# SCHOOL EXPERIENCES AND AUTISM SPECTRUM DISORDER: WHAT DO CHILDREN SAY?1

Vivências Escolares e Transtorno do Espectro Autista: o que Dizem as CRIANCAS?

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ABSTRACT: This study aimed at investigating the conceptions of children with typical development about their school experiences in contexts of inclusion of classmates with Autism Spectrum Disorder - ASD at two different moments, at the beginning and at the end of the school year, in order to verify possible changes over these conceptions as from the peers' contact with ASD. As many as 42 children aged 4-5 years old took part, from two child education institutions in the city of João Pessoa, state of Paraíba, Brazil, who had classmates in their classrooms diagnosed with ASD. Semi-structured interviews were applied with children with typical development, which were transcribed and analyzed using Bardin's content analysis technique. As results, the children mentioned positive adjectives when describing their daycare, teacher, and peers, both at the beginning and at the end of the school year. It was also common for children to describe the daycare in terms of the activities they performed in their routine, and the people, in relation to their behaviors. As classmates with whom the children did not play, those with typical development that presented aggressive behaviors were mentioned. About their classmates with ASD, they were considered by their peers as favorite classmates, also highlighting the use of the terms "special" or "baby" to characterize them, and the fact that over time they became viewed from their capacities and interests. Lastly, the importance of studying school inclusion from the perspective of children is discussed.

KEYWORDS: Special Education. Autism Spectrum Disorder. Conceptions. Typical Children. Early Childhood Education.

RESUMO: Este estudo objetivou investigar as concepções de crianças com desenvolvimento típico acerca de suas vivências escolares em contextos de inclusão de colegas com Transtorno do Espectro Autista - TEA em dois momentos distintos, no início e no final do ano letivo, com vistas a verificar possíveis mudanças nessas concepções a partir da convivência com os pares com TEA. Participaram 42 crianças, na faixa etária de 4-5 anos, de duas instituições de Educação Infantil da cidade de João Pessoa, Paraíba, Brasil, que tinham em suas salas de aula colegas diagnosticados com TEA. Foram aplicadas entrevistas semiestruturadas com as crianças com desenvolvimento típico, que foram transcritas e analisadas a partir da técnica de análise de conteúdo de Bardin. Como resultados, as crianças mencionaram adjetivos positivos ao descreverem sua creche, professora e colegas, tanto no início quanto no final do ano letivo. Também foi comum as crianças descreverem a creche em termos das atividades que realizavam em sua rotina, e as pessoas, em relação aos seus comportamentos. Como colegas com quem as crianças não brincavam, foram citados aqueles com desenvolvimento típico que apresentavam comportamentos agressivos. Sobre seus colegas com TEA, estes foram considerados por seus pares como colegas preferidos, destacando-se também o uso dos termos "especial" ou "bebê" para caracterizálos, e, ainda, o fato de que com o tempo eles passaram a ser vistos a partir das suas capacidades e interesses. Discute-se, por fim, a importância de estudar a inclusão escolar a partir da perspectiva das crianças.

PALAVRAS-CHAVE: Educação Especial. Transtorno do Espectro Autista. Concepções. Crianças Típicas. Educação Infantil.

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# 1 Introduction

Autistic Spectrum Disorder (ASD) is characterized by persistent deficits in two main domains: social communication and social interaction; and by restricted and repetitive patterns of behavior, interests, and activities. However, such characteristics are present at different levels of severity in people with this disorder; therefore, the term "autistic spectrum" has been used over the past few years to indicate this variability in clinical settings (American Psychiatric Association [APA], 2013).

The characteristics of ASD are manifested early, and diagnosis and stimuli in the early years are of fundamental importance (Cossio, Pereira, & Rodriguez, 2017; Velloso et al., 2011). Thus, considering Early Childhood Education as one of the first spaces for socialization and learning outside the family context, the importance of school inclusion of children with ASD stands out, as this practice provides experiences that are fundamental to promote development at this stage of life. According to the National Education Guidelines and Bases Law (Law No. 9,394, of December 20, 1996, updated by Law No. 13,415, of February 16, 2017), the purpose of Early Childhood Education is the integral development of children of up to 5 years old, in their physical, psychological, intellectual and social aspects, complementing the action of family and community.

Several studies on school inclusion of children with ASD (Camargo & Bosa, 2012; Chicon, Oliveira, Garozzi, Coelho, & Sá, 2018; Fiaes & Bichara, 2009; Gaspar & Serrano, 2011; Lemos, Salomão, & Agripino-Ramos, 2014; Mattos & Nuernberg, 2011; Sanini, 2011) have pointed out the importance of this practice by highlighting the role of educators as mediators of interactions in the school environment and demonstrating the participation of these children in peer interactions, considering the inherent peculiarities of the disorder, the level of commitment of the children and the observed context.

Considering the difficulties of children with ASD, but starting from the positive aspects that involve the possibilities and results of the inclusion work, we mention the study conducted by Lemos, Salomão, Aquino and Agripino-Ramos (2016), which revealed that most researched teachers demonstrated to be reformulating their conceptions about the child with ASD from the established experiences with these children in the school daily life.

Another aspect related to experiences in the context of school inclusion refers to the benefits of this practice for other children. Authors such as Camargo and Bosa (2012), for example, stress the importance of peer interactions for the development of social competence of all children. In this sense, Mattos and Nuernberg (2011), in their descriptive study about an internship experience in school psychology with the objective of helping to promote the development and social interaction of a child with ASD, highlight the role of established social and communicative exchanges among the children and point out the importance of the experience of valuing diversity in order to overcome attitudinal and communication barriers.

Thus, studies carried out in Portugal with children with typical development, who attend regular schools with children with ASD (Almeida, 2015; Ferreira, 2013; Joaquim, 2016; Martins, 2012; Nota, 2011), demonstrate the benefits of school inclusion from their prosocial behaviors. Although these surveys were conducted in another context and with children over 6 years of age, it should be noted that their results suggest a good level of acceptance and

interaction of students with typical development in relation to peers with ASD, as well as a positive attitude of peers regarding their inclusion.

It is noteworthy that a survey of national (Brazilian) and international articles published in the last 10 years in the PubMed, PePSIC and LILACS databases was carried out, using as descriptors (in Portuguese) the word "autismo" combined with the terms "concepções" or "atitudes" and "pares" in addition to their English counterparts (conceptions, attitudes, peers). Inclusion criteria were that the research had as participants typically developing children who studied in regular teaching classrooms with children with ASD, specifically in the context of Early Childhood Education, that is, up to 5 years of age. However, no articles were found that also met this last criterion, indicating the need for research with children in this initial stage of schooling.

Regarding the participation of children in scientific research, it should be noted that this is a consolidated activity in different areas of knowledge, since children have been the object of research; however, this usually occurs as individuals to be observed rather than participants who will act as respondents (Campos, 2008). Furthermore, understanding the child as a competent social agent for communication and cultural exchanges, we agree with authors such as Campos (2008), Rocha (2008) and Mafra (2015) when they address the possibility of giving voice to children in research, considering that children produce meanings based on what they feel and think about their experiences, and it is very important to know them to broaden their understanding in relation to them and favor the development of intervention strategies. Thus, the literature review study conducted by Mafra (2015) about the research methodology with children highlights the interview as a valid and effective methodological instrument with this population.

In this sense, starting from the relevance of school inclusion since Early Childhood Education and the possibility of expression of children inserted in this process about their experiences, this study seeks to answer the following research questions: What do children with typical development say about their school experiences? In their statements, do they mention peers with ASD? How are they referred to? Do the statements about their school experiences and their peers with ASD change throughout the school year?

The aim of this study is, therefore, to investigate the conceptions of children with typical development about their school experiences in contexts of inclusion of peers with ASD at two different times, that is, at the beginning and end of the school year, with a view to verify possible changes in these conceptions from the coexistence with peers with ASD.

### 2 Method

## 2.1 Participants

Forty-two children with typical development, aged 4-5 years, participated in this study from two Reference Centers in Early Childhood Education (called, in Brazil, *Centros de Referência em Educação Infantil -* CREI) of the Municipal Education Network of the city of João Pessoa, Paraíba State, Brazil, being 21 children of each CREI. Of the total of children, 22 were female and 20 male. These participants were in the first year of preschool and had in their classrooms classmates with a diagnosis of Autistic Spectrum Disorder, in a total of three children with ASD, two of whom attended the same room in one of the CREI.

# 2.2 Instruments

Although the three children mentioned had a previous diagnosis of ASD - all of whom had been diagnosed at about age 3 - the Childhood Autism Rating Scale (CARS) was used to characterize them in the present study, as it is an instrument that allows the indication of the level of the disorder presented by the child and has already been validated for use in Brazil (Pereira, Riesgo, & Wagner, 2008). From the frequency, duration and intensity of behaviors presented by the child, the score can vary from 15 to 60, with 30 being the cutoff point for the disorder, with the corresponding classifications: without autism - from 15 to 30 points; mild/moderate autism - 30 to 36 points; severe autism - from 36 to 60 points (Pereira et al., 2008).

Semi-structured interviews were also conducted individually with children with typical development of the two CREI, allowing a flexible organization, both in the form of asking and in the order of questions, allowing a broadening of questions as they emerged in the children's speeches. These interviews were recorded through a mini-recorder upon the child's consent.

It is important to highlight that, to ensure that the questions were understandable by the children of the study, the interview was previously conducted with five typically developing children attending preschool at a municipal educational institution in the city of João Pessoa. Of these children, three were male and two female. Although with a limited number of participants, the previous application of the interview indicated that some questions should be reformulated to make them easier to understand.

After the reformulation, the interview that was used in this research was configured, emphasizing that the questions of this instrument did not address the peer with ASD directly, in order not to induce an expected response and/or reinforce some kind of stigma. Thus, the questions directed at the children were broader, addressing what they thought about the CREI, the educators and the classmates in general, and they were also asked about their favorite peers and those they did not like to play with, as well as if they realized that a classmate did not play with the others.

### 2.3 Data collection and analysis procedures

After approval by the Research Ethics Committee of the Health Sciences Center of the Federal University of Paraíba, under Protocol no. 0605/15, the study was initiated with the survey of the CREI in the city of João Pessoa - Paraíba who had children diagnosed with ASD.

It is noteworthy that the CREI are Early Childhood Education institutions of the Municipal Education Network, aimed at children aged 0 to 5 years, ranging from nursery to preschool, full time. From this, contact was made with the CREI coordinators in order to present the objectives of the study, as well as obtain authorization for the research and a brief interview with them in order to characterize each CREI. The parents of the children were then contacted to obtain permission for their children to participate in the research.

After the parents' authorization, the CARS evaluation scale was applied, which allowed to identify the levels of impairment of the three children in the spectrum. The scale was applied by the first author of the article, who is specialized in ASD and who had previous

contact with CARS through her work with children with the disorder. The application was based on the observation of the children with ASD in their routine activities at the CREI and through additional interviews with the children's parents to complement the aspects that could not be observed. It is important to mention that this research is part of a larger project that includes observations and interviews with parents and educators, which allowed the application of this scale.

The next step consisted of conducting interviews with typically developing children. About the time of the interviews, initially one of the CREI educators individually called the children to go to a private environment of the institution with the researcher, who explained to them the reason for the visits to the CREI, requesting that the children answered questions about their experiences in that place, from a semi-structured script.

In the initial moments of the interviews, some children answered the questions punctually. However, the researcher sought to motivate them by adjusting her language and attitudes to the characteristics of this age group, which contributed to making the children feel more comfortable talking and offering richer statements

The interviews lasted an average of 10 minutes and were conducted at two different periods of time, at the beginning and end of the 2016 school year (April and December). It is noteworthy that all ethical aspects were followed. It is important to mention that the final interviews had a smaller number of participants - 35 children, being 19 from the first CREI and 16 from the second -, since some children no longer attended the CREI in the final phase of the study.

After conducting the interviews, they were transcribed literally and collected data submitted to the technique of Categorical-Thematic Content Analysis, proposed by Bardin (1977), when the initial and final interviews were compared. The analysis was performed by the first author of the article and reviewed by the other two authors, and categories were elaborated for four thematic classes - conceptions about CREI, about educators, about peers in general and about peers with ASD -, which are presented in the next section. We emphasize that these categories were established *a posteriori*, based on the reports of typical children. However, before presenting the categories, it is considered important to characterize the children with ASD in the study.

# **3 RESULTS AND DISCUSSIONS**

# 3.1 CHARACTERIZATION OF CHILDREN WITH AUTISM SPECTRUM DISORDER

As shown in Table 1, of the three children with ASD, one had a severe level of the disorder, while two had a mild to moderate level. Fabio scored 30 on the CARS scale, which corresponds to the cutoff point for autism, which indicates that this child seems to be on the threshold of the disorder. It is important to point out that, although all these children are part of the same diagnostic category, they have distinct characteristics and behaviors, considering the peculiarities within the spectrum.

CREI	Child <sup>5</sup>	Gender	Age	CARS	Schooling time
CREI 1	Natalia	Female	4.10	35	1 year
CREI 2	Fabio	Male	4.7	30	1 year
	Renato	Male	4.5	40,5	3 years

**Table 1**. Characterization of children with ASD.

More specifically about the linguistic characteristics of children with ASD participating in this study, it is important to note that Renato, the child with a severe level of the disorder, did not communicate verbally, making only a few sounds, such as repeating letters; Natalia verbalized some words, such as greetings or repetitions of the names of objects she liked; Fabio, on the other hand, communicated more verbally through sentences, though some of these were repetitions of what he heard. As for the behavioral and relational characteristics, Renato was the child who presented more motor mannerisms and social isolation; Natalia presented stereotypies in occasional situations and difficulty to socialize with the other children; Fabio showed little repetitive behavior, however, as for socialization, although it remained close to his peers, he showed some difficulty in initiating and responding to social interactions.

It is also noteworthy that all children with ASD in the study received multiprofessional interventions in public institutions, school clinics or private practices, such as psychiatric or neurological follow-ups and interventions with psychologists, speech therapists and occupational therapists, and one of them still practiced swimming. The time these children received such interventions ranged from five months to one year. According to Cossio et al. (2017), the earlier the intervention in ASD cases begins, the greater the chances of the child developing. It should also be mentioned that the CREI in which the research was conducted did not have Specialized Educational Assistance (SEA).

Having made the characterization of children with ASD, this section will present the main categories identified in each thematic class from the verbalizations of children with typical development. Given these considerations, it is recognized the relevance of children's conceptions of their daycare, their teachers and their peers in view of the role these aspects play in children's school experiences and their development. However, in this study, conceptions related to peers with ASD are highlighted.

#### 3.2 THEME CLASSES

In this subsection, we will present the conceptions about the two Reference Centers in Early Childhood Education, about the educators, about peers in general and about peers with ASD.

<sup>&</sup>lt;sup>5</sup> Fictitious names.

# 3.2.1 CONCEPTIONS ABOUT THE CREI

Regarding the conceptions about CREI, in both institutions children used *positive adjectives* - such as good, cool, wonderful - to refer to these places. When mentioning the CREI, all participants cited *activities they perform* in these spaces, and playing was the most frequent favorite activity in children's verbalizations, followed by pedagogical activities (such as writing, drawing and painting), daily living activities (eating, sleeping and bathing), sports and musical activities. These categories were identified in the participants' speeches at both moments of the study.

Such positive aspects present in the children's verbalizations about their experiences in the preschools refer to their role in promoting the development and learning of children in these collective spaces. Thus, it is worth mentioning playing as their favorite activity. As Cordazzo and Vieira (2007) state, because it is the preponderant activity in childhood, play, when used as a school resource, enables children to learn more attractively, as it is their own motivation. In addition to these aspects, it is considered important to emphasize that play permeates the whole process of child development, being the main activity from which the child's development occurs (Vygotsky, 2007).

### 3.2.2 Conceptions about the educators

Regarding the conceptions about the educators, the children of both institutions also used *positive adjectives* to refer to those, such as good, cool and great, especially regarding the initial moment of the study, although children of CREI 2, in the same time period, have characterized the teacher through *negative adjectives* such as "boring" or "angry". The children, in general, stated that they *like* the educators, which was verified in both Centers, both at the beginning and at the end of the school year. The children also referred to the educators in terms of the *actions performed by them*, such as conducting academic activities, telling stories, giving out/ toys, directing the children in activities of daily living (hygiene) and school routine.

The relationship between children and adults in the context of Early Childhood Education is addressed by Monção (2017), who emphasizes the need for more investment in teacher training and improvement of objective working conditions. Although many aspects permeate this debate, going beyond the objectives of this study, we agree with the author about the relevance of deepening the discussions about Early Childhood Education based on themes such as affection, care, feelings and emotions, recognizing the role of Early Childhood Education institutions in development.

### 3.2.3 Conceptions on Peers in General

As for the conceptions about peers in general, the children of both Educational Centers, in both stages of the study, also referred to *positive adjectives* – such as good, cool and great. However, in the final stage, only in CREI 1, some children referred to their peers through *negative adjectives*, such as "bad". Part of the children mentioned their peers in terms of the *activities they perform together*, such as play, with some children characterizing them as friends or through behaviors that they often have, such as hugging and kissing. However, they also cited behaviors such as fighting or hitting.

Among the *favorite peers*, or more frequent play partners, those of the same gender were usually mentioned, which became more evident in CREI 1 in the initial stage of the research. Concerning *peers with whom they do not play*, those who exhibit behaviors that could be characterized as aggressive or inappropriate - such as fighting, hitting, pushing, giving names and not obeying the teacher - were most often cited both at the beginning and end of the school year. To these behaviors, aspects of peers with whom they do not play were also followed: not sharing toys, school supplies or belongings; unauthorized picking up objects or toys from others and not returning them; being of the opposite sex.

These results are supported by the literature, since, according to Papalia and Feldman (2013), in the preschool phase, in general, children like to play with others of the same gender and age, preferring prosocial peers and rejecting those that show intrusion or aggression. This aspect also refers to the importance of the affective dimension for acceptance among peers. As Machado et al. (2008) highlighted in their study, emotional development plays an important role in children's ability to interact and form positive relationships with one another.

### 3.2.4 Conceptions about peers with ASD

With regard specifically to the *characterization* of peers with ASD, among the peers who mentioned such children in their verbalizations, the following terms were cited to refer to them: "baby", having mentioned this at the beginning and end of the year; "special" or "important" (as a synonym for special). It is noteworthy that, in CREI 2, these names for children with ASD were used only in the final stage of the study, possibly due to the fact that educators mainly use the term "special" to explain some behaviors of these children to their peers, such as crying, or to justify the permission to use a toy only by the child with ASD and not by the others. It is worth mentioning that this articulation between children's conceptions and teachers' discourses was possible, because, as mentioned, this research also involved observations and interviews with educators.

When asked about the meaning of these terms, the children gave various explanations. Overall, the children justified their positions by the behaviors of their peers related to: not playing with other children, difficulty performing educational activities, not sitting, making body movements, jumping and making sounds, as well as other behaviors presented, especially by children with more severe levels of disorder, such as urinating on the floor of the classroom, tearing up posters or climbing the desks. Other responses also included: emotional reactions apparently unrelated to what is happening around them, such as smiling or crying, and difficulty speaking, as exemplified in the following account:

She is a baby [...]. She walks, but she [didn't] grow up, she's a little kid still. She'll grow up to be able to talk ... she's growing up fast. [...] She doesn't use a pacifier.

These results are corroborated by the study conducted by Joaquim (2016), who pointed to speech difficulty as one of the characteristics of students with ASD most frequently cited by their peers, followed by difficulty in relating with other people, besides the manifestation of unusual and repetitive interests and/or behaviors and slow thinking. Moreover, it is worth mentioning Martins's (2012) research, as the author indicated that peers of students with ASD

recognize that such peers have attitudes that they cannot understand. According to Almeida (2015), the vast majority of students with typical development participating in their study had the knowledge or perception that their peers with ASD manifest difficulties in these areas.

The children in this study also attributed the meaning of sick to the term "special", with statements about the need for their peers with ASD to go to the doctor or hospital. The following excerpt is from a participant's that referred to the two peers with ASD in CREI 2:

Researcher: Do you like playing with them?

Child: But I can't play hide and seek, if they run, they will get hurt because they are special.

They will fall and then they cry.

Researcher: What is it to be special? Child: It is ... being special is something that someone special is sick. My mother already asked

about this ... If anyone is sick here it will be this: special.

Researcher: Sick how?

Child: Sick ... as we do not go to the hospital and then get sick? And then it's called that name.

Researcher: What name? Child: It's ... special.

It is possible to infer also in the speech of this child a sense of protection or care in relation to his peers with ASD, as revealed by some studies (Almeida, 2015; Joaquim, 2016; Martins, 2012; Nota, 2011), when they indicated a tendency of typically developing students to care about and assist peers with ASD by manifesting attitudes such as protection, cooperation, and altruism.

It is noteworthy that children with ASD were also mentioned among their *favorite classmates*, both at the beginning and at the end of the school year. Thus, part of the CREI 1 participants mentioned the child with ASD of this institution as one of the most frequent play partners. It should be noted that these participants were female, as was the child with ASD. It should be noted that in the early stage of the study, one of the participants who cited the child with ASD as one of their favorite peers also reported some of her behaviors that made interacting with others difficult, as the following excerpt demonstrates:

She cries, she lets no one play, gives nothing to anyone ... gives no toys. When I'm in the room she just gives it to me, she doesn't give it to anyone else [...] I say, 'Natalia, look, if you give it to everyone, I'll like you a little more.' [...]. She gets everyone's toys. Then I say like this: 'Natalia, everyone has no toy', then the teacher goes: 'what an ugly thing'.

In addition to the characteristics of the child with ASD that would make interaction with other classmates difficult, this statement also shows an attempt of the typically developing child to encourage a child with ASD to approach others, seeking to stimulate attitudes such as cooperation when giving toys to others, which reinforces the importance of contact with other children of the same age for the development of social skills by those with ASD. It is still necessary to highlight the role that the educator could play in this situation. In relation to that, we mentioned Lemos et al. (2014), when they conceive the educator as a mediator and point to their importance in promoting these interactions.

With regard to CREI 2, the two children diagnosed with the disorder were also cited by their peers - both male and female - and the child with milder ASD characteristics was cited more often than the one with a more severe level of disorder. Thus, when compared to the other two children in the study who had mild to moderate level of the disorder, the child with severe level was less referred to as a play partner by peers with typical development. However, although children with ASD manifested some behaviors that somehow bothered their peers, such as pushing, the aggressiveness of other typically developing peers, from behaviors such as beating and insulting, was more evident in the participants' statements as factors that hindered interaction. That is, the fact that children have the disorder was not an aspect that necessarily made their peers to consider them as play partners difficult.

With regard to *play* that they usually participate with children with ASD, in CREI 1, at the beginning of the school year, activities with toys, such as construction sets, as well as objects of interest to children with ASD, such as a bag, which at the beginning of the study was the restricted interest presented by the child, typical feature of ASD. In the final stage of the study, a greater variety of games were mentioned, such as: tickling, singing happy birthday with the child, playing with a doll, jumping on a trampoline, playing with musical instruments such as the guitar, as well as other objects of interest. Lipstick, which was of their interest in the final stage of the study. It was also referred to as a favorite play with the child with ASD placing her on the lap, which may be influenced by the child's perception of being a "baby" and, in turn, by the educators' speeches referring to the child with ASD compared to those with typical development.

The data obtained by Spagnol (2015), also from the discourses of a teacher, corroborates the idea of infantilization of students with ASD by teachers, as she describes her student as an "eternal child". This fact can also be observed in school practices, such as pedagogical activities (Macêdo & Nunes, 2016), being discussed by Capellini, Shibukawa and Rinaldo (2016) who, in their study, identified that the teacher presented a different way of treating the student with ASD when compared to the other students, manifested in terms of content and also in the language used with him, which was infantilized.

However, in general, it can be inferred from the play that children with typical development reported, with regard to the student with ASD, that they seem to realize and value over time the activities of interest to the child with ASD, accepting and participating more in these activities, as well as encouraging their participation in other games, demonstrating the benefits of school inclusion for both typically developing children and children with ASD, as suggested by Camargo and Bosa (2012).

In this sense, the results of the study conducted by Almeida (2015) indicate that although almost all peers stated that they like the company of their classmates with ASD, most also said they played little with them. According to Nota (2011), the greatest difficulty of typically developing children seems to be related to their ability to understand the problem of their peers with ASD than to relate to them. These data point to the need for educators to work in order to enable children with typical development to understand the child with ASD, both in terms of his/her characteristics as well as his/her skills, interests, and commonalities with developing children themselves. contributing to the promotion of social interactions among them.

Regarding the CREI 2, in relation to playing with children with ASD, at the beginning of the school year, activities were mentioned with toys, such as cars and construction sets, especially in relation to children with milder characteristics of the disorder.

At the end of the school year, children reported playing games such as hide and seek and tag, as well as modeling and football activities, being the latter mentioned as the one performed specifically with the child with the mildest level of the disorder.

Still regarding the changes verified with time in CREI 1, it was also noticed that some children who mentioned, at the beginning of the school year, that the one with ASD did not play or did not let other children play, cried, shouted, pushed or took toys reported less these characteristics at the end of the year, and there were, in turn, reports about the *learning* of the child with ASD, in the final period of the study, as exemplified by the following excerpt:

"She's already learning ... to ear, wash her hands, wear sandals ... Putting her sandals in her bag".

The first point that can be analyzed from this excerpt concerns how Early Childhood Education spaces can favor the development of children with ASD, especially with regard to their autonomy in activities of daily living. In addition, the speech of the typically developing child suggests that those with ASD can be perceived by their peers not only in relation to their difficulties but also to their abilities, which are emerging throughout their school path, a perception that can be facilitated. by the way educators refer to children with ASD in the presence of their peers.

With regard to CREI 2, it was noticed that more behaviors of children with ASD in the class were mentioned at the end of the school year, as if these characteristics were becoming more evident to the students over time. It also appears that at the end of the year, the peers begin to associate the two children diagnosed with the disorder, as they mention events, situations, or behaviors that specifically involve the two, as in the following examples:

"Fabio screams and Renato cries, but the teacher fights with Fabio, only with Fabio" [when indicating that the teacher used to scold the child with mild diagnosis of the disorder due to his behavior, but not the child with more severe level].

"Renato does like this, O: 'ii' [imitating echolalic sound that the child makes] ... Fabio does like this, O: ā āranran' [imitating crying sound]. Fabio wants the teacher's phone. He likes cell phones ... Then the teacher gives it to him [...]. I only play with Fabio and Renato".

Among the participants, *positive expectations* regarding the development and abilities of children with ASD in the class were identified at the end of the school year, especially those with the most severe level of the disorder, regarding the possibility of developing the verbal language. In both moments of the research, some participants also indicated that they would like to be able to play with the children. These results suggest, once again, the need and importance of an intervention by educators that enables children with typical development to understand their peers with ASD, allowing to address also the diversity that is proper to human beings.

# **4 Conclusions**

The relevance of children's participation in scientific research is emphasized as a subject capable of expressing their ideas and their opinions regarding their surroundings. With regard to this study, it is concluded that its objectives were met, as children with typical development could share their experiences in Early Childhood Education, specifically with regard to peers with ASD, which became possible for the adequacy of the instrument to the age range of the participants.

Given the results found, we point to the influence of educators on the conceptions presented by children with typical development in relation to peers with ASD. It is worth mentioning that the term "special" used by some of them to refer to these peers sometimes took on a negative meaning, when the notion of illness was attributed, and this denomination may be linked to the discourses given in these spaces by the educators. The same happened with the term "baby", since children perceive the inconsistency in this explanation and express it in their speech through questioning.

This context reflects the difficulty of educators in dealing with the theme, since the perception of the characteristics of children with ASD are reported by the other children, who seek answers from their educators, due to curiosity, a characteristic of childhood. Thus, the data from this study indicate the need for further discussion on how to address these issues with typical children, considering: the characteristics of their age group, their level of understanding, the child with ASD included and the family moment regarding their child's diagnostic process.

Considering the mentioned aspects, it is noteworthy that having children with ASD in the same teaching environment is not necessarily enough for the other children to develop positive attitudes, as well as the establishment of strategies that favor the conceptions and the interactions in these contexts.

Once again, this work highlights the importance of school inclusion of children with ASD since Early Childhood Education, as it enables the broadening of their social experiences and provides their peers with an awareness of the diversity that is proper to human beings. However, it is necessary to discuss inclusion policies with educators and parents, as their attitudes and discourses will influence how typically developing children will perceive and interact with their peers with ASD. It should be noted that the coordinators of the CREI investigated, when asked if any work had been done to receive children with ASD in the institutions, they denied it, and one of them highlighted only the fact that they requested a caregiver to accompany the child with ASD in the CREI, whose education, in most cases, is not enough to promote effectively the inclusion of these children.

In this sense, the role of a team of professionals that offers continuing education in service to teachers with regard to school inclusion, such as the school psychologist, becomes relevant. Thus, we emphasized the importance of this professional in the areas of Early Childhood Education and the contribution he/she can make in this sense, constituting him/ herself as an agent promoting the school inclusion of these children, besides disseminating in these spaces knowledge about development and learning, enabling children with ASD to develop their potential.

However, some aspects were considered as limitations in this study, namely: the research carried out in only two Centers, as well as the lack of studies in the national literature on the subject, especially involving children between 4 and 5 years old, that is, specifically in Early Childhood Education, made the discussion results through the lack of evidence from other empirical studies in similar contexts difficult.

Finally, we suggest conducting research that investigates the conceptions of a larger number of children with typical development, about their peers with ASD, from different public and private Early Childhood Education institutions, as well as children of different ages, besides a larger number of classrooms and, consequently, children with ASD, with different degrees of the disorder. This would allow to know what the characteristic aspects of the experiences and questions of each age group are, as well as the impact of the severity level of the ASD, providing the basis for further reflection on how to approach the theme in the school context, in order to contribute to the success of the inclusive practices.

We should also emphasize as a suggestion the need for studies on the conceptions of children with typical development about their peers with ASD linked to the observational method, allowing to apprehend the experiences of the children in their context of relationships. Such studies could offer clues about social interactions involving children with ASD and their peers and how to promote them in situations experienced in Early Childhood Education.

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