

Successful Assessments for Individuals with Autism Spectrum Disorder

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Abstract

Individuals with Autism Spectrum Disorder (ASD) have a difficult time gaining employment. In 2003, The National Longitudinal Study-2 (Cameto, Marder, Wagner, & Cardoso) found that only 15% of people with ASD gain employment. In order to increase the number of individuals with ASD who gain employment, the evaluation process must change. Prior to evaluating people with ASD, service providers must be knowledgeable of ASD. The major deficit areas of people with ASD are communication, behavior, and socialization; therefore, vocational evaluations must address these three areas. After the evaluation process has occurred, professional must begin to find the "niche" /job that best suites the individual.

Successful Assessments for Individuals with Autism Spectrum Disorder

Adolescents and adults with Autism Spectrum Disorder (ASD) are facing high unemployment. Individuals with disabilities are less likely to gain employment than their typical peers (Wagner & Blackorby, 1996). In 2003, The National Longitudinal Study-2 (Cameto, Marder, Wagner, & Cardoso) results indicated that only 15% of all individuals with ASD gain employment. The Longitudinal study focused on individuals with disabilities who were 13 to 16 years of age on December 1, 2000. In Alabama, of all the individuals with ASD who met the same age criterion as the Longitudinal study and who applied for Vocational Rehabilitation Services, only 4% gained employment. The number of individuals with ASD who do not gain employment will only increase as more children with ASD are diagnosed and reach the age of employment.

The population of individuals with ASD is increasing. Numerous references have reported that the rate of autism is increasing dramatically. In 1992, The Autism Society of America has reported an increase in the incidence of autism over the past decade as seen in the following: in 1992 incidence of autism was 1 in 10,000 births and in 2005 the incidence of autism increased to 1 in 166 births (<http://www.autism-society.org>). The United States State Department of Education reported a 544% increase in the occurrence of autism from the 2000-01 school year to the 2002-03 school year (www.IDEAdata.org). As recently as March 2007, The Center for Disease

Control and Prevention estimates that ASD affect 1 in 150 births (www.cdc.gov/ncbddd/autism).

With the growing number of individuals with ASD, Vocational Rehabilitation Services (VRS) will begin to see an increase in the number of applicants with ASD. According to Cathy Pratt (2007), service providers must understand ASD and that

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individuals with ASD have varying ability levels. After gaining an understanding of the disability, service providers will understand that there is no one program or set of services that will fit everyone with ASD. In order to provide appropriate services, service providers must learn about each individual.

Autism Spectrum Disorder

In 2006, autism is now called Autism Spectrum Disorder (ASD) to reflect the vast differences that each individual with autism demonstrates. Typically, individuals with ASD have deficits in communication, socialization, and behavior (ASA, 2006). These deficits can occur in any combination from mild to severe. The American Psychiatric Association (2000) in the Diagnostic and Statistical Manual of Mental Disorders: Fourth Edition-Text Revision (DSM-IV-TR), which is consulted by professionals when diagnosing individuals with ASD, categorizes ASD under the broader heading of Pervasive Developmental Disorder (PDD). Because of the delayed development in individuals with PDD, they have varying characteristics. These characteristics, according to the DSM-IV-TR, are classified into five developmental disorders: Autism Disorder, Rhetts's Disorder, Childhood Disintegrative Disorder, Asperger's Disorder, and Pervasive Developmental Disorder Not Otherwise Specified (PDD-NOS). Each category is discussed in the following section.

Categories of Pervasive Developmental Disorders Autism Disorder

In order to receive a diagnosis of Autism Disorder, an individual must display a predetermined number of characteristics in three areas: social interaction, communication, and behavior (American Psychiatric Association, 2000). With regard to social interaction, an individual diagnosed with autism must demonstrate two or more of

the following characteristics: limited eye contact, poor facial expressions, unusual body posturing and gestures, lack of social relationships, and lack of emotional and social reciprocal interactions. In more general terms, the individual might not look at people, might have limited, if any, facial expressions, might prefer to be isolated, might hold arms or hands in unusual positions, and might not display the ability to share with someone.

With regard to communication, an individual must demonstrate one or more of the following: lack of and/or delayed verbal communication with no gesturing, inability to initiate or have reciprocal conversation, echolalia or stereotyped language, and lack of make-believe play or imagination. Examples of these communication characteristics are failure to point to a desired object or to start a conversation, repeating certain words and/or phrases, and lacking pretend play.

With regard to behavior, an individual must demonstrate at least one of these characteristics: repetitive, stereotyped behavior, interest, and activities, i.e., preoccupation with restricted and stereotyped patterns of interest that can either be great in intensity or are abnormal. Examples of these behaviors include the individual always having to sit in the same place, insistence on wearing a certain clothing item or tantrums if not allowed, and persistent fascination with a certain part of an item such as a picture in a book. In addition, to receive a diagnosis of Autism Disorder, the individual must have one or more delays before he or she reaches his/her third birthday (American Psychiatric Association, 2000).

Rhett's Disorder

An individual who has received a diagnosis of Rhett's Disorder must have had normal prenatal and postnatal development, normal psychomotor development in the first five months of life, and a normal head circumference at birth. In other words, there could not have been an apparent physical problem with the individual prior to five months of age. Between the ages of five and 48 months, an individual with Rhett's disorder will begin to have a decrease in head circumference. He or she will lose acquired hand skills between the ages of five and 30 months and will lack coordination in gait and/or body movements. The

individual will lose socialization skills and have severe impairments of expressive and receptive language. Lastly, the individual will demonstrate psychomotor retardation, e.g. motor tics, loss of ability or inability of the following skills: sucking, drinking, and turning from side-to-side (American Psychiatric Association, 2000).

Childhood Disintegrative Disorder

Individuals with a diagnosis of Childhood Disintegrative Disorder (CDD) will have had a typical, normal development for the first two years of life in the areas of communication, social relationships, play, and adaptive behavior. Between the ages of two and ten years, individuals with Childhood Disintegrative Disorder have significant losses in the following skills: expressive or receptive language, social skills or adaptive behavior, bowel or bladder control, play, and motor skills. In general terms, these individuals can lose their ability to communicate and to socialize with family and friends. Those with CDD will typically lose adaptive skills such as dressing, brushing teeth, and going from point A to point B. Also negatively affected will be motor skills such as walking, running, throwing, and picking up items. These individuals will begin to have bathroom accidents caused by loss of bladder control and, given impaired motor skills, they lose the ability to play. These children develop normally for two years; but, over the next several years they lose the ability to function normally like their typical peers (American Psychiatric Association, 2000).

Asperger's Disorder

To receive a diagnosis of Asperger's Disorder, an individual must have impairments in socialization and behavior. An individual must have two of the following symptoms: (a) limited and/or impairments in eye contact, facial expressions, body posturing, and gestures, (b) lack of peer relationships, (c) lack of spontaneous sharing of feelings, interests, or achievements with others and lack of reciprocal socialization and emotions with others. In addition, individuals with Asperger's Disorder have one or more symptoms of restricted repetitive and/or stereotyped behaviors, interest, and activities (i.e., preoccupation with interests that are abnormal or high intensity), strict adherence to routines or rituals that do not

serve a function, repetitive and stereotyped mannerisms, and insistent preoccupation with parts of objects. Individuals with Asperger's Disorder also have significant impairments in social, occupational, or other areas of functioning. These individuals are often overlooked because they do not have significant delays in language, cognitive development, self-help skills, or adaptive behavior, and they are naturally curious about their environment (American Psychiatric Association, 2000).

Pervasive Developmental Disorder Not Otherwise Specified (PDD-NOS)

Individuals with PDD-NOS have severe impairments in reciprocal socialization associated with impairments in either verbal or nonverbal communication or stereotyped behavior, interests, and activities. Under this diagnosis, individuals do not meet the requirements of Pervasive Developmental Disorder; but, this can include "atypical autism," the presentation of symptoms that do not meet the criteria of autistic disorder due to age of onset and/or differing symptoms (American Psychiatric Association, 2000).

Research on Individuals with ASD and Employment

Research regarding the employment of people with ASD typically has focused falls into the following three areas, (1) characteristics of individuals with ASD, (2) interventions and/or strategies used, and (3) practices of agencies that work with individuals with ASD. Several studies have focused on IQ and/or the varying levels of IQ to determine whether IQ affects employment (Howlin, Goode, Hutton, & Rutter, 2004; Koegh, Bernheimer, & Guthrie, 2004; and Szatmari, Bartolucci, Bremner, & Bond, 1989). Other studies have focused on whether support and/or the amount of support affected the employment of individual with ASD (Mawhood & Howlin, 1999; Schaller & Yang, 2005). Other researchers have focused on the differences between sheltered, supported, and competitive employment (Schaller & Yang, 2005; Garcia-Villamizar, Ross, and Wehman, 2000; Garcia-Villamizar, Wehman, and Navarro, 2002).

Several pieces of information can be ascertained from the above mentioned studies. First, individuals with higher IQ levels

have better employment outcomes; however, individuals with lower IQ levels can gain and maintain employment. Next, individuals with ASD are more likely to gain and maintain employment if they have support. Finally, individuals with ASD have higher Quality of Life assessment scores when they are competitively employed as opposed to working in sheltered workshops.

Other avenues of research have focused on the practices of Vocational Rehabilitation Services (VRS). For almost two decades, researchers have begun to focus on the traditional practices and beliefs of the evaluation process of individuals with significant disabilities (Sax & Thoma, 2002). In 1990, Rogan and Hagner examined how the vocational evaluation process had been used as a screening tool that either allowed or rejected people regardless of whether they could benefit from VRS. This resulted in the individuals with significant disabilities not receiving VRS and ultimately not gaining employment.

In addition, the traditional vocational assessments and/or evaluation have been used to screen people in determining whether they are job ready or not. Those that considered job ready, are more likely to gain competitive employment. However, for those individuals who are not considered job ready, typically end up in sheltered workshops (Rogan & Haner, 1990). At a glance, many individuals with ASD will appear to be not ready for employment.

At first glance or during a "situation"(al) assessment, many individuals with ASD can appear to be someone who might not benefit from VRS and/or not job ready. Individuals with ASD, by the very nature of the disability, have deficits in communication, socialization, and behavior; therefore, vocational assessments and/or evaluations should include information concerning the individuals' levels and/or ability to function in the areas of communication, socialization, and behavior with and without supports. However, if people with ASD, are evaluated by traditional vocational evaluations, they will continue to be seen as non-employable. In order to increase the number of individuals with ASD gaining employment, they must be evaluated through non-traditional means.

Changing Traditional Vocational Evaluations for individuals with ASD

In order to increase the number of people with ASD who gain employment, Service Providers need to "think outside the box" (Pratt, 2007). Many times individuals with ASD are determined as non-employable if assessed by the traditional evaluations (i.e., a checklist or scale measuring abilities and skills). Pratt (2007) discusses how services and support(s) are often based and/or provided on an availability bases for programs and services already in existence. Thinking outside of the box, would require services providers to begin thinking of services and/or support in situations, programs, and/or environments that are not already established, but that fit the needs of the individuals.

Pratt (2007) also discusses how the traditional vocational evaluation/assessment process is not capable of assessing the unique skills and abilities of individuals with ASD. Here again Service Providers must begin to think outside of the box. The first step in evaluating this population is collecting multiple means of information (e.g. interviews from multiple people who know and understand the individual, observations in multiple settings, and if possible, information collected from the individual). By interviewing the individual, family, teachers, and others who know the individual, service providers will begin to understand the unique skills and abilities of the individual. Remember that communication is an area that is affected; however, atypical communication does not mean that the individual is not employable.

The second step in evaluating individuals with ASD requires multiple observations in settings that are familiar to the individual. People with ASD, have difficulty with transitioning to new and unfamiliar settings and especially with new and unfamiliar people; therefore, the standard situational assessment is a disaster waiting to happen. As a high school teacher that taught individuals with significant disabilities, including ASD, I invited Vocational Rehabilitation (VR) personnel to observe my students when they were at work. By law, students with ASD begin receiving transitional services which is supposed to include job exploration beginning no later than their 16th birthday. The majority of time, after the VR personnel would observe

the student at work, he/she would indicate that they were surprised that the student was not only working but doing a good job. In reality, changes in the evaluation process will also involve changing preconceived beliefs about people with ASD.

"Put on your detective hat" is a phrase that I used when working with individuals with ASD. It is imperative to know the individual's likes, dislikes, strengths, and weaknesses from multiple points of view including the individual (i.e., at least three different people), and know what is necessary for the individual to be successful in terms of communication. Once service providers understand the individual, they can begin to find the "niche" or type of job that best suits the individual. In terms of employment for individuals without disabilities, the majority of people find their niche. So, why do we as professionals not find the niche for people with ASD?

Non-Traditional Evaluations for Individuals with ASD

Because individuals with ASD have varying deficits in communication, socialization, and behavior traditional vocational evaluations leave people with ASD unemployed. Pratt (2007) stated that people with ASD "require a creative and careful assessment process". The first place to begin is communication. The evaluator must as-

ness how the individual communicates. Table 1 provides questions that can assist service providers regarding communication.

Table 1 Evaluating Communication

1. Communication level without assistance

a. No communication b. One-three words c. limited/ specific d. Functional e. Fluent

2. Communication level with assistance (e.g., visual strategies, PECS, etc.)

a. No communication b. One-three words c. limited/ specific d. Functional e. Fluent

If a, b, or c, please explain how the individual expresses needs. Does he/she talk but is unable to articulate clearly? Does the individual use any type of technology to communicate?

3. Does the amount or quality of communication change in a new setting or with certain people?

Questions 1 and 2 have an answer choice "limited/specific." This means that the individual is verbal but typically all communication revolves around limited or specific topics (e.g. trains, weather, oceans, and video games). In terms of type of tech-

nology to communicate, individuals with ASD often use Picture Exchange Communication System (PECS) or computerized devices. It is crucial to remember that the level of communication does not necessarily reflect the IQ and/or processing skills; therefore, many non-verbal individuals can communicate effectively with technology.

In terms of socialization, service providers must evaluate several facets. Socialization on the job site includes interactions with people and environments. In addition, ability of a person with ASD to ask for assistance can vary in different settings and with different people; therefore, I include self-help skills in the area of socialization.

Table 2 provides several questions that should be asked as part of the evaluation process.

Table 2 Evaluating Socialization

1. How does the individual react to new people? Please explain:
2. How does the individual react to a new situation? Please explain:
3. How does the individual react to a new environment? Please explain:
4. How does individual ask for help? Please give example.
5. Is individual capable of saying there is a problem? Please explain:
6. Is individual capable of saying "I do not know how to do _____". Please explain.
7. Does the individual prefer working with men or women?

The questions concerning socialization are secondary to the communication questions because the evaluator must understand how the individual expresses himself. In terms of question 7, individuals often respond differently to males and females. From years of experience, I learned that some individuals react differently with

males or females. Sadly, in most schools if there is a situation that involves inappropriate behavior, typically the principal or coach is called; therefore, many individuals associate males with trouble.

The third area that is greatly affected for individuals with ASD is behavior. For service providers it is important to understand

that inappropriate behavior typically occurs when the individual cannot communicate and/or in stressful situations. Questions that need to be considered by service providers regarding behavior can be found in table 3.

Table 3 Questions regarding Behavior

1. At School Setting
a. poor b. below average c. average d. above average e. excellent
2. At Work Setting
a. poor b. below average c. average d. above average e. excellent
3. In a new Setting
a. poor b. below average c. average d. above average e. excellent
4. If average or above, how long has behavior been at that level?
5. What actions were taken to achieve level of behavior?
6. If below average, what has been implemented to assist behavior?
7. If individual has behavior outburst, how many per week?
8. Please describe outburst (especially what precedes it?)
9. If individual has outburst what typically calms him/her down?
10. Does the individual express any repetitive behaviors that need to be addressed or that could hinder/help him/her in the workplace?
11. Are any of the individual's behaviors destructive to himself/herself?
12. How does the individual respond to instructions?

It is important for service providers to understand that all behaviors occur for a reason (e.g. attention and escape). If inappropriate behaviors occur, services providers and others must put on their "detective hat" in order to figure out why the behavior is occurring. Only after figuring out why

the behavior and addressing the reason of the behavior can the behavior either be changed/shaped or extinguished. For individuals with ASD, inappropriate behaviors often occur when the individual is not able to communicate or when he/she is anxious. In addition to the three areas that are

directly related to the diagnosis of ASD (i.e., communication, socialization, and behavior) sensory issues can have a significant impact on the employment of individuals with ASD. Table 4 contains questions that are related to sensory issues that must be addressed prior to successful employment.

Table 5 Evaluating Sensory Issues

If individual has hypo/hyper sensory issues/concerns, please describe below and provide examples. Please understand that gloves, earphones, loud noises, hair nets, masks, pins on uniforms, types of shoes, etc. are factors in an individual's performance.

Visual: _____

Auditory: _____

Tactile: _____

Smell: _____

Taste: _____

Individuals with ASD, often can be either hypo or hyper sensitive to stimuli that are in the environment. Sensory issues can cause problems that appear as behavioral problems. For example, if an individual has is hypersensitive to smells, perfume factories, garbage jobs, humane shelters, and some restaurants would not be appropriate. However, working in an environment that has

fresh air (e.g., nurseries, parks, businesses, and certain restaurants might be appropriate). Service providers must know the individuals, (i.e. put on the detective hat) and determine what environment will allow the individual to be successful on the job.

Lastly, in terms of evaluating individuals with ASD for employment, service profes-

sionals should consider the goals/choices of the individual in terms of the employment. Again, service providers must begin thinking outside of the box. Table 5 contains questions that should be considered in terms of the goals of the individual and could be asked of the family members of the individual.

Table 5 Questions concerning Employment Goals

What do you want to do after you exit high school? _____

What type of job do you want? _____

What do you like to do in your free time? _____

What are your favorite places to go to? _____

Do you have any special talents/skills? _____

Do you prefer to be outside or inside? _____

What environments do you prefer? _____

Being creative is the key for finding the employment niche for individuals with ASD. People with ASD are great employees. Typically, they are not late for work, do not like being absent from work, and do not become involved in the gossipy, side-taking, water cooler socialization. It is also important to remember that individuals whether they have a disability or not

find self-worth in employment. We are all important to society and everyone can gain employment with the appropriate support.

Stop and ask yourself, why are you in the profession that you are in? Is it because you were forced, need money, want to help others, or because it is your niche? Typically, we end up in a profession that somehow

fits our niche. Then why do we forget that finding a niche is an important part of employment? Employment can occur for all people regardless of whether they have a disability or not. In order for individuals with ASD to gain employment, service providers need to begin changing how people with ASD are evaluated.

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