Children with autism spectrum disorder and the inclusion process developed in schools.

THE CHILD WITH AUTISTIC SPECTRUM DISORDER AND THE INCLUSION PROCESS DEVELOPED IN SCHOOLS THE CHILD

WITH AUTISTIC SPECTRUM DISORDER AND THE
INCLUSION PROCESS DEVELOPED IN SCHOOLS

Bruna Cristina Nunes Moura₁

SUMMARY

The theme of this study is Autism Spectrum Disorder and the inclusion of students with this disorder. Students with this disorder have difficulty being included in regular classes due to their special educational needs and, often, because people do not understand their needs and do not have training to deal with these children. The study's general objective is to demonstrate strategies that are used by teachers to enable autistic children to have the right to quality inclusive education. Being a bibliographical research with a qualitative approach, based on the reading of texts, articles, monographs and books about Autism Spectrum Disorder (ASD), the behavior of the individual with this disorder in the school environment and the challenges faced in order to carry out the process of inclusion of this student. The topic has social relevance, since children diagnosed with autism are singled out and stigmatized, being seen as students who have "problems" and will not learn. Inclusion is a very complex process and demands a lot of preparation and knowledge from the professionals included, which is why it is essential that all teachers receive appropriate preparation during their initial training and ongoing professional development.

Key words: Inclusion. Learning. Autism. School environment.

ABSTRACT

The theme of this study is the Autistic Spectrum Disorder and the inclusion of students with this disorder. Students with this disorder have difficulties being included in regular classes because of their special educational needs and, many times, because people do not understand their needs and have no training to deal with these children. The study's general objective is to demonstrate strategies that are used by teachers to enable autistic children to have the right to quality inclusive education. It is a bibliographic research with a qualitative approach, based on the reading of texts, articles, monographs and books about the Autistic Spectrum Disorder (ASD), the behavior of the individual with this disorder in the school environment and the challenges faced to make the inclusion process of this student. The theme has social relevance, since the child diagnosed with autism is labeled and stigmatized, seen as a student who has a "problem" and will not learn. Inclusion is a very complex process and demands a lot of preparation and knowledge from the professionals included, so it is essential that all teachers receive appropriate preparation during their initial training and continuous professional development.

Keywords:Inclusion. Learning. Autism. School environment.

RCMOS-Multidisciplinary Scientific Journal O Saber. ISSN:2675-9128. São Paulo, vol. 07,P. 01-15,Jun. 2021.



¹Postgraduate student in Neurolearning at Centro Universitário Cesumar – UniCesumar. Email: brunacnmoura@hotmail.com.

1. INTRODUCTION

This article will address questions about the possibilities of including students with Autism Spectrum Disorder in the school environment. Given the need to reflect an inclusive society, where autistic people, within these perspectives, can have their fundamental rights guaranteed, of access to the city, this proposal is built to research and understand more about this disorder, as well as point out techniques and inclusion which aim to collaborate with development in the motor, cognitive and social fields, through the schooling process.

The challenges that arise, teaching practice, through the perspectives of including students with autism in the school context, is the main point of relevance of this research. It is important to analyze how the teaching-learning process of a child with autism occurs and how the teacher can contribute to their development. The research contributes to the expansion of knowledge about the topic addressed, as it contributes to a theoretical deepening about this disorder that poses as a challenge to the teacher the creation of truly assertive methodologies, that is, that effectively provides the learning of all students, considering their special educational needs.

For a long time, children with autism have suffered social prejudice, being singled out and stigmatized for their special educational needs. Throughout history, they have been identified as "problem" students and their learning capacity has been challenged. We will seek to point out the need to build a collective consciousness that understands that there is not just one way of learning and that, therefore, it is necessary for teachers to pay attention to the educational needs of their students, promoting adequate professional support during the educational process, which enables adequate development within their capabilities.

To this end, this study's general objective is to demonstrate strategies that are used by teachers and that enable autistic children to have access to quality inclusive education. We will show the main difficulties encountered by these professionals during the educational process, as well as point out which strategies have been used in offering quality education, understanding the challenges faced by autistic students and teachers in the inclusion and learning process.



This bibliographical research will have a qualitative approach, based on reading texts, articles, monographs and books about Autism Spectrum Disorder (ASD), the behavior of individuals with this disorder in the school environment and the challenges faced in order to carry out the process of inclusion of this student. The analysis was focused on studies by Mantoan, Vygotsky, Bosa, Cunha, Libâneo, among other authors.

This article is subdivided into three topics, in which the first will address Autism Spectrum Disorder, in the second it will be discussed about children with ASD in the school environment, in the third the challenges of the inclusion and learning process will be presented and, finally, conclusion will be made.

2 AUTISTIC SPECTRUM DISORDER AND THE SCHOOL ENVIRONMENT

Autism is part of the category of Psychological Development Disorders, in the International Statistical Classification of Diseases and Related Health Problems (ICD-10), and is included in the subcategory of Global Developmental Disorders (TGD). According to the Diagnostic and Statistical Manual of Mental Disorders (DSM-V), considered the most modern manual, Autism is categorized as Autism Spectrum Disorder (ASD).

According to the DSM-V, autism is included in the category of Neurodevelopmental Disorders, a subcategory of Autism Spectrum Disorder. Becker and Riesgo (2016) consider that ASDs are heterogeneous, complicated and have a multifactorial etiology.

Asperger's Disorder, Rett's Disorder, Pervasive Developmental Disorder without specification, Childhood Disintegrative Disorder and autism were grouped into ASD. The reason for this grouping is explained in the preface to the DSM-V:

Fusion of autistic disorder, Asperger's disorder, and pervasive developmental disorder into autism spectrum disorder. The symptoms of these disorders represent a *continuum* of losses ranging from mild to severe in the areas of social communication and restrictive and repetitive behaviors rather than constituting distinct disorders. This change was implemented to improve the sensitivity and specificity of criteria for diagnosing autism spectrum disorder and to identify more focused treatment targets for specific impairments.observed (DSM-V, 2014).

According to the DSM-V, ASD is characterized by permanent deficits in social interaction and communication in various situations, including social reciprocal deficits,



in non-verbal communicability behaviors, used to interact socially and in the ability to strengthen, maintain and understand relationships. The diagnosis of ASD requires the existence of repetitive and limited parameters of conduct, commitment or activity.

According to Becker and Riesgo (2016), studies to understand autism have been carried out since 1990, starting from an organic dysfunction, so that the disorder was seen from a biological perspective. Different combinations of genetic and environmental risk factors appear to be involved in the etiology of ASD, as well as molecular and cellular imbalances. Today, it is noted that there is rarely just one factor known as the cause of the disorder.

Current research proves that both environmental and genetic factors are important, contrary to what was previously thought. According to Becker and Riesgo (2016, p. 358), in fragile stages of development, environmental risk factors "could act as a trigger for pathophysiological pathways that could trigger ASD". The environmental factors highlighted are prenatal, perinatal and neonatal.

According to what the DSM-V says, the definition of the diagnosis of ASD is presupposed based on two categories, different from the three that were determined by Kanner, namely: "change in social communication and stereotypical and repetitive behaviors" (RODRIGUES, 2015, p. 21). Gadia and Rotta (2016) point out that ASD is a developmental disorder that appears during childhood and is characterized by a serious delay in the acquisition of speech, in social relationships, in addition to having limited interests and recurrent and standardized behaviors.

As it is a spectrum, there are several variations that need attention, as limited and standardized interests, as well as the delay in acquiring speech, can vary from one person to another.

The diagnosis and treatment of children with ASD cannot be carried out in isolation; a group of specialists is needed to diagnose and treat (psychologist, psychologist, speech therapist and neurologist). ASD treatment is multidisciplinary so that the different needs of each individual are met, through music therapy, psychopedagogy, hydrotherapy, art therapy, psychology, occupational therapy, speech therapy, educational programs or behavior change techniques. Gadia and Rotta (2016) determine that the efficient interventions proven to date are behavioral change techniques. The action of music therapy has been shown in this sense, however, "it is fundamental to understand that children are different, their needs and



the opportunities are different, which means different therapies" (GADIA; ROTTA, 2016, p. 374).

For Marchezan and Riesgo (2016), ASD has several etiologies that may be associated with other diseases and disorders that additionally compromise the patient, in addition to the losses inherent to the disorder.

Children with ASD have two to five comorbidities that could possibly generate complications in the diagnostic process (MARCHEZAN; RIESGO, 2016). Sometimes, in more serious cases that require medication, pharmacological treatment is carried out, used to reduce the comorbidities of people with ASD, thus, medications have "a secondary role [...] to alleviate symptoms such as stereotypies and mood swings" (CONSENZA; GUERRA, 2011, p. 135). Medications help to improve the child's behavior, as there is no promise of curing the disorder. Generally, treatment is carried out over a long period and the most commonly used medications are antipsychotics.

2.1 CHILDREN WITH ASD IN THE SCHOOL ENVIRONMENT

The 1988 Constitution established that education is a social right that must be guaranteed to all people. Based on this, the enrollment of students with special educational needs in the country's regular schools is considered a right to equal conditions for access and permanence in the institution (GOMES; MENDES, 2010).

According to Baptista and Bosa (2002), Special Education was considered by the Basic Guidelines Law no. 9,394/96 as a transversal category to all degrees and categories of the Brazilian education system. This was a major milestone in the trajectory of Special Education, as it was considered a teaching category aimed at individuals with disabilities in regular schools.

In current public policies, specialized educational assistance is implemented as one of the supplementary or complementary pedagogical services to schooling, as it will work directly with the specific characteristics of each individual. Despite presenting the same diagnosis, each individual is unique in all areas of their life, requiring individualized attention.



The concepts of inclusive education have been structured to a greater extent, making the school re-examine its internal systematization based on the analysis of its goals in the education of individuals with disabilities. In order to enable access to knowledge for individuals with ASD, it is essential that there is a systematic pedagogical organization, in addition to the preparation of the person who manages the institution, providing this knowledge, so that it reaches a large number of students (BAPTISTA, 2011).

The school, as an institution that contributes to the complete development of the individual, needed to begin to be concerned with its internal structures in relation to the quality of teaching and, mainly, with its physical area in order to enable access for these individuals, as that students with disabilities would be legally protected by the right to education in regular educational institutions.

It is at school that various relationships take place, such as student-student, teacher-student and student-teacher, thus, it can contribute to socialization and the formation of emotional bonds. These questions are fundamental to building a school routine for students with ASD. Some scholars have carried out studies that show the importance of social relationships for the complete development of the being (VYGOTSKY, 2010).

Vygotsky's approach highlights human interaction as an aid in the development of the being. Psychological skills are built based on interaction with peers and culture. According to Vygotsky (2010, p. 16):

It is through others, through the adult, that the child becomes involved in their activities. Absolutely, everything in the child's behavior is fused, rooted in the social. Thus, the child's relations with reality are, from the beginning, social relations. In this sense, it could be said that the baby is a social being at the highest level.

The author highlights the importance of another person in the development of a social being from the beginning of the individual's life, with the expectation of exercising a connection with the environment in which he lives. These relationships between children can be observed at school, contributing, among other successes, to the expansion of knowledge, the practice of varied activities autonomously, in the socialization of ideas and principles with the group they are part of.

To work with children with ASD, it is essential to establish symbolic mediation and communication strategies. Adapting the Portuguese language is important for learning curricular content. When developing communication, it is necessary to recognize the student's motivations, predilections and abilities.

Among the predilections and motivations, playful elements and games can be recognized as motivating contexts for these individuals. Interaction through playing generates possibilities for teaching and learning procedures.

The various pedagogical actions at school contribute to child development in the emotional, linguistic, social and cognitive fields. It is pertinent to highlight the various mediation strategies and their consequences for the formation of higher psychological functions. Mediation strategies are related to dialogue and adaptation of a linguistic code. Silva and Almeida (2012, p. 72) point out that:

In the school context, communication strategies are intertwined with the objectives of providing anticipation of the school routine, the progressive expansion of the child's flexibility through changes in the routine or environment, in addition, obviously, to expanding the possibility of access for this student to receptive and expressive language. Thus, we can assume that these strategies must be structured in favor of real situations to be experienced by the child, in everyday school life, provoking cognitive development based on the allocation of real meaning to their use.

From this, it is possible to see the importance of working at school for the progress of children with ASD, as it is in this place that communication strategies and routines can be established, in addition to developing written and oral language, among others.

It is pertinent to highlight that, even with different possibilities for learning at school, obstacles in the communication of children with ASD may be related to school performance. In more serious cases with a lack of verbal language, as well as the lack of use of alternative communication techniques, individuals will have difficulty understanding and meaning, which can lead to psychosocial issues of frustration, anxiety and aggressive behavior. In this way, the lack of information and instruction from education and health professionals for the work of these people can harm the process of social and academic inclusion of students with ASD (MACIEL; GARCIA FILHO, 2009).

Broad or alternative communication is a large method that is developed with children who do not conceive of communicative exchanges with other people, as well as those who need to increase the oral communication skills they already have, but who do not yet achieve organized speech, autonomous and free (DELIBERATO, 2008).

Regarding the methods that can contribute to the communication of children with ASD, there is an expanded or alternative communication board and its use in the classroom as an instrument to assist the student in communication is assumed. This method helps the

student to stipulate a type of communication with other individuals based on miniature objects or images. For preparation, the student's routine must be considered with their essential needs, as well as the schedules of frequent activities. Scrap metal can be used to make it, in addition to adding objects that are of interest to the child.

In this way, the school can show interventions for the life of students with ASD based on the development of their capabilities. The priority is to understand that this individual is capable of learning, he just behaves differently, not being considered an indicator that makes it impossible to create a social life equivalent to that of other individuals who build their families and become professionals (MACIEL; GARCIA FILHO, 2009).

Individuals are distinct, despite having similar characteristics in their way of being, reflecting, expressing themselves. In this circumstance, children with ASD stand out who demonstrate different characteristics in their behavior despite presenting different particularities and attitudes of the disorder. Thus, it is essential, first of all, to see the person with ASD as an individual who shows himself to the universe as a being, who has his own desires and wills that define him in the social environment as a being distinct from someone else (SILVA; ALMEIDA, 2012).

It is important that in society and, above all, at school, the specificities, form and time of development of each individual are considered, given that each one has their own different style and pace of learning. With some students with ASD, specialized techniques will be used with the aim of improving important skills for learning school knowledge.

It is true that regular education has the capacity to provide the formation of knowledge related to the various sciences, however, the school needs to be designed with the aim of also serving students who do not follow the group in a standardized way, but learn at a different time of others.

2.2 TEACHING STRATEGIES FOR STUDENTS WITH ASD

Curricular change has become a general way to refer to all modifications made with the aim of meeting the student's particular needs. However, the dissimilarity between curricular change and adaptation must be understood. The change entails modifying the subject taught based on the limitations and difficulties of the



student, even if it indicates modifying the assessment models. In the adaptation, the integrity of the theme and the curricular evaluation model are maintained.

Taking into account the student's limitations and difficulties, it is possible to show the curriculum in a different way or change the strategies that make the student learn. In other words, the change changes what is taught and how progress is measured, while adaptation changes the way the subject is taught and/or accessed, however, not the way progress is assessed.

It is important to understand that individuals with ASD, on many occasions, are unable to learn in the same way as a neurotypical child. During typical development, children often do not need mediation to learn and exclusive interventions. On the other hand, the learning process of students with ASD is different since there is a distinct connection between the senses and the brain, so information does not always generate knowledge. Therefore, for the development of an atypical student to occur in the school environment, it is essential that the teacher uses different resources in learning, since each student will learn differently.

Often, students with ASD will need some type of academic change, as problems such as motivation (participation in classes) and motor deficits (such as holding a pencil) may need changes. Therefore, schools and teachers need to be adequately trained to practice the necessary inclusion for students.

Therefore, it is necessary for educational institutions to be aware of evidence-based approaches that correctly clarify the deficiencies of students with ASD, develop procedures to identify efficient teaching practices and highlight characteristic mechanisms in the school environment.

When implementing teaching strategies and interventions based on scientific evidence, teachers need to have instruments to evaluate and support the techniques that will be implemented. An assessment based on inquiry is essential for success in the inclusive educational space and the first step is to carry out an assessment that shows the student's abilities to develop appreciable goals. Therefore, for a student with ASD, the educational program needs to be based on their needs, so that it is possible to establish which type of learning environment will be most suitable for them.

The preparation of the Individualized Education Plan (IEP) is the second step in this process, as it is a tool that suggests planning and monitoring the



development of students who have learning difficulties based on school guidelines. The purpose of the PEI is to guide the work of the educational institution in the priorities that will be taught to students who need adaptations to the curriculum.

When the PEI is determined, the teacher must change the materials and activities so that the needs of these students with ASD are met, making the necessary changes for individuals who have learning difficulties. These students, for example, usually need predictability with the intention of reducing anxiety. Having the ability to anticipate changes and transitions, with visual support that shows which activities will be carried out throughout the day, can effectively support these students. Therefore, the inclusion of visual support to be used in the classroom, such as words or drawings, is a useful resource for children with ASD because they clearly indicate what has been completed and what should be done immediately. Other examples of techniques that, when evaluated and programmed, are imminently attenuating the learning process:

- Teach new tasks by providing examples or models so that the student has a clear vision of the steps necessary to complete a given task and the expected performance;
- introduce activities appropriate to the level of difficulty of the student involved;
- Provide instructions or visual cues to make information more understandable to the person;
- Give students predictability of the activities they will carry out. For example, if the science class will discuss the stars during class time, parents can observe a night sky with their son/daughter. This provides a familiarization process, in which the individual may accept the task in a varied situation;
- Assign specific models for the child to observe and imitate during group activities, such as circle time or group exercises. In more fluid group situations help the individual select a specific role that he or she can perform;
- Structure event sequences in which the least preferred activity will be followed by the most preferred (First _ X _ , then _ X _);
- Break/fragment tasks into small steps and teach each step in sequence and in a structured way.

There are behavioral interventions that are specific and contribute considerably to the inclusion process in regular schools. One of the interventions is Applied Behavior Analysis (ABA), which is an educational action that covers the procedure of systematically applying interventions based on precepts arising from behavior to improve behaviors that are socially significant. Included are the teaching of new skills, such as communication, social skills and functional life; universalization of behavior between situations, such as the passage of



social skills for natural places; decreasing intervention behaviors and containing the conditions that occur in inappropriate intervention behaviors.

Thus, for students with ASD to be included in regular schools, it is important that there are tools that equate them with other individuals, instruments that range from the methodology used to knowing how to act with the different types of behavior presented by the student with ASD, such as adaptation assessment, material, curriculum, among others.

Education is not just a right that the law guarantees, it is essential for children, whether they have developmental difficulties or not. The school has an ethical and legal duty to provide solid educational foundations and guarantee equality as a principle for creating learning environments that enable children and adolescents to reach their potential.

2.3 THE CHALLENGES OF THE INCLUSION AND LEARNING PROCESS OF CHILDREN WITH ASD

The learning process of students with ASD happens differently, as they have important characteristics, such as difficulty in the ability to learn and communicate, lack of concentration, concrete reasoning, difficulty in integrating or combining ideas, difficulty in sequencing, organizing and generalize, among others. In addition to these deficits, students with ASD present anxiety, strong impulsivity and sensory-perceptual irregularities. Their learning essentially takes place visually in calm places with a constant routine (Rodrigues; Spencer, 2010).

It is natural that children with ASD require adaptations to be made that take into account their behavioral, language, clinical, social adaptation conditions, among other special needs. According to Belisário Filho and Cunha (2010), if there is no flexibility in the face of students' peculiarities and waiting for them to be able to adapt to the techniques provided in the classroom, little will be done to develop new skills. That is why it is so important to be aware of the needs of children with ASD and their skills that can be used as work techniques.

It is up to the teacher to have knowledge of the student with whom he works daily in order to dispel stereotypes that hinder and, on many occasions, make impossible an educational process that has confidence in the capacity and competence of each student, regardless of their mental and physical peculiarities.



The inclusion of children with ASD in regular school is essential to develop their capabilities, especially due to the chance for socialization. For this reason, it is necessary to limit its teaching to specialized schools and regular education schools. However, the inclusion of the child must be accompanied by pedagogical work carried out in conjunction with regular schools so that they support, facilitate and improve the student's development. To achieve this goal, it is essential to overcome the myths that are part of everyday teaching that make inclusive education difficult and impossible.

The school must carry out work that seeks the integral development of students, breaking patterns that predetermine and classify students' chances of development based on possible limitations. Consequently, it is believed that inclusion needs to enable children with ASD to meet other children, each with their own particularities. School provides children with experiences based on their relationship with another person.

According to Chiote (2013), inserting a child (individual) with ASD goes beyond placing them in a regular classroom, in a regular school. It is necessary to enable meaningful learning, where there is an investment in the child's potential, making them an individual who thinks, feels, learns, participates and develops within a social group.

For Orrú (2012), it is important to carry out pedagogical work in an individualized way with children with ASD, since this student's teaching-learning process must meet a careful relationship between daily life, pedagogical mediation and the construction of concepts, enabling the meeting/confrontation of everyday practices and enabling quality teaching. In this way, the Individualized Educational Plan is a method used by the Specialized Educational Service (AEE) that supports teaching practice with the aim of helping teachers understand the particularities of each child and access techniques and activities that support the educational process.

For students with ASD to receive expressive learning, the practices carried out in the school environment need to provide the child with new ways of being and composing themselves, generating meaning for particular possibilities of relating to other people and the world (CHIOTE, 2013) .

Therefore, it is essential that the teacher is prepared to work with students diagnosed with ASD, especially in the Early Childhood Education phase, which prioritizes



cognitive and motor development, through the development of skills, through socialization and the progress of autonomy.

FINAL CONSIDERATIONS

Inclusion is a very complex process and demands a lot of preparation and knowledge from the professionals included, which is why it is essential that all teachers receive appropriate preparation during their initial training and ongoing professional development.

Teachers still do not receive appropriate preparation to deal with students with ASD in schools in Brazil. Training courses have curricula that are far from real pedagogical practice, with essential training not available for employees to work with the diversity of students, which has serious consequences for the inclusion process.

The main objective of this work was to demonstrate which strategies are used by teachers to enable children with ASD to have the right to quality inclusive education. The implementation of the multifunctional resource room was launched by the MEC with the purpose of supporting the offer and organization of educational assistance characterized by providing complementary and supplementary services to students who have pervasive developmental disorders, among others, who are enrolled in regular classes, aiming to provide them with better access, learning and participation conditions.

The teacher who works in the resource room is committed to identifying the difficulties and skills demonstrated by the student, enabling the development of a plan to use the necessary resources to assist them. In the inclusive school, it operates to collaborate in the progress of the potential of the child with ASD, which is added to regular education, as the activities carried out in the resource room are different from those carried out in the regular room.

Therefore, it is essential that the teacher is able to identify the school environments that create exclusion, as well as knowing the processes that enable the composition of an inclusive school, especially from perspectives related to curricular organization, school administration and performance evaluation. Therefore, it is essential to



training of a reflective, autonomous professional, who has the ability to make choices and develop pedagogical alternatives to address SEN.

REFERENCES

BAPTISTA, Claudio Roberto; BOSA, Cleonice et al. **Autism and education**: reflections and proposals for interventions. Porto Alegre: Artmed, 2002.

BECKER, M. M.; RIESGO, A. of the S. Aspects neurobiological aspects of autism spectrum disorders. *In:*ROTTA, NT; OHLWEILER, L.; RIESGO, RS (Org.). **Learning disorders**: neurobiological and multidisciplinary approach. 2nd ed. Porto Alegre: Artmed, 2016.

BELISÁRIO FILHO, JF; CUNHA, P.**Special education from the perspective of school inclusion**: pervasive developmental disorders. Brasília: Ministry of Education, Secretariat of Special Education; [Fortaleza]: Federal University of Ceará, 2010. v. 9. (Special Education Collection from the Perspective of School Inclusion).

CHIOTE, FAB**Inclusion of children with autism in early childhood education**: Working on pedagogical mediation. Rio de Janeiro, RJ: Wak, 2013.

CONSENZA, R.; GUERRA, L.**Neuroscience and education**–how the brain learns. Artmed: Porto Alegre, 2001.

DSM-V.**Diagnostic and statistical manual of mental disorders**. Porto Alegre, Artes Médicas, 2014.

GADIA, C.; ROTTA, NT Clinical aspects of autism spectrum disorder. *In:*ROTTA, NT; OHLWEILER, L.; RIESGO, RS (Org.). **Learning disorders**: neurobiological and multidisciplinary approach. 2nd ed. Porto Alegre: Artmed, 2016.

ORRÚ, ES**Autism, language and education**: social interaction in everyday school life. Rio de Janeiro: Wak, 2012.

RODRIGUES, B.S.**Autism spectrum disorder**: The relationships between education and neurosciences – in search of quality inclusive education in early childhood education. 2015. Course Completion Work (Degree in Pedagogy). Federal University of Rio Grande do Sul – Porto Alegre. Available at: https://lume.ufrgs.br/bitstream/handle/10183/134829/000985236.pdf?sequence=1&isAllowe d=y. Accessed on: 04 Sep. 2020.

RODRIGUES, JMC; SPENCER, E.**The autistic child**: A Psychopedagogical Study. Rio de Janeiro: Wak publisher, 2010

VYGOTSKY, L.S.**Educators Collection**–MEC. Massagana, 2010