

Barriers and Facilitators to Employment for Adults With Autism: A Scoping Review

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ABSTRACT

Background: Employment is a significant factor contributing to identity and quality of life for adults with autism spectrum disorder (ASD). Currently, relatively little is known about the most efficient and effective ways to support adults with ASD to obtain and maintain employment. This scoping review was performed to: (a) summarize the barriers and facilitators to employment for adults with ASD; (b) synthesize key findings; and (c) highlight the gaps and limitations in the current body of literature.

Methods: We searched seven databases: ABI/INFORM (ProQuest), the Cochrane Database of Systematic Reviews (Ovid), the Cumulative Index to Nursing and Allied Health Literature–CINAHL (EBSCO), Embase (Ovid), MEDLINE (Ovid), PsycINFO (EBSCO), and PubMed (searched 08/22/16 to 08/25/17).

Results: The final review of 161 articles highlighted the complex personal, environmental, and work-specific needs of adults with ASD, including individual or personal factors, such as general level of functioning and possession of job-specific skills; environmental or context-specific facilitators, such as level of social support and customized job accommodations; and aspects of the work that facilitate employment for this population, such as comprehensive job training and on-site coaching.

Conclusion: Our review suggests that focusing attention on customized, long-term supports and accommodations within encouraging and informed communities and workplaces contributes to successful employment for individuals with ASD. This scoping review of the literature indicates that there is a need for a coordinated and systematic approach to employment support and training for adults with ASD. [*Annals of International Occupational Therapy*. 2018;1(1):31-40.]

Employment is a significant factor contributing to identity and quality of life (Blank & Hayward, 2009; J. Scott et al., 2013; Walsh & Tickle, 2013). Although many adults with autism spectrum disorder (ASD) wish to work (Hendricks, 2010), numerous studies have shown poor employment outcomes for this group (Bennett & Dukes, 2013; M. Scott, Falkmer, Girdler, & Falkmer, 2015; Taylor, Henninger, & Mailick, 2015; Taylor & Seltzer, 2011). For example, the unemployment rate for adults in developed countries is 4.4% to 6.5% (Australian Bureau of Statistics, 2017; Statistics Canada, 2017; U.S. Department of Labor, 2017), yet for adults with ASD, this rate is estimated to be 66% (M. Scott, Falkmer, Girdler, & Falkmer, 2015). Unemployment for those with ASD has significant individual and societal costs, with estimates from the United Kingdom

and the United States suggesting costs ranging from \$1.4 to \$2.4 million U.S. dollars during an average life span (Buescher, Cidav, Knapp, & Mandell, 2014). There is very little research on the return on investment for supporting adults with ASD to work. With increased evidence of the personal and economic challenges associated with unemployment for adults with ASD (Barnhill, 2007; Hedley et al., 2016; Holwerda, van der Klink, de Boer, Groothoff, & Brouwer, 2013), it is important to understand how these adults can be supported to participate fully in meaningful activities, including work.

Autism spectrum disorder is defined as “persistent deficits in social communication and social interaction across multiple contexts” (American Psychiatric Association, 2013). It is a complex neurodevelopmental disorder that

usually arises because of a complex genetic predisposition (French, Bertone, Hyde, & Fombonne, 2013). The detected prevalence has increased significantly during the past 20 years (French et al., 2013), and for children in developed countries, the rate varies between 0.8 and 23.6 in 1,000 individuals (Christensen et al., 2016; Taylor et al., 2015). Consequently, large numbers of affected teenagers are now approaching working age, which is especially significant because individuals with ASD experience symptoms that often can be perceived as barriers to employment, including persistent deficits in social communication and interactions; restricted, repetitive patterns of behaviors (Chen, Sung, & Pi, 2015); varying degrees of adaptive functioning; and co-occurring mental health and medical concerns (Roux et al., 2013).

Currently, relatively little is known about the most efficient and effective ways to support adults with ASD to obtain and maintain employment (Johnson & Joshi, 2016). The literature suggests that the low employment rates seen globally are potentially related to individual and environmental factors. At the individual level, poor social communication and interpersonal skills are commonly reported as challenges to gaining and maintaining employment (Brownlow, 2010; Gal, Landes, & Katz, 2015). At the environmental level, some have posited that the real barriers to employment for this group lie not in the socially atypical mannerisms of ASD but instead in society's labeling of the idiosyncrasies associated with ASD as "deficits" instead of positive attributes in the workplace (Lorenz, Frischling,

Cuadros, & Heinitz, 2016). Much of the current research indicates significant gaps in understanding the daily challenges that prevent those with ASD from maintaining meaningful employment. Occupational therapists may play a key role in optimizing the delivery of services to optimize employment outcomes for this population. Consequently, to optimize the health and wellness of adults with ASD through engagement in employment, we conducted a scoping review of the literature to summarize the current state of evidence and the prevailing narratives.

METHODS

Study Design

Given that knowledge about this topic is relatively recent, a scoping review was conducted in place of a systematic review. A scoping review is a rigorous and systematic method of determining the type of research that has been published in a particular field of interest. This method has been used frequently across health fields to create a structural foundation for an emerging topic (Arksey & O'Malley, 2005). A scoping review also allows investigators to map the current research without becoming overwhelmed by the depth and specifics of each study, as can occur with a systematic review (Arksey & O'Malley, 2005). For this review, we used the methods outlined by Arksey and O'Malley (2005), including determining the research question, identifying relevant studies, performing study selection, appraising the quality and extracting the data, and collating and summarizing the results in a report.

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Arksey and O'Malley (2005) indicated that the review process should be iterative and reflexive; the research team adapted their methods as needed to develop a feasible approach to reviewing the existing literature. The purpose of this scoping review was to: (a) identify the current breadth of research on employment and ASD; (b) synthesize the key findings; (c) highlight gaps and limitations in the extant literature; and (d) propose recommendations for further study. Our research team posed the following research question: What is known in the existing literature about the barriers and facilitators to employment for adults with ASD?

A comprehensive search of the following electronic databases was conducted: ABI/INFORM (ProQuest), the Cochrane Database of Systematic Reviews (Ovid), the Cumulative Index to Nursing and Allied Health Literature—CINAHL (EBSCO), Embase (Ovid), MEDLINE (Ovid), PsycINFO (EBSCO), and PubMed. Significant terms derived from the research question were selected and expanded to create a comprehensive list of primary search terms and variants, including “autism spectrum disorder,” “autism,” “Asperger syndrome,” “Rett syndrome,” “pervasive developmental disorder not otherwise specified (PDD-NOS),” and “child pervasive developmental disorder,” as well as a combination of the following work-related terms: “employment,” “employment, supported,” “unemployment,” “workplace,” and “occupation.” Combinations of these terms were then tested across each of the selected databases in an iterative manner to allow for the identification of new combinations of terms or other related citations. Medical Subject Heading (MeSH) terms, MeSH tree, and related terms found in key words and article references were also searched, and truncation was used for maximum recall when applicable. All searches included at least one identifier for ASD (e.g., autism, Asperger) linked to at least one identifier for employment. The search was performed in August 2016 and yielded 2,083 articles. After duplicates were removed, two of the authors (E.H. and E.S.) individually reviewed the titles of each study to determine eligibility based on the predetermined inclusion and exclusion criteria. On completion of this initial review, the two lists were reconciled and then combined for further assessment based on study abstracts; finally, a full-text review was completed by two of the authors (E.H. and E.S.). Throughout this review period, the research team received RSS notifications from the aforementioned databases as new articles became available, until June 30, 2017. These articles were similarly reviewed for inclusion criteria and suitability within the research topic.

The following inclusion criteria were used to guide and further narrow the search: (a) published in English; (b) published between January 1, 2000, and June 30, 2017; (c) included human subjects, 18 years and older; (d) included research subjects with a diagnosis of ASD or a variant from previous versions of the *Diagnostic and Statistical Manual of Mental Disorders* (DSM); and (e) referenced literature from peer-reviewed journals, edited books, or grey literature. Exclusion criteria were identified as follows: (a) journal articles outside of those defined in the inclusion list (e.g., opinion articles, commentaries, book reviews); (b) undergraduate dissertations; and (c) policy analyses.

Because our study range spanned across years and included the use of different editions of the DSM to diagnose ASD, our search did not separate study participants based on level of function or specific diagnosis (i.e., autism vs. Asperger syndrome). For the purposes of this study, we grouped each of these disorders under the umbrella of ASD in the same fashion as the current edition of the DSM, the DSM-V.

Charting the Data

Through careful and repeated review of the literature, we identified the key themes and issues discussed in the relevant studies—such as the process of ASD intervention or the content of the support program—to provide context and generalizability for readers. This information was recorded in a data extraction framework, along with key pieces of information on each study (e.g., author, publication year, location, type and duration of intervention, study population, outcome measures, and important results), where available. The information was synthesized and interpreted to map the scope and breadth of existing research.

RESULTS

Our search strategy returned 2,083 citations for initial screening, and after duplicates were removed, 1,315 unique citations remained. Of these, 1,035 citations were excluded because their titles or abstracts did not address both employment and adults with ASD, which left 280 citations. Finally, the full text of the remaining articles was read and assessed for eligibility. The final number of eligible citations that met the inclusion criteria and were included in this review was 161. The **Figure** provides a summary of the search and retrieval process. The included studies were published between 2000 and 2017 in a variety of predominantly English-speaking countries, including the United States, England, Australia, and Canada.

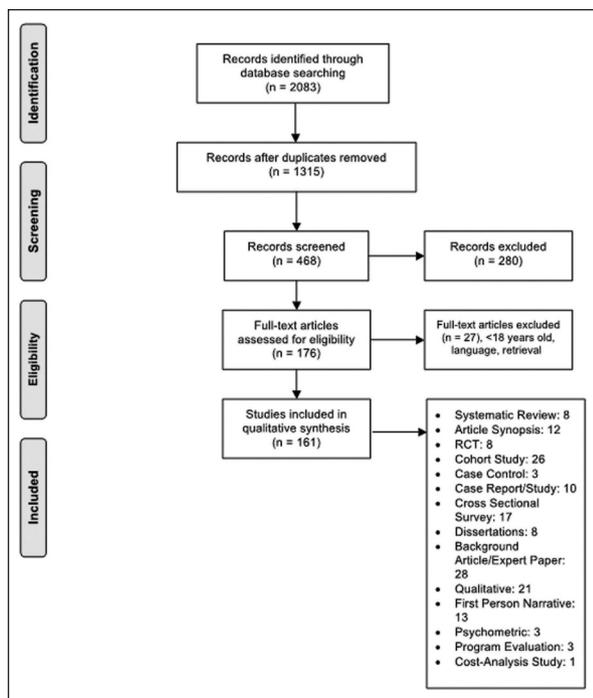


Figure: Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) flow diagram. RCT = randomized controlled trial.

Study type and quality of level of evidence varied greatly within the included literature (Table 1). The highest level of evidence included studies classified as systematic reviews, meta-analyses, and randomized controlled trials ($n = 28$). The second highest level of evidence included studies that were classified as nonrandomized but used two groups, such as cohort and case-control studies ($n = 26$). Most of the included literature, however, had lower levels of evidence, including nonrandomized, one-group studies ($n = 35$) and descriptive studies that included an analysis of outcomes ($n = 72$). Many of these articles were background studies ($n = 36$) that gave either broad overviews of ASD symptoms or specific accounts of adults' lived experiences navigating employment with this diagnosis.

Likewise, the use of outcome measures varied greatly. Of the 161 reviewed studies, 31 specified the use of a tool to measure outcomes in a standardized way and 13 used more informal self-, parent-, or employer-reported tools to measure outcomes and levels of satisfaction.

Conceptualization of Employment

Employment was described with a variety of parameters, ranging from type of work and tasks performed, to hours and compensation, to level of integration between employees; fewer than half of the studies specifically

TABLE 1

Levels of Evidence of Studies Reviewed ($n = 161$)

Level of evidence	Study design	Number of articles selected
I	Systematic reviews, meta-analyses, randomized controlled trials	28
II	Two groups, nonrandomized studies (e.g., cohort, case-control)	26
III	One group, nonrandomized studies (e.g., before and after, pretest and posttest)	35
IV	Descriptive studies that include analysis of outcomes	72
		Total: 161

described the work performed ($n = 70$). Most commonly, the type of work was briefly discussed based primarily on title ($n = 47$), including examples such as clerical work (e.g., Baldwin, Costley, & Warren, 2014), employment as a grocery clerk (e.g., Briel & Getzel, 2014), and retail work (e.g., Lynas, 2014). Less frequently, compensation was specifically described ($n = 19$); more commonly, it was noted that employees with ASD received lower compensation than neurotypical employees (e.g., Seaman & Cannella-Malone, 2016). Number of hours worked was outlined most often in terms of full-time, part-time, and casual work ($n = 20$). Chiefly, the articles noted that, again, relative to neurotypical employees, adults with ASD tended to work fewer hours and rarely achieved full-time employment (e.g., Henry, 2013). Few articles described work in the context of sheltered employment (i.e., a factory-like environment with mundane tasks employing only those with developmental disabilities) versus supported, integrated, or competitive employment. Three articles described maintenance of employment after a particular intervention or program (e.g., Cimera & Burgess, 2011).

Facilitators to Employment

Aside from depicting the type of work that adults with ASD are and are not participating in, much of the literature described the internal and external factors that facilitate employment for this population. The review showed that

this is a complex topic, with a wide variety of influences on the success of employment, including individual or personal facilitators, environmental or context-specific facilitators, and aspects of the work that facilitate employment for this population.

Individual or person-related facilitators. The reviewed literature reflected the diversity of person-related facilitators to employment, but focused primarily on the level of functioning of adults with ASD: being “high-functioning,” with lower levels of ASD-specific behaviors ($n = 20$), was a frequently cited facilitator (e.g., Rebholz, 2012). Related to functioning, possessing insight into one’s strengths and weaknesses was also considered an important facilitator ($n = 11$) in adults who tended to be successful in finding and maintaining employment (e.g., Whetzel, 2014). More practically, possessing skills related to a specific job (e.g., Gal, Ben Meir, & Katz, 2013), whether through interest or through previous experience, was also described as a facilitator ($n = 14$). Few studies examined gender as a factor contributing to employment. Those that examined gender noted that being male may be perceived as a facilitator to employment (e.g., Migliore, Timmons, Butterworth, & Lugas, 2012). However, the authors of these studies noted that these results may be inconclusive because few female study participants were included.

Environmental or context-specific facilitators. The literature highlighted various physical, social, and cultural environments as major facilitators to employment for adults with ASD. The social environment, particularly the network of supportive and understanding people surrounding the adult with ASD, including coworkers (e.g., Hudson, 2004), specific support staff (e.g., Friedman, Warfield, & Parish, 2013), family (e.g., Cimera, Wehman, West, & Burgess, 2012), and friends (e.g., Brownlow, 2010), was highlighted as a strong facilitator to employment ($n = 77$). The literature also showed that diversity training specific to ASD increases the understanding and support of coworkers and supervisors of adults who have ASD ($n = 22$) (e.g., Lynas, 2014; Wehman et al., 2016). Specific to the physical work environment, access and provision of individualized accommodations was frequently reported ($n = 66$) as a major contributing factor to employment success (e.g., Feldman-Sparber, 2015). Customized workplace accommodations are most commonly facilitated by professionals working alongside the adult with ASD, both through the initial weeks of work and during the course of the job, to help in the maintenance of employment (e.g., McDonough & Revell, 2010; Westbrook et al., 2012). Pro-

vision of long- and short-term workplace supports was the most frequently referenced ($n = 96$) environmental facilitator to employment for adults with ASD. Workplace supports also included access to an on-site job coach (e.g., for monitoring of quality of task performance), supports for workplace participation (e.g., transportation to the work site), and assistance in the setup of workplace accommodations (e.g., McNaughton & Richardson, 2013).

Work-related facilitators. Related to the work and job tasks themselves, the literature highlighted a need for comprehensive, multiple-area training to best facilitate employment for this population ($n = 61$). The review suggested that training should include skill development in the areas of behavior and emotion management (e.g., Bennett & Dukes, 2013), communication and social interactions (e.g., Bonete, Calero, & Fernandez-Parra, 2015; Dipeolu, Storlie, & Johnson, 2015), self-advocacy (e.g., Chappel & Somers, 2010), and soft job skills (e.g., Seaman & Cannella-Malone, 2016). Job site training related to specialized work tasks was included within this area (e.g., Lattimore, Parsons, & Reid, 2006). Moreover, support and coaching for the job search process itself (e.g., Hillier et al., 2007) was outlined as a component that often contributes to employment success ($n = 28$). Interestingly, a large portion of the articles reviewed ($n = 58$) discussed the importance of a good job “fit” (e.g., Hurlbutt & Chalmers, 2004). A good job fit was conceptualized as consideration of an employee’s interests, strengths, preferences, and abilities in directing job application, performance, and maintenance.

Barriers to Employment

The literature on barriers to employment for adults with ASD was extensive, describing a range of personal, environmental, and job- and task-specific factors that hinder employment success.

Person-related barriers. Studies focused on stereotypical characteristics of the ASD population in describing common barriers to participation and inclusion. For example, many studies identified communication and social difficulties as obstacles to finding and maintaining work ($n = 65$), particularly related to engaging in interactions with coworkers and supervisors (e.g., Briel & Getzel, 2014). In addition, exhibiting increased ASD symptoms on the job site was portrayed as a hindrance ($n = 47$). Most of these symptoms were described as atypical and/or disruptive behavioral characteristics, such as restrictive and repetitive behaviors (e.g., Giarelli, Ruttenberg, & Segal, 2013), self-harm (e.g., Hendricks, 2010), and abnormal

sensitivity to sensory stimuli (e.g., Burkhardt & Cardillo, 2012). These symptoms also can manifest themselves in obsessive adherence to routine (e.g., Gal et al., 2015) or strong resistance to change (e.g., Hurlbutt & Chalmers, 2004), both of which act as barriers in the workplace. In addition, decreased executive functioning skills are presented as a hindrance (e.g., Hendricks, 2010). Finally, mental health issues and diagnosed mental health conditions ($n = 30$), particularly depression and anxiety (e.g., Hill, Belcher, Brigman, Renner, & Stephens, 2013), created roadblocks to employment for those with ASD.

Environment-related barriers. The literature also addressed barriers in the individual's environment. The most frequently cited obstacle was a lack of long-term workplace support programs or a lack of access to such programs ($n = 32$) because of underfunding for adults in this population (e.g., Gerhardt & Lainer, 2011), particularly in rural areas (e.g., Ridley & Hunter, 2006). Another frequently cited hindrance to successful employment in the work setting was the negative attitude of employers, managers, and coworkers ($n = 18$), which can heighten existing social anxiety (e.g., Briel & Getzel, 2014). The social environment of a workplace can also act as a barrier when the job requires a nonpreferred level of social interaction for the employee ($n = 17$), such as a customer service position for an individual who finds small talk challenging.

Work-related barriers. Many studies in this review referenced employment barriers related to the job itself and the required tasks. For instance, occupations that offered low wages, poor conditions, shortened hours, and/or no opportunities for growth ($n = 37$) were unlikely to facilitate long-term, stable employment for those with ASD (e.g., Ohl et al., 2017). Likewise, a poor job fit for the individual was an obstacle to workplace success ($n = 34$), particularly within jobs that do not align with the employee's specific skills (e.g., Rausa, Moore, & Anderson, 2016), experiences (e.g., Hurlbutt & Chalmers, 2004), and/or education (e.g., Taylor et al., 2015). Finally, a lack of individualized workplace training was frequently listed as a barrier to employment ($n = 28$) because tailored programs are most effective for this population (e.g., Gerhardt, Cicero, & Mayville, 2014) and can teach specific "soft skills" commonly lacking in those with ASD (e.g., social skills training, self-advocacy training, time management training) (e.g., Henry, 2013).

DISCUSSION

Several key themes emerged through the data charting process (Table 2). Each theme describes a factor that led to

successful employment experiences. For example, the literature suggests that adults with ASD who possess one or a combination of the following attributes may have more success in seeking and maintaining employment: having work-related experience or skills, having insight into one's strengths and weaknesses, and being "high-functioning" (e.g., presenting with fewer ASD symptoms). Likewise, the fit of the job with the individual, in terms of abilities, preferences, sensory needs, task demands, and social requirements, with corresponding employment, is an important factor to consider when seeking work opportunities. It is suggested that the better the job fit, the more likely the individual will be to succeed.

The literature also suggests that the social surroundings highly affect a person's ability to succeed in occupational pursuits along the employment continuum (i.e., high school and university job preparation, the job search process, and maintenance of employment). Specifically, when individuals with ASD are surrounded by supportive communities that encompass coworkers, managers, family, and friends, they are more likely to have a positive employment experience. Likewise, professionals who support those with ASD within the employment process, such as job coaches, teachers, mentors, and vocational support staff, result in more success for the individual when they themselves have received comprehensive training. The support provided by these highly trained professionals is most effective when it is specifically customized to the individual and provided over the long term. In addition, individuals with ASD who receive workplace training in multiple areas, ranging from job-specific to social to stress management skills, are more likely to be better prepared for the work environment.

As highlighted by the recurring themes in this review, interventions may be more effective when they acknowledge the individual in a holistic manner that considers personal preferences and abilities, the work environment, work activities, and the interplay among these components. To address each of these areas effectively, it is helpful to use a guiding conceptual framework. One such framework, found in the field of occupational therapy, fits well with this holistic approach: the Person-Environment-Occupation model (Law et al., 1996). In this model, the component of the Person includes intrinsic factors: physiological, cognitive, spiritual, neurobehavioral, and psychological. The Environment includes extrinsic factors: social support, social and economic systems, culture and values, built environment and technology, and the natural environment. The Occupation component includes clusters

TABLE 2

Key Themes Summarized in the Scoping Review (*N* = 161 Studies)

Themes	Facilitators	Barriers
Person-related		
Physiological	Not discussed	Poor personal hygiene
		Physical health issues
Cognitive	Skills specific to certain jobs	Decreased executive function skills
		Difficulty following instructions
Self-identity	Positive self-identity	Low self-esteem
Neurobehavioral	Higher functioning	More severe communication/social difficulties
	Fewer symptoms	More symptoms
Psychological	Insight	Mental health challenges
	Self-advocacy	Resistance to change
Environment-related		
Social support	Trained coaches, teachers, mentors, support staff	Nonpreferred level of social interaction
	Positive employer/coworker attitudes	Negative employer/coworker attitudes
Social and economic systems	Long- and short-term workplace supports/ programs	Lack of long-term workplace supports/ programs
	Individualized accommodations	Lack of information/access to programs
Culture and values	General value of diversity	Social stigma
	Understanding disclosure rights, positive disclosure experiences	Negative disclosure experiences
Built environment and technology	Preferred level of sensory stimuli	Poor person–environment fit
	Technological aids	
Natural environment	Not discussed	Not discussed
Work-related		
Training and support	Training in multiple areas	Lack of individualized workplace training
	Support for job search, interview, job preparation	Lack of support for job search, interview, job preparation
Job fit and preferences	Good job fit	Poor job fit
	Fair compensation, working conditions, opportunities to grow	Unfair compensation, poor conditions
Feedback and expectations	Clear expectations, boundaries, schedule	Unclear expectations, boundaries, schedule
	Feedback, self-monitoring, goal setting	

of tasks and activities that make up the variety of ways in which individuals spend their time, including produc-

tive activities, such as employment. Viewing all of these components together and not as separate entities allows

consideration of the plethora of unique factors that affect an individual's success, increasing the effectiveness of employment support.

A consideration of the themes in the literature showed several gaps. First, although some studies mentioned mental health conditions in the ASD population (Hayakawa, 2015; Hurlbutt & Chalmers, 2004), the implications of these comorbid conditions for employment are rarely discussed or incorporated into job recommendations. In addition, although the literature acknowledged negative attitudes of coworkers and employers, stigma specifically related to mental health was not addressed. Understanding the origins of the stigma may allow tailored education about ASD to be provided to an individual's surrounding community. Second, in the literature, the description of employment programs is either extremely specific, for example, job support with individualized Apple iPod applications (Gentry, Lau, Molinelli, Fallen, & Kriner, 2012), or very broad, for example, miscellaneous employment training (Migliore et al., 2012). This spectrum of detail led to a lack of evidence on which to base employment-related programming for both the employee and the surrounding staff. Future research to address these gaps can help occupational therapists to be better informed in their support of adults with ASD in finding and maintaining employment.

Limitations

During this review, several limitations arose concerning the quality of the research. First, the studies ranged in quality. The review included a small number of more rigorous studies, including randomized controlled trials and systematic reviews. Less rigorous research, such as descriptive studies, background reports, and first-person narratives, constituted nearly half of the reviewed articles. Although first-person narratives provide information that adds to the depth of understanding of individual experience, the overall lack of rigorous research within this field presents several concerns. For instance, few studies chronicled specific interventions or outlined the exact content and mechanism of employment support programs, but instead gave a summary of generic supports. We did not identify any studies that described interventions that were delivered specifically by an occupational therapist. Of the studies that described specific interventions, most were pilot projects that did not provide adequate details on the structure of interventions and did not use control groups or sufficient sample sizes. Studies also rarely differentiated between levels of ASD functioning within study participants. The terms "high-functioning" and

"low-functioning" were not concretely defined across the literature. This lack of specification can make studies challenging to replicate and generalize. Additionally, because the average age range of study participants was 19 to 35 years, the experience of older individuals and those who received a late diagnosis is notably missing from the literature. Finally, although this study reviewed English language articles only, the worldwide community could benefit from the addition of international perspectives to this important and timely discussion.

Recommendations

When considering how to apply the findings of this review, it is helpful to note the persistent emphasis on providing support at a level and type of intervention to match the needs of the individual with ASD. To ensure holistic consideration of all areas that affect employment success, use of the Person-Environment-Occupation model or a similar holistic framework can help clinicians to create comprehensive and effective support and training programs. Including each piece of this model helps to ensure a good fit between an individual and a job, and the use of a coordinated and systematic approach to employment support and training for adults with ASD is recommended.

CONCLUSION

This review attempted to identify the breadth of existing literature on employment and adults with ASD. The themes that emerged were classified as either facilitators or barriers in the categories of person, environment, and work. The review process identified specific gaps that highlighted the need for more rigorous, high-quality studies in this field to create a foundation for evidence-based practice, with attention paid to the effects of mental health, coworker and employer sensitivity training, and the content of support programs on employment success. Although most of the literature was primarily produced in North America, the United Kingdom, Europe, and Australia, it may be hypothesized that the themes also would be applicable in less developed countries because they appear to be universal. Clearly, however, it would be helpful to have original research completed outside of the aforementioned locations to enhance the existing body of evidence. Based on the findings of this scoping review, focusing attention on customized, long-term supports and accommodations within encouraging and informed communities and workplaces contributes to successful employment for individuals with ASD.

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