



The symbolic game in speech-language intervention with children with autistic spectrum disorder

O jogo simbólico na intervenção fonoaudiológica de crianças com transtorno do espectro autístico

El juego simbólico en la intervención fonoaudiológica de niños con trastorno del espectro autístico

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Abstract

Objective: To verify the proposal of the symbolic game in speech-language intervention with children diagnosed with Autistic Spectrum Disorder. **Methodology:** Case study with qualitative approach. It was performed at two philanthropic institutions in a capital of a Northeastern state, with speech pathologists working with autistic children. Speech-language pathologists, referred as F1, F2, F3, F4 and F5, answered a structured interview with thirteen questions. The interviews obtained, in average, duration of 30 minutes, and carried out in the work environment of the professional. Participants' responses were analyzed and described according to content analysis. **Results:** Professionals, four females and one male, have between two and nine years of service, only two have autism related training and two reported attending a demand of more than twenty children per week. Most of the professionals work in a general way, and there is no search for autism-related training. Regarding stimulation of symbolic play, only three reported that it occurs from the beginning of therapy. They reported advances related to the behavior of children, and justified that such advances are also reported by parents and other professionals. **Conclusion:** It was possible to observe variables that directly influence the stimulation of the symbolic game, related to the training, time of performance and exclusive hours for patient care. For some speech therapists working in the area, approaches that stimulate functional and adequate behaviors are necessary, considering the

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symbolic play as secondary to the cognitive and language development.

Keywords: Autistic Disorder; Speech, Language and Hearing Sciences; Growth and Development; Cognition.

Resumo

Objetivo: Verificar a proposta do jogo simbólico na intervenção fonoaudiológica com crianças diagnosticadas com Transtorno do Espectro Autístico. **Método:** Estudo de casos, com abordagem qualitativa. Foi realizada em duas instituições filantrópicas de uma capital de um estado do Nordeste, com fonoaudiólogos que atuam com crianças autistas. Os fonoaudiólogos, denominados como F1, F2, F3, F4 e F5, responderam a uma entrevista estruturada com treze questões. As entrevistas obtiveram, em média, duração de 30 minutos, e foram realizadas no ambiente de trabalho do profissional. As respostas dos participantes foram analisadas e descritas conforme análise de conteúdo. **Resultados:** Os profissionais, quatro do sexo feminino e um do sexo masculino, possuem entre dois e nove anos de atuação, apenas dois têm formação relacionada ao autismo e dois relataram atender a uma demanda de mais de vinte crianças por semana. A maioria dos profissionais atua de forma generalista, não havendo busca por formação relacionada ao autismo. Em relação à estimulação do jogo simbólico, apenas três relataram que ocorre desde o início da terapia. Relataram avanços relacionados ao comportamento das crianças, e justificaram que tais avanços também são relatados por pais e outros profissionais. **Conclusão:** Foi possível observar variáveis que influenciam diretamente na estimulação do jogo simbólico relacionadas à formação, tempo de atuação e carga horária exclusiva para atendimentos dos pacientes. Para alguns fonoaudiólogos que atuam na área, são necessárias abordagens que estimulem comportamentos funcionais e hábitos de vida diária, considerando o jogo simbólico como secundário para o desenvolvimento cognitivo e da linguagem.

Palavras-chave: Transtorno Autístico; Fonoaudiologia; Crescimento e Desenvolvimento; Cognition.

Resumen

Objetivo: Verificar la propuesta del juego simbólico en la intervención fonoaudiológica con niños diagnosticados con Trastorno del Espectro Auténtico. **Metodología:** Estudio de casos con enfoque cualitativo. Se realizó en dos instituciones filantrópicas de una capital de un estado del Nordeste, con fonoaudiólogos que actúan con niños autistas. Los fonoaudiólogos, denominados F1, F2, F3, F4 y F5, respondieron a una entrevista estructurada con trece cuestiones. Las entrevistas tuvieron, en promedio, una duración de 30 minutos, realizadas en el ambiente de trabajo del profesional. Las respuestas de los participantes fueron analizadas y descritas según análisis de contenido. **Resultados:** Los profesionales, cuatro del sexo femenino y uno del sexo masculino, tienen entre dos y nueve años de actuación, apenas dos tienen formación relacionada al autismo y dos relataron atender a una demanda de más de veinte niños a la semana. La mayoría de los profesionales actúa de forma generalista, no buscando una formación relacionada al autismo. En cuanto a la estimulación del juego simbólico, sólo tres relataron que ocurre desde el inicio de la terapia. Informaron avances relacionados al comportamiento de los niños, y justificaron que tales avances también son relatados por padres y otros profesionales. **Conclusión:** Fue posible observar variables que influyen directamente en la estimulación del juego simbólico, relacionadas a la formación, tiempo de actuación y carga horaria exclusiva para atender a los pacientes. Para algunos fonoaudiólogos que actúan en el área son necesarios abordajes que estimulen comportamientos funcionales y hábitos de vida diaria; considerando el juego simbólico como secundario para el desarrollo cognitivo y del lenguaje.

Palabras clave: Trastorno Autístico. Fonoaudiología. Crecimiento y Desarrollo. Cognition.

Introduction

Symbolic play is one of the main forms of expression in childhood, through which children may reveal their inner world, express their desires and feelings, and adapt to their living environment^{1,2}. Regarding the cognitive aspects of symbolic games, children demonstrate key acquisitions important for character formation³.

The emergence of symbolic play is understood as one of the prerequisites for the emergence of language. With the evolution of language skills, objects undergo resignification, extending the worldview of the child; personal interests are revealed and cognitive/creative levels are reached^{3,4}.

Children with autistic spectrum disorders (ASD) may have difficulty in engaging in symbolic play. When they play a game of make-believe, they demonstrate repetition and limitations in the acquisition of metaphors⁵. There is no correlation in the delay of the development of some areas of development in TEA with difficulty in symbolic capacity⁵. Children with ASD can demonstrate great difficulty in symbolic capacity, and this prevents the establishment of their reciprocal social skills^{6,7}.

Many studies have proved, quantitatively and qualitatively, the difficulty in symbolic capacity that is manifested by children with TEA. For example, an author evaluated three groups (autism, Down syndrome, and typical development), each consisting of ten children, regarding the items of a protocol that discriminated against children with autism. The findings revealed that 100% of the children in the autism group did not show symbolic play capacity, confirming the uniqueness of this characteristic among children with ASD⁸.

Symbolic play, therefore, is a skill that should be stimulated to enable the child with TEA to represent and, subsequently, understand roles. Action schemes are developed from symbolic play, and these schemes help the child to acquire notions about the environment in which he/she lives. In addition, symbolic play may provide the establishment of rules and propose the execution of everyday actions. The speech therapist, stimulating the development of this extremely important ability can apply tools for the development of other areas^{3,7,9,10}.

The audiologist is able to observe children's individuality and thus conduct a structured therapeutic plan with features that can ensure greater involvement of the patient in therapy. The related

literature offers several proposals for speech therapy intervention. However, there remains a high demand for related studies, given the empirical gaps in research¹¹. As such, assuming the cognitive effects of symbolic play and its importance for the development of language, this study aimed to verify the feasibility of symbolic play in speech therapy intervention in children diagnosed with ASD.

Method

This study was submitted to and approved by the evaluation committee of ethics in research of a north-eastern state university on 23 July 2016 under CAAE number 57030816.3.0000.5011. The informed consent form (TFCC), in accordance with the guidelines and standards of research in human beings, was signed by the participants of the survey.

This qualitative cross-sectional research was developed from August to September 2016 in two institutions of a city in Alagoas (chosen with permission from the persons responsible for carrying out the research), recruiting speech therapists who work with children with ASD aged six to twelve years. All professionals selected by the Coordinator of each institution, serve children with TEA, part of the inclusion criteria of this research (speech therapists who work with children with ASD).

The sample was composed of five speech therapists (four female and one male). The audiologists, named as F1, F2, F3, F4, and F5 in this work, responded individually to a structured interview based on a study of the same nature¹² (Appendix B) with 12 issues prepared by the researchers, on the basis of the variables studied: four closed questions related to general information on professionals (age, years of experience, continuous formation) and eight open questions related to methodologies used in therapies with children with ASD, developments observed during the therapy, and stimulation of symbolic play. The interviews were conducted from August to September 2016, lasting for an average of 30 minutes. The interviews were held in the professionals' work environment.

For the qualitative analysis of the data, the study used content analysis. Such a method consists of a subjective technique of systematic procedures for the analysis of communication, enabling analysis and detailed description of messages sent¹³. We analysed the manuscripts of the professionals, and

then the key elements for such analysis were listed and categorized.

The results were analysed according to the three axes established by the researchers, corresponding to the variables studied in the survey: professional performance, methods and skills, and games. Such variables were defined according to the literature, confirmed as contributing factors to effective speech therapy intervention^{11, 14}.

Results

The participants were between 25 and 40 years of age. Two participants had two years of professional experience, one had three, and two had nine years, with an average of 4.2 years. Only F3 and F4 had autism-related training corresponding to the modern programs in the field: Treatment and Education of Autistic and Communication Handi-

capped Children (TEACCH), applied behaviour analysis (ABA), Picture Exchange Communication System (PECS), and sensory integration (IS). Figure 1 gives the average number of children with ASD served by week. The participants served an average of 11 to 20 children.

Most of the participants did not report undertaking a present training course; only two had additional training related to TEA. The participants who had no training related to TEA (F1, F2, and F5) provided a generalized service not exclusively for autism, and compared with those with training in specific areas, sought updates related to their fields of knowledge or of increased demand. As regards the main methodologies applied in speech therapy, even with only two professionals with specific training, the findings revealed a predominance of TEACCH, PECS, ABA, and IS.

Professionals	Autism-related training	Type of training	Number of children with ASD per week
F1	-	-	5 to 10
F2	-	-	5 to 10
F3	Yes	TEACCH, PECS, IS	11 to 20
F4	Yes	ABA, TEACCH, PECS, IS	>20
F5	-	-	>20

Note: Treatment and Education of Autistic and Communication Handicapped Children (TEACCH), applied behaviour analysis (ABA), Picture Exchange Communication System (PECS), and integration sensory (IS).

Figure 1. Data on training and professional demand

The main complaints cited by those responsible for the children with TEA are given in Figure 2. Figure 3 lists the skills worked at the beginning of therapy, independent of the demand of those responsible, as well as the methods used in therapy.

In relation to resources used in therapy, most of the participants indicated use of resources that contribute significantly to the therapy and stimulation of the symbolic game. F5, when asked about what features are used in therapy, responded as follows:

The playful [ones]... among the most used is the puzzle and objects in daily life, such as dishes, pots, and spoons. (F5)

Figure 4 presents the frequency of stimulation of symbolic play, perceived advances, bonding formation, and other reports of parents / other professionals. In relation to the progress observed in the course of the therapies, all of the participants pointed out improvements in attention, concentration, social interaction, group activities, and increased participation in school, including language development, corroborated by reports of the parents and other professionals.

Professionals	Complaints reported by parents
F1	<i>Does not talk; displays repetitive behaviours</i>
F2	<i>Presents stereotypes, does not maintain eye contact, lack of interaction with other children</i>
F3	<i>Difficulties in language, behaviour, and speech</i>
F4	<i>Needs to talk or improve speech</i>
F5	<i>Does not verbalize</i>

Figure 2. Complaints reported by parents of children diagnosed with TEA

Professional	Skill addressed at the beginning of therapy	Methods used	Resources used in therapy
F1	Interaction	-	Visual and auditory stimulation, painting, drawing, sensory stimulation
F2	Visual cues, sensory stimulation	TEACCH	Educational games, drawings, and colouring materials
F3	Interaction	TEACCH, PECS, sensory stimulation	Toys and crafts
F4	Sitting and eye contact	PECS (in some children), assessment tools (CARS, ATA)	Positive reinforcement
F5	Non-verbal language skills	No protocol applied because it is under development	Puzzles and objects in daily life

Note: Treatment and Education of Autistic and Communication Handicapped Children (TEACCH), applied behaviour analysis (ABA), Picture Exchange Communication System (PECS), and integration sensory (IS).

Figure 3. Stimulated at the beginning of the skills therapy, methods and resources used by the professionals

Discussion

This study aimed to verify the effectiveness of symbolic play in speech, language pathology and audiology therapy intervention in children diagnosed with ASD. Studies have shown the efficacy of speech therapy intervention directly and indirectly; in other words, in clinical practice associated with the orientation and follow-up with the families¹⁴. In promoting communicative and social development, the focus has been on the abilities and disabilities of each child. However, participants F4 and F5 reported meeting an average of 80 children per week, demonstrating a demand and performance overhead in the area of these professionals. This factor affects therapy, as it is necessary to analyse demonstrations with respect to the individuality of each patient^{13, 15, 16}.

In relation to therapeutic approach, the TEACCH method, which favours an assessment, listing what are the current abilities of the child [...] and which helps to develop them¹⁰. Therefore, this method is critical for the evaluation and structuring of a therapeutic plan¹¹. However, even without

training, F2 claimed to implement this method in therapy. Applying this technique requires professional training, and as such, F2 may have known about the structuring theories, including the methods and ability to deal with demonstrations related to autism^{12, 14}.

With regard to the stimulation of the symbolic game, the participants had varied responses (Fig. 4). F1 and F3 provided contrasting responses. F1 claimed to always be stimulating the game, even though as a determining factor of age, subtends in F3 speech that this professional does not stimulate the symbolic game.

In examining the socio-cognitive performance of children with mental disabilities and TEA, hearing, points out that, among the socio-cognitive aspects, the ability to engage in symbolic play is the more impaired in children with ASD, mainly compared with children with mental disabilities and hearing impairment), both in individual and group situations¹⁷.

Children, particular those with TEA, present peculiarities and different needs. However, the deficit in the ability to symbolize among children

Professional	Time and frequency of stimulation	Perceived advances	Bonding formation	Reports of parents / other professionals
F1	Always and since the beginning of therapy	Improvements in interaction, group activities, concentration	Depending on the patient Occurs from the beginning of therapy	Improvements in interaction
F2	Since the beginning of therapy	Improvements in attention, concentration and interaction	Gradually	Only by parents Development in visual and command skills
F3	Constant attempt to introduce stimulation; however, sometimes it is necessary to approach things more objectively	Best speech development, increased participation in school, improvement in attention	Variable	Parents reported advances in speech and interaction
F4	In a few moments, to stimulate the imitation motor, creativity, and interaction with others	Advances in all the skills worked in varying degrees; Cognitive, behavioural, and social	From the first interaction and increasing with time	Always
F5	At all times, in children of various ages	Advances in attention, social interaction, tolerance, and levels of language	Yes	Reporting in relation to the guidelines made

Figure 4. Stimulation of symbolic game, advances observed, and link training

with ASD is significant. As this ability is crucial for symbolic play, stimulation is implemented in the therapeutic process to stimulate communicative intent, problem solving, and other aspects that promote the development of language and social interaction. F3 reported that interaction is one of the skills addressed at the beginning of therapy; F3 also pointed out that there are priorities in terms of issues to be addressed, and symbolic play is not one of them.

For F5, the importance of guidance to parents is evident as a necessary factor for ensuring understanding of the assistance that should be provided to the child. The promotion of active participation of the parents leads to greater parental contribution and familiarity with the progress of therapy²⁰.

All of the professionals who participated in this study worked in institutions that typically have a high demand, which hinders the formation of individualized planning, the application of certain methods, and the analysis of the stories and routines of each child. This impediment can influence the development of therapy, such as needing a longer period than expected to meet the therapeutic objectives and work skills.

All of the variables shown are instrumental in the formation and execution of plans, as well as for the inclusion of certain methodologies in therapy. The short time of training, lack of training, great number of patients, and possible difficulties in bond formation are factors that influence therapy; these should always be considered in structuring a more specific planning for obtaining progressive new acquisitions by the child with ASD.

In stimulating symbolic play, it is necessary that the child has pleasure in the game, as well as various experiences with the middle. Similarly, it is necessary that the therapist, together with those responsible for the child, mediate and stimulate such experiences and direct the children to the acquisition of other skills²¹.

Conclusions

Symbolic play was inserted to the speech intervention of children diagnosed with ASD. For speech, language therapists and audiologists who work in this area, patients need approaches that encourage adequate performance. Symbolic play can be considered as secondary to the cognitive and language development of these children.

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APPENDIX – Structured Interview

Symbolic play in speech intervention of children with autistic spectrum disorders

QUESTIONNAIRE FOR SPEECH THERAPISTS WHO WORK WITH CHILDREN WITH ASD*

* Adapted from the São Paulo State Protocol of diagnosis, treatment, and referral of patients with autism spectrum disorders

ID number: _____

Age: _____ () 20–30 years () 31–41 years () other _____

Length of professional experience: _____ () 1 year () 3 years () more than 5 years

Institution: () NGO/CER () Institution specialized in the area of autism spectrum disorders

1. Have you had additional training related to autism?

Yes () No ()

2. If yes, which type? _____

3. How long has it been since your last supplementary training?

() less than 6 months () 1 year () 3 years () more than 3 years

4. What is the average number of children with ASD that you serve weekly?

() less than 5 children () 5–10 () 11–20 () more than 20

5. What are the main complaints cited by parents/guardians? _____

6. Which skill is addressed at the beginning of therapy? Why? _____

7. Do you use any method or instrument in your therapy? _____

8. What are the features most used during the therapy sessions? _____

9. From the skills work, are there noticeable advances in the behaviour of the child? If yes, in which aspects? _____

10. At what time and how often is symbolic game implemented? _____

11. Was there any establishment of therapeutic bonding? If yes, at what time? _____

12. Have the parents or other professionals reported advances in the development of the child? _____

