et al., 2015), this continued negative perception of people with IDD by the people who would be hiring along with the low employment rate of those with IDD and the lack of interventions focused on potentially changing employers' perspectives is disconcerting. Further research on exploring employers' perspectives about including people with IDD is vital to understand how these perspectives may impact outcomes as well as developing interventions to change these negative perceptions and minimize the impact on the employment outcomes of those with IDD in integrated work settings.

Limitations

Overall, studies reported employer perspectives were increasingly positive with research conducted globally using a variety of methodologies and tools. However, there were several limitations identified in this review. First, half of the articles identified for this review were found through the ancestral and forward searches conducted on the initial 23 articles. These initial articles were

identified through databases generally used to locate articles in educational, vocational rehabilitation, rehabilitation, and social science research. Therefore, conducting article searches in business-focused databases (e.g., ABI/INFORM complete, Business source complete, EconLit), and journals (e.g., *Journal of Finance*, *Journal of Labor Economics*) may have resulted in a more comprehensive picture of employers' perspectives.

Second, there was a dearth of employer demographic data reported as well as a lack of reliable and valid data collection tools used to collect the perspectives. Without such details, stakeholders may find it difficult to apply and generalize the results of those studies to their own organization's situation. Future research studies should include detailed employer demographics as well as causal research designs and statistical analyses to examine if particular factors (e.g., education, age, company size) and/or intervention (e.g., employer training and support) have an impact on the development of their perspectives. Furthermore, researchers should consider using formal and standardized assessments to measure employer perspectives so participant groups and outcomes can be compared across studies, settings, and locations.

Finally, our search included only articles written in English; yet, we included studies conducted globally. It is possible that potential articles written in languages other than English could have been excluded. In addition, only peer-reviewed data-based journal articles were included in this review. With this inclusion criteria, we may have excluded literature such as case studies, nonpeer-reviewed articles, and gray literature (e.g., dissertations, books) that explored employer perspectives using different methodological or data collection approaches.

Implications for Research

Based on the results and limitations from this scoping review, there are several opportunities for potential future research. First, additional studies should be conducted in more countries to deepen our understanding on how employers perceive people with IDD working in integrated work settings. This will provide a more holistic view of what inclusive employment, hiring practices, and employer perspectives may look like in different countries and cultural contexts. Second, postschool employment research for

people with IDD may need to move from an educator focus to an interdisciplinary focus across stakeholders in areas such as education, human resources, vocational rehabilitation, business, and organization management. Third, researchers should publish in a wider array of journal types. In this review, employers who had experiences hiring and working with individuals with IDD (e.g., Duvdevany et al., 2016; Nicholas, Mitchell, Zulla, & Dudley, 2019; Nicholas, Mitchell, Zulla, Solomatin, et al., 2019) reported more positive perspectives and accepting attitudes toward hiring individuals with IDD and how it impacts their organizational culture. Thus, publishing in more business-focused or human resource type journals may reach more employers and demonstrate these positive experiences and perspectives employers have with employees with IDD to create a more inclusive and integrated workplace. Finally, future research needs to include more detailed demographic information of the employers and businesses in the studies to help determine perspectives, trends in research, and potential generalizability of the findings.

Implications for Practice

Although understanding how employers perceive and interact with individuals with IDD in the workforce is critical, it is even more imperative to use such information to develop interventions to work with employers and coworkers to build their disability awareness and knowledge as well as how to work, socialize with, and supervise people with IDD in the workplace. Interventions that could change employer and coworker negative perspectives in the workplace and improve employment practices and cultures could result in a more positive and inclusive work environment for both individuals with and without IDD. Stakeholders can also use this review to further develop tools (e.g., brochures, websites) and trainings (e.g., Chamber of Commerce presentations, disability awareness trainings) to assist employers and hopefully change the employment outcomes for people with IDD (Chen et al., 2015). Furthermore, employers can support the inclusion of high school students with IDD by connecting with special educators and transition specialists to offer work-based learning opportunities because these experiences are positive predictors of postschool outcomes (Mazzotti et al., 2016).

Implications for Policy

Although this scoping review does not demonstrate causality between experience working with individuals with IDD and positive employer perspectives, policy makers can continue to encourage the inclusion of people with IDD in the workplace by passing inclusive policy and legislation. State legislatures have initiated or are lobbying for Employment First laws to require state agencies to support competitive integrated employment for adults with IDD. In addition, it is necessary to create funding programs such as the Visionary Opportunities to Increase Competitive Integrated Employment (VOICE) initiative to assist in developing statewide policies to increase inclusive competitive employment and opportunities for people with IDD (Office of Disability Employment Policy, 2020). Therefore, promoting both state and national legislation to encourage a diverse workforce and to improve employment outcomes of both people with and without IDD is critical.

Conclusion

Although individual studies suggest a shift towards positive perspectives of adults with IDD as well as workplace inclusion, understanding exactly how to support employers and build capacity to create competitive inclusive employment continues to be limited. Results from this review may provide stakeholders with a broad understanding of the employer perspective literature and how employers perceive people with IDD in employment settings. Such information may encourage more interagency collaboration among the school, adult services, and work to potentially change employer perspectives and hiring practices and improve employment outcomes of people with IDD. Ultimately, by including perspectives from both the employer (demand-side) and employee (supply-side) may help identify strategies that can potentially build employer capacity and decrease the stigma towards people with IDD in the workforce (Erickson et al., 2014).

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