

Introduction to Autism Spectrum Disorders: Script

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Lesson 1: Introduction to Autism Spectrum Disorders

What is Autism Spectrum Disorder?

Autism Spectrum Disorder encompasses a range of conditions characterized by challenges in social skills, repetitive behaviors, communication, and restrictive interests. At the scientific level, ASD is described as a neurobiological disorder with a variety of genetic and environmental factors. As diverse as the spectrum of autism, the variety of causes of autism also greatly differ from individual to individual. Current estimates are that there are between 200-400 different genes that impact autism. Ultimately this leads to atypical development of the brain.

The term spectrum reflects the variety and diversity of challenges that each person with ASD experiences. Each individual varies in their challenges and strengths, level of functioning, sensory processing challenges, and communication. Because of this diversity in ASD, experts agree that it is foundational to understand each individual to best support him/her to excel.

Current estimates show that as high as 1 in 59 children in the US are diagnosed with Autism, with a gender imbalance of 1 in 38 boys, and 1 in 152 girls. Unfortunately, there are a number of medical and mental health issues that are frequently co-diagnosed with autism. These include gastrointestinal (GI) disorders, seizures, sleep disturbances, attention deficit and hyperactivity disorder (ADHD), anxiety, phobias, and sensory processing disorder.

It is important to clarify that vaccines do not cause autism – there is no scientific evidence to support these claims. The original article that triggered this misconception was retracted from the journal *Lancet* and the author had his medical license taken away. In fact, numerous studies have been conducted to clarify the link between vaccines and autism, with no evidence showing that vaccines cause autism.

Diagnosis for Autism

The spectrum of autism is extremely broad. Children vary from non-verbal to experiencing mild challenges in social communication, or anywhere in between. Some may have severe learning disabilities while others may be highly intellectually gifted. However, as diverse as individuals are, there are specific diagnostic criteria that need to be met for someone to be considered be part of the spectrum.

The diagnosis criteria for autism spectrum disorder are outlined in the DSM-5. There are two main sets of criteria that are necessary for a diagnosis of ASD. The first is that there must be a deficit in social communication and interaction. Particular impairments in emotional and social reciprocity, building and maintaining social relationships with peers, and deficits in non-verbal communication are required. This means that individuals may have challenges in understanding the underlying rules that govern typical social interaction, may have trouble understanding the emotions and behaviors of others, and lack understanding of facial expressions, body language and implicit statements. In addition, social communication challenges may limit the ability of the child to express themselves and communicate their



needs and wants. This not only makes it hard to connect with people, but may lead also lead to frustration in getting their needs met

The second set of criteria necessary for a diagnosis of autism is restrictive and repetitive behavior and interests. Children may have fixed interests, showing extreme curiosity in a handful of subjects but close to none in any other. Individuals with autism often prefer fixed routines and may be uncomfortable with change or deviation from a preset schedule. Some children demonstrate repetitive actions, speech or movements that may seem to have no purpose, and can affect how peers may view them. Finally, some individuals with ASD demonstrate sensory seeking behaviours or significant sensory aversions.

Again, autism exists on a spectrum and each individual is unique in the degree and set of challenges they experience. It is important to understand each person to learn the best way to build relationships and support him/her.

This wraps up the first module on an introduction to autism. I hope that this helped you better understand the diversity that surrounds autism and some characteristics that are necessary for diagnosis. In the next section, we will cover some tips from therapists in supporting individuals on the spectrum. Thank you and see you in the next one!

Lesson 2: Guiding Principles

In this section, we will cover some guiding principles for supporting children with autism spectrum disorder. These are all recommended from a variety of therapists in the field, and are some things to keep in mind when interacting with children.

Focus on the Individual

The first and most important principle is to focus on the individual. It is important to emphasize that different individuals on the spectrum experience *varying degrees and combinations* of challenges. More importantly, supporting individuals on the spectrum *to the best of their abilities* involves relationship building at its core. As one of the people I had the pleasure of interviewing put:

“None of the definitions do the individual justice. Forget autism, get to know the individual. Everyone has a different story.”

Many therapists agree with this mentality. In supporting individuals on the spectrum, it is important to understand the unique challenges, experiences, and strengths that each individual has. With this understanding, you can use an adaptable toolbox of skills in the best ways to help that individual succeed.

For example, James and Mary are two students in a second grade class. They both do poorly on a math test, and at first glance it may seem that both need help with math. After getting to know each of the students you realize that James has a difficult time conceptualizing math concepts and would benefit from visualization. As a teacher or parent, you might offer a ruler as an aid to help with visualization of numeric differences.



Mary, on the other hand, actually loves math, but instead struggles with written language. Mary's difficulty with the test had nothing to do with math, but instead was because she had challenges in understanding the written questions. Assisting Mary in reading would likely be a better option than providing a ruler. So, although James and Mary may seemingly struggle with same activity, through a bit of understanding we can find better ways to assist all children.

Goal Setting

One of the other reasons why it is so important to understand the individual is to properly set goals for the child. As with any student, each child has their own unique set of strengths, weaknesses, and learning styles. Depending on the student, some academic or social goals may be easily achievable, some may take time, and others may be out of the current scope of abilities.

To begin, it may be advised to break down larger goals into smaller objectives. Because of your fluency in many skills, it can be difficult to consciously realize the steps, and level of masteries that you need to complete a certain task. By decomposing such skills, parents and teachers can map out the steps to success for children. This way, we can break down daunting tasks into more manageable objectives.

Remaining Calm

The last recommendation is to try to always stay calm. Although this can be extremely challenging at times, maintaining a calm attitude as a parent, teacher or professional can control the atmosphere of the room and reflect onto the child.

I had the pleasure to talk to a few students on the spectrum myself. From my conversations with these children, having a calm setting was highly valued, and self-identified as one of the key reasons why they found the learning centre's atmosphere more safe and conducive to learning. The other main reason was trusting the teacher and that the staff understood them.

At times, staying calm involves fighting behavioural instinct when children may act out or be uncooperative. Not showing any reaction and speaking less can be very effective in scaling back these behaviours.

Now we would like to introduce another set of guiding principles to take forward as you learn more about supporting diverse learners. These are concepts that sets the fundamentals of all of our approaches and interactions with children on the autism spectrum. These are: Understanding the Individual, Empathy, and Patience.

Understanding the individual

This is the same as focusing on the individual. It is often easy to get lost in the diagnosis of autism or challenges that may be occurring, taking our focus away from understanding who our student is. By understanding and appreciating the individual for who they are, we not only demonstrate respect for that person, but also learn how we can create an environment to best support their learning.

Empathy



If we can begin to try to understand the challenges that others experience, we can better support that individual. Putting ourselves in the shoes of our student is one of the most powerful things we can do to help guide how we can help that child succeed.

Patience

It is important for us to realize that different people learn at different speeds and in different ways. This concept also extends to social skills, behavior, and implementation of support strategies. Being patient with our students and persevering is another important guiding principle for us to take forward into and beyond the classroom.

This is the end of the second module on guiding principles in supporting individuals with autism. Remember, autism does not define the individual, and by getting to know each person in depth, we can learn how to best assist that person.

The next module will cover sensory processing disorders. Thank you.

Lesson 3: Sensory Processing (Integration) Challenges

Welcome to the last introductory lesson, and thank you for watching! In this module, we will introduce sensory processing challenges, and how they may relate to autism.

Sensory Processing Challenges

Sensory Processing Challenges involve a condition “when sensory signals are either not detected or don't get organized into appropriate responses” by an individual. (STAR Institute 2017)

Sensory Processing Disorders & Autism:

Sensory processing issues are very common in autism, with estimates as high as 88% - 96% of all individuals with ASD experiencing some degree of sensory challenge. Although each individual experiences sensory processing issues in a different way, people are commonly grouped into hyper (over) or hypo (under) sensitive to sensory stimuli. Sensory issues are also associated with a variety of other conditions, such as ADHD, and some individuals may experience sensory challenges without additional disabilities. The condition may be specific for any of the five senses – sight, sound, touch, smell, and taste – or often a combination of multiple senses.

Scientists have identified developmental differences that cause sensory processing disorders. For example, studies have shown that auditory processing of complex sounds in autism suggests atypical brain activity.

On a more day-to-day level, sensory processing disorder influences behavior. Depending on the child and environment, children may engage in sensory-seeking or sensory-aversive behavior. Self-stimulatory behaviours may involve repetitive actions with seemingly no purpose or possibly stereotypic hand-gesturing, which can have significant negative impacts on social, educational and personal parts of an individual's life.

In contrast, hypersensitivity to stimulus may lead to escapism type behaviours, aggression, or other socially unconventional actions. Sensory overload occurs when an individual receives



over-stimulation from one or more of their bodily senses, and in certain scenarios can lead to self-injury, aggression, avoidance behaviours, or mental shutdown.

Here are some personal descriptions of sensory overload:

“Every sense you have is already naturally exaggerated, and an overload is having every sense explode beyond anything tolerable. Every sound is a deafening explosion, every light like a flash of a bomb, every sense at the extreme. As a result your brain starts to panic, and all it acknowledges is the senses and how strong they are... It’s an incredibly painful experience and it’s something I have come to fear.” – Hallie Ervin

“Like being suffocated by sound.” – Jeannine Seery

“It feels as though I’m trapped and restricted in a glass case that I can’t escape, and the overwhelming fear and anxiety climbs up my body and throat in an almost suffocating way. All I can think to do is escape.” - Laura Spoerl

Sensory processing challenges creates an added dimension to the complexity of autism. It impacts development of speech, education, social skills and personal relationships. However, although understanding sensory processing disorders is important, it is crucial to understand that this only a piece of the complex problem of autism.

That concludes this video on sensory processing challenges and this module on an introduction to autism. I hope that through these videos you have learned about what is autism, including the prevalence, diagnostic considerations, and myths. In our guiding principles section, we emphasized the importance of understanding the individual, proper goal setting, remaining calm, and why exercising empathy and patience is so important to the success of children. Lastly, we covered sensory processing challenges, discussing hyper and hypo sensitivity, and how that might affect the lives of those experiencing differences in sensory integration.

Thank you for watching and visiting our site. Please feel free to browse through our content, and learn about that topics that are most interesting or relevant to you!

Thank you for visiting this website, we hope to be able to provide everyone a set of skills to support children with autism through the lens of sensory processing disabilities. Our simulations give a perspective into what some people experience on a daily basis.

