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Employment Supports and Outcomes for Persons with Intellectual and/or Developmental Disabilities: a Review of Recent Findings

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Abstract

Purpose of Review The purpose of this article is to examine the preparation of youths and adults with intellectual and/or developmental disabilities (IDD) for employment and the personal and organizational factors that support their participation in the workforce.

Recent Findings Despite evidence of the positive impacts of employment, high rates of unemployment and underemployment persist. However, the variety of employment options is increasing to include social purpose enterprise, customized employment, integrated work, competitive employment, and military membership. Central to employment success is the fit between the individual, the workplace environment, and its commitment to inclusion with the availability of broader community support. **Summary** Effective partnerships between employers and community/educational professionals can establish a support system that paves a constructive pathway to employment beginning in high school and leading to post-secondary education and work-related training, such as apprenticeships. Future research and practice should focus on a whole-of-government approach with broad self-advocate and community collaboration to promote and provide incentives for inclusive and diverse workplaces.

Keywords Intellectual and/or developmental disabilities · Employment outcomes · Employment supports · Post-secondary education · Employment skills training · Benefits of hiring

Introduction

The dismal employment rates continue. Persons with intellectual and/or developmental disabilities (IDD) experience high rates of unemployment or underemployment status globally [1] despite decades of research that have supported the necessity for improved employment opportunities and working conditions. In addition, there is clear evidence of the benefits of meaningful work in the lives of persons with IDD who choose and have opportunity for employment. Here, we

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emphasize a focus on choice in order to avoid a hegemonic privileging of work as it relates to concepts of economic citizenship and reduced reliance on public support [2]. However, for those who are employed, hopefully by choice, work has been shown to be associated with improved health [3] and is a source of income. It provides purchasing power, social status, social interaction, linkage to community activity, and the opportunity to build a greater sense of self-worth because the person is making a societal contribution [4]. Parent-Johnson and Owens identify happiness, well-being, social capital, and resiliency as outcomes of meaningful employment [5•]. Furthermore, these authors describe how companies or organizations that hire persons with IDD report that their workplace and their other employees experience improvement in teamwork among co-workers and an increase in repeatcustomer business. Employment can take many forms; however, finding work, especially for young people who are transitioning to adulthood, requires thorough planning with the individual and their supporters, access to appropriate training, and ongoing support geared to the individual [6–8].

The focus of this article is on recently studied issues related to the employment of youth and adults with IDD including



preparation for employment and the supports that are necessary to optimize success. Consideration is given to the nature of disability-inclusive training, hiring, and employment support practices.

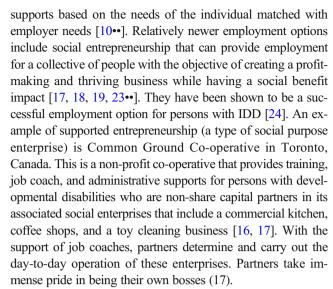
How Employment Benefits Persons with IDD and Their Employers

Benefits have been found for persons with IDD who undertake work in a wide variety of settings. Sheltered employment improves quality of life in comparison with those who are unemployed [9.., 10.]. However, Almalky's literature review describes that persons with disabilities in sheltered employment work fewer hours for lower wages than other types of employment, such as supported employment or competitive work [9..]. Nevertheless, sheltered employment in the form of transitional work that includes a hands-on training program, rather than a long-term extended work position, can lead to future integrated or competitive work. There is an increasing focus on inclusive employment opportunities that have been shown to improve health, emotional well-being, and work productivity. Integrated and competitive employment can promote higher independence along with financial benefits, agency, and enhanced self-worth [9...].

Not only does inclusive employment benefit the person with IDD, but it also has been shown to bring various benefits to their work settings. Employees with IDD have been shown to have a significantly higher work retention rate in comparison with typical employees [11••]. Improved workplace safety for all employees, increased co-worker awareness regarding IDD, and higher levels of co-worker cooperation have been found when persons with IDD are hired by employers in competitive employment. Other benefits include a more positive workplace setting, a strengthened interpersonal atmosphere due to their attributes and personalities, the co-creation of a culture of teamwork, and improved inclusivity in workplace practices [12, 13...]. Some employers have discussed how an inclusive workplace has increased employee work ethic and also has attracted more diverse customers to their business/ organization [11••, 13••, 14••].

Increasing Employment Options for Persons with IDD

With the trend toward devolution of institutions has come an increasing focus on community living and support for broad community participation by persons with IDD [1]. This is reflected in the increasing range of employment options beyond sheltered workshops to include social purpose enterprises [16, 19], micro-enterprises [6, 20, 21], supported employment, and customized employment [22] as well as other jobs all with



An employment option that appears less frequently than others in the literature is military membership. Werner and Hochman describe the hiring of soldiers with IDD in Israel and how their commanders who, while initially hesitant, became knowledgeable about IDD and gained an improved attitude as ongoing daily interactions gave them a better understanding of each soldier's skills and abilities. Similarly, the soldiers without IDD also became more accepting of diversity. The soldiers with IDD were acknowledged as being productive and as having a positive impact on the military workplace environment due to this inclusive process [25]. This is another example of the reciprocal advantages of inclusive employment.

Education, Training, and Transitions

Post-secondary education (PSE) leading to inclusive employment outcomes can increase inclusion in the community for young people with IDD [26...]. For youth who are interested in PSE and employment, groundwork planning and preparation should begin during high school. With an increasing focus on early youth transition planning, professionals including teachers and school psychologists who are working in high schools need to coordinate their work with families, students, and community professionals [7, 8, 27–29]. Timmons et al. describe a high school initiative, facilitated by trained AmeriCorps staff, local disability agencies, and educators, where students with autism spectrum disorders participate in a community service program that gives them the opportunity to gain hands-on experiences with tasks such as animal care or packing merchandise, exploring career options, and increasing employment-related networking by developing and practicing social skills [30]. It has been noted that students who had prior work experience that provided minimum wage during their secondary school years are more likely to acquire paid employment after completion of their PSE [31, 32].



The number of inclusive college programs for persons with IDD in the USA is growing due to federal funding provided under the 2008 Higher Education Opportunity Act [27]. Participation in PSE programs for persons with IDD has been shown to result in higher employment rates [33] and elevated weekly wages [34, 35]. Furthermore, PSE is a predictor of paid employment for persons with IDD when this educational experience includes enrollment in inclusive classrooms that are open to all students [31]. In addition, work experiences embedded in PSE programs can be particularly helpful.

To provide opportunities for paid work experiences, some PSE programs partner with community businesses or other organizations. An example is a culinary training program for students with IDD in Toronto, Canada, who are supported by a partnership between a community agency and a PSE program that includes placements in commercial settings. This program has demonstrated a 100% graduation rate and an 84% employment rate [36]. Scheef examined the strategies that PSE institutions report they use to facilitate these experiences including the following: ensuring the job placement is compatible with the student's interests, providing on-job training, utilizing on-site natural supports, assisting students to connect academic and job-related learning, and building meaningful relationships between the employer and the PSE program professionals that encourage employer feedback [37...]. This kind of work-based learning has been shown to be an effective educational strategy for the purpose of introducing young people with IDD to a broader range of job experiences that align with their preferences and individual capacities [38].

During the transition stage for students in secondary and PSE, an essential aspect of work-based learning is gaining knowledge about how to engage, collaborate, and establish relationships with their employers. On the other side, employers have expressed that they would like to receive training on how to interact with persons with IDD and that they would recommend that regularly scheduled follow-up meetings be held during the job placement process. It is important that the work-based learning process promotes success for the business/organization and also recognizes the need to address employer concerns for worker safety and worker potential/ competency [38]. Employer training to address these concerns and to debunk stereotypes about persons with IDD can enhance employer experiences. Equally important are the structural and contextual components of the workplace environment that can impact work productivity and workplace inclusion [39]. A significant key to success is the fit between the trainee or employee and the workplace.

Factors that Support Employment Success

Weymeyer and Thompson describe the World Health Organization's International Classification of Functioning, Disability, and Health (ICF) as a person-environment fit model that reflects a biopsychosocial understanding of disability that contributes to a strengths-based orientation to IDD-related services [40]. These authors discuss that this conceptualization of IDD promotes a focus on the supports that an individual needs in order to participate in valued activities. Recent studies have revealed specific features of the individual, the employment setting, and community and family supports that promote success for persons with IDD who choose to work. These features include individual factors such as the person's attitudes and approach to work, organizational support structures, anti-discriminatory hiring practices, workplace environment, and employer-specific factors.

Individual Factors

The personal attributes that are required of employees vary from one job setting to another. However, the central issue to consider in any employment situation is the fit between the individual's skills, knowledge, interests, personality, and support needs with the demands and supports that are available in the setting [14., 37., 41]. Skills and attributes necessary to succeed in a job setting may be perceived differently by employees and managers. In one study, two persons with IDD who work in the restaurant industry and their food services manager all identified what they considered to be the most important personal attributes related to successful employment outcomes in their business setting. While there was overlap in their rankings, the manager ranked some items higher than the employees did. Feerasta points out that while the employees have a clear understanding of attributes that are important for success in their job, they may not be aware of differences between their expectations of which are most important and those of their supervisor [14••]. Feerasta suggests that this highlights the need to ensure that employees understand the expectations that their supervisors have of them. This can be accomplished through strategies such as clarifying job expectations, using performance evaluation, and engaging in regular communication [14.]. Job-readiness programs can provide assistance in this area as well.

Summer employment programs can help students with disabilities to gain job preparedness for community employment. In one study, 75% of businesses described summer students as improving in the work skills necessary to meet the demands of the job while 92% of the businesses reported the students were performing their work duties very well. Fifty percent of the businesses claimed that they would be willing to hire the student, and 70% said they would participate in the summer job program again [42]. Job-readiness programs can assist a person with IDD to prepare for integrated employment by increasing their ability to complete a job application, carry out an effective interview, and learn about public transportation, all of which are important factors that contribute to overall



positive employment experiences and satisfaction. Similar characteristics relating to social skills, such as providing an opportunity for positive social interaction, as well as factors promoting motivation, such as the opportunity to achieve, to be recognized, and to attain promotion, have been associated with job satisfaction [41]. However, successful employment for persons with IDD is not solely maintained by their personal skills, attributes, and characteristics. There also must be an effective support system in place to optimize the individual's performance and job satisfaction.

Organizational Factors—Workplace Supports

For persons with IDD who are involved as work placement trainees or as employees, particular aspects of the job and the workplace environment can foster inclusion and work productivity while others may present barriers that must be overcome to optimize their success at work. Promotion of a sense of belonging and inclusion is important. Factors that support these aspects include social interactions at work, such as ongoing contact with other employees, being recognized as a coworker (e.g. people know the person's name), having shared workplace schedules and tasks, and experiencing supportive attitudes of supervisors and co-workers [39]. A work environment that is committed to supporting diversity may be more apt to hire an employee with IDD.

Employers' attitudes have an important influence on recruitment and hiring. Zappella found that some employers believe that a person with IDD must be provided with a job that fits their abilities and in which any error that may occur will not create repercussions for the company. Other employers believe that the person's job duties should be equivalent to those of their co-workers and that all must meet the same expectations. Yet, other employers are comfortable with modifying the job to the person's abilities. The criticality of employer and employee 'fit' is key to successful employment outcomes for both. Zapella suggests that motivation for hiring employees with disabilities can vary from those who do it simply to satisfy legislated requirements to those who see this as an opportunity both for the employee and for the organization. For this to be successful, the employer must find the right candidate for the right job, a job that contributes to the organization's success and is not simply a token. In addition, there must be a commitment to making changes that promote inclusion [43••]. It has been suggested that disability-inclusive hiring practices need to embrace the value of customizing the job search for persons with IDD based on diversity management strategies [12]. This research also discussed how newly developed technology and automation have recently replaced work duties that previously could have been performed by persons with IDD. This challenge can be addressed through employers developing work duties that are still compatible with the capacity of these employees and that also serve their businesses.

In addition, Hole et al. discuss the benefit of a hired self-advocate being part of an organization's human resources and recruitment practices. This role could smooth the process of future hiring of persons with IDD [4].

Responsive employment recruiting and ongoing support systems must focus on how to optimize the capabilities that persons with IDD bring to the organization. Moore et al. describe how disability inclusive recruitment practices can become tenable over time when upheld by 'regulative, normative, and cultural-cognitive' [12] workplace activities. The regulatory component involves policy and legislative stipulations. The normative aspect includes moral conformity where social activities align with expected values. Finally, the cultural-cognitive component relates to common ideas or representations that influence behaviour. However, tension can arise between these values and pragmatic business demands. The disability-inclusive business in this study revealed that their organizational recruitment practices became less inclusive due to technological adjustments that were made to enhance their hiring process but that did not promote future employment of persons with IDD, thus placing emphasis on efficiency over diversity in the workplace. Employers who are committed to inclusive hiring practices face difficulties in sustaining a diverse workplace and maintaining increasing demands for higher standards of efficiency as these factors can conflict. This may be where effective support systems are required to sustain employment opportunities [12]. These supports may include the involvement of community care providers, family members, and the use of appropriate teaching approaches and technology supports. Authentic partnership of businesses with individuals and their personal and community supports could optimize accommodations to support the interests, skills, and needs of each individual as well as meeting the needs of their employers. However, to be effective, such partnerships must be based on mutual trust, understanding, and a commitment to creative and flexible problem solving.

Community Supports

Community employment services and caregivers can play a key supportive role in employment acquisition and its sustainability in a variety of ways including helping individuals to enroll in PSE programs, to receive training in social skills and self-advocacy, to secure work options, to negotiate job compatibility, and to receive supports to remain in the job [38, 44, 45, 46••]. Professionals such as job coaches who support on-site learning and use unobtrusive coaching strategies can promote increased job independence [47]. In addition, augmentative and alternative communication supports can improve meaningful employment participation of persons with severe IDD [48].

Family support also is recommended as being critical to employment maintenance and advancement, although coordination with care providers can be complex. Thus, it would be important



for employment service professionals to keep in mind that family engagement in job development and sustainability is valuable [49]. Family members can provide great support for the development of individuals' self-determination and positive community integrated employment experiences [10..]. However, a difficult challenge is how to provide help while avoiding overprotection [50]. Persons with IDD tend to rely on hierarchical relationships with caregivers (i.e. parents). As such, when caregivers remain figures of authority and the dependency of persons with IDD is exaggerated, overprotection tendencies can limit individuals' entry into the workforce. Employment opportunities may be blocked due to caregivers' fear of individuals' exposure to potentially hazardous circumstances or to harassment or other negative social interactions in the workplace. As a result, the individuals' true level of capacity may be underestimated and independence may not be promoted by caregivers [50]. However, not all care providers limit potential for independence [51]. This is just one of the difficult balances faced by care providers in their incredibly complex role.

Despite the presence of organizational, community, and family supports, there still are not enough jobs available for all the persons with IDD who want to be employed. This prompts examination of broader social and systemic factors that contribute to this picture.

Conclusion

If research has shown that employment benefits persons with IDD and that hiring persons with IDD also enhances the workplace, then why do their employment rates remain dismal? Article 27 of the United Nations Convention on the Rights of Persons with Disabilities describes work and employment rights including the right to training, support, and accommodation to protection from discrimination, the promotion of various forms of self-employment, as well as employment in public and private sectors [52]. Yet, despite these protections, again we ask, why do their employment rates remain dismal? We ponder: should inclusive employment practices be legislated?

This route may be tempting; however, implementation of legislation for promoting equitable and non-discriminatory employment may not produce attitudinal change among employers [53••] even though research has shown that supporting persons with IDD in various forms of employment makes economic sense [54]. In Sweden and Norway, anti-discriminatory legislation and financial incentives (i.e. employment subsidies) did not influence employers to assume greater responsibility for recruitment of persons with IDD into inclusive employment [53••]. Waddington, Priestley, and Yalcin discuss the broad implementation of anti-discriminatory legislation and the challenges of achieving an inclusive labour market through development and implementation of government policy [55].

Labour market barriers and policy solutions need to be explored [56]. Realizing the multi-causal nature of the employment issue, a holistic approach [57...] to policy solutions that targets a 'whole-of-government' approach is essential [58...]. This involves multi-sector collaboration to improve policy and its implementation by addressing barriers that focus on shared objectives and answers [56]. In Canada, Prince discusses the need for a progressive government vision statement on supports for persons with disabilities as citizens. Enhancement of transitional aged youth planning processes should include collaboration and cooperative networking among educators, community support providers, and families. Post-secondary education programs should be scaled up to include accommodation funding for supports such as tutors, note takers, and adaptive devices. Workplace practices should be enhanced in areas such as management policies regarding health issues, work retention, and re-entry from absenteeism. Fundamental to extend employment services is shifting funding from sheltered workshops and day programs to supported employment choices that can create more entrepreneurial opportunities and job coaching. Finally, Prince discusses streamlining labour market agreements related to government incentive funding to promote authentic employment that is not functioning under a cost-shared paradigm with other unrelated social programs [58••].

Promotion and support of employment for persons with IDD are ecosystemic issues. While the days of the dominance of the sheltered workshop as the only employment option are largely past and new employment options are emerging, challenges remain. Broad technological changes are changing the employment landscape providing increased adaptive resources to support employment access in some sectors while replacing human employees in others. While government legislation requiring increased inclusion may be insufficient in and of itself, it is nonetheless necessary to promote broad community awareness of the skills that citizens with IDD can perform and to promote the development of services to support them. To accomplish the necessary multi-faceted approach to improve employment opportunities for persons with IDD, policy evaluation and development of policy solutions need to involve self-advocates with IDD as full partners along with a broad range of business, family and community, education, and government stakeholders in interagency and crosssectoral collaboration. Persons with IDD have important contributions to make to their communities and businesses; they need to have the opportunity to participate.

Compliance with Ethical Standards

Conflict of Interest The authors (Readhead [7, 8, 16, 17] and Owen [7, 15–17]) cited published articles that were co-authored by us (separately or together). References [15–17] were based on grant (government and university) funded research with humans. We also cited some sources with which we were familiar because Owen was co-editor of a Journal on Developmental Disabilities special issue ([28, 36]). Two additional



sources were cited ([18, 19]) that relate to a large multi-site research project with which Readhead and Owen also were associated. Readhead is currently conducting research on transitional aged youth (supported by university grant; not cited in this article) for which Owen is supervisor.

Human and Animal Rights and Informed Consent All reported studies/ experiments with human subjects performed by the authors have been previously published and complied with all applicable standards (including the Helsinki declaration and its amendments, institutional/national research committee standards, and international/institutional guidelines).

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