Detailing and reflections on occupational therapy in the process of school inclusion

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Abstract: Introduction: Studies show the effectiveness of inclusive actions in educational processes, as well as the need for specialized training of occupational therapists, enabling them for collaborative approaches and actions. Objective: To identify actions developed by occupational therapists in the process of school inclusion of children and teenagers with special educational needs, and think over the context of inclusive education from the presented perspectives. Method: A survey with 18 occupational therapists for data collection. A questionnaire related to school inclusion and professional practice was applied through an on-line platform and a social network. Data gathered were forwarded to qualitative analysis, with descriptive, exploratory analysis for objective questions, and content analysis for the descriptives. Results: The main participants’ involvement in school inclusion occurred from their office practice, but 50% of them also assist in regular school. The main method of contribution occurred through assessment, planning and developing inclusion and guidance activities in schools. The participation of family and other professionals in a collaborative approach, the school and teachers lack of preparation to complete the inclusion processes were noteworthy. Conclusion: Study results reassure the importance of occupational therapist’s contribution to cope with the challenges and effectiveness of school inclusion. Emphasis is given to the need for greater integration of those professionals in regular school and the importance of expanding the considerations and questions regarding the construction of a more democratic educational system.

Keywords: Occupational Therapy, Inclusion, Early Childhood Education, Special Education, Children with Special Educational Needs.

Detalhamento e reflexões sobre a terapia ocupacional no processo de inclusão escolar

Resumo: Introdução: Estudos apontam para a efetividade de ações inclusivas relacionadas aos processos escolares, assim como a necessidade de formação especializada para terapeutas ocupacionais, capacitando-os para abordagens e ações colaborativas. Objetivos: Identificar ações desenvolvidas por terapeutas ocupacionais do Estado do Paraná no processo de inclusão escolar de crianças e adolescentes com necessidades educacionais especiais, e refletir sobre o contexto da educação inclusiva, a partir de perspectivas apresentadas. Método: Realizou-se levantamento de dados (survey), com a participação de 18 terapeutas ocupacionais. Aplicou-se questionário relacionado a inclusão escolar e atuação do profissional, com divulgação através de plataforma online e rede social. Submeteram-se os dados coletados à análise qualitativa, com análises exploratórias descritivas nas questões objetivas e de conteúdo, nas descritivas. Resultados: O principal envolvimento dos participantes com a inclusão escolar ocorre a partir...
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1 Introduction

The educational actions with proposals for inclusion are topics addressed in the area of education around the world. The integration/rehabilitation model changes to a more complex model contextualizes a process involving intersectoral services, infrastructure, organization and changes in didactic resources and pedagogical projects, reformulation of services and training of professionals, with the aim of eliminating barriers in the teaching and learning process (TREVISAN; BARBA, 2012; BRASIL, 2011a). However, the restructuring of the school is a slow and complex process, as it demands cultural, political and economic changes (LOURENÇO; CID, 2010). Brazilian Special Education was structured throughout the twentieth century, in a network parallel to regular education, in public and private institutions, which developed the work of agreements with education secretaries, in the states and municipalities (GARCIA; MICHELS, 2011).

The inclusion model goes through an amplitude of transformations with principles aimed at the reception within individual specificities; the valuation of the person; the coexistence within human diversity, and learning, through cooperation. There are difficulties for this process to be strengthened, both in regular public and private schools (PAULON; FREITAS; PINHO, 2005; LEONARDO; ROSSATO, 2014). In this direction, Decree 7611/2011 establishes the objectives of the Specialized Educational Assistance - AEE, such as to provide conditions for access, participation, and learning in regular education, ensure specialized support services; ensure the mainstreaming of special education actions in regular education; to foster the development of didactic and pedagogical resources; ensure continuity of studies at other levels of education (BRASIL, 2011a).

The National Guidelines for Special Education in Basic Education, since 2001, affirm that inclusive school implies adaptations and a new posture of the common school, and in the pedagogical project, there must be actions that favor social interaction and heterogeneous practices. In this way, the education system must receive all students and ensure the conditions of quality education. Therefore, Inclusion also means providing the teacher and the school with the support needed to meet the different demands, based on egalitarian principles, so learning takes place in a context of diversity (BRASIL, 2001, 2008a, 2011b). From this, the implementation of the Multifunctional Resource Rooms in the public schools’ basic education schools strengthened the process of inclusion in the regular classes of regular education, as a program made available to favor the organization of the specialized educational service space (GARCIA; MICHELS, 2011; BRASIL, 2001, 2008b, 2011b).

Decree 7,611/2011 defined that the target audience with school inclusion are students with physical, intellectual, visual and auditory disabilities, developmental disorder, and high skills/giftedness. Through the decree, access, participation, learning, and continuity in the highest levels of education were guaranteed, as well as ensuring the accessibility, training, and qualification of professionals, and the participation of the family and the community (BRASIL, 2011a).

The 2011 National Plan of Education (PNE) set 20 goals to be achieved by 2020, such as to universalize the school attendance of people from 4 to 17 years old, with the same inclusion profile in the regular education network (BRASIL, 2011b).

The National Policy for the Protection of the Rights of People with Autistic Spectrum Disorder, created by Law Nº 12.764/2012, prohibits the denial of enrollment by schools to people with any type of disability, determining punishment for establishments that deny this right. In January 2016, Law 13,146/2015 was in force, establishing...
the Brazilian Law on the Inclusion of People with Disabilities (Disabled People Statute), which promotes and ensures the rights of people with disabilities for the purpose of social inclusion and the exercise of citizenship, guaranteeing equality and non-discrimination. In this context, inclusive education allows for empowerment of lifelong learning, developing physical, sensory, intellectual and social skills (BRASIL, 2012, 2015b).

From the dissemination of the concept of special educational needs, the relationship between the individual characteristics of the students with the educational and social environment is highlighted, and the regular school receives the challenge of attending to differences (BRASIL, 2011a).

These changes have created a major confrontation for the regular schools of regular education, which begin to seek the support necessary to provide adequate care for children and adolescents with special educational needs. The school environment is a space rich in discoveries and experiments of a diversity of sensory, motor and social activities that promote the child’s global development and the improvement of abilities and skills of overcoming difficulties and of discovery (IDE; YAMAMOTO; SILVA, 2011).

In its historical evolution, the work of the occupational therapist in the education area, through intervention in institutions with special education programs in Brazil, has been observed since the 1960s. This activity began with activities to support the educators and actions directed at students with disabilities, through therapeutic procedures (CARDOSO, 2009; CARDOSO; MATSUKURA, 2012; ROCHA, 2007).

In his actions, the occupational therapist is committed to the purpose of promoting the independence and autonomy of the patient in the different activities of everyday life, in different environments, seeking to achieve health, well-being, and participation in life situations, through involvement in occupations. Therefore, education is among the domains of occupational therapy, according to the American Occupational Therapy Association (ASSOCIAÇÃO..., 2015). Therefore, the occupational therapist is considered a professional trained to act in the sensitization and the capacitation of those involved in the process, as well as to perform collaborative actions in daily school issues, which are the main requests of the teachers (WORLD..., 2003; MUNGUBA, 2007; TREVISAN; BARBA, 2012; ASSOCIAÇÃO..., 2015; SANT’ANNA, 2016).

The strategies to enable/facilitate to play in activities of daily living, and accessibility, as well as to favor the potential of the child/adolescent, based on the adaptations of furniture and school materials can be mentioned among the possible actions of the occupational therapist in the school context, which contributes to the social interaction and adaptation of the child in the educational and social environment (ROCHA, 2007; ASSOCIAÇÃO..., 2015; SANT’ANNA, 2016).

Considering that the child plays and the learning process in the children’s education is carried out in a playful way, the occupational therapist can contribute to favor the games, considering the multiplicity of forms, needs, and powers of each one, in a context of expression and diversity. It is observed that in the National Curriculum Guidelines for children’s education, the pedagogical purposes include guaranteeing the right to play, coexistence and interaction with other children, articulating the child’s experiences and knowledge with cultural, environmental, artistic, scientific and technological, for its global development, among others (SANT’ANNA, 2016; FERLAND, 2006; BRASIL, 2010; MARCELINO, 2013; POZAS, 2014).

In the process of inclusion of children and adolescents with motor disabilities, the occupational therapist works in partnership with the school, the family, and the community, considering that motor impairment can significantly decrease participation and performance in activities. The professional collaborates in overcoming architectural and attitudinal barriers, and can suggest and coordinate environmental adaptations, such as ramps, bars in the corridors and bathrooms, signage and lighting of environments, as well as indication, confection and training in the use of assistive technology to favor school activities by an inclined plane, orthoses, enlarged guidelines, pencils with different diameter or rubber, computer use, use of alternative communication, helping with activities of daily living, through appropriate adaptations to facilitate the handling of backpacks, dishes, glasses, cutlery and oral hygiene. Regarding to playing, the occupational therapist proposes age-appropriate activities, alternative and adapted games, and specific activities to stimulate the child’s overall development, as well as acting in the teacher’s continuing education through collaborative consulting (SANT’ANNA, 2016; PELOSI, 2006; PELOSI; NUNES, 2011; TOYODA et al., 2007).

In a more operational perspective, a problem is the barriers that restrict the student’s participation in the
accomplishment of these actions in the daily life, such as the use of inadequate methodologies, inadequate furniture to the needs of the student and difficulties to establish alternative forms of communication. Interdisciplinary actions and collaborative, with the participation of the occupational therapist, can favor these processes, since knowledge related to the prescription of adapted furniture and alternative communication systems are usually in the domain of these professionals, together with speech therapy and psychology (ARAÚJO; MANZINI; FIORINI, 2014; ROCHA; SANT’ANNA; PELOSI, 2017).

Regarding to actions and strategies aimed at the pedagogical project, it is pointed out that the occupational therapist should have the collaborative actions as a priority, focusing on the necessary adaptations, based on the competence and individual needs of each child/adolescent. From the demand of each individual, it is necessary to develop strategies and adaptations to facilitate their learning. Thus, there is the need for a partnership between different professionals to favor the structuring of the pedagogical project, based on the individual needs of each child (ROCHA, 2007; SANT’ANNA, 2016; GEBRAEL; MARTINEZ, 2011).

In this way, it is understood that children and adolescents with special educational needs may need an Individualized Pedagogical Project (IPP), that is, curricular adaptations that meet and favor their singularities. For the elaboration of the IPP, it is important to subsidize teachers from the analysis of their context, offering continuous training in service, through the advice of trained professionals, according to their demands and needs (SANT’ANNA, 2016; PELOSI; NUNES, 2011; ROCHA; DELIBERATO, 2012). Through collaborative consulting, the occupational consultant’s contribution to school inclusion is constructed, which consists of a process to identify needs and plan actions through interactive and dynamic action, in an equal relationship with the school staff, providing assistance in decision-making and in the implementation of the best plans, according to the student’s interest (TOYODA et al., 2007; GEBRAEL; MARTINEZ, 2011; DELLA BARBA; MINATEL, 2013).

It is important that the actions of the occupational therapist are not restricted only to the student with disabilities in the classroom. Authors such as Sant’Anna (2016) and Marcelino (2013) point out that parents should be involved, as well as other students and teachers, to enable the deconstruction of obstacles in the process of school inclusion, strengthening the actions of educators and learners, with the mediation of the occupational therapist in the relationships between the family and the school (SANT’ANNA, 2016; MARCELINO, 2013).

This study identified and discussed practices of occupational therapists who work in school inclusion, contributing to the construction and foundation of the field, through scientific study. Therefore, the research problem originated from the following question: In what way, in professional practice, the occupational therapist acts in the interventions with the school inclusion of children and adolescents with special educational needs?

Thus, the general objective of this study was to identify actions developed by occupational therapists in the process of school inclusion of children and adolescents with special educational needs in the State of Paraná. The specific objectives were to describe and characterize the work of the occupational therapist in the process of school inclusion and to reflect on the context of inclusive education, based on perspectives presented by the participants.

2 Method

The research method used was the Survey, because it is the one to study the behavior. The data were obtained by questionnaires, with a cross-section approach (COZBI, 2003; FREITAS et al., 2000).

Access to the questionnaires on school inclusion was available to the participants through an online platform, via e-mail and publication on a social network page, aiming to reach as many professionals as possible in the State of Paraná.

The project was submitted to the ethics committee of the Brazilian Institute of Therapies and Teaching under the process number 55906416.8.0000.5229, approved in accordance with Opinion 040869/2016, in accordance with the resolutions contained in Resolution CNS.466/12.

2.1 Data collection

A questionnaire was used (CARDOSO, 2009), to enable obtaining of data that allowed the identification and characterization of the actions and the perceptions of these professionals.

The questionnaire was formulated by eight general identification items and 26 specific questions, consisted initially of the identification of the
participants, information regarding the insertion of the professional in the school inclusion process, as well as actions taken and team performance. Finally, there were also the items to address suggestions of strategies and actions that could be carried out, and the professionals’ perceptions about the inclusion process in Brazil (CARDOSO, 2009).

The inclusion criteria for applying the questionnaire included professionals graduated in occupational therapy in the activity or who had already worked as an occupational therapist in the school setting.

2.2 Data analysis

The data were submitted to content analysis, allowing a careful analysis of the references used. Content analysis is a technique usually applied in qualitative research, consisting of systematic procedures that apply to diverse discourses and their interpretations, with the function of presenting analysis and critical evaluation of information (BARDIN, 1977; SANTOS, 2012).

Content analysis is performed in a practical and direct way, in three phases: (a) Preanalysis; (b) Exploitation of material and treatment of results; (c) Coding, categorization, inference and computer processing of the data obtained (BARDIN, 1977; SANTOS, 2012).

For the interpretation of data of this study, the categorical analysis technique was in the pre-analysis phase used, through exhaustive reading of the questionnaire responses, identification of themes and sub-themes, category formation and interpretation and treatment of the results (BARDIN, 1977; SANTOS, 2012).

For the analysis of the data of the closed questions, it was opted for descriptive exploratory analysis, which contributed to the characterization and identification of the profile of the participants (BARDIN, 1977).

The link was defined to enable the research available to the participants in the online platform and provided descriptive analyzes of all questionnaires answered. Through the site’s resources, the descriptive analyzes and the interpretation of the results were carried out. Open-ended items, including those with the “other” option, were analyzed and categorized separately. For the categorization, the items that referred to the same theme were selected and then grouped. No citation group has reached a significant number for the creation of another category. In some cases, the participant’s response was disregarded because the topic was not discussed.

3 Results

3.1 Profile of participants

There were 18 occupational therapists selected working in inclusive education in the State of Paraná.

As for the training time, four people (22.2%) had zero to two years. Another four (22.2%) had from two to five years of training. Seven people (38.9%) comprised five to ten years of training, one (5.6%) from ten to 15 years, one (5.6%) from 15 to 20 years and one (5.6%) with more than 20 years of training.

All participating professionals underwent continuous training; Of them, 89% carried out postgraduate studies with specializations in different areas of development, 16% completed masters and 5% had doctorate. Participants did not specify training in the children’s area or in learning and inclusion. They mentioned some courses of extension and improvement that were considered relevant in the area of inclusive education, such as adapted sports, occupational therapy in inclusive education (counseling and advising, sensory integration, motor coordination disorder, deafblindness and mental health).

Regarding the time of professionals’ participation in school inclusion, 55.6% of the participants reported having up to two years of experience, 16.7% had two to five years, and 27.8%, had over five years of experience in inclusion and two of these participants reported having 30 years of experience in the area.

3.2 Acting in the inclusion process

Different ways in which the work of the occupational therapist happens in the process of school inclusion were identified (Table 1).

Participants were able to present more than one current job or previous experiences related to the process of school inclusion.

Regarding the relation of the occupational therapist to the process of inclusion in school, 72% of the participants reported that they work from a clinical context, while only 11.1% (01 participant) of the cases were from the occupation in administrative position or research in the area of inclusion.

It was observed that the cases of children and adolescents with special educational needs reached the occupational therapists either by referral of other technicians (61.1%) or by their parents’ complaints, and they were attended at the clinics/institutions (61.1%), followed by referral from regular schools.
to clinic/institution. It is evident, once again, that the main relationship between the occupational therapist and the school inclusion occurred in the clinical context through the special school, to work in the school, 38.9% of the cases entered; by the regular school to act in the school, 33.3%, and the referral of special schools to clinic/institutions makes up 16.7% of the cases.

The interventions that the occupational therapist develops in the process of school inclusion were identified (Table 2).

Participants’ responses indicated the main forms of occupational therapists’ role in the school inclusion process: Specific guidelines on the use of assistive technology and/or furniture (89.9%); Orientations to the family for the school and inclusion (89.9%); General orientations to the teacher in the regular school (83.3%); General orientation to the regular school (77.8%); Activities in clinical environment/institution for the development of cognitive-motor skills of the child in the process of school inclusion (77.8%). The least cited actions

Table 1. Occupational therapist performance and school inclusion.

<table>
<thead>
<tr>
<th>How does your work relate to school inclusion?</th>
<th>Percentage (%)</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Based on clinical care (clinic, institution) of children in the process of school inclusion</td>
<td>72</td>
<td>13</td>
</tr>
<tr>
<td>From acting in a special school</td>
<td>55.6</td>
<td>10</td>
</tr>
<tr>
<td>Sporadic guidance to regular schools</td>
<td>50</td>
<td>9</td>
</tr>
<tr>
<td>Participation in support team in regular inclusive schools</td>
<td>44.4</td>
<td>8</td>
</tr>
<tr>
<td>Hiring for specialized care in occupational therapy in regular school</td>
<td>16.7</td>
<td>3</td>
</tr>
<tr>
<td>From the occupation of administrative position</td>
<td>11.1</td>
<td>1</td>
</tr>
<tr>
<td>From research in the area of inclusion</td>
<td>11.0</td>
<td>1</td>
</tr>
<tr>
<td>Others</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

Table 2. Actions performed by the occupational therapist in the process of school inclusion.

<table>
<thead>
<tr>
<th>Activities performed by occupational therapists related to the process of school inclusion</th>
<th>Percentage (%)</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Specific guidelines on the use of assistive technology and/or furniture</td>
<td>88.9</td>
<td>16</td>
</tr>
<tr>
<td>Family orientations regarding school and inclusion</td>
<td>88.9</td>
<td>16</td>
</tr>
<tr>
<td>General orientations to the teacher in the regular school</td>
<td>83.3</td>
<td>15</td>
</tr>
<tr>
<td>General guidelines for regular school</td>
<td>77.8</td>
<td>14</td>
</tr>
<tr>
<td>Activities in clinic environment/institution for the development of cognitive-motor skills of the child in the process of school inclusion</td>
<td>77.8</td>
<td>14</td>
</tr>
<tr>
<td>Training of ADHD in the clinic/institution and orientation for these activities in the regular school</td>
<td>66.7</td>
<td>12</td>
</tr>
<tr>
<td>Regular school activities for the development of cognitive-motor skills of the child in the process of school inclusion</td>
<td>55.6</td>
<td>10</td>
</tr>
<tr>
<td>Intervention in classroom dynamics in regular school</td>
<td>50</td>
<td>9</td>
</tr>
<tr>
<td>Acceptance and listening of the child in the process of inclusion in the clinic/institution</td>
<td>44.4</td>
<td>8</td>
</tr>
<tr>
<td>Referral of students with special educational needs for clinical care in the public or private network</td>
<td>44.4</td>
<td>8</td>
</tr>
<tr>
<td>Intervention in classroom dynamics in regular school</td>
<td>38.9</td>
<td>7</td>
</tr>
<tr>
<td>Intervention in the dynamics of the classroom in special school</td>
<td>38.9</td>
<td>7</td>
</tr>
<tr>
<td>Intervention in school dynamics in special school</td>
<td>33.3</td>
<td>6</td>
</tr>
<tr>
<td>Intervention in a regular school support room</td>
<td>33.3</td>
<td>6</td>
</tr>
<tr>
<td>Individual reception and listening to students in the process of inclusion in school at regular school</td>
<td>33.3</td>
<td>6</td>
</tr>
<tr>
<td>Training of ADL in regular school</td>
<td>22.2</td>
<td>4</td>
</tr>
<tr>
<td>Coordination of host group, reflection, and discussion on issues related to the process of school inclusion with family and/or community</td>
<td>11.1</td>
<td>2</td>
</tr>
</tbody>
</table>
were the training of ADLs in the regular school (22.2%), as well as the coordination of the host group, reflection, and discussion on issues related to the inclusion process (11.1%).

The general guidelines and interventions in the clinical setting are characterized as the main forms of intervention of the occupational therapist.

The contribution of the professional in the architectural accessibility, the accomplishment of home visits and participation in the orientation and indication of materials coming from the public system destined to the disabled in the public regular schools were cited like additional forms of action of the occupational therapist in the field “others”.

The main places where occupational therapists performed interventions related to school inclusion corresponded to clinic/doctor’s office/institution (66.7%); regular class (55.6%); special school (44.4%); place of recreation in the regular school of regular education, such as park, patio, court, among others (33.3%); class of support in regular school (27.8%); home care (27.8%); library (22.2%), and other community places (16.7%).

When questioned about personal satisfaction related to the performance in school inclusion, 55.5% of occupational therapists were dissatisfied with the performance in the school inclusion process, while 44.4% reported satisfaction.

Before the request to have three reasons that demonstrated the degree of their satisfaction in only one word, they reported: child; knowledge; autonomy; participation; performance; resistance, and socialization. Regarding the degree of dissatisfaction, participants defined feelings using more than one word. The following stand out: lack of support; lack of understanding of other professionals; lack of investment in specific resources for children; lack of accessibility; difficulty in establishing a teamwork (school and therapies), and the difficulty in the reality found, in which the schools are called inclusive, but in practice, they can not be considered as such.

3.3 Characteristics of accompanied children

The special needs related to the process of school inclusion and the needs the occupational therapists most attended were the intellectual (83.3%), physical (77.8%), multiple deficiencies (72.2%), visual impairment (61.1%) behavioral disorders (44.4%), auditory (38.9%), giftedness or high skills (16.7%), and “Other” (33.3%). In this last item, the professionals described other special needs related to the school inclusion process that were not included in the previous alternatives, such as chemical dependency, autism spectrum disorder, attention deficit hyperactivity disorder (ADHD), Down syndrome, and developmental delay.

Regarding the age group and the monthly average income of the population attended by occupational therapists, it was observed that the age group of the children most followed by occupational therapy comprised those from zero to five years old (88.9%), six to ten years old (83.3%), 11 to 16 years old (55.6%) and over 16 years old (22.2%). It should be noted that the highest attendance rate has been in elementary education and, although infrequently, attendance to those over 16 suggests a continuation of the follow-up of occupational therapists to young people and adults.

It is observed that over 50% of the participants in this study work with the population with an average family income of up to two wages (58.8%) and between two and four minimum wages (58.8%). A little less than half of the participants accompany children with monthly income of four to six minimum wages (47.1%), with a quarter of those with a family income of more than six minimum wages.

It is important to emphasize that family income refers to the amount of minimum wages that the family receives in the month, considering the value of the minimum national salary of R$ 880.00 (eight hundred and eighty reais) (BRASIL, 2015a).

3.4 Team performance

Concerning the work of the occupational therapist in the school context, questions about the involvement with the team and family were questioned, in which 100% of the participants of this study confirmed the participation of other professionals in the school inclusion process.

The professionals cited as partners of the occupational therapist in interventions aimed at school inclusion were the speech therapist (89.9%), then the pedagogue, the regular school teacher and the psychologist (83.3% each), and the director of the regular school and the physiotherapist (72.2% each). It should be noted that the professional less mentioned in the responses was the social worker (44.4%).

Other professionals were cited by the research participants as partners in the work of the occupational
therapist: visual reeducator, psychopedagogue, professional with training in equine therapy, special school director and administrative staff of the municipal secretary.

The family participated in the school inclusion process in 88.9% of the cases.

Table 3 presents the purposes of occupational therapists’ meetings with the professionals of the technical team.

The professional with whom the occupational therapist most involved in the process of school inclusion was the speech therapist, cited by 14 participants; then the psychologist mentioned by 13 participants, and the social worker as the less cited professional (eight participants).

It is observed in Table 4 that evaluating cases and situations was the main reason that led occupational therapists to meet with professionals in the technical team, followed by reporting on developments and discussing cases, as well as planning the intervention program. Explaining about occupational therapy and conducting guidelines was the least indicated item.

It was observed that all professionals mentioned in the school environment had a significant relationship in direct contact with the occupational therapist, with the teacher and the director of the school cited by 16 participants and the pedagogue by 15.

Evaluating cases and situations stood out as the first of the purposes of occupational therapist meetings with school staff, followed by guidance. The least-mentioned purposes were to explain about occupational therapy and to report on developments and discuss cases. In this sense, it is important to report that the main reason for the meeting with the pedagogue was to evaluate cases and situations (100%), while with the director and the teacher was to carry out guidelines (93.8%).

Regarding to the involvement of the occupational therapist with other professions in general, it was observed that some participants marked the involvement in the process of inclusion with professionals in speech therapy, psychology, and physiotherapy. However, in Table 3, the objectives of the meeting were not mentioned, suggesting that these professionals were involved in the process of inclusion of the child, even though there were no team meetings or among these professionals. In the same way, the purposes of acting with the professionals of the school team, such as the director and the teacher were described in Table 4, although they were not cited as professionals working in the school inclusion process.

### Table 3. Purposes of the occupational therapists meetings with the professionals of the technical team.

<table>
<thead>
<tr>
<th>Professional (Frequency)</th>
<th>Explain about O.T.</th>
<th>Guide</th>
<th>Evaluate cases and situations</th>
<th>Plan intervention program</th>
<th>Develop program objectives</th>
<th>Report developments/discuss cases</th>
</tr>
</thead>
<tbody>
<tr>
<td>Psychologist (13)</td>
<td>46.2%</td>
<td>61.5%</td>
<td>84.6%</td>
<td>84.6%</td>
<td>100%</td>
<td>92.3%</td>
</tr>
<tr>
<td>Speech Therapist (14)</td>
<td>46.9%</td>
<td>50%</td>
<td>85.7%</td>
<td>64.3%</td>
<td>85.7%</td>
<td>85.7%</td>
</tr>
<tr>
<td>Physiotherapist (12)</td>
<td>41.7%</td>
<td>41.7%</td>
<td>91.7%</td>
<td>75%</td>
<td>83.3%</td>
<td>83.3%</td>
</tr>
<tr>
<td>Social Assistant (8)</td>
<td>62.5%</td>
<td>62.5%</td>
<td>100%</td>
<td>75%</td>
<td>75%</td>
<td>87.5%</td>
</tr>
</tbody>
</table>

### Table 4. Purpose of occupational therapist meetings with school professionals.

<table>
<thead>
<tr>
<th>Professional (Frequency)</th>
<th>Explain about O.T.</th>
<th>Guide</th>
<th>Evaluate cases and situations</th>
<th>Plan intervention program</th>
<th>Develop program objectives</th>
<th>Report developments/discuss cases</th>
</tr>
</thead>
<tbody>
<tr>
<td>Professor (16)</td>
<td>75%</td>
<td>93.8%</td>
<td>87.5%</td>
<td>81.3%</td>
<td>87.5%</td>
<td>75%</td>
</tr>
<tr>
<td>Director (16)</td>
<td>75%</td>
<td>93.8%</td>
<td>87.5%</td>
<td>75%</td>
<td>75%</td>
<td>75%</td>
</tr>
<tr>
<td>Pedagogue (15)</td>
<td>80%</td>
<td>86.77%</td>
<td>100%</td>
<td>80%</td>
<td>80%</td>
<td>80%</td>
</tr>
</tbody>
</table>
At the meeting of the occupational therapist with the family, the main objectives corresponded to the realization of guidelines (100%), explanations on occupational therapy (92.9%), reports on the evolution/discussion of cases (85.7%), as well as programs development (78.6%) and to plan intervention programs and evaluate cases and situations (64.3% each).

In general, the main actions developed by the occupational therapist in the school inclusion process - considering the work in conjunction with the technical, school and family professionals - are to guide teachers (83.3%), evaluate cases and situations with the pedagogue, teacher and director (77.7%), develop program objectives with the teacher and guide the family (77.7%), guide the pedagogue, plan an intervention program with the teacher, develop program objectives with the psychologist and explain on occupational therapy for the family (72.2%).

Participants were questioned about the value of occupational therapy in the process of school inclusion by the school members and the technical team.

As for the degree of value, in descending order from highly valued too low valued, the inclusion process was evaluated by 17 participants, and seven (41.2%) of them said to be valued, three (17.6%) said they were be highly valued and seven (41.25%) said to be undervalued. Regarding the valorization of the inclusive process by the members of the technical team, 55.6% reported being valued, 11.1% very valued, 16.7% highly valued and 16.7% undervalued.

It was observed that the performance of the occupational therapist was more valued by the technical team (83.4%) than by the professionals of the school (58.8). This situation can be attributed to the fact that the highest percentage of interventions are performed in a clinic/institution setting, although the professional’s intervention aims to focus more on interventions in the school context.

3.5 Obstacles and challenges in the work of the occupational therapist in the process of school inclusion

Occupational therapists were asked what were the main obstacles and challenges in working with the target population of special education in the process of school inclusion (Table 5).

The major obstacles identified by the participants in this study corresponded to the lack of preparation of the teachers to receive students with special needs in their regular classrooms (94.4%), as well as the lack of preparation of the team from the regular school for the inclusion process (88.9%). The least mentioned included the difficulty of the regular school in receiving guidance from occupational therapists attending in the clinic children and adolescents in the process of inclusion (33.3%), the lack of cooperation of family members in the work of occupational therapy (33, 3%) and the structural limitations of the regular school for the occupational therapist in the school (33.3%).

In the “Other” field, the lack of knowledge of the school teams about the work developed by the occupational therapist was punctuated as an obstacle.

Table 5. Obstacles and challenges found in the professional performance of the target population of special education in the process of school inclusion.

<table>
<thead>
<tr>
<th>Obstacles and challenges</th>
<th>Percentage (%)</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lack of teacher preparation to accommodate students with special needs in their regular classrooms</td>
<td>94.4</td>
<td>17</td>
</tr>
<tr>
<td>Lack of preparation of regular school staff for the school inclusion process</td>
<td>88.9</td>
<td>16</td>
</tr>
<tr>
<td>Lack of material resources (material for adaptation, among others) in the regular school</td>
<td>61.1</td>
<td>11</td>
</tr>
<tr>
<td>Lack of teacher cooperation in Occupational Therapy work</td>
<td>44.4</td>
<td>8</td>
</tr>
<tr>
<td>Limitation of time for the occupational therapist’s performance in the regular school</td>
<td>38.9</td>
<td>7</td>
</tr>
<tr>
<td>Regular school difficulty in receiving guidance from occupational therapists who attend children included at the clinic</td>
<td>33.3</td>
<td>6</td>
</tr>
<tr>
<td>Structural limitations of the regular school for the work of the occupational therapist in the school</td>
<td>33.3</td>
<td>6</td>
</tr>
<tr>
<td>Lack of family cooperation in Occupational Therapy work</td>
<td>33.3</td>
<td>6</td>
</tr>
<tr>
<td>Others</td>
<td>5.6</td>
<td>1</td>
</tr>
</tbody>
</table>
3.6 Professional update and theoretical support for the development of actions in school inclusion

Participants were asked if they felt a need for a theoretical update on the theme “occupational therapy in the process of school inclusion” in their professional practices. All participants answered this question; 94.4% of respondents answered yes, while only 3.6% (one participant) said no.

They were also questioned whether they were satisfied with the amount of theoretical material found. It was observed, in general, the dissatisfaction of occupational therapists with the amount of theoretical material found, considering that 61.1% said they were not satisfied, 27.8% satisfied and only 5.6% referred as very satisfied and very dissatisfied.

Participants reported the main sources to find theoretical material on the subject of school inclusion, with publications in the area of occupational therapy (88.9%) and publications in other areas (88.9%), as well as site search, both of the area as of other areas were the ones that stood out as the main search sources for research and updating. Internet sites related to other areas (83.3%) and congresses, symposiums, seminars and other events in other areas (22.2%) were also punctuated. Another source cited by a participant was update by postgraduate.

3.7 Perspectives and reflection on the performance of occupational therapy in the school inclusion process

Participants were asked if there would be activities that could be performed by the occupational therapist in the process of school inclusion that were not yet practiced or rarely practiced. All respondents answered the question: 72% said yes and 27.8% said no.

Participants who answered “yes” pointed out some actions that could be performed more frequently by occupational therapists, related to the process of school inclusion. Among the responses, the insertion of the occupational therapist in the school environment (three answers) and the intervention of the occupational therapist in the demands of assistive technology and environmental adaptations (two answers) stand out. The participation of the occupational therapist was also mentioned in the following actions: adaptation of curricula; mediation between the integration of clinical, school and family contexts; training of teachers and training of the support team for children; participation of team meetings; training in activities of daily living and group activities in schools, as well as conducting research on lack or excess of stimuli in the classroom (lights, provision of materials and portfolios, adequate furniture).

3.8 Action suggestions

Participants were asked to suggest actions that could be implemented to improve the effectiveness of the school inclusion process in the country. In an open question, occupational therapists opined about actions in four aspects: public policies, school every day, studies and research, and occupational therapist training.

The participants’ answers can be checked below.

3.9 Public policy

In total, nine participants answered the question, and one response was disregarded because it was at odds with the proposed theme. The main suggestions regarding public policies were: A) Multiprofessional team inserted in regular schools to favor an inclusive education system (22.2%); B) Insertion of the occupational therapist in public schools and educational networks (22.2%); C) Investment in the training of teachers and tutors (11.1%); D) Clear policies and discussion with professionals, and school inclusion is seen as public responsibility (11.1%); E) Invest in human and structural resources that favor the full participation of children and adolescents with special educational needs in all environments related to school and social life (11.1%); F) Investments in accessibility (11.1%).

Through the suggestions, it was observed that the main actions related to public policies were to invest in human resources with the insertion of health professionals in the context of education through the contracting of a multi-professional team (22.2%), among the occupational therapist (22.2%).

3.10 School daily

Eight participants answered on the suggestions and implementation actions related to the school routine to favor the inclusion process. They were: A) Training of professionals in regular schools to
include children daily in the school context, favoring cognitive and social skills (25%); B) Presence of occupational therapists in schools (25%); C) Meeting with pedagogical and therapeutic staff (12.5%); D) Follow-up of students targeted by special education (12.5%); E) Accessibility (12.5%).

The training of professionals from regular schools (25%) was considered to be more relevant in daily school activities, with the purpose of daily activities related to the individual needs of the children included, as well as the insertion of the occupational therapist in schools (25%) to favor the inclusion process.

3.11 Studies and researches

Four participants suggested actions that could be implemented related to studies and research: A) More studies and research in the area of occupational therapy and school inclusion (75%); B) Incentive in educational institutions to study the process of school inclusion in the national and international scope, aiming to expand strategies and improve actions (25%).

3.12 Occupational therapist training

The suggestions of the research participants regarding the training of the occupational therapist referred to A) Creation, by teachers and professionals working in the area of courses, intervention protocols, and continuing education programs, and training for occupational therapists in the area of school inclusion (37.5%); B) Courses and postgraduate courses in the area of school inclusion (25%); C) Greater knowledge about public policies and evaluation instruments that validate the practice (12.5%); D) Greater knowledge about school learning (12.5%). Eight people answered the question.

The main suggestion presented in this item, related to the training of the occupational therapist, was the performance of continuous training, and courses in the area of school inclusion aimed at occupational therapists to prepare the different demands of the school context.

4 Discussion

This study aimed to identify actions developed by occupational therapists in the process of school inclusion of children and adolescents with special educational needs in the State of Paraná, as well as to reflect on the context of inclusive education, based on perspectives presented by participants. In this sense, the following discussion topics are presented.

4.1 Performance of occupational therapists in Paraná: actions and perspectives

The performance of the occupational therapists in the process of school inclusion was characterized by the profile of the participants, the work of the occupational therapist in the process of school inclusion, the characteristics of the people followed, the team performance, obstacles and challenges in the work, the professional update and theoretical support related to their performance in the school context, perspectives and reflection on the performance of this professional, as well as the suggestions of actions that could be implemented to favor their work. In view of the results, some points for reflection are highlighted here.

The occupational therapists of the study especially accompany children in the process of school inclusion, and few participants pointed out the follow-up of people above 16 years old. This result was also evidenced by Cardoso in 2009, who identified practices of occupational therapists involved in the process of school inclusion in the State of São Paulo. In the review of the literature, no studies were found that addressed the process of school inclusion of youths and adults with occupational therapy, evidencing the need for further studies in the area.

In Brazil, fewer young people reach adulthood each year as illiterate. Although the issue of inclusion is closely related to children and adolescents, the National Education Program (PNE) includes the education of children, young people and adults with disabilities in regular education, and the target for young people and adults is integrated to professional education, in the modalities of professional training, higher education, youth, and adult education, and continuous learning (CARDOSO, 2009; BRASIL, 2011b, 2014).

Another fact that draws attention - and which is also in line with the results of similar research carried out in the State of São Paulo (CARDOSO, 2009) - concerns the main form of relationship between occupational therapists and inclusive education. The data showed that most participants performed actions aimed at school inclusion, based on clinic visits (clinics and/or institutions). However, there are several possibilities for the work
of the occupational therapist, and the professional should, double the attention in the case of clinical care, not to reinforce exclusion and practice based on disability. Of the interventions related to the inclusion process, those performed in the regular school of regular education were cited by half of the participants, representing the second place of the results. This fact evidenced the transition in the work of the occupational therapist in the socio-educational systems, in which, traditionally, for a long time, the professional intervention was focused on minimizing the sequelae and difficulties to promote the individual’s occupational performance.

At the moment, it is observed that intervention in the school context turns to the construction of a systematized knowledge, in which occupational therapists have been called to work with people with disabilities (TREVISAN; BARBA, 2012; CARDOSO; MATSUKURA, 2012; SANT’ANNA, 2016; CARDOSO, 2009).

The intervention of the occupational therapist in regular schools for the inclusion of children with special educational needs has shown positive results, such as increasing the child’s participation in school daily life and reducing teacher’s attendance, which has participated in the construction of daily and individualized planning of activities. The actions of the occupational therapist in the inclusion process should focus on the practice and in-service training of the teacher, demonstrating the importance of interdisciplinary partnerships (CARDOSO; MATSUKURA, 2012; SANT’ANNA, 2016; CARDOSO, 2009).

The orientations referring to the use of assistive technology and/or furniture represented the main activity of the occupational therapist in the process of school inclusion. The use of assistive technology favors functional performance in daily activities, including in academic activities, promoting increased participation, independence, and autonomy. In schools, the work of the occupational therapist with assistive technology involves the assessment of needs, physical, sensory and cognitive abilities, cultural and social issues, the receptivity of the individual regarding the use of assistive technology resources, as well as the evaluation of the physical characteristics of the environment, as well as instructions and guidelines for people involved with the use of assistive technology (PELOSI, 2006; PELOSI; NUNES, 2009, 2011; TOYODA et al., 2007).

Although many professionals can use assistive technology as a resource, the specific performance of the occupational therapist emphasizes the role and performance of meaningful activities within the school context, being a professional with the necessary skills to become a specialist in assistive technology, work done with school inclusion. Thus, the direct action of the occupational therapist in the regular schools of primary education is fundamental (PELOSI; NUNES, 2009; ROCHA; SANT’ANNA; PELOSI, 2017).

As for the challenges found by occupational therapists in the process of school inclusion, it is evident the lack of preparation of teachers to receive students with special educational needs and the lack of preparation of all school staff. Currently, the conditions of teacher training for inclusive education are insufficient due to the fact that they often depend on personal investment and parallel training chosen, evidencing the need for investment in teacher training (SANT’ANNA, 2016).

In the actions suggested in this study, the main point was to train professionals from regular schools, so school inclusion is a daily process (SANT’ANNA, 2016; CARDOSO, 2009). It was observed the need to instrumentalize the teacher, in which case, in-service training is a possibility of intervention, which enables the implementation of specific strategies, as well as the structuring of Individualized Pedagogical Planning (IPP), to favor the performance of the individual in the school activities, from the real daily demands, process that the occupational therapist has much to contribute (SANT’ANNA, 2016).

It was also observed that the involvement of the occupational therapist with the teacher was evidenced, and the orientation to the teacher is the main action developed by the occupational therapist within the regular school. Therefore, the occupational therapist can contribute to the formation of the teacher to act together with the school inclusion, the reflective and collaborative actions of the inclusion process, and through the Continued Training in Service model, based on the needs of the student and the teacher (TREVISAN; BARBA, 2012; SANT’ANNA, 2016; DELLA BARBA; MINATEL, 2013).

The participation of the family in the process of inclusion was also a very significant aspect, emphasizing the family orientation as the purpose of the meetings of the professional with the family. The relation that the occupational therapist establishes with the family is fundamental in the process of school inclusion since it favors the independence and the autonomy of the child. The occupational
therapist has an important role in family orientation and child development and social skills, daily life, school, among others, to favor the family’s look at the child’s potential and the deconstruction of obstacles to enhance occupational performance and the inclusion (MARCELINO, 2013).

This study verified the relationship between the occupational therapist and the other professionals of the team, presenting significant involvement with all professionals, both the technical team and the pedagogical team. Evaluating cases and situations, reporting developments, discussing cases, and planning the intervention program were the main reasons cited for occupational therapists to meet with professional staff. The involvement of the occupational therapist with other professionals in the process of inclusion of the child has repercussions on successful actions in support of an inclusive education system (CARDOSO, 2009).

The inclusion of students with special educational needs requires a diversity of actions to solve problems and increase student participation and performance, which requires a comprehensive management of services, with the involvement of all the professionals involved. The occupational therapist is one of the professionals who contribute to the school inclusion of people with disabilities, both with actions related to consulting and training professionals of the school and acting directly with the student (SANT’ANNA, 2016; ARAÚJO; MANZINI; FIORINI, 2014; GEBRAEL; MARTINEZ, 2011; ROCHA; DELIBERATO, 2012).

In this way, it is very important the work of the occupational therapist in the interdisciplinary teams and to support the school inclusion, since this is a professional who has worked directly with other professions, through the identification of specific demands of the school, of advisory projects, as well as interventions both punctual and continuous, in the process of school inclusion (ROCHA, 2007; SANT’ANNA, 2016; ARAÚJO; MANZINI; FIORINI, 2014; GEBRAEL; MARTINEZ, 2011).

In the collaborative consulting model, the consultant acts in an egalitarian manner with the other professionals, assisting in the decision-making and implementation of actions, according to the student’s educational needs (TREVISAN; BARBA, 2012). Many of the benefits of conducting collaborative consulting in schools are known, including providing assistance to the teacher to deal with students’ demands; exchange ideas and discuss possibilities between teacher and consultant; address important issues about the student; offer services geared to the child’s needs, and perform teamwork (GEBRAEL; MARTINEZ, 2011).

It is necessary to consider school inclusion, training and preparation of the professionals of the school as a process under construction since although, in recent years, legislative measures have already evolved a lot in relation to inclusive education, actions are effectively constructed from of daily practices and reflections from school inclusion (CARDOSO, 2009).

Therefore, interdisciplinary - and even intersectoral - projects may favor the formation and the collaborative action of different people involved with inclusion processes, and the joint confrontation of the problems that emerge from the educational every day, through the exchange of knowledge and problematizations.

The study participants point out that a greater insertion of occupational therapists in the school environment may favor these projects. Many data from the study demonstrate an important movement of professionals in this direction. However, it is understood that the relationship of most professionals with the school still happens from another place of accompaniment, that is, the occupational therapist is not a professional of the school, but it is related to this environment considering the importance of accessing the living spaces of the people they accompany, whether in the clinic or in other contexts of attention. It is believed that the expansion of this relationship is essential for the professional practice contextualized and committed to the daily life processes and confrontations of the individuals, in the collective contexts and in the communities they are part. However, as also pointed out by the participants, the hiring of the occupational therapist for educational spaces is a necessity and an issue that involves public policies. This way of acting in inclusive education represents another perspective of action, from the insertion in the field of education and in the daily life of the schools, composing its team.

Thus, it is perceived the need of the occupational therapist to act in the multidisciplinary teams in the Municipal Secretaries of Education, so the performance is even more effective (SANT’ANNA, 2016; OLIVEIRA et al., 2015; DELLA BARBA; MINATEL, 2013; BABORA; PAIVA; ROSSLER, 2012).
4.2 Challenges for a more democratic education - problematizations from school inclusion

Numerous and diverse are the challenges and needs that present in the daily life of the school and the people involved in the processes of school inclusion. In this direction, an issue that arises is the development of interdisciplinary projects, with the participation of the population, which enables a team work to plan and collaborate in the strategies of action regarding the priority activities for children and adolescents, respecting the stages of development, skills, limitations and sociocultural context, in the proposal of actions and adaptations necessary to enhance the educational experience.

Faced with the complexity of inclusive education and its operational, political, social and cultural issues, it is necessary to look at previous processes that relate to the production of a truly democratic educational context, which goes beyond the discussion of special educational needs, only. In this sense, it becomes important the dialogue and the collective construction focused on integrality, based on the participation of different perspectives and knowledge, which demands articulation among several related actors/sectors, such as population, education, health, culture, social protection, among others to create debates and effective possibilities for the production of a democratic education.

The approach in an integral, participatory and intersectoral perspective, based on dialogues and collaborative meetings, becomes necessary to confront contradictions and exclusionary sociocultural processes, and, consequently, to consolidate inclusive actions in the school and community context.

Completeness requires a broad and complex understanding of historical and social processes, which involve the production of exclusion/inclusion in various contexts, such as the school. To do this, actions need to advance/expand the health-education approach to promote problematizing encounters between different fields of knowledge, including - essentially - popular knowledge, towards the creation of proposals that emerge the socio-political crossings that define conditions and limits of institutional practices. In this context, work is also political, of resistance to exclusive social mechanisms produced by a logic that favors the real deconstruction of exclusion processes of “difference”.

In this way, above all, the issue is ethical, and points to proposals for policies and actions geared towards a democratic education, in which respect for diversity and differences is advocated (PIRES, 2006; COMIN; LINCOLN, 2012). In the text “On the tightrope of inclusion”, published in the book “Contrapontos da Educação Especial” (DENARI, 2012), Comin and Lincoln emphasize that “to defend a democratic education, it is necessary to see difference as a social, historical construction and cultural” (COMIN; LINCOLN, 2012, p. 59). In this sense, those involved must be aware that practices do not present in an inclusive discourse, but produce exclusionary and reproductive actions of domination and oppression.

Although there are public policy actions and projects for inclusive practice, a number of questions need to be raised about the implementation of such proposals in the day-to-day of school processes, in a collective movement to think and create transformation strategies - relational, operational and structural - in a reading, critique, micro and macro politics. The occupational therapist is a professional with conditions to contribute in these ways. However, to do this, he must understand, assume and deepen its ethical-technical-political role in the face of professional practices and contexts.

5 Final Considerations

In this study, it was possible to observe a relevant performance of occupational therapists in the regular school of regular education. Although the most significant percentage has been interventions in the clinic field, actions in different living spaces, production, care and assistance are identified, as well as the work done in the team and with the family, which strengthens the practice, from of the articulation between several people involved to favor processes of school inclusion and appreciation of diversity.

The search for occupational therapists working in the processes of school inclusion, as well as the analyzes performed from the professional practice, were essential for this study carried out at the state level, being identified the importance of being realized, also, nationally, to broaden the vision of the interventions performed and the characteristics of the occupational therapist’s role in the country’s school inclusion, developing dialogic and problematizing analyzes.

From the results of this study, it is reaffirmed the potential and importance of the occupational therapist’s role in the inclusion of children and
adolescents with special educational needs, and reflect on the breadth of their professional role and the challenges in the search for a democratic educational system.

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**Authors’ Contribution**

Simoni Pires da Fonseca: Conception of text, organization of sources and/or analysis, writing of text. Maria Madalena Moraes Sant’Anna: Orientation for the design of the text, writing of the text, analysis, review. Paula Tatiana Cardoso: Analysis, review. Solange Aparecida Tedesco: Guidance for the design of the text, analysis, review. All authors approved the final version of the text.