Report 4: Sam, Age 31

Sam is a young man who came to see me, never having been diagnosed with autism. His parents' desire in seeking an evaluation was for Sam to be able to receive ongoing services from the Regional Center, which would help him in obtaining steady employment and the ability to live outside of the home, without his parents' continued and consistent assistance.

Because of the need to provide a very strong case for Sam having a diagnosis of autism, he was administered the ADOS and the parents were interviewed utilizing both the Vineland Adaptive Behavior Scales Second Edition (VABS II) and the ADI-R, in addition to my standard, in-depth interview.

Consultation Report of the Department of Behavioral Medicine

ASD Diagnostic Service

Reason for Consultation
An evaluation was requested to determine if Sam has an ASD.

Procedures Administered
The ADOS module 4, the VABS-II, and the ADI-R along with a clinical interview with the parents and the patient were conducted.

Consultation History

In elementary school, Sam was uncomfortable being around peers, as he felt like an outsider and did not know what to do when he was around others. While Sam did have a few friends in the neighborhood around this time, he would only play with them for a short period of time before wanting to be alone.

In middle school, Sam enjoyed archery and was progressing well. When he was informed that continued archery lessons would include him teaching other students, Sam suddenly dropped the sport and never took it up again. While in middle school, Sam would spend his free time as well as mealtimes alone, as he preferred to be in the library, where he would not stand out. Sam felt very awkward in high school and did not have any peers whom he would see outside of school. In high school, Sam played golf and ran marathons but never developed any friendship playing those sports. It was around this time that Sam started to become more sullen and withdrawn. His parents noted that he was frustrated by his difficulties, both within and outside of school.

At the age of 16, Sam underwent a speech and language evaluation through the Clovis Unified School District because of his difficulty in processing spoken information. Sam's receptive language was found to be two standard deviations above the mean, while he was noted to have difficulty with pragmatics and the ability to carry on a back-and-forth conversation.

In 1995, Sam graduated from high school with relatively poor grades. He then enrolled at a local community college before dropping out in his first year. In the spring of 1996, Sam started working at Trader Joe's Supermarket. While there, Sam was unable to work the cash register and was uncomfortable interacting with customers. Sam was also unable to develop any true relationship with his coworkers and never met any of them outside of work. It was around this time that Sam had a blind date with the sister of a fellow employee, which reportedly did not go well. That was Sam's first and last date.

One year later, Sam was briefly employed at a local department store, where his significant interpersonal difficulties continued. One of Sam's pleasures at work was to watch the sink fill up with water before letting it drain. There were reportedly several instances when Sam would become distracted and have to clean up the mess when the sink overflowed. When Sam began jumping up and down on packing material in an attempt to make his coworkers laugh, the manager fired him on the spot, walked him to his car, and told him never to come back.

From June 1997, for a few months, Sam worked part time at a local pet store, taking care of the animals. After his supervisor left the company and Sam began working alone, he became extremely disorganized, and his high level of anxiety prevented him from working effectively. Sam's ability to work decreased dramatically, and he began arriving for work several hours late. After months of this behavior, Sam's employer called his parents to ask if their son "had any mental disability."

In the last few years of his employment, Sam required between 10 and 12 hours a day to complete four hours of work. Sam was not paid for any time he spent at work after the initial four hours. Sam was soon overwhelmed by what he viewed as an "unmanageable" amount of work and being over-tasked by his employer. It was not until Sam told his therapist how overwhelmed he was that he finally decided to quit his job.

Sam is currently unemployed and continues to live with his parents. The parents believe Sam is very self-conscious and overly sensitive to criticism. Sam was noted to be uncomfortable being himself around others and feels he needs to be careful about what he says.

A few years ago, Sam underwent a psychoeducational assessment to assist him with his career planning. The evaluation found Sam to have a verbal IQ score of 115 and a performance IQ of 84. This 31-point verbal–performance split is highly unusual and clinically significant. This type of nonverbal learning disability is quite common among individuals on the autism spectrum.

The assessor went on to note that Sam has a very literal interpretation of spoken language and "slow or no response to puns, idioms, and sarcasm. Social pragmatic difficulties were notable for deficits in nonverbal language, including rare use of gestures, body movement or facial expression to convey ideas, and little change in voice tone or quality." Sam was also noted to lack friends and has never had a best friend. It was reported that Sam wants to have friends and to learn how to interact with others his age. In the conclusion of the report, it was noted, "Sam is depressed with his inability to make friends in spite of the desire to do so. He is not yet able to live independently."

Sam enjoys golf and has done so for approximately 10 years. In all that time, Sam has not made any friends. He does not like to participate in team sports, as he does not like to assert himself. Sam now spends a great deal of time watching television and doing chores around the house. In fact, Sam spends an inordinate amount of time engaging in typical household activities. The parents noted that cleaning his dishes and putting them in the dishwasher, something which would take them less than a minute to do, requires 10–20 times as long for Sam, as he will don his gloves and undertake a meticulous routine that cannot be deviated from. There have been times when Sam would not go out of the house, as he needed to spend more than an hour organizing his clothes or going through every item in the refrigerator to check the expiration date.

In the recent past, Sam has been attending a support group for individuals with autism and Asperger's disorder, led by two graduate students. Sam has struggled for so long with his insecurities and inability to understand what to do in various situations that he is overwhelmed by a sense of low self-esteem and social adjustments difficulties. There have also been instances in the past when Sam would become frustrated and punch holes in walls and doors.

It was further noted that Sam "barely understands the basics of income, money management, and expenditures." When he was working, Sam would typically toss his paycheck into a drawer and forget about it. It was only after his parents pestered him that Sam would make a deposit. There were also times when Sam would deposit as many as 10 checks at once. Sam typically has no idea how much money he has in the bank, nor how to pay his bills.

Prenatal and Perinatal History
Sam was born healthy and on time. The mother did not note any problem or complication with her pregnancy.

Medical History
As a young child, Sam was in the hospital frequently. As a teenager and now as an adult, Sam has been very healthy. For about the past year, Sam has been taking medication to help with his depression.

Developmental History
At the age of two, Sam underwent a developmental evaluation. His motor and language skills were delayed by 10 months. His adaptive skills were delayed by eight months, and his personal/social skills were delayed by 13 months. Sam was toilet trained at the age of five.

Behavioral Observations
The vast majority of my evaluation consisted of meeting Sam's parents for the administration of the Vineland, the ADI-R, and the clinical interview. During my two-hour meeting with Sam, his eye contact was quite inconsistent, and he often spoke in a very flat and monotone voice. A high level of anxiety was also noted from the very beginning of our meeting. During the ADOS, Sam would often ask me if he was doing all right or if he had done something correctly. Sam would often talk at tremendous lengths while staring at the wall about topics that were only somewhat related to what was being discussed in the evaluation. During our time together, Sam reported, "I have not had a lot of success in my life with neurotypicals."

Assessment Findings and Impressions
Sam has a lifelong history and has been significantly affected by all of the signs of autism, *DSM-IV-TR* code 299.00. He is displaying difficulties in the areas consistent with the disorder, namely, problems with social interaction, communication and stereotyped patterns of behaviors and interests.

Sam has a significant history of socialization difficulties. His eye contact has always been poor, and he rarely responds to or looks at someone when they call his name. This is the case whether it is his parents, other family members, or

strangers trying to get his attention. Sam is also basically unable to understand nonverbal communication and body language. If he is talking incessantly about one of his many topics of interest, he is unable to discern that others are not interested in hearing what he is talking about.

As a young child, Sam was very content to play alone in his room for prolonged periods of time. In fact, Sam has always had difficulty playing appropriately with others. When the mother would set up play dates for Sam in preschool, he would come crying to her that the other children were too loud or were messing up his room. The mother noted that Sam was clearly distressed at having other children in his personal space. As a child, Sam also would not ask to see others and did not want to go over to other people's homes.

Sam typically does not like to watch plays or dramas on television, as he is unable to form any type of emotional connection with the characters or the plot. He also actively avoids interactions with neighbors, although he may call them to see if he could play with their pets. As a child, Sam would not know how to go about meeting people or what to do or say to "break the ice." As a result, Sam began asking people, " Do you like trains?" When his parents informed Sam that this was not an appropriate question, Sam switched to asking them if they like apples, which he continues to do to this day.

In terms of the communication difficulties common among individuals with autism, Sam spoke in a singsong cadence as a child. As he grew older, his facial expression and tone of voice grew flat. Now, Sam speaks in a very flat tone of voice, with no facial expressions, gestures, or body language. Sam has also always been a very black-and-white thinker and has significant difficulty in coping with concepts and answers to questions that do not fit into those categories. The pragmatics of conversation is also an area of difficulty for Sam and is something he rarely does. As Sam does not view "small talk" as genuine, he will not engage in those pleasantries and therefore appears rude or aloof at times. However, there was an instance when Sam was 13 and walked into his sister's room, to chat with her. Unfortunately, it was 2 AM at the time. Sam's understanding of sarcasm, jokes, and idioms is also very limited.

In regard to the stereotyped and repetitive manners common among individuals with autism, Sam has developed very rigid and self-imposed standards. Once this overly elaborate, overly complex, and truly time-consuming routine is put into place, Sam has significant difficulty deviating from it. The parents noted that Sam requires a great deal of "sameness and predictability" and fights against change. For example, Sam is reported to engage in a 90-minute bathroom routine, which cannot be changed or expedited. This typically results in Sam being late for almost every appointment or engagement he has. There have been instances in which Sam has been unable to get out of the house because he is so focused on his to-do list.

Sam is typically unable to make it to appointments on time or get to a store before it closes because of the length of time it takes him to complete a task. Other changes to routines such as making coffee, preparing to drive somewhere, or having houseguests are all activities that can cause Sam significant unease if specific routines are not followed.

When he was younger, Sam was obsessed with traffic lights and the Loch Ness Monster. He would then talk at people about these subjects for prolonged periods of time. Sam also has a history of rocking back and forth as a child. As a young child, Sam never engaged in creative or imaginative play. He would not interact with his brother directly and mainly engaged in parallel play.

Sam is also displaying several signs of a sensory integration disorder, as his parents noted that he does not like loud noises and was terrified of fireworks as a child. He also did not like to be picked up or held and did not want anybody to rub his neck or back.

Autism Diagnostic Interview—Revised (ADI-R)

	Obtained Scores	*Cutoff Scores*
Qualitative impairments in social interaction	26	10
Communication	22	8
Repetitive behaviors and stereotyped patterns	9	3
Abnormality of development evident at or before 36 months	1	1

The ADI-R is a structured, standardized assessment of communication, social interaction, and behavior for individuals where an ASD is suspected. Scores at or above the cutoff indicate a higher likelihood of an ASD.

The following table provides the raw score tallies that were totaled to acquire the obtained score.

Score	**Qualitative Impairments in Reciprocal Social Interaction**
5	1. Sam has a history of inconsistent eye contact and generally would not engage in social smiling as a child. Sam also displayed a markedly limited range of facial expressions as a child.
7	2. While Sam would occasionally play with others as a child, he did not engage in any pretend play. He would rarely approach others and would be unpredictable in his response to other children when they approached him. Sam did enjoy some parallel play with other children but little or no cooperative play. When Sam was in the middle and high schools, he did not have any peer relationships which involved sharing.

6	3. Sam would bring things to others when he was a child, but it was typically restricted to his intense preoccupations, food, or a need for help. Sam would only share items with others as a child when instructed to do so.
8	4. Sam would occasionally place another person's hand on objects or use the other person's hand as if it were a tool. He would rarely offer comfort to others when they were in distress and would infrequently use a combination of eye contact and vocalization to get his needs met. Sam's facial expressions were usually not appropriate to the situation, and he would respond to others in a very limited manner.

Score	**Qualitative Impairments in Communication**
8	1. As a child, Sam made little or no attempt to bring his parents' attention to things that interested him. He also never nodded or shook his head spontaneously. Sam would only inconsistently use gestures.
6	2. As a child, Sam would only spontaneously imitate a limited number of activities his parents would engage in and would only occasionally engage in pretend play. When others would engage in this sort of play, it was typically not reciprocated by Sam.
4	3. Sam would rarely speak to others as a child for purely social reasons. He would typically speak only to get a need met. Sam continues to have tremendous difficulty in maintaining reciprocal conversations.
4	4. Sam has a history of stereotyped utterances and a continued, frequent use of odd questions and statements.

Score	**Repetitive Behaviors and Stereotyped Patterns**
2	1. While Sam does not have a history of unusual preoccupations, he becomes fixated on specific hobbies and interests.
3	2. Sam used to have a tendency to say things in a specific manner and make his parents do the same. These rituals continue to intrude upon family life and cause problems if interrupted. There are also certain compulsions and rituals that Sam continues to engage in, which take up a prolonged period of time and will cause significant intrafamilial conflict if disrupted.
2	3. Sam does not have a history of any hand or finger mannerism but does engage in complex body movements, such as spinning, walking on his tiptoes, and running with an awkward gait.
2	4. As a child, Sam's play was highly stereotyped, as he was more interested in examining a toy than playing with it in the manner in which it was created.

Autism Diagnostic Observation Schedule (ADOS Module 4)

The ADOS is a semi-structured, standardized assessment of communication, social interaction and play for individuals who have been referred because of possible autism or other pervasive developmental disorders. Administration consists of a series of planned social occasions or "presses" in which a behavior

Area	*Obtained Score*	*ADOS Algorithm Cutoff*	
		Autism Spectrum	*Autism*
Communication	4	2	3
Reciprocal social interaction	6	4	6
Stereotyped behaviors and restricted interests	0	*No cutoffs determined*	
Imagination/creativity	2	*No cutoffs determined*	
Communication and social interaction total	10	7	10

of a particular type is likely to occur. Across the session the examiner presents numerous opportunities for the individual being assessed to exhibit behaviors of interest in the diagnostic process. A module chosen to be appropriate to a particular developmental and language level dictates the protocol. At the end of the administration, ratings are completed based on the observation period. The obtained scores are compared with the ADOS cutoff scores to assist in diagnosis. Scores at or above the cutoff indicate a higher likelihood of an ASD.

For this assessment as well, all of the required items from module 4 were administered. Module 4 is appropriate for an adolescent or an adult who has fluent speech. The descriptions provided below involve only those behaviors and clinical impressions that are needed to ascertain the presence of autistic traits.

Language and Communication: Sam's overall level of language was appropriate, but he often spoke in a very monotone and flat voice. Sam did not display any immediate or delayed echolalia during our time together and did not use any stereotyped or idiosyncratic words or phrases. While Sam would spontaneously offer information about his thoughts, feeling, and experiences, he would do so in an excessive, almost-rambling manner in which he provided too much information. Sam would only occasionally ask the examiner about his own thoughts and had difficulty sustaining a reciprocal conversation. Sam did display some descriptive gestures during the ADOS, but they were rather limited in range, and he did not display any empathic or emotional gestures.

Reciprocal Social Interaction: Sam's eye contact during our time together was somewhat appropriate but not always. He would occasionally direct some facial expressions toward the examiner but less so than would be expected. Sam displayed some interest in the examiner and communicated some degree of understanding of others' emotions. While Sam was able to provide the examiner with several examples of insight and some examples of personal responsibility, they were less so than would be expected from someone his age. Sam's social

overtures were slightly unusual, as they would often relate to his own interests, and only minimal attempts were made to include the examiner. While a good rapport was developed between Sam and the examiner, there was minimal reciprocal communication. Although Sam was very verbal throughout our time together, the vast majority of Sam's speech consisted of asking for clarification from the examiner because of his high level of anxiety.

Stereotyped Behaviors/Restricted Interests: Sam did not display any unusual sensory interest or hand or finger mannerism. He did not engage in any self-injurious behaviors, excessive interests in specific topics, or any compulsions or rituals.

Imagination/Creativity: Sam displayed a great deal of difficulty in the areas of the ADOS that required creative or make-believe actions. During the "Create A Story" section, Sam displayed tremendous difficulty coming up with an imaginative story using a few random objects and his creativity.

Other Abnormal Behaviors: Sam displayed some anxiety throughout the assessment, but it did not become extreme enough to cause problems during our time together.

Vineland Adaptive Behavior Scales (Parents as Respondent)[1]

Domain	*Standard Score*	*Adaptive Level*	*Age Equivalent*
Communication Domain	25	Low	
Receptive		Low	2 years 10 months
Expressive		Low	8 years 0 months
Written		Moderately low	12 years 0 months
Daily Living Skills Domain	65	Low	
Personal		Moderately low	16 years 0 months
Domestic		Low	12 years 0 months
Community		Low	15 years 9 months
Socialization Domain	30	Low	
Interpersonal relationships		Low	2 years 10 months
Play and leisure time		Low	5 years 4 months
Coping skills		Low	8 years 6 months
Adaptive Behavior Composite	38	Low	

The information provided by Sam's parents finds him to be functioning below one tenth of the first percentile of people his age in the realms of communication and socialization. Sam was at the first percentile of people his age in the realm

[1] *Vineland Adaptive Behavior Scales, Second Edition (Vineland II).* Copyright © 2005 NCS Pearson, Inc. Reproduced with permission. All rights reserved.

of daily living skills. In terms of Sam's communication skills, he is probably functioning at an elementary school level. In regard to socialization, Sam is probably functioning at the kindergarten or first-grade level. If left to his own devices, Sam would not make any attempts to socialize with others and would spend the majority of his time alone, in his room.

Treatment Plan

Sam clearly meets and exceeds all of the diagnostic criteria for having autism according to *DSM-IV-TR* code 299.00. Sam has a lifelong history of difficulty because of his autism. He is now in significant need of Regional Center services to help him develop the occupational and life skills he requires to become a functioning member of society.

Sam is in need of job coaching to assist him in finding an appropriate vocation in which his autism and high level of anxiety will not become detriments to his success. Sam also requires life skills training to help prepare him to be able to live independently. The parents noted that Sam does not have the basic skills necessary to be financially independent.