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. We 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. © 2012 Wiley Periodicals, Inc.

The transition to life after high school can be accompanied by a mix of both excitement and uncertainty as youth prepare to embark on new college and career pathways. Most young people in the United States hold aspirations for a future career characterized by compelling wages, good benefits, opportunities for advancement, and close alignment with one’s personal interests and strengths (Zimmer-Gembeck & Mortimer, 2006). Moreover, a good job is often the gateway to other valued outcomes. For example, in addition to promoting financial well-being, a meaningful career can contribute to a person’s sense of accomplishment, self-worth, and confidence; promote independence and self-determination; provide a venue to share strengths and talents in ways that are valued by others; lead to new friendships and supportive relationships; and offer deeper connections to, and engagement in, the larger community. It is not surprising, therefore, that preparing adolescents and young adults for the world of work has remained a dominant theme of secondary educational and transition efforts for more than 2 decades (National Collaborative on Workforce and Disability for Youth, 2009; Wehmeyer & Webb, 2012).

EMPLOYMENT OUTCOMES FOR YOUTH AND YOUNG ADULTS WITH AUTISM SPECTRUM DISORDERS

For many youths and young adults with autism spectrum disorders (ASDs), however, these early educational and vocational aspirations often go unfulfilled. Findings from numerous studies suggest that the post-secondary career and college pathways can often be difficult to navigate, and meaningful work remains unacceptably elusive (e.g., Holwerda, van der Klink, Groothoff, & Brouwer, 2012; Howlin, 2003; Shattuck et al., 2012). For example, the National Longitudinal Transition Study-2 (NLTS2) provides a nationally representative portrait of the in-school and post-school employment experiences of youth and young adults with autism. During secondary school, only half (50.2%) of youth with autism were reported to have had any type of school-sponsored on- or off-campus work experience (Wagner, Newman, Cameto, Levine, & Marder, 2003), and only 14.5% had held...
a paid after-school or summer job at any time during the previous year (Wagner, Cadwallader, & Marder, 2003). Access to job shadowing, job skills training, job placement support, job coaching, and internship or apprenticeship experiences during high school are also consistently low (Wagner, Newman et al., 2003).

After graduation, the employment landscape remains similarly bleak. Newman et al. (2011) reported that up to 8 years after leaving high school, only 63.2% of young adults with autism had worked at any point since graduation and only 37.2% of these young people were currently employed at the time of the survey. Among those currently employed, young adults with autism averaged just 24.1 hours of work per week, earned an average of $9.20 per hour, and only 52.8% reported receiving any benefits (e.g., paid vacation or sick leave, health insurance, retirement benefits). Compared with employment statistics for young adults without a disability, those with autism clearly reported greater difficulties obtaining employment and remaining employed; and even once employed, reported working fewer hours, making less money, and receiving benefits less often (Newman et al., 2011).

Other follow-up studies paint a similarly disappointing picture. In their analysis of vocational rehabilitation data collected between 2002 and 2006, Cimera and Cowan (2009) reported that only 40.8% of adults with autism were employed by the time their cases were officially closed by vocational rehabilitation. On a weekly basis, those adults with autism worked an average of 18.6 hours and earned an average of $146.65. Taylor and Seltzer (2011) found that almost one third (29.4%) of young adults with autism who did not have a comorbid intellectual disability in their longitudinal sample were not participating in any type of employment or college experiences. Finally, Howlin (2003) reported that employment outcomes for adults with ASDs are generally poor in the United Kingdom, as those with a mild intellectual disability have unemployment rates as high as 60% to 70%.

Collectively, these and other studies (e.g., Howlin, Goode, Hutton, & Rutter, 2004; Mawhood & Howlin, 1999) highlight the need for stronger vocational preparation and employment supports for students with ASDs before, during, and beyond high school. In addition, these disappointing outcomes also challenge schools, service systems, and other stakeholders to focus more concerted and coordinated efforts on equipping young people with ASDs with the skills, supports, opportunities, and connections needed to find success in the workplace. Absent such efforts, too many adults with ASDs will continue to encounter limited employment opportunities, difficulty in job retention, limited opportunities for career advancement, and negative work experiences. Such pathways can have a profoundly negative impact on overall quality of life for the individual and create additional, yet preventable, long-term costs for society.

**ARTICLE OVERVIEW**

The purpose of this article is to review key components of promising transition services and supports that might enable students with high-functioning autism spectrum disorders (HFASDs) to successfully transition into meaningful employment experiences during and after high school. Although the educational needs of students with ASDs have received burgeoning attention in the empirical literature, policy discussions, and the popular media, surprisingly few rigorous studies have examined high-quality secondary and transition experiences for the subgroup of young people at the high-functioning end of the autism spectrum (i.e., those with HFASDs; Carter, Sisco, Chung, & Stanton-Chapman, 2010; Hendricks & Wehman, 2009; Moxon & Gates, 2001). Indeed, the knowledge base remains unacceptably lean. Therefore, we draw on relevant and related research to identify promising elements for enhancing the employment outcomes of this group of youth. Such elements contribute to a framework for designing transition interventions specifically for these youth.
WHO ARE STUDENTS WITH HFASDS?

More than 370,000 school-aged children receive special education and related services under the category of autism (U.S. Department of Education, 2011). Although individuals with ASDs can receive special education under other disability categories or may not even be eligible for such services at all, the Individuals with Disabilities Education Act defines autism as:

a developmental disability significantly affecting verbal and nonverbal communication and social interaction, generally evident before age three, that adversely affects a child’s educational performance. Other characteristics often associated with autism are engagement in repetitive activities and stereotyped movements, resistance to environmental change or change in daily routines, and unusual responses to sensory experiences. (300/a/300.8/c/1/i)

Although several other autism definitions exist (e.g., American Psychiatric Association, 2000), most refer to a triad of symptoms, including impairments in social relations, difficulties in communication, and repetitive behaviors and/or restricted intense interests.

Students with HFASDs represent the higher-functioning subset of individuals on the autism spectrum, that is, those with more intact cognitive and language abilities. They are often described as having Asperger’s syndrome, high-functioning autism, or high-functioning pervasive developmental disorders—not otherwise specified. The boundaries of this label have been quite varied and frequently debated. Regardless of where definitional lines are drawn, there is consensus that many young people with HFASDs face limited opportunities and disappointing outcomes associated with their disability (Klin & Volkmar, 2000; Tsatsanis, Foley, & Donebower, 2004).

FACTORS IMPACTING EMPLOYMENT OUTCOMES OF STUDENTS WITH HFASDS

A constellation of factors may coalesce to limit the employment outcomes of youth and young adults with HFASDs. First, given the divergent diagnostic and eligibility criteria, some youth with HFASDs may not actually be eligible to receive formal transition- or employment-related services and supports provided by public schools, adult agencies, or other organizations (e.g., intact cognitive abilities leading to perceptions of reduced need for services). Second, the educational programs of adolescents with HFASDs often emphasize academic achievement and general education participation to the exclusion of other transition domains, such as career development and early work experiences. Third, the social-related challenges associated with HFASDs may have a particular impact on the employment prospects of affected youth. For example, Carter and Wehby (2003) found that employers of transition-age youth tend to emphasize the contributions that strong social and interpersonal skills can make to success on the job. Navigating the social demands associated with the job search process, coworker and supervisor relationships, and disability disclosure likely represent core challenges for young people with HFASDs (e.g., Higgins, Koch, Boughfman, & Vierstra, 2008; Hurlbutt & Chalmers, 2004; Müller, Schuler, Burton, & Yates, 2003). Fourth, interventions and supports for youth with autism have tended to focus on promoting post-secondary educational pathways rather than on preparation for the workforce (Levinson 2004). A college degree can be instrumental in launching a new career. However, strengthening students’ academic capacities represents only one aspect of what will help them succeed in the workplace.

PROMISING ELEMENTS OF HIGH-QUALITY EMPLOYMENT PREPARATION

The remainder of this article describes major elements that hold promise for fostering vocational success among students with HFASDs. We 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. Although these broad components are not fundamentally different from those recommended for other youth with disabilities, they differ, at times, in their intensity and configuration for youth with HFASDs. Moreover, we emphasize from the outset that although these seven elements are important transition considerations for this population, they are not to be interpreted as a comprehensive or exhaustive list for addressing the transition needs and vocational education of these students.

**Individualized, Strengths-Based Transition Services and Supports**

One hallmark of credible special education and transition services is that they must be individually designed to reflect the unique needs, strengths, interests, and preferences of each student. Although we focus in this article on a group of students who share a common label and similar social-related challenges, the manner in which their employment preparation is addressed should be individually tailored to reflect each student’s personal profiles. Although definitional criteria typically emphasize deficits, youth with HFASDs—like all students—also possess considerable strengths and positive qualities that can be drawn on and strengthened to promote successful career preparation. Moreover, many defining characteristics associated with ASDs can actually be considered strengths in particular employment contexts. For example, the National Autistic Society (2004) noted that some individuals with HFASDs may be particularly attentive to details; be meticulous about rules, accuracy, and routines; be highly reliable, conscientious, persistent, and technically savvy; retain detailed factual knowledge; and evidence excellent long-term memory. Such qualities, if channeled correctly, could allow young people to be successful in jobs that require such skills (e.g., programming, engineering, accounting, library science, mathematics, drafting, journalism, and lab technical tasks; Grandin, 1999). Other professions enhanced by these strengths might, in some cases, include electricians, architects, musicians, bankers, plumbers, and lawyers (e.g., see Baron-Cohen, Richler, Bisarya, Gurunathan, & Wheelwright, 2003). Such examples are not listed here to put boundaries on career options, but rather to emphasize the breadth of possibilities that families and educators should consider for youth with HFASDs.

The transition planning process offers an important context for delineating the specific services and supports youth with HFASDs will need to prepare for the world of work. According to the Individuals with Disabilities Education Improvement Act (2004), transition planning must begin no later than the first Individualized Education Program (IEP) in effect when a student turns 16 (or younger if determined appropriate by the IEP team) and should be reviewed and updated annually. Youth must be invited to planning meetings, and recommended practices contend that students should have meaningful opportunities and preparation to assume leadership roles (Martin & Williams-Diehm, in press). Despite this mandate, however, studies suggest that many students with autism often have limited involvement in or are altogether absent from their own transition planning meetings (Shogren & Plotner, 2012). For example, in their analyses of the NLTS-2, Cameto, Levine, and Wagner (2004) found that 22.6% of high school students with autism did not attend their IEP meetings. Among those who attended, 44.8% reported their participation was minimally active, 30.0% reported their participation was moderately active, and only 2.6% reported their participation was quite active in that they led the planning of their IEP meetings.

**Positive Career Development and Early Work Experiences**

Preparing transition-age youth for the world of work has long been a prominent focus of transition education. Access to a combination of career development experiences during middle and
high school can provide adolescents with authentic opportunities to acquire important work skills and values, inform their vocational decision making, and shape their career aspirations for the future (Vondracek & Porfeli, 2006). For example, activities related to career assessment and planning (e.g., career or job counseling, career interest assessments, written career plans, career aptitude assessments), exploration (e.g., tours of local businesses or industries, job-shadowing programs, tours of colleges or technical schools, college fairs or college days, speakers brought in from local businesses), instruction (e.g., career exploration courses, tech-prep programs, interviewing or resume-writing practice), and connecting (e.g., job fairs or career days, job placement services for students, career or job resource center, mentorship programs with employers) have all been advocated as avenues for increasing the employability of all youth, including students with HFASDs (Carter, Trainor, Cakiroglu, Swedeen, & Owns, 2010; Van Wierren, Reid, & McMahon, 2008). For these students, such activities can raise awareness of their career-related strengths, interests, needs, and goals; expand their knowledge and understanding of occupational options; and provide them with meaningful opportunities to practice and to improve general employment skills (Chappel & Somers, 2010; Higgins et al., 2008)—all contributing to a higher quality of life and better career prospects (Patton, Creed, & Muller, 2003). Absent such experiences, students may have restricted career options, develop unrealistic vocational aspirations, make poor vocational decisions, or lack important resume-building experiences.

Particularly important for youth with HFASDs may be the accruing of early, hands-on vocational experiences through after-school and summertime jobs, paid or unpaid internships, or school-sponsored work experiences. Although prior follow-up studies have not focused specifically on youth with HFASDs, holding a paid job during high school has emerged as a consistent and powerful predictor of post-school employment outcomes for young people with a range of disability labels (e.g., Carter, Austin, & Trainor, 2012; Test et al., 2009). It is not surprising, therefore, that some transition frameworks emphasize the value of ensuring that every student with a disability is connected to a job prior to leaving high school (Rusch, Hughes, Agran, Martin, & Johnson, 2009). Career interest assessments, vocational evaluations, and person-centered future planning efforts can all be employed to help youth and their transition planning teams identify promising work experiences aligned with students’ individualized needs.

Despite the importance of early work experiences, available data suggest that access to these formative experiences may be limited for students with ASDs. Findings from the NLTS-2 indicate that only 15% of youth with autism held a paid job at any time during the previous year, 50% had some form of school-sponsored work experiences, and 1% had an internship or apprenticeship (Wagner, Cadwallader et al., 2003). A number of potential barriers may coalesce to limit such involvement, including the attitudes and expectations of general and vocational educators, concerns about students’ social-related challenges, the availability of needed adaptations and supports, and the preferences of youth themselves. Such barriers should be identified and addressed as part of programmatic reflection efforts.

Meaningful Collaboration and Interagency Involvement

Ongoing and effective collaboration among formal and informal service and support systems provide for more efficient and effective service delivery, and can be essential to the success of transition-age youth in accessing and maintaining meaningful work (Noonan, Morningstar, & Erickson, 2008). Cultivating strong linkages between students and needed services—as well as among various service providers themselves in a given community—can ensure that the needs and opportunities identified during transition planning are adequately addressed and delivered in coordinated ways. For example, the individual and collaborative work of vocational counselors, job coaches,
and/or special educators can help connect students and their families to relevant employment-related support services, such as vocational assessments; career counseling; benefits counseling; transportation; and an array of other guidance, resources, and referrals (Chappel & Somers, 2010). When designed thoughtfully, such linkages may also promote greater continuity in services and supports as young people and their families transition across service systems. Yet, studies suggest that a sharp decline in access to services takes place for many young adults with ASDs in the years after exiting high school (Shattuck, Wagner, Narendorf, Sterzing, & Hensley, 2011). In addition, transition planning teams should explore avenues for deepening connections between students and more informal, natural supports available within most communities (e.g., workplace mentors, job clubs) that can deepen the social capital of students and their families (Carter, Swedeen, Cooney, Walter, & Moss, 2012; Trainor, 2008). Such collaborations may produce more durable sources of support for students that transcend eligibility requirements and funding availability.

Family Supports and Expectations

Families often represent a prominent and enduring source of support in the lives of transition-age youth with HFASDs. From an early age, parents can play an important role in shaping their children’s career identities, conversing about potential educational and career pathways, and encouraging early engagement in volunteer and other work experiences. As their children approach adolescence, the emotional and instrumental supports they offer related to employment can be especially important in helping youth access and maintain work experiences in the community. For example, parents may offer advice, help youth develop and learn about personal strengths and interests, assist youth to complete applications or locate job openings, provide transportation to the job site, and offer encouragement and problem-solving support. Moreover, research affirms the strong contributions parents can make toward career development and improved employment outcomes for their transition-age children. For example, Carter et al. (2012) found that parents’ work-related expectations were a significant predictor of whether young adults with disabilities found paid community jobs in the first 2 years after leaving high school. Thus, supporting meaningful collaboration among families, schools, and service agencies should be a central component of effective transition programming.

Fostering Self-Determination and Independence

Efforts to foster student self-determination and independence are increasingly emphasized within transition policy, research, and recommended practices (Cobb, Lehmann, Newman-Gonchar, & Alwell, 2009). Constructs such as empowerment, self-advocacy, and self-efficacy all contribute to greater self-determination and can ultimately enhance students’ long-term career success. Although defined differently across disciplines, self-determination generally refers to having the skills, attitudes, and supports to steer one’s own life in ways and directions that enhance valued outcomes (Field, Martin, Miller, Ward, & Wehmeyer, 1998). Correlational research strongly associates indicators of self-determination with an array of positive employment- and transition-related outcomes (Cobb et al., 2009; Test et al., 2009; Wehmeyer et al., 2011). For example, Wehmeyer and Palmer (2003) found that young adults with intellectual disabilities who were more self-determined were more likely to be employed and experience financial independence in the early years after high school. Yet, adolescents with HFASDs—like many youth with disabilities—may experience difficulties acquiring or fluently performing the skills often associated with self-determination, such as self-awareness, self-knowledge, and skills in choice making, decision making, goal setting, problem solving, self-advocacy and leadership, and self-management and self-regulation (Carter et al., in press; Wehmeyer, Shogren, Zager, Smith, & Simpson, 2010). Moreover, self-determination is often demonstrated within social contexts, which may introduce added challenges for students with
HFASDs. For example, communicating one’s strengths, preferences, and interests; setting future goals; advocating for needed supports and resources; and demonstrating leadership all typically occur as part of interpersonal interactions.

An increasing array of instructional and curricular self-determination interventions have emerged over the last 2 decades (Cobb et al., 2009; Carter, Lane, Crnobori, Bruhn, & Oakes, 2011; Fullerton & Coyne, 1999). Although relatively few of these studies have involved adolescents with HFASDs, the following components are likely to be beneficial when incorporated into school-based efforts to promote self-determination. First, the self-determination capacities of students, along with school-based opportunities, should be assessed in an ongoing manner as part of the transition planning process. Second, skill- and support-based needs identified and prioritized during the assessment process should receive instructional attention within the classroom and on the job. Third, self-determination skills that promote student involvement should be taught in advance of and supported during person-centered transition planning meetings. Fourth, students with HFASDs should be given supportive opportunities to practice and deepen self-determination skills within the settings in which they will ultimately need them. Finally, given the developmental nature of becoming self-determined, attention should be given to fostering self-determination much earlier than high school and across school, home, and community environments (Carter et al., in press).

Self-advocacy skills may be especially important to emphasize for youth with HFASDs. Because they leave an entitlement system when exiting high school, requests for access to needed services, supports, and accommodations in the workplace and post-secondary educational settings must be initiated by young adults with disabilities themselves (Chappel & Sommers, 2010; Hendricks, 2010). For example, educators might teach students their legal rights and equip them to make appropriate requests for reasonable work accommodations that would facilitate success on the job (Hawkins, 2004). Similarly, leadership skills may be particularly beneficial in helping young people with disabilities advance in their careers and move beyond entry-level positions (Carter, Swedeen, Walter, Moss, & Hsin, 2011). Unfortunately, these students infrequently receive opportunities to develop their leadership capacities during secondary school.

Social- and Employment-Related Skill Instruction

Numerous studies have explored the breadth of employability and occupation-specific skills identified by employers as critical for success on the job (e.g., Bricout & Bentley, 2000; Carter & Wehby, 2003). For example, Ju, Zhang, and Pacha (2012) recently documented an array of general and nontechnical competencies that employers prioritize among their entry-level employees (e.g., demonstrating personal integrity/honesty in work, following instructions, showing respect for others, being on time). Technical skills specific to carrying out the primary functions of a particular position are also essential for young people with HFASDs to acquire and demonstrate fluently. Similarly, several collateral skills may be instrumental to finding and keeping a job, such as possessing effective job search and interview skills, transportation-related skills, time management skills, and problem-solving skills. Young adults with HFASDs are likely to vary widely in the degree to which they possess the skills necessary to meet their employers’ expectations and needs in each of these areas (Hendricks, 2010; Müller et al., 2003). Thus, it is important to connect students to vocational coursework, volunteer activities, internships, and hands-on work experiences within which such skills can be developed over time.

Possessing strong social-related work skills, however, appears to be critical to the success of youth with HFASDs in finding, maintaining, and advancing within a job (Dew & Alan, 2007; Holmes, 2007). As noted earlier, employees with HFASDs often evidence substantial social-related challenges that may make it more difficult to navigate interpersonal interactions with coworkers, supervisors,
and customers; adapt to fluctuating social expectations across settings and persons; or develop enduring and enjoyable relationships with their coworkers. For example, youth with HFASDs might evidence difficulties with reciprocal conversation, pragmatic language, making small talk, or general social awareness (e.g., dressing inappropriately, professional mannerisms, respecting personal space; Hawkins, 2004; Higgins et al., 2008; Hurlbutt & Chalmers, 2004). When a poor fit exists between the skills these young adults with HFASDs possess and the expectations employers hold, problems in the workplace are more likely to emerge, and frustration, lack of promotion, or termination may result.

Although a fairly extensive literature has addressed the design and delivery of social skill interventions within school-based settings, far less attention has focused on the application of these interventions to teaching work-related social and interpersonal skills. Drawing on this available literature, several factors should be considered when designing interventions addressing this domain. First, social- and work-related instruction should be a prominent focus of instruction and support within the secondary curriculum. Second, instructional efforts should be driven by a careful assessment of the nature of students’ skill deficits (i.e., acquisition, fluency, maintenance, and motivation) and a clear understanding of the skills valued most within a particular place of employment or potential career path. The impact of instruction on students is likely to be greatest when evidence-based instructional strategies address priority skills. Third, critical skills are contextually determined. The skills valued most in one place of business may differ widely from those required by another employer or in a different business sector. Fourth, whenever possible, skills should be taught within the settings in which students will ultimately be expected to use them. In other words, some youth may have difficulty applying what they learned in the classroom to the workplace. Fifth, job coaches and vocational counselors can play an important role in observing and discussing specific workplace challenges with youth with HFASDs. They might work individually with a student or young adult with an HFASD to model appropriate skills and provide feedback on performance (Hawkins, 2004; Howlin, 2003).

Establishing Job-Related Supports

For many young people with HFASDs, difficulties related to keeping and advancing in a job may be more prominent than challenges associated with initially finding that job (e.g., Higgins et al., 2008; Holmes, 2007; Hurlbutt & Chalmers, 2004). Therefore, finding a strong job match and establishing needed on-the-job supports from the very outset take on elevated importance. For example, close alignment between key features of the workplace, core job responsibilities, and the strengths, interests, and needs of youth are likely to increase their job satisfaction and diminish their need for additional supports. Similarly, finding a receptive employer who already recognizes the diverse assets someone with HFASDs might bring to the workplace is likely to lead to a more supportive work environment (Higgins et al., 2008).

Students with HFASDs should also be taught about disability disclosure, workplace self-advocacy, and how to request reasonable accommodations (National Collaborative on Workforce and Disability for Youth, 2005). To equip youth to recruit their own supports, educators and job coaches should teach students and young adults with HFASDs their rights under the Americans with Disabilities Act and show them how to effectively request reasonable work accommodations likely to facilitate their success on the job. For example, professionals might assist youth with HFASDs to weigh the pros and cons of disclosing their disability and address when and how to share information with supervisors and/or coworkers (Hawkins, 2004). Through scripting, practicing, and role-playing of such conversations, youth with HFASDs can better learn the process of sharing this information and experience less anxiety about having such conversations. As noted previously,
instruction focused on self-management and self-advocacy strategies may better equip students to identify and address their own support needs.

Finally, the avenues through which on-the-job supports will be provided should be carefully considered. Coworker supports should comprise the first tier of assistance youth are encouraged to draw on. Although such support is considered natural to the setting, many coworkers are still likely to need explicit guidance from job coaches on how best to interact with and assist their coworker with a disability (Hagner & Cooney, 2005). Similarly, supervisors might benefit from learning strategies related to providing clear and consistent instructions, schedules, and consequences; building in time to enable youth to learn new skills; providing effective reminders and reassurances; incorporating organizational tactics (e.g., use of organizers, instruction sheets, checklists); reducing unstructured time; and avoiding sensory and stimulation overloads (e.g., Hagner & Cooney, 2005; Hendricks, 2010; Howlin, 2003). When designed well, cultivating such natural supports may be more sustainable long-term, less stigmatizing, and more likely to enhance generalization (Hagner & Cooney, 2005; Hendricks, 2010).

At the same time, to flourish in the workplace, many employees with HFASDs will benefit from initial and/or ongoing support from vocational professionals. Mawhood and Howlin (1999) found that adults with HFASDs had a substantively greater employment rate when provided vocational support compared with those who lacked such support. Similarly, Howlin, Alcock, and Burkin (2005) reported that employees with HFASDs who received supported employment services were more likely to maintain employment, successfully secure employment in administrative or technical/computing work, and experience a rise in their salary over time. Job coaches, vocational counselors, or other professionals can provide an array of individualized direct or indirect supports on the job that promote their success and inclusion. For example, Schall (2010) discussed the ways in which a positive behavior support plan can help workers and employers to minimize the likelihood of challenging behaviors by identifying antecedent strategies and ecological modifications that reduce their occurrence, reinforcing appropriate behaviors, and teaching alternative replacement behaviors.

**Implications for Research and Practice**

**Implications for Practice**

By virtue of their relative cognitive, language, and academic strengths, students with HFASDs appear to possess considerable potential for occupational success. However, their autistic symptoms (e.g., social deficits, repetitive behaviors, need for routines) often pose major barriers to finding and maintaining employment. Ironically, many such students with HFASDs are underserved where social and vocational support services are concerned due to the misperception that their cognitive and academic strengths somehow render such supports unnecessary. This article presented and reviewed critical elements for transition planning that school and vocational personnel, students with HFASDs, their families, and potential employers can put into collaborative practice to maximize the long-term vocational success of such students.

Working together, educational and agency-based vocational professionals can take the lead in different phases of the transition (e.g., school personnel prior to graduation and agency personnel following graduation), making the transition from school to work occur more smoothly. School-based professionals, such as school psychologists, special education teachers, school counselors, vocational counselors, and school social workers, are well positioned to coordinate, assist in, and evaluate the vocational transition planning of youth with HFASDs, especially prior to graduation. Vocational transition planning is an important aspect of IEP development for older students, and school-based meetings (regarding IEP development and review) are excellent opportunities for
collaboration and coordination between school-based professionals, community agency members, family members, and the student.

School personnel can provide formal support for students with HFASDs in their career development. Early in the vocational transition process, educational professionals may utilize both standardized and nonstandardized career assessments to help students to explore and expand their interests and strengths. Assessment and vocational exploration would be ongoing efforts, but additional supports would evolve with changes in the student’s needs as part of preparation for eventual graduation. Examples of such supports include using assessment results to guide students concerning career exploration; assisting students in obtaining vocational-related information; assisting them with developing job search skills; mentoring and coaching students in work-related social skills; and helping them with resume writing, impression management, and developing interviewing skills. Professionals can also promote and provide internship and/or volunteer work to help students to establish appropriate work experience, work skills, and develop confidence. As students are ready to seek a job after graduation, practitioners in vocational agencies can further assist young adults in specific job-seeking, job-coaching, and job-maintenance skills and in developing effective problem-solving and coping skills for dealing effectively with work-related and nonwork stressors that can impact success. Critically, vocational practitioners can provide consultative and supportive services for employers who hire talented young adults with HFASDs.

Future Research Implications

Given the paucity of studies focusing on the needs of transition-age youth with HFASDs, the need for additional research focused on improving employment outcomes for these youth remains ever pressing. We offer several recommendations for future research. First, several compelling frameworks have been advocated to guide the design and delivery of transition education for youth with disabilities defined broadly (e.g., Hughes & Carter, 2011; Kohler & Field, 2003; National Collaborative on Workforce and Disability for Youth, 2009). Additional research is needed to explore whether and how key components of these models might be relevant to—or specifically adapted for—youth with HFASDs. Second, the current literature addressing employment for young people with HFASDs is composed almost exclusively of discussion papers and descriptive studies. For example, in their meta-analysis examining the effectiveness of adult employment interventions in securing and maintaining employment for adults with ASDs, Westbrook et al. (2012) identified only two studies designed to enable causal interpretations. The paucity of rigorous intervention evaluations makes the identification of evidence-based practices difficult. Additional intervention research is needed to more deeply address each of the seven elements identified in this article. Third, relatively little is known about factors contributing to the long-term career success of young people with HFASDs. Compelling longitudinal research is needed to increase the field’s understanding of how service and support needs may shift over time.

SUMMARY

Students and young adults with HFASDs possess a number of potential strengths (e.g., intact cognitive and language abilities, capacity for intense focus) that are clear assets for pursuing vocational success. Ironically, these very strengths often lead to the popular misperception that they are unlikely to require support services to be successful. However, their social and pragmatic interaction deficits, unusual and intense interests, repetitive behaviors, sensory issues, and other autism-related symptoms can create significant barriers to finding and maintaining employment and otherwise restrict their opportunities to excel vocationally. Ample evidence-based interventions are documented concerning transition services for students with emotional disabilities, behavior
problems, and disabilities involving greater cognitive impairment (e.g. Down’s syndrome, mental retardation, low-functioning autism), as well as vocational services for adults with persistent physical and mental illnesses. However, few evidence-based interventions have been established specifically for students with HFASDs. Drawing on relevant support from the broader transition literature, as well as from the descriptive literature concerning both vocational rehabilitation and HFASDs, we propose a conceptual framework of critical elements that is broadly applicable, flexible, collaborative, and longitudinal in nature. This framework encompasses seven important elements for guiding interventions that provide critically needed support for students with HFASDs from the period prior to post-secondary graduation through later successful job maintenance by nurturing positive career development; emphasizing collaboration among school professionals, adult vocational agencies, and families; and providing vocational support for those who employ people with HFASDs.

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