

INCLUSION OF STUDENTS WITH SCHIZOPHRENIA IN ELEMENTARY SCHOOL: REFLECTIONS ON CHALLENGES AND POTENTIALITIES IN BRAZILIAN EDUCATION

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ABSTRACT

The main objective of this study is to understand the complexities that involve the process of inclusion of students with schizophrenia beyond the insertion in the educational context, highlighting the need to develop training processes in service to teachers and school education professionals, with the intention of expanding the promotion, diversification and adequacy of pedagogical resources, aiming to foster differentiated methodologies and strategies that enable the global development of these students, students, considering their needs and potentialities. Schizophrenia is a serious mental disorder, characterized by alterations in thinking, language, emotions, ability to perceive, etc. Therefore, it is a disease that can lead to cognitive, emotional, interactional, and behavioral impairment of the individual. A descriptive, applied and qualitative literature review was carried out. He has several contributions from scientific authors, including: Arroyo (2014); Costa (2022) and Gadelha, Nardi and Silva (2021). The research contributed with new perspectives and highlighted the importance of understanding the needs and capabilities of students with schizophrenia, in order to put into practice the adaptations, strategies and teaching approaches in the classroom.

Keywords: Students. Schizophrenia. Inclusion.

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INTRODUCTION

The school has an essential function in the life of the student, an important role for their cultural, social and cognitive development, being indispensable for their formation as a citizen. It is necessary to recognize the importance of understanding the multiple forms of diversity present in the school routine, seeking to overcome socially established inferiorities. In this sense, highlighting inequality and valuing diversity as a possibility to build pedagogical practices that welcome the different students who make up the public school in our country, represents one of the greatest challenges to contemporary education.

Basic school professionals need to follow current discussions and studies on diversity, special education and inclusion, and think about new educational strategies and conceptions of education that contribute to the construction of a just and egalitarian society.

That said, it is relevant to be aware of the fact that the teacher, as a subject, brings with him a large repertoire of knowledge resulting not only from his professional training, but also from his life experiences. They are active subjects, who have their own way of learning and carrying out educational practices. Teachers, as well as students, are diverse in their stories and experiences and, in contemporary times, they are facing the challenge of effectively including students in school and inserting elements of diversity in their classes. The access of all subjects to school, especially public school, is necessary to enable the right of all to education. Legally no subject can be denied enrollment, so schools need to adapt to receive individuals with the most diverse specificities.

It is necessary to emphasize that for the inclusion of students with disabilities and other specific needs, it is necessary to qualify the team of school professionals and the availability of pedagogical resources. Therefore, this study is necessary, because inclusion is fundamental in school, but in relation to students with schizophrenia enrolled in the final years of elementary school in our country, are they being included in such a way that their educational, psychosocial and cognitive specificities are being met by the school? Are teachers managing to provide the development of these students in an integral way?

Thus, the following guiding question arises from this research: are school professionals, especially teachers, qualified to include students with schizophrenia, stimulating and enabling their cultural, social and cognitive development in the school



environment? Does the school have physical, pedagogical and accessibility resources that can guarantee the inclusion of these students in a satisfactory way?

Schizophrenia is defined by the World Health Organization – WHO as a severe mental disorder, characterized by alterations in thinking, language, emotions, ability to perceive, etc. (WHO, 2022). Therefore, it is a disease that can lead to cognitive, emotional, interactional, and behavioral impairment of the individual. Because it is a chronic and serious disease, the WHO considers schizophrenia among the ten greatest possible causes of making a person incapable. The etiology of schizophrenia in Brazil is unknown, and the diagnosis is strictly clinical, being made according to the numerous signs and symptoms presented, among which include: positive symptoms, also called psychotic; negative symptoms; cognitive symptoms and changes in mood, making people apathetic and depressed. (Gadelha et al, 2021).

This study is justified by the fact that it is of paramount importance that education professionals, especially teachers, have their work focused on the inclusion of all, making available to students with schizophrenia what is best for their learning, because for them to learn, they need to be stimulated by their teachers and by everyone who somehow participates in the teaching process.

THE SCENARIO OF INCLUSIVE PUBLIC POLICIES IN BRAZIL

When thinking about inclusive education, it is necessary to consider that guaranteeing the right to public, free and quality education for the entire Brazilian population is, therefore, the duty of the State, as expressed in the Federal Constitution (1988), classifying it as a social right. This social right is sanctioned in a series of national documents, among them, Law No. 9,394, of December 20, 1996 – which establishes the Guidelines and Bases of National Education - LDB.

In an effort to meet the postulates of the 1990 Declaration and, above all, to comply with the protocol of intentions, aiming to ensure the access and permanence of all in school, programs and actions were developed, such as the elaboration of a National Policy on Special Education in the Perspective of Inclusive Education, aiming to constitute public policies that promote quality education for all students. The imperative "education for all" was thus constituted in the official discourse, instituted by the LDB itself, which, through Article 87, paragraph 1, designated "the decade of Education in line with the World Declaration on Education for All" (BRASIL, 1996, p.29).



The actions developed by the Ministry of Education and Culture (MEC) began within the framework of commitments assumed by the government and international organizations at the World Conference on Education for All, held in Jomtien, Thailand (1990). It sanctioned the World Declaration on Education for All and Satisfaction of Basic Learning Needs, which has ten articles, among them, improving all aspects of the quality of education and ensuring excellence for all, so that recognized and measurable learning outcomes are achieved by all, especially in language and mathematics literacy and essential life skills, which highlight the right of all to basic education and the duties of nations regarding the fulfillment of these specificities. This conference unfolded through an agenda common to Latin American countries (including Brazil), stipulating a ten-year deadline to solve educational problems on the world stage.

With the Salamanca Declaration (1994), it was established that schools should welcome all children, regardless of their physical, intellectual, emotional, social, linguistic, ethnic or cultural conditions. Therefore, any child, regardless of origin, disability or level of development, should be enrolled in school. Thus, following the precepts of a school in which each student has the possibility of learning and developing, based on their aptitudes and capacities, in which knowledge is built without resistance or submission to what is selected to compose the curriculum, resulting in the promotion of some students and the marginalization of others from the school process, in 2008, the National Policy on Special Education in the Perspective of Inclusive Education was elaborated.

From a historical perspective, the understanding of special educational needs has gained a more interactive focus over the last decades. However, "until the mid-1930s" it promoted a deterministic conception of development, on which any type of activity was based. From 1940 and 1950 onwards, new perceptions and concepts of social adaptation and differentiated learning were manifested, reinforcing the possibilities of intervention. However, it was only from 1960 onwards that the concept of special educational needs began to be used, referring especially to learning problems, with a relative and contextual character, thus highlighting the provision of educational resources necessary to stimulate the students' potential, reduce learning difficulties and an educational context that was as inclusive as possible.

The inclusion of individuals with disabilities in the common classrooms favored the development of educational proposals, resulting in new processes of development of a



culture that privileges the person as a subject of rights, regardless of their physical, intellectual and social condition.

The revolutionary proposal to include all students in a single educational modality, regular education, has encountered other barriers, among which the assistentialist/therapeutic culture of Special Education stands out (...). It is undeniable that, because they are guided to serve an idealized student and teach from an elitist, meritocratic and homogenizing school project, our schools produce situations of exclusion that have unjustly harmed the educational trajectory of many students. (MANTOAN, 2012).

Undoubtedly, barriers exist and need to be discussed in their different spaces and contexts. There is no doubt that education professionals, particularly teachers, feel insecure and/or unprepared to deal with this revolutionary proposal. It is worth mentioning that this is a challenge that requires the awareness of the whole society about the importance of conceiving diversity as an inalienable right of the subject, since guaranteeing access to school is only the first step. In addition, it is necessary to meet the specific needs of each student, experiencing the ethical, human and social principles of equality, provided for by law.

CHALLENGES OF INCLUSION OF STUDENTS DIAGNOSED WITH SCHIZOPHRENIA IN ELEMENTARY SCHOOL

Schizophrenia is not the price of modern times: it is not characteristic of Western societies, it does not come from a contemporary way of life, from the incessant intolerances, from the anonymity of our heartless society. It is a pathology that can be found from the beginning, in all societies, in different geographical areas ³.

Throughout history, schizophrenia has attracted the attention of illustrious names in neuropsychiatry, including the French psychiatrist Benedict Morel, who instituted the term démence précoce (dementia praecox), in order to describe a state of mental and emotional deterioration with onset in adolescence. Subsequently, the German psychiatrist Emil Kraepelin formalized the concept of Morel as dementia praecox ⁴. It is currently classified

³ Currently, it has a worldwide prevalence rate of about 1%, which is equivalent to saying that approximately 70 million people in the world are affected by this disease, regardless of ethnicity or social class (Sadock & Sadock, 2008).

⁴ However, it was Bleuler who, in 1911, named the concept *schizophrenia*, from the Greek *schizo* (to divide) and *phren* (mind), which literally means "divided mind", that is, the split of mental functions, thus, the dissociation between thought and reality (Sadock & Sadock, 2008).



by psychiatry as a syndrome whose conditions are presented as distortions of the fundamental characteristics of thought and perception and by maladjusted affect.

Schizophrenia is considered, with regard to mental illnesses, the most relevant and even the most relentless, being the one that most sensitizes and impresses for the repercussion it has on the person, on his family and in the community. Subjects with schizophrenia, due to the characteristics of the disorder, mainly due to the debilitating effects that occur in the course of the disease, the acerbicity of the long-term symptoms and the specific nature of the needs it causes in the individual, pose a peculiar challenge and, for this reason, have deserved special attention, also because of its disabling character that is imposed on at least a third of the patients who suffer from it.

Usually characterized by an acute onset, of chronic evolution by outbreaks, its course is not typical, as it presents several episodes over time and covers varied psychopathological manifestations that reach the areas of thought, perception, emotion and movement, with the presentation of a whole group of symptoms that lead to the fractionation of the personality. The individual with schizophrenia usually presents a varied typical symptomatology: delusional ideas, hallucinations, disorganized speech and loss of production of symbolic and abstract thoughts, such as the elaboration of complex emotional responses, markedly disorganized behavior with peaks of eccentricity and with a tendency to escape from reality, or catatonic, known as positive symptoms, which translate into an excess or distortion of normal functions; and affective blunting (limitations in the variety and intensity of emotional expressions), alogia (restrictions in productivity and fluency of thought and speech), and avolition (difficulty in initiating goal-directed behavior), which are included in the negative symptoms and reflect a fall or loss of normal functions. The schizophrenic subject experiences "non-habitual experiences" that cannot be seen as hyperbole or additions of usual feelings.

Attention to the inclusion of students with schizophrenia is a major challenge, both in the organization and in the implementation of actions. Regardless of the modality that is established, regular or special, the school also has a therapeutic value for these students, as it contributes to the reordering of the student's lost structure. As a place that allows social recognition, it also produces effects on personal well-being. It is based on this precept that inclusive education is proposed, in an interdisciplinary proposal, as a bias for the possible and necessary articulation between the educational and the therapeutic. For



adolescents, the receptivity they find at school and from adults to extracurricular activities can undoubtedly provide extremely beneficial and satisfying support.

What can be seen, in general, is that there has been an advance in relation to the concern with the inclusion of students with some developmental disorder and/or disability, in terms of laws, projects, decrees, etc. However, educational practice still needs to be improved, because even today the school often becomes a space of segregation because it does not know how to welcome and enable the development of these students. It is necessary to consider the specificities that involve the learning and schooling process of students with schizophrenia, it is necessary to know and understand the possibilities in this process, as well as the limits. When we talk about inclusion, it is possible to understand that a lot of care is needed on the part of the school for its students, from the teacher to his student. Attention needs to be focused exclusively on students and their real needs and specificities. It is necessary to review the teaching practice and be careful not to continue as a legitimizer of a process of segregation by an illusory inclusion, because,

The madman bars the narcissism of the school, placing it in front of not knowing, establishing lack, and hence desire. Inclusion forces the school to deal with a knowledge that knows nothing about itself, and that is why it is continuously modified, breaking with the stereotypes of the teacher who knows everything, and the student who must learn everything, in a previously stipulated time and method. This is because the madman does not obey, at first, the established order [...] nor the chronological time of learning: he has his own logic and his answers can be resignified, but never evaluated along the lines of "take it, answer it here". (KUPFER, 1998, p. 136).

Therefore, Inclusive Education represents the greatest chance for a schizophrenic student, as it unites welcoming, understanding, respecting, loving, treating and educating. And the earlier the child receives the appropriate treatment and education for his specific development, the more chances he will have in relation to learning, because in childhood the psychosis is not yet fully decided.

POSSIBILITIES AND CHALLENGES OF THE TEACHING PROFESSION IN INCLUSIVE EDUCATION

Currently, the approaches of studies on diversity, difference and inclusion contemplate many rights of the Brazilian citizen in search of equality. In the educational field, professionals are "forced" to deal with the diverse subjects who are increasingly inserted in their classrooms by the conquest of the right of access to education, a



primordial condition for equal opportunities before society. In this context, education plays an essential role in understanding and building social equality. Thus, the demands of the wronged groups go far beyond access to education. According to Arroyo (2014, p. 28):

For both school pedagogy and popular education, the first issue will be the recovery of the agents of educational action: childhood, adolescence, youth and adult life, workers, classes, social, ethnic, racial groups and, above all, the recovery of the complex and tense processes in which they are immersed for their survival and affirmation as humans, as landless collectives, without a home, without health, without school, without university, without work, without spaces for a dignified and fair life.

In their struggles, the wronged collectives believe or bet a lot on the power of school education, although it is necessary to recognize its limits, taking into account that those involved in schooling do not always have possibilities and share this understanding, are engaged in the same perspective of action or are in a position to develop this understanding of educational action. Currently, there is an increasing emphasis on inclusive education programs, in which material resources are offered for schools to use with students who have disabilities, disorders and/or specific needs. However, we know that in a social life no one wants to go through exclusion or be the target of prejudice ⁵.

The diversity of individuals, their ways of learning and participation in school life is not a matter of pedagogical "fad", it is a matter of great relevance for those who think about education in a serious, critical and committed way with social reality.

In a democratic society, everyone fights to get their rights guaranteed. Therefore, schools and educational systems need to prepare themselves to think about innovation and strategies for new pedagogical proposals and curricula that take into account the knowledge and knowledge of the various subjects who have access to school. In this sense, Arroyo asks:

How can we think about curricula, contents and methodologies, formulate policies and plan educational programs without incorporating the close links between the conditions in which students reproduce their existences and their human learning? Disturbing questions (...) that have been instigating other educational practices, other knowledge and other relationships between teachers and students. (ARROYO, 2014, p. 83).

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⁵ In this sense, Heerdt (2003, p. 70), "A series of challenges are evident, some unprecedented, which need to be assumed and incorporated into teaching practice. Change, the new, the questioning, the different, are almost always a cause of insecurity and fear. But it is necessary to dare and face it". The challenge posed to this text concerns diversity, which involves the rupture of historically constructed paradigms so that the school can assume its inclusive role.



Today's school needs to dialogue with the subjects who are inserted in society and seek to develop pedagogical actions that contemplate the desires of its students. Historically, social groups and international organizations have increasingly clearly and objectively claimed their spaces in the school curriculum. The Salamanca Declaration (1994), for example, was a milestone for some debates from the perspective of curricular inclusion, since, among other aspects, this document confers on schools the duty to welcome all children, by stating that

Schools must welcome all children, regardless of their physical, intellectual, social, emotional, linguistic or other conditions. They must welcome children with disabilities and gifted children; children who live on the streets and who work; children from distant or nomadic populations; children from linguistic, ethnic or cultural minorities and children from other groups or areas, disadvantaged or marginalised. (DECLARATION OF SALAMANCA, 1994, p. 17-18).

Currently, school inclusion is understood by society as a right. As a result, the regular school ends up being driven to update its curriculum due to the demands that the entry of "new" students causes. Today the act of studying is no longer a privilege of a class; In the conception of the inclusive school, it constitutes a primordial condition for the development of the subject and society. The main struggle is not for a specialized school, but for a school prepared and welcoming to receive everyone. Therefore, the educational process will be much more satisfying and enriching if all students have the opportunity to interact with classmates with multiple characteristics, whether they are disabled or not.

METHODOLOGICAL PROCEDURES

MODE OF RESEARCH

Because it is meticulous, detailed and rigorous, the research methodology is the explanation of an entire action developed in the course of scientific research work ⁶.

The research in question is seen as applied because it seeks to generate knowledge for practical application, directly related to the resolution of problems that contain previously defined objectives. For Minayo (2010), applied research focuses on the problems present in the activities of institutions, organizations, groups or social actors and is developed for the elaboration of diagnoses, identification of problems and search for

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⁶ According to Gil (2002, p. 17), scientific research consists of the "rational and systematic procedure that aims to provide answers to the proposed problems". In which the construction of knowledge about a certain phenomenon or situation of reality presupposes the construction of a methodology that establishes the paths to be followed.



solutions. They respond to a demand formulated by social actors. In addition, the same author argues that this research develops activities in which previously acquired knowledge is used to collect, select and process facts and data, in order to obtain and confirm results, and generate impact.

The procedure used for the development of this work was bibliographic research, which is described by Lakatos and Marconi (2017) as a specific type of scientific production, made from already published texts, such as books, scientific articles, critical essays, dictionaries, encyclopedias, newspapers, magazines, reviews, abstracts. In the view of the authors, this type of research is of great relevance because it allows the investigator to have contact with a wide collection of information that often becomes more extensive than that which could be investigated directly.

As for the approach, qualitative research was adopted, because according to Minayo (2010, p. 57), qualitative research:

(...) This is what applies to the study of history, relationships, representations, beliefs, perceptions and opinions, products of the interpretations that humans make about how they live, build their artifacts and themselves, feel and think. Although they have already been used for studies of large clusters, qualitative approaches are better suited to investigations of delimited and focused groups and segments, of social histories from the perspective of the actors, of relationships, and for the analysis of discourses and documents."

As for the objectives, this is a descriptive research, as it was necessary to study, analyze, record and interpret the facts without the interference of the researcher. In this sense, Trivinõs (2011, p. 110), discussing descriptive studies, states:

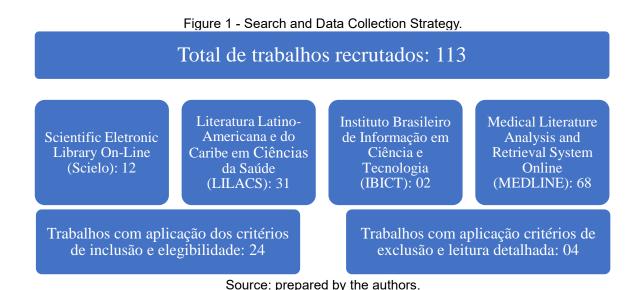
Most of the studies that are carried out in the field of education are descriptive in nature. The essential focus of these studies lies in the desire to get to know the community, its characteristic features, its people, its problems, its schools, its teachers, its education, its preparation for work, its values, the problems of illiteracy, malnutrition, curricular reforms, teaching methods, the occupational market, the problems of adolescents, etc. (TRIVINÕS, 2011, p.112)

DATA COLLECTION INSTRUMENTS

The present study is a descriptive, applied and qualitative literature review. Having as a guiding question: are school professionals, especially teachers, qualified to include students with schizophrenia, stimulating and enabling their cultural, social and cognitive development in the school environment? Does the school have physical, pedagogical and accessibility resources that can guarantee the inclusion of these students in a satisfactory way?



A documentary survey was carried out, that is, a "literature search", where bibliographic survey sources were used in the following databases: Scientific Electronic Library On-Line (Scielo), Latin American and Caribbean Literature in Health Sciences (LILACS), Medical Literature Analysis and Retrieval System Online (MEDLINE), and Brazilian Institute of Information in Science and Technology (IBICT). The following keywords/descriptors were used: "Schizophrenia", "Inclusion", "Learning", "Accessibility" and "elementary school". The following inclusion criteria were adopted: indexing in the aforementioned databases, articles, theses, and dissertations made available in full, in Portuguese, and publication between January 2015 and July 2023. The study sample consisted of 113 articles (Figure 1). With the application of the inclusion and eligibility criteria, a final sample of 24 studies was obtained. In addition, exclusion criteria were adopted: articles whose title or abstract were outside the scope of the present study. After detailed reading, 04 (four) studies were chosen to compose the sample list of this research, as they are extremely relevant to it. However, it is perceived that studies on the inclusion of students with schizophrenia and/or their schooling are quite scarce, and most deal only with therapeutic treatment in rehabilitation clinics, treatment in mental health centers, family support and pharmacological treatment.



Next, Thematic Analysis was carried out, which is a method of qualitative data analysis to identify, analyze, interpret and report patterns (themes) from qualitative data. The least that thematic analysis provides is to organize and describe existing knowledge and data in rich detail, as it contributes a lot to the generation of an interpretative analysis



of the data. Thus, it is a flexible, accessible method capable of supporting the management of both large and small databases of qualitative studies.

RESULTS AND DISCUSSION

The sample of this study was composed of 04 (four) studies, chosen for meeting the objectives proposed in the research, which are represented in Chart 1, according to the following variables: author(s), title, type of study, publication and year.

Chart 1 - Presentation of the study sample

No.	AUTHORS	TITLE	DESIGN OF STUDY	PUBLICATION	YEAR
01	Janaynna Mayara Teixeira Póvoas; Juliana Maria dos Santos Silva Maciel	Schizophrenia in adolescence and its impact on the school context	Bibliographic review (monograph).	Mental Health and Psychosocial Care Collection (repository of the LABORO Faculty).	2016
02	Cristiane Sousa de Assis	Inclusion of students with schizophrenia disorder: a case study carried out in a municipal school in Recife	Case study (article).	IV CINTED – International Congress on Inclusive Education	2020
03	Tatiane Mello de Miranda; Adriane de Lima Vilas Boas Bartz; Cintya Fonseca Luiz.	Schizophrenia and the Educational Process.	Bibliographic study (article).	Book: Education in its pedagogical, political, social and cultural dimensions 2 – Atena publishing house.	2020
04	Augusto Luís dos Santos Costa1; Lyvia Rafaelle Martins Serra Costa; Cícero Wellington Brito Bezerra.	Schooling and Challenges of Inclusion of People with Schizophrenia	This is a descriptive, exploratory and retrospective literature review.	Mens Agitat - Roraimense Academy of Sciences.	2022

Source: prepared by the authors.

Among the articles selected, it is possible to perceive that the predominant type of research is the bibliographic study and that all allude to the schooling of subjects with schizophrenia, how inclusion occurs and, especially, about the main difficulties faced by these individuals in the educational environment. Chart 2 shows the objectives and main results of each study mentioned above.



Table 2 - Presentation of the study sample by objective and main results.

		study sample by objective and main results.
No.	OBJECTIVES	MAIN RESULTS
01	Identify the main difficulties faced by schizophrenic adolescents in the school environment and clarify the social role of the school in relation to these students.	The study observed the great loss of students with Schizophrenia, being characterized by great functional loss, in the cognitive, affective and social. He addressed that the disease affects, in general, the personality of the individual and compromises their praxis and psychological functions; In this way, the adolescents in the school environment suffer from inclusion barriers, barely positioning of ideas and commitment to learning.
02	To expose and reflect on the inclusion of students with Intellectual Disabilities diagnosed with Schizophrenia Disorder in the regular education system in a municipal public school in Recife, Pernambuco.	The study showed that the educational institution, as a space for human formation, as a promoter of experiences and experiences, of exchanges and interactions, is continuously lacking in fostering the direction and redirection of actions that complete the human varieties. It was also found that not all professionals incorporate the complexities that involve the inclusion process beyond absorption in the educational context, emphasizing the need to present training processes in service to the teachers and technicians involved, with the intention of expanding the promotion, diversification and adequacy of pedagogical artifices, fostering differentiated strategies and methodologies that can bring the best possible pedagogical intervention.
03	To research the developmental, learning and relationship difficulties of schizophrenics diagnosed in childhood, investigating ways to improve the educational and social process and integrate them into society, without being discriminated against, addressing their real difficulties, in order to seek improvements in the teaching process of the adolescent with this disease.	It was possible to observe that the student with schizophrenia demands a series of trained professionals, working with the creation of learning programs focused on the real needs of the student, being carried out in partnership with the family and the school, can develop a study plan for it, in order to with contents that are part of their experience, considering their difficulties, limitations and their knowledge already acquired. Among the methodologies, the proposition of learning and performance goals was reported, encouraging the student's interest, acting on negative symptoms as well as avolition.
04	To identify the main factors that trigger deficits in the performance of people with schizophrenia; to address alternatives that guide the teacher's work and to identify how the inclusion of these people in their schooling is going.	The study recommends that the learning of people with schizophrenia occurs by reinforcement or reward, that is, that learning goals be established, as it instigates the student to want to learn, motivating him. shows that the family's help in the process of acceptance and knowledge of the disease is quite relevant, which when well guided work as propellers for this feat to be achieved. And he reinforces that the enrichment of didactic approaches in the classroom is applied in a simple and objective way.

Source: prepared by the authors.

The objective of this study is to understand the complexities that involve the process of inclusion of students with schizophrenia beyond the insertion in the educational context,



highlighting the need to develop training processes in service to teachers and school education professionals, with the intention of expanding the promotion, diversification and adequacy of pedagogical resources, aiming to foster differentiated methodologies and strategies that enable the global development of these students, considering their needs and potentialities. Thus, in this context, after a detailed reading and careful analysis of the research that makes up the sample of this study, it was possible to organize it into two spheres: the reasons that hinder academic development and interventions that facilitate inclusion and help in the learning of students with schizophrenia.

Reasons that hinder the academic development of students with schizophrenia

It is important to note that many schizophrenic students, when they are first diagnosed with a conduct disorder, over time they end up receiving the diagnosis changed to schizophrenia. Consequently, the professional, before making a diagnosis of schizophrenia, must be as clear as possible about its symptoms, especially when the patient has symptoms of thought disorder.

It is worth noting that there is no research in the literature that clarifies a standard method model of psychotherapy, which is considered as certain and effective to be used in the treatment of childhood-onset schizophrenia ⁷. However, socio-educational actions practiced in order to improve communication, problem solving and family life have favored a reduction in the number of patients' crises, which will also reflect on their educational performance.

The primary characteristics affected by schizophrenia, relevant to the patient's educational development and quality of life, are cognitive and functional characteristics. The studies selected for this research list a profusion of noticeable changes from the morbid phase, that is, before the first symptoms appear, being able to last for life, if there is no effective rehabilitation. They found that rehabilitation does not depend only on a multidisciplinary team, but on an entire family, school and personal context. And they list as main cognitive deficits: memory, attention/vigilance, executive function, problem-solving and reasoning, social cognition and processing speed. These deficits are well explained in table 2 by Costa; Costa and Bezerra (2022, p. 52-53):

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⁷ According to Tengan and Maia (2004).



Table 2 – Main cognitive deficits Deficits	Meaning
Memory	It can be working memory, visual, auditory, or verbal, referring to the ability to recall verbal, visual, and auditory information, and manipulate information for immediate use.
Attention/Surveillance	Ability to stay focused on something or some activity. It is divided into: selectivity (keeping an eye on one stimulus and another competitor); sustaining (keeping attention on a single repeated activity without loss of quality).
Problem Solving and Reasoning	Ability to solve and answer questions that reverse a problem, seeking to understand acts and facts, formulating ideas and elaborating judgments.
Executive Function	Ability to work with information, focus thoughts and check for distractions.
Social Cognition	Set of mental operations that establish social relations. Example: interpretation, perception and responses to the intentions of others.
Processing Speed	Speed in performing simple tasks that may require the operation of executive processes.

Source: COSTA; COAST; BEZERRA, 2022

The authors show other reasons that cause significant impairment in academic development and in the daily tasks of individuals with schizophrenia, they refer to the very picture of symptoms presented by the disease, with emphasis on the so-called negative symptoms, as they are more resistant to the action of medications and are present in a subtle way, before the manifestation of the disease. As shown in Table 3 by Costa; Costa and Bezerra (2022, p.53), are: alogia, affective blunting, anhedonia, avolition, and social isolation:

Table 3 – Main cognitive deficits Deficits	Meaning
Alogia	Poverty of expression, reduction in the collection of speech and speech, scarcity of conversational fluency.
Affective blunting	Decreased intensity and range of emotional expressions (voice intonation, facial expression, gestures, and body movements).
Avolition	Loss of the ability to express emotions and feelings, Indifference, deficiency in the initiation and maintenance of behaviors directed to certain goals (work, study, sports, daily activities, personal hygiene, etc.) especially when they require effort. Deficit in the desire to engage in these behaviors. Related to apathy and lack of energy.
Anhedonia	The anticipation of a reward or of any other pleasurable or recreational activity (anticipatory anhedonia) is more markedly and consistently impaired than the enjoyment of the experience itself (consummatory anhedonia).
Social isolation	Decreased interest, motivation, and appreciation of social interactions with others, such as family and friends. Loss of interest in intimate (sexual) intercourse independent of somatic problems. In children, it may correspond to a loss of interest in playing with others.

Source: COSTA; COAST; BEZERRA, 2022



It is possible to see that the amount of these factors considerably impairs the performance of routine and indispensable tasks in the life of any human being, such as shopping, paying bills, walking on the street, taking transport, performing domestic activities, managing finances, etc. Consequently, reaching interpersonal relationships and/or the ability to maintain them, especially the autonomy of these people, since they express the need for constant guidance.

Subjects with schizophrenia are easily distracted, have difficulties in planning and producing something, in solving problems whose questions have texts with implicit solutions ⁸. For these people, everything has to be as objective and clear as possible, whether in an academic activity or in a simple conversation. The same author also evidenced that in fact there is an impoverishment of both social and occupational functioning, associated with the degree of manifestation of negative symptoms, causing a lower quality of life. In addition, the study showed that negative symptoms stabilize or increase over the years, while positive symptoms (hearing voices, delusions, persecution mania, etc.) tend to decrease, but this decrease does not mean the disappearance of positive symptoms. This fact contributes to the conclusion that negative symptoms are primary aspects of schizophrenia.

Regarding the presence of cognitive deficits, Pontes and Elkis (2013) corroborate that it is difficult to make an accurate estimate of how common it is, however, about 40% to 60% of individuals with schizophrenia manifest cognitive impairment. However, they confirm that deficits should not be analyzed in isolation, since schizophrenia has a diversity of factors, with many variations in symptoms, functional impoverishment and the course of the disease itself ⁹.

Interventions that facilitate inclusion and aid in the learning of students with schizophrenia

Regarding the inclusion of students diagnosed with schizophrenia, it is possible to see that it is something very challenging for all actors involved in education, a fact evident by the scarcity of works, articles and studies that involve the theme, especially when it

⁸ As Beck (2009) explains.

⁹ Amorim et al. (2017) contribute by stating that the assessment of functional capacity alone is not enough to explain day-to-day functionality, that is, personal factors such as attitude and motivation, and environmental and cultural factors (such as the living environment) must also be evaluated. Thus, the person with schizophrenia needs support that considers the full range and diversity of problems, so that the readaptation, inclusion and/or reinclusion of the schizophrenic in society occurs.



comes to their inclusion in the final years of elementary school. Of the four studies that make up the results of this research, one of them shows the process of inclusion of a 14year-old adolescent, but in the 4th year of elementary school, that is, in the initial years, despite the age because the student is already distorted in grade and age. Thus, the articles socialize about school inclusion in basic education and one goes further and even addresses higher education.

Regardless of the existence of numerous public inclusion policies, such as the Brazilian Inclusion Law of 2015, Ordinance No. 3,284/2003 and Decree No. 3,298/1999, which are legal mechanisms used to guide the task of basic and higher education institutions to offer access, school adaptation, as well as accessibility mechanisms and the necessary support for the permanence of students with disabilities globally.

According to Freitas and Baqueiro (2014), students with disabilities, especially intellectual/mental disabilities, live with exclusion on a daily basis. Thus, we can understand that this fact is a reflection of society's lack of information, the lack of institutional actions that do not take into account the specificities of the student, the lack of academic preparation of teachers, the institutional inertia itself in relation to what can be done to ensure inclusive education, and thus, leave the scope of public policies and ideals of inclusion, and in practice, actions are initiated, enabling perspectives of quality of life for students. As is identified in cases of relying on reports for the student's failure in the face of the assimilation of a content, promoting him to pass the year without applying the necessary interventions and adaptations. For Fachinetti and Carneiro (2020) this is a problem that is increasing more and more and taking root in education, especially in public schools.

It is necessary to give voice to this population, and especially to people who suffer from schizophrenia, because in addition to all the challenges of the disease itself and overcoming to have a life within what society considers "normal", there are several barriers ingrained in this same society, one of them is dealing with prejudice, and here we mention the first element to be worked on by institutions to ensure that the school inclusion of students with schizophrenia happens, the overthrow of stigmas ¹⁰.

¹⁰ It is necessary to enhance the importance of combating the stigma against the disease, and Noto (2012) and Bressan (2012) intensify this, when they state that people with schizophrenia face a two-pronged struggle, where on the one hand is the fact of dealing with the disability arising from the disease and the manifestations of symptoms, and on the other, dealing with stereotypes, prejudices and social discrimination.



Thus, it is extremely necessary to plan and apply teaching strategies and interventions that aim at respecting the individual, understanding and knowing how to deal with possible difficulties and behaviors considered inappropriate (Ferreira, 2011). However, the lack of information is the most important factor to popularize myths about schizophrenia, so training actions for all professionals are necessary.

In this regard, Fideles (2019) corroborates by emphasizing the obligation to create strategies to involve all professionals of the educational institution, from support professionals, as well as administrative technicians, cleaning professionals to the teaching staff, as the student belongs to the school and not just to a teacher.

It is necessary to understand that school inclusion, in addition to assuming the therapeutic role, makes it for all students, contributing to learning and coping with difficulties for students with schizophrenia, as well as encouraging respect and cooperativism for other students ¹¹.

Regarding this point, studies have shown that for regular teachers of the curricular components, the inclusion of students with schizophrenia is possible, but it is very obscure in the current scenario. Dias (2017) shows that the teachers' feeling is one of frustration, since they allege the lack of discussion on the subject at the university, during their training process. Many report not having been prepared to deal with atypical students. In addition to the lack of accessibility, structure and support of many educational institutions, it is clear the commitment and willingness of these professionals to make inclusion happen, but lost in the teaching and learning process, because there are no alternatives and resources available, as well as public policies for continuing education and they do not have at least the notion of what the disease is.

Regarding the teaching practice, the articles that make up the results of this study suggest that the learning of people with schizophrenia occurs through reinforcement or reward, that is, that goals of possibilities and learning are established. As we have already seen, among the various factors that hinder the learning of people diagnosed with schizophrenia, demotivation, lack of interest in something, in addition to impaired concentration and attention stand out. Designing goals with the contents to be worked on and achieved, as well as determining a reward, instigates the student to want to learn,

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¹¹ Ferreira (2011) complements by stating that the structuring of an educational institution aimed at students with peculiar learning needs is made up of the lack of professionals and teachers trained to meet and understand the individuality of each student, in fact, the presence of a multiprofessional team becomes indispensable [...].



motivating him. Tavares et. al (2020) points out that the use of concrete materials such as didactic games helps in the better understanding and assimilation of the content by students with schizophrenia, citing the board game, where many of the students who participated in the games achieved a good performance ¹².

According to Costa (2022), the use of practical classes is essential, since they arouse the interest and stimulate the student's curiosity, facilitating the understanding of the content proposed in the classroom. However, it is important that the realization of these practices be developed with low-cost materials or unstructured materials, working on sustainability and contextualizing the student's daily routine with the topics to be studied. It is worth mentioning that the use of these resources not only can, but should be carried out by all students, as they can all reveal some difficulties that can be solved with the application of these didactic resources. Thus, with all that has already been mentioned, it is clear that the teacher's work is full of challenges and has required more and more specialization and teacher training. The adaptation, deconstruction and reconstruction of teaching strategies is indispensable in the school environment, especially in the classroom.

FINAL CONSIDERATIONS

The present study reflects on the understanding of the complexities that involve the process of inclusion of students with schizophrenia beyond the insertion in the educational context. It was possible to perceive the great need to develop public policies that contemplate training processes in the service of teachers and school education professionals, with the intention of expanding the promotion, diversification and adequacy of pedagogical resources, aiming to foster differentiated methodologies and strategies that enable the global development of students with schizophrenia, considering their needs and potentialities. It was found that their inclusion is still a great challenge, especially for teachers, a fact that is evidenced by the scarcity of research and studies related to the theme that serve as guidance for basic education teachers, especially those in the final years of elementary school.

It was possible to understand schizophrenia, especially in terms of preventing personal and social manifestations, as well as to reflect on interventions and assertive

¹² Thus, it is perceived that interventions that consider playful activities such as games, games, experiments, welcoming, creation of models, use of software in places where possible, drawings, activities that stimulate reasoning, concentration and dynamics, contribute significantly to the learning of students with schizophrenia (Ferreira, 2011).



pedagogical strategies to be developed in order to, more than minimizing the school deprivations of a student with schizophrenia, help him to feel good.

It is a fact that there are difficulties and challenges to promote real conditions for learning and schooling of students with schizophrenia, however inclusion is a right that needs to be guaranteed in practice so that children and adolescents with schizophrenia, disabilities and disorders are included in the regular school network, with the possibility of experiencing processes that favor the construction of learning and human development.

It is worth mentioning the great relevance of the family in the process of acceptance, knowledge and treatment of the disease, which when well guided work as a true base and propellers for inclusion to be achieved and the development of the student to happen.

We emphasize that the enrichment of didactic approaches and strategies in the classroom are applied in a simple and objective way. In this way, it will be possible to overcome the great challenge of enhancing the learning of students with schizophrenia. However, in the exercise of the profession, challenges will come all the time, and it is extremely necessary that the teacher understands the importance of his role in favoring an inclusive education and society.



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