Autism Treatment is Lacking: And How AI is Helping Bridge the Gap

**Introduction**: This paper will be discussing Autism Spectrum Disorder and the lack of resources available for Autism treatment in older children and people with High Functioning Autism. Where many of these treatments fail and are lacking will be identified and examined through the lens of personal experience. How AI is helping fill in gaps of where current treatment methods are lacking. Finally, how Autism treatment can be improved.

# What Autism Is:

Autism, or Autism Spectrum Disorder (ASD), is a developmental disorder that can impair social and communication development, lead to sensory processing problems, and obsessive repetitive behaviors and interests. What Autism Spectrum Disorder is and how it develops. (Newschaffer, et al. 2007)

Despite the official diagnoses being created in the mid-1940s, no major research or studies were done on Autism until after 1980s. The history of human understanding of autism. (Wolff 2004)

Children may present signs of autism from as early as their first year of life and may develop or worsen over time. There is some debate about whether Asperger’s and people with high functioning autism are disabled. Asperger syndrome/high-functioning autism is not a disability, they just think differently. (Baron–Cohen 2000)

Social norms have a major impact on Autism treatment.

# Forms of Autism Treatment:

Autism has no cure, but there are ways to mitigate the impact it has on a person’s life.

Autism impairment treatments have two classifications: focused intervention practices and comprehensive treatment models (CTMS).

Focused intervention practices are often short-term and are usually more single focused.

Comprehensive treatment models are more complex and can take years as the goal of CTMS is to treat all autism impairments. Different treatments for autism and their effectiveness. (Odom, et al. 2010)

The application of CTMS are great for building a community and providing treatment early on, however the CTMS for older children above the age 8 are scarce.

# Why High Functioning Autism Treatment is Important:

People living with Autism may be at risk of higher anxiety and depression. The impact autism has socially. (Kelly, et al. 2008)

Signs of autism can be found in early childhood and how early intervention can help. (Landa 2007)

People with functional autism require support to a lesser extent than non-functional autistics, however treatment can still help develop fundamental coping strategies.

One common problem people with autism face is sensory sensitivity. People with Asperger’s Syndrome are more likely to have sensory sensitivity. (Dunn, Myles and Orr 2002)

Sensory sensitivity may make is hard to eat, touch certain materials, or process sound.

Treatment may include learning to deal with sensory overload and finding ways to work around sensory sensitivity.

# Living with Autism:

I was diagnosed with Asperger’s Syndrome in 2009, before it was categorized as a sub-classification of Autism. Manual of mental disorders where Asperger’s was first put under the category of Autism Spectrum Disorder. (American Psychiatric Association, Association and others 2013)

My social impairments made it hard for me to make friends and communicate my thoughts, and my family and teachers made no effort to try to understand me.

I started developing the skills to mask in seventh grade, I learned to hide any quirk that could be associated with my disorder so that I could be treated like everyone my age instead of a kindergartener.

Far too often I have been told that I am the “good kind of autistic” that makes you incredibly smart and not the “other kind of autistic” that is completely incapable.

It has taken me almost twenty years to be comfortable identifying as autistic, as the world seemed to tell me it was something to be ashamed of.

# The Autism Turing Test:

I like to call methods of autism treatment that focus on teaching the patient to act in a way that is socially acceptable, the “Autism Turing Test”.

The process of learning to hide symptoms of neurodivergence is called masking and can be harmful to the person’s self-esteem and confidence.

When treatments focus on passing the Autism Turing Test over giving the person the skills to live confidently with their autism, there is a high likelihood that it is teaching masking.

I was put into a class to teach me how to socialize and was treated like a robot.

# Autism Treatment Problems:

There is very little encouragement for some of the symptoms of Autism such as hyper-fixating, which only negatively impacts the person who is not allowed to express the hyper-fixation.

Socializing helps improve social skills, but children are mean and judgmental.

Rarely does the treatment include dealing with sensory overload or when you can only eat one food for a week.

# Autism Helper AI:

AI has begun to be developed for helping children with autism. A study on the type of assistance AI can provide people with Autism and the feasibility of it. (Jaliaawala and Khan 2020)

An analysis of autism related technology in China. (Tang and Flatla 2016)

There are social robots used to practice speaking and conversation.

Many of these AI also help children develop the skills to identify and respond to emotions.

# What Can Be Improved:

More options for Autism treatment that cover things that are not just inconvenient for everyone else.

Making things like the Autism Treatment AI come in more affordable forms than robots.

# Conclusions:

**Conclusion:** There is not enough resources available for people with autism, especially high functioning autism. AI is helping bridge the gap, but it is not enough, and further improvements are still needed.

**Summary:** AI is beginning to bridge the gap of treatment for people with Autism, however there is still a great deal of resources and help lacking for people with Autism. This paper shows how damaging some treatments and lack of treatment can be. AI done right can help increase confidence and develop social skills, however, lacks accessibility and does not cover the lesser considered problems that come with Autism.

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