I still Need My Security Teddy Bear: Experiences of an Individual with Autism Spectrum Disorder in Higher Education

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Abstract

Understanding the needs of individuals with Autism Spectrum Disorder (ASD) and their post-high school experiences is a new and widely under-studied area of research (MacLeod & Green, 2009). The purpose of this qualitative study was to explore the experiences of a young woman with ASD in her journey following high school graduation to the world of work and higher education. Problems for individuals with ASD in higher education are examined, and suggestions are given for university support for better recruiting and retaining these individuals. The results of this study will give practical strategies, support, and accommodations for professionals in higher education.

Keywords: Autism Spectrum Disorder, transition, case study, self-determination.

Background

On Jillian's (a pseudonym) first day at her new school, her teachers were concerned that she had not attended any of her assigned classes. After an extensive search, we found her hiding in the restroom refusing to come out until after-hours when all of the other students had left. I first met her when her aunt, and now legal guardian, brought her to register for her 7th grade year. A bright, seemingly happy, young lady with vibrant blue eyes and curly blonde hair, Jillian seemed at ease with adults, but underneath there was a noticeable nervous apprehension at starting a new and uncertain journey in her life. State workers had removed her from her biological mother due to abuse, and she moved across the

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state to live with her aunt. As her case manager for special education in her 7th and 8th grade years, I transferred from the middle school to the high school when Jillian began her freshman year and also taught language arts for students with disabilities. Since I had been in her life for so long, I felt responsible for providing her with the best transition information possible.

This paper explores Jillian's experiences following graduation from high school as a young woman with Autism Spectrum Disorder (ASD). The year after her graduation, I interviewed her each summer for three years. Insightful information emerged from the interviews as I sought to better understand how her Individual Education Plan (IEP), a written document developed for students with disabilities eligible for special education services, adequately prepared her for major life transitions following high school graduation. Although enrolled in a local community college and engaged in full-time employment during the course of the interviews, she still experienced the same feelings of confusion and loneliness she felt while in high school. Ultimately, she dropped out of college because she lacked the self-advocacy skills necessary to be successful. It saddened me to realize that, even years after her high school graduation, Jillian still felt the same isolation she experienced during her teenaged years. I wanted to understand Jillian's experiences and discover why she struggled through much of her time in higher education. Perhaps this honest glimpse into her life story will offer hope to other students with ASD and the educators who work with them. It is hoped that the results of this study may provide professionals in higher education the means to better accommodate for the specific needs of individuals with ASD.

Purpose of the Study

This study sought to understand the experiences of a young woman with ASD and the navigations she made transitioning from public high school to adulthood. These individuals are distinctive in their strengths and weaknesses; therefore, a focused study was imperative to identify factors that may be of concern for people with ASD (Scharoun, Reinders, Bryden, & Fletcher, 2014; Schwartz, Sandall, Garfinkle, & Bauer, 1998). Results of this study may help to identify what is working and what are the gaps in support for matriculation to higher education, finding employment, and independent living. A thoughtful exploration of Jillian's experiences may assist future

educators in developing more pragmatic and realistic transition goals that better prepare students with disabilities for adult life. Additionally, this study may highlight the need for communication between families and the university. This research was guided by the following questions: How does a young woman with ASD negotiate the journey into post-high school life? How does she negotiate the journey into higher education? What supports and accommodations were most beneficial for her? What further needs would inform educators in the development of transition plans to better assist the individual in achieving success in the adult world?

Individuals with ASD and Higher Education

The most recent edition of the *Diagnostic and Statistical Manual of Mental Disorders-5 (DSM-5)* folds all the previously named subcategories of autism into the one umbrella term of *Autism Spectrum Disorder* (ASD) (APA, 2011; Autism Research Institute, 2012; Wolf, Brown, & Bork, 2009). Understanding individuals with ASD is a growing field of study, yet the disorder still remains "shrouded in confusion and mystery" (Hesmondhalgh, 2010, p. 32). Individuals with high-functioning ASD were once classified as having Asperger's Syndrome. While some argue that people with high functioning ASD fall within the mild continuum of the disorder, Raymond (2011) cautioned, "mild does not mean 'not serious'" (p. 7). Further elaborating these terms represents decades of debate among researchers, parents and educators. While definitions of ASD remain fluid and complex, typical characteristics include normal or above-normal cognitive functioning and limited interpersonal skills, including poor eye contact, diminished facial recognition, awkward body movements, challenges interpreting body language, impaired social interactions, and difficulty with organization.

Transition and Post-High School Success

Effective secondary transition planning for students with disabilities in PreK–12 grades plays a critical role in their post-school success (Kochhar-Bryant & Greene, 2008). However, findings from several groundbreaking research studies on disabilities and life success, such as the Special Education Elementary Longitudinal Study (SEELS), determined those students labeled ASD had the poorest outcomes in employment, advocacy, and social skills (Wagner, New-

man, Cameto, Garza, & Levine, 2005). It is therefore best practice for teachers to embed transition goals within the student's IEP, thus developing these skills for post-high school success across the curriculum. Such goals should be based on the student's strengths and needs by providing a coordinated set of activities engaging a wide range of community resources. This strategy is built on a backwards design to prepare the student for the world of adulthood. Although well-established in the literature, how this design strategy looks in actual practice is often a nebulous, ever-changing ideal. Despite an influx of legislative and curriculum-based approaches, post-school outcomes for individuals with disabilities lag far behind their nondisabled peers, resulting in devastating consequences (Barnard-Brak, Lechtenberger, & Lan, 2010; Higbee, Katz, & Schultz, 2010). Raymond (2011) found that special education may inadvertently promote a lifetime of learned helpless behavior if self-advocacy and social skills are not embedded within the IEP. In light of the many documented historical inequities in special education, it is imperative for educators to focus on ensuring IEP goals are well-established and incorporate a wide continuum of services so students have every opportunity for success upon graduation. Although all students need practical transition planning for life after high school, it is especially critical for students with disabilities. Researchers have discovered that for persons with a disability, the outlook for employment is far bleaker than for their nondisabled peers. The U.S. Department of Labor (2011) estimated the unemployment rate of individuals without a disability to be 9.1%. However, for those with a disability, the unemployment rate stands at 14.8%. According to Disabled World (2011), the most current statistics concerning poverty and disability are quite disheartening. They estimated almost 21% of the population aged 16 and older with a disability live below the poverty level compared to 11% of the population age 16 and older without a disability. This translates to a median earning of $18, 865 for those individuals with a disability compared to $28,983 for individuals without a disability.

Students with Disabilities and Higher Education

Although the numbers of students with disabilities are growing in post-secondary education, these students are also at the highest risk for dropping out of college (Barnard-Brak et al., 2010). Higbee et

al. (2010) discovered that approximately 11% of college students reported a disability. These numbers may be depreciated due to the low rates of self-disclosure. Several reasons were given for the reticence of individuals to disclose their disability: difficulty navigating the process in higher education, lack of advocacy training, and reluctance to appear different. Wessel, Jones, Markle, and Westfall (2009) reported that 53% of students with disabilities earned a college degree compared to 64% of students without disabilities. Barnard-Brak et al. (2010) discovered that one reason for this high attrition rate is a "lack of understanding" (p. 412) by the universities concerning the diverse needs of students with disabilities. This is most evident in the absence of training that faculty and staff in higher education receive regarding students with disabilities. Full inclusion into college life is not a reality for most students with disabilities in higher education (Higbee et al. 2010).

Theoretical Frame

Deci and Ryan's (2000) self-determination theory (SDT) is an effective framework for understanding the post-high school experiences of individuals with ASD. This lens examines critical concerns of how people are able to pursue and accomplish their basic psychological needs. SDT delineates the concept of motivation within human development through its unique approach to goals-directed behavior. Similar to other frameworks of motivation and self-efficacy, SDT embraces the idea that individuals have an innate, natural propensity to develop a sense of self (Deci & Ryan, 2002). SDT states that myriad societal factors may either support or impede that development. Detailed within the subset of motivation are three basic needs essential for healthy human development: competence, relatedness, and autonomy. Competence refers to a feeling of effectiveness within one's environment. This is coupled with independence, self-reliance, and experiencing a wide range of opportunities for self-growth. Relatedness refers to a connection to others and the feeling of being an integral part of a community. Autonomy, which differs from independence in SDT, refers to a self-perception concerning one's own behavior that incorporates values, interest, and expression.

SDT and Special Education

SDT was first applied to special education in the early 1990s

as an outcome of federal mandates pertaining to transition planning (Wehmeyer et al., 2007). Algozzine, Browder, Karvonen, Test, and Wood (2001) stated that self-determination was one of the most important topics in special education because "the right to make one's own decisions about life and future is viewed as an inalienable right by American adults without disabilities and yet has only recently been recognized for adults with disabilities" (p. 219). At its core, self-determination is an issue of social justice. Although adults with disabilities have made some advances in the social realm, they still lag behind their peers without disabilities in several areas such as employment, matriculation to higher education, and independent living (Mustian, Mazzotti & Test, 2013).

Decades of research on SDT and individuals with disabilities have produced a stout research base generating instructional models, curricular materials, and assessment instruments (Chambers et al., 2007). *The Functional Theory of Self-determination* developed by Wehmeyer et al. (2007) emphasized both defining self-determination and mandating that self-determined behaviors must be explicitly distinguished and taught according to the real-life application to the individual. Essential characteristics of self-determined behaviors emerge through the development and acquisition of these multiple interrelated elements: choice making, decision making, problem solving, goal setting, risk taking, and self-advocacy. Students with disabilities who learn these fundamental attributes have greater success in adulthood. These findings are verified in numerous studies, including research by Carter, Lane, Pierson, and Stang (2008), who concluded that SDT skills must be taught both in general and special education classrooms because so many of today's youth lack the skills to become independent, self-determined adults. The authors found that inclusion into general education classrooms for those with disabilities may offer more opportunities for self-determination. It is therefore crucial that general education teachers be aware of self-determination skills, since 70% of students with disabilities receive at least one core academic class in a general education class and 83% in elective courses. According to Carter et al., general education teachers report they frequently teach a component of self-determination in their classroom, but this instruction may not be differentiated for students with disabilities.

These skills may also be taught through informal, indirect instruction. SDT examines the psychologically based approach to attainment of these skill-sets and is deemed the most appropriate lens for this study because it was possible to recognize the issues, barriers, and strengths involved in Jillian's transition to adult life.

Jillian's Case

As individuals with ASD are so unique and distinctive in their strengths and weaknesses, I determined a focused study was essential to identify factors of concern and to offer insights regarding the in-depth complexities of lived experience. Jillian seemed like a perfect case for this study because of my relationship with her as her teacher for six years. While the strengths and weaknesses of people with ASD differ significantly, social interaction difficulties and repetitive behavior are common characteristics that cause difficulties in independent living. Her case provides an important example of the struggles that other young adults with ASD may encounter. I was interested in Jillian's case for its similarities to the experiences of others with ASD, but also for the deep insights gained from better understanding the singular ways she navigated the complexities of adult living.

Participant

Jillian was diagnosed with ASD while in high school at a rural public school district located in the Midwest. Previous psycho-educational testing in the 7th grade found her eligible for special education services based on the category of Other Health Impaired (OHI) due to severe anxiety, depression, and attention deficit hyperactivity disorder (ADHD). Her last re-evaluation in the 11th grade indicated ASD with a secondary diagnosis of anxiety disorder and ADHD. She graduated from high school three years prior to the first interview. She identified her ethnicity as Caucasian, and currently lives with her adopted mother and father in a farmhouse several miles from the small community where she attended school.

Similar to many individuals with disabilities, Jillian experienced a long line of unsuccessful jobs after high school and changed majors twice at the Career Tech School, though she eventually completed a certification in computer design. At the time of the first interview, she was enrolled in summer classes in preparation for full-time matriculation at a local community college. Between the second and

third interview, she was able to get a first-time job coach from the vocational rehabilitation services. This person came to her place of employment and assisted her in communication skills. She dropped out of the community college she had been attending for two years prior to the third interview.

Data Sources

Data consisted of transcripts from semi-structured, audio-recorded interviews conducted over a span of three consecutive years. Data analysis was accomplished through the use of open coding, line-by-line analysis, identifying themes, and categorizing subcategories until themes emerged. I then identified indigenous themes through analytic processes of constant comparison, data coding, analytic statements, and descriptive analysis. Field notes and transcribed interviews were analyzed in tandem to provide validity to the interview. The process of open coding as identified by Emerson, Fretz, and Shaw (1995) was conducted through a second reading of each transcript for the purpose of identifying preliminary categories, themes, and events. During the course of the interviews, questions were often answered by the participant in the form of stories or personal vignettes. These stories were also labeled into data sets according to their themes. Rubin and Rubin (2005) detailed how a participant's stories are powerful tools for pursuing participant meanings. Triangulation procedures to assure trustworthiness of the study included a convergence of multiple data sources—such as a comparison of field journals—member check, and peer debriefing. Jillian was sent a copy of each typed transcript and gave input on the content.

Themes

Several compelling themes emerged as Jillian told her stories. Through all three interviews there seemed to be an inability to articulate her disability. Coupled with this powerlessness was an equally troubling realization that she could not perceive how her difference impacted every aspect of her life. The second major theme was socialization, followed by the third theme of autonomy. At times, these themes seemed to dovetail, weaving in and through each other, creating a tightly woven mosaic representative of Jillian's world.

Understanding of Disability

When first asked to identify the disability category that made

her eligible for special education, Jillian's response was, "I think it was autism, but I'm not sure." Subsequent interviews revealed a persistent, contradictory understanding of her disability. For example, during the second interview when asked the same question, her response was, "I don't know that I ever knew. I think my mom just told me I was going to be in special ed." By the third year, however, she seemed to have developed a growing perception of her disability as evidenced: "I have…what is it my mom said…We went through the vocational rehab, and they said I have low scale Asperger's or something. They used big fancy words that my mom understood and I didn't."

This inability for Jillian to name her disability resulted in failure to advocate for her needs while in college and during employment. Sadly, a review of her IEP revealed that these skills were not a part of her high school transition goals. It also emerged that Jillian did not understand the specific learning accommodations and modifications available to her, as was exemplified when she attempted to describe her struggles in math while enrolled in college: "I said that I had a math disability to see if I could use different colored paper or something." Although the use of colored paper is appropriate for some individuals, Jillian had never utilized this particular accommodation. Calculator use was listed as an accommodation in her middle and high school IEPs, and yet she equated this to cheating in college: "He said [the professor] that he would not let us use a calculator because we need to depend on our brains. But I cheated and used a calculator anyway!" Most surprisingly, her mother, a long time special education teacher, enforced the professor's view: "If she sees me sitting at the kitchen table using a calculator, she says, 'Does Mr. T. let you use a calculator?' 'No, Mommy.' 'Then put it away.'… 'Yes, mommy.'" It seemed that the tutor hired to assist her in math had a better grasp of Jillian's needs, as she allowed her to use a calculator. According to Jillian, she did this "because most of these problems I can't do in my head, and she gave me a calculator." Evidently, an accommodation she used for many years in high school did not translate to college. A skewed understanding of disability was apparent up through the third interview when she proclaimed that to succeed in college she needed to "Study more! Only I am going to force myself to be motivated

to study." It is critical to understand the majority of individuals with ASD have normal or above normal intelligence. For Jillian, the issue was not needing to study more, but knowing how to organize her notes and to study effectively.

Troubles with organization and submitting her assignments on time seemed to be the prevailing reasons why Jillian was not able to do well in her classes. In her third interview, Jillian stated, "I am not motivated if it is not in front of me, then I don't really think about it." Citing her lack of organization as the reason for finally dropping out of college, she continued throughout the third interview, "I think if I could write down, 'Hey, I have homework in this and I have to do this,' then I think I'll be better." Referring to herself as lazy, she proffered a lack of motivation for studying as another excuse for her college failure: "I just wasn't motivated to study. I have to get off my lazy butt and do this." However, by the third interview, she was beginning to appreciate her strengths and needs. She articulated that "My math probably was the hardest, that was probably the worse but I just didn't want to do it." Another accommodation utilized all through middle and high school was the use of an organizer, but this also did not translate to college.

Perhaps her increasing maturity or the intervention of the vocational rehabilitation coach assisted her, because, by the third interview, Jillian was able to articulate the beginnings of self-understanding: "I always knew I was different from other people, just because I could tell by the way I interact with them." When asked if knowing about her disability helped her, she responded, "What it means to me, basically, it helps explain why I have trouble connecting to people. I think different than other people." This statement represents a prodigious move forward for Jillian in her ability to self-advocate. It signals that she is finally able to recognize who she is and appreciates her unique strengths and may be ready to initiate the process of self-disclosure and advocacy.

Socialization

Difficulty interpreting social skills is a common characteristic for many individuals with ASD and this was certainly true for Jillian. While in middle school, she would often hide in the restroom if she felt overwhelmed. Other maladaptive behaviors included laughing

too loudly and at inappropriate times, withdrawal, unawareness of personal space, inappropriate smiling, and incongruous eye contact. Freedman (2010) stated that although individuals with ASD seem to choose being alone, they often report that they are lonely. Jillian exemplified this as she stated her preferred social activity is playing video games, reading, or staying home and playing with her dogs. Although she never stated that she was lonely, it seemed as though she did not know how to make friends or how to reach out to others. When asked whether she participated in any social activities in college, she responded that she would not attend any event unless her friend came with her. When asked why this was so, she responded, "I think the more people there are, the more scared and nervous I get. I just sit there and am quiet. I don't talk to anybody. I just sit there." As Freedman posited, it is especially difficult for these individuals to overcome social challenges after years of rejection, loneliness, and isolation. As with many individuals with ASD, they are accurately aware of their awkward social interactions. This is not something the person can easily change, but there are specific skills that personnel in higher education can do to assist the person with ASD. These will be discussed in a later section.

With direct instruction, this skill-set can be internalized. The vocational rehabilitation coach provided Jillian with explicit on–the-job-training for occupational socialization, and the difference was remarkable. Her manager and co-workers learned code words to assist her in more socially acceptable behavior: "Where before they would yell, 'Jill, SHUT UP!' They would get mad and I would think, 'I won't talk.' Now they say, 'Okay, calm down…lower the level a little bit.' I guess she explained it and they understood it."

Strengths

During every interview, I kept a field record of impressions, notes, and thoughts. It was amazing to me how much Jillian had grown during the years since we first met. These small steps were encouraging her to be a strong, independent young woman realizing her dream of happiness in adulthood. Some specific instances during the interviews succinctly demonstrate strengths in higher education, occupational success, and social skills.

Shortly after her work with the vocational rehabilitation servic-

es, Jillian began to develop more confidence and an elevated sense of self-esteem. Between the second and third interview, she started working at a job she really enjoyed. The difference in her success between this job and other short-lived ones was that a vocational rehabilitation coach taught both her and her manager the various nuances of ASD. This transformation was clearly demonstrated in her words about her life changes since the previous interview. She said, "I think I'm braver." She also gained the self-awareness to identify that although she was gaining confidence, it needed to translate to advocating for her needs: "I was braver in my classes, but I wasn't as brave to ask for help. I should have asked for more help, especially when I started having trouble. I thought, 'well, I think I'll be okay'…and I wasn't." Another accommodation she established in college was taking a friend with her to talk to a professor, which gave her the confidence she needed to overcome her fears: "I still need my big security teddy bear." Additional signs of self-awareness for Jillian included her disclosure to her current employer that she had difficulty with money, and allowing the vocational rehabilitation coach to come to her job to train her management and peers about her disability: "After she talked to them, I noticed they, they didn't treat me different, but they would step in and ask if I needed help." This allowed her the safety of making mistakes without withdrawing, and to develop confidence in herself: "I started changing because I started asking for help more." Growing confidence equated with deeper self-actualization: "I'm not ashamed of my disability, but I don't want to broadcast it because I am afraid that people will treat me different. I'm different, but I'm NOT! I'm the same kind of person as you." Finally, she was able to envision a bright future: "I think I can go away and live by myself and be just fine. I might get a little homesick, but I think I'll be okay."

Best Practices, Strategies, and Supports

Students with ASD face enormous challenges as they move from the highly structured parent/teacher supported environment of high school into the adult world. Here they encounter the daunting task of having to advocate for themselves, seek assistance from many agencies, and navigate an overwhelming situation, often with limited communication and social skills. Themes from this study examined through an SDT lens are: competence/understanding disability, relat-

edness/socialization, and autonomy.

Competence

If individuals with disabilities are unable to understand their differences or to identify their strengths and needs, they will never be able to adequately self-advocate. MacLeod and Green (2009) observed that, like Jillian, many individuals with high-functioning ASD are identified later in life. Indeed, Jillian was not able to correctly identify her disability until she was 24 years old. Higbee et al. (2010) offered several reasons for the reticence of individuals to disclose their disability, but the consequences for secrecy are steep. Although she never explicitly stated as such, Jillian could tell that some of her professors at the college considered her as different, defective: "Some teachers, they don't mean to, but they are just so used to what they are teaching and it's so obvious to them and so their answers just kind of come out like they think you are stupid." Sadly, she talked of several instructors who made her feel alienated: "Sometimes, when I would ask questions, just the way… his voice… I guess, would kind of make me feel stupid." Referred to by Higbee et al. (2010) as "marginalization of language" (p. 10), this describes the oppressive ways faculty use demeaning language in their classroom, which works to segregate those with learning differences. For the vast majority of university professors, this is unintentional, but for individuals with ASD the ability self-identify themselves as having a difference may be hindered by many factors: fear of being isolated, embarrassment, perceived lack of support, communication difficulties, or low self-esteem, among others. Brockelman, Chadsey, and Loeb (2006) discovered that college students often reported negative reactions from their professors when they disclosed their disability. Their research indicated that faculty members were interested in working with students with disabilities, but many professors revealed they were not knowledgeable in how to provide accommodations or differentiate curricula.

Increasing self-awareness

Wehmeyer et al., (2007) outlined the importance of teaching students with disabilities self-determination skills. Students who are taught self-determination techniques have more positive outcomes in their adult lives than those students who are not taught these skills.

This process should begin as early in the educational process as possible. For faculty and staff in higher education it is critical to be aware of the characteristics of individuals with high-functioning autism due to these individuals' reluctance to disclose their disability. Other tips include:

- Wolf et al. (2009) recommended that all university personnel be trained to recognize certain typical characteristics of ASD, such as poor eye contact, impulsivity, or being a very literal thinker.
- Camarena and Sarigiani (2009) suggested that faculty use extended time or a flexible time schedule for completion of assignments.
- Faculty should also allow flexibility in taking tests, such as breaking a test into smaller units or allowing the student to choose which sections of a test to complete. It is important to note that faculty do not need to change the overall rigor of their courses, but should be aware of students' individual strengths and needs (Wolf et al., 2009).
- Preference assessments can be given to the entire class so all learners are aware of their specific learning styles, i.e. tactile, visual, auditory, etc. This is a great first day assignment that can also assist in peer interactions and may assist individuals reluctant to disclose their disability the safety to talk about their academic strengths and weaknesses. This informal tool could contain such questions as: Does the student learn best with a lecture, small group, or hands-on activity?
- Frequent breaks are necessary for individuals with ASD. This gives the individual an opportunity for movement, which can help with restlessness, but also offers a chance to process all of the sensory input that has occurred in the classroom.

Relatedness

Emotional and social functioning are behaviors not easily acquired by individuals with ASD. Deshler and Schumaker (2006) suggested three areas of concentration for social skills acquisition: teaching positive behavior supports, instruction in specific social

skills for employment, and self-advocacy and advocacy training. Taylor and Seltzer (2011) said that individuals with both ASD and secondary psychiatric disorders, such as Jillian, had limited independence and diminished social functioning in adulthood compared to those with only an ASD identification. Additional post-high school supports for these students are critically needed to assist them in their transition. This was true for Jillian, as she realized occupational success only with the help of the Vocational Rehabilitation Services (VRS) job coach. Since many people who need VRS are not eligible, or are placed on a lengthy waiting list for services, skills for transition to adult life must also be explicitly addressed in the IEP. Students need to be aware of the laws regarding their rights to accommodations and modification. The next step is to understand what unique accommodations work for their strengths and weaknesses, coupled with self-advocacy behaviors.

Increasing relatedness

Students with disabilities should also be taught to understand the unique accommodations necessary to address individual strengths and needs.

- VanBergeijk, Klin, and Volkmar (2008) suggested the use of a personal digital assistant (PDA) for a visual representation of an organizer.
- Audible alarms, hard copies of class notes or lecture slides, breaking down large assignments into more manageable chunks, and assistance with abstract terms are also helpful for many students with ASD (Wehmeyer et al., 2007).
- These evidence-based accommodations can easily be called upon in numerous situations in which a student might find him or herself. In the high-stress world of higher education, it can be especially critical that institutions construct a structured environment for ASD students in order to counterbalance the social difficulties they encounter.

Faculty awareness of the unique needs of individuals with ASD is crucial to their success in college. Many difficulties in the classroom may be the result of misinterpretation of ASD characteristics. For example, these individuals have limited response to facial cues. This may be construed as rudeness or disinterest by the professor (Wolf

et al. 2009). Most universities do not provide training to faculty and staff about dealing with students with learning differences. Some ways to assist them may be through the dissemination of fact sheets or through small workshops from the university Office of Disability Services (ODS).

- A Specific strategy for personnel in higher education is to avoid the use of absolute terms like always or never (Wolf et al. 2009).
- Remember that individuals with ASD may be reluctant to ask for clarification, so it may be helpful to reinforce difficult concepts in multiple ways, i.e., tactile, visual, auditory, etc. It is also supportive to ask students to reiterate ideas in their own words.
- Higher education personnel can also assure that they maintain clear directives and rules and provide plenty of advance notice if there is any change in the syllabi or coursework.
- Break the class time into small dyads or triads for the students to peer teach what has just been taught. Smaller groups may be more comfortable for individuals with ASD to ask for clarification on topics and also serve to encourage social interaction. It is critical for the professor to be aware of any student who appears to be left out of these groups and look for ways to facilitate interaction.
- Wolf et al. (2009) suggest that returned classwork be edited with listed or numbered changes to provide a guideline for students.
- For large classes, the professor can utilize a clicker system to periodically assess student understanding of course lecture.
- University personnel should avoid the use of idioms, sarcasm, and innuendos, as these abstractions may be difficult to understand. These simple accommodations are of benefit to all of the learners at the university level.

Autonomy

As echoed in much of the literature, Jillian rarely disclosed her disability at community college. During her matriculation, she

gave conflicting answers to questions concerning the need for modifications. At the time of her first interview, she had been attending summer classes. She claimed she did not need to disclose her disability because it was unnecessary: "I told them I didn't need it for the summer but I am getting some for the fall because I am taking a couple of hard classes." By the end of her first full year of studies, she recognized that the classes were becoming more difficult and that she did need help. In the second interview, when she was asked if she identified her disability to college officials, she said, "Um…I think I did. I'm not positive, but I think I did." This inchoate comprehension of her needs for modifications was echoed through all three interviews. During early interviews, she claimed to not need any modifications, but later she averred, "So it was kinda my fault that I failed… because I really didn't use the services that I could have." When asked if her mother assisted her in finding the correct office, she replied, "I was going to talk with my mom, and it totally slipped my mind." Perhaps she was afraid of showing her parents that she was not mature enough to handle the nuances of college. This is consistent with research that indicates students with disabilities in higher education may face segregation "and experience both overt and more subtle forms of discrimination" (Higbee et al. 2010, p. 8) due to the inability to navigate the maze of paperwork, identify appropriate personnel, and self-disclose their disabilities and needs. The majority of university syllabi contain information on how to contact ODS, but this may not be enough for some individuals with disabilities. Practical and contextual preparation during high school was critically needed for her to navigate the tides of college life. Staff in higher education can also help by using scripts and teaching strategies with all of their students as a way to promote independence.

Jillian also talked about having feelings of guilt during the rare times she reached out for help in college. When questioned whether she ever attended the office hours of her math professor for assistance, she stated, "I always felt guilty going to him because I was taking up all of his office hours and he had other students. I did go a couple of times. I would see people sitting outside and I would feel guilty." One concrete strategy that would have helped Jillian would be the use of checklists and questionnaires that evaluate the students'

level of stress and suggest possible accommodations to ameliorate the situation (Wolf et al. 2009). Kochhar-Bryant, Bassett, and Webb (2009) also discuss specific steps that parents and high school educators can take to assist students in the transition from high school to the adult world. These activities are delineated for each high school grade level to promote autonomy and independence.

Increasing autonomy

- It is all too easy to assume that everyone knows how to take good lecture notes, how to organize classwork, and how to study, but this may not be true. Wolf et al. (2009) recommend a three column note strategy: one column for vocabulary, one for information, and one for questions (p. 49). It may be helpful for the professor to make a copy of the three column note-taking page and hand it out to all students, or to explicitly walk through how to take relevant notes in class.
- Scenarios and explicit instruction of strategies should be incorporated as part of class support for all students.
- Higher education tutoring programs can also implement specific programs that teach students effective note-taking skills.
- If the individual has disclosed their disability, it is imperative for all faculty and support staff to work closely with the ODS to assure that all needed accommodations and modifications are being employed.

Conclusion

Stakeholders in higher education, including policy makers, faculty, and staff, may need to implement a design of learning that is welcoming and supportive of students of all abilities. Parents and students will also benefit from the findings of this study in their preparation for higher education. By creating more contextual accommodations for students with ASD, society ultimately benefits as they are better able to reach their full potential.

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