

An Attempt to Get Acquainted with Autism Spectrum Disorders

Tsimpri Pinelopi*

Second Department of Psychiatry, "Attikon" University Medical Hospital, National and Kapodistrian University of Athens, Medical School, Greece

*Corresponding Author: Tsimpri Pinelopi, Second Department of Psychiatry, "Attikon" University Medical Hospital, National and Kapodistrian University of Athens, Medical School, Greece.

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Abstract

Since autism was first described in the 1940s, there is an advanced scientific research regarding diagnosis, pathophysiology, prevalence, comorbidities, medical needs and treatment approaches for people on the ASD. However, latest studies show that despite all scientific efforts, many questions remain unanswered. Most importantly, latest research indicates that there is still an enormous gap in our awareness of the needs of individuals with ASD that intercepts the effectiveness of the provided treatments and their social inclusion.

This paper reviews the existing research relating ASD, as an attempt to better understand people on the autism spectrum and to comprehend the way they perceive the world and interact with the others. In the first section the text describes the most common characteristics of ASD, and thence focuses on the findings that show the associations between ASD and the deficits in Theory of Mind (ToM). Furthermore, the paper explores the findings and recommendations of the researchers which support that the impairments of ToM tasks that occur in ASD are strongly associated with deficits in the development of skills prior to ToM.

ToM is a component of social cognition which involves mentalizing (Frith and Frith, 2003), that is the ability to think or to recognize mental states to oneself and to others, as well as to use this knowledge/information in order to understand and to predict thoughts, beliefs, intentions and perspectives different from one's own [1]. ToM is considered to be crucial in social interaction, as it refers to the ability to infer others' mental or emotional states and may be the missing piece in fully conceptualizing the puzzle of the autism spectrum. The purpose of this paper is to present an evidence-based review of the related findings.

It is hoped this review will inform practitioners and the general public on how to effectively approach individuals on the autism spectrum and achieve a mutual communication with them, as well as to promote their social acceptance.

Keywords: Autism Spectrum Disorders; Autism; Theory of Mind; Development; Skills; Social Communication

Introduction

The term "autism" is derived from the Greek word "self" and denotes the isolation of a person in himself.

Autism Spectrum Disorders (ASD) refer to an umbrella of congenital, life-long, neuropsychiatric disorders caused by cerebral malfunction(s), which mainly occur during the first three years of a person's life and are characterized by distinctive, qualitative differences

in mutual social interaction and relationship building, verbal and non-verbal communication, thinking, imagination and behavior [2,3]. ASD affect the development that deviates from the normal course, while the development affects the manifestation of symptoms and the clinical features of the disorder. Symptoms may vary dramatically depending on age, severity of autism, comorbidity of other disorders, individual's temperament and environmental factors [4-7].

In 2013, the American Psychiatric Association released the fifth edition of its Diagnostic and Statistical Manual of Mental Disorders (DSM-5) in which updated the diagnostic criteria for ASD and the related diagnosis of Social (Pragmatic) Communication Disorder (SCD). Concisely stated, SCD is characterized by difficulty with the use of social language and communication skills, comprising also deficits in social cognition, pragmatics, language processing and non-verbal communication. Prior to DSM-5, people exhibiting its symptoms were diagnosed with ASD. The hallmarks of SCD are deficits in social interaction and social cognition, and poor pragmatics that are the difficulties in communicating in appropriate ways, changing speech and communication based on the circumstances, as well as in understanding nonliteral language [3,8,9].

In connection with ASD, social communication deficits are a defining feature, along with restricted, repetitive patterns of behavior. Individuals on the ASD, despite their particularities and personality differences, exhibit some common characteristics such as social skills deficits, difficulties in emotional relationships, peculiar linguistic development - limited or absent speech development, sensory hyperactivity or hyperactivity, stereotyped or repetitive motor movements, and obsessive behavior such as persistence in maintaining the same sequence in activities of daily living, inflexible adherence to routines and ritualized behavior patterns. In summary, we find the hallmarks of ASD in the concept of the 'trinity of autism deficits", which was introduced by Lorna Wing (1998) [2]: (a) difficulties in social interaction; (b) deficits in social communication; and (c) limited, repetitive activities, restricted routine and interests.

In addition to the above, which compose the clinical picture of ASD, in order to better understand autism spectrum, it is important to address the cognitive deficits, especially those related to the "Theory of Mind". Theory of mind (TOM) refers to one's ability to "read the mind of the other" so as to be able to attribute oneself and to others mental states, emotions, intentions, beliefs; to interpret and predict future behaviors; and to understand that others have emotions, perspectives, desires and intents that differ from one's own.

TOM is an intrinsically prescribed cognitive mechanism [10] that allows us to perceive that our actions and the actions of others are governed by a logical continuum [11,12].

According to some researchers, individuals on the autism spectrum show deficits in skills that are prior and required for the development of the TOM, which in turn affects their social, emotional and cognitive development. For example, Baron-Cohen describes that autism causes some kind of "spiritual blindness" in people, "consequently making it impossible to deal with human interactions" [13]. An indication of the underdevelopment of the theory of mind is the disadvantage of children on the autism spectrum in mentalization and symbolic, imaginative play in relation to children of typical development. However, they may exhibit great intelligence and exceptional abilities even impossible to other people.

In our attempt to get acquainted with the enigmatic "culture of autism", we could not mention Frith's (1999) perfectly apt description, which supports that people with ASD are behaviorists. That is, they perceive the manifested behavior as it is presented: literally. Thus, the difficulties in understanding non-verbal communication, ambiguous meaning of language (e.g. idioms, humor, metaphors) or what is not explicitly stated (e.g. flattery, irony) and conceiving multiple meanings that depend on the context for interpretation, are expected and inevitable. Moreover, this in association with the limited development of the TOM and the difficulties and poor performances in TOM skills, strongly apparent in people on the ASD, may explain several of their peculiarities in social interaction and, consequently, some of their non-socially acceptable behaviors.

Concerning the treatments of ASD, although there is no effective way of preventing or treating autism, according to research, in some cases, one's developmental path and ability acquisition can be spectacular. Early detection and early therapeutic and educational interven-

tion can significantly improve perception, individual and interpersonal skills, social communication and interaction. Of course, in order to help an autistic person function in a non-autistic structured society, it is crucial for the general public to comprehend her/his particular cognitive style, the concrete way she/he perceives things and interacts with the world. In this way, people on the autism spectrum will have the support they need to enjoy basic human rights, benefit from culture and have equal opportunities of social integration [14,15].

Conclusion

In conclusion, it is worth to recall an excerpt from the speech by Jim Sinclair, an adult diagnosed with ASD, at the 1993 International Conference on Autism in Toronto: "(...) Autism is not an appendage.

Autism isn't something a person has, or a "shell" that a person is trapped inside. There's no normal child hidden behind the autism. Autism is a way of being. It is pervasive; it colors every experience, every sensation, perception, thought, emotion, and encounter, every aspect of existence. It is not possible to separate the autism from the person--and if it were possible, the person you'd have left would not be the same person you started with. This is important, so take a moment to consider it: Autism is a way of being. It is not possible to separate the person from the autism (...)".

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