LANGUAGE ASSESSMENT OF PRESCHOOL AND SCHOOL-AGE CHILDREN AT RISK FOR LANGUAGE DISORDERS IN RESIDENTIAL CARE SETTINGS

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Abstract:
Adequate language development is central to a child's academic and social development. This study aimed to assess the language of 35 preschool and school-aged Portuguese children in residential care in four social institutions, using the Grelha de Observação da Linguagem (GOL-E) developed by Kay and Santos (2014), a validated tool in Portuguese. The results of the study showed that in terms of language competence, compared to the normative results expected for their age: a) Of the thirty-five children assessed, only three were at or above the 50th percentile; b) Twelve children were between the 5th and 25th percentiles; c) Eight children were in the 10th percentile; d) Of the children between the 11th and 12th percentiles, only one was in the 90th and 75th percentiles; e) Eleven children were in the 10th and 25th percentiles; f) One child at the age of 12 was in the 5th percentile. Most of the children were in percentiles below those expected for their age group. According to the definition of speech and language disorders, we can observe that a group of these children fall under the condition of speech and language disorders, but have not been formally identified in the educational system, putting them at risk of failure in school and life. This study highlights the importance of language assessment and special education services for children living in institutions in Portugal. More studies with this population in these age groups are needed to better understand the language competencies of children living in residential care.

Keywords: residential care; students at educational risk; assessment; language disorders

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1. Introduction

Language development is a prerequisite for the acquisition of literacy, which in turn is a prerequisite for satisfactory school performance (França et al., 2004). For this reason, many studies seek to assess whether and how language learning takes place, whether in the family context (Hart & Risley, 2000) or in the school context (Oliveira et al., 2016).

The literature shows that, in fact, not all environments are conducive to a child’s good language development. Before being institutionalized, children lived in environments that lacked affection, attention, education, and stimulation and were exposed to very poor language experiences (Amorós & Palacios, 2004). However, when they moved to an institutional setting, they didn't find what they wanted either. The direct interaction between the child and the caregiver is not personalized and sometimes doesn’t happen at all, which causes or exacerbates language difficulties (Correia, 2013).

Portugal is the country in the European Union with the highest number of children in institutional care. According to data from UNICEF (2024), 95% of children under the protection system live in residential care. Following the trend in Central European countries, Portugal has a rate of 294 institutionalizations per 100,000 children, almost three times the world average.

Despite the high number of children in residential care in Portugal, there are no studies on the language characteristics of children at risk. These would be crucial to understanding the impact and needs of these children, particularly in terms of language. Institutionalized children often experience cognitive, linguistic, and other developmental delays and are more likely than their peers to be in conflict with the law, perpetuating the cycle of institutionalization (UNICEF, 2024).

Language disorders are also associated in the literature with psychosocial difficulties such as low self-esteem, social isolation, and anxiety. This disorder is one of the most common, affecting between 3 and 15% of children (Schirmer et al., 2004).

2. Literature Review

Language is an important factor in development and learning. It is first acquired within the family, which is the child’s first opportunity to socialize, followed by school. In school, children learn to read, write, and use a language different from the one we use in our daily lives.

The phenomenon of human language is very complex. In its study, from the perspective of assessment to intervention, it is desirable to involve different specialists from different fields of knowledge. The variety of knowledge fields involved in the study of language (psychology, linguistics, sociology, audiology, etc.) allows us to understand its complexity and diversity, providing us with information about its definition, acquisition models, and its development in children. Understanding the development of language in children from birth and during the first years of life is crucial for a better understanding of the communication process between children and those close to them,
considering that language development follows a sequential and universal process (Owens, 2016; Reed, 2018). Although there is some variability in language acquisition and development, there are clear and distinct phases that can be organized in such a way as to take into account specific language skills, in which all its components: syntax, morphology, semantics, phonology, and pragmatics interact in such a way that they are gradually involved until they reach oral language skills in adulthood (Owens, 2016; Reed, 2018). It is interesting to note that in this process, children have already learned to produce oral language to communicate like adults by the age of 7/8, although there is continuous refinement of oral language throughout their lives.

When studying language development, we sometimes encounter children who do not develop in the same way as their peers, and although we consider there to be variability in language development, it can be a source of concern when children do not follow their peers developmentally (Reed, 2018; Salvia, Ysseldyke, & Witmer, 2017).

Based on this assumption, identifying children who may have language delays or problems has become a fundamental issue in assessment to identify children at risk of developing academic, social, and behavioral problems (Bishop, Snowling, Thompson, Greenhalgh, & CATALISE consortium, 2016). Therefore, it is clear that children with speech and language disorders generally show early signs of needing special education services. Early identification and subsequent referral to these services are extremely beneficial for the child, as identifying cognitive, emotional, etc. problems before learning problems arise is an aspect that brings numerous benefits to the child and their family (Fey, Windsor, & Warren, 1995; Reed, 2018).

Preschool and school-age assessments, conducted collaboratively by professionals and parents, provide evidence for the identification of children with possible language difficulties. However, it is important to note that not all children begin this language acquisition process on an equal footing (Charlot, 2000). Research shows that speech and language disorders are the precursors of reading problems that can appear in the early years of primary school (Bishop, 1997).

In the most disadvantaged social strata, the environment does not provide as many and varied linguistic experiences, which does not allow for the same knowledge of words. This means that children who do not have "decoding tools" are unable to consolidate their knowledge at the right time, leading to future learning and language difficulties (Kincaid, McConnell, & Wackerle-Hollman, 2020; Silva, 2014).

Students with these learning and language difficulties are currently included in the group of students with special educational needs, whose characteristics place them in a situation of "risk" in terms of their academic and social performance. Derived from a set of factors that place them in a situation of high educational risk, these students are more likely to experience behavioral and learning problems (Correia, 2013, 2017). In addition, they may experience the educational system in a more conflictive and even exclusionary way, developing other comorbidities triggered by low self-esteem, the result of social and school failure, and added to the most diverse forms of violence and prejudice (Gomes, 2012). It’s important to note that success in school remains the biggest
problem in the lives of these children. Their social capital is considerably low and the fact that they come from backgrounds where educational attainment is generally low conditions their ambitions in terms of the desire and need to integrate school in all its aspects (Lemos, 2012).

It is during childhood that individuals acquire skills and values that help them build their individuality. In this process, the family is the child's first educational institution. For this reason, its role is fundamental (Almeida, 1998). It is in the family that children are born, grow up, and acquire the first knowledge they need to complete all the stages of their development. However, this is not always the case, as not all families are able to maintain an adequate and structured environment for the well-being of the child (Moreira, 2018). When the family is unable to adequately fulfill its role as a socializing body, it places the child in a situation of danger.

Risk and danger for children are circumstances imposed on them that they do not have the skills to overcome and leave autonomously (Silva, 2016). As Tomás, Fernandes, and Sarmento (2011, p. 215) also point out, "the number of children who continue to die in Portugal as a result of family violence or undetermined death is worrying, while the excessive number of institutionalized children continues and the trend towards deinstitutionalization is not very relevant".

In the face of these problems, the national reception system for children and adolescents at risk consists of different responses: The Temporary Foster Home (TFH), when it is necessary to temporarily remove the child or adolescent from his or her biological family. It is expected to last a maximum of six months. The Children and Youth Home (CYH) is used for children and youth in need, from a family environment, whose problems justify a prolonged removal. The stay in this type of home is long-term (Alves, 2007).

Foster care is a response for children and young people between 0 and 25 years of age (art. 5 of Law 23/2017), applied when the family structure does not meet, at least immediately, the conditions for their reception and integral development. Since it is a long-term measure, it plays a fundamental role as a socializing agent for children and young people, replacing the biological family in whole or in part.

With regard to children's and adolescents' homes, and on the basis of the legislation in force, they can be personalized and structured with educational models adapted to the children and adolescents they receive (art. 51 of Law 142/2015). The foster care experience must be structured in such a way as to provide a positive opportunity to reorganize the child's or adolescent's life, promoting an affective relationship. Family members or legal representatives may visit the child or young person, taking into account the opening hours and operating rules of the home (art. 53 of Law 142/2015). The school, which is referred to as a "world of written culture" where language skills are linked to success or failure in school, is also based on a meritocratic and massifying perspective. As such, it is not "adapted" to the characteristics of children in institutions (Castro, 1997).

The literature points to the importance of language as a factor in development and learning. This development involves learning specific rules of the system related to form
(language structure), content (language meaning), and use (application of language in context). The form includes three components: phonology, morphology, and syntax. Content refers to semantics and uses to pragmatics. Each of these five components is part of the language system and is governed by a set of language-specific rules in order to communicate effectively (Owens, 2016). Any language assessment should include the five components or aspects of language: phonology, morphology, syntax, semantics, and pragmatics. Both comprehension and production of each of these elements should be considered in the assessment process (Reed, 2018; Taylor, 2000).

One of the major challenges in inclusive education in recent years has been to gain a better understanding of the problem of language difficulties in order to develop and implement appropriate intervention strategies. With the widespread implementation of the inclusive model, the entire educational community has had to come to terms with the changes that have occurred and which have altered the dynamics in some way. Increasingly, the goal is to provide quality support to children with language difficulties, whose prevalence appears to be high in the preschool and early elementary years, in order to provide them with adequate development and education.

In line with the philosophy of inclusion, the school must strive to include all students, to know their characteristics, and to identify their needs. In this way, it can use precise strategies and resources to lead students to educational success. This success does not have to be the same for everyone (Vieira-Rodrigues & Sanches-Ferreira, 2017; Martins et al., 2018 cited in Cruz-Santos, 2019). To this end, language assessment is an important and crucial factor. In this way, we can close any gaps that may exist, reduce asymmetries, provide evidence-based intervention strategies, and contribute to school success.

3. Material and Methods

3.1 Participants
The research was approved by the Scientific Council of the Institute of Education of the University of Minho and in accordance with ethical and regulatory issues. The legal guardians who agreed to participate signed an informed consent form after the objectives and methods were explained in accessible language.

This exploratory study consisted of 35 participants, aged 6 to 12 years (Table 1), of both sexes, living in foster homes and attending from preschool to 7th grade (Table 2), which represents the third cycle of basic education, and living in four different types of residential institutions in northern Portugal (Table 3).

The descriptive data of the participants are presented below.
Table 1: Age of Participants

<table>
<thead>
<tr>
<th>Age</th>
<th>n</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>6</td>
<td>6</td>
<td>17,1%</td>
</tr>
<tr>
<td>7</td>
<td>3</td>
<td>8,6%</td>
</tr>
<tr>
<td>8</td>
<td>4</td>
<td>11,4%</td>
</tr>
<tr>
<td>9</td>
<td>6</td>
<td>17,1%</td>
</tr>
<tr>
<td>10</td>
<td>5</td>
<td>14,3%</td>
</tr>
<tr>
<td>11</td>
<td>4</td>
<td>11,4%</td>
</tr>
<tr>
<td>12</td>
<td>7</td>
<td>20%</td>
</tr>
<tr>
<td>Total</td>
<td>35</td>
<td>100%</td>
</tr>
</tbody>
</table>

Source: Researcher’s illustration based on fieldwork.

Of the 35 participants, we found (Table 1) that the majority were aged 6, 9, and 12. The smallest number of children was in the 8-year-old age group.

Table 2: Participants’ Level of Education

<table>
<thead>
<tr>
<th>Level of Education</th>
<th>n</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-school</td>
<td>3</td>
<td>8,6%</td>
</tr>
<tr>
<td>1st year</td>
<td>3</td>
<td>8,6%</td>
</tr>
<tr>
<td>2nd year</td>
<td>3</td>
<td>8,6%</td>
</tr>
<tr>
<td>3rd year</td>
<td>7</td>
<td>20%</td>
</tr>
<tr>
<td>4th year</td>
<td>6</td>
<td>17,1%</td>
</tr>
<tr>
<td>5th year</td>
<td>3</td>
<td>8,6%</td>
</tr>
<tr>
<td>6th year</td>
<td>7</td>
<td>20%</td>
</tr>
<tr>
<td>7th year</td>
<td>3</td>
<td>8,6%</td>
</tr>
<tr>
<td>Total</td>
<td>35</td>
<td>100%</td>
</tr>
</tbody>
</table>

Source: Researcher’s illustration based on fieldwork.

We can see (Table 2) that most of the children study in the 3rd and 6th grade. The 4th grade has the highest number of participants, with the rest distributed among preschool, 1st, 2nd, 5th, and 7th grades.

Table 3: Type of Residential Care

<table>
<thead>
<tr>
<th>Type of residential care</th>
<th>n</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Children and Youth Home (CYH)</td>
<td>20</td>
<td>57,1%</td>
</tr>
<tr>
<td>Temporary Foster Home (TFH)</td>
<td>15</td>
<td>42,9%</td>
</tr>
<tr>
<td>Total</td>
<td>35</td>
<td>100%</td>
</tr>
</tbody>
</table>

Source: Researcher’s illustration based on fieldwork.

In terms of type of placement (Table 3), 20 children live in the Children and Youth Home (CYH) and 15 children live in the Temporary Foster Home (TFH).

3.2 Instrument

The Grelha de Observação da Linguagem (GOL-E), 2nd edition by Sua Kay and Santos (2014) was used in this study to assess children’s language. The GOL-E is available for purchase for use in educational/clinical settings. It is divided into three linguistic
structures: semantics, morphosyntax, and phonology, with each structure consisting of several subtests. In the semantic structure, which consists of three tests, we assess the definition of words, where the child should be able to analyze a concept. The second subtest, naming classes, aims to assess the mastery of vocabulary in relation to superordinate terms. The third and final subtest, called Opposites, assesses the ability to establish semantic relationships between words that share most but not all semantic features.

In the second language structure, morphosyntax, four subtests are used. The first, recognition of ungrammatical sentences, focuses on the ability to make grammatical judgments, i.e. to assess the grammaticality of a sentence. The second test, Sentence Coordination, and Subordination, aims to assess the ability to construct complex sentences (coordination and/or subordination) from simple sentences. The third test, Word Order in a Sentence, assesses the ability to order words in a sentence using a basic canonical structure; the number of words per sentence has been kept low so as not to involve the memory factor too much in this test. The fourth and final test in this structure, Word Derivation, assesses the use of morphological rules to create derived words.

In the third and final structure, the phonological one, the assessment focuses on four tests: the first two, Word Discrimination and Pseudoword Discrimination, are auditory discrimination tests. (Pseudowords are those that have no meaning, but respect the phototactic rules of word formation in Portuguese). Rhyme identification and syllable segmentation are the other two tests included in this structure because of their importance in learning to read and write, although they usually involve skills acquired before school age. Before the GOL-E was administered, an example of what was required was always given, and the instructions were not to be repeated.

In a single, individually analyzed session, all responses were audio-recorded and then transcribed and scored according to the criteria established by the authors of the GOL-E.

Each of the responses in the various GOL-E applications has a score that must always be applied: 0 - the wrong/no answer - or 1 - the correct answer for the majority of items. The sections for defining words (semantic structure) and recognizing ungrammatical sentences (morphosyntactic structure) define three types of scores - 0, 1, and 2 - as explained below:

For Section I - Definition of Words, 0 points are given for a wrong/no answer, 1 point for an answer that gives only the function or description, and 2 points for an answer that gives a superordinate term (item class) with specific conceptual information. For Section II - Recognizing Incorrect Sentences, 0 points are awarded if the error is not recognized and the sentence is not corrected, 1 point if the error is recognized but not corrected, and 2 points if the error is recognized and the sentence is corrected.

3.3 Procedures of Data Collection

The data collection process began with obtaining authorizations from the technical directors/managers of each nursing home. Once the appropriate statements were signed,
data collection began. The data collection took place in the social institutions where the children live, in an individualized room. With a maximum duration of 30 minutes, the children's speech was analyzed individually and in a single session. Before applying the GOL-E, an example of what was required was always given. All responses were audio-recorded and then transcribed and scored according to the criteria established by the authors of the GOL-E. The data were collected between December 2019 and October 2020, during the pandemic period in Portugal. During this period, the Portuguese government decreed a series of contingency measures, such as the closure of public and private schools at all levels of education. In the specific case of children's homes, the Portuguese government ordered a ban on entry for all outside members of the institutions, as well as preventing children in this regime from meeting with their families.

The summer months - June to September - were a better time in terms of the pandemic period, but the various foster homes and institutions we contacted were still very cautious about the possibility of contamination and did not allow people to enter their facilities. It was suggested that the data could be collected by video call, but the host institutions rejected the request because they did not have enough computers for this purpose and because of the time management that would be required.

There were no children of the desired age in the institutions contacted, so children aged 11 and 12 were included in the sample. This decision was made due to the scarcity of studies on this topic (both national and international) and the need to have data that covers the needs of these children. IBM SPSS Statistics 26.0 (Statistical Package for the Social Science) was used for the quantitative approach and processing of the statistical data obtained. The results obtained were analyzed using descriptive and inferential methods. Inferential statistics will show the differences in GOL-E (2nd edition) scores for the variables age, type of care, gender, level of education (children attending preschool and primary school), and district. Similarly, the information related to each linguistic structure - semantic, morphosyntactic, and phonological - was evaluated taking into account the child’s age group.

4. Results and Discussion

Inferential analysis was carried out using the parametric test Analysis of Variance - ANOVA for the variables age (Table 4), level of education (Table 5), type of residential care (Table 6), district (Table 7), and gender (Table 8). These last two variables (district and gender) were analyzed and no statistically significant differences were found in the total and in the percentile of the GOL-E. There are statistically significant differences in the total (score) of the GOL-E test (see Table 4 and 5).
Table 4: Analysis of Variance for Age

<table>
<thead>
<tr>
<th>Total GOL-E</th>
<th>Sum of squares</th>
<th>df</th>
<th>Mean square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between groups</td>
<td>15874,252</td>
<td>6</td>
<td>2645,709</td>
<td>24,929</td>
<td>.000</td>
</tr>
<tr>
<td>Within groups</td>
<td>2971,633</td>
<td>28</td>
<td>106,130</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>18845,886</td>
<td>34</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Researcher’s illustration based on fieldwork.

Table 4 shows significant differences in the GOL-E total (score). The children assessed are below the normative values for their age group.

Table 5: Analysis of Variance for Level of Education

<table>
<thead>
<tr>
<th>Total GOL-E</th>
<th>Sum of squares</th>
<th>df</th>
<th>Mean square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between groups</td>
<td>15788,457</td>
<td>7</td>
<td>2255,494</td>
<td>19,918</td>
<td>.000</td>
</tr>
<tr>
<td>Within groups</td>
<td>3057,429</td>
<td>27</td>
<td>113,238</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>18845,886</td>
<td>34</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Researcher’s illustration based on fieldwork.

As in the previous table, Table 5 shows significant differences in the total score of the GOL-E, with the children scoring below the normative values for their age group.

Table 6: T-test for the Type of Residential Care

<table>
<thead>
<tr>
<th>Type of residential Care</th>
<th>T</th>
<th>Df</th>
<th>Sig. (2-tailed)</th>
<th>Mean difference</th>
<th>95% Confidence interval of the difference</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>Lower</td>
</tr>
<tr>
<td>Type of residential Care</td>
<td>18,516</td>
<td>34</td>
<td>.000</td>
<td>1,571</td>
<td>1,40</td>
</tr>
<tr>
<td>Totals GOL-E</td>
<td>21,374</td>
<td>34</td>
<td>.000</td>
<td>85,057</td>
<td>76,97</td>
</tr>
<tr>
<td>Totals percentiles</td>
<td>5,759</td>
<td>34</td>
<td>.000</td>
<td>18,714</td>
<td>12,11</td>
</tr>
</tbody>
</table>

Total GOL-E (score) and total percentile (Table 6) showed statistically significant differences.

Table 7: Analysis of Variance for District

<table>
<thead>
<tr>
<th>Totals GOL-E</th>
<th>Sum of squares</th>
<th>df</th>
<th>Mean square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between groups</td>
<td>517,938</td>
<td>2</td>
<td>258,969</td>
<td>.452</td>
<td>.640</td>
</tr>
<tr>
<td>Within groups</td>
<td>18327,948</td>
<td>32</td>
<td>572,748</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>18845,886</td>
<td>34</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Totals Percentile GOL-E</th>
<th>Sum of squares</th>
<th>df</th>
<th>Mean square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between groups</td>
<td>1266,816</td>
<td>2</td>
<td>633,408</td>
<td>1,794</td>
<td>.183</td>
</tr>
<tr>
<td>Within groups</td>
<td>11300,327</td>
<td>32</td>
<td>353,135</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>12567,143</td>
<td>34</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Researcher’s illustration based on fieldwork.

Similarly, there was no statistically significant difference between total and percentile GOL-E (Table 7).
Similarly, there was no statistically significant difference between total and percentile GOL-E (Table 8).

### 4.1 Percentiles

The results obtained in this study show that of the 35 participants, only three scored at the 50th percentile or above. Regarding the semantic structure of the GOL-E test (Figure 1), we found that twelve children scored in the 5th percentile, nine children in the 10th percentile, five children in the 25th percentile, five children in the 50th percentile, three children in the 75th percentile, and one child in the 90th percentile. As for the morphosyntactic structure of the GOL-E test (Figure 2), 11 children scored in the 5th percentile, 15 children in the 10th percentile, three children in the 50th percentile, and one child in the 75th percentile. In the phonological structure of the GOL-E (Figure 3), 20 children scored in the 50th percentile, five children in the 25th percentile, four children in the 75th percentile, two children in the 5th percentile, and two children in the 90th percentile. Looking at the GOL-E test as a whole (Figure 4), we see that 12 children scored in the 5th percentile, 12 children scored in the 25th percentile, eight children scored in the 10th percentile, one child scored in the 50th percentile, one child scored in the 75th percentile, and one child scored in the 90th percentile. These last three participants are the only ones in the expected percentile for their age group. With the application of the instrument, it was also possible to verify that age and level of schooling have an influence on the results of the language assessment of the children tested, namely in the totals of the I structure - semantic, the II structure - morphological, the III structure - phonological and in the total of the GOL-E sections of the test. If we consider that the maximum scores for the GOL-E test are between the ages of nine and ten, we can see that these 11 children aged 11-12 were well below the target. One 11-year-old participant scored in the 10th percentile and three scored in the 25th percentile. Of the 12-year-olds, one reached the 90th percentile, one the 75th percentile, four the 25th percentile, and one the 5th percentile. Considering the normative values of the GOL-E, the fact that a 12-year-old child reached the 5th percentile is considered extremely severe and not expected in this age/school context.

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**Table 8: Analysis of Variance for Gender**

| Source: Researcher’s illustration based on fieldwork. |
|---|---|---|---|---|
| Totals GOL-E | Sum of squares | df | Mean square | F | Sig. |
| Between groups | 497,804 | 1 | 497,804 | 1,895 | .351 |
| Within groups | 18348,082 | 33 | 556,002 | 556,002 | |
| Total | 18845,886 | 34 | | |

| Totals Percentile GOL-E | Sum of squares | df | Mean square | F | Sig. |
| Between groups | 7,584 | 1 | 7,584 | 7,584 | |
| Within groups | 12559,559 | 33 | 380,593 | 12559,559 | |
| Total | 12567,143 | 34 | | |
Figure 1: Percentiles of Semantic Structure of the GOL-E Test

Source: Researcher’s illustration based on fieldwork

Figure 1 shows that of the children that were assessed, 12 children scored at the 5th percentile, 9 children scored at the 10th percentile, 5 children scored at the 25th percentile, 5 children scored at the 50th percentile, 3 children scored at the 75th percentile, and finally 1 child scored at the 90th percentile.

Figure 2: Percentiles of Morphological Structure of the GOL-E Test

Source: Researcher’s illustration based on fieldwork

Figure 2 shows that 11 children scored at the 5th percentile, 15 children scored at the 10th percentile, 5 children scored at the 25th percentile, 3 children scored at the 50th percentile, and one child scored at the 75th percentile.
Figure 2: Percentiles of Phonological Structure of the GOL-E Test

Source: Researcher’s illustration based on fieldwork

Figure 3 shows that 2 children reached the 5th, 10th, and 90th percentiles, 5 children reached the 25th percentile, 20 children reached the 50th percentile, and 4 children reached the 75th percentile.

Figure 3: Percentiles of the GOL-E Test

Source: Researcher’s illustration based on fieldwork

Figure 4 shows that 12 children reached the 5th and 25th percentiles, 8 children reached the 10th percentile, and 3 children (1 in each percentile) reached the 50th, 75th, and 90th percentiles.

5. Discussion

These results show that the children are exposed to learning academic content without a consolidated and well-learned linguistic base. It can be observed that the participants between the ages of 11 and 12 show severe language disorders, because when they were assessed with the GOL-E, and considering that this assessment is only carried out up to the age of 10, the children showed lower results than would be expected for children between the ages of 9 and 10 (maximum scores on the GOL-E).
Of the 11 children between the ages of 11 and 12 who were given the GOL-E, only one reached the 90th percentile and another the 75th percentile. The rest scored between the 10th and 25th percentiles.

It is also important to note that one 12-year-old child scored in the 5th percentile. This result is extremely severe. For the maximum age range for the GOL-E assessment, 9-10 years, children should score in the 50th percentile. Because these children are older, scoring in such low percentiles is extremely serious. We would expect the results to be higher.

In this study, we can see that there is a failure in early identification and in the country’s education system, as these children have not received support in schooling, especially in learning to read and write. This situation results in teachers dealing with students without identification or assessment, and children with speech and language disorders are one of the groups of special educational needs included in the regular classrooms of all schools in the country (Correia, 2017; Charlot, 2000). Cruz-Santos et al. (2019) emphasize the importance of the role of professionals, who must be able to identify this type of problem and be familiar with the common causes of communication problems. In this way, it would be possible to recognize the seriousness of the problems faced by this group of students at educational risk, who have a series of special educational needs and should be given the utmost attention by the teacher. If this is not the case, the student may later fail in school (Correia, 2013; 2017). Therefore, it is essential to pay attention to this group of students at educational risk, who represent about 10 to 20% of the student population (Dowdy et al., 2015; Correia, 2017) and who, in most cases, experience school failure for environmental and cultural reasons, should be the target of concern and specific interventions by the school in order to identify their difficulties at an early stage.

According to Correia (2017), if these difficulties do not change or are not addressed by appropriate interventions, they represent a serious risk for the students in academic and social terms. If the school or educational system simply ignores the specific problems and needs of each of these students, it does not respect their rights or the principle of equal opportunities, which is the foundation of quality education (Correia, 2013).

After identifying the difficulties, characteristics, and needs of these students, they will be able to access the resources provided by the school to improve their learning, through the mobilization of measures to support learning and inclusion, which must be activated according to the needs and characteristics of the students, as outlined in the latest national law - Decree-Law No. 54 of 6 July 2018, which regulates inclusive education, which has the "purpose of guaranteeing access to the curriculum" for all students, according to the Inclusive Education Practice Support Manual (Pereira et al., 2018).

More studies are needed on language development and the impact on children at educational risk, as well as the use of regular and early assessment tools to evaluate and identify children with difficulties. The sooner we act, the sooner we can identify possible language disorders and help students on their way to school success rather than failure. Early assessment and intervention provide better support for the student. In this sense, a
recent nationwide study was carried out in the country with the aim of developing and establishing norms of the Preschool Early Literacy Screening Tool (Rastreio de Literacia Emergente Pré-escolar; RaLEPE) as a screening tool useful for early intervention in childhood to provide early diagnosis and contribute to early intervention for children with language and learning disorders (Sapage & Cruz-Santos, 2021).

It is necessary that the social institutions where these children live and the schools work in partnership, in a network, establishing communication between the different technicians in order to assess these students and provide them with the best possible support so that they do not fall behind, condemned to school failure, and can reach their full potential. The institution can also make use of other means available in civil society, such as volunteer work by specialized technicians and/or partnerships with community organizations, so that these children receive the best and most appropriate support.

It is also necessary to revise the training of teachers so that they have access to literature on psychology, sociology, and special educational needs during their undergraduate studies. Only with this knowledge will teachers be able to understand different students and social phenomena/disorders. By knowing and studying typical language development, teachers will be able to assess language skills in order to intervene appropriately in the students' educational process and thus effectively address and remedy their individual needs (Cruz-Santos et al., 2019).

Once the difficulties have been identified, these students will be able to access the means provided by the school to improve their learning, through the mobilization of measures to support learning and inclusion, which must be activated according to the needs and characteristics of the students, as outlined in Law 54/2018 and the Inclusive Education Practice Support Manual (Pereira et al., 2018).

For children with language disorders, more effective strategies must be implemented. From a developmental perspective, studies have shown that language difficulties seem to persist into adulthood (Plante et al., 2002; Richardson et al., 2006, cited in Cruz-Santos, 2019).

6. Conclusion

In today's society, it is well known that language difficulties can have a negative impact on learning to read and write. If left untreated, they can adversely affect the performance of children and adolescents in school. To prevent this from happening, it is extremely important that speech and language disorders are identified as early as possible. The implementation of an initial screening each school year would serve the purpose of identifying students with possible difficulties in these areas. Early identification and intervention of language disorders would make it possible to identify warning signs and implement forms of support and program strategies to promote these areas. Since children with language difficulties and at risk are a topic with few studies carried out in Portugal in terms of identification, assessment, and intervention, more research is needed to make a more significant contribution to understanding them and, consequently, to
designing and implementing more effective strategies in terms of intervention, transdisciplinary training and research itself.

Language is considered to be the most important "tool" that children develop and that supports learning in the educational context. Consequently, the language skills acquired through active listening and conversation before entering elementary school are the foundation for future school learning, and it is essential to consider their importance in language difficulties.

Thus, as a form of preventive action, assessment instruments would be implemented in children at risk. By breaking with paradigms imposed decades ago, we can better respond to the needs of each child and effectively contribute to their success. And it is with this maxim in mind that the school of the 21st century should be guided by the implementation of inclusive education, as in Portugal, as well as by evidence-based practices to achieve success with these children.

Conducting any research always involves constraints that may have conditioned the study in some way. In addition to time and financial constraints, it is important to reflect on the constraints of data collection throughout the study. As there are very few studies related to language assessment of children at educational risk in inclusive schools, it is recommended that future studies collect data from more cities in the country and from more children of all ages.

If we look at Western countries with an industrial and post-industrial model, with which we share a greater cultural and social affinity, we see that this panorama is unparalleled. For this reason, the Committee on the Rights of the Child (2014), in the third and fourth periodic reports submitted by Portugal, warned of the need to strengthen family-based care and develop deinstitutionalization strategies, with the aim of phasing out institutional care. The Committee also stated the urgency of developing "the paradigm of deinstitutionalization in order to combat the dominant institutionalizing, custodial tendency", since "the personalized relationship is fundamental and family intervention must be privileged" (Parliamentary Committee on Constitutional Affairs, 2006, p. 24).

More than a decade after the publication of the report, and after noting a 15% reduction in the number of institutionalizations, we realize that not only have the recommendations made not been implemented, but the use of institutional care has increased compared to the use of family care for children and adolescents (Delgado & Gersão, 2018). Despite this new paradigm and the debate on the right to grow up in a family instead of in an institution (Gilbert, Parton, & Skivenes, 2011), we found that in Portugal, in 2019, there were 100 residential care facilities in the northern region and 2112 children were covered. The districts of Porto and Braga have the highest number of residential care facilities and, consequently, the highest number of users (Carta Social, 2020).
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Conflict of Interest Statement
The authors declare no conflicts of interest.

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AT RISK FOR LANGUAGE DISORDERS IN RESIDENTIAL CARE SETTINGS

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