

Investigating the Social and Communication Skillsets within Autistic Individuals and the Improvements through Controlled Neurotypical and Neurodiverse Social Intervention

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7/1/22

Abstract

Autism Spectrum Disorder (ASD) is a neurological disorder that was discovered in 1911 by Eugen Bleuler. Originally defined as the most extreme form of schizophrenia, Autism was redefined as a neurodevelopmental disorder in the late 1950s. Today, it is a social and communication disorder with ranging symptoms in poor motor function, speech and social impairment, impulsivity, chronic repetition, extreme sensitivity, anxiety, and depression. It was renamed Autism Spectrum Disorder in later years to facilitate diagnoses of a broader range. ASD can delay pediatric milestones throughout mental and physical growth. Children are typically affected in their social skills with delayed abilities in language, cognition, and learning. Unfortunately, ASD has no clearly defined cause, making it an idiopathic disorder. Even worse, ASD affects one in every forty-four children as of 2018 with the prevalence rate of the disorder nearly tripling in the past two decades. In addition to ASD being an idiopathic mental disorder, there are currently no cures and very few treatment options to alleviate symptoms. As of 2008, 2.3% of eight-year-olds worldwide were diagnosed with ASD. The average age of diagnosis is approximately four years old.

Since there is no known cause for ASD, there is also no diagnostic reason for the treacherous incline in Autism cases. There are many hypotheses as to why, but no confirmed findings. For instance, one belief is that new equipment and diagnosis guidelines have increased ASD's prevalence and that the increase in cases is more of an illusion. Others hypothesize that there is a legitimate increase in Autism cases because of higher parental ages affecting their incidence rate. At the age of forty, women's incidence rate of infant complications doubles from 0.5% to 1%. Finally, some believe that there is a greater prevalence of the hypothesized Autism-inflicting genes in parents, which is increasing the presence of ASD cases. Either way, all these beliefs are guesses rather than facts, meanwhile, there continues to be an increase in autistic individuals worldwide. With no known cause or cure, ASD will continue to flourish affecting millions of adolescents.

With a growing population of ASD diagnoses among children, there develops a larger need to help the ASD communities. Unfortunately, the world is a more neurotypical-focused setting which can be difficult for those with the disorder. Those affected by Autism display a higher probability of not engaging in social interactions, especially with neurotypical individuals. Familiarity is crucial to an autistic child's comfortability, and changes in social environments can be devastating to them. More importantly, the people themselves drastically affect autistic individuals' comfort and social drive. Those with Autism are very sensitive to the emotions of others. Whether they are outgoing, shy, confident, afraid, happy, or sad, all these emotions can contribute to the neurodiverse person's comfortability.

In addition, autistic adolescents heavily struggle with intersubjectivity, the exchanging of subjective experiences or thoughts from two or more people. Depending upon their comfortability, their intersubjectivity can vary immensely, but mostly is minimal in autistic children. Because of the common coinciding symptoms of anxiety, attention-deficit/hyperactivity disorder (ADHD), obsessive-compulsive disorder (OCD), and depression, ASD individuals suffer extreme fear with any social interactions, hindering their intersubjectivity, and making it very difficult for these people to operate in a neurotypical setting.

A few studies have tested high-functioning autistic adults regarding their comfortability with neurotypical interactions rather than fellow peers with Autism. The results concluded that there is a higher tolerance for the high-functioning adults to interact with their fellow peers because they feel as if they belong. Since the adults were always more accustomed to their counterparts in daily life and similar thinking, the hypothesis is that they were not properly exposed and made comfortable with a more neurotypical atmosphere.

My hypothesis is that through controlled neurotypical and neurodiverse social intervention with one-on-one and small group interactions, ASD children and adolescents (ages ranging from ten to seventeen) will develop higher social compliance and expand their social and communication skill sets. Data will be developed through four separate neurodiverse categorized groups ranging amongst the Autism spectra. Utilizing the Social Communication Questionnaire (SCQ), Augmentative and Alternative Communication Assessment (AAC) for only certain groups, Childhood Autism Rating Scale (CARS), and Social Responsiveness Scale (SRS), data will be collected and analyzed before and after interactions to accurately measure change and growth within the autistic individuals. In addition, brain activity measurements will be taken on Oxytocin, Dopamine, Serotonin, and Gamma-Aminobutyric Acid (GABA), to find the chemically measured significance of the individuals happiness and comfort. Data will be processed and presented by various clinicians and diagnosticians to ascertain results. The goal is to find the preferences of autistic children to further help them in social interactions, comfortability, and communication so they can become more accustomed to a neurotypical setting.