Activities implemented by parents to teach reading their children with autism

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Abstract

The child with Autistic Spectrum Disorder (ASD) may present difficulties in reading acquisition. Implementing effective teaching procedures that can involve the family can ensure learning for the children and the instrumentalisation of family members about teaching strategies. The present study aimed to evaluate the efficacy of an instructional package for the teaching of fifteen dissyllable (isolated) words for children with ASD, based on the model of reading as a network of relationships. Three children with ASD and their parents participated in the study. Each teaching stage had taught three different words and comprised: teaching a game with the researcher, computerized teaching and playing a game with parents. Overall, children obtained gains in reading the words taught and parents learned to use reinforcement and hint during the games.
Keywords: Autism; reading; parents.

Atividades aplicadas pelos pais para ensinar leitura para filhos com autismo

Resumo

A criança com Transtorno do Espectro Autista (TEA) pode apresentar dificuldades na aquisição da leitura. Implementar procedimentos de ensino eficazes que possam envolver a família pode garantir aprendizagem às crianças e a instrumentalização dos familiares acerca de estratégias de ensino. O presente estudo teve como objetivo avaliar a eficácia de um pacote instrucional para o ensino de leitura de quinze palavras dissílabas (isoladas) para crianças com TEA, baseado no modelo de leitura como rede de relações. Participaram do estudo três crianças com TEA e seus pais. Em cada etapa de ensino eram ensinadas três palavras diferentes e compostas por: o ensino de um jogo com a pesquisadora, o ensino informatizado e a realização de um jogo com os pais. De modo geral, as crianças obtiveram ganhos na leitura das palavras ensinadas e os pais aprenderam a utilizar reforço e dica durante os jogos.
Palavras-chave: Autismo; leitura; pais.

Actividades aplicadas por los padres para enseñar lectura a hijos con autismo

Resumen

El niño con Trastorno del Espectro Autista (TEA) puede presentar dificultades en la adquisición de la lectura. Implementar procedimientos de enseñanza eficaces que puedan abarcar la familia, puede garantizar aprendizaje a los niños y la instrumentalización de los familiares acerca de estrategias de enseñanza. En el presente estudio se tuvo como objetivo evaluar la eficacia de un paquete instruccional para la enseñanza de lectura de quince palabras bisílabas (aisladas) para niños con TEA, basado en el modelo de lectura como red de relaciones. Participaron del estudio tres niños con TEA y sus padres. Cada etapa de enseñanza era enseñada tres palabras distintas y compuesta por: la enseñanza de un juego con la investigadora, la enseñanza informatizado y la realización de un juego con los padres. De modo general, los niños obtuvieron mejoras en la lectura de las palabras enseñadas y los padres aprendieron a utilizar refuerzo y sugerencias durante los juegos.
Palabras clave: Autismo; lectura; padres.

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Introduction

The school inclusion of children with Autistic Spectrum Disorder (ASD) enrolled in regular schools has shown the importance of involving different educational agents, especially parents and / or those responsible for teaching basic academic skills, such as reading (Benitez & Domeniconi, 2014; 2018). Due to the difficulties that these children may present in reading learning through conventional teaching methods, certain educational arrangements are necessary to promote such teaching, such as the use and suitability of alternative and personalized methods for effective teaching (Bosa, 2001; Gomes, & Souza, 2016; Gomes, Hanna, & Souza, 2015; Varella & Souza, 2015).

Teaching procedures based on a theoretical conception that a network of relations among stimuli can form the reading and writing repertoires (for example, figures dictated words and printed words).As the same as between stimuli and responses (for example: word, selection of a figure conditionally to a name) have been used since the 1970s as an effective alternative to teaching isolated word reading to people with different profiles of learning and development. Recent Brazilian studies (eg, Bandini, Bandella, Sella, & Souza, 2014; Benitez & Domeniconi, 2016; Gomes & Souza, 2016; Gomes et al., 2015; Melchiori, Souza, & Rose, 2000; Sidman, 1971; Varella & Souza, 2015; Zaine, Domeniconi, & Rose, 2014) confirmed the hypotheses raised since Sidman's pioneering study (1971). In these, teaching procedures based on the same reading model were used as a network of relationships and documented positive reading data of words isolated by children with typical development and difficulties in reading learning, intellectual disability (ID), com ASD and also by illiterate adults.

The relationship network model has used by different studies in the area of education and, given its breadth, due to emerging relationships; it is still difficult to measure the limits of use. Based on this model, Rosa Filho, Rose, Souza, Hanna and Fonseca (1998) developed a computerized reading and writing program of isolated words, which is an individualized teaching, entitled Learning to Read and Write in Small Steps - ProgLeit.

In the study by Benitez and Domeniconi (2016) the ProgLeit program was applied in the residence of five apprentices with ID and by a relative, who was taught to monitor, record the sessions and provide tips when the apprentice needed. The objective of the study was to evaluate the learning of reading and writing of simple words by the apprentices and to investigate the behavior and the insertion of tips of the familiar ones like monitors. The results showed better performances of the apprentices in the post-test, since they went from 0% to 20% of correct answers in the reading of words printed in the pretest to 89,3% in the reading of the words of instruction and 52% in the words of generalization (not taught) in the post-test. Regarding the behavior of the family members, as the learner reached the teaching criteria, the number of tips insertion had reduced, showing a greater efficiency of the program in the control of the learner's behavior in relation to the monitoring of the family members. Thus, the study showed that the use of the program in the residence of the apprentices and the application made by the relatives are promising situations of learning for apprentices with intellectual deficiency, besides the school and laboratory application. However, it had noted that as the parents did not frequently apply the program without the supervision of the experimenter, the author believes that the activities employed were very different from those that are part of the routine of the families.

In many cases, parental involvement with the academic life of their children is limited to helping with homework assignments and does not always occur in the most appropriate way (Fernandes, Pontes, Silva, Lima, & Santos, 2014; Pezzi & Marin, 2016). There is a need to build procedures and methods that help create more motivating contexts to improve parent-child interaction, and to enable meaningful learning for children. Pellizzetti and Souza (2014) point out that games are effective for teaching and comment on the need to develop more technologies for teaching reading and writing that allow the parents' involvement. Some studies have evaluated the potential of the game as an instrument for the teaching of reading skills and the application of these by the parents (Panosso, 2013, Dondi & Moretti, 2007). Games has used or adapted to promote, improve and / or support learning processes in both formal and informal contexts. They may also constitute teaching and learning situations close to the family routine, facilitating the maintenance of these activities even in the absence of the researchers involved, constituting genuine and replicable teaching moments.

The present study aimed to evaluate the efficacy of an instructional package for the teaching of reading of 15 dissyllable words (isolated) for children with ASD, based on the reading model as a network of relationships. The instructional package used in the present study was composed of the teaching of the relationship between dictation and printed word (CA) in tasks presented via computer and to strengthen the relationships to complement the teaching of reading carried out through computerized teaching through games applied by the and parents of children with ASD participating in the study.

Method

Participants

Three children (two boys and one girl - Breno, Gabriel and Maria Flávia), 11 years old, were diagnosed with ASD and their parents. The children attended the second year of regular education, two of them in municipal school and one in private school. Gabriel's father was not able to participate because incompatibility of the schedule of activities with his job, which amounted the presence of two parents and three mothers. As an initial inclusion criterion, parents were required to have at least the first stage of elementary education completed in order to guarantee the reading of the instructions of the games. The-

refore, three completed higher education, one completed high school and one did not finish higher education. The present study had approved by the Committee of Ethics in Research with Human Beings of the Federal University of São Carlos (CAAE 34399214.8.0000.5504, opinion number 791.007).

For the selection of participants, an adapted version of the Diagnostic of Reading and Writing (DLE) of the ProgLeit program was used (Rosa Filho et al., 1998). In the present study, only nine of the 17 tasks that DLE used and adapted to analyze the reading repertoire of each child. The pairing attempts used in adapted DLE were figure and figure (BB), printed word and printed word (CC), dictation and figure (AB), dictation and printed word (AC), figure and printed word (BC), printed word and figure (CB), naming printed words (CD), syllables (CDs) and letters (CDL). Therefore, in order to participate in the study, the child should perform less than or equal to 60% in naming printed words (CD) and 95% to 100% in BB and CC relations. The BB relation happens when a figure presented as a model and the child among some comparison figures chooses the corresponding one (BB). The CC relation happens in the same way, but printed words have used instead of figures. The use of this criterion implied that the participant did not read all the words that had taught and had a well-established discriminative repertoire and follow-up of rules, such as sitting in front of the computer and choosing some stimulus conditionally to the presented model.

Location and Materials

The materials used in all the sessions were camera, sheet of paper A4 and pencil. For the construction of the games were used words and their respective figures printed on sheet of paper. The words and figures cut and laminated. In the sessions with the parents and the children were also used the games and the *checklist* built by the researcher and carried out in the residences of each one. For more details about the games, one can consult the dissertation of Menotti (2016).

The *checklist* had drawn up and used in order to record the behavior of the parents during games. It was from the categories adapted and the findings of Benitez and Domeniconi (2012), to highlight: a) instructing the children on how to play, b) praising the correct responses of the children, c) provide tips that help in the delivery of the correct answer, and d) point out mistakes in the children's answers.

Table 1. *Description of the teaching procedure.*

Procedure step	Relationships used	Stimuli	Games	Consequences for successes and mistakes	Learning Criterion
Pre-test	AB-AC-BB-CC-CB-BC-CD-CD_S-CD_L	15 words taught, five words of generalization, 21 syllables and 23 letters of the alphabet	---	---	---
Step 1	AC-BB-CC	Words TATU, FACA, GATO and respective figures.	Memory	√	√
Test 1	AC-BC-CB-CD	15 words taught, five words of generalization	---	---	---
Step 2	AC-AB-BB-CC	Words BOLO, SUCO/DADO, MALA and respective figures.	Bingo 1	√	√
Test 2	AC-BC-CB-CD	15 words taught, five words of generalization	---	---	---
Step3	AC-BD-CD	Words FITA, DADO/SUCO, PATO and respective figures.	Bingo 2	√	√
Test 3	AC-BC-CB-CD	15 words taught, five words of generalization	---	---	---
Step 4	AC-BB-CC-BC-CB	Words BOCA, RATO, SAPO and respective figures.	Domino	√	√
Test 4	AC-BC-CB-CD	15 words taught five words of generalization.	---	---	---
Step 5	BC-D	Words CASA, VELA, LUPA and respective figures.	Syllables	√	√
Test 5	AC-BC-CB-CD	15 words taught five words of generalization	---	---	---
Pos-test	The same words of the pre-test	The same of the pre-test	---	---	---

In the sessions with the researcher and the children with ASD, the computerized curriculum adapted - ProgLeit (Rosa Filho et al., 1998) and the games were also used.

Procedure

The design used in the research was the multiple baseline among sets of words (Cooper, Heron, & Heward, 2007). The teaching sessions took place at least three times a week, lasting no more than 50 minutes each. The procedure described in Table 1 was composed of three phases: 1) pre-test; 2) application of teaching and 3) post-test.

Pre-test

In order to evaluate the reading repertoire of the participants, the adapted DLE had drawn up from the ProgLeit (Rosa Filho et al., 1998). After the preparation of the adapted DLE, the evaluation (pre-test) of the initial reading repertoire of each child had performed. The pre-test took place in two sessions with an average duration of 50 minutes each. The attempts did not contain differential consequences for successes or mistakes. Each child had tested with the 20 words disyllable (15 taught and five generalization) in the relationships figure and figure (BB), printed word and printed word (CC), dictation and figure (AB), dictation and printed (AC), figure and printed word (BC), printed word and figure (CB), naming of printed words (CD). As well as and reading repertoire of 23 letters of the alphabet and 21 syllables contained in the 20 words used in the procedure.

Application of education

Before starting the procedure with children with ASD, the parents attended a meeting about the use of reinforces and tips with an approximate duration of three hours. After talking about these concepts, the researcher played a *role-playing* with one of the games to exemplify how parents should use them.

After the meeting with the parents, the children started the teaching. The words used in computerized teaching and played were dissyllables with alternating consonants and vowels. The 15 words taught during the procedure were TATU (armadillo), CASA (house), GATO (cat), BOLO (cake), FACA (knife), MALA (bag), FITA (ribbon), SUCO (juice), PATO (duck), BOCA (mouth), RATO (rat), SAPO (frog), DADO (dice), VELA (candle) and LUPA (magnifying glass). The five generalization words used in the test sessions were MATO (bush), LOBO (wolf), MAPA (map), LATA (can) and SACO (bag).

The computerized teaching had the purpose of installing and / or developing a repertoire of recognition of the 15 words (of teaching) through the task of conditional discrimination dictation and printed word (AC). That is, from the dictation by the computer, the child chooses among three comparative stimuli (three printed words) the word corresponding to the dictation. The other relationships had not taught because the children already had high performance in them. The five words of generalization (words not taught) had not used. The teaching of the 15 words had distributed in five stages, and then three different words had used in each step.

The five games built by the experimenter were Memory, Bingo 1, Bingo 2, Dominoes and Game of Syllables. These games had used in the sessions with the experimenter and the children and in the sessions with the parents and the child. The aim of the games was to strengthen relationships for completing reading instruction through computerized teaching, to involve and motivate parents in learning and to evaluate parents' performance in inserting tips and reinforcement during games. In each game were used three words and their respective figures according to the distribution of the words taught in the Steps via computerized teaching. The choice and insertion of the type of tips (physical, gestural or verbal) that the parents provided the child with incorrect answers was left to them. In some games, the AB, BB and CC relationships had worked with the intention of keeping the child and the father motivated in the task, since the apprentice had presented from 95% to 100% of correctness in the pre-test. Each game contained pieces with words, their respective figures and two types of instructions, being: one that the experimenter and the parents used to teach the child to play the game; and another that the parents used for them to know how to play with the child.

The Teaching Steps happened as follows: initially the child held a session of games with the researcher, where they played the respective game of the Step, for the child to learn the rules of the game and there was no criterion of learning. After this session, teaching sessions had started via computerized curriculum with the same three words used in the game. Upon reaching the learning criterion, the child performed the play session with the father, under the supervision of the researcher. The purpose of this session was to strengthen relationships (reading network) and to engage the father in the reading learning. At the end of each Step, the child performed the test with the 15 words taught and the 5 words of generalization. These words had tested through the relations AC, BC, CB and CD. During the test, no consequences had provided for the correct and wrong answers of the child.

Post-test

After completing the Teaching Steps, the post-test had performed in the same way as the pre-test.

Data analysis

Through the design, it was possible to follow the performance of children with ASD in reading all the words taught

(CD) before and after each teaching, as well as in the generalization of the reading of five new words. In the computerized curriculum had considered correct answer when the child with ASD read the words completely. During the game sessions, the answer had considered correct when the child with ASD performed the relationships correctly. Before the filming and protocols of the sessions, a second judge analyzed 30% of the videos and transcribed the answers independently. The calculated index was 95%. This had calculated from the division of the number of concordances by the number of concordances plus number of disagreements and multiplying the result by 100 (Fagundes, 1981).

Results

The results had analyzed in two ways: 1) performance of children with ASD in reading activities and 2) behavior of parents during games.

The figure 1 shows the performance of children with ASD in reading the 15 words taught before and after teaching. In it there are the pre-test, the post-test, the tests carried out at the end of each Step and the cumulative frequency of the answer regarding the reading of the word taught before and / or after the teaching via computerized curriculum. The dotted line signals the moment in which the teaching of the words had performed in the Step.

Breno obtained a 60% accuracy in reading the words in the pre-test and 75% in the post-test. Gabriel read 10% of the words in the pre-test and 45% in the post-test. Maria Flávia read 10% in the pre-test and 40% in the post-test. Despite the improvement in the reading repertoire of children with ASD, it was possible to observe that they presented inconstancy in the maintenance of this learning throughout the different tests applied. For example, Breno had read the word BOLO in the pre-test. In Step 2, he did not read; however, he read in the following tests. Gabriel had not read the words TATU and FACA in the pre-test. When these had taught, he read them in the test performed in the Step, but in some tests later he read and in others he did not. Maria Flávia also read some words (BOLO, PATO) in the tests carried out after teaching. When these had tested again at other times, she did not read again.

Regarding the reading of the generalization words, Gabriel and Maria Flávia began to read a few words. Gabriel read the word LATA (1) in Test 1 and the word taught in Step 1 was MALA, and read the word SUCO (2) in Test 2 and the word taught in Step 2 was SUCO. Maria Flávia read the words LOBO (1) and LATA (2) in Test 1 after had taught in Step 1 the words BOLO and MALA, she read in Test 2 the word SACO (3) after had taught in Step 2 the word SUCO.

The participants' reading in game sessions

Filming performed during parent games and in the tests conducted by computerized curriculum in the CD rela-

tionship in Steps 1, 2 and 4, showed that even when there was no instruction for the children to read the words during the games, they read. However, when they should read the same words in computerized curriculum tests, they often did not read. The parents requested only one time to read the word during the games. Faced with the results, Breno did not read the words BOLO and JUICE by computerized curriculum, but during the game when his father asked him to read, he read. Gabriel did not read the words TATU, BOLO, DADO, MALA and BOCA by computerized curriculum but read during the game when his mother requested. Maria Flávia read all the words during the games with the parents, but in the computerized curriculum, she did not read the words MALA, BOCA and RATO.

## The parents' performance in game sessions

The use of the *checklist* made it possible systematically analyze parental behavior during gaming sessions. In most sessions, parents should perform the following behaviors: providing instruction in the game, providing differential consequences for their children's correct responses, pointing out mistakes in their children's responses, and providing tips. During the game sessions, the researcher instructed the parents about how they should proceed while playing the game with their children. Each child with ASD performed five sessions with its respective parents. Thus, in all, 15 sessions of games had held that counted on the participation of the parents.

Parents' behaviors had assessed according to the findings of Benitez and Domeniconi (2012) and adapted into four categories. Before the results of all parents, the behaviors emitted by them during the reading games were: a) providing instructions on the game in 12 sessions; b) providing praise for the correct responses of the children in 13 sessions; c) tips that guided the emission of the correct answer in 13 sessions; d) reported errors in their children's responses in 13 sessions; e) in a session of one of the children the father did not point out errors in the response of his son.

Discussion

The present study aimed to evaluate the efficacy of an instructional package for the teaching of reading of 15 dissyllable words (isolated) for children with ASD, based on the reading model as a network of relationships. The data obtained in this study had described in the literature with students with ASD and / or ID. Regarding the conception of reading teaching, as a network of relations among stimuli and between stimuli and responses (Bandinia et al., 2014; Benitez & Domeniconi, 2016; Gomes, & Souza, 2016; Gomes, Souza, & Hanna, 2015; Melchiori et al., 2000; Reis et al., 2009; Sidman, 1971; Varella & Souza, 2015; Zaine et al., 2014).

In general, in respect of the reading of the words taught, when comparing the data of the participants in the pre-test, post-test and during teaching, the results indicated
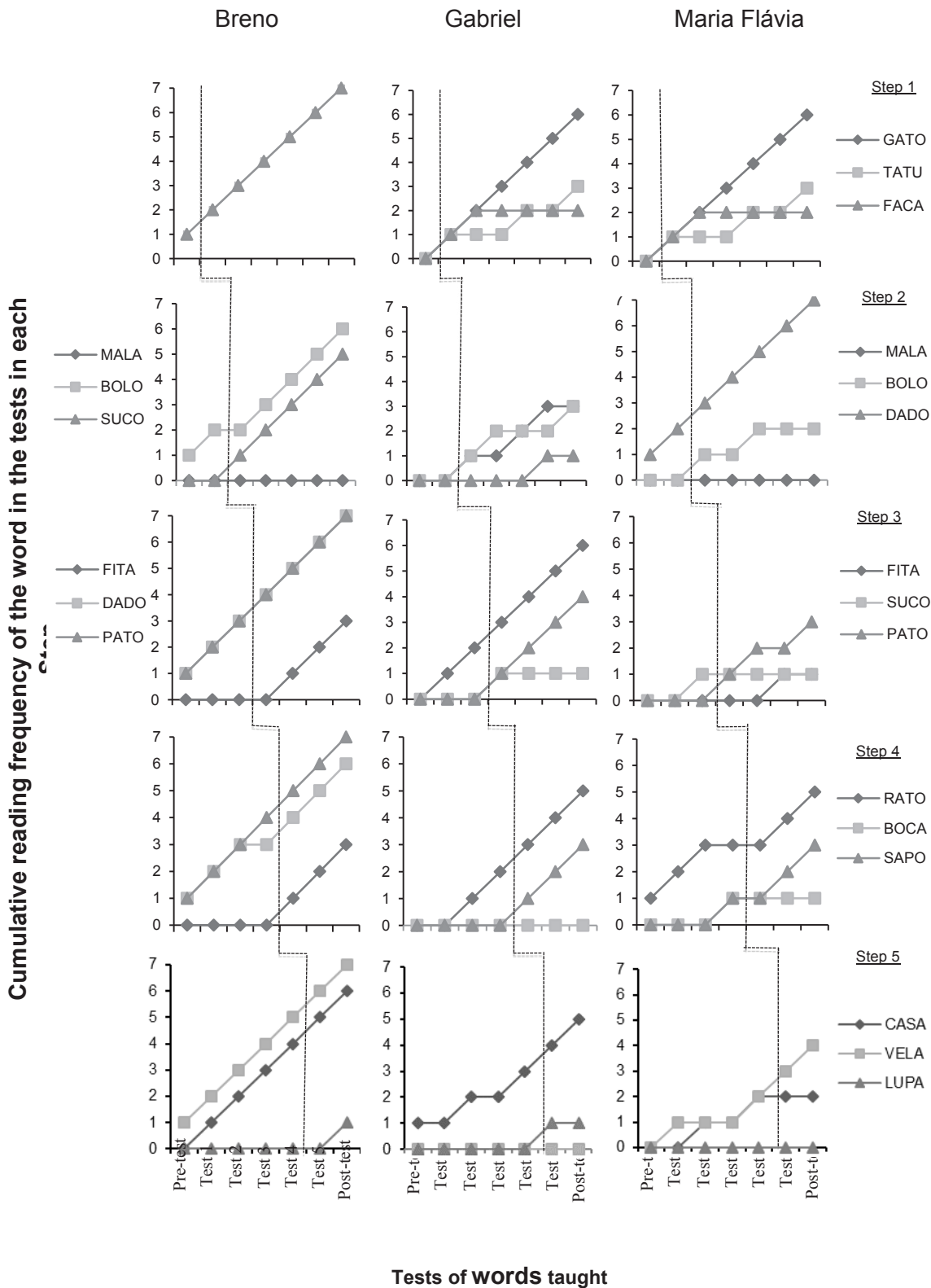
Figure 1. Learner's performance in the tests of reading the words taught and in the maintenance of learning in each Step. The dashed line signals the test performed after teaching the words via computerized curriculum.

that the procedure favored the increase in the reading repertoire of the children with ASD. Because they learned to read a good part of the words taught and, despite the diagnosis of ASD did not present great difficulties in carrying out the teaching together with their parents, since they advanced in the learning of the AC relationship, requiring few repetitions of the teaching sessions by computerized curriculum. It is important to emphasize that such children had mild and moderate ASD, they were speakers, and before the beginning of the experiment, they were already able to identify figures (AB) and read / name some syllables (CDS) used in teaching and generalization words. These data replicate the students' performances with ASD from the study by Benitez and Domeniconi (2018).

The data in the present study did not support with the performances identified in previous studies on the need for a greater number of teaching sessions with special education targeting children (Melchiori et al., 2000). As well as they did not replicate the difficulty documented in studies with children with ASD on the learning of conditional relations between stimuli, mainly arbitrary relations, such as figures and printed words (Williams, Pérez-González, & Queiroz, 2005). As previously mentioned, the repertoire of participants before the procedure was already composed of a series of important skills that had considered as pre-requirements for the target learning, therefore, replications of the present procedure must pay attention to the initial repertoire of the participants.

Concerning the inconstancy observed in the maintenance of reading responses, it has believed that it occurred because the children with ASD presented competing behaviors with learning when they performed the teaching by computerized curriculum. For example, sometimes they said they did not want or would not perform the task, that they wanted to shut down the computer and / or left the room. In comparison, the spontaneous reading responses presented in the game situation and the absence of escape or elusive responses corroborate the hypothesis that the computer presented test may have had a coercive or non-discriminative function for the desired response in some situations, even and no differential consequences have been planned for wrong answers. One limitation identified in this context was the absence of a preference test for the choice of reinforcing stimuli before initiating computerized activities. Future studies may adopt such a strategy to identify possible stability in student performance.

In respect of the difficulties in the generalization of learning, it had observed that the participants presented higher percentages of correct answers for words taught, when compared with the words of generalization. This result replicates the data of Melchiori et al. (2000), as well as those of Benitez and Domeniconi (2016).

It had expected to verify if the procedure applied in the present study would allow the apprentices to perform the reading of recombined words from the syllables of the taught words, however, this did not happen in an effective way. Rose (2005) argues that some people learn to read under control of words or groups of words (molar units) and possibly learn later to fractionate them into molecular units (syllables or graphemes), where recombination of molecular units allows reading of new words (combinative reading). In any case, direct teaching of the smaller units of words or teaching a large number of whole words seems essential for combinative learning to occur even with learners with typical development (Reis et al., 2009). Future studies could add the direct teaching of syllables to the procedure used in the present study, in order to verify the emergence of the combinative reading in children with ASD.

About the use of games, it has believed that they played a complementary and supportive role in the accomplishment of the tasks and in the learning of the children (Dondi & Moretti, 2007; Panosso, 2013; Pellizzetti & Souza, 2014) and may have had an important role for the child to require few repetitions of teaching sessions via computerized curriculum. Probably in constructing games based on the network of stimulus-response relationships that make up the reading repertoire, it is possible to contribute to the consolidation of the learning of children with ASD. Another important point concerns the situation proposed by the games, in which it was possible to involve parents in a positive way in carrying out academic activities with children with ASD.

In the analysis of the performance of the children with ASD in the games sessions with the parents, it has believed that the performance of the family as an educator at the time of the games implementation may have contributed in some way to their performance. In this sense, in order to increase the possibilities for and their learning, replicating data from previous studies that used the involvement of parents as a strategy for teaching academic repertoires (Benitez & Domeniconi, 2012, 2014, 2016, 2018 and Fernandez et al., 2014).

Thus, it was possible to verify that the parents' concern with teaching and learning reading behavior for their children decreased because they noticed and reported the children are able to learn and develop complex skills after exposure to the teaching procedure. The parents only reported this data and there are no records of them in filming or in the *checklist.* These data are in dialogue with the reports of parents participating in the study by Benitez and Domeniconi (2014) after conducting a training on how to contribute to teaching basic reading skills with their respective children with ASD and ID.

Concerning parents' behavior regarding the provision of praise, instructions and tips to their children during games, it is believed that they acted in a more reinforcing rather than coercive manner, which appeared to be a beneficial situation for learning new content, replicating the data found in the study by Benitez and Domeniconi (2012, 2014).

Regarding the design used, it was possible to verify that, although it was possible to investigate the repertoire of children with ASD, during the procedure before and after the teaching of each set of words, it was not possible to investigate exactly how the games contributed to the teaching. It was noticed that, there are indications of the importance of the games in the learning situation, especially when applied by the parents (including by the occurrence of reading in

these situations and not in the form of computerized test), but the moment the tests occurred did not allow it to be evaluated consistently the advantage of this learning situation. Although the evaluation of parental involvement in children's reading learning can be considered as a secondary target of the present study, it is extremely relevant to the area and future studies could insert tests between the two teaching conditions (computerized and by games) to the isolated effect of each of these situations.

Considering the data obtained in the study, it has suggested for future researches: 1. refine the design, inserting tests intercalated between sessions in the computer and games to obtain a greater control of the effectiveness of teaching, both with the use of games and with the use of the computerized curriculum. 2. Teach the syllables used in the words at the beginning of the procedure or increase the number of taught words, in order to increase the possibility that the combinative reading has observed.

Conclusions

The teaching procedure proposed in the present study was sufficient to teach basic reading skills, through a network relation, for children with ASD. These data generate reflections on alternative inclusive strategies for teaching reading behavior, involving children enrolled in regular schools, through interaction with their parents.

Because of the variety of behaviors present in the autistic spectrum, it is essential to emphasize the repertoire of entry that the children with ASD participating in the study presented. They were talking children, who identified figures when requested, read some syllables that made up the words used in the procedure. This means that the teaching procedure proposed in the study was effective for these children specifically. Finally, it has considered that the involvement of the parents during the application of the proposed procedure in game format was important to foster interaction between the dyad, in addition to creating the conditions for parents to participate effectively in the process your child with ASD.

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