



Behavior in Children with Autism Spectrum Disorders

Jasmina Troshanska¹ Teuta Ramadani Rasimi² Buniamin Memedi³

Received: 18 July 2022 / Accepted: 10 August 2022 / Published: 24 November 2022
© 2022 Jasmina Troshanska, Teuta Ramadani Rasimi & Buniamin Memedi⁴

Doi: 10.5281/zenodo.8159144

Abstract

Introduction: Autism is a complex neurodevelopmental disorder that affects behavior. People with autism also face difficulties in social and emotional reciprocity and a reduced interest in sharing emotions or feelings. They often fail to respond to social interactions. A child with autism spectrum disorder (ASD) may have challenging behaviors that educators, parents, and siblings find difficult. The aim of this article is to present results of the research using Motivation Assessment Scale (MAS) for detecting motivation of the behavior of children with autism in primary school. **Methodology:** A total number of 35 participants were took part in this research, where 31 participants were children with autism and 4 of the participants were special educators. The research methods used for the study were descriptive and as instrument a questionnaire (MAS-test) was used to detect those situations in which an individual is likely to behave in certain ways, by selecting a behavior that is of particular interest. **Results:** Our results showed that our respondents have the following behaviors more often: screaming loud, clapping their hands, tendency to hide their head, constantly shaking their head, hitting (face, head, body), dragging, spiting at the educator, parent, adults, singing and vocal stereotypes, talking to themself, crying, desire to go home and scratching. Some of the results show that children's screaming is motivated by the need of attention, while continuous behavior with hand clapping is motivated by sensory reasons, and avoidance usually is presented by hitting behavior (face, head, body). **Conclusion:** According to our results we can conclude that challenging behavior is very often in children with

¹ Faculty of Pedagogy, University of Tetovo, Email: jasmina.troshanska@unite.edu.mk

² Faculty of Pedagogy, University of Tetovo, Email: teuta.rasimi@unite.edu.mk

³ Faculty of Pedagogy, University of Tetovo, Email: buniamin.memedi@unite.edu.mk

⁴ This is an Open Access article distributed under the terms of the [Creative Commons Attribution 4.0 International License](https://creativecommons.org/licenses/by-sa/4.0/), which permits unrestricted use, distribution, adaptation, and reproduction in any medium, provided that the

original work is properly cited.



autism that visit schools, mainstream or special. To prevent these behaviors, it is necessary to know the motive. Therefore, teachers and professionals need to have knowledge of applying simple tests to detect the behavior of children with autism to prevent it. Children with autism have their own strengths that can only arise when the challenging behavior is removed. These strengths are needed and should be used to successfully pass the educational process and be able to integrate into society.

Keywords: *Autism, behavior, MAS test*

Introduction

Autism is a complex neurodevelopmental disorder and affects the behavior of a person that includes persistent deficits in communication and social interaction, sensory sensitivity, and differences in flexibility of thinking. People who have autism also face difficulties in social and emotional reciprocity, have a reduced interest in communicating their emotions and feelings in social interactions and understanding the relationships.

One of the biggest problems in raising and educating a child with autism are behavioral challenges. Parents and teachers often do not know how to deal with a child's behavior. Even if he/she has good cognitive abilities, if the child has challenging behavior, he/she will not have the opportunity to develop and learn.

Important factor in working with children with autism is dealing with behavioral challenges. To deal with these challenges, we need to know their cause, because every behavior has its own function. For this purpose, we conducted research, using a scale to assess the motives of the behavior.

The data were collected through direct observation of the children, then they were crosstabulated and analyzed by 4 areas: weather behavior is a result of child's desire to get something, child's desire to reject something, result of sensory differences or is related to material things. Our research contributes to autism awareness in parents and professionals in Republic of Macedonia.

Methodology of the research

The aim of this article is to present data that we came to while discovering motives of behavior in children with autism according to the MAS-test. We analyzed four categories of reinforcement:

1. Is the challenging behavior the result of the child wanting to get something?
2. Is the challenging behavior the result of the child wanting to reject something?
3. Is challenging behavior the result of sensory differences in a child with autism?
4. Is the challenging behavior related to material things?

The research methods used for the study are descriptive with percentages and crosstabulation.

As a technique we used Motivation Assessment Scale questionnaire (MAS-test) to discover those situations in which an individual is likely to behave in certain ways, selecting a behavior that is of our particular interest. The MAS-test is a sixteen-question questionnaire that assesses the functions or motivations of specific behaviors. The sixteen questions are organized into four categories of reinforcement: sensory, avoidance, attention, and tangible.

A total number of 35 subjects participated in this research, where 31 subjects are children with autism and 4 of the subjects are special educators. The research was developed in collaboration with special educators, in two settings, in the school "D.r. Zlatan Sremec" - in Skopje and in the association for autism "Ura Blu" - in Tetovo. The data for the children participating in this research are anonymous, while all ethical norms in the research are respected.

Results and discussion

Children with autism can have different types of challenging behaviors. From the following table (table 1) it can be seen that among our respondents the following behaviors appear more often: Screaming in high tones, clapping hands incessantly, tendency to hide the head, constantly shaking the head, hitting (face, head, bank), crawling, spitting on educator, parent, older adults, singing and vocal stereotyping, self-talk, crying, wanting to go home, and scratching. These behaviors are often seen and commented in other research also.

Table 1. Children's behaviors

Behaviors of children with autism	The number of children	%
Shouting in high tones	5	16,2
Clapping of hands incessantly	2	6,4
Tendency to hide the head	2	6,4
Constantly shaking his head	3	9,7
Hits (face, head, bank)	3	9,7

Dragging	2	6,4
Spit on the educator, the parent, the adults	2	6,4
Singing and vocal stereotypes	3	9,7
Talk to themselves	2	6,4
Crying	3	9,7
Desire to go home	2	6,4
Scratching	2	6,4
Total number of children	31	100%

In the table 2 we can see data related to the behavior “scream in high tones”. In this table, 3 of the subjects are part of the attention category which can be seen that the children's screaming is motivated by attention. When children scream, the teacher approaches, talks and plays with them. This is a motivating or rewarding situation for children, as high tone screaming ensures that the teacher will interact with them. The behavior occurred when the child felt alone.

From this table we can notice that even in the category “avoidance” there is a subject. This child often screams in high tones to escape from the task offered by the educator. Also, one child has sensory issues.

Table 2. Behavior: Screaming in high tones

Behavior	Motivation of the behavior			
	Sensory	Escape	Attention	Tangible
Screaming in high tones	1	1	3	0
Total number of the children	5			

Some of the children have “clapping hands continuously” as challenging behavior. In our research, 2 of them had this behavior because of sensory issues. The behavior occurred when the children were left alone or when an unknown person entered the classroom. With this behavior, the children ensured closeness with the educator. “Tendency to hide the head” as a behavior we found in 2 children, one because of avoidance, when the child was ordered to perform a task, and the other because of seeking the attention of the teacher.

Table 3. Behavior: Constantly shaking of the head

Behavior	Motivation of the behavior			
	Sensory	Escape	Attention	Tangible
Constantly shaking of the head	0	1	1	1
Total number of the children	3			

Behavior “Constantly shaking the head” (table 3) was present in 3 children and each of them had different reason for it. One of the children was motivate by avoidance to avoid request, one of the children was motivated by seeking attention, and behavior occurs when his teacher was speaking with another child, and the third child was motivated by the material thing, when teacher took his toy out of his hands.

Table 4. Behavior: Hitting (face, head, body)

Behavior	Motivation of the behavior			
	Sensory	Escape	Attention	Tangible
Hitting (face, head, body)	0	2	0	1
Total number of the children	3			

In this table (table 4), the avoidance appears in 2 subjects, and the hitting behavior (face, head, body) is motivated by the avoidance. The behavior started to happen immediately after the request to perform a new task, to escape from the task the children hit the face, head, or body.

Motivation of material nature appears only in one subject, where the behavior of hitting begins when he wants to reach his favorite sweet.

Dragging, as challenging behavior appeared in two children, and this behavior was motivated by seeking attention of the teacher while spiting on the educator, parent or adults appeared in also 2 students motivated by avoidance of the tasks.

Table 5. Behavior: Singing and vocal stereotypes

Behavior	Motivation of the behavior			
	Escape	Attention	Tangible	Escape
Singing and vocal stereotypes	1	1	1	0
Total number of the children	3			

When analyzing the behavior “Singing and vocal stereotypes” one of the children was motivated by the sensory need, one of the children was motivated by avoidance of doing homework, and one child was seeking the attention. This child was starting with singing when teacher was leaving the room out. “Talking with themselves” as challenging behavior was present in 2 children; one was motivated by avoiding and with talking with himself he refused to listen to the educator. The other child was motivated by the material things. He started to be talking to himself to indirectly told the teacher that he wanted to play/take her favorite toy. “Crying” was motivated in tree children: in one by sensory need (too loud), then in one because of the avoidance the task and in one child because of seeking the attention of the mother. “Desire to go home” and “Scratching” was manifested in two children.

During our research, we reviewed literature that provided explanations for behavior in children with autism. Namely, in addition to the behaviors that we have encountered, in the literature, the most common forms of behavior mentioned are outbursts of anger, biting, gnashing of teeth, self-injury, etc (Wing, 1979).

Sensory system dysfunction occurs in children and adults with autism, as well as all those with developmental disorders. Sometimes one or more senses are hypersensitive or not sensitive to stimuli at all. Such a sensory problem can be a significant cause of behaviors such as arm rocking, spinning, and shaking (The American Occupational Therapy Association, 2022).

Some of the researches say that it is difficult to define how a person's senses work, because each person experiences stimuli from the environment differently, and in relation to what their experiences are, so is their behavior (Stone, 2006).

According to the avoidance, a child with tactile defensiveness can react violently with "fight or flight" at the simplest touch. It is very active to the point of disturbing parents and teachers. The

neurological basis, in fact, leads us to problems in learning, but the behavior that causes this condition significantly disrupts the learning process (Heller, 2002).

Research related to the senses says that children who seek sensory stimulation have a high threshold for irritability and an active strategy whereby they constantly seek active movement – pushing, pulling, bumping into furniture or people. These children like strong hugging, pressing and when they write, they press very hard on the paper. They rock in the chair while sitting, hit the back of the bed while sitting, enjoy jumping on beds and like to hide under heavy blankets. Biting, hitting or aggressive behavior may occur in these children. They may exhibit self-stimulatory behaviors such as self-biting, scratching, or head-banging (Larkey, 2007).

Conclusion

From our research, we can conclude that in most children with autism, different types of challenging behavior can occur. Each of them has a different motivation. It is important when working with them, to discover the reasons for the behavior and to work on their extinction or their replacement (Heather, 2011). The work of improving behavior requires the introduction of various methodical procedures. Research around the world suggests physical exercises for children with autism. Exercises have a positive effect on the development of the vestibular and proprioceptive system, can reduce aggression and repetitive behavior in children and people with autism (Rosenthal-Malek & Mitchell , 1997), new skills are learned, and bilateral abilities are developed. Some studies show that simply placing children with autism in a group with typical peers, without other interventions and adjustments, can increase their social interactions (Lord & Hopkins , 1986) and decrease repetitive behavior (McGee, Paradis, & Feldman, 1993), but other studies have not shown these effects (Strain, 1983). Thus, further research is needed to see if simply placing children with autism in a group with typical peers is effective (Autism Speaks, 2022). Behavior of children with autism is very important to be subject in the future research, because today, in our country, because of process of inclusion, a lot of children are visiting mainstream schools. Most of the teachers have problems with these children, who usually have challenging behavior.

References

Autism Speaks. (2022, May 2). Retrieved from <https://www.autismspeaks.org>

- Heather, N. (2011, February). The Effects of Antecedent Physical Activity on the Academic Engagement of Children with Autism Spectrum Disorders. *Psychology in the Schools*, pp. 48(2):198 - 213.
- Heller, S. (2002). *Too Loud, Too Bright, Too Fast, Too Tight. What to Do If You Are Sensory Defensive in an Overstimulating World*. New York : Harper-Collins.
- Interrater Reliability of the Motivation Assessment Scale*. (2022, May 1). Retrieved from Sagepub: <https://journals.sagepub.com/doi/10.1177/154079699401900207>
- Larkey, S. (2007). *Practical Sensory Programmes For Students With Autism Spectrum Disorder and Other Special Needs*. London and Philadelphia: Jessica Kingsley Publishers.
- Lord , C., & Hopkins , J. (1986). The social behavior of autistic children with younger and same-age nonhandicapped peers. *Journal of Autism and Developmental Disorders* 16, pages249–262.
- McGee, G., Paradis, T., & Feldman, R. (1993). Free Effects of Integration on Levels of Autistic Behavior. *SagePub*, 57-67.
- Rosenthal-Malek , A., & Mitchell , S. (1997). Brief Report: The Effects of Exercise on the Self-Stimulatory Behaviors and Positive Responding of Adolescents with Autism. *Journal of Autism and Developmental Disorders* volume 27, pages193–202 (.
- Stone, F. (2006). Autism - The Eight Colours of the Raibow, Learn to Speak Autistic. In F. Stone, *Autism - The Eight Colours of the Raibow, Learn to Speak Autistic*. London: Jessica Kingsley Publishers.
- Strain, P. (1983). Generalization of autistic children's social behavior change: Effects of developmentally integrated and segregated settings. *Science Direct Volume 3*, 23-34.
- The American Occupational Therapy Association*. (2022, May 3). Retrieved from www.aota.org
- Wing, L. (1979). Severe impairments of social interaction and associated abnormalities in children:epideliology and classification. *Journal of Autism and Developmental Disorders*, 9: 11-29.

