

Evaluating the College Transition Needs of Individuals With High-Functioning Autism Spectrum Disorders

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Increased attention has been given recently to the needs of students with learning and developmental disabilities who are transitioning from high school to college. This is especially important for students with high-functioning autism spectrum disorders (ASD), who are likely to experience significant and unique challenges in adjusting to postsecondary educational settings. After an overview of diagnostic criteria, symptom presentation, and treatment approaches for high-functioning students with ASD, this article discusses the type of difficulties students may encounter across various domains, including socialization, communication, independent daily living skills, academic functioning, and self-advocacy. The article concludes with recommendations for areas to be evaluated and addressed when determining the supports students with high-functioning ASD need to succeed in meeting the organizational, academic, and social demands of college life.

Students with learning and developmental disabilities who are transitioning from high school to college face particular challenges, and numerous articles have discussed the needs of such students (Janiga & Costenbader, 2002; Sitlington, 2003). However, though much has been learned about the needs and experiences of students with learning dis-

abilities, far less is known about the transition process for individuals with autism spectrum disorders (ASD). This is unfortunate because it is likely that many more students with ASD will be attending postsecondary educational settings in the near future. This may be due, in part, to an overall increase in the prevalence of the disorder (Centers for Disease Control, 2005). Although the prevalence

of ASD appears to have increased, the number of higher-functioning individuals has also increased (California Department of Developmental Services, 2003). In fact, one factor contributing to the overall increase in the prevalence of ASD may be an improvement in our ability to recognize and diagnose higher-functioning individuals who may have been overlooked in the past. It is also likely that our ability to identify children at much younger ages has led to more children receiving early intervention services, thus improving outcomes for a number of children. Nonetheless, students with high-functioning ASD will encounter distinct challenges due to the nature of their specific disability. Understanding the disorder and the particular challenges faced by students with ASD will be necessary for colleges to meet the unique needs of this population.

Autism Spectrum Disorders

The term *autism spectrum disorders* refers to a group of neurodevelopmental disorders that affect development in the areas of social interaction, communication, and behavior. As the word *spectrum* implies, ASD affects each individual differently and to varying degrees of severity. Because the symptoms of ASD fall along a spectrum, or continuum, symptoms can occur in any combination and can range from very mild to severe. In addition, individuals may differ significantly in their overall language and cognitive abilities, with approximately 50% of individuals falling within the average range or higher on intelligence tests (California Department of Developmental Services, 2003). Such individuals are often referred to as having high-functioning ASD, which includes diagnoses of high-functioning autism (HFA), Asperger syndrome (AS), and pervasive developmental disorder not otherwise specified (PDD-NOS). The ability to reliably differentiate among these specific forms of high-functioning individuals with ASD is considered controversial, a point that will be revisited later in this article. Therefore, the considerations and supports described herein are meant to apply to students who fall within the high-functioning end of the autism spectrum, regardless of their specific diagnosis.

Students with HFA and AS frequently have difficulties engaging in reciprocal social interactions and communication and often exhibit a pattern of restricted and repetitive behaviors, interests, and activities. These difficulties tend to change over time as individuals mature, so that behaviors observed in young children may not be observed in adolescents and young adults. Some behaviors that may be observed in college-age students with ASD follow.

Social Skills

Although some individuals with HFA and AS are not very interested in social interactions, many want to develop

friendships and romantic relationships. However, despite a desire for social contact, many people with ASD have difficulty making and keeping friends. They frequently have trouble understanding the feelings of others or of taking others' perspectives. Many also have difficulty using and understanding nonverbal communication (e.g., eye contact, gestures, body language) and may not pick up on subtle social cues or follow accepted social conventions. These difficulties place them at great risk of being misunderstood by others, who often form opinions that the student is disinterested or rude.

Speech, Language, and Communication

Individuals with HFA and AS are frequently described as having advanced vocabularies and may speak in an overly formal or stilted-sounding manner. Some also exhibit atypical prosody, with their voices sounding monotonous; a voice volume that they are unaware of in terms of how loudly or softly they are speaking; and inappropriate body language, such as standing too close to others when speaking. Individuals with ASD also frequently have difficulty engaging in reciprocal (or back-and-forth) conversations and in taking the listener's needs into account when speaking. They may continue to talk at length about a topic of high interest, resist others' attempts to change the topic, and fail to provide relevant background information when introducing a topic or telling a story (i.e., the information seems to "come out of nowhere"). Furthermore, individuals with higher-functioning ASD may have problems with comprehension, which may result in difficulty following multistep directions and long discussions. Students with ASD also tend to interpret language in an overly literal way and often have difficulty understanding idioms/figures of speech, humor, and sarcasm. These behaviors set students apart from their peers, as they do not tend to use the slang expressions commonly used by their classmates. Further, their inappropriate use of prosody and body language may be misinterpreted by others as signs of disinterest, frustration, and anger, causing others to avoid interacting with them. Their difficulties in understanding humor and sarcasm also put them at risk for being taken advantage of and/or teased.

Repetitive and Restricted Activities, Interests, or Behaviors

Individuals with ASD may exhibit body mannerisms such as rocking back and forth or moving their hands in unusual ways. This is much more common in more severe cases of ASD, but it can occur in higher-functioning individuals, where the body mannerisms may be more subtle (e.g., shuffling from one foot to another, drumming fingers on the table, frequently blinking eyes). Students with ASD also often display an intense interest in one or

two topics or activities (known as circumscribed interests), which they pursue to the exclusion of many other activities. For some students, this area of interest may be unusual (e.g., train schedules, license plates, memorizing the phone book, obsession with sports statistics), resulting in difficulties relating to peers around commonly shared interests and experiences. Other students, however, may exhibit interests that are more typical for their age group (e.g., video games, computers, science, math). Yet the intensity with which these interests are pursued sets them apart from their peers by preventing them from engaging in social activities. Such intense interests may also result in a lack of motivation for activities or course work not involving these topics. Students with ASD also tend to exhibit a need for sameness or predictability in their environments, which may result in inflexible behavior when their environment or an established routine is altered. For example, some individuals will have difficulty if physical features of an environment change (e.g., dorm room furniture is rearranged), and others may become anxious when the order of the expected schedule changes (e.g., a class is canceled, the student oversleeps and does not have time for breakfast, the semester schedule changes to a reading days/exam schedule). Some individuals with ASD may also have difficulty being flexible with respect to following rules or tolerating rule violations. As a result, they may become anxious or agitated when other students break an established rule (e.g., the honor policy for test taking, no alcohol rules in the dorm) and may attempt to enforce the rules on their own. This can be especially problematic, as other students typically do not see the need to listen to the student with ASD. In such situations, the student with ASD may benefit from having a peer mentor who can help negotiate these types of situations.

Diagnosis

Autism spectrum disorders are diagnosed based on a set of criteria provided in the *Diagnostic and Statistical Manual of Mental Disorders—Fourth Edition—Text Revision (DSM-IV-TR)*; American Psychiatric Association, 2000). At the current time, no medical tests can diagnose ASD. Instead, diagnosis is based on observed behaviors, as defined in the *DSM-IV* criteria. Typically, the diagnosis is made by a psychologist; however, other medical professionals (e.g., pediatric neurologist, psychiatrist, developmental pediatrician) can also make a diagnosis of an ASD.

Autism spectrum disorders are included under a class of disorders referred to as Pervasive Developmental Disorders (PDD) within the *DSM-IV*, which lists five specific PDDs: (a) Autistic Disorder, (b) Asperger's Disorder, (c) Pervasive Developmental Disorder—Not Otherwise Specified (PDD-NOS), Rett's Disorder, and Childhood Disintegrative Disorder. The latter two are very rare conditions and are not discussed in detail in this article.

It should be noted that the diagnostic criteria for Asperger's Disorder and Autistic Disorder are identical with respect to symptoms of social impairment and restricted and repetitive behaviors. Students with Asperger's, unlike Autistic Disorder, do not demonstrate delay in the development of spoken language (e.g., they must speak before age 2) or in their cognitive development (e.g., must be in the low-average to average range or higher). Even though the *DSM-IV-TR* criteria for Asperger's Disorder do not include impairments in communication, most individuals with AS do have difficulty with reciprocal conversations, and many have idiosyncratic language and/or difficulty with pretend play. Thus, the diagnostic distinction between high-functioning autism and Asperger's Disorder is unclear (Klin & Volkmar, 1995; Macintosh & Dissanayake, 2004).

Treatments and Interventions

Because the etiology of ASD is still unclear, there is currently no cure. However, medical and educational strategies have been demonstrated to be effective in helping individuals manage some of their symptoms and improve their quality of life (Myles & Adreon, 2001; Tsai, 2005).

With respect to medical interventions, individuals with ASD are sometimes given prescription medications to help them manage the symptoms, such as rigid, inflexible behavior (Tsai, 2000). In addition, students with ASD are frequently treated with medications to target symptoms of co-occurring disorders, such as ADHD, anxiety, and depression (Tsai, 2000, 2005). However, medications should be used cautiously; few studies of medication use and side effects exist for this population. Thus, anecdotal reports, as well as limited research, suggest that individuals with ASD may respond to lower doses than used in the general population and may exhibit unusual side effects (Tsai, 2000).

Students with ASD are often eligible to receive special education services under the Individuals with Disabilities Education Improvement Act (IDEIA, 2004) and Section 504 of the Rehabilitation Act of 1973. Although students with more severe presentations of ASD are often identified under the IDEIA category of autism, higher-functioning students (especially those with Asperger's Disorder) may not receive any special education services under IDEIA, instead receiving accommodations through Section 504 plans. IDEIA and Section 504 both specify that school districts must provide a free and appropriate public education to each qualified person with a disability, regardless of the nature or severity of the disability. In addition, both allow for the provision of accommodations and special services for students with disabilities so that they may participate in and benefit from public education programs and activities. However, there are some differences between the two. Under IDEIA, an Individualized Education Program (IEP) is developed for a stu-

dent, specifying goals and objectives for learning and behavior, and school personnel are held accountable for documenting the student's progress toward mastering these goals. In addition, IDEIA includes a number of specified disability categories, for which students must meet certain criteria to be considered eligible to receive services. Section 504, however, defines disability more broadly; consequently, students who do not meet criteria under IDEIA may still be eligible to receive accommodations under Section 504 (e.g., a student with Asperger's Disorder would typically be defined as having a disability under Section 504 but may not meet eligibility criteria for the category of Autism under IDEIA).

When higher-functioning students are determined to be eligible for special education under IDEIA, they may receive services under various IDEIA eligibility categories, such as gifted, other health impaired (OHI), specific learning disabilities (SLD), or emotionally disturbed (Klin & Volkmar, 1995; Maag & Katsiyannis, 2000). This creates some difficulty in transition planning, as the unique needs of these students are often not taken into account. College student disability offices should review the student's IEP to determine what specific supports were provided for the individual in his or her high school environment. In general, goals and accommodations for students with ASDs tend to focus on addressing social skills, communication, and sensory and organizational needs.

It is important to remember that IDEIA applies to students in the public school system; consequently, individuals are no longer protected under IDEIA once they graduate or leave the school system because of their age. Therefore, the services and accommodations that were being provided in high school will not automatically carry over to the college setting. Students must discuss their specific learning needs and necessary accommodations with the college to determine which services and supports can be provided in that setting. This issue is revisited later under the topic of self-advocacy.

Issues in Transition

The specific challenges faced by students with learning disabilities include difficulty with academic content, organization, time management, and study skills. These difficulties are exacerbated by several issues, including proper identification of students in need of services, the hidden nature of the disability, students' reluctance to disclose their disability, and larger class sizes and more limited teacher-student contact in college settings (Janiga & Costenbader, 2002). Individuals with higher-functioning ASD are likely to face the same challenges, along with a number of other difficulties.

The literature suggests specific areas to consider and address for individuals with ASD planning for the transition to college. The major issues include

- deciding what type and size of college to attend and where the student is going to live,
- assessing/teaching independent living skills,
- discussing when and how to disclose one's disability,
- identifying appropriate academic supports and accommodations,
- identifying necessary social supports, and
- identifying strategies to assist in adjusting to the college environment.

Choosing a College. With respect to choosing a college, several considerations should be taken into account, including the type of college (e.g., vocational/technical school, community college, 4-year college/university); the size of the campus (total number of students, average class size, campus layout); and the proximity of the campus to home.

For some students with ASDs, serious consideration should be given to starting at a community college. In general, community colleges offer more individual attention for students (Perner, 2002). Many students with ASDs have difficulty navigating large campuses and may find smaller college campuses easier to navigate and less overwhelming (Harper, Lawlor, & Fitzgerald, 2004; Moreno, 2005; Willey, 2000; Williams & Palmer, 2004). At the same time, it is important to note that some colleges that have served students with ASDs have indicated that sometimes a smaller school increases the visibility of being different (Perner, 2003). Class size varies considerably from one school to another. Larger schools may offer more diversity and, therefore, more opportunities to meet individuals with similar interests.

Lars Perner (2002), a professor with AS, suggested that one disadvantage of community college is that it will necessitate yet another change to complete a 4-year degree, if desired. Technical or trade schools might allow more concentrated focus on an area of interest. It is also possible that specialized schools may not require students to take as many general courses. This might be advantageous for students with AS who are highly skilled in specific areas yet have difficulty in other areas. Wheeler and Kalina (2000) have written a guide to assist individuals in assessing what environment is right for them.

In addition, students and their families should give serious consideration to the type of living arrangement that will work best for the student (e.g., living on or off campus, living at home), including whether to have roommates. In this regard, several authors have suggested that it is helpful for many students with ASD to live at home the first year so that they have a chance to get used to the academic and organizational demands of college, before adding social and living challenges (Jekel & Loo, 2002; Perner, 2002; Rosenwald & Hultgren, 2003). However, despite the benefits of living at home, "some individuals who do not like to drive or use public



transportation may find commuting to school too difficult” (Perner, 2003, p. 29). In such cases, choosing a school that is close enough to home to allow for frequent visits may provide enough support for the student to live away at college (Perner, 2003).

For many students with ASD, sharing a dorm room is extremely difficult. In most instances, a single room should be considered to avoid the sensory and social demands of sharing a small living space with others (Jekel & Loo, 2002; Perner, 2002; Prince-Hughes, 2002; Rietschel, 2002; Williams & Palmer, 2004). Susan Moreno, the founder and director of Maap, Inc., an international support organization for individuals with high-functioning ASD, opted for a private room for her daughter (S. Moreno, personal communication, May 2, 2005). Even with a single room, individuals on the spectrum may encounter challenges sharing communal bathrooms (Perner, 2002; Williams & Palmer, 2004) and “crowded and noisy quarters” (Perner, 2002, p. 328). Perner suggested that parents provide “open ended bus, train, or plane tickets or vouchers” (2002, p. 238) to reassure students that they can stay in close touch with family and visit when they feel the need. Prepaid phone cards or cell phones are another way to provide a sense of security for students (Jekel & Loo, 2002; Perner, 2002).

Independent Living Skills. In evaluating the pros and cons of living away from home, it is important to consider the student’s sensory issues and daily living skills. Sensory issues can significantly affect adjustment to the college environment and may include sensitivity to noises and smells (Myles, 2005; Myles & Adreon, 2001; Myles, Cook, Miller, Rinner, & Robbins, 2000), physical comfort of furniture (Prince-Hughes, 2002), lighting (Myles, 2005; Myles et al., 2000; Prince-Hughes, 2002), and taste (Myles et al. 2000; Prince-Hughes, 2002). For some, eating cafeteria food is challenging because of highly specific food preferences (Perner, 2002).

Common daily living issues that may be problematic for some individuals with ASD include tending to personal hygiene (Adreon, 2004b; Prince-Hughes, 2002), dressing properly (Moreno, 2005), waking up to an alarm clock (Adreon, 2004b; Williams & Palmer, 2004), getting to class on time (Adreon, 2004b), shopping (Prince-Hughes, 2004), understanding meal plans and the rules for using them, using a campus ID, handling fire drills in the middle of the night, finding public restrooms, and acquiring transportation (Williams & Palmer, 2004). For individuals who need assistance and supervision with daily living skills, living at home (at least initially) may be more appropriate.

It is also important to consider problem-solving and decision-making skills, which can vary considerably among individuals with ASD. If students are going to live away from home, parents may want to post information in the student's room or create a resource guide of useful information (Adreon, 2004a; Coulter, 2003). Such a guide might include rules and safety guidelines, insurance information, emergency phone numbers, and bank account information. It may also be helpful to clarify procedures to follow during a minor illness, including administering first aid, handling medical emergencies (and non-emergencies), and accessing health care on campus (Coulter, 2003; Williams & Palmer, 2004).

Other problem-solving situations that may be problematic include budgeting, managing bank accounts, shopping, and other organizational aspects of daily living (Adreon, 2002, 2004b; Jekel & Loo, 2002; Prince-Hughes, 2002; Williams & Palmer, 2004); ability to use the phone, e-mail, and instant messaging (Coulter, 2003; Williams & Palmer, 2004); and managing medication (Coulter, 2003). Students with ASD and their families should carefully consider the supports needed to handle the above-mentioned tasks in planning for the transition.

Self-Advocacy. Disclosure of one's disability and ability to advocate for oneself is another important transition-related issue. IDEIA, which guarantees special education services for all eligible students, no longer applies once students exit the public school system. Although services are available at the postsecondary level, disclosure is necessary to receive accommodations based on the ADA. Dania Jekel and Stephanie Loo (2002), from the Asperger's Association of New England, recommended disclosure so the individual can access supports and accommodations. Stephen Shore (2004) addressed the pros and cons of disclosure in his book *Ask and Tell: Self-Advocacy and Disclosure for People on the Autism Spectrum*.

An often overlooked fact is that in most college settings, students are responsible for advocating for themselves (Williams & Palmer, 2004). This means that they must initiate contact with the school's disabilities office to disclose their disability and must approach professors to indicate the accommodations that they will need to be successful. Williams and Palmer (2004) noted, "Many students will need coaching and support in order to do this" (p. 1). Ideally, the student would be taught to do this while in high school; however, some families address this further by hiring someone to be the liaison between the student and school personnel. For example, parents may hire a graduate student or a life coach who can go with the student to speak with each instructor to explain the disability and the accommodations that will be needed.

Academic Supports and Accommodations. In general, many individuals with ASD need the type of supports

commonly provided to students with learning disabilities, including preferential seating (Williams & Palmer, 2004); note takers (Rosenwald & Hultgren, 2003; Moreno, 2005); tape-recorded lectures (Rosenwald & Hultgren, 2003; Willey, 2000); taking exams in quiet and less distracting environments (Prince-Hughes, 2002; Williams & Palmer, 2004); and extra time for exams (Prince-Hughes, 2002; Williams & Palmer, 2004).

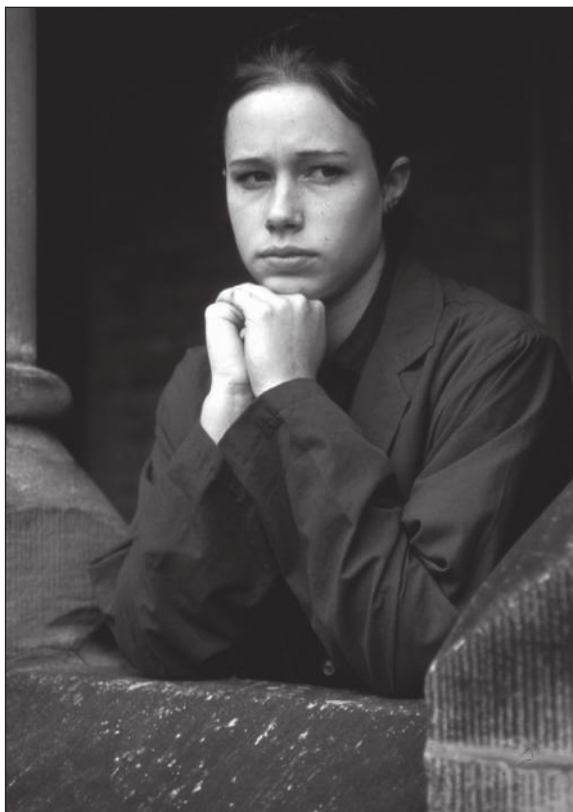
However, numerous other accommodations may be helpful that might be beyond the scope of what universities typically provide and that may not be required under the Americans with Disabilities Act (ADA), which governs services at the postsecondary level. Such accommodations might include additional assistance with course selection (Williams & Palmer, 2004); course exemptions or substitutions (Wheeler & Kalina, 2000; Willey, 2000); permission to "avoid group projects, group discussions, laboratory assignments and group seating arrangements" (Willey, 2000, p. 134); oral rather than written exams (Willey, 2000); flexibility in assignment due dates (Willey, 2000; Williams & Palmer, 2004); flexibility in scheduling classes (Wheeler & Kalina, 2000; Willey, 2000); and "permission to attend other sections of the same course" if "you suffer anxiety attacks or bouts with depression that interfere with your ability to function" (Willey, 2000, p. 134).

In addition, many individuals with ASD will need accommodations for organizational strategies because the majority of these students have significant deficits in many aspects of executive functioning. The term *executive functions* refers to a set of cognitive processes necessary for goal-directed behavior and involves various skills, such as planning, initiation, organization, inhibition, working memory, and self-monitoring (Clark, Prior, & Kinsella, 2002). Assistance in developing study skills and organizational skills (Myles, 2005; Myles & Adreon, 2001; Jekel & Loo, 2002), as well as assistance with long-term projects (Myles, 2005; Myles & Adreon, 2001; Moreno, 2005), might be necessary. Some students will require tutoring in specific subject areas (Jekel & Loo, 2002; Moreno, 2005; Prince-Hughes, 2002).

In most university settings, the student will be responsible for seeking out available tutoring. For individuals with ASD, this can be a challenge in and of itself. Therefore, in some instances, families may wish to hire an outside tutor or life coach, rather than relying on the student to access on-campus, peer-tutoring services. Alternatively, the life coach may be responsible for monitoring how the student is doing in classes and prompt or assist the student in accessing campus tutoring services if necessary. Liane Holliday Willey (2000), an adult with AS who has a doctorate degree in education, recommended several strategies. She suggested that students "keep drop dates on your calendar so that if you decide a course is too difficult for you, you can drop it without affecting

your grade point average” (Willey, 2000, p. 138). In addition, she suggested, “The moment your instructor tells you when homework is due or when tests will be administered,” write them on your calendar (Willey, 2000, p. 138).

Social Supports. Perhaps the most challenging area for students with ASD is adjusting to the social demands of the college setting (Welkowitz & Baker, 2005). Students with ASD run the risk of social isolation due to their difficulty forming relationships and may be exploited by others due to their naïveté (Welkowitz & Baker, 2005). For some students, establishing a liaison or point person to go to when confused or stressed is helpful (Myles & Adreon, 2001; Jekel & Loo, 2002; Rosenwald & Hultgren, 2003). Jekel and Loo (2002) described the liaison as someone students can go to if they have any questions or feel overwhelmed or confused by social or academic demands. They suggested that the liaison keep in touch with the student on a regular basis to monitor the student’s stress level and assist the student in problem solving, when necessary. The role of the liaison is to help the student “figure out what’s going on and how to improve the situation before things escalate” (Jekel & Loo, 2002, p. 5). Other roles include serving as a liaison for communication between the student and his or her parents, assisting the student in navigating through various aspects of college life such as registration, course selection, grad-



uation requirements, as well as assist the student in understanding the “unwritten social rules of classroom, dorm, and campus behavior” (Jekel & Loo, 2002, p. 5).

Using college students as mentors is another useful support. Moreno (2005) has indicated that mentors (e.g., social, academic, organizational) were an important part of her daughter’s support system at college. She attributes much of her daughter’s success to a wonderful peer social mentor, who provided ongoing social assistance without monetary compensation. Some parents have found it helpful to “hire a ‘shadow’ (perhaps a student in the same chosen field) to attend classes who can assist in assignments and understanding the lectures and social situations” (Rosenwald & Hultgren, 2003, p. 84). For others, identifying a safe place to go and relax or regroup is helpful (Willey, 2000).

For example, Coulter (2003) discussed a student with ASD who received several crank phone calls during his first year in college. He reported them to the resident director, who held a meeting with students to explain that they could be expelled for this type of behavior. Coulter suggested teaching students to define and identify hazing and exploitation, as well as giving students a list of people to contact and a place to go if hazing occurs.

Adjusting to the Transition. Numerous strategies can ease the transition from high school to college: taking a college course while attending high school (P. Gerhardt, personal communication, April 7, 2005) or taking a summer course on campus between the end of high school and the beginning of freshman year (Jekel & Loo, 2002). Additional strategies include taking a reduced course load (Jekel & Loo, 2002; Prince-Hughes, 2002; Williams & Palmer) and planning on more time to complete college (Jekel & Loo, 2002; Perner, 2002). Some students find it helpful to schedule classes 1 or 2 days a week during the first semester, “so that there is the knowledge that ‘escapes’ can be for a longer duration” (Perner, 2002, p. 327).

Willey (2000) recommended that students “not schedule classes back-to-back unless they are in the same building” because “it can be too taxing to try and navigate your way through campus under time pressures” (p. 138). In addition, Willey suggested that students with ASD “never sign up for a class that meets earlier than you routinely like to wake up or later than you routinely like to relax” (p. 137).

Many recommend that students become familiar with the campus before starting school (Coulter, 2003; Harper et al., 2004; Willey, 2000). Visiting the college’s Web site, studying campus maps, and walking through campus to locate classrooms for the first day of class are helpful orientation activities (Harper et al., 2004). Students may also benefit from specific information regarding orientation activities, procedures for checking into the dorm, and registering for classes (Coulter, 2003).

Personal Perspectives of Individuals With ASD

Individuals with ASD vary in how they describe their college experience. Stephen Shore (2001) described college as an extremely positive experience, an environment he found so pleasurable that he had expressed a desire to stay in a college environment forever: "At college I met people who appreciate me for who I was instead of making fun of what was different about me.... College was an exciting time. I could be myself" (p. 77). In contrast, Dawn Prince-Hughes (2002) considered the physical environment and social demands of universities to be at odds with the innate needs and motivation of college students with ASD. She set out to find a way to reach her goal of becoming an anthropologist without attending classes on a traditional college campus. She began her college education in an "animal sciences program in a technical college that allowed her to work outside of the campus setting in external mentoring situations." In later years, when she did attend classes, she developed specific coping strategies: "Because I knew I would have difficulty in a formal classroom setting, I made sure I was very prepared for all my coursework before I ever took a formal class. This meant that all I had to focus on when I finally attended a class was being considerate of other people and learning how groups worked" (Prince-Hughes, 2004, p. 136).

Many individuals with ASD find change extremely difficult. Prince-Hughes (2002) described a student who lived at home during her undergraduate years. She saw no reason to leave an environment in which she was comfortable. She moved to attend graduate school and described moving away from home as a traumatic experience:

Fortunately, I was assigned to live in university housing on campus so I did not have to deal with the stress of trying to find a place to live. But I experienced so much anxiety and stress over the whole event that I had recurring nightmares for three or four months with the same theme: moving day. (p. 102)

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REFERENCES

- Adreon, D. (2002, January). What about adolescents and adults with Asperger syndrome? In D. Adreon (Ed.), *Florida Asperger Syndrome Times*. Coral Gables, FL: University of Miami Center for Autism and Related Disabilities.
- Adreon, D. (2004a). Creating a resource guide: The importance of looking ahead. In D. Adreon (Ed.), *Florida Asperger Syndrome Times*. Coral Gables, FL: University of Miami Center for Autism and Related Disabilities.
- Adreon, D. (2004b). Ten skills to teach your child in preparation for life after high school. In D. Adreon (Ed.), *Florida Asperger Syndrome Times*. Coral Gables, FL: University of Miami Center for Autism and Related Disabilities.
- American Psychiatric Association. (2000). *Diagnostic and statistical manual of mental disorders, 4th edition, text revision*. Washington, DC: Author.
- California Department of Developmental Services. (2003). *Autism spectrum disorders—Changes in the California caseload. An update: 1999–2003*. Retrieved November 22, 2005, from <http://www.dds.ca.gov/autism>
- Centers for Disease Control. (2005). *How common is autism spectrum disorder (ASD)*. Retrieved November 22, 2005, from <http://www.cdc.gov/ncbddd/autism/>
- Clark, C., Prior, M., & Kinsella, G. (2002). The relationship between executive function abilities, adaptive behavior and academic achievement in children with externalizing behaviour problems. *Journal of Child Psychology and Psychiatry*, 43, 785–796.
- Coulter, J. (2003). *Lessons learned from first year of college*. Retrieved July, 30, 2004, from <http://www.aspennj.org/coulter.html>
- Harper, J., Lawlor, M., & Fitzgerald, M. (2004). *Succeeding in college with Asperger syndrome: A student guide*. New York: Jessica Kingsley.
- Individuals with Disabilities Education Improvement Act of 2004, 20 U.S.C. § 1400 *et seq.* (2004) (reauthorization of the Individuals with Disabilities Education Act of 1990)
- Janiga, S. J., & Costenbader, V. (2002). The transition from high school to postsecondary education for students with learning disabilities: A survey of college service coordinators. *Journal of Learning Disabilities*, 35, 462–468.
- Jekel, D., & Loo, S. (2002). *So you want to go to college: Recommendations, helpful tips, and suggestions for success at college*. Watertown, MA: Asperger's Association of New England.
- Klin, A., & Volkmar, F. R. (1995). *Asperger's syndrome: Guidelines for treatment and intervention*. Published by the Learning Disabilities Association of America. Retrieved November 22, 2005, from <http://info.med.yale.edu/chldstody/autism/astreatments.html>
- Maag, J. W., & Katsiyannis, A. (2000). Recent legal and policy developments in special education. *National Association of Secondary School Principals NASSP Bulletin*, 84, 1–8.
- Macintosh, K. E., & Dissanayake, C. (2004). Annotation: The similarities and differences between autistic disorder and Asperger's disorder: A review of the empirical evidence. *Journal of Child Psychology and Psychiatry, and Allied Disciplines*, 45, 421–434.
- Moreno, S. (2005, Winter). On the road to a successful college experience: Preparations make the difference. *Autism Spectrum Quarterly*, 16–19.
- Myles, B. S. (2005). *Children and youth with Asperger syndrome: Strategies for success in inclusive settings*. Thousand Oaks, CA: Corwin Press.

- Myles, B. S., & Adreon, D. (2001). *Asperger syndrome and adolescence: Practical solutions for school success*. Shawnee Mission, KS: Autism Asperger Publishing.
- Myles, B. S., Cook, K. T., Miller, N. E., Rinner, L., & Robbins, L. A. (2000). *Asperger syndrome and sensory issues: Practical solutions for making sense of the world*. Shawnee Mission, KS: Autism Asperger Publishing.
- Perner, L. (2002, July). *Preparing to be nerdy where nerdy can be cool: College planning for the high functioning student with autism*. Paper presented at the Autism Society of America Annual Conference, Indianapolis, IN.
- Perner, L. (2003, November/December). Selecting a college for a student on the autism spectrum. *Autism Asperger's Digest* 36, 28–31.
- Prince-Hughes, D. (2002). *Aquamarine blue: Personal stories of college students with autism*. Athens: Swallow Press/Ohio University Press.
- Prince-Hughes, D. (2004). *Songs of the gorilla nation: My journey through autism*. New York: Harmony Books.
- Rietschel, L. (2002). *College bound ... things you should know part II or desperately seeking a ppt!* PDD Network. Hamden, CT: CT Autism Spectrum Resource Center.
- Rosenwald, L., & Hultgren, S. (2003). More college tips. In S. Hultgren (Ed.), *CT autism spectrum resource guide*. Hamden, CT: CT Autism Spectrum Resource Center.
- Shore, S. (2001). *Beyond the wall: Personal experiences with autism and Asperger syndrome*. Shawnee Mission, KS: Autism Asperger Publishing.
- Shore, S. (2004). *Ask and tell: Self-advocacy and disclosure for people on the autism spectrum*. Shawnee Mission, KS: Autism Asperger Publishing.
- Sitlington, P. L. (2003). Postsecondary education: The other transition. *Exceptionality*, 11, 103–113.
- Tsai, L. (2000). Children with autism spectrum disorder: Medicine today and in the new millennium. *Focus on Autism and Other Developmental Disabilities*, 15, 138–145.
- Tsai, L. Y. (2005). Medical treatment in autism. In D. Zager & D. Berkell Zager (Eds.), *Autism spectrum disorders: Identification, education, and treatment*, (3rd ed., pp. 399–496). Mahwah, NJ: Erlbaum.
- Welkowitz, L. A., & Baker, L. J. (2005). Supporting college students with Asperger's syndrome. In L. J. Baker & L. A. Welkowitz (Eds.), *Asperger's syndrome: Intervening in schools, clinics and communities* (pp. 173–187). Mahwah, NJ: Erlbaum.
- Wheeler, M., & Kalina, N. (2000). *The road to post-secondary education: Questions to consider*. Indiana Resource Center for Autism Web. Retrieved April 20, 2005, from <http://www.iidc.indiana.edu/irca/education/questions.html>
- Wiley, L. H. (2000). *Pretending to be normal: Living with Asperger's syndrome*. Philadelphia: Jessica Kingsley.
- Williams, G., & Palmer, A. (2004). *Preparing for college: Tips for students with HFA/Asperger's syndrome*. TEACCH Web. Retrieved April 22, 2005, from <http://www.teacch.com/prep4col2.htm>

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