

Case study of a student is the Autism spectrum disorder: Social behaviour and intervention

Pinelopi Christani *

Department of Greek Philology, Democritus University of Thrace, Greece.

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Abstract

The purpose of this paper is to provide a brief overview of a case involving a child on the Autism Spectrum and how it affects their social life. For this purpose, the first episode of the series "Η Λέξη που Δε Λεξ" (The Unspoken Word) has been selected. The protagonist of the series, Pavlis, is a child who attends kindergarten and belongs to the autism spectrum, exhibiting social characteristics indicative of an individual with autism. With the help of relevant literature, these elements are evaluated and interpreted, while also emphasizing their impact on the individual's social interactions.

Keywords: Autism spectrum disorder; Social behaviour; Intervention; Symptoms

1. Introduction

It is advisable to present the definition of the autism spectrum in order to analyze the symptoms that this condition entails. The most widely accepted definition, for describing the disorder, comes from the American Psychiatric Association and highlights that autism includes "a broad spectrum of neurodevelopmental disorders, characterized by impaired social interaction, deficient verbal and nonverbal communication, restricted interests, and repetitive behavioral patterns" (American Psychiatric Association, 2013 as cited in Galanis, n.d.). Analyzing the above definition, it can be concluded that individuals diagnosed with autism exhibit significant deficits in three areas: social interaction, communication, and repetitive behaviors.

2. The social behaviour of individuals on the autism spectrum

The researcher Wing, after a thorough study of the phenomenon, suggests the view that social deficiency can "take three different forms: autistic children who actively avoid contact, children who accept it but passively, and others who go straight to the other person (sometimes even to strangers on the street)" (Wing, n.d., as cited in Karantanos, n.d.). In the specific case under study, the child exhibits social isolation with various characteristics.

3. Avoidance of social contact and lack of response to answers

Pavlos avoids any form of social interaction, whether with peers or with his family, and he exhibits a "lack of motivation for social interaction and indifference to others" (Mavropoulou, n.d.). Specifically, without any inclination for conversation, he does not respond to any questions posed by his aunt (12:36), or as described, "absence of initiatives for interaction and lack of response to initiatives... by adults" (Galanis, 2015) who surround him, even with very familiar individuals. This behavior of Pavlos appears to greatly perplex his aunt, who is concerned about the child's attitude.

* Corresponding author: Pinelopi Christani

Another example of social isolation is when Pavlos suddenly isolates himself without informing his parents. When they call his name, he does not respond at all, but only mechanically repeats information from the song he was listening to in a robotic and monotonous voice, without any inflection (25:12). Following this event, his parents appear concerned and tend to believe that there may be an auditory issue in the child, which is why he exhibits such unresponsive behavior, as they dismiss the presence of any other type of disorder. This was also the initial reaction of Kanner when interacting with individuals with severe autism, "so there was initially suspicion of deafness" (Happé, 2003).

4. Inappropriate non-verbal responses

Another key characteristic of the social interaction of individuals with autism appears to be the avoidance of physical as well as eye contact, a complete absence of gestures, facial expressions, and touching, which accompany speech and are considered necessary for establishing social connections. One such instance is when Paul's aunt tries to give him a hug, and he reacts with fear (13:27), making his negative response very evident. In every case where someone appears to address him or tries to talk to him, the young boy completely avoids eye contact. This can be explained by the fact that they "lack social and emotional reciprocity, which is manifested by a lack of synchronous eye contact with others, and a lack of interest in the faces of others" (Mavropoulou, 2011).

5. Absence of interest in others

The most common characteristic of individuals on the autism spectrum that affects their social interaction is their inability to recognize and decode the emotions, perceptions, and intentions of others beyond themselves. This is what Galanis (2015) defines as the "passive and idiosyncratic code of behavior" of autistic individuals. Observing the specific video, Paul does not react at all to the applause he receives from his family at the dinner table (14:00). This could, on a deeper level, be manifested as an inability to recognize the emotions of others. In more detail, Paul has not understood the positive feelings of surprise from his family and how much they felt the need to applaud him, and he does not react or share in their joy. This aligns with Mavropoulou's (n.d.) description of "lack of social or emotional reciprocity." At this point, the family seems to be trying to justify the child's behavior, repeatedly emphasizing how smart he is, perhaps to avoid acknowledging an underlying issue.

The second instance where this happens is when Paul's mother becomes angry with his indifference to her instructions to close the window, and she scolds him (34:16). Paul looks at her indifferently and doesn't seem to have understood anything about the situation, or as Mavropoulou (n.d.) states, shows a "lack of expression of empathy." But even when his mother expresses her love and asks for his forgiveness, the young child looks at her with the same indifference, without showing any sign of having grasped her emotions. Specifically, the issue of indifference has been addressed by many scientists, who point out an inability to recognize emotions from others' facial expressions, as well as an inability to express their own emotions through facial expressions (Weeks & Hobson, 1987; Langdell, 1981; Hobson, Ouston & Lee, 1988, as cited in Capps et al., 1992).

What is quite evident from the behavior of the young protagonist is that children with autism spectrum disorder (ASD) exhibit significant deficiencies in their social interactions. They often struggle to follow basic instructions or engage in conversations even with familiar individuals in their environment. It is highly likely that they may not respond to questions directed at them or even when someone calls their name. This behavior is typical of children with autism, and as observed, their inability to establish functional social connections primarily stems from their limited responsiveness to social cues from others (Gonzalez-Lopez & Kamps, 1997).

It should be noted that the fundamental difficulty and anomaly in children with autism in social interactions arise from their inability to create causal relationships between mental states (Hadwin et al., 1996). In essence, they find it challenging to interpret the reactions of others and mentally connect them to the emotions they evoke. This entire behavior leads individuals with autism into isolation, avoiding any social interaction, residing in their own world, and experiencing profound loneliness. However, it cannot be conclusively inferred that this isolation is intentional, desired, or that it does not cause them unpleasant and depressive feelings (Bauminger & Kasari, 2000).

The intervention program proposed will primarily focus on addressing the phenomenon of social isolation. A fundamental requirement for the success of the program is its collaborative implementation both at the child's school and within their family environment. This collaboration involves close cooperation between specialists and family members.

6. Social support through exchanges

A widely used approach to developing basic skills for individuals on the autism spectrum is the use of behavioral interventions with reinforcement. Such approaches are based on behavioral learning theories, emphasizing that children respond better when they receive some form of reinforcement or positive feedback. These programs can be referred to as "token economies" (Fiske et al., 2015, as cited in Galanis, n.d.), and they may involve "symbolic rewards" (e.g., stickers) as a consequence of demonstrating desired behaviors (Genaa, 2007, as cited in Galanis, n.d.). In this context, a successful brief social interaction with a peer could be considered a form of social reinforcement. Additionally, one could propose the use of social interaction as a reward, either at the school or family level, by allowing the autistic child to engage in their favorite activity, such as music, as seen in the case of Paul.

Please note that the effectiveness of these strategies may vary from person to person, and it's essential to tailor interventions to meet the individual needs of each child on the autism spectrum. Consulting with a qualified professional or therapist experienced in autism interventions can provide valuable guidance in implementing effective strategies.

7. Guidance or Modeling of Behavior Patterns

In order for a child to be able to apply acceptable patterns of social behavior that will facilitate their integration into the social group, they need to be taught these behaviors. One way this can be achieved is through verbal guidance from the educator. This approach was applied by Genas (2007) in preschool children. In the initial stages of intervention, the educator followed the student during their free playtime and either whispered questions into their ear to initiate a social interaction with another classmate, such as asking a question, or the educator herself asked the peer a social question and encouraged the autistic student to mimic it (Galanis, n.d.). It should be emphasized at this point that any successful effort on the part of the student should be accompanied by some form of praise or positive reinforcement. In these cases, the student feels less social anxiety and becomes more confident and secure in their social interactions. Additionally, as reported by adults with autism, they felt reduced social anxiety and improved social relationships after guidance from specialists in simple everyday interactions (Bushell et al., 2018).

8. Creating a program or routine

Taking into consideration the need for children diagnosed with autism to maintain a routine, experts suggest creating a program based on behavioral patterns that will benefit the student, with the fundamental requirement of daily implementation. For example, the classroom teacher could create a brief dialogue such as, "Good morning. - Good morning. - How are you? - Very well. And you? - Very well, thank you," and repeat this on a daily basis among the child with autism, their classmates, and the teacher themselves. The expected outcome of this interaction is for the student on the autism spectrum to learn to respond to short questions and to formulate similar questions to their conversation partner. Thomas and Smith (2004) conducted research in a similar area, studying how the creation of routines using games benefited three students diagnosed with autism in developing social interaction skills.

9. Social stories

A widely used tactic aimed at students with autism is the creation of social stories to facilitate the acquisition of various skills. Social stories should be read to the child in a calm environment to achieve maximum effectiveness. In this particular case, the story should emphasize the presence of social interaction, specifically responding to questions directed towards them. The social story should include both words and images, as the intervention is intended for kindergarten students who have not yet acquired reading skills (Appendix I). It is worth mentioning the effort of Dr. Siobhan Timmins (2016), who created and published 32 stories explaining how, through the creation of successful stories, students with autism, even at a very young age, manage to build basic concepts, reaching the point of understanding more complex terms (Timmins & Gray, 2016).

10. Peer mediation

The contribution of students' peers to the inclusion of students with autism in mainstream schools is a crucial factor that should be taken seriously into account when designing intervention programs. Maximizing the results requires educators to address the entire student body, explaining the difficulties faced by their classmate with autism and cultivating feelings of empathy and cooperation among them. On a secondary level, educators can involve all students in differentiated teaching programs aimed at fostering social relationships. They can encourage students to take initiatives, play together with their classmate with autism, and ask simple everyday questions, possibly related to the

interests of the student. The findings from Whitaker's study (2004) are quite encouraging in this aspect of group collaboration in intervention programs.

11. The role of Digital technologies

Here we have to highlight the important role of all digital technologies in the field of special education and in autism training. These technologies are highly effective and productive and facilitate and improve assessment, intervention, and educational procedures through mobile devices that bring educational activities anywhere [17-20], various ICTs applications that are the main supporters of education [21-40], and AI, STEM, Games and ROBOTICS [41-48] that raise educational procedures to new performance levels. Furthermore, the development and integration of ICTs with theories and models of metacognition, mindfulness, meditation, and the development of emotional intelligence [49-82], as well as with environmental factors and nutrition, accelerates and improves educational practices and results more than those, particularly in children with autism, treating domain and its practices like assessment and intervention.

12. Conclusion

As observed from the records, Pavlos, the protagonist of the series, portrays a child with autism, closely resembling reality. This is because the creators of the series have adopted fundamental characteristics of children on the autism spectrum. Beyond the basic deficiencies in verbal and non-verbal communication, this child lags significantly in social interaction and the creation of meaningful communication with his conversational partners, even if they come from his close family environment. Researchers explain these deficiencies by the theory of mind deficits in these children. From an educational perspective, there are many educational programs and techniques that can be applied on a case-by-case basis, addressing the unique and individual needs of each person, resulting in very positive outcomes in the acquisition of specific skills necessary for daily life. These skills seem to be challenging for individuals with autism, while they are considered self-evident in the development of typically developing children. Through the collaborative efforts of the special educator, the entire class, and the family environment simultaneously, the results of each intervention are maximized, and progress is achieved in the child's skills.

Compliance with ethical standards

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Disclosure of conflict of interest

The Authors proclaim no conflict of interest.

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