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## FIGURES OF SPEECH IN AUTISTIC SPECTRUM DISORDER: A LOOK AT THE BRAZILIAN BIBLIOGRAPHY

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Abstract: Introduction: Studies on autism point to a variety of behavioral changes and language impairments. Subjects with Autistic Spectrum Disorder face difficulties in understanding the subjectivity of language; stand out: facial expressions, idiosyncrasies and figures of speech. Objective: To analyze how the Brazilian bibliography addresses the use of figures of speech by individuals with Autism Spectrum Disorder. Materials and methods: Qualitative bibliographic research carried out in a database, seeking only articles, monographs and other scientific publications, between 2008 and 2018, originating from the Brazilian bibliography. Results: Fifteen works were identified that resulted in the construction of four categories: Characterization of the document source consulted; Are there difficulties and limitations in figurative language for people with Autism Spectrum Disorder? What do people with Autistic Spectrum Disorder and/or their family members say about figurative language? Is it possible to work figurative language with people who have Autistic Spectrum Disorder? The use of figures of speech in autism is not much studied or argued because the subject ends up classified as a speaker or non-speaker and his difficulty in the social function of language inhibits the exploration of figures of speech. Conclusion: It was verified in the Brazilian bibliography a low number of works that approach the subject studied. When it comes to studies in speech therapy, only three studies address figures of speech. This finding indicates the need for further studies on the subject, as there is nothing, scientifically proven, that contradicts the use of figures of speech as part of the therapeutic follow-up of individuals with Autism Spectrum Disorder. **Keywords:** Autistic Spectrum Disorder; Language studies; Metaphor; Revision.

## INTRODUCTION

To say that one is "metaphorically speaking" (a term with 125,000 entries in *Google*) is quite common in everyday language. Likewise, saying that one is "literally speaking" is something so commonplace that the expression "literally speaking" has already become a frequent discursive marker in the Portuguese language<sup>1</sup>.

The E-Dictionary of Literary Terms presents figure, metaphor and connotation, in general, as fragments of utterances whose apparent interpretation does not conform to their real interpretation and which results in a codified transgression of the code itself. The terms "figures of speech", "metaphorical language", "figurative meaning" or "connotative language" are used as synonyms<sup>2</sup>.

The metaphor is the most famous figure of speech and the effect is given by the word play that is done in the sentence. It consists of removing a word from its conventional context (denotative) and transporting it to a new field of meaning (connotative), through an implicit comparison, of an existing similarity between the two.

To clarify, the connotation of language is more commonly understood as "figurative language". If we say "foot of the table", we are referring to the similarity between the sign foot — which is in the organic field of the human being — and the trace that makes up the support of the table, in the field of objects. A sign lends its meaning to two different fields, a kind of meaning transfer. Thus, language "figures" the object that supports the table, based on the similarity of the human foot and this relationship takes place between signs. On the other hand, denotation attempts a more direct relationship and approximation between the term and the object. The animal's foot, the human being's foot would be denotative signs, language correlated to a real, which would always answer the question

"what is such an object?" with the name of the object, without figuration or intermediaries<sup>10</sup>.

Again in relation to figures of speech, the metaphor has some variations and is related to other figures of speech such as personification (attribution of actions, qualities or feelings of human beings to inanimate beings); hyperbole (exaggeration); symbol (happens when the name of a being or concrete thing assumes a conventional and abstract value); synesthesia (visual sensations merge with auditory, gustatory, olfactory, tactile); catachresis (current job, which serves to make up for the lack of a specific name for a certain thing); among others<sup>3</sup>.

Metaphors are one of the difficulties faced in communication by people with Autism Spectrum Disorder (ASD). ASD, according to the Diagnostic and Statistical Manual of Mental Disorders (DSM-V), criterion A, has as essential characteristics the persistent impairment in reciprocal social communication, in non-verbal communicative behaviors used for social interaction and in the development, management and understanding of relationships. Deficits to develop, maintain and understand relationships. Ranging, for example, from difficulties adjusting behavior to suit diverse social contexts, to difficulty sharing imaginative play or making friends, and lack of interest in peers4.

Many authors agree that autism is a neuropsychological developmental disorder that manifests itself through marked and persistent difficulties in social interaction, communication, and in the repertoire of interests and activities. The level of these alterations are important markers for the diagnosis of ASD, especially the presence of verbal language. The level of receptive language may be below the level of expressive language and many children with ASD have difficulty

understanding questions, simple instructions, jokes or figurative expressions, evidencing their inability to understand language<sup>3-4-5</sup>.

In this sense, language development in children affected by the disorder is atypical, especially with regard to aspects related to semantic and pragmatic development, that is, in the fields of meaning and use of speech in the social context. Conventional oral language acquisition in children with Pervasive Developmental Disorder(TGD)1 is considered a hallmark of development, those who develop this ability before the age of five show greater intellectual and social competence in their subsequent development. Incidentally, orality may not develop, and when verbal language is elaborated, it is little used socially: the subject with the disorder has little initiative in social conversation and has difficulties in maintaining a conversation that does not directly concern their interests in function of the variability of the disorder and its resulting manifestation in a spectrum of involvement in degrees that can vary from mild to severe<sup>5-6</sup>.

The absence of orality is different from that of the hearing impaired, because they maintain good social interaction and make use of compensatory communication maneuvers, for example, the use of gestures. In fact, gestures are rarely used by children with PDD for communicative purposes and, often, the request for objects or actions is made by guiding the adult's hand<sup>5</sup>.

The lists of symptoms presented in the literature on the Autistic Spectrum have not contemplated the analysis of dialogic practices and the interactions of the subjects. In general, difficulties are cited in certain behaviors of social conviviality. In addition, other mechanisms of meaning are not analyzed, such as non-verbal language<sup>6</sup>.

<sup>1</sup> Nomenclature used by the author due to the year of publication of her work, based on the DSM-IV, where Autistic Spectrum Disorder was still classified within Pervasive Developmental Disorder. Only in the DSM-5 that only the TEA nomenclature started to be used, with its due degrees of severity.

Thus, this research aimed to analyze how the Brazilian bibliography addresses the use of figures of speech by individuals with Autism Spectrum Disorder.

## MATERIAL AND METHOD

Qualitative bibliographic research, carried out with articles, monographs and other scientific publications that relate figures of speech and/or metaphors with ASD, including electronic databases as a research strategy - Scielo, Portal Capes, Pubmed, Medline and Google Scholar. Materials from the period 2008 to 2018 were included, only in Portuguese.

Exclusion criteria are translated articles, monographs, dissertations or theses, as only originals in Brazilian Portuguese will be accepted, since what is intended to be researched is the national state of the art.

The searches for the materials for the research were carried out from March 5, 2019 to April 7, 2019, totaling 34 days. They were made from 10:45 pm to 00:15 am, and, on weekends, from 6 pm to 10 pm, therefore, one and a half hours a day and eight hours a weekend, which at the end of thirty-four days totaled seventy-six hours of searches for articles, monographs and other scientific publications.

For the searches, a list was created with three nomenclatures for ASD described in the DSM-IV: Autistic Disorder; Asperger's Disorder and Pervasive Developmental Disorder, which in the DSM-5 became just a nomenclature: Autistic Spectrum Disorder (code 299.00)4, also included in the search. In addition to four more nomenclatures present in the ICD-10: Infantile Autism (F84.0); Atypical Autism (F84.1); Asperger Syndrome (F84.5) and Other Pervasive Developmental Disorders (F84.8)<sup>14</sup>.

Each nomenclature was searched first on academic Google, then on Scielo, Portal Capes, Pubmed and Medline, always in that order. The research was carried out using one of the aforementioned nomenclatures and the word "language". Approximately two thousand search results were found. Of these, many dealt with language in general and not specifically with figurative language. Therefore, in these results obtained, four terms related to figures of speech were searched between quotation marks (to specify): "figures of speech", "figurative language", "metaphorical language" and "metaphor" (these last two were inserted due to the few results obtained with the other two terms related to figures of speech).

Thus, at the end of the searches, twenty bibliographies were filtered. Some results were used for the theoretical support of the research, because they present little information about figurative language itself or because it is a very specific topic in medicine (resonance images, for example). Seven articles and eight dissertations/thesis reached the criteria to be used in the bibliographical research.

After obtaining the materials for the research, the fifteen works were studied in detail and the author organized files for each one of them. In these records, she began to observe themes that repeated or became constant in the work, such as family, school, difficulties, among others. Thus, the themes were filtered and organized. Subsequently, four categories of analysis were built, which Characterization of the document source consulted; Are there difficulties and limitations in figurative language for people with Autism Spectrum Disorder?; What do people with Autism Spectrum Disorder and/ or their family members say about figurative language? and Is it possible to work figurative language with people who have Autistic Spectrum Disorder?

The fifteen works were named as Documental Source Consulted and are referenced as Appendix 1. During the results and discussion, this Documental Source is referenced with superscript letters in Latin alphabet, so that there are no divergences with the standard references that appear referenced with numbers Superscript Arabic, in accordance with the *Vancouver* format.

## **RESULTS**

## CHARACTERIZATION OF THE DOCUMENT SOURCE CONSULTED

The consulted documental source presents relevant characteristics which allowed the assembly of tables to highlight them, as will be presented in the sequence. These tables were not prepared as a form of quantitative analysis and yes, to characterize the Documental Source and guide the reading of the bibliographic findings.

	ARTICLES	DISSERTATIONS / THESIS
Written by Speech Therapists	0	3
Written by Graduates in Letters	1	1
Written by Psychologists	8	1
Written by Graduates in Biological Sciences	3	0
Written by Graduates in Pedagogy	2	2
Written by Occupational Therapist	0	1

**Table 1.** Regarding the training of the authors of the consulted document source

Chart 1 was inserted as a way of analyzing which areas addressed the subject studied and whether it appeared more in articles or dissertations/theses. All the authors of the works were inserted in the table, justifying the total number exceeding fifteen (number

of works from the Documental Source Consulted).

	ARTICLES	DISSERTATIONS / THESIS
Case study	2	0
Literature review	4	0
Qualitative analysis of autobiographical books	1	0
Research carried out with specific qualitative or quantitative protocols and/or methods	0	1
Field research	0	1
Structured or semi-structured interviews	0	1
Elaboration and application of the Specific Protocol to the study	0	1
Estudo observacional	0	1
More than one study in the same work - Bibliographic review, interviews, among others	0	3

**Table 2.** Regarding the type of study of the document source consulted

Table 2 informs which specific study the author(s) used for publication.

	ARTICLES	DISSERTATIONS / THESIS
It was cited concomitantly with other areas of health	1	2
It was cited referring to speech therapy in ASD	0	2
It was mentioned because the subject of the research undergoes treatment with speech therapist (a)	0	1
It was cited concomitantly with other areas of health and the subject of the research undergoes treatment with speech therapist(a)	0	1

**Table 3.** Regarding the citation of the word speech therapy in the document source consulted

Finally, chart 3 aims to analyze why the author mentions the word speech therapy in his work. In this table, it is noticed that there were seven Documentary Sources that included the word speech therapy, therefore, eight Sources approached ASD, the figures of speech, but did not mention speech therapy.

## ARE THERE DIFFICULTIES AND LIMITATIONS IN FIGURATIVE LANGUAGE FOR PEOPLE WITH AUTISTIC SPECTRUM DISORDER?

Many authors present several scientific justifications that show the limitations of people with ASD in terms of figures of speech. the pedagogue of Andrade<sup>a</sup>, in one of his publications, reports that with regard to the broader context of the use of

connotative language within a constructivist learning perspective, many of the teachers carry traditional views (even being inclusion teachers) of the learning process, as the use of figures of speech, when it occurred, was not based on a constructivist approach to learning.

This portrays the difficulties even of people who are involved in learning the person with ASD, as they often do not know how to help and/or teach. Reis<sup>b</sup>, who holds a doctorate in Child Studies, is Portuguese and published an article in Brazil where she states that children with Autistic Spectrum Disorders (ASD) have serious alterations not only in language, but in non-verbal communication. These difficulties are evident both at the level of comprehension – in the processing of verbal and non-verbal information, and at the level of expression – in the use of natural gestures, codified gestures and words to enter into communication with the other.

At another point, the same author mentions that the narrative discourse is particularly problematic, since it involves social, cognitive and linguistic knowledge that is "blind" in these children. The difficulty in perceiving intentions, other's points of view, inferential reasoning and the literal interpretation of behavior prevent the child's involvement in narrative discourses<sup>b</sup>.

Autistic people generally demonstrate difficulties in interpreting what they observe, in giving meaning beyond the literal, in associating words with their meaning, in understanding spoken language, figures of speech, ironies and abstract concepts, in using speech with a communicative function and generalizing learning<sup>c</sup>.

According to psychologist Gomes<sup>c</sup>, all these difficulties, added to the low emission of symbolic play or make-believe, are directly related to changes in language and suggest the limitations that these aspects can bring to the lives of people with autism and those who live

with them.

Discourse and pragmatics require an understanding of the structural form of language, but also how that structure is used in the course of social interactions. Several studies describe that children with ASD have speech difficulties, fail to respond to questions and comments, and these conversational difficulties continue into adulthood<sup>b</sup>.

In the same line of statements, Eckel<sup>d</sup>, Graduated in biological sciences, he also mentions that another characteristic of these people is the fact that they do not understand non-verbal language, such as gestures, facial and body expressions and demonstrations of feelings, in addition to figures of speech sarcasm. For someone with Asperger's, everything is understood in the denotative sense, with no understanding of implicit or connotative information in the communication. These characteristics make other people interpret the behavior of someone with Asperger's as alien, indifferent or insensitive to their ideas and feelings, but what happens is a lack of understanding of non-literal elements.

Returning to the look for a pedagogical vision, Ferreirae cites that the difficulty in understanding abstract elements is due to the fact that the person with autism thinks concretely, interpreting language literally. Therefore, idioms, slang, puns, subtleties of language, expressions that have double meanings, inferences, analogies, metaphors, insinuations and sarcasm do not make sense and become incomprehensible in a dialogue. For her, this individual, even being capable of delivering a speech, would make it slow, boring and pedantic. In addition, he would have difficulties with idioms and adapting and associating expressions in different situations. "It would demonstrate inability in metaphorical constructions and interpretive mechanisms for indirect communication. or principles of coherence that lead to understanding between the lines<sup>e</sup>".

To Ferro<sup>f</sup>, the literal interpretation that these people make of what is said to them brings serious damage to the understanding of metaphors and figures of speech. Thus, parents, teachers and other professionals must avoid metaphors, euphemisms and colloquialisms. The pedagogue states that it is likely that people with Asperger Syndrome, who have a special impairment in semantics, have learning problems, as it is common for them to encounter a situation or explanation of certain content that is difficult to understand because it contains metaphors<sup>f</sup>.

In agreement with all the statements above, speech therapist Faustino<sup>g</sup> it also addresses the difficulties of people with ASD in understanding and using non-literal language and in providing an appropriate level of information relevant to understanding a given subject, in addition to the inappropriate use of social conventions, such as greetings and politeness markers. In her experience, she states that the "child plays with the therapist, but does not understand messages with double meanings, nor figures of speech. Uses speech unintelligibility to answer questions that exceed your comprehension<sup>g</sup>".

Marquesh, also a speech therapist, justifies the difficulty that these people have, explaining that this advanced level of linguistic ability coexists with a severe communicative-pragmatic and social inability of the autistic, which affects the ability of these individuals to infer the implications of statements and to discriminate literal implicit meanings and figurative. In one of her research studies, she investigated the fact that individuals diagnosed with Asperger Syndrome often have difficulty understanding idioms (IEs), such as *Carla released the chicken*. Such individuals attribute a literal meaning to expressions, being unable to reach an idiomatic meaning. In the case

of *releasing the chicken*, they decode an event of giving freedom to an animal and not the socially accepted, non-compositional sense, which refers to the event of revealing one's personality. Therefore, these individuals can often be lost when the speaker's words do not maintain a compositional relationship between form and meaning.

The speech therapist, in her study, considered it possible to propose that AS (Asperger Syndrome) do not even try to supplant the semantic face value of expressions. It must be inferred that they are unable to improvise a process of maintaining a short story based on mnemonic processes, so that they rescue the idiomatic meaning, whenever the context requests ith.

After so many statements, findings and scientific studies addressing this theme of understanding figures of speech in ASD, the next subtitle will present excerpts from speeches and views of both individuals with ASD and their families on this subject.

## WHAT DO PEOPLE WITH AUTISM SPECTRUM DISORDER AND/OR THEIR FAMILY MEMBERS SAY ABOUT FIGURATIVE LANGUAGE?

Bialer<sup>i</sup>, psychologist, did research based on a biography written by Jessy's mother, a girl with ASD. Analyzing the work, the author cites:

there was a concern on the part of the family to avoid talking about improbable events, as they considered that for them it was something incomprehensible by language. So, they only sought to affirm something if they were sure that this would happen. If they said they would go to the supermarket, even if it started to rain in torrents, they would not change the plan, reiterating the importance that she could have a relationship of trust with what others told her. Only at the end of the first autobiography is Jessy beginning to brush up on the concept of uncertainty in life and language.

The author cites excerpts from the book where the girl's mother comments on figurative language:

when Jessy's language was able to develop more cohesively, around the age of 15, numbers ceased to be the structuring element of her apprehension of reality and organization of thought and she was able to structure her thought and language in a way less idiosyncratic. With the development of language, Jessy was able to express herself fluently, her sentences became more complex, well structured grammatically and logically chained. Although she still had a penchant for literality, she became progressively interested in figurative expressions and proverbs, which increased her ability in social interactions and understanding the world. He never developed the capacity for irony, but he learned to lie, although his naivety was still prevalenti.

At another point, the mother reports on the situation after Jessy became an adult: "we characterize how progressively the way her language could develop, although even as an adult she has difficulty decoding slang or situations of linguistic expressions that gain contextual meaning<sup>i"</sup>.

Gonçalez<sup>j</sup> researched individuals with ASD interpreting questions with specific figures of speech. Regarding Hyperbole, where the intention is to exaggerate the meaning, she reports:

that there was a confusion with the literal meaning of the word "toast". The students associated it with hunger, as it is a food present in their daily lives, not interpreting the context of the expression "die would toast" in the story, which meant that the character would burn with the sun's rays. In this question, the error in the answer is characterized by not properly understanding the Figure of Language presented.

Another author who also cites a misinterpretation of figures of speech is Trevizan<sup>k</sup>:

durante a realização de tarefas de matemática, após ter resolvido, sozinho e correctly, three problems of addition and subtraction, he started, abruptly, an uncontrollable cry. When trying to identify the situation that caused her suffering, the teacher asked: "Why are you crying? He is tired?". And he explains: "That's not it! It's just that in the last task, Maria got bonbons; Pedro also got bonbons. And me? I didn't have anything!"."

The same author uses other excerpts from her research that demonstrate more situations in which ASD ends up making it impossible to understand the real meaning of the context:

> At the beginning of her second pregnancy, Éttore's mother, trying to instill in her son (two and a half years old at the time) acceptance of the younger brother's arrival, asks: "Éttore, whose room is this?", pointing to the space that was being prepared for the brother (which was being formed inside the mother's body, therefore, not yet visible to him). "It's from the house", replies Éttore. It is not a question here of deviating from the answer, out of jealousy, as some traditional approaches to psychology might initially suggest. It is, rather, the immediate recognition of the physical space ("room" inside the "house"), operationalized by logical thinking k.

Trevizan<sup>k</sup> reports another moment of the same mother:

the mother, next to the child, suddenly comments: "Our! I don't know where my head was!" The child immediately reacts: "Do not know?! Always on your neck!" The mother then explains that, in addition to the literal meaning, already understood by him, the phrase can express the person's regret for having done something he must not have done. And she explained, with concrete examples, what was the experience that was causing her remorse and why the use of figurative speech. Some time later, the occupational therapist tried to convince the child to go back to eating broccoli. Éttore then says: "Broccoli? Never again. I don't know where my head was k".

Lastly, Ferreira<sup>c</sup>, when observing a student with ASD for his research, he mentioned that a peculiar situation caught his attention.

The student recorded the word Earth with a capital letter and was asked by the support teacher: "Why did you write Earth with a capital letter?". The student replied: "Why is the planet". And, in the face of the argument, there was the objection: "Not. It is a reference to land management". He replied: "So why then deal with rotational motion?" It is common for students with autism to 'disconnect' from the explanations, and in this case, the student was attached to the literal writing of the words and to the knowledge acquired previously and not to the contextual meaning of the class. In your logic, Earth (planet) is always written with a capital lettere.

After all these reports, the last category of this work aims to promote ASD for action, respecting all the limits and changes already presented.

## IS IT POSSIBLE TO WORK FIGURATIVE LANGUAGE WITH PEOPLE WHO HAVE AUTISTIC SPECTRUM DISORDER?

This question can be answered positively or negatively by many authors who were used in the bibliographical research. In the field of pedagogy, de Andradea states that "the use of metaphors as methodological resources can be considered a tool capable of stimulating the cognitive development of students" and that "these resources are directly linked to the development of speecha"". However, at another point, she states that "teachers seem to lack a set of good analogies and are not confident in using them effectively [...]a", and even though "there are several types of autism, their characteristics can vary according to this variety and consequently the learning process, so there is a need to adapt the pedagogical work to the studenta".

In the same vein, Azevedol points out

that "these students have the potential to learn, but given the conditions of lack of teacher training, the possibilities decrease, affecting the development of students". In his research, he pointed out that there is "the need to rethink the operationalization of the inclusive process so that the" included "do not experience a process of exclusion within the school itself". As a pedagogue, the author also mentions the school environment, stating that "language figures, such as metaphors, humor and sarcasm may be incomprehensible, since the person with autism may not be able to appreciate the communicative intention of the interlocutor, resulting in a literal interpretation of the statement" and that, therefore, "an intervention in the school context is important in these cases<sup>1</sup>".

Eckel<sup>d</sup> also addresses the importance of pedagogical work:

everything must be explained in detail, as these individuals understand everything in the denotative sense, not understanding sarcasm or other figures of speech. Therefore, there is no point in thinking that this child will understand the reason for a change or exception to the rules, as this will not happen if the teacher does not sometimes work hard on the difficulties and restrictions of this student. Using topics of interest to the individual with Asperger's is the best way to obtain a satisfactory result regarding the teaching and learning process. One learns better what gives pleasure and captivates attention<sup>d</sup>.

Another author who follows the same reasoning is Ferreirae, when he comments that for a student who is on the spectrum "the appropriation of knowledge through analogous relations for the explanation of phenomena does not always happen".

To have learned as the main objective of a class, in addition to verbal language usually used in classes by teachers, it is necessary to organize ways that allow the student to improve the ability of abstraction and visual perception, with visual resources and also with concrete and manipulable resources, so that the interpretation and understanding of the curriculum contents and the gradual conceptual construction of school contents "for the whole class", including students with autism who are currently enrolled in regular schools<sup>c</sup>.

Trevizan<sup>k</sup> also talks about teachers in this role of teaching and learning, stating that if they "don't make explicit the cultural meanings implicit in the shared speeches, they may make their (autistic) communication and social interaction even more difficult, even producing inappropriate speeches". At another time, the author, who has a degree in Literature, states that "autistics need greater explanations of this process of materialization of the abstraction contained in the meaning, which must be valued in the school and social contexts of their 'proximal development'<sup>k</sup>".

Gonçalez<sup>j</sup>, who also has a degree in Literature, mentions in her research that "the analyzed students understand such figures of speech in the context that was presented to them". The author justifies that "such a condition may be due to the exposure of these students to communication situations permeated by these figures, such as dialogues with schoolmates and teachers, everyday school texts, paradidactic books<sup>j</sup>", among others, "which may indicate that this group studied was adequately stimulated in relation to this type of school content<sup>j</sup>".

Although the results are not immediate, some authors favor the insertion of metaphors in teaching children with ASD. It is the case of Santos<sup>m</sup>, psychologist, when she mentions that "the strategies used by the educators to expand the child's understanding did not have an immediate response", and, at another point, she states: "the boy did not answer the questions about what was in the box, for example. However, these strategies are considered necessary for children's cognitive

development<sup>1m</sup>". Then he concludes that "these situations, if constantly promoted, can help in the development of language and in the understanding of a context that requires a greater abstraction<sup>m</sup>".

Finalizing the concepts found involving the school environment, by Andradea also states that "the level of learning development of autistic people is generally slow and gradual", therefore, "it will be up to the teacher to adapt his communication system to each student. It is also up to the educator to adapt and prepare the other students for the best inclusion of the autistic in the school context<sup>a</sup>".

"Therefore, the school institution in partnership with the family can, [...] review concepts about the psyche and language of people with ASD and help them in their development, through a socio-interactionist educatione".

Taking the findings to a sphere beyond the school environment, Leon<sup>n</sup>, who has a background in occupational therapy and a doctorate in psychology, approaches the subject by stating that "the understanding of primary metaphors depends on a close experiential correlation between two different domains<sup>n</sup>". He cites individuals with ASD, within a large group with some Pervasive Developmental Disorder (GDD), and thus states that "a child affected by GDD will be able to understand primary metaphors, since these metaphors come from non-linguistic knowledge experienced bodily". On the other hand, "the understanding of idiomatic expressions and complex metaphors will require the inclusion of contextual factors and the speaker's intention, which possibly makes it unfeasible for a child with PDD to understand, according to the characterization of this disordern".

Finally, Milher °, the only speech therapist whose research was included in this subitem, addresses the subject by stating that

her research "showed that there are aspects that favor future development; These, in turn, have an intrinsic therapeutic value". He also states that "for the speech therapist, being aware of the existence of a link between the abstract context of the utterance and the interactivity applied to it can, for example, guide the evaluation and therapeutic planning regarding figures of speech".

## **DISCUSSION**

The study, composed of fifteen publications, shows the limitation on the subject "figurative language" correlated with ASD. Initially, much larger numbers were believed to compose the present publication. Examining the data quantitatively, only three publications belong to authors trained in Speech Therapy and nine belong to authors in the field of education. In addition, it is noteworthy that nine authors are from the field of Psychology. According to the analysis carried out, the works in this area analyze, mainly, the behavior towards figures of speech and not the language itself. It is the case of Santos<sup>m</sup> that in his work "the focus is given, predominantly, to the commitment of symbolic play". As this is not a pedagogical article, the data collected, exposed and discussed are certainly a source of interest for educators. This meticulous relationship between health and education can be justified by the focus of the study: figurative language.

If the child or adolescent, of school age, does not have a good social and verbal relationship with the environment inserted, the school will promptly request evaluations and/or treatments so that the student can, however small it may be, live and be inserted in the environment school.

Thus, in relation to the second category presented in the results, about difficulties and limitations in figurative language for people with ASD, science shows, in agreement with de Andrade<sup>a</sup> and Gomes<sup>c</sup>, that it is still not

known for sure how linguistic information is processed and which factors are determinant for a good communicative performance, but it emphasizes that the difficulties of social engagement and differences in cognitive style are elements that make research in ASD cases difficult<sup>8</sup>.

Reis<sup>b</sup> and Eckel<sup>d</sup>, pointed out the difficulties in non-verbal communication. Studies show that the educational system still does not offer the appropriate service for this, and that the unpreparedness of professionals to educate and teach children with ASD is related to insufficient training, due to lack of information about the condition. The traditional school, even with strategic changes for the inclusion of autistic children, proves to be incapable of welcoming and working with the limitations and differences presented by individuals. The inclusion of students with special needs implies providing these children with quality education, with the commitment of the professionals involved, and not just guaranteeing a space in the school<sup>8</sup>. Perhaps this justifies the fact that schools refer/require students with ASD to seek health services, more specifically, psychologists and/or speech therapists, as they may believe that it is the exclusive work of these professionals and not a joint effort between health professionals/ school professionals /families.

Ferreira<sup>e</sup>, Ferro<sup>f</sup> and Faustino<sup>g</sup> address difficulties in understanding abstract elements, idioms and non-literal interpretation. During the study, one of the difficulties is that the lists of symptoms presented in the literature on ASD have not contemplated the analysis of dialogic practices and interactions of the subjects. In general, difficulties are cited in certain behaviors, social life, as if different interlocutors and different social practices did not affect the subject's postures. In addition, other meaning mechanisms are not analyzed, such as non-verbal language (gestures, facial

expressions) in dialogical contexts<sup>6</sup>. All this social interaction together with figurative language, seem to go unnoticed in the eyes of scholars who aim and focus the study on the subject as verbal or non-verbal; included or not included, or able to understand or unable to understand. Since we can make an analogy with a tree, where all this is the trunk, but the branches are also part and are important. That is, focusing and labeling the child or adolescent with ASD as capable or incapable of something is becoming an outdated practice.

The speech therapist Marquesh that individuals with ASD "do not even try to supplant the semantic face value of expressions. " Perhaps for the reason of the "severe communicative-pragmatic and social inabilityh" that they present. To Delfrate6, the child depends on four basic and essential conditions for the development of language. The first would be the presence of a subjective interest in the child, that is, a willingness to play. The second would be the existence of at least one intact sensorimotor system (audiovisual or visual manual). The third would be the insertion in an environment where language is part of significant routines and the fourth and last would be the presence of a minimally self-referenced language that contains some grammatical mechanisms, signaling organization itself so that the discovery of its structure can proceed efficiently, following a more or less determined direction. In this sense, the person with ASD would not have the first condition: subjective interest in interacting with the other. If there is no such interest, the language consequently undergoes major changes and/or influences.

Linguistically, the expressions that the authors cite as not understood by autistic people are, among other figures of speech, metaphors, where the locus is language. In this linguistic view, this implies that the figurative use does not have a central role in

the production of meanings, since it would not establish a direct relationship between reality, concept and word, which would be the case of the literal meaning. This meaning would be "distorted", when using a term in place of another, bringing, in this transport, connotations typical of the "borrowed" concept, which would interfere with the meaning of what one wants to refer to. One of the implications of approaching metaphor as the "exchange" of one word for another would be to see the figure as a deviation from the correct, "proper" meaning of a term1. As a result, metaphor is seen as a superfluous resource of language, characteristic of poetic or rhetorical discourse, both of which are not considered "serious" uses of language, as they do not contain "legitimate" meanings. This shows the erroneous view about this use, since metaphors are inserted in the daily life of society as a whole, from the school environment, work, media networks, among others. Believing in the superfluity of this resource is, in a way, to accept the non-social insertion of the subject with ASD

The second topic of the results brought clippings of what people with ASD and/or their family members say about figurative language. Bialeri, in his research on a biography written by a mother of a girl with ASD, reports on the uncertainties of language. This family avoided talking about unlikely events, certainly because of the difficulty the daughter has in understanding something that she cannot see or do immediately. In a study with imaging exams to evaluate the brain activity of individuals with ASD and individuals without ASD, Marques9 found that both groups were equally capable of processing sentences within the same temporal spectrum (latency). Cognitive responses in relation to stimuli with reversible idiomaticity (John kicked the bucket) revealed that individuals without ASD had greater difficulty processing these sentences. It

was interpreted here that the fact that subjects with ASD did not have access to the idiomatic meaning left them with only one possibility of literal interpretation of these sentences, while for the other group there was a literal and an idiomatic possibility. Thus, we can see that this difficulty in abstract understanding is strongly present in the group included in the spectrum, however, without data or scientific notes that prove some physiological factor, which can generate many therapeutic approaches.

Gonçalez<sup>j</sup>, Trevizank and Ferreira<sup>e</sup> specified figures of speech in their biographical studies, showing the difficulty of people with ASD in understanding figures other than metaphors, such as hyperbole. According to Delfrate<sup>6</sup>, one of the reasons for this difficulty may be in the functional use of language. These people's utterances are not continuous and they have difficulty engaging in conversation, providing information, and especially expressing their ideas. In most cases they don't seem to know what they are and what words are for. Without receiving help from trained professionals, they will probably continue not to understand the meaning of words, their function and their use in simple statements, who will say then, in statements with the use of figurative language, sarcasm and intrinsic meanings.

Finally, the last category presented in the results addressed the possibility of working with figurative language with subjects belonging to the autistic spectrum. Some authors, such as de Andrade<sup>a</sup>, Azevedo<sup>l</sup>, Eckel<sup>d</sup>, Ferreira<sup>e</sup>, Trevizan<sup>k</sup> and Gonçalez<sup>j</sup>, presented favorable arguments in relation to this type of work with these subjects.

The authors of the educational scope, evidenced the pedagogical action in the inclusion of these children in the school environment. However, Sousa<sup>11</sup> cites that the simple fact that these children come to attend the same space as other neurotypical children,

does not classify them as adapted to the environment that surrounds them, because while in integration, investments are made in the possibility of individuals with disabilities to attend common schools, whose curriculum and pedagogical method are aimed children considered "normal", in inclusion the focus is shifted from the individual to the school. In this case, it is the educational and social system that must adapt to receive the disabled child. That is, it is not enough for students with special needs to be attending classes with other students in a regular school if they cannot effectively participate in activities developed in the classroom. Because doing so would just put a person who needs adaptations in their physical and psychological environment in an unfavorable situation that would cause not only discomfort, but also lack of interest on the part of this student that would culminate in the delay in their school and social development and even evasion or dropping out of classes, which in fact occurs very frequently in municipal and state schools and also in the private network.

Thus, a child with Autistic Spectrum Disorder actually needs a multidisciplinary team, such as a speech therapist, psychologist, occupational therapist, physiotherapist, psychiatrists, among others who can meet the particular needs of each individual depending on their degree of autism<sup>11</sup>. Only with educators, health professionals and family understanding and accepting this multidisciplinary team, which will be possible to approach far beyond the simple and pure language.

The psychologist Santos<sup>m</sup>, was also favorable to the insertion of metaphors in the teaching of children with ASD, mainly for language development. Accordingly, Santos<sup>12</sup>, states that the most evident feature in the language of autistic people is perhaps its diversity, which is related to the individual's intellectual and

social development. The linguistic abilities present in these children range from mutism with little or no communicative functionality, to relatively well-developed syntactic abilities and functional speech, although with poor conversational abilities and sometimes with a peculiar use of language (altered, repetitive and meaningless). It is estimated that only about half of children with ASD acquire speech as a means of communication and, even the majority of those who manage to speak, never fully develop functional communication skills, often presenting echolalia and maintaining their linguistic level below the normal level. standard. Thus, the use of figures of speech can and must be considered since the language in ASD presents all this diversity.

The only speech therapist mentioned in this last category of results (due to research criteria and not the author's choice), stated that "for the speech therapist, being aware of the existence of a link between the abstract context of the utterance and the interactivity applied to it can, for example, guide the assessment and therapeutic planning regarding figures of speecho". This adds to and strengthens the aforementioned statements from other professionals. In this discussion there was no author who, emphatically, is against the use of figures of speech in ASD.

Delfrate<sup>6</sup> states that the figure of the speech therapist is essential for the early treatment of children diagnosed with ASD. These children with autism are a population in which individual impairments are very different. Each patient requires a specific understanding. From the moment that significant interactions are established between subject and therapist, the child's posture changes in relation to the interlocutor and to the language itself. The interlocutor considers the speech and gestures of the child with autism as significant and maintains a posture of listening to their speech, giving meanings to their utterances

and seeking to interpret and signify their verbal and non-verbal manifestations. Based on these considerations, we understand that a therapist involved with language must conceive the subject as a speaker and active in the social environment.

Acting in the social environment, reflection is in order here, it is not just about looking at the subject, seeing the limitations, inserting this subject in a social environment and believing that there is his place. It is about acting, which according to the Michaelis dictionary<sup>13</sup>, means to exercise activity, to have a function, to act.

In this direction, the Speech Therapy therapeuticwork, from stimulation, acquisition and appropriation, enables the change of the subject's position in language. The process of construction of subjectivity, with the use of figures of speech and abstract understanding can be considered, therefore, unique in each child, whether he has a diagnosis of autism or not. This singularity is characteristic of the language acquisition process and is part of the particular relationship that is established between the subject, language and their social interactions<sup>6</sup>.

## CONCLUSION

The present work aimed to analyze how the Brazilian bibliography addresses the use of figures of speech by individuals with ASD. In the Documental Source consulted, figures of speech are identified as difficulties to be understood and used by people with autism. The main difficulties are in relation to metaphors, hyperboles and idiosyncratic expressions, in addition to sarcasm and facial expressions.

Throughout the analysis, no notes were found against the use of figures of speech in the therapeutic follow-up of people with autism.

However, there was a low number of works

that specifically address the theme of this study. When it comes to studies in the field of Speech Therapy, only three studies address figures of speech. This finding indicates the need for further studies on the subject, since it is the speech therapist who deals with the work that involves the development of language and improvement of communication in the universe of autism.

Arguably, ASD compromises the social function of language use, but if it can be "taught", then the use of metaphors, hyperboles, idiosyncratic expressions can be introduced, so that this individual with ASD is also motivated to understand when someone tell him something in a figurative way, and that he, in addition to understanding, can actually feel included.

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### APPENDIX 1

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