

Autism, Transition, and Employment: An Annotated Bibliography 2008-2014

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AUTISM, TRANSITION, AND EMPLOYMENT: AN ANNOTATED BIBLIOGRAPHY 2008 - 2014

Baldwin, S., Costley, D., & Warren, A. (2014). Employment Activities and Experiences of Adults with High-Functioning Autism and Asperger's Disorder. *Journal of Autism and Developmental Disorders*, DOI 10.1007/s10803-014-2112-z.

There is limited large-scale empirical research into the working lives of adults who have an autism spectrum disorder with no co-occurring intellectual disability. Drawing on data from a national survey, this report describes the employment activities and experiences of 130 adults with Asperger's Disorder (AD) and high functioning autism (HFA) in Australia. Outcome measures include current occupation; occupational skill level and alignment with educational attainment; type of job contract; hours of work; support received to find work; support received in the workplace; and positive and negative experiences of employment. The findings confirm and expand upon existing evidence that adults with AD and HFA, despite their capacity and willingness to work, face significant disadvantages in the labour market and a lack of understanding and support in employment settings.

Burgess, S., & Cimera, R. E. (2014). Employment outcomes of transition-aged adults with autism spectrum disorder: A state of the states report. *American Journal on Intellectual and Developmental Disabilities*, 119(1), 64-83.

The primary purpose of this study was to evaluate the employment outcomes of transition-aged adults with autism spectrum disorders (ASD) served by vocational rehabilitation services (VR) over the last 10 years by state. A secondary purpose was to compare employment outcomes of individuals with ASD to those of the overall transition-aged population served by VR for the same time period. Although there was variability both within and among states, the results of this study indicate that, over time, the number of young adults with ASD seeking VR services has increased; however, employment outcomes including the percent of adults with ASD achieving employment, the number of hours worked, and wages earned have not improved for this group. The cost to provide VR services to transition-aged adults with ASD was relatively stable over time. Transition-aged adults with ASD were more likely to become successfully employed as a result of receiving VR services than the overall population of transition-aged adults served by VR. However, the employed transition-aged adults consistently worked fewer hours and earned lower wages than those in the overall population. Factors that may influence variability within and among states, and between groups, and implications for research and practice are discussed.

Burke, R. V., Andersen, M. N., Bowen, S. L., Howard, M. R., & Allen, K. D. (2010). Evaluation of two instruction methods to increase employment options for young adults with autism spectrum disorders. *Research in Developmental Disabilities*, 31(6), 1223-1233.

The authors evaluated the efficacy of a vocational training program including behavioral skills training, and a "performance cue system" (i.e., a proprietary iPhone application adapted for the study) to teach targeted social-vocational skills to six young adults with an Autism Spectrum Disorder. In two separate studies, participants were employed to assist in the delivery of a fire safety education program. Participants were asked to wear an inflatable firefighter WalkAround® mascot costume and to perform

63 scripted behaviors in coordination with a fire prevention specialist who was the lead program presenter. In Study 1, three participants were initially exposed to established company training procedures comprised of behavioral skills training components to determine whether they met mastery of the skills. If necessary to reach criteria, participants were then exposed to a performance cue system. In Study 2, three additional participants were provided with the performance cue system alone, and then behavioral skills training if required. A single case, multiple-baseline design across subjects was used to evaluate efficacy of each intervention. Results indicate that 5 of 6 participants reached criterion only after introduction of the cue system while the sixth reached criterion with behavioral skills training alone. The program received high satisfaction ratings from participants, their parents, and consumers. Implications and potential use of the PCS in other employment settings are discussed.

Chappel, S., & Somers, B. (2010). Employing persons with autism spectrum disorders: A collaborative effort. *Journal of Vocational Rehabilitation*, 32(2), 117-124.

The number of persons diagnosed with autism spectrum disorders (ASD) is on the rise. With more individuals being diagnosed, it is imperative that these persons get the skills and services necessary to obtain and retain employment. Given the fact that individuals with ASD benefit from services through the vocational rehabilitation system, it is essential that schools and vocational rehabilitation work together to ensure that students with ASD access the services they need to be successful employees. School systems and their vocational rehabilitation partners need to make a commitment to cooperatively work together to provide a comprehensive transition plan for students with ASD. Once these steps for becoming successful partners are in place there are a variety of strategies that, if implemented, will likely improve the outcomes for students with ASD.

Chiang, H., Cheung, Y., & Li, H. (2013). Factors associated with participation in employment for high school leavers with autism. *Journal of Autism and Developmental Disorders*, 43(8), 1832-1842.

This study aimed to identify the factors associated with participation in employment for high school leavers with autism. A secondary data analysis of the National Longitudinal Transition Study 2 (NLTS2) data was performed. Potential factors were assessed using a weighted multivariate logistic regression. This study found that annual household income, parental education, gender, social skills, whether the child had intellectual disability, whether the child graduated from high school, whether the child received career counseling during high school, and whether the child's school contacted postsecondary vocational training programs or potential employers were the significant factors associated with participation in employment. These findings may have implications for professionals who provide transition services and post-secondary programs for individuals with autism.

Chiang, H. M., Cheung, Y. K., Hickson, L., Xiang, R., & Tsai, L. Y. (2012). Predictive factors of participation in postsecondary education for high school leavers with autism. *Journal of Autism and Developmental Disorders*, 42(5), 685-696.

This exploratory study was designed to identify the factors predictive of participation in postsecondary education for high school leavers with autism. A secondary data analysis of the National Longitudinal Transition Study 2 (NLTS2) data was performed for this study. Potential predictors of participation in postsecondary education were assessed using a backward logistic regression analysis. This study found that the high school's primary post-high school goal for the student, parental expectations, high school

type, annual household income, and academic performance were significant predictors of participation in postsecondary education. The findings of this current study may provide critical information for parents of children with autism as well as educators and professionals who work with students with autism.

Cimera, R., Burgess, S., & Wiley, A. (2013). Does providing transition services early enable students with ASD to achieve better vocational outcomes as adults? *Research & Practice for Persons with Severe Disabilities*, 38(2), 88-93.

This study investigated whether receiving transition services early (i.e., by age 14) promoted better vocational outcomes than receiving transition services later (i. e., by age 16) for young adults with ASD. To do this, the outcomes achieved by two matched groups were examined-453 young adults from states requiring transition services be addressed by age 14 and 453 young adults with ASD from states requiring transition services be addressed by age 16. In each of the four years examined (i.e., 2006-2009), individuals from the early transition states were significantly more likely to be employed than individuals from the later transition group. Further, early transition individuals who became employed appeared to earn more wages and cost less to serve.

Cimera, R., & Cowan, R. J. (2009). The costs of services and employment outcomes achieved by adults with Autism in the US. *Autism*, 13(5), 285-302.

This article examines the cost of services and employment outcomes obtained by adults with autism within the United States vocational rehabilitation (VR) system. It found that the number of such individuals has increased by more than 121 percent from 2002 to 2006. Moreover, though adults with autism were employed at higher rates than most disability groups investigated, they tended to work far fewer hours and earn less in wages per week. The study also found that adults with autism were among the most costly individuals to serve.

Cimera, R. E., Wehman, P., West, M., & Burgess, S. (2012). Do sheltered workshops enhance employment outcomes for adults with autism spectrum disorder? *Autism*, 16(1), 87-94.

This study investigated whether sheltered workshops help prepare individuals with autism spectrum disorder (ASD) for competitive employment within the community. Two groups of individuals were compared: (a) 215 supported employees who were in sheltered workshops prior to entering supported employment and (b) 215 supported employees who were not in sheltered workshops. Individuals from both groups were matched based on their primary diagnosis, secondary diagnosis (if present), and gender. Results showed that there were no differences in rates of employment between these two groups. However, individuals who participated in sheltered workshops earned significantly less (US\$129.36 versus US\$191.42 per week), and cost significantly more to serve (US\$6,065.08 versus US\$2,440.60), than their non-sheltered workshop peers. Results presented here suggest that individuals with ASD achieve better vocational outcomes if they do not participate in sheltered workshops prior to enrolling in supported employment.

Eaves, L. C., & Ho, H. H. (2008). Young adult outcome of autism spectrum disorders. *Journal of Autism and Developmental Disorders*, 38(4), 739-747.

The purpose of this study was to learn about the lives of young adults with ASD, families with children born 1974–1984, diagnosed as preschoolers and followed into adolescence were contacted by mail. Of 76 eligible, 48 (63%) participated in a telephone interview. Global outcome scores were assigned based on work, friendships and independence. At mean age 24, half had good to fair outcome and 46% poor. Co-morbid conditions, obesity and medication use were common. Families noted unmet needs particularly in social areas. Multilinear regression indicated a combination of IQ and CARS score at age 11 predicted outcome. Earlier studies reported more adults with ASD who had poor to very poor outcomes, however current young people had more opportunities, and thus better results were expected.

Geller, L. L., & Greenberg, M. (2009). Managing the transition process from high school to college and beyond: Challenges for individuals, families, and society. *Social Work in Mental Health, Special Issue: Critical Transitions in the Lives of Young People with Autism*, 8(1), 92-116.

Transition to adulthood represents a significant challenge for individuals on the autism spectrum and their families. With the increase in diagnosis and appropriate treatment at younger ages, more adolescents on the spectrum have the potential for independent adult lives, including work and college. Yet the support systems have been slow to respond to the needs of individuals with typical dreams and aspirations but atypical development. This article addresses the challenges of the transition to adulthood from multiple perspectives and provides a framework for individuals, families, and supporting professionals to anticipate challenges and develop positive solutions.

Gentry, T., Wehman, P., McDonough, J., Kriner, R., & Sima, A. (in press). Enhancing employment outcomes for adult workers with autism using the Apple iPod Touch as an assistive technology: A delayed randomized controlled trial. *Journal of Autism and Developmental Disorders*.

Personal digital assistants (PDAs) are versatile task organizers that hold promise as assistive technologies for people with cognitive-behavioral challenges. This delayed randomized controlled trial compared two groups of adult workers with autism spectrum disorder (ASD) to determine whether the use of an Apple iPod Touch PDA as a vocational support improves work performance and reduces personal support needs on the job. Baseline data were collected on 50 adults with ASD who were beginning in vocational placement supported by a job coach. Participants were randomized to receive training in the use of a PDA as a vocational aid during their first two weeks on the job or after working twelve weeks without PDA support. Workers who received PDA training at the beginning of their job placement required significant less hours of job coaching support ($p=0.013$) during their first 12 weeks on the job than those who had not yet received the intervention. Functional performance between the two groups was not significantly different. The significant difference in hours of job coaching support persisted during the subsequent 12 weeks, in which both groups used a PDF ($p=0.017$).

Gerhardt, P. F., & Lainer, I. (2011). Addressing the needs of adolescents and adults with autism: A crisis on the horizon. *Journal of Contemporary Psychotherapy*, 41(1), 37-45.

The cohort of individuals with autism spectrum disorder (ASD) diagnosed as part of the first wave of what is often referred to as the autism epidemic is rapidly approaching adulthood. This cohort represents only the proverbial tip of the iceberg with some reports noting that 70% of the currently identified individuals with ASD are less than 14-years old. These numbers represent a looming crisis of unprecedented magnitude for adults with autism, their families, and the ill-prepared and underfunded adult service system charged with meeting their needs. A review of the current literature on outcomes for adults with ASD indicates that, independent of current ability levels, the vast majority of adults on the spectrum are either unemployed or underemployed and, further, that large numbers of adults with autism remain without any appropriate services. Many have had inadequate transition programming including little attention to service coordination, minimal direct family involvement and/or absence of treatment based on evidence-based practices. Lastly, issues related to staff and provider recruitment and retention present significant, systemic challenges to the provision of effective services. As such there is a significant and growing need for greater attention to individual needs of adults with ASD if the staff is to provide the opportunity for a positive quality-of-life.

Gratez, J. E. (2010). Autism grows up: Opportunities for adults with autism. *Disability & Society*, 25(1), 33-47.

A disability is a natural part of human experience that should not inhibit one's ability to experience independence, equal opportunity and economic self-sufficiency. It is not known how caregivers of adults with a specific disability, an autism spectrum disorder, would frame these opportunities for their children living in the USA. This survey explored the needs of 143 families supporting an adult with autism and the opportunities afforded them in socialization, employment and residential living. The results of the study indicated a lack of available support for caregivers and limited opportunities for their family member with autism in the areas of socialization, employment and residential living, especially for those most severely affected with autism. Implications for societal change are presented.

Hagner, D., Cloutier, H., Arakelian, C., & Brucker, D. (2012). Outcomes of a family-centered transition process for students with autism spectrum disorders. *Focus on Autism and Other Developmental Disabilities*, 27(1), 42-50.

A three-component intervention was implemented with 47 youth with autism spectrum disorders (ASD) as they transitioned from high school to adult life. The youth, ages 16 to 19 years, were randomly assigned to a Year 1 group or a Year 2 group. Participants in the Year 1 group received a transition planning intervention consisting of (a) group training sessions for families in the transition process, (b) person-centered planning meetings facilitated by project staff, and (c) follow-up assistance with career exploration and plan implementation. Data were collected pre- and post implementation to measure student and family expectations, self-determination, and career decision-making ability. The Year 2 group began receiving services following the second data collection point. Participants in the Year 1 group reported statistically significant increases in all four measured variables, whereas the Year 2 group showed no significant changes. Implications for redesigning transition services for this population are discussed.

Ham, W., McDonough, J., Molinelli, A., Schall, C. & Wehman, P. (2014). The Effect of Project SEARCH on Employment Outcomes for two youth with Autism Spectrum Disorder. *Journal of Vocational, Rehabilitation*, 40(2).

This paper presents the case studies of successful employment support for two young adults with autism spectrum disorders (ASD). Contrary to reported employment outcomes for young adults with ASD, these two young people experienced success in their transition to employment as a result of intensive job coaching. Their supports included consultation with a positive behavior support facilitator, the implementation of a multi-component behavior intervention plan, and the implementation of supervisor and co-worker training in the implementation of the plan. Both young adults achieved independence at work and maintained successful employment for two years or more with fading supports as a result of this intervention.

Hart, D., Grigal, M., & Weir, C. (2010). Expanding the paradigm: Postsecondary education options for individuals with autism spectrum disorder and intellectual disabilities. *Focus on Autism and other Developmental Disabilities*, 25(3), 134-150.

This article provides an overview of postsecondary education (PSE) options for students with Autism Spectrum Disorder (ASD) and other Intellectual Disabilities (ID). Topics include a historical and philosophical discussion outlining how students with ASD and ID can benefit from postsecondary opportunities, a description of current PSE options, and models of implementation. The conclusion provides implications and recommendations for future research, training and technical assistance.

Hendricks, D. (2010). Employment and adults with autism spectrum disorders: Challenges and strategies for success. *Journal of Vocational Rehabilitation*, 32(2), 125-134.

Individuals with autism spectrum disorder (ASD) have the ability and desire to work, but there are still several obstructions. Research overwhelmingly demonstrates disappointing employment outcomes for this group. The vast majority is unemployed and for those who do have gainful employment, underemployment is common. The increased prevalence of ASD coupled with unique social, communication, and behavioral characteristics translate into the need for services to help them achieve employment success. Consideration of individual characteristics including strengths, needs, as well as specific interests, coupled with implementation of proper supports can result in successful and ongoing employment. This paper provides a review of evidence based research related to employment for individuals with ASD. Specific areas addressed include benefits of employment, state of employment, obstacles to employment, current service options, and an in depth review of supports needed for success. These supports focus not only on job tasks, but also the interpersonal skills needed to foster a positive work experience.

Hendricks, D., & Wehman, P. (2009). Transition from school to adulthood for youth with Autism Spectrum Disorders Review and Recommendations. *Focus on Autism and Other Developmental Disabilities*, 24(2), 77-88.

The transition from school services to adulthood can be particularly difficult for many adolescents with autism spectrum disorders (ASD). Although some individuals with ASD are able to successfully transition, most are faced with significant obstacles in multiple areas as they attempt to negotiate their way into college, work, community participation, and independent living. This article contains a review of research related to the transition from school to adulthood for youth with ASD in the areas of

education, employment, community living, and community integration. These key areas of the transition process are crucial for success in adulthood. A summary of principal conclusions drawn from the current literature and suggestions for future research are provided.

Henninger, N. A., & Taylor, J. L. (2013). Outcomes in adults with autism spectrum disorders: A historical perspective. *Autism*, 17(1), 103-116.

In this review, the authors examine the ways in which researchers have defined successful adult outcomes for individuals with autism spectrum disorders (ASDs) from the first systematic follow-up reports to the present day. The earliest outcome studies used vague and unreliable outcome criteria, and institutionalization was a common marker of poor outcomes. In the past decade, researchers have begun to standardize the measurement of adult outcomes with specific criteria based on friendships, employment, and living arrangements. Although nearly all of these studies have agreed that the majority of adults with ASD have poor outcomes, evolving concepts of what it means to be an adult could have an impact on outcomes measured. For example, some researchers have suggested that taking into account the person-environment fit could reveal a more optimistic picture of outcomes for these adults. Suggestions for future research are discussed.

Holwerda, A., Klink, J., Groothoff, J., & Brouwer, S. (2012). Predictors for work participation in individuals with an autism spectrum disorder: A systematic review. *Journal of Occupational Rehabilitation*. 22(3), 333-352.

Research shows that only about 25% of people with autism are employed. The authors conducted a systematic review on factors facilitating or hindering work participation of people with autism in longitudinal studies. An extensive search in biomedical and psychological databases yielded 204 articles and 18 satisfied all inclusion criteria. The authors assessed the methodological quality of included studies using an established criteria list. Seventeen factors were identified and categorized as disease-related factors, personal factors or external factors. Limited cognitive ability was the only significant predictor consistently found for work outcome. Functional independence and institutionalization were both reported by one study to be significantly related to work outcome. Inconsistent findings or non significant findings were reported for the other fourteen factors. These findings emphasize the need for more high quality cohort studies focusing on work participation as the main outcome among people with Autism.

Howlin, P., & Moss, P. (2012). Adults with autism spectrum disorders. *Canadian Journal of Psychiatry*, 57(5), 275-283.

In the decades since autism was first formally described in the 1940s, there have been major advances in research relating to diagnosis, causation, and treatment approaches for children with this condition. However, research into prognosis, outcomes, or effective interventions for adults with autism spectrum disorders (ASDs) is much more limited. In this paper, the authors review studies of outcome in adulthood. The findings indicate that, as adults, many people with ASD, including those of normal IQ, are significantly disadvantaged regarding employment, social relationships, physical and mental health, and quality of life. Support to facilitate integration within the wider society is frequently lacking, and there has been almost no research into ways of developing more effective intervention programs for adults. Moreover, most of the research on outcome has involved relatively young people in their 20s and 30s--much less is known about outcomes for people with ASD as they reach mid-late adulthood. Systematic follow-up studies from childhood through adulthood are needed if the study is to gain a

better understanding of trajectories of development over the lifespan, to identify the factors that influence prognosis, and to determine how these factors exert their effects and how they may be modified to ensure a better future

Hume, K., Loftin, R., & Lantz, J. (2009). Increasing independence in autism spectrum disorders: A review of three focused interventions. *Journal of Autism and Developmental Disorders*, 39(9), 1329-1338.

The features of autism that inhibit the independent demonstration of skills, as well as three effective interventions for increasing independence, are explored in this review article. Independent performance may prove difficult for individuals with autism spectrum disorders (ASD) due to the core deficits of the disability, as well as executive function deficits that impact initiation and generalization. These difficulties, coupled with intervention strategies that encourage over-reliance on adult support, contribute to poor long term outcomes for adults with ASD in employment, housing, and relationship development. Self-monitoring, video modeling, and individual work systems each emphasize a shift in stimulus control from continuous adult management to an alternative stimulus and have proven successful in addressing executive function deficits and increasing independence.

Kreiger, B., Kinebanian, A., Proding, B., & Heigl, F. (2012). Becoming a member of the work force: Perceptions of adults with asperger syndrome. *Work*, 43(2), 141-157.

Research has shown that comparatively few adults with Asperger Syndrome (AS) participate in the competitive work force. The purpose of this study was to gain in-depth knowledge about contextual factors, which contribute to successful labor market participation in some adults with AS. This study was conducted by in-depth-interviewing six adults with AS working in the competitive job market in Switzerland. A developmental and hermeneutic narrative approach was used for data collection and analysis. Two in-depth narrative interviews were conducted with each participant. A narrative analysis according to the theories of Paul Ricoeur was performed. Results showed that participants received pre-vocational requisites during their childhood through parents and friends that provided a feeling of security in social contexts. For participants, a supportive school setting resulted in academic achievements. The narratives reveal participants' capacities for understanding and adapting to social norms. Participants' understanding of their own needs was essential to the successful labor market participation. However, disclosure is rare and social stigma is still present. This study showed that successful labor participation of adults with AS can be enhanced through adequate social support already in the early stages of an individual's lifetime.

Lawer, L., Brusilovskiy, E., Salzer, M. S., & Mandell, D. S. (2009). Use of vocational rehabilitative services among adults with autism. *Journal of Autism and Developmental Disorders*, 39(3), 487-494.

This study examined the experiences of individuals with autism spectrum disorders (ASD) in the US Vocational Rehabilitation System (VRS). Subjects included all 382,221 adults ages 18–65 served by this system whose cases were closed in 2005; 1,707 were diagnosed with ASD. Adults with ASD were more likely than adults with other impairments to be denied services because they were considered too severely disabled. Among those served, adults with ASD received the most expensive set of services. They and adults with MR were most likely to be competitively employed at case closure. Post hoc

analyses suggest that their employment was highly associated with on-the-job supports. The results suggest the importance of the VRS in serving adults with ASD.

Lee, G., & Carter, E. (2012). Preparing transition-age students with high-functioning autism spectrum disorders for meaningful work. *Psychology in the Schools*, 49(10), 988-1000.

This article provides an overview of promising essential elements for fostering vocational success among students with high-functioning autism spectrum disorders (HFASDs) by drawing literature from the fields of school-to-work transition for post-secondary students and vocational rehabilitation for individuals with disabilities. The authors highlight seven important elements of high-quality transition services, including (a) individualized, strengths-based transition services and supports; (b) positive career development and early work experiences; (c) meaningful collaboration and interagency involvement; (d) family supports and expectations; (e) fostering self-determination and independence; (f) social and employment-related skill instruction; and (g) establishing job-related supports. These elements provide a comprehensive, collaborative, and longitudinal framework for clinical and research interventions aimed at fostering successful employment for students with HFASDs. Clinical and research implications are discussed.

Levy, A., & Perry, A. (2011). Outcomes in adolescent and adults with autism: A review of the literature. *Research in Autism Spectrum Disorder*, 5(4), 1271-1282.

Since Kanner's first account of children with autism, there has been extensive research into the presentation of and interventions for Autistic Disorder. However, only a small proportion of this literature has focused on the progress of individuals with autism as they move from childhood and adolescence into adulthood. This paper is a critical review of the current empirical studies that have addressed prognosis in this population in terms of diagnostic severity, cognitive functioning, language, academic performance and social outcomes. The overall pattern of change is considered and factors that appear to influence or predict outcome in adulthood are reviewed. Limitations in this pool of literature and recommendations for future studies are discussed.

Lugas, J., Timmons, J., & Smith, F. A. (2010). Vocational rehabilitation services received by youth with autism: Are they associated with an employment outcome? Research to Practice Brief, Issue No. 48. Boston, MA: Institute for Community Inclusion, University of Massachusetts Boston.

While youth with autism represent a small percentage of all vocational rehabilitation (VR) closures, the number who closed out of VR more than tripled between 2003 and 2008 (see "Institute for Community Inclusion Data Note 26"). As increasing numbers of youth with autism are accessing VR services, it is important to understand how they are using these services and the relationship of these services to outcomes and costs. The purpose of this brief is to: (1) Determine differences in services received by youth with autism compared to youth with other disabilities; (2) Identify services that are most closely associated with an employment outcome for youth with autism; and (3) Establish if large percentages of the group are receiving these successful services.

McDonough, J., & Revell, E. (2010). Accessing employment supports in the adult system for transitioning youth with autism spectrum disorders. *Journal of Vocational Rehabilitation*, 32(2), 89-100.

Effective transition from school to the adult community and employment for youth with Autism Spectrum Disorders (ASD) requires knowledge of an array of state and community agencies and organizations. This paper provided an overview of current research on employment outcomes for persons with ASD, with emphasis on employment outcomes achieved through participation in services provided by State Vocational Rehabilitation agencies. Descriptions are given for the primary providers of employment and related supports in the adult service system for transitioning youth with ASD. Two case study examples are provided detailing the development and implementation of employment plans responsive to the unique needs and abilities of young adults with ASD. Becoming well informed about resources at the community and state level and learning how to network effectively among these resources are emphasized as key to planning and implementing an effective transition program for a youth with ASD.

McNaughton, D., & Richardson, L. (2013). Supporting positive employment outcomes for individuals with autism who use AAC. *SIG 12 Perspectives on Augmentative and Alternative Communication*, 22, 164-172.

Employment is a valued transition outcome for many individuals with autism who use augmentative and alternative communication (AAC). As for anyone, a successful employment experience will require careful planning during the school years and the provision of appropriate supports in the workplace. Consideration of the individual's skills, preferences, and needed supports will play a critical role in ensuring positive workplace participation. This article will describe key strategies for supporting positive outcomes for individuals with autism who use AAC and illustrate these approaches with case examples.

Migliore, A., Timmons, J., Butterworth, J., & Lugas, J. (2012). Predictors of employment and postsecondary education of youth with autism. *Rehabilitation Counseling Bulletin*, 55(3), 176-184.

Using logistic and multiple regressions, the authors investigated predictors of employment and postsecondary education outcomes of youth with autism in the Vocational Rehabilitation Program. Data were obtained from the RSA911 data set, fiscal year 2008. Findings showed that the odds of gaining employment were greater for youth who received job placement services, yet only 48% of youth received this service. In addition, postsecondary education was among the strongest predictors of better earnings, yet only 10% of youth received college services. The authors recommended providing job placement services and college services to more youth with autism. At the same time, due to the relatively moderate effect sizes of these regression models, they recommend investigating additional variables currently not included in the RSA911 data set.

Migliore, A. & Zalewska, A. "Data Note: What Are the Employment Experiences of Youth with Autism After High School?" (2012). *Data Note Series, Institute for Community Inclusion*. Paper 49. Retrieved from: http://scholarworks.umb.edu/ici_datanote/49

As the number of youth diagnosed with autism increases across the nation, there is a growing interest in knowing about their employment experiences after high school. To explore this, the authors examined

the findings from the National Longitudinal Transition Study-2. As Table 1 shows, over half of youth with autism worked at some point after leaving high school (67%). This figure was greater than for their peers with an intellectual disability (ID) (53%), although smaller compared with their peers with other disabilities (86%). When looking only at those employed at the time of the interview, however, the figures were smaller across all disability groups.

Youth with autism were more likely to work in office and administrative support (21%) compared to youth with ID (7%) and youth with other disabilities (8%). They were also less likely to work in the food industry (12%) or to do cleaning and maintenance (10%) compared to their peers with ID (20% and 19%). Almost half of the youth with autism earned less than the federal minimum wage and reported that the majority of their co-workers were people with disabilities (42%). In addition, only about a third of youth with autism received paid vacation or sick leave (29%), and even less received health insurance (11%) or retirement benefits (10%). Despite these limitations, respondents indicated that work was an important positive experience: Over 85% of youth across the three disability groups reported liking their job very much or fairly well. As the number of youth diagnosed with autism increases nationally, knowing more about their employment experiences after high school is an important first step toward improvement.

Nicholas, D. B., Attridge, M., Zwaigenbaum, L., & Clarke, M. (2015). Vocational support approaches in autism spectrum disorder: A synthesis review of the literature. *Autism*, 19(2), 235-245. DOI: 10.1177/1362361313516548

This synthesis-based analysis identifies and reviews studies evaluating vocational resources for adults with autism spectrum disorder. It is based on a larger systematic review of intervention studies in autism spectrum disorder, from which a critical interpretive synthesis was conducted on studies related to vocation and autism spectrum disorder. In total, 10 studies were found that examine employment support for youth and adults with autism spectrum disorder. Two domains of vocational intervention in the literature were found: supported employment including community placement and job coaching and media and technology-based augmentative tools. The literature is limited in volume and quality of methodology, yet emerging constructs are promising in introducing the utility of vocational resources, in particular, supported employment in community settings. These vocational approaches are examined, along with representative studies. Recommendations for advancing practice, community capacity, and research are offered.

Parr, A. D., & Hunter, S. T. (2013). Enhancing work outcomes of employees with autism spectrum disorder through leadership for employees with autism spectrum disorder, *Autism*, July 25, 2013. (Epub ahead of print) Retrieved from: <http://aut.sagepub.com/content/early/2013/07/23/1362361313483020.abstract>

The focus of this study was to identify leader behaviors that elicit successful engagement of employees with autism spectrum disorder, a population that is powerfully emerging into the workplace. The ultimate goal was to improve the quality of life of employees with autism spectrum disorder by facilitating an environment leading to their success. Through a series of interviews with 54 employees with autism spectrum disorder, results indicated that leadership has a great effect on employee attitudes and performance, and that the notion of leadership preferences is quite complex culminating in several important behaviors rather than one superior leadership theory. Implications and future research directions are discussed.

Roberts, K. D. (2010). Topic areas to consider when planning transition from high school to postsecondary education for students with Autism Spectrum Disorder. *Focus on Autism and Other Developmental Disabilities*, 25(3), 158-162.

For many individuals with an autism spectrum disorder (ASD), attending and completing postsecondary education is a viable option. However, success in postsecondary education for these individuals may require more planning and ongoing support than students without an ASD. This article provides educators and transition support personnel with a range of topics to consider when working with students with ASD and their families to develop a comprehensive transition plan. These topic areas include career exploration, academic goal setting and preparation, assessing and knowing learning styles, self-advocacy skills, reasonable accommodations, academic supports, interagency collaboration, technology, and time management skills.

Schall, C., Brooke, V., Wehman, P., Molinelli, A., Ham, W., Collins, H., ...Gerhardt, P. Transition-aged youth with ASD and community based functional assessment: An analysis of the social validity of available transition assessment tools. *Manuscript submitted for publication.*

This article reviews the social validity of available assessment tools for transition aged youth with autism spectrum disorder (ASD) that would be intended to guide the transition process including: 1) access to and meaningful participation in secondary course of study, 2) identification of desirable and measurable secondary goals, and 3) development of strong Individualized Education Plans (IEP). A Gap Analysis technique was selected as the quantitative and qualitative analysis methodology to review available tools. For the purposes of this work, a “gap” was defined as the measurement of the difference between tools that are currently available for youth with ASD and expectations of a future product. Additionally, the paper used the construct of social validity as the criterion for assessing the gaps in the available transition assessment tools compared to recommended practices for transition assessment. The process effectively highlighted attributes that need to be considered in a new transition assessment tool, designed for youth with ASD.

Schall, C., Wehman, P., Brooke, V., Graham, C, McDonough, J., Brooke, A., Ham, W., Rounds, R., Lau, S., & Allen, J., (In press). Employment interventions for individuals with ASD: The relative efficacy of Supported Employment with or without prior Project SEARCH training. *Journal of Autism and Developmental Disorders.*

This paper presents findings from a retrospective records review that compares the outcomes associated with implementation of supported employment with and without prior Project SEARCH with ASD Supports intervention on wages earned, time spent in intervention, and job retention. Results show that supported employment lead to competitive employment for 45 adults with ASD. Twenty-five of those individuals received prior intervention through Project SEARCH with ASD Supports while the other 20 individuals received Supported Employment Only. Individuals who received prior Project SEARCH plus ASD Supports required fewer hours of intervention. Additionally, individuals in Project SEARCH plus ASD Supports group achieved a higher mean wage and had higher retention rates than their peers who received Supported Employment Only.

Schall, C., Wehman, P. & Carr, S. (2014). Transition from high school to adulthood for young adults with ASD. In F. R. Volkmar, B. Reichow, J. C. McPartland (Eds.) *Adolescents and adults with autism spectrum disorders*. New York, NY: Springer.

This chapter discusses the various issues faced by youth with ASD who are transitioning into adulthood. Research and best practices are described.

Schall, C., Wehman, P., & McDonough, J. (2012). Transition from school to work for students with autism spectrum disorders: Understanding the process and achieving better outcomes. *Pediatric Clinics of North America*, 59(1), 189-202.

This article discusses best practices in transition to work for students with ASD. It describes various employment models that can help enhance employment outcomes.

Shattuck, P. T., Narendorf, S. C., Cooper, B., Sterzing, P. R., Wagner, M., & Taylor, J. L. (2012). Postsecondary education and employment among youth with an Autism Spectrum Disorder. *Pediatrics*, 129(6), 1042-1049.

The authors examined the prevalence and correlates of postsecondary education and employment among youth with an autism spectrum disorder (ASD). Data were from a nationally representative survey of parents, guardians, and young adults with an ASD. Participation in postsecondary employment, college, or vocational education and lack of participation in any of these activities were examined. Rates were compared with those of youth in 3 other eligibility categories: speech/language impairment, learning disability, and mental retardation. Logistic regression was used to examine correlates of each outcome.

For youth with an ASD, 34.7% had attended college and 55.1% had held paid employment during the first 6 years after high school. More than 50% of youth who had left high school in the past 2 years had no participation in employment or education. Youth with an ASD had the lowest rates of participation in employment and the highest rates of no participation compared with youth in other disability categories. Higher income and higher functional ability were associated with higher adjusted odds of participation in postsecondary employment and education.

The authors concluded youth with an ASD have poor postsecondary employment and education outcomes, especially in the first 2 years after high school. Those from lower-income families and those with greater functional impairments are at heightened risk for poor outcomes. Further research is needed to understand how transition planning before high school exit can facilitate a better connection to productive postsecondary activities.

Shattuck P., Roux A., Hudson L., Taylor J.L., Maenner M., Trani J. (2012). Services for adults with an Autism Spectrum Disorder. *Canadian Journal of Psychiatry*, 57(5), 284-291.

The need for useful evidence about services is increasing as larger numbers of children identified with an autism spectrum disorder (ASD) age toward adulthood. The objective of this review was to characterize the topical and methodological aspects of research on services for supporting success in work, education, and social participation among adults with an ASD and to propose recommendations for moving this area of research forward. We reviewed the literature published in English from 2000 to 2010 and found that the evidence base about services for adults with an ASD is underdeveloped and can

be considered a field of inquiry that is relatively unformed. Extant research does not reflect the demographic or impairment heterogeneity of the population, the range of services that adults with autism require to function with purposeful lives in the community, and the need for coordination across service systems and sectors. Future studies must examine issues related to cost and efficiency, given the broader sociopolitical and economic context of service provision. Further, future research needs to consider how demographic and impairment heterogeneity have implications for building an evidence base that will have greater external validity.

Shattuck, P., Wagner, M., Narendorf, S., Sterzing, P., & Hensley, M. (2011). Post-High School Service Use Among Young Adults with an Autism Spectrum Disorder. *Archives of Pediatrics & Adolescent Medicine*, 165(2), 141-146.

The objectives were to produce a nationally representative population estimates of rates of service use among young adults with an autism spectrum disorder during their first few years after leaving high school and to examine correlates of use. The study design was nationally representative telephone survey from April 2007 to February 2008. The main outcome measures were use of the following services in the prior 2 years or since leaving high school: mental health services, medical evaluation and assessment, speech therapy, and case management.

The results were rates of service use ranged from 9.1% for speech therapy to 41.9% for case management; 39.1% of youths with an autism spectrum disorder represented by the survey received no services. The adjusted odds of no services were higher among African American participants and those with low incomes. The adjusted odds of case management were lower among youths with high functional skills and those with low incomes.

The authors concluded rates of service disengagement are high after exiting high school. Disparities by race and socioeconomic status indicate a need for targeted outreach and services.

What happens to adolescents with autism spectrum disorders (ASDs) once they reach adulthood? The number of young adults in the United States diagnosed as having an ASD is increasing rapidly as ever-larger cohorts of children identified as having an ASD age through adolescence. This trend is especially visible in special education enrollment, where the number of students aged 12 to 17 years classified in the autism eligibility category increased from 15 480 in 1998 to 99 803 in 2007. It is unclear whether growing enrollment reflects changing identification practices or a true increase in population prevalence. Regardless of the root cause, the facts remain that treated prevalence is increasing and that the implications of this trend for service systems are poorly understood.

Shogren, K. A., & Plotner, A. J. (2012). Transition planning for students with intellectual disability autism or other disabilities: Data from the National Longitudinal Transition Study – 2. *Intellectual and Developmental Disabilities*, 50(1), 16-30.

The purpose of this study was to compare the status of transition planning for students with intellectual disability, autism, or other disabilities, the authors used data from the National Longitudinal Transition Study-2, a federally funded, national study of the secondary and postschool experiences of students with disabilities. Results show that although transition planning had been conducted for the majority of students, few of them took a leadership role in their transition planning. Students with autism or intellectual disability were significantly less likely than students with other disabilities to take a leadership role. The majority of the active participants in transition planning were school-based personnel. The authors also found limited participation from other agencies/support persons (e.g.,

vocational rehabilitation). Students with autism or intellectual disability had more identified needs for support after school than did students with other disabilities.

Stodden, R., A., & Mruzek, D. W. (2010). An introduction to transition to postsecondary education and employment of persons with autism & intellectual disabilities. *Focus on Autism and Other Developmental Disabilities*, 25(3), 131-133.

Americans of every historical era and demographic group have recognized the role of education in improving the quality of life for the individual, as well as sustaining a democratic society. The most groundbreaking of these federal policies include: (1) the Individuals with Disabilities Education Act (IDEA), which focuses on quality preparation in secondary school and transition to postsecondary education and employment; (2) the Americans with Disabilities Act (ADA), which focuses on providing reasonable accommodations to ensure equal access to learning and work environments; and (3) the Rehabilitation Act of 1973, which provides financial assistance and training support leading to quality employment. This special issue includes six peer-reviewed articles intended to provide readers with a clear picture of the current status of efforts to prepare and transition youth with autism spectrum disorders (ASD) and intellectual disabilities (ID) to postsecondary education settings. The articles have been organized to provide readers with an overview of this field of work, present a range of approaches and models currently being used by persons in the field, and share current status data on the types of programs underway and their impact upon the quality of postschool life for young persons with ASD and ID.

Strickland, D., Coles, C., & Southern, L. (2013). Jobtips: A transition to employment program for individuals with autism spectrum disorders. *Journal of Autism and Developmental Disorders*, 43(10), 2472-2483.

This study evaluated the effectiveness of an internet accessed training program that included Theory of Mind-based guidance, video models, visual supports, and virtual reality practice sessions in teaching appropriate job interview skills to individuals with high functioning Autism Spectrum Disorders. In a randomized study, twenty-two youth, ages 16–19, were evaluated during two employment interviews. Half received a training intervention following the initial interview and the half who served as a contrast group did not. Their performance pre and post intervention was assessed by four independent raters using a scale that included evaluation of both Content and Delivery. Results suggest that youth who completed the JobTIPS employment program demonstrated significantly more effective verbal content skills than those who did not.

Taylor, J. L., McPheeters, M., Sathe, N. A., Dove, D., Veenstra-VanderWeele, J., & Warren, Z. (2012). A systematic Review of Vocational Interventions for Young Adults with Autism Spectrum Disorders. *Pediatrics*, 130(3), 531-538.

Many individuals with autism spectrum disorders (ASDs) are approaching adolescence and young adulthood; interventions to assist these individuals with vocational skills are not well understood. This study systematically reviewed evidence regarding vocational interventions for individuals with ASD between the ages of 13 and 30 years.

The Medline, PsycINFO, and ERIC databases (1980–December 2011) and reference lists of included articles were searched. Two reviewers independently assessed each study against predetermined inclusion/exclusion criteria. Two reviewers independently extracted data regarding participant and

intervention characteristics, assessment techniques, and outcomes, and assigned overall quality and strength of evidence ratings based on predetermined criteria.

Five studies were identified; all were of poor quality and all focused on on-the-job supports as the employment/vocational intervention. Short-term studies reported that supported employment was associated with improvements in quality of life (1 study), ASD symptoms (1 study), and cognitive functioning (1 study). Three studies reported that interventions increased rates of employment for young adults with ASD.

Few studies have been conducted to assess vocational interventions for adolescents and young adults with ASD. As such, there is very little evidence available for specific vocational treatment approaches as individuals transition to adulthood. All studies of vocational approaches were of poor quality, which may reflect the recent emergence of this area of research. Individual studies suggest that vocational programs may increase employment success for some; however, the ability to understand the overall benefit of supported employment programs is limited given the existing research.

Taylor, J. L., & Seltzer, M. M. (2011). Employment and post-secondary educational activities for young adults with autism spectrum disorders during the transition to adulthood. *Journal of Autism and Developmental Disorders*, 45(5), 566-574.

The authors examined whether exiting high school was associated with alterations in rates of change in autism symptoms and maladaptive behaviors. Participants were 242 youth with ASD who had recently exited the school system and were part of the larger longitudinal study; data were collected at five time points over nearly 10 years. Results indicated overall improvement of autism symptoms and internalized behaviors over the study period, but slowing rates of improvement after exit. Youth who did not have an intellectual disability evidenced the greatest slowing in improvement. Lower family income was associated with less improvement. The findings suggest that adult day activities may not be as intellectually stimulating as educational activities in school, reflected by less phenotypic improvement after exit.

Taylor, J.L. & Seltzer, M.M. (2012). Developing a Vocational Index for Adults with Autism Spectrum Disorders. *Journal of Autism and Developmental Disorders*, 2(12), 2669-2679.

Existing methods of indexing the vocational activities of adults with autism spectrum disorders (ASD) have made significant contributions to research. Nonetheless, they are limited by problems with sensitivity and reliability. We developed an index of vocational and educational outcomes that captures the full range of activities experienced by adults with ASD, and that can be reliably coded across studies using specific decision rules. To develop this index, we used employment, vocational, and educational data collected from nearly 350 adults with ASD at 6 times over 12 years, as part of a larger longitudinal study. The resulting index consists of 11 categories coded on a 9-point scale, ranging from competitive employment and/or postsecondary educational program to no vocational/educational activities.

VanBergeijk, E., Klin, A., & Volkmar, F. (2008). Supporting more able students on the Autism Spectrum: College and Beyond. *Journal of Autism and Developmental Disorders*, 38(7), 1359-1370.

In the 1990's a surge of children were diagnosed with autism spectrum disorders (ASDs) and are now approaching college age. Through early diagnosis and intervention many of these children are now able to consider post secondary education. However, these students will need specific interventions and supports in order to be successful. This article reviews the nosology of ASDs, the legal basis for providing accommodations to students on the autism spectrum, and the incidence and prevalence of ASDs. The authors provide specific recommendations regarding the academic, independent living, social, vocational and counseling needs of college students who are on the autism spectrum. With a carefully planned transition, appropriate accommodations, and support, ASD students can be successful academically and socially in college.

Van Wieren, T. A., Armstrong, A. J., & McMahon, B. T. (2012). Autism spectrum disorders and intellectual disabilities: A comparison of ADA Title I workplace discrimination allegations. *Journal of Vocational Rehabilitation*, 36(3), 159-169.

Using the Integrated Mission System (IMS) of the Equal Employment Opportunity Commission (EEOC) for allegations of discrimination involving Title I of the Americans with Disabilities Act (ADA), allegations made by individuals with autism spectrum disorders (ASDs) and by individuals with intellectual disabilities (IDs) are compared and contrasted. Key dimensions of workplace discrimination examined include: demographic characteristics of the charging parties; the industry designation, location and size of employers against whom allegations were filed; the nature of workplace discrimination alleged to have occurred; and the EEOC outcome/resolution of these allegations. The characteristics of ASD allegations are then compared and contrasted with those of ID allegations. The findings of this study imply that typical ASD and ID allegations are characteristically quite similar to each other. Differences that were found between the two groups of allegations indicate that charging parties with ASD are more likely to be a bit younger than those with ID, and are more likely to be male. Additionally, ASD allegations of discrimination were more likely than ID to have been made against Information, Educational Services, and Arts/Entertainment/Recreation industry employers.

Van Wieren, T. A., Reid, & McMahon, B. T. (2008). Workplace discrimination and autism spectrum disorders: The National EEOC Americans with Disabilities Act research project. *Work*, 31(3), 299-308.

Using the Integrated Mission System of the Equal Employment Opportunity Commission (EEOC), the employment discrimination experience of Americans with autism spectrum disorders (ASDs) is documented for Title I of the Americans with Disabilities Act. The researchers examine demographic characteristics of the charging parties; the industry designation, location, and size of employers against whom complaints are filed; the nature of discrimination (i.e., type of complaint) alleged to occur; and the legal outcome or resolution of these complaints. Researchers compare and contrast these key dimensions of workplace discrimination involving individuals with ASDs and persons with other physical, sensory, and neurological impairments. Researchers also attempt to discern whether or not the resolutions of the ASD charges can be predicted using the variables available for analysis. The comparative findings of this study indicate that individuals with ASDs were more likely to make charges of discrimination against Retail industry employers. Persons with ASDs were also more likely to make charges of discrimination when they were younger, male, and/or of Native American/Alaskan Native

ethnicity. The predictive findings of this study indicate that the odds of ASD charges resulting in meritorious resolution (i.e., discrimination determined by the EEOC to have occurred) increase when the discrimination was encountered in Service industries and by larger employers. Implications for policy, advocacy and further research efforts are addressed.

Wehman, P., Lau, S., Molinelli, A., Brooke, V., Thompson, K., Moore, C., & West, M. (2012). Supported employment for young adults with Autism Spectrum Disorder: Preliminary Data., *Research & Practice for Persons with Severe Disabilities*. 37(3) 160-169.

The purpose of this study was to examine the effects of supported employment in securing and maintaining competitive employment for people with autism spectrum disorder, a group that has typically been found to be underemployed or unemployed. This prospective study followed and collected data on 33 individuals with autism spectrum disorder as they progressed through a supported employment model, working one-on-one with an employment specialist. Of the 33 individuals included in the study, 27 successfully obtained competitive employment, with a total of 29 positions secured. The successful results were achieved through the use of a supported employment model and skilled employment specialists who were able to provide a high level of social supports and compensatory training strategies for skill acquisition. Specifically, employment specialists supported individuals through four steps of an individualized supported employment model." (a) the development of a jobseeker profile and assessment, (b) guiding the job development and career search, (c) conducting job site training, and (d) designing long-term supports to promote job retention. The multitude and variance of specific methods and strategies used in each case to execute these key steps of the supported employment model accurately reflect an emphasis on a highly individualized approach. Although the outcomes of this preliminary study were positive in terms of employment outcomes, further research remains to be conducted.

Wehman, P., Schall, C., Carr, S., & Targett, P. (2014). Meaningful employment. In. M. Tincani & A. Bondy (Eds.), *Adults with autism spectrum disorder: Evidence-based and promising practices*. New York, NY: Guilford Press.

This chapter describes the employment research and best practices to assist adults with ASD with employment. It also discusses supported employment and customized employment services.

Wehman, P., Schall, C., Carr, S., Targett, P., & West, M., Cifu, G. (2014). Transition from school to adulthood for youth with autism spectrum disorder: What we know and what we need to know. *Journal of Disability Policy Studies*. DOI 10.177/1044207313518071.

Youth with autism spectrum disorders (ASD) experience poor outcomes in the areas of independence, employment, and postsecondary education. This article provides a critical review of the key aspects of the transition process and identifies recommendations for policy and practice. The review highlights the literature and explores recommendations across the manifold elements of this transition, including social and psychological development, high school curriculum, work, and college. Five policy recommendations are outlined in the areas of school curriculum, employment development, postsecondary education, inclusion with nondisabled peers, and systematic instruction. Finally, the authors offer recommendations for further research in the areas of social interaction, increased academic and vocational rigor, employment, technology, independence, and postsecondary education.

Wehman, P. H., Schall, C. M., McDonough, J., Kregel, J., Brooke, V., Molinelli, A.,...Thiss, W. (2014). Competitive employment for youth with autism spectrum disorders: Early results from a randomized clinical trial. *Journal of Autism and Developmental Disorders*, 44(3), 487-500.

For most youth with autism spectrum disorders (ASD), employment upon graduation from high school or college is elusive. Employment rates are reported in many studies to be very low despite many years of intensive special education services. This paper presented the preliminary results of a randomized clinical trial of Project SEARCH plus ASD Supports on the employment outcomes for youth with ASD between the ages of 18–21 years of age. This model provides very promising results in that the employment outcomes for youth in the treatment group were much higher in non-traditional jobs with higher than minimum wage incomes than for youth in the control condition. Specifically, 21 out of 24 (87.5 %) treatment group participants acquired employment while 1 of 16 (6.25 %) of control group participants acquired employment.

Wehman, P., Schall, C. M., McDonough, J., Graham, C., Brooke, V., Riehle, J. E.,... Allen, J. (In progress). Effects of an employer based intervention on employment outcomes for youth and young adults with autism: A randomized clinical trial.

This article investigates the impact of an employer-based, nine-month intervention for high school youth with ASD to learn job skills and acquire employment. The intervention was a modified version of the program titled Project SEARCH, referred to in this article as Project SEARCH plus ASD Supports (PS-ASD), because it incorporated the use of supported employment and applied behavior analysis. The researchers used a randomized clinical trial to compare the implementation of PS-ASD with usual public school special education high school programs. Participants included 54 high school aged individuals (ages 18 to 22) who were diagnosed with an ASD and eligible for supported employment through vocational rehabilitation. Those who were placed into the PS-ASD group, or the treatment group, experienced an intensive nine-month high school program where they learned job skills by rotating through 3 different internships in a community hospital.

The main outcomes measured in this study were employment status, defined by whether or not the individual was employed, how many hours they worked weekly and their hourly wage, and reported upon graduation, at 3 months after graduation and 12 months after graduation. Stark differences were found between the treatment and control groups in this study. At three months post-graduation, 90% of the treatment group acquired competitive, part-time employment earning \$9.53 to \$10.66 per hour. Further, 87% of those individuals maintained employment at 12 months post-graduation. The control group's employment outcomes were far under those of the treatment group with 6% acquiring employment by 3 months post-graduation and only 12% acquiring employment by 12 months post-graduation. The positive employment outcomes of the treatment group provide evidence that youth with ASD can gain and maintain competitive employment.

Wehman, P., Schall, C., McDonough, J., Molinelli, A., Riehle, E., Ham, W., & Thiss, W. (2013). Project SEARCH for youth with autism spectrum disorders: Increasing competitive employment on transition from high school. *Journal of Positive Behavior Intervention*, 15(3), 144-155.

Supporting youth with autism spectrum disorder (ASD) in the transition to adulthood is challenging. This article provides a description of how Project SEARCH, a model transition program for youth with

disabilities, was used to help youth with ASD gain competitive employment. This article includes two case studies and a thorough description of the additional supports provided to increase successful employment on graduation from high school. Key Project SEARCH program components include setting a goal for employment, providing successive intensive internships in a community business, and assuring collaboration between school and adult services staff. Supports specific to students with ASD include providing intensive instruction in social, communication, and job skills; visual supports; and work routine and structure. These supports are described in the provided case studies.

Wehman, P., Smith, M., & Schall, C. (2009). *Autism and the transition to adulthood: Success beyond the classroom*. Baltimore, MD: Paul H. Brookes Publishing Co.

Professionals who work with young adults will get hard-to-find information on how specific social, behavioral, and cognitive characteristics of people with autism affect the transition to adulthood, exploring potential challenges and traits that can be powerful assets. Compelling stories throughout this book illustrate how successful transition planning improved the lives of three diverse teenagers, and the practical forms, checklists, and suggested resources and links help readers put the proven strategies into action. A must for every member of the transition team--including general and special educators, transition specialists, employment specialists, and counselors--this is the ultimate resource for supporting the goals, dreams, and future success of young adults with autism. Contents of this book include: (1) Understanding the Transition from School to Adulthood for Students with Autism (Carol Schall & Paul Wehman); (2) Positive Behavior Support (Marcia Datlow Smith); (3) Educational and Transition Planning (Carol Schall); (4) Meeting Transition Goals Through Inclusion (Carol Schall & Jennifer McFarland-Whisman); (5) Teaching Youth for Success: From Classroom to Community (Dawn R. Hendricks, Marcia Datlow Smith, & Paul Wehman); (6) Navigating the World of Adult Services and Benefits Planning (Grant Revell & Lucy Axton Miller); (7) Integrated Employment (Pamela Sherron Targett & Paul Wehman); (8) Post Secondary Options for Students with Autism (Lori W. Briel & Elizabeth Evans Getzel); (9) Critical Life Skills (Marcia Datlow Smith & Pamela Sherron Targett); and (10) Living in the Community (Pamela Sherron Targett & Marcia Datlow Smith). A list of references and a resource guide are presented.

Wehman, P., & Targett, P. (2012). *Autism and employment*. In F. Volkmar & P. Howlin (Eds.), *Encyclopedia of Autism Spectrum Disorders*. New York, NY: Springer Press.

This entry discusses barriers to work for individuals with autism. It also describes best practices related to gaining and maintaining employment in the community.

Westbrook, J. D., Nye, C., Fong, C. J., Wan, J. T., Cortopassi, T., & Martin, F. H. (2012). *Adult employment assistance services for persons with autism spectrum disorders: Effects on employment outcomes*. *Campbell Systematic Reviews*, 5. *Mathematica Policy Research Reports*.

This systematic review of the research on the effectiveness of adult employment assistance interventions for individuals with autism spectrum disorder (ASD) found two quasi-experimental studies that met inclusion criteria. However, the review was not able to identify definitive interventions that predictably and positively supported the development of employment outcomes for individuals with ASD. Qualitative studies and other relevant research studies were also reviewed. While qualitative studies

point to a number of promising issues for future research, they do not provide a definitive statement about what works.

Wilczynski, S. (2013). Improving employment outcomes among adolescents and adults on the autism spectrum. *Psychology in the Schools*, 50(9), 876-887.

As the number of diagnosed cases of ASD increases, school professionals must consider not only efficacious teaching approaches for improving academic goals, but also what systems must be in place to address one of the most important jobs of the school systems: preparing capable citizens. For more than 160 years, schools have been tasked with preparing good citizens who are capable of contributing to society through work. Given the fact that schools have been required to provide appropriate educational programming to students with disabilities for decades and that this includes planning for the transition to adulthood, the staggeringly poor employment outcomes of individuals on the autism spectrum should be a cause for concern. The present article reviews the significant problem of unemployment as well as employment supports for individuals with ASD. These supports include both the natural supports (scaffolding to enhance success in obtaining and maintaining employment) as well as technological advances that may minimize ostracization in the workplace. Lastly, recommendations for school psychologists who seek to play a vital role in this critical area are offered.

Zager, D., & Alpern, C. S. (2010). College based inclusion programming for transition-age students with autism. *Focus on Autism and other Developmental Disabilities*, 25(3), 151-157.

Considerations for college-based programming for transition-age students with autism spectrum disorders (ASD) are addressed in this article, with particular attention to social communication supports necessary to facilitate student success. An overview of current literature related to college-based programming and support for students with ASD in the area of social communication is presented, along with a preliminary survey of the perceptions of youth regarding their social communication competency. The need for support in this area is highlighted based on student evaluations of their ability and needs as well as on information gathered through an examination of current literature. Recommendations are offered for enhancing development of social communication skills for students with ASD in college-based programs.