Inclusion

A Scoping Review of the Competencies and Training of Employment Specialists Supporting Individuals with Intellectual and Developmental Disabilities
--Manuscript Draft--

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Abstract

Employment Specialists play an integral role in supporting individuals with disabilities to access competitive integrated employment; their skill or lack thereof has the potential to influence employment outcomes. A scoping review was conducted to identify the status of the empirical literature on employment specialist competencies and training to provide employment services to individuals with Intellectual and Development Disabilities. Additionally, researchers evaluated what methods have been used to address competencies and training. Eight articles were identified that met the inclusion criteria. Of those, four articles identified or suggested competencies for employment specialists and four articles described or implemented training procedures. Results indicated that the existing peer-reviewed research on competencies and training is insufficient to address the needs of the profession.

Keywords: employment specialist, job coach, intellectual and developmental disabilities, competency, training, competitive integrated employment, scoping review

A Scoping Review of the Competencies and Training of Employment Specialists

Supporting Individuals with Intellectual and Developmental Disabilities

Supporting individuals with intellectual and developmental disabilities (IDD) in accessing competitive integrated employment (CIE) and a fair wage was and remains a civil rights issue (Grossi et al., 2020; Wehman & Bricout, 1999). Unfortunately, current statistics show that transitioning persons with IDD into integrated positions rather than sheltered employment or day habilitation settings is not occurring (Winsor et al., 2018). Even with the advent of evidence-based employment models such as supported employment and customized employment, and highly effective transition-to-employment models such as post-secondary education and internship programs, the percentage of individuals with disabilities accessing integrated employment is decreasing (Winsor et al., 2018). In other words, highly effective practices exist and yet this knowledge has not resulted in improved integrated employment outcomes for persons with IDD (Cohen-Hall et al., 2018; Schall, et al., 2020; Wehman & Melia, 1985).

Among the many stakeholders who play a role in CIE outcomes for individuals with IDD, the person most directly involved in the provision of employment supports for all evidence-based interventions is the employment specialist. The employment specialist, sometimes called employment consultant, skills trainer, job trainer, or job coach, is the direct interventionist who delivers all phases of customized employment, supported employment, internships, and work supports to individuals with disabilities in post-secondary education who also have work rotations (Ryan et al., 2019). The employment specialist plays an essential part in each step of the employment process from assisting with initial job searches prior to employment to providing on-going support after the individual with IDD is hired to ensure job retention. The

purpose of this paper is to scope the literature to understand the recommended professional

training and competencies required for the employment specialist to be effective in their critical

role of promoting CIE for people with IDD. Additionally, a comparison of the competencies and

training of employment specialists in the peer reviewed literature to professionally recommended

competencies, those identified by governing organizations, will take place.

Evidence-Based Pathways to CIE

Currently, there are several identified pathways to CIE for individuals with IDD (i.e.,

supported employment, customized employment, internships, and post-secondary education

[Wehman et al., 2018]). CIE is defined by (a) being compensated at a fair and minimum wage,

(b) receiving benefits similar to individuals on the same site without disabilities, (c) occurring at

a location where the individual with IDD interacts with individuals without disabilities, and (d)

being presented with opportunities for advancement similar to other individuals without

disabilities who are employed in similar positions (Office of Disability Employment Policy,

2021). Different models of employment may be more beneficial than others based on the

individualized goals and needs of the person receiving employment services (Wehman et al.,

2018).

Evidenced-based employment models proceed in four general phases. They are: (a)

gathering information about the job seeker to identify an appropriate employment position, (b)

working with the employer and future employee to acquire CIE, (c) providing on-the-job support

and training, and (d) providing long-term supports to maintain the individual's successful

employment (Schall et al., 2014). The over-arching phases are similar across the different

models, but steps within each phase may differ depending on the model being implemented.

During these phases, the employment specialist works as a liaison between the employer and the

vocational rehabilitation system to ensure that individuals with IDD have access to any additional needed services such as transportation training, or life skills support (Kaya et al., 2018). In addition, the employment specialist works to ensure that their supervisors and co-workers have the knowledge and skills necessary to include their co-worker with IDD in their workplace environment and culture (Wright et al., 2020). The work of an employment specialist is integral to the success of all identified pathways to CIE (supported employment, customized employment, internships, and post-secondary education) for individuals with IDD (Brooke et al., 2018; Fabian et al., 2011; Park et al., 1993; Ryan et al., 2019; Wehman et al., 2020; Wehman & Kregel, 1988). In fact, the literature reflects that employment support models are wholly dependent on the skills and competence of the individual providing the employment supports (Tilson & Simonsen, 2013; Wehman et al., 2018). However, there is little research on this profession (Hall et al., 2014; Whitley et al., 2010).

Employment Specialist Competence and Training

Foundational research on the evidenced-based pathways to CIE recognized the vast array of skills demanded from the employment specialist in facilitating employment outcomes (Cohen et al., 1989; Winking et al., 1988). Using a Delphi study to gain consensus from CIE leaders in the field at the time, Cohen et al. (1989) provided an initial description of the essential functions of the employment specialist. These recommendations provided the first set of competencies that prepare an employment specialist to provide 'quality' employment services. The list consisted of 35 functions and competencies including understanding and identifying business' needs, how to adapt and integrate into the private sector, analyzing jobs, providing training, behavior management, and strong communication skills (Cohen et al., 1989). Winking et al. (1988) noted that the employment specialist is a high turnover and low paid position while the roles and skills

that an employment specialist must don are vast and varied. It is evident from the earliest research that the professional employment specialist was expected to perform many roles.

Today, it is still acknowledged that an employment specialist must have mastery of numerous skills related to different employment interventions and know how to successfully engage in interagency collaboration efforts with multiple stakeholders including families, local education agencies, and businesses (Remund et al., 2022; Taylor et al., 2019). To wit, an employment specialist must support individuals with the most significant disabilities and/or behavior challenges to access CIE (Wehman et al., 2018). An employment specialist must also learn the culture and needs of an array of employment sectors whilst considering organizational level culture and needs (Cox & Land, 2019). The call for professionalizing the role of the employment specialist first appeared alongside seminal demonstrations and literature on evidenced-based pathways to employment in the 1980s and yet several decades later, it still remains a need (Parent et al., 1994; Winking et al., 1988; Wehman et al., 1986).

Employment Specialist Competencies

All professions define their members by the demonstration of competency in a core set of knowledge, skills, abilities, and dispositions, completion of required pre- and in-service training, and supervised experiences (Vila et al., 2014). Employment Specialist competencies have evolved from the initial description of general role expectations and practices to more formalized competencies (Association of Persons Supporting Employment First [APSE], 1988; Grossi et al., 1991; Hagner et al., 1992; Morgan et al., 1995; Parent et al., 1994). The literature base generally describes employment specialist competence in broad areas including knowledge and skills specific to understanding, assessing, and training the individual with IDD, training their co-workers without disabilities, marketing the individual to potential employers, developing jobs,

and assessing and modifying specific jobs and job skills based upon the needs of the employee with IDD (e.g., Morgan et al., 1995).

In that context, the Association of Community Rehabilitation Providers (ACRE) undertook the process of expanding and revising the generally agreed upon competency areas for the purposes of defining required training (ACRE, 2013). ACRE felt that expansion and clarification of employment specialist competencies was necessary in order to clarify and bring consensus to the expectations and subsequent training for employment specialists to adequately perform and thus meet the goal of employment models to increase rates of CIE. Initial competencies were published on-line in 2005 with revisions to these competencies in 2013, 2018 and 2021. Currently, ACRE has published two sets of competencies, one for general employment services (the 2021 revisions) and one with an emphasis on customized employment (the 2018 revisions) that are required for employment specialists to be adequately prepared to support individuals with IDD to access CIE (ACRE, 2018; ACRE, 2021). The competencies for general employment services are organized across four domains. The domains are: (a) Application of Core Values and Principles to Practice, (b) Individualized Assessment and Employment/ Career Planning, (c) Community Research and Job Development, and (d) Workplace and Related Supports. Finally, the individual competency statements are denoted as a knowledge or skill, and then assigned to either the basic level or the professional level of competence. While these competencies are identified, it is unknown how or if professionals who are considered employment specialists are trained in the identified competencies.

Employment Specialist Training

While the ACRE competencies represented a strong step forward in the professionalization of the employment specialist role, the training of employment specialists

remains somewhat less clear. Despite early calls for '*extensive*' training for personnel that will be responsible for facilitating the placement of persons with significant disabilities into CIE this training has yet to be fully realized (Cohen-Hall et al., 2018; Wehman & Kregel, 1988, Wehman et al., 2018). In addition to their competency statements, ACRE has certified training courses and noted the time required across each of the domains for the basic (40 required hours) and professional level (an additional 20 required hours) of training (ACRE, 2021). Further, there is no practical demonstration of competence required at the basic level, and only "one year experience" required at the professional level. Finally, there is no stated prerequisite educational or preservice training requirement to become an employment specialist beyond the basic high school diploma (ACRE 2018; ACRE 2021). Instead, ACRE uses their competencies to approve and certify training curricula offered by other agencies.

While ACRE has addressed the needed competencies and endorsed certain employment specialist curricula, APSE offers a test which provides an applicant the opportunity to gain a Certified Employment Support Professional (CESP) credential (APSE, 2021). According to an APSE report titled *CESPs and States: A Report out from 2021*, of the 18 participating states, five states encourage their employment specialists to complete the CESP test, two states require ACRE certification, and three states require CESP for job developers only (APSE, 2021). Neither ACRE nor APSE have developed or implemented a way to verify that the competencies or the successful completion of the CESP test directly results in the delivery of 'high-quality' employment supports for individuals with IDD. In fact, research indicates that in spite of the awareness of effective practices to facilitate integrated employment, there is a lack of implementation on the part of service providers such as employment specialists (Cohen Hall et al., 2018; Cox & Land, 2019).

The Effect of the Lack Coordinated Training and Verified Competence for Practicing ES

Nearly 35 years after the advent of models to support integrated employment, research continues to indicate that employment specialists are not sufficiently equipped to implement practices to support CIE and additional emphasis must be placed on preparing staff (Cohen-Hall et al., 2018; Wehman et al., 2018). An examination of individuals in this profession is becoming increasingly more important as the skill needs required of employment specialists entering this field are expected to continue to grow (Bogenschutz et al., 2014; Hewitt & Larson, 2007). The projected increase in demands on employment specialists is concerning considering the field is often characterized by high turnover and lack of training (Bogenschutz et al., 2014; Hewitt & Larson, 2007).

Purpose of Research

The purpose of this paper was to review the existing research literature to evaluate the competencies required for employment specialists and to understand the training requirements for those who wish to enter or are currently practicing in the profession. In particular, the aim was to determine what the extant literature tells the field about the competencies and training required to be an employment specialist who supports individuals with IDD who are seeking CIE. For the purposes of this study, competencies referred to employment specialist skills, knowledge, and dispositions reported within the peer reviewed literature as integral to promoting competitive employment outcomes. This guiding question was broken into four sub-research questions. They were:

1. What research methodology and processes have been used within the peer-reviewed literature to examine competency and training requirements for employment specialists serving individuals with IDD who seek CIE?

2. What does the peer reviewed research literature indicate are the required professional competencies for employment specialists serving individuals with IDD who seek CIE?

3. What does the peer reviewed literature indicate is the required preservice and in-service training for employment specialists serving individuals with IDD who seek CIE?

4. How does the peer reviewed literature on competencies and training of employment specialists compare to the identified ACRE employment specialist competencies?

Methods

A scoping review was selected as the most appropriate methodology to address the research questions. To date, no review of the research literature regarding employment specialist competencies or training has been conducted. Therefore, it was not clear at the outset the depth or breadth of the peer reviewed literature. Consequently, the research team determined that a scoping review was required to identify the types of available evidence and clarify the key competencies and training identified within the empirical literature (Munn et al. 2018).

Inclusion and Exclusion Criteria

Included articles met the following criteria: (a) in peer reviewed journals, (b) included a description, discussion, or study on employment training or competency, (c) addressed the training and competencies needed to assist individuals with IDD to gain CIE, and (d) were written in English. The decision was made to focus on peer reviewed articles in an effort to ensure that the research on competencies and training was empirical. An on-going barrier in the employment literature is a lack of rigorous and experimental research (Cohen Hall et al., 2018)). Inclusion of articles written in English and published in the United States was made due to the varying definitions of CIE internationally and different qualifications and expectations of professionals, such as employment specialists, providing employment services. Articles were

excluded if they: (a) presented opinions only; (b) did not address employment specialist competencies or training in CIE; (c) addressed populations outside of IDD (e.g., needs of veterans or individuals with severe mental illness, physical or sensory disorders); (d) defined CIE to include work on a mobile crew of people with IDD or sheltered work; or (e) focused on the training of a very specific intervention technique rather than general employment specialist competencies or training (e.g., video modeling). The decision was made to exclude articles on specific topics or interventions in order to address the over-arching purpose of the study- to identify the status of the empirical literature on preparing employment specialists to engage in the entirety of competencies to support job seekers with IDD to access CIE. The time frame for included articles was 2005 to the present time and was selected because it follows the publication of seminal work by ACRE in establishing the initial employment specialist competencies (ACRE, 2013). While literature has been published on competencies since the advent of supported employment in the 1980s; in an effort at parsimony and clarity the authors chose to focus on literature published after 2005 as ACRE reports that their competencies encompass both expert opinion and literature published prior to this time period.

Information Sources and Search Terms

The research team conducted a search of the Education Resources Information Center (ERIC), Cumulative Index to Nursing and Allied Health Literature (CINAHL), Education Research Complete, PsycINFO, and Publisher Medline (PubMed) databases using the search terms presented in Table 1. All searches were saved in Zotero reference management software. The search of all databases was completed in January to March, 2022. Once all digital searches and screening processes were completed, the research team also scanned reference lists of the final sample for possible articles to include.

Selection of Sources of Evidence

The results of the search strategy described above culminated in the delineation of 614 potential articles for inclusion. The entire collection of articles was subjected to four levels of review. First, duplicate articles across databases were removed, then, titles and abstracts were screened using the inclusion and exclusion criteria. Full text articles were read and scrutinized for possible inclusion. Lastly, final included articles were read and data was extracted. Figure 1. presents the article selection process by each stage. At each level, at least two of the researchers independently completed the review. Once completed, all three researchers discussed differences of opinion and developed consensus on the inclusion of all questionable articles.

The interrater reliability at each stage was calculated. During title and abstract screening, there was disagreement on the inclusion of 12 of the 463 articles identified after the removal of duplicates. Four of the 12 articles were screened into the review while eight were screened out. For full text review, there was disagreement on the inclusion of two articles. Both were screened into the next stage for further examination as a result of discussion and consensus. There was no disagreement on the articles included in the final data extraction phase. There was agreement between raters on 600 of the 614 articles identified after duplicate removal from the data search. This resulted in an inter-rater reliability of 97.72%.

Data Items

Data items collected from each article included the authors, year of publication, method used to develop the research or describe the content, list of competencies included or description of training provided, and outcomes reported. All articles in the final sample were sorted into three categories. First, descriptive research literature is presented in Table 2. Literature in this category was identified by its lack of research methodology and its stated purpose to describe

either ES competencies and/or curriculum for training. These descriptive journal articles did not provide any data on outcomes associated with the methods described. The included research literature from the second category, survey/interviews of currently practicing ES is presented in Table 3. This category included peer reviewed journal articles that reported the quantitative and qualitative results of surveys and interview research of current ES'. The third category of peer reviewed research literature was prospective experimental and quasi-experimental research on training ES. This category of peer reviewed articles is presented in Table 4. It included single subject, pre/post comparative quasi-experimental, and randomized controlled trial research designs.

Results

Research Methodology and Content

The review identified a total of eight articles meeting inclusion criteria from the peer-reviewed literature on competencies and training for employment specialists promoting competitive employment outcomes for individuals with IDD. The final sample is presented in Tables 2-4 and organized by article type (i.e., descriptive, survey/interview, experimental/quasi-experimental). Table 2 presents two articles that were descriptive in nature, with one focusing on competencies (Cox & Land, 2019) and one focusing on training (Remund at el., 2022). Three articles employed surveys/interviews as method of inquiry and are presented in Table 3, with two concentrating on competencies (Migliore et al., 2010; Tilson & Simonsen, 2013) and one examining both competency and training (Hagner et al., 2014). The remaining three experimental/ quasi-experimental articles presented in Table 4 described training. Two articles were single subject design (Brock et al., 2016; Wenzel et al., 2021) and one article was an

experimental randomized controlled trial (Butterworth et al., 2019). Overall, most of the research

literature fell into descriptive, survey, and quasi-experimental methodology.

Competencies Identified for Employment Specialists

The four studies included in the final sample related to competencies differed widely in

scope and content (Cox & Land, 2019; Hagner et al., 2014; Migliore et al., 2010; Tilson &

Simonsen, 2013). Two articles primarily described specific technical skills related to the

provision of evidenced-based supports (Hagner et al., 2014; Migliore et al., 2010) while two

identified more supplementary skills such as personal attributes and guiding philosophies that are

best described as "good practice" but are not central implementation steps of evidenced-based

intervention (Cox & Land, 2019; Tilson & Simonsen, 2013). While the varied focal points made

identification of themes across articles difficult, together these studies compliment the

knowledge and skill-based competencies set forth by ACRE while also providing potential ways

ES can go above and beyond traditional technical competencies to bolster employment

outcomes.

Comparison of Published Competencies to the ACRE Competencies

The four articles that describe competencies were analyzed and compared to the ACRE

Competency topic areas. Results are presented in Table 5. This comparison revealed that no

publication addressed all the topic areas included in the ACRE competency set. The only topic

area addressed by all published articles was workplace and related supports. Hagner et al. (2014)

addressed this area most comprehensively by describing four employment training areas

including: (a) workplace support and culture; (b) orientation, training and on-going support and

supervision; (c) facilitating workplace inclusion into workplace culture; and (d) consultation

skills and professionalism. Cox and Land (2019) also included comprehensive descriptions of

workplace supports by encouraging employment specialists to demonstrate professional behavior in the business environment and providing the individual with IDD with adequate job support.

The next most addressed ACRE topic area was application of core values and principles to practice. Three of the four publications included competencies in this topic area. Specifically, Tilson and Simonsen (2013) provided the most description on this topic area by including the values of principled optimism and cultural sensitivity skills. They defined principled optimism as the "belief in the capabilities of the job seeker and the responsibility [of the employment specialist] to empower them" (p. 130). Additionally, they define cultural competence as the "awareness of the context in which youth live and the ability to communicate with youth and their families" (pg. 131.)

Only two publications, Migliore et al. (2010) and Tilson and Simonsen (2013), included descriptions of competencies that would address community research and job development. Tilson and Simonsen (2013) describe the networking savvy required by successful employment specialists in finding community employment while Migliore et al. (2010) describe the competencies needed for employment specialists to find job openings and engage employers to hire individuals with IDD.

Finally, the ACRE topic area least addressed in the publications reviewed was individualized assessment and employment/ career planning. Here, Migliore et al. (2010) described the process of getting to know job seekers by employing a combination of person-centered planning, interviews, and observations. However, these were not described in the context of assessment. Across all the published literature describing competencies, Migliore et al. (2010) and Tilson and Simonsen (2013) included competencies in three of the four ACRE

topic areas while Hagner et al. (2014) and Cox and Land (2019) included competencies in two of the four ACRE topic areas.

Training Identified for Employment Specialists

There was also significant variability in training format, time, provider, and level of education of training recipients described in the five articles reviewed. Hagner et al. (2014) was included in both competency and training literature as it addressed both categories while the other seven articles provided only training or competency descriptions. Among the types of articles presented, Remund et al. (2022) provided a description of the training structure for three different employment support provider levels in Utah. Hagner et al. (2014) provided a mixed method review of training provided by an agency. Finally, all the quasi-experimental and experimental literature included in Table 4 described training with two single subject and one randomized controlled trial of training methods.

The format of training described in the literature was either online (Butterworth et al., 2020; Hagner et al., 2014; Remund et al., 2022) or in person (Brock et al., 2016; Wenzel et al., 2022). All but one of the articles included in this review provided estimates of the hours included in training. Here the training hours varied from 8 to 80 hours (Remund et al., 2022). Further, Remund et al., (2022) was the only study included in the review to describe three different levels of training with job coaches requiring 8 hours of training, employment specialists requiring 40 hours of training and providers of customized employment requiring 80 hours of training. Most of the training described in the literature was well below 40 hours with Hagner et al (2014) at 20 hours, Brock et al., (2016) at 8 hours, and Wenzel et al., (2022) at 6+ hours. Both Brock et al. (2016) and Wenzel et al. (2022), however, were reviewing the impact of training job coaches in the use of systematic instruction instead of addressing a wide array of competencies. Butterworth

et al., (2020) implemented a comprehensive, multi-component training intervention using a randomized controlled trial methodology. Specifically, their training included a variety of online and practical activities for employment specialists. Those activities included online communities of practice, resources, learning videos, and discussions. The practical activities included 'microlearning' activities where ES' demonstrated skills learned. Additionally, employment specialists had access to distance coaching when requested to assist with implementation of skills. They reported that the time in the intervention was 12 months. All training reviewed in the included literature was provided by a university except for Hagner et al., (2014) which was provided by an agency. Finally, three of the five journal articles that reported on training identified the prior education of participants (Brock et al, 2016; Butterworth et al., 2020; Wenzel et al., 2022). A range or prior educational experience was reported across studies from high school diploma to graduate degrees (Tables 2-4).

Outcomes as a Result of Training

Four of the five training articles reported outcomes associated with their training interventions. Participants included in Hagner et al., (2014) reported increased implementation of key job support strategies to promote employee inclusion. Brock et al., (2016) and Wenzel et al., (2022) reported mastery of skills associated with behavior skills training when providing systematic instruction (e.g., task analysis, least to most prompting, and simultaneous prompting). Only Wenzel et al., (2022) reported skill generalization after training. In the only experimental study, Butterworth et al., (2020) reported significant improvement in weekly work hours with small increases in hourly earnings and reduced time to hire noted across the study.

Discussion

The purpose of this scoping review was to identify the current empirical literature regarding competencies and training for employment specialists supporting individuals with IDD to access CIE. Additionally, the researchers were interested in identifying what methodologies the literature has employed to address training and competencies for employment specialists. Research from 2005 on was reviewed as this was the first date that a governing organization, ACRE, released a list of essential employment services competencies. A total of eight articles were identified that met the inclusion criteria. Methodologies ranged from purely descriptive, to qualitative methods such as in-depth interviews, to quasi-experimental and experimental methods. A major theme was the variability in methodologies used to address employment specialists competencies and training. Also, none of the articles addressed the wide range of employment specialist competencies or activities.

Implications for Competencies: Expanding Beyond the Traditional Employment Specialist Role

Existing research on competencies of employment specialists identified additional competencies beyond ACRE requirements for employment specialists (Tilson & Simonsen, 2013; Hagner et al., 2014), made the competencies easier to understand and implement (Cox & Land, 2019), or identified if recommended competencies are being implemented. Migliore et al. (2010) recommends an *initial* return to descriptive methods in order to evaluate what competencies are needed and which ones are regularly employed by employment specialists in the field to facilitate CIE. Hagner et al. (2014) approached their intervention and analysis from the perspective that the original identified competencies in the employment support literature are not sufficient. They suggest additional training is required in the areas of promoting inclusion of job seekers with disabilities and assimilating into the culture of the workplace. Similarly, Tilson and Simonsen (2013) modeled research conducted in other professional fields focusing on

personal attributes that impact performance. Their findings suggest that there may be trainable or

innate traits that make an employment specialist more or less likely to succeed in supporting job

seekers with significant needs and thus contributing to improved employment outcomes.

Whether focusing on describing competencies, suggesting competencies or evaluating their

implementation, existing literature suggests that there are gaps both in the currently identified

competencies and in their implementation. For example, additional competencies to address the

'disposition' of employment specialists to fulfill the professional expectations as suggested by

Tilson & Simonsen (2013) or additional technical skills as suggested by Hagner et al., (2014)

and Migliore et al., (2010). There is an acknowledgement within the field that we now have a set

of essential core competencies from the ACRE (Hagner et al.; 2014; Tilson & Simonsen 2013).

To date, there is no research that assesses knowledge, needs, implementation nor effectiveness

on these 40 essential competencies.

Implications for Training: A Call for Consistency and Rigor

Due to the varied nature and scope of the research on training, identifying over-arching

themes amongst the research is difficult. However, the existing literature base on employment

specialist training provides a foundation for next steps. To begin, the inclusion of some

segregated training contexts and varied participant backgrounds (i.e., prior educational training

and experience) may impact the ability to generalize training results from the studies reviewed.

For example, Wenzel et al. (2022) trained undergraduate students in systematic instruction in

integrated settings while Brock et al. (2016) trained experienced employment specialists who

were employed in sheltered workshop settings. Other studies recruited employment specialists

employed at different organizations across the country (Migliore et al., 2010) or within state

agencies (Butterworth et al., 2020). The level of education among participants in the identified

studies varied. Educational background has implications for the quantity and the nature of

training required. It is difficult to expect similar outcomes in performance and demonstration of

the wide range of competencies from a recent graduate with a high school diploma versus a

young adult with a bachelor's or master's degree in a human services field.

Overall, there is a general need to increase the amount of research on the training and

preparation of professional employment specialists. Since the advent of employment models to

support job seekers with significant disabilities there has been an identified need for a

comprehensive list of competencies and provision of training to develop a field of professional,

highly skilled, and competent employment specialists (Wehman, 1986). The available research

base stands to benefit from the addition of comprehensive and more rigorous research across all

competencies currently identified. This can help the field to identify and characterize which of

the existing competencies are sufficient and what remains to be added above governing

organizations. To date, according to the ACRE website, 27 ACRE organizational members are

approved to provide training based on their competencies. Colleges or universities represent nine

of these members while 18 are agencies. Eleven training sites offer hybrid (i.e., online and in-

person) training, three sites offer a choice between online or in-person, eight are in-person and

six are online only. They generally range from 10 to 12 weeks to complete training, and all meet

the basic 40-hour training requirement. The cost of ACRE approved training ranges from $300 -

$500 per person. None of the ACRE approved training programs offer any coaching or

supervision for practical experience. On the one hand, some of the included studies offer a link

between training employment specialists and improving outcomes for individuals with IDD yet

none of those studies include the comprehensive competencies identified by ACRE. On the other

hand, the comprehensive ACRE competencies provide no data regarding the impact of their training on the lives of people with IDD.

Higher levels of research rigor would allow the field to link training for, and competencies of employment specialists to outcomes for individuals with IDD in CIE. The paucity of existing research on training employment specialists is remarkable when compared to the amount of time that the field has been calling for professional and highly skilled employment specialists and the awareness of their importance in the employment process (Wehman & Kregel, 1988; Wehman, 1985). Employment specialists are expected to demonstrate a high-level skillset while not being prepared with high-level training.

In order to move the field forward and increase employment outcomes for persons with IDD we must take the time to return to the initial message of the models to promote CIE and the role the employment specialist plays in the employment of the individual with IDD. This would include developing more comprehensive professional standards, including minimum educational requirements, verification of competence by trainee's vis-a-vis a test or portfolio review, supervised practical experience, and required on-going professional education after hire. Such standards can help to inform policy, funding, training, and graduate education initiatives that can develop the field and contribute to a 'professional' role with advanced skill sets.

There is an identified crisis in the field of direct support professionals, including employment specialists, in terms of their turnover due to lack of pay and high stress (Cohen et al., 2018). The field also needs to ensure that there is funding and time allotted for training of employment specialists outside of research settings and recognition of the nature and stress of their work with requisite salary reimbursement. Individuals with IDD need quality employment services now. For example, research identifies pathways and practices to contribute to integrated

employment for persons with IDD. It stands to reason, then, that a similar practice and pathway should exist for those professionals that are responsible for providing these evidence-based employment services as well.

Limitations

There are limitations to the current scoping review that deserve consideration. Additional search terms and inclusion/ exclusion criteria could have facilitated identification of additional articles. Researchers chose to focus on research conducted in the United States and research that was written in English. This could have resulted in missing relevant research addressing competencies in other countries. The decision was made to focus on research facilitating employment for persons with IDD. The researchers are aware that other employment models such as IPS have a wide breadth of research on supporting job seekers with mental illness. Realistically, employment specialists may be expected and required to support job seekers with a wide range of disabilities and support needs. Future research can further examine if disability specific strategies would improve outcomes.

Conclusion

Employment specialists are expected to demonstrate high level skills and competencies; yet the research on their competencies and training is inadequate to support professionals to adhere to these standards. A need remains to identify what essential competencies contribute to the development of a professional employment specialist. Once these are identified the field stands to benefit from disseminating, assessing, evaluating, and adjusting these competencies as research and practice indicates. Originally, it was suggested that there be curriculum or graduate coursework to prepare quality employment specialists and equip them with the needed skills and underlying philosophies that facilitate integrated employment. However, there has been a gradual

shift in the literature away from the development or importance of foundational

coursework. Revisiting the implications and necessary steps such as training and education to

build a network of professional employment specialists who are knowledgeable, skilled, and

competent can help to return to the original intentions of CIE employment models and to address

current legislative and societal agendas to increase rates of integrated employment for

individuals with IDD.

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A Scoping Review of the Competencies and Training of Employment Specialists

Supporting Individuals with Intellectual and Developmental Disabilities

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Figure 1.

Article Selection Process by Stage

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┌─────────────────────────────┐   ┌─────────────────────────────┐
│ Records identified through  │   │  Additional records         │
│ database searching          │   │  identified through other   │
│ (n = 610)                   │   │  sources                    │
│                             │   │  (n = 4)                    │
└─────────────────────────────┘   └─────────────────────────────┘
              │                                │
              ▼                                ▼
           ┌──────────────────────┐   ┌──────────────────────┐
           │ Records reviewed     │──▶│ Duplicates removed   │
           │ (n = 614)            │   │ (n = 151)            │
           └──────────────────────┘   └──────────────────────┘
                     │
                     ▼
           ┌──────────────────────┐   ┌──────────────────────┐
           │ Abstracts screened   │──▶│ Records excluded     │
           │ (n = 463)            │   │ (n =440)             │
           └──────────────────────┘   └──────────────────────┘
                     │
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           ┌──────────────────────┐   ┌──────────────────────┐
           │ Full-text articles   │──▶│ Full-text articles   │
           │ assessed for         │   │ excluded             │
           │ eligibility          │   │ (n =15)              │
           │ (n = 23)             │   │                      │
           └──────────────────────┘   └──────────────────────┘
                     │
                     ▼
           ┌──────────────────────┐
           │ Studies included in  │
           │ systematic review    │
           │ (n = 8)              │
           └──────────────────────┘
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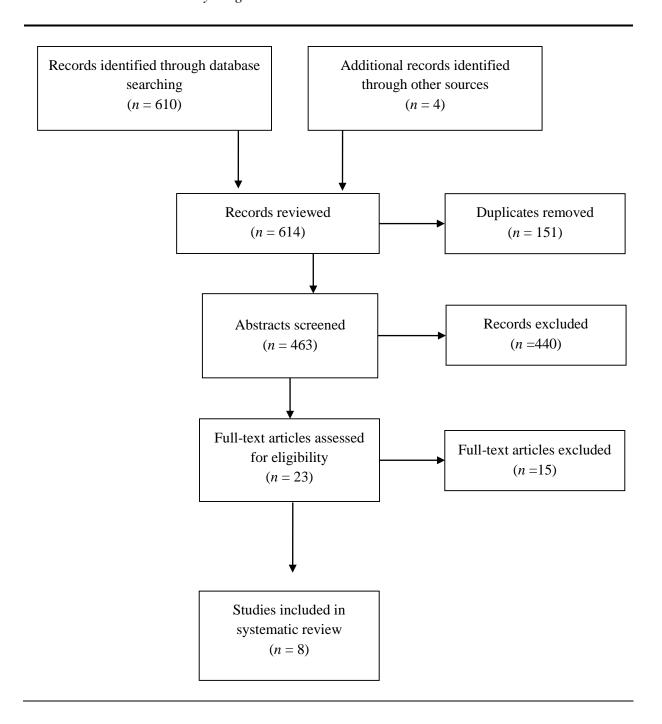**Table 1.**

Search Terms

Category	Search Term
Population	Employment specialist OR job coach OR job developer OR skills developer
Intervention	train* OR prep* OR competen* OR intervent* OR program*
Domain	work* OR employ* OR vocation* OR Supported Employment OR Customized Employment OR open employment OR comp* employ*
Domain	disabil* OR IDD OR DD OR developmental disabil* OR mental retardation

Table 2.

Descriptive Research Literature

Citation/ Country	Purpose	Competency or Training	Findings
Cox & Land, 2019 U.S	Describe a guiding set of rules for ES' to bridge the research to practice gap	**Competency** Rules developed to simplify the large volume and diverse competencies needed by ES and to bridge the research to practice gap.	Competencies 1. Do no harm (Aware of perception and reputation of employee, think on their feet, assess, intervene) 2. Don't be weird (Fitting into norms of workplace rather than relying on a human services skillset, Physical proximity, time onsite, where and when instruction is provided) 3. Provide enough, but not too much support (Identify accommodations and modifications if additional support is needed- provides a figure for natural supports) 4. Do right by the supported employee (Identify what works for employee from the beginning of the relationship, Use job analysis- focus on workplace culture)
Remund et al., 2022 U.S.	Describes a training structure in Utah for those providing SE and CE	**Training** Format: Online/ in-person Time: 8-80 hours (varies by role of provider) Provider: University Prior Participant Education: Not reported	a. Workplace supports training for job coaches (topics cover professionalism, job analysis, systematic instruction, and assistive tech) b. Employment specialist training (topics cover core values, assessment and planning, community research/job development, workplace support) c. CE training (For ES) must have completed prior two trainings (A and B above), content covers discovery, action-oriented discovery activities, vocational themes, vocational profiles, and CE development/ recognizing needs of a business *with* added field-based work

Table 3.

Needs Assessment(s) and Qualitative Interview Literature

Citation/ Country	Participants	Method	Competency or Training	Outcomes
Hagner et al., 2014 U.S	17 trainees- currently supporting PWD in CIE	Mixed methods Qualitative (semi-structured interviews) and descriptive quantitative survey approach	**Competency and Training** **Competency** Derived from the literature **Training** Format: Online mini course Time: 20 hours of training across 4 weeks Provider: Local Agency Prior Participant Education: Not reported	Training resulted in increased implementation of key job support strategies by ES Employees with IDD supported by trained ES scored high on inclusion measures and teamwork and satisfaction
Migliore et al., 2010 U.S	163 employment specialists from 74 employment programs across 28 states	Self-report web-based survey assessing best practices in job development	**Competency** Derived from the literature	Varied reports of implementation. Practices surrounding getting to know the job seeker and knowledge expansion had low reports of implementation Majority female, between ages of 36-55, bachelor's degree
Tilson & Simonsen, 2013 U.S.	17 top performing employment specialists from the Marriott Foundation's Bridges from School to Work Program	Qualitative in-depth interviews to discover the attitudes and dispositions of successful staff	**Competency** Attempt to discover personal attributes of highly successful employment specialists	1. Principled Optimism: genuine belief in the capabilities of the job seekers and responsibility to empower them. 2. Cultural Competence: the values, norms and traditions that affect how individuals of a particular group perceive, think, interact, behave, and make judgements about their world and having an awareness of the world in which the person lives

3. Business-Oriented Professionalism: understanding what motivates businesses and having a commitment to high personal standards for professional behavior that mirrors effective business practices
4. Networking Savvy: creative strategies for identifying new opportunities for youth, negotiating mutually beneficial relationships and collaborating with colleagues

Table 4.

Experimental and Quasi-Experimental Literature

Citation/ Country	Participants/Prior Training	Method	Competency or Training	Outcomes
Brock et al., 2016 U.S.	6 job coaches	Single subject (multiple baseline across behaviors)	**Training** Format: Behavior Skills Training, In person and individual Time: 8 (1 hour) weekly trainings Provider: University Prior Participant Education: High school diploma – master's degree	Over baseline, all participants improved in three new skills related to job coaching by receiving instruction, feedback and modeling *Job coaches did not appear to generalize skills after training.
Butterworth, et al., 2020 U.S.	187 Employment Consultants	RCT of Training and Performance Feedback Block randomization by employment agency	**Training** Format: Data enabled performance feedback and guidance (Community of practice, resources, learning videos, discussion, micro learning activities) Time: 12 months Provider: University Prior Participant Education: High school to graduate degree	Treatment group employment consultants' clients showed increased weekly work hours, hourly earnings, and reduced time to hire compared to the control group, but only weekly work hours was statistically significantly higher in the treatment group.
Wenzel et al, 2022 U.S	3 Job Coaches	Single Subject	**Training** Format: Behavior Skills Training, In person and individual Time: 6 + hours as needed Provider: University Prior Participant Education: High school with some college	Implementation fidelity increased across all three coaches Skills generalized to individuals with IDD

Table 5.

Comparison of Published Competency Topics to ACRE Topics

ACRE, 2021, 2018	Hagner et al., 2014	Migliore, et al., 2010	Cox & Land, 2019	Tilson & Simonsen, 2013
Application of Core Values & Principles to Practice	Yes	Not Mentioned	Yes	Yes
Individualized Assessment and Employment/ Career Planning	Not Mentioned	Yes	Not Mentioned	Not Mentioned
Community Research and Job Development	Not Mentioned	Yes	Not Mentioned	Yes
Workplace and Related Supports	Yes	Yes	Yes	Yes
Specific Disabilities, etc.	Not Mentioned	Not Mentioned	Not Mentioned	Not Mentioned