

Vocational Skills Interventions for Adults with Autism Spectrum Disorder: A Review of the Literature

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Abstract With a disproportionately high unemployment rate, obtaining and maintaining employment is exceptionally difficult for individuals with autism spectrum disorders (ASD). Further, few individuals with ASD have been trained in the vocational skills needed to obtain gainful employment. The need to evaluate not only our current knowledge about the employment needs of individuals with ASD, but also to inquire about interventions, strategies, and supports in the workplace is pressing. The harsh reality of high unemployment rates for adults with ASD, and the consequently high cost of services, can be aided by examining the best practices for supporting employment. This review of the literature focuses on vocational training interventions targeted specifically to adolescents and adults with ASD. Twenty studies evaluating pre-employment, specific vocational skill training, and job retention interventions are discussed, trends in intervention characteristics are highlighted, and recommendations for future research are suggested.

Keywords Autism spectrum disorder · Employment · Vocational training · Transition

With a staggering 64% increase since 2006, the CDC estimates that about 1 in 68 children is identified with an autism spectrum disorder (ASD) (CDC, 2012), which is accompanied by a myriad of challenges encompassing language, social, and behavioral

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deficiencies (Njardvik et al. 1999). Fortunately, there is an abundance of research concerning how to best address and build on these challenges, with a sizeable number of studies devoted to facilitating, instructing, and assessing individuals with ASD (McEachin et al. 1993 Sallows and Graupner 2005; Corsello 2005). However, much of the research directed towards this population has concentrated on interventions for young and school-age children, with considerably less focus on adults (Hurlbutt and Chalmers 2004). Of 150 recently reviewed intervention studies targeted towards individuals with ASD, 63% were conducted with children between the ages of 2 and 8 years, and less than 2% of the studies were conducted with participants 20 years of age and older (Edwards et al. 2012). This narrowly focused research scope has left a significant gap in the literature for older individuals, leading to burgeoning issues in applied settings influencing skill deficits in life, community, and vocational settings (Cimera and Cowan 2009). The lifelong challenges that stem from ASD require lifelong support and teaching (Bennett and Dukes 2013).

Few individuals with ASD have been trained in the vocational skills needed to obtain gainful employment. As Hendricks (2010) discussed, the complexities that accompany ASD, such as interactional and behavioral difficulties as well as the supplementary cognitive functioning deficits, add to the struggles of employment for this population. Subsequently, the most costly implications arise from the lack of research evaluating transition planning and employment outcomes (Hendricks 2010). The stigma of behavioral issues (e.g., outbursts, aggression, and antisocial behavior) associated with ASD make it increasingly difficult to find businesses that will employ individuals with ASD. Further, the novelty of situations, tasks, and routines makes it difficult for individuals with ASD to adjust to workplace environments (Muller et al. 2003). As such, vocational interventions need to be tailored to address these unique characteristics. However, the existing body of research is still quite small and further inquiries are needed to evaluate not only our current knowledge about the employment needs of individuals with ASD, but also to inquire about interventions, strategies, and supports in the workplace (Hendricks 2010; Roux et al. 2013; Taylor and Bond 2014).

In addition to the lack of research on employment-related interventions, adults with ASD are vastly under- and unemployed. Even among other adults with disabilities, those with ASD yield one of the lowest rates of paid employment at only 55% (Shattuck et al. 2012). Data from the National Longitudinal Transition Study 2 (NLTS2) found that young adults with ASD earned an average of \$8.10 per hour, which is lower than the average wage for young adults in the comparison groups of emotional disturbance (ED), learning disability (LD), speech/language impairment (SLI), and mental retardation (MR). Further, young adults with ASD were found to have held jobs clustered in a limited number of occupational types such as food preparation, cleaning, and maintenance (Roux et al. 2013). Compared to other disability categories (e.g., SLI, LD, and MR), adults with ASD had the lowest rates of participation in both paid and unpaid employment experiences. Moreover, adolescents with ASD had the highest risk (35%) of being completely disengaged from any kind of postsecondary education or employment (Shattuck et al. 2012).

These discouraging statistics suggest additional ramifications. There is a substantial discrepancy between the estimated costs associated with ASD, the evidence base for understanding what interventions can optimize employment, and the costs incurred (Taylor et al. 2012). For example, the costs related to the services for adults with autism are notably higher than their peers with other disabilities. From 2002 to 2006, individuals with autism obtained services that cost Vocational Rehabilitation an average of \$3,213 annually, and only individuals with sensory impairments exceeded these expenses at \$4,210 (Cimera and Cowan 2009). Järbrink et al. (2007) examined the cost of an individual with ASD both with and without employment. They argued that those who are employed with community supports would substantiate a decrease in cost by creating less reliance on day programs and activities, such as adult day care. If individuals with ASD were employed, costs could be saved, as the wages earned would go towards providing for the individual's additional costs, such as medical and living expenses. The harsh reality of high unemployment rates for adults with ASD, and the consequently high cost of services, can be aided by examining the best practices for supporting employment.

In their literature review, Bennett and Dukes (2013) searched the peer-reviewed literature for studies focused on teaching employment skills to individuals with ASD between the ages of 14 and 22. Within these studies, they examined the instructional tactics used to teach employment skills, as well as the effectiveness of these interventions. Although their search yielded a relatively small number of studies, there have been an increasing number of studies published since 2010 (Bennett and Dukes 2013) suggesting a need to revisit the subject and reassess the most effective intervention qualities. Focusing on some of the limitations that Bennett and Dukes (2013) reported, this review examined (a) interventions or teaching strategies used to teach vocational skills to individuals with ASD, (b) the setting in which the skills were taught, (c) the use of technology within the intervention, (d) whether the vocational training resulted in employment, (e) if generalization and maintenance were assessed, (f) the effectiveness of the intervention, and (g) the quality of the intervention.

Method

Searches

A three-step process was followed to identify journal articles for this review. First, electronic database searches were conducted using Education Research Complete, ERIC, MEDLINE, Psychology and Behavioral Sciences, PsycINFO, Vocational and Career Collection, and Google Scholar. A four-way search was conducted with the following search terms: (a) autism OR ASD, (b) employ* OR voc* OR work* OR job, (c) instruct* OR train* OR teach*, and (d) transition OR adult OR “high school” OR “middle school” OR “secondary educ*”. Next, a hand search of the references from articles that met the inclusion criteria was conducted. Finally, the “Cited by” feature in Google Scholar was used to forward search each of the included articles. This three-step process identified 20 articles that met all of the inclusion criteria (Fig. 1).

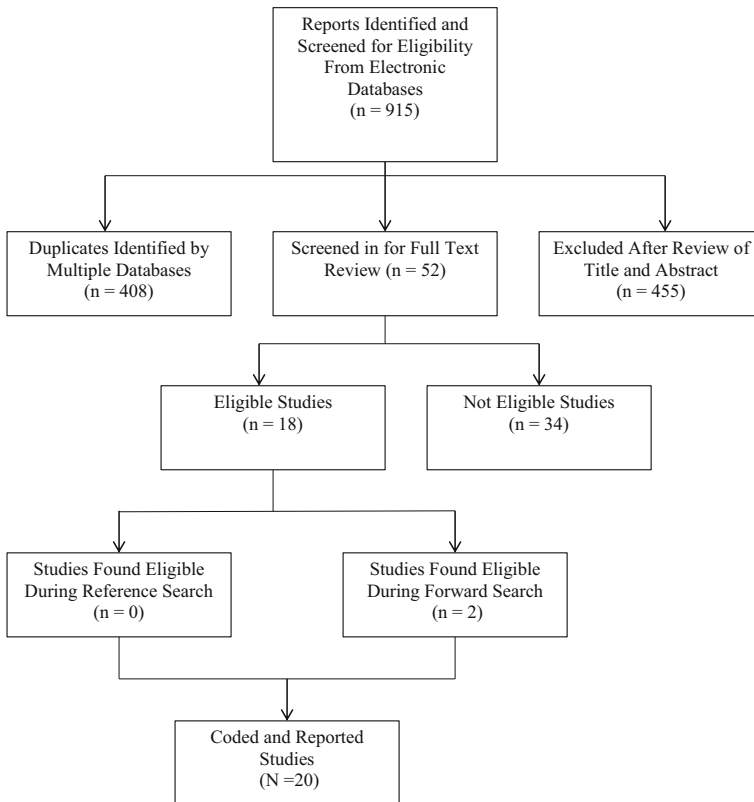


Fig. 1 Flow diagram of study identification procedures

Inclusion Criteria

Peer-reviewed journal articles evaluating the acquisition of employment skills for individuals with ASD were systematically reviewed. Four inclusion criteria were selected prior to the literature search. First, at least 50% of the participants in the study must have been identified as having an ASD, including Asperger Syndrome and Pervasive Developmental Disorder-Not Otherwise Specified (PDD-NOS). This criterion was selected to ensure a balanced representation of individuals with ASD, and follows the inclusion criteria of Bennett and Dukes (2013). Second, the study had to have evaluated an intervention designed to improve one or more vocational skills (e.g., mail sorting, packing, and food preparation) or skills directly related to obtaining or maintaining employment (e.g., job interviews). Third, 75% of the participants had to be at least 14 years of age, which is the age when transition planning and instruction typically begin with students served in special education (Bennett and Dukes 2013). Further, this criterion eliminated studies comprised primarily of younger participants. Finally, the study had to be published in a peer-reviewed journal between 2010 and 2015. This criterion was chosen based on Bennett and Dukes (2013) review of the literature, which included studies through 2010.

Coding

Articles were reviewed and analyzed by five participant characteristics: age, number, gender, diagnosis, and percentage diagnosed with an ASD. Additionally, nine intervention characteristics were coded: vocational skill taught, intervention used, setting, incorporation of technology, generalization, generalization setting, maintenance of the vocational skill, job acquisition (i.e., if the intervention resulted in job acquisition for the participants), and experimental design.

Finally, all studies were coded according to the What Works Clearinghouse Single Case Design evidence standards (Kratochwill et al. 2010). Studies were coded by the extent to which they met the evidence standards, whether the standards were met, and the level of evidence that was suggested by the intervention effects. A description of the evidence criteria is displayed in Fig.2. It should be noted that those studies that used an alternating treatments design were not coded for evidence strength as no standards for this design were provided.

Intercoder Agreement

An independent reader analyzed and coded 33% of the included articles. All of the above participant and intervention characteristics were coded for each article. There

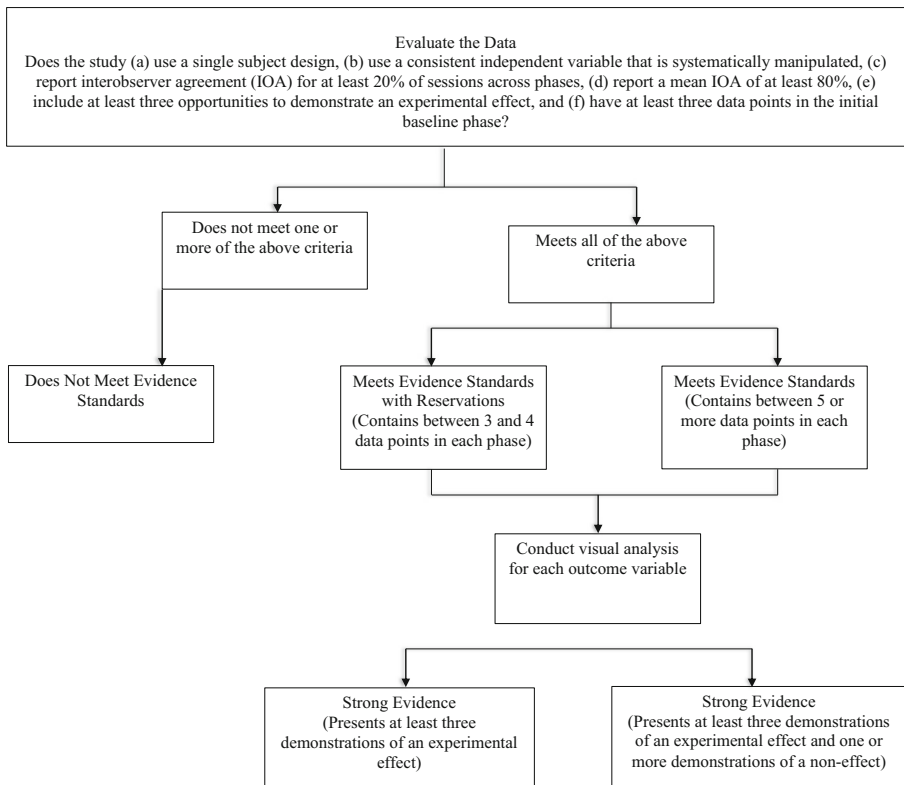


Fig. 2 Flow diagram of what works clearinghouse single case design standards

was 98% (range: 96–100%) agreement between observers. After review, no major discrepancies were observed.

Results

The results of a systematic search of the 915 articles identified through the electronic search yielded 20 articles that met the inclusion criteria. These 20 articles included 21 independent experiments that were analyzed separately.

Demographics

There were a total of 203 participants included in the 21 experiments; 178 were male and 25 were female. Participants ranged in age from 13 to 60 years old, and the median age of participants was 24 years old. The percentage of participants with an ASD diagnosis included in each experiment ranged from 50–100%, and overall 96% of participants had a diagnosis of ASD ($N = 196$). Additional participant diagnoses included MR, intellectual disability (ID), and Down syndrome. There were 19 experiments in which all of the participants had an ASD. In the remaining three studies (Dotson et al. 2013; Johnson et al. 2013; Van Laarhoven et al. 2012, between 50% and 69% of the participants had a diagnosis of ASD. Five studies included participants who had secondary diagnoses of ASD and comorbid diagnoses of ID, MR, Down syndrome, or cerebral palsy.

Intervention

Vocational skills were broken into three main categories: pre-employment, job tasks, and job retention. Within job tasks, skills were further broken into categories of restaurant, retail, and clerical. Table 1 displays these vocational skills by the characteristics of intervention name, technology type, design, generalization, and maintenance.

Results indicated that a university setting was used in all of the studies that targeted pre-employment skills. Additionally, 75% of the retention-targeted studies were conducted in workplace sites. Similarly, 85% of the studies targeting retail job interventions were also conducted in workplace sites.

Moreover, 62% ($n = 9$) of the job skills interventions employed either video modeling or video prompting, and an additional 21% ($n = 3$) of each used a form of audio prompting or an intervention package.

Inspection of the remaining intervention characteristics revealed that generalization was assessed in 33% ($n = 7$) of studies, with generalization settings including a school environment, (Alexander et al. 2013), a work environment (Allen et al. 2012, 2010a; Bennett and Dukes 2013; Dotson et al. 2013), or a warehouse (Burke et al. 2010). Furthermore, maintenance was assessed in 57% ($n = 12$) of the studies. Lastly, four studies evaluated job acquisition with participants who were already employed, and only two studies (Allen et al. 2012, 2010a, b) reported whether the vocational training intervention resulted in employment for the participants.

With respect to experimental design, 71% ($n = 15$) utilized a single case design and 29% ($n = 6$) employed a group design. All ($n = 3$) of the interventions targeting pre-

Table 1 Vocational skills by intervention characteristic

Vocational Skill	Article	Intervention	Technology Type	Setting	Design Type	Generalization	Maintenance
Pre-employment	Morgan et al. (2014)	Interview Skills Curriculum	None	University	Group	No	No
	Smith et al. (2014)	Virtual Reality Job Interview Training	Computer	University	Group	No	No
	Strickland et al. (2013)	Web-based Interviewing Program	DVD & Computer	University	Group	No	No
Job-Task Restaurant	Johnson et al. (2013)	Video Prompting	Video (iPod)	School	Single Subject	No	Yes
	Kellems and Momingstar (2012)	Video Modeling	Video (iPod)	Various Work Sites	Single Subject	No	Yes
Job-task Retail	Allen et al. (2012)	Video Modeling and Audio Cuing	Laptop & Transceiver with microphone	Factory Warehouse	Single Subject	Yes	Yes
	Allen et al. (2010a)	Video Modeling	Video	Retail Store	Single Subject	Yes	Yes
	Allen et al. (2010b)	Video Modeling	Video	Retail Warehouse	Single Subject	No	Yes
	Bennett et al. (2013b)	Covert Audio Coaching	Two-way radio and headset	School	Single Subject	Yes	Yes
	Burke et al. (2013)	Video Modeling & Prompting	Tablet	Warehouse	Single Subject	No	No
	Burke et al. (2010)	Behavior Skills Training & Performance Cue System	iPod	Warehouse	Single Subject	Yes	Yes
	Burke et al. (2010)	Behavior Skills Training & Performance Cue	iPod	Warehouse	Single Subject	Yes	Yes

Table 1 (continued)

Vocational Skill	Article	Intervention	Technology Type	Setting	Design Type	Generalization	Maintenance
Job-task Clerical	Alexander et al. (2013)	Video Modeling	Video (iPad)	School	Single Subject	Yes	Yes
	Bennett et al. (2013a)	Video Prompting	Video (iPad)	School	Single Subject	No	No
	Bennett et al. (2013c)	Covert Audio Coaching	Two-way radio and headset	School	Single Subject	No	Yes
	Bereznak et al. (2012)	Video Self-prompting	Video (iPhone)	School	Single Subject	No	Yes
Retention	Dotson et al. (2013)	Group-based Teaching Interaction Procedure	None	University	Single Subject	Yes	Yes
	Gentry et al. (2015)	Training Student to Use iPod as Cognitive Aid	iPod	Various Work Sites	Group	No	No
	Liu et al. (2013)	Autism Specific Workplace Training Program	None	University	Group	No	No
	Montgomery et al. (2011)	Audio Prompting System	Cassette Tape Recorder & Headphones	Restaurant	Single Subject	No	No
	Van Laarhoven et al. (2012)	Video Modeling	DVD & Computer	Restaurant	Group	No	No

employment skills evaluated the results with a group design, and 75% ($n = 4$) of the studies targeting job maintenance skills also used a group design. The majority (92%; $n = 13$) of interventions targeting job skills (e.g., restaurant, clerical, and retail) used a single subject design.

Evidence Standards

Table 2 displays results of the quality and strength of evidence of each study by intervention type. Given that this method of evaluating evidence strength is only applied to single case design studies, only 71% ($n = 15$) of experiments were evaluated. Examination of study quality indicated that 29% ($n = 6$) of the studies met the evidence standards without reservations and 14% ($n = 3$) met the evidence standards with reservations. Moreover 29% ($n = 6$) of the studies did not meet the evidence standards, and an additional 29% ($n = 6$) studies were not evaluated as they did not use a single case design methodology. As per What Works Clearinghouse Single Case Design evidence standards (Kratochwill et al. 2010) recommendations, only studies that meet evidence standards with or without reservation can be evaluated in examining the

Table 2 Intervention type by what works clearinghouse evidence standards

Intervention	Article	Meets Standards	Evidence
Video based	Alexander et al. (2013)	With reservations	Moderate
	Allen et al. (2012)	Does not meet standards	—
	Allen et al. (2010a)*	Without Reservations	Strong
	Allen et al. (2010b)	Without reservations	Strong
	Bennett et al. (2013a)	Without reservations	—
	Bereznak et al. (2012)	With reservations	Strong
	Burke et al. (2013)	Does not meet standards	—
	Johnson et al. (2013)	Does not meet standards	—
	Kellems and Morningstar (2012)	With reservations	Strong
Audio based	Van Laarhoven et al. (2012)	Not single case design	—
	Bennett et al. (2013b)	Without reservations	Strong
	Bennett et al. (2013c)	Without reservations	Strong
	Montgomery et al. (2011)	Without reservations	Moderate
Intervention Package	Burke et al. (2010)	Does not meet standards	—
	Burke et al. (2010)	Does not meet standards	—
	Dotson et al. (2013)	Does not meet standards	—
	Gentry et al. (2015)	Not single case design	—
	Liu et al. (2013)	Not single case design	—
	Morgan et al. (2014)	Not single case design	—
	Strickland et al. (2013)	Not single case design	—
Virtual Reality	Smith et al. (2014)	Not single case design	—

strength of evidence. As such, 42% ($n = 9$) studies were coded for this variable. It was found that a total of 9% ($n = 2$) of studies exhibited moderate evidence and 29% ($n = 6$) exhibited strong evidence.

Discussion

The number of under- and unemployed adolescents and adults with ASD is exceptionally high, especially compared to those in similar disability groups (Shattuck et al. 2012). Although the number of studies evaluating vocational interventions for individuals with ASD has almost doubled in recent years (Bennett and Dukes 2013), there is still a relatively small literature base regarding this imperative topic. As such, the purpose of this review was to explore the research on this subject published in the last 5 years. The results showed that there are numerous interventions that have been effective in teaching vocational skills to adults and adolescents with ASD. Among these interventions, there have been several skills targeted such as mail sorting, photocopying, food preparation, and even interacting with customers. Additionally, there are interventions for both prevocational and job retention skills such as interviewing and on-task behavior. Further, these skills have been successfully evaluated in both teaching and real-life settings. Several prominent themes emerged from the nine intervention characteristics that were coded and following, the research questions will be discussed in those contexts.

Intervention

The distribution of skill type (pre-employment, job task, or job retention) is of note among the included studies. Although more than half of the interventions fall into the category of job tasks, there is just a fraction related to job retention, and an even smaller number targeting pre-employment skills. Although job task skills are crucial to successful employment, job acquisition and maintenance are vital to be mastered and maintained as well. Although lacking, the mere presence of pre-vocational studies demonstrates the advancement of this body of research, as there were no studies that focused on pre-vocational skills in Bennett and Dukes (2013) review. However, researchers of future studies should seek to evaluate evidence-based practices in relation to both pre-employment and job retention skills. For example, this could be accomplished by applying the most frequently used, evidence-based interventions from this review (video modeling/prompting) and using them to teach skills such as resume writing.

Similarly, many of the skills involved in job maintenance are considered soft skills (e.g., as organization, customer and co-worker interactions, and time management), which are often the most difficult for individuals with ASD. One advantage of targeting and evaluating soft skills is that instruction can be incorporated into the school day, and taught at an earlier age. Teaching these skills while individuals are still school-age would provide the distinct advantage of using the funding provided by the Individuals With Disabilities Act (IDEA).

This is particularly important as funding is significantly decreased after the individual is no longer involved in school programming. This review only identified one study (i.e., Morgan et al. 2014) examining the training and improvement of the soft skills involved in employment (social pragmatic skills). However, the vocational skills targeted in this study were job interview skills, not exclusively the soft skills identified above. The identification of these studies may have been limited by the search terms and criteria. Including terms such as “social skills”, “time management, and “pragmatic skills” would aid in creating a more thorough search. The current search did not include these expanded search terms, as the aim of this review was to evaluate interventions or teaching strategies used to teach specific vocational skills, rather than those skills that would support the maintenance of a job. Researchers of future studies should consider focusing a review solely on soft skill acquisition related to acquiring and keeping a job.

In regards to employment settings and targeted jobs, there are also several areas for further investigation. The most commonly taught skills of the included studies took place in clerical, restaurant, and retail positions. However, according to the NLTS2, the most common placements of adults with ASD are those in clerical, transportation, and production jobs. This highlights somewhat of a research-to-practice gap. Applying evidence-based interventions, such as video modeling (Wong et al. 2015), to these common employment areas is paramount. Researchers of future studies should aim to evaluate the evidence-based interventions described above in combination with the jobs in which adults with individuals with ASD are most likely to be employed. Moreover, researchers should seek to investigate paths to expand the narrow job market for individuals with ASD, and provide additional employment opportunities to this population.

Technology

With technology growing in popularity, it has led to an increased presence in the literature. As such, the majority of the studies in this review employed some, or even multiple, forms of technology. One of the key outcomes sought for vocational programming is independence for employees, and it is this independence that contributes to competitive and sustained employment while reducing the dependence on job-coaches, teachers, or other employees (Lancioni and O’Reilly 2001). Interventions that employ technology allow for this independence to manifest with greater ease. Van Laarhoven et al. (2012) cite several benefits to using technology, specifically video-based supports, to promote independence in employment settings.

The incorporation of technology leads to several other advantages. First, in formats that use video or audio recordings, there is the opportunity for the user to review or repeat steps as needed. This is especially advantageous for individuals who need repeated practice or experience memory issues related to intellectual disabilities. Self-directed video prompting (Bereznak et al. 2012), for example, allows the participant to independently navigate through the steps of the task and even repeat steps to successfully complete a job. Second, interventions such as covert audio coaching (Bennett et al. 2013a, b, c) and

video prompting (Johnson et al. 2013) are easy to incorporate into the workplace, as they blend into the environment far more easily than obtrusive visual aids or other supports. Researchers of future studies should build on this evidence, and investigate incorporating these technologies into other areas such as generalization to different skills and environments.

Also of importance, technology is cost effective in terms of both materials and vocational training (Van Laarhoven et al. 2012). First, employees often already have audio and video devices, such as cellphones, on hand. Technology has become readily available in recent years, and the significant decrease in cost has made it far more accessible for both general use, and for that with students with disabilities. In regards to vocational training, the incorporation of technology with traditional job coaching can significantly lower the costs associated with supported employment. Compared to the typical cost of a job coach and supported employment (Cimera 2012), teaching an employee with ASD to use video prompting would require significantly less time and money. Johnson et al. (2013) trained a teacher to use video prompting with her students to teach food preparation skills. The results showed that it took her students a range of 2 to 13 days to reach mastery of those skills with minimal assistance from the teacher. This is in sharp contrast to the weeks and sometimes months that a job coach is required to work with a client. Researchers of future studies should examine various avenues of implementing cost-effective self-directed technology.

Vocational Outcomes

Only two studies provided data pertaining to the acquisition of employment following completion of the study. Further, both of these studies were conducted by the same research team (Allen et al. 2010a, b, 2012). As the purpose of many of the included interventions was to assist individuals with ASD in the process of obtaining gainful employment, it is vital to document whether or not these interventions result in said outcomes. If the interventions are not resulting in the desired outcome of employment, it would be these data that would lead to reevaluation and modification of the intervention to ensure that employment is still within grasp. Researchers of future studies should investigate the real-life employment outcomes that are associated with the interventions and training they are evaluating. Moreover, tracking and recording the acquisition of employment following vocational training would provide possibly the most valuable data of all.

Study Evaluation

The What Works Clearinghouse single case design standards (Kratochwill et al. 2010) were used in the current study to evaluate the design and effectiveness of a single case design study. Given that the scope of this review included studies that utilized both group and single case designs, only 71% ($n = 15$) experiments were evaluated using these standards. However, out of the 15 studies that were evaluated, only 29% ($n = 6$) demonstrated strong evidence of an effect. With

such a small research base examining vocational skills training for individuals with ASD, the implications from these findings lie within the design and intervention effects of future studies. In order to provide justification for the interventions that are being designed for this population to be woven into the existing training framework, it is key that they are able to demonstrate their effectiveness to practitioners. Researchers should ensure that their studies are designed according to the standards set by Kratochwill et al. (2010). If study designs do not meet these standards, it will be difficult to evaluate the effectiveness of the interventions we put forth. Finally, we did not evaluate those studies that implemented a group design. Future researchers should seek to employ methods that allow for evaluation of all vocational skills studies, regardless of experimental design.

Generalization and Maintenance

Similar to vocational outcomes, generalization and maintenance measures are also central components when evaluating interventions. Generalization measures are designed to be implemented in a real-life setting rather than the controlled or contrived environment to which many studies are confined. Additional generalization measures that could be evaluated are those across vocational skills. This measure would be especially valuable for those studies in which generalization to a new environment would not be practical (i.e., job retention).

The results indicate that the intervention setting of these studies is limited to either on the job, or in a university or school. Although many of the interventions conducted in a school or university setting evaluated pre-vocational skills (e.g., filling out job applications), several studies evaluated vocational skills tasks that were also measured in this type of environment. However, this can become problematic when an intervention is only proven effective in a contrived setting. With this, it is impossible to know if there are characteristics of the intervention that would need to be modified in order for the participant to be equally effective when performing the skill on the job. Further, it is difficult to measure these skills in contrived environments and then generalize these results to real-life employment settings. It would be far more advantageous to have continued support and training in a generalized environment (e.g., on the job). This would allow for extraneous variables such as other co-workers, loud noises, and time constraints to be accounted for. Examining the studies that evaluated pre-employment skills, there was no measurement of generalization or maintenance in any of the studies. Additionally, there were no generalization measures reported for the studies that evaluated job retention skills. Further, when evaluating all included studies, maintenance was only measured in 57%, and generalization in a mere 33%. Researchers of future studies should record further measures of generalization that would allow these interventions to be utilized in a variety of other skills and settings.

Given the overwhelming evidence of the efficacy of vocational skill interventions for individuals with ASD, it can be concluded that many of these interventions could easily be incorporated into a variety of in-school or on-the-job teaching opportunities. In addition to the many aforementioned benefits of

vocational interventions, a greater focus on transition age students and employment training will greatly contribute to the body of intervention research for individuals with ASD. Moreover, expansion of the included studies will build a more complete repertoire of skills needed for the full spectrum of employment. With the hopeful growth of literature in this area, there can be improved employment and life outcomes for individuals with ASD in the near future.

Compliance with Ethical Standards

Funding This study was not funded.

Human and Animal Rights This article does not contain any studies with human participants or animals performed by any of the authors.

Conflict of Interest The authors declare that they have no conflict of interest.

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