# DISORDERS IN ORAL AND WRITTEN LANGUAGE IN ELEMENTARY TEACHERS' PERCEPTION

# Alterações da linguagem oral e escrita na percepção dos professores do ensino fundamental

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# **ABSTRACT**

**Purpose:** to characterize the perception and the behavior of elementary school teachers when facing their students' difficulties regarding oral and written language. **Methods:** this was a descriptive cross-sectional study that used a questionnaire of eight questions mixed. A hypothetical case that addressed development or change of oral or written language was presented in each question. Teachers responded on the perception and conduct referrals. **Results:** the sample consisted of 48 teachers of elementary school, with an mean age of 40.3 years and years of teaching performance with an mean of 8.7 years. The analysis of the responses show that teachers have greater insight into disorders in oral language than written language. Regarding the conduct of referrals, the profesional most cited reference was followed by the speech therapist and psychologist. **Conclusions:** teachers surveyed have a higher percentage of practical insight into the changes in fluency and phonology and little insight in written language. The difference between the responses of teachers questions of hypothetical changes in oral language and written language promotes quantitative subsidies that enable a reflection on the thematic development of training programs for teachers.

KEYWORDS: Knowledge; Faculty; Education, Primary and Secondary; Language Disorders

## **■ INTRODUCTION**

There is the performance of the Speech Therapy in educational institutions since the beginning of the actuation, which at that time was not yet predominantly of the Speech Therapy¹. According to the author, in the decades of 1940 and 1950 the speech therapy began with the speech therapists, which were mostly professionals with practical performance related to the mastership. Since then the teachers who were interested in the field performed a short course of 3 months length and were called logopedist. In 1981, with the regulation of the profession of Speech Therapy, the performance related to the pedagogical field was still latent.

However, the rehabilitative condition demanded an approximation with the health field.

In the Resolution no 309 of the year of 2005 of the Conselho Federal de Fonoaldiologia (Federal Council of Speech Therapy) were attributed to the Speech Therapist the realization of training and advising through lectures and orientations in the school environment. The target public of the speech therapist performance in schools can be the parents, the students, the pedagogical team and the faculty<sup>2</sup>.

In what relates to the teachers, besides the base knowledge that rules the given discipline, they also need to know essential elements to the practice of teaching<sup>3</sup>. This elements were elected by their degree of importance is divided in knowledge axis. 1° axis) Students, their learning process and the sociocultural context, including the knowledge about learning, human development and linguistic development; 2° axis) the subject that the teachers give before the curriculum and the broader educational goals; and 3° axis) knowledge about different

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subjects, different students and evaluation and class management.

The first axis, that comprehend this research, is of main importance in teaching knowledge, once they deal with children under development. The authors also raise the importance of knowing the language development and its phonology, morphological and syntactic subsystems.

In the exercise of teaching, the communication is a main instrument into sharing experiences of the human being4. It is a means by which the individual receives and expresses the language being an essential element in the socialization and integration in the community<sup>5</sup>. The disturbs of communication cause a direct impact on the social life of the child and on his/her academic and occupational success<sup>6</sup>.

The teacher has an important role in what concerns to the perception of possible difficulties that students may present in their development7. Besides perceiving questions related to child development, he can intervene directly in the development process taking actions to optimize it8.

Knowledge about language, and more specifically about acquisition and development of the speech were researched, and it was found that the teachers have regular knowledge about the development of the speech and that most of the sample distinguished the normal form the pathologic<sup>9</sup>. Yet, in recent researches concerning the knowledge of high school teachers about written language, it was concluded that the participating teachers have a lack of the fundamental knowledge to the teaching practice in what is related to the Written Language, and the diagnosis of possible difficulties 10,11. With similar results in a research made in Colombia, it was concluded that the teachers do not have enough knowledge about the difficulties of written language, and when they have any, the authors classified it as superficial<sup>12</sup>.

When considering the complex characteristics of the alterations of oral and written languages, and its social and psychological consequences to individuals and the families that have it, it is fundamental to know the understanding that teachers have in the identification of these alterations and in the conduct of referrals in order to formulate strategies that improve the work of the teacher aiming the global development of the student. For that, it is important that the agents that research such knowledge do it in a practical way. It can allow the teacher to approximate the cases he finds in class with the cases presented in questionnaires.

Thus, the aim of this study is to characterize the perception and the conduct of teachers of elementary school in the city of Contagem (MG) in the face of the difficulties of oral and written language of elementary school students from a questionnaire with hypothetical cases.

#### METHODS

This is a descriptive and cross-sectional study and it was cleared by the Ethic Committee of Federal University of Minas Gerais (CAAE-14813513.5.0000.5149), and it was performed with teachers of Elementary School of Contagem, Minas Gerais. All participants signed an Informed Consent Form.

This is a non-probabilistic sample and it was requested at the Education Secretariat of the city of Contagem (SEDUC-Contagem), Minas Gerais, while the formation courses was being performed. Such courses are a part of a political-pedagogical project of SEDUC-Contagem, which covers the faculty of the city with the periodicity of monthly meetings. In the present study were recruited participants with ongoing formation courses for the period between September and October of 2013, and they were a total of 48 teachers of Elementary School of private and public schools.

The inclusion criteria were: be a part of a faculty staff of Elementary School of Contagem and consent to participate in this study. Were excluded of the sample the participants who did not answer correctly the questionnaire (i.e. marked more than one answer per question) or did not answer it all.

The instrument used to perform this study was the questionnaire, (made by the authors) "Faculty Perception on Classroom" (part I and II). The questionnaire has closed and essay questions on the development or alterations on the oral and written languages, in addition to collect information about the teachers (i.e. age, gender, length of the professional experience and characteristics of training).

The questionnaire preparation was built on problem-solving methodologies 13,14. The questionnaire has eight questions with hypothetical students from elementary school cases. The questions approach oral language (phonology and fluency) and written themes on teaches routine in the classroom. Of the eight questions, two represents mainstream cases (questions 2 and 7), on which there is no need of intervention and referral. The six other questions represent a situation involving some kind of development alteration and they were grouped by themes (3 questions about Oral Language: 1, 3 and 4; and 3 questions about written language: 5, 6 and 8).

At the part I of the questionnaire, for each hypothetical case presented the teacher had the option of mark one of the four alternatives, i.e.: Letter A: the student has an adequate development;

Letter B: The student has low difficulties, which will be dealt with time; Letter C: The student has a development problem; and Letter D: The teacher does not know.

To the frequency distribution of the questions studied, it was considered as altered the hypothetical cases shown on the questions 1, 3, 4, 5, 6 and 8. The hypothetical cases represented on questions 2 and 7 were considered adequate. The hypothetical cases were elaborated based on literature 15-23.

The part II of the questionnaire investigates the referral conducting and considers the same cases presented in part I and asks if the analyzed case needs referral with answer options of yes and no. By choosing yes, the teacher fills a column mentioning experienced professionals.

It was given 40 minutes of the formative process class break of SEDU-Contagem to the application of the questionnaire.

Initially the faculty were clarified regarding to the research aims, its benefits and repercussions, as too were the volunteers, and they all signed the Informed Consent Form.

After it, the part I of the questionnaire was given to the participants. The researcher read to them the header of the questionnaire and also the answers instructions, both of them contained in the questionnaire. The teachers preferred to read individually the questions, and, after answer them, the questionnaires were collected.

Afterwards, it was delivered to the participants the second part of the questionnaire. The researches oriented the participant on how to fill the header and the answers. The teachers read it individually and, after it, the part II was collected.

No teacher expressed any doubt or needed any extra clarification to answer part I or II of the questionnaire. The average time to fill the questionnaire (part I and II) were 25 minutes.

In order to investigate the knowledge used by the teachers in analyzing hypothetical situations (part I), it was compared the straight answer with the essay answer. The teachers' answers were classified on "coherent" and "incoherent" by these following criteria:

Subgroup of oral language alterations, on which the hypothetical cases with phonetic alterations and/ or phonological or stuttering are represented. It was considered as a coherent answer those on which the teacher considered relevant features of phonetic and/or phonological disturbs and its synonymy. Namely: 1st) Age and its synonymy: acquisition, development, chronological; 2<sup>nd</sup>) Phonetic and/or phonological disturb: exchanges in speech, inadequate phonemes; and 3<sup>rd</sup>) Stuttering: repetition of syllables on the speech<sup>15,16,20,21</sup>.

Subgroup of written language alterations, on which the cases of orthographic changes and reading alterations are represented. It was considered as a coherent answer those on which the teacher considered as relevant feature for the orthographic changes, reading alterations and their synonymy. Namely: 1st) Age and its synonymy: acquisition, development, chronological; 2<sup>nd</sup>) Orthographic changes: changes in writing, wrong letters, difficulty in distinguishing the letters; and 3rd) Alterations on reading: difficulty in reading, slow reading and bad reading. 4th) Grade: year16-19,22.

Subgroup adequate development: in which the hypothetical cases of normality. It was considered as a coherent answer those on which the teacher considered relevant features for normality. Namely: 1st) Age and its synonymy: acquisition, development, chronological; 2<sup>nd</sup>) Literacy: beginning of literacy and literacy process; and 3rd) Timidity: withdrawn, introspective<sup>23</sup>.

The variables analyzed in this study were: age of the faculty, gender, graduation, teaching practice time, adequate perception of oral language, adequate perception of written language, referral conduct and the professionals who were referred to on necessary situations on the teacher perception.

A database of specific data was built for this study on the software SPSS. For the purpose of descriptive analysis, it was created a frequency distribution of the categorical variables involved in the evaluation of study and central tendency of dispersion of the continuous variable. For the inferential analysis, the T from Student test was used. The data were previously checked and they received an adequate statistical treatment.

#### RESULTS

Forty-eight elementary school teachers from schools of Contagem, Minas Gerais, were interviewed. Forty-seven of those (98%) are female and one (2%) male, with an average age of 40,3 years (±9,6), with the variation between 23 and 57 years. The teaching practice time warranted between 1 and 30 years with the mean of 8,7 years (±7,3 years).

It was observed that 77% (37) of the faculty have a graduation on pedagogy, 23% (11) have graduation on teaching. Of the interviewed, 23% (11) are postgraduate and 16% (8) teaches at privates schools.

Table 1 shows the analyses of the adequate perception of the teacher on the hypothetical cases in oral language alterations, written language alterations and adequate development characterized according time and kind of faculty formation. It was verified that the faculty who teaches for more or less

Table 1 – Analysis of the adequate teacher perception on hypothetical cases characterized according to time and kind of teacher formation

	Teaching p	ractice time		
	< 8 years (n=25)	P value*		
Mean of right questions in OLA/subject	1,88 (±0,17)	2,0 (±0,22)	0,67	
Mean of right questions in WLA/subject	1,28 (±0,19)	1,17 (±0,17)	0,68	
Mean of right questions in AD/subject	0,80 (±0,12)	0,96 (±0,16)	0,44	
	Kind of teach	ning formation		
	Pedagogia (n=37)	Licenciatura (n=11)	P value	
Mean of right questions in OLA/subject	1,89 (±0,15)	2,09 (±0,31)	0,55	
Mean of right questions in WLA/subject	1,27 (±0,14)	1,09 (±0,31)	0,56	
Mean of right questions in AD/subject	0,84 (±0,10)	1,00 (±0,27)	0,50	

Legend: OLA: Oral Language Alteration; WLA: Written Language Alteration; and AD: Adequated Development. \*Test T of Student

8 years, and those with initial formation on pedagogy did not influenced on the adequate answer of the hypothetical cases (p value ≥0,44).

In Figure 1 it can be observed the teachers' answers in relation to the hypothetical cases analyzed on the questionnaire. The columns that represented the answers that was expected on each question were shadowed.

In what regards the adequate development related to the questions 2 and 7, a mean of 43% of teachers (Table 2) were assertive in their answers. The teachers' answers were analyzed separately (Figure 1), and it was observed that the question

that describes orthographical changes related to the literacy process scores 60%. On the question that relates difficulty on speech comprehension on an intense noise, 41% of the teachers answered that it is about a "problem on student's development".

The six remaining cases showed on Figure 1 (showed columns) show some alteration on the oral or written language development. In the cases analyses by subgroups (Table 2), it is shown that 26% the teachers believed that the oral language alterations are mild difficulties which will be overcome with time, and that 42% of faculty answered the same for written language alterations.

	Answers of the questions							Defermed conduct					
	A B		C D			Referral conduct							
Hypothetical Situations in Classroom	Adequate development		Low difficulties dealt with time		Development problem		I don't know		Yes		No		
	n	%	n	%	n	%	n	%	n	%	n	%	
1) L.M. who is 7 years old, coursing 2nd grade/9, male, who when willing to say "eu quero comprar uma bateria", says "/eu quelo complar uma batelia/".	4	8	24	50	19	39	1	2	39	81	9	18	
2) C.P. who is 6 years old, female, on the literacy process coursing 1st grade/9, when trying to write: "eu gosto de cachorro-quente" she wrote: "/eu gostu di caxoru centi/".	29	60	15	31	4	8	0	0	11	23	37	77	
3) J.T. who is 13 years old, male, coursing the 5th grade/9, when trying to say: "the cat ate the food", he says: "/the ca ca cat at at ate th th the foo foo foo food/".	1	2	5	10	39	81	3	6	48	100	0	0	
4) D.P. who is 11 years old, female, coursing 6th grade/9, when trying to say: "o gato comeu a comida" she says: "/u ga ga ga gatu cu cu cu cumeu a cu	1	2	9	19	35	73	3	6	47	98	1	2	
5) J.N. who is 9 years old, male, who is coursing 4th grade/9, has a paused and slowly reading, without rhythm and the textual interpretation is inadequate. <sup>e</sup>	1	2	20	41	22	46	5	10	39	81	9	19	
6) M.A. 15 years old, male, coursing 8th grade/9, likes to be in a group activities and when those activities involves rhythm he see himself with difficulties. He has difficulties in punctuation, accentuation and stress syllable perception.	8	16	19	39	15	31	6	12	26	54	22	46	
7) R.G. who is 8 years old, male, coursing 3rd grade/9, is shy and not talkative and speak slowly. She has difficulties in understanding conversations among intense noise.	13	27	13	27	20	41	2	4	35	73	13	27	
8) B.D. who is 9 years old, female, coursing 2nd grade/9. She was on a dictate activity when she was supposed to write what the teacher was saying. On the frase: "todo fósforo é perigoso" she wrote: "dodo vósvoro é berigoso".	3	6	22	46	22	46	1	2	40	83	8	16	

Legend: The shadowing columns are the expected answers to each question.

Figure 1 – The elementary school teachers' answers to the hypothetical cases of oral and written language alterations.

Table 2 – Answers of elementary school teachers to hypothetical cases of written and oral language alterations by theme subgroups

		Answers of the	Referral conduct						
Subgroups Adequate development	Adequate	Low difficulties	Development	I don't know	ye	s	No		
	dealt with time	problem	I don't know	n	%	n	%		
OLA 3 questions	4% (6)	26% (38)	64% (93)	4% (7)	134	93	10	7	
WLA 3 questions	8% (12)	42% (61)	40% (59)	8% (12)	105	73	39	27	
AD 2 questions	43% (42)	29% (28)	25% (24)	3% (2)	46	48	50	52	

Legend: OLA: Oral Language Alteration; WLA: Written Language Alteration; and AD: Adequated Development.

Subgroup OLA - It has 3 questions, answered by 48 teachers, total of possibilities: 144. Subgroup WLA - It has 3 questions, answered by 48 teachers, total of possibilities: 144.

Subgroup AD – I has 2 questions, answered by 48 teachers, total of possibilities: 96.

The questions of hypothetical cases related to oral language covered topics on phonetic/phonological disturbs or stuttering. The answers showed that a minority of the teachers (39%) observed alterations related to phonological changes (question 1). On the question about stuttering (question 3) the major part (81%) of the faculty indicated as a development problem.

The questions of hypothetical cases of written language alteration involve orthographic mistakes and reading alterations, however, in all, a minority of the teachers classified the cases as a development problem (Figure 1, Table 2). On the question related to deaf/sound orthographic changes (i.e. changing letter F to V on written), showed in Figure 1 (question 8), the major part of the faculty do not identify such difficulty as a development problem.

By comparing the faculty answers between oral language alteration questions with written language alteration questions (Table 2), it can be observed a difference in the answers of the faculty: 64% of the teachers answered that the three oral language alterations questions showed was a development problem; and 40% said the same for the written language alteration questions.

Regarding to the referral conduct (Table 2), a mean of 93% of the teachers would referral the students with oral language alterations, of which on the stuttering cases (Figure 1, question 3), 100% of the teachers said that would referral such student. On the questions related to the language alterations (Table 2), the mean of 73% of the teachers answered that would referral the students, of which the question that describes a student with struggles on punctuation, accentuation and syllable stress perception (Figure 1, question 6) had the lowest rate of referrals of this subgroup (54%).

On Table 2 it is possible to observe that, although a mean of 40% of the faculty considered the questions that showed written language alterations a development problem, 73% of them would rather referral the students.

The professionals indicated by the faculty after the analyses of the hypothetical cases can be seen in Figure 2, where the speech therapist, together with the psychologist were the professional most cited in all subgroups.

In Figure 3 are represented the hypothetical cases, the teachers' answers and the coherence of the justifications on which it is possible to observe that the questions of hypothetical cases of oral language alterations and adequate written development (Question 2) show a major percent of coherent justification. The guestions of written language alterations and adequate development of hearing (question 7) showed major percent of incoherent justifications.

	Subgroups								
Indicated professionals*	OLA	WLA	AD						
·	3 questions	3 questions	2 questions						
Speech therapist	86% (125)	32% (47)	26% (25)						
Psychologist	12% (18)	21% (30)	16% (16)						
Psychopedagogist	5% (7)	16% (24)	4% (4)						
Pedagogist	1% (2)	8% (12)	3% (3)						
Private teacher	0,6% (1)	5% (8)	3% (3)						
Otorhinolaryngologist/ Ophtalmologist	0	4% (6)	6% (6)						
Neurologist	1% (2)	1% (2)	2% (2)						
Pediatrician	0	0,6% (1)	0						
Literacy teacher	1% (2)	1% (2)	1% (1)						
Not reported	2% (4)	1% (2)	1% (1)						

<sup>\*</sup>There was the possibility to referral more than a specialist per case.

Legend: OLA: Oral Language Alteration; WLA: Written Language Alteration; and AD: Adequated Development.

Subgroup OLA - It has 3 questions, answered by 48 teachers, total of possibilities: 144.

Subgroup WLA – It has 3 questions, answered by 48 teachers, total of possibilities: 144.

Subgroup AD – I has 2 questions, answered by 48 teachers, total of possibilities: 96.

Figure 2 – Professionals indicated on the subgroups of alterations.

#### DISCUSSION

The present study proposed to characterize the perception and the conduct of teachers of the elementary school in face of the difficulties in the oral and written languages of elementary school students of the city of Contagem, Minas Gerais. Research with similar objectives used semi-structured questionnaires, with closed<sup>9</sup>, open<sup>10,24</sup> and mixed<sup>11,25</sup> questions. However, the difficulty found was the lack, in the speech therapy literature researched, of a standard and validated mean of evaluation appropriate to the population researched and it meets the objectives of this research. Then it was elaborated e used the questionnaire "Percepção docente em sala de aula" (Teacher perception in classroom), with hypothetical cases relative to the elementary school students, which investigate in a practical approach teaching reality in class. In this work, we used the term oral language to the phonological and fluency aspects.

According to the Censo dos Professores (Teachers' Census), 86.4% of elementary school teachers of Minas Gerais are female and 13.5% male. These findings correspond with those in the research, which presents mostly a female sample<sup>26</sup>. Another finding of the Censo dos Profesores (Teachers's Census) is that 34,3% of the elementary school teachers of Minas Gerais are in the age group that comprises the average age found in the teachers of this research (40,3 years).

On a research about the curricular content of the Pedagogy Courses, verified that in most of the courses evaluated, there are subjects with specific contents of elementary school, like the written language. However, the author states that, although these subjects exist, they are offered in the curricular grade with the intent of improving the performance of the teachers, as speakers of the Portuguese language and not as future teacher who will use his knowledge to the students' development<sup>27</sup>. In this perspective, there was not observed significant statistical difference between the kind of the teachers' initial formation and the perceptions of the changes in the oral and written language in the hypothetical cases of this research.

Although the training time is considered one of the teacher training optimizer factor in dealing with the student and in consideration of their singularities<sup>28</sup>, it was not observed significant statistical difference between teachers with few performance time and those with time of performance above the average (8 years) in the sample found in this study (Table 1).

When analyzing the answers of the teachers in this research it is seen that the question that describes orthographic changes related to the literacy process achieved greater success of the teachers. In the questions related with the difficulty in understanding of the speech among intense noise, less than half of the teachers answered that it is about a "problem in the development". The difference among the answers shows the knowledge related to the literacy from the teachers' initial training<sup>27</sup>, and partial knowledge of the teachers about the hearing as mentioned in the hearing care research with

	Respostas das questões								luctification			
	Α		В		С		D		Justification			
Hypothetical Situations in Classroom	Adequate development		Low difficulties dealt with time		Development problem		I don't know		Coherent		Incoherent	
4) 1 1 1 2 2 11 1	n	%	n	%	n	%	n	%	n	%	n	%
1) L.M. who is 7 years old, coursing 2nd grade/9, male, who when willing to say "eu quero comprar uma bateria", says "/eu quelo complar uma batelia/".	4	8	24	50	19	39	1	2	32	66	16	33
2) C.P. who is 6 years old, female, on the literacy process coursing 1st grade/9, when trying to write: "eu gosto de cachorro-quente" she wrote: "/eu gostu di caxoru centi/".	29	60	15	31	4	8	0	0	31	64	17	35
3) J.T. who is 13 years old, male, coursing the 5th grade/9, when trying to say: "the cat ate the food", he says: "/the ca ca cat at at ate th th the foo foo foo food/".	1	2	5	10	39	81	3	6	39	81	9	18
4) D.P. who is 11 years old, female, coursing 6th grade/9, when trying to say: "o gato comeu a comida" she says: "/u ga ga ga gatu cu cu cu cumeu a cu cu cu cu cu cumeu a cu cu cu cu cu cumida/".	1	2	9	19	35	73	3	6	22	46	26	54
5) J.N. who is 9 years old, male, who is coursing 4th grade/9, has a paused and slowly reading, without rhythm and the textual interpretation is inadequate.	1	2	20	41	22	46	5	10	10	21	38	79
6) M.A. 15 years old, male, coursing 8th grade/9, likes to be in group activities and when those activities involves rhythm he see himself with difficulties. He has difficulties in punctuation, accentuation and stress syllable perception.	8	16	19	39	15	31	6	12	9	19	37	77
7) R.G. who is 8 years old, male, coursing 3rd grade/9, is shy and not talkative and speak slowly. She has difficulties in understanding conversations among intense noise.	13	27	13	27	20	41	2	4	12	25	36	75
8) B.D. who is 9 years old, female, coursing 2nd grade/9. She was on a dictate activity when she was supposed to write what the teacher was saying. On the frase: "todo fósforo é perigoso" she wrote: "dodo vósvoro é berigoso".	3	6	22	46	22	46	1	2	22	45	26	54

Legend: The shadowing columns are the expected answers to each question.

Figure 3 - Elementary School teachers' answers to hypothetical cases of oral and wrritten language alterations and the coherence of the answers.

elementary school teachers were only 30% of them said they had undergone training on hearing<sup>29</sup>.

The knowledge of the teachers about the students' typical development helps in the adequate management of the class. Knowing what the students are capable of to making an adequate construction of a bridge between the previous knowledge and the one that is being taught and

learned enables the optimization of student learning and ensures the continuity of development<sup>30</sup>. The knowledge of the oral and written language makes teachers assist students to expand the repertoire in all linguistic possibilities<sup>3</sup>.

When comparing the answers of the teachers about oral language with the answers about written language, it is observed that a minority state that

the difficulties of the first will overcome with time, as for the written language this prognostic is higher among teachers. This shows the possibility of many children to have changes in oral and written language unnoticed by teachers. It is known that children who do not develop well the oral or the written language may be marginalized for the lack of the basic skill related to the communication what could result in behavioral and psychiatric disorder<sup>31</sup>. Moreover, illiteracy possibilities arising from oral and written language changes are large and can adversely affect job performance and minimize job opportunities<sup>18</sup>.

In a study it was found that 55% of children and adolescents are not linked to a Basic Health Unit and do not realize, therefore, regular pediatric follow<sup>32</sup>. In the family environment in which the mother works to help support the children, the teacher then becomes the central observer of child development<sup>33</sup>. It is then conferred to the teacher a very important role in the perceptions of the difficulties that the student may present in his development<sup>7,8</sup>.

The questions of hypothetic cases related to the oral language addressed topics in phonetics/ phonology disturbs or stuttering. The answers revealed that a minority of teachers observed changes related to phonological modification. It is believed that such a response of teachers is because the exchange of the phoneme flap (the sound of r on letter) by the phoneme /l/ (the I on language) is observed in the typical development of language and the phoneme flap be the last of the phonemes acquired by the children<sup>15</sup>. In addition, the research aiming to describe the phonological development of children of pre-school age speakers of the variant of the Brazilian Portuguese spoken in Minas Gerais showed that the type of exchange speech described in the hypothetical case is the most common type of phonological process<sup>34</sup>.

Regarding the issue of stuttering, most teachers denote as a problem in the development, on the other hand, studies show that teachers have difficulty recognizing stuttering<sup>35,36</sup>. In a study of the occurrence of types of speech breaks with stuttering children, the type of disfluency of the hypothetical case (repetition of syllables) was the most prevalent<sup>20</sup>. This finding may explain the high number of hits on this issue

The questions in the hypothetical cases of changes in written language involve spelling mistakes and reading alterations. However, in all of them less than half of the teachers classified the cases as developmental problems. The spelling mistakes and reading alterations involved in the questions suggest sings of risk of dyslexia and / or dysorthographia. In a research with elementary school

teachers regarding their knowledge in reading and writing found that although the teachers recognize as signs of risk, they do not fully comprehend the spelling mistakes and reading alterations, calling them dyslexia<sup>10</sup>. In contrast, study of elementary school teachers from public and private schools in Belo Horizonte and Nova Lima, Minas Gerais, which investigated the practical and theoretical knowledge about the developmental dyslexia, reveals that 50% of teachers surveyed knew conceptualize dyslexia, and 98% correctly identified its causes<sup>37</sup>.

In the questions relative to orthographic change in the type deaf/sonorous (e.g. exchange of letter F to V for writing), most teachers do not identify such difficulty as a development problem. In research conducted with elementary school students, it was observed that this type of misspelling (deaf / sound) affects 55.9% of 1st grade students decreasing until the 4th grade. Because it is children with typical language development, the average frequency of such errors in each child ranges from 0.7 to 2.3% depending on the grade. The great frequency of occurrence of this error by the student denotes a spelling change<sup>17</sup>.

A reflection on the misspelling affect in the development of the written language in children of early elementary school grades is important for teachers to know the development of written language and thus identify changes and assist students in their daily teaching practices in the classroom<sup>38</sup>.

By comparing the teachers' answers between the questions of oral language changes and the questions of written language changes, it is observed that most teachers denote the former as "problem in the development", the same do not occur with the written language. Such findings show a tendency, in this sample, to classify as a problem in higher percentage, issues related to oral language. With similar results about the oral language, the authors concluded that teachers have regular knowledge about the development of speech9. In related research knowledge into a written language points that teachers have little knowledge about their acquisition and development 10-12. This difficulty in identifying the problem can result in not referring the student.

In a study of the specific content of Elementary School in the curriculum of Pedagogy courses, it is concluded that higher education institutions (HEI) include in their curriculum subjects related to oral language, however, much of the HEIs do not demarcate the written language as a specific topic<sup>27</sup>.

In this research, with regard to the conduct of referrals most teachers would refer the students with changes in the oral and written language. The question that describes a student with difficulties in scoring accentuation and perception of the stressed syllable had the lowest rate of referrals of this subgroup. In a study with children with learning disorder, 8-11 years old (2nd to 4th grade of elementary school), it was noticed a less melodic reading variation, use of pauses without differentiation in the phrase boundaries and not marked tonic prominence<sup>22</sup>. Most of the teachers consider that the students described in the hypothetical cases in both oral language and written language, need referrals. This finding contradicts the research findings<sup>11</sup> in which the index of the referrals of the teachers when faced with a systematic difficulty of the students in written language was 39%.

The Speech Therapist, followed by the Psychologist, was the most mentioned professionals in all subgroups. In a study of the profile of patients with changes in the oral language assisted in the Clinic of Diagnostics of Communication Disturbs of USP (Clinica de Diagnósticos dos distúrbios da comunicação da USP) in Bauru-São Paulo it was found a low incidence of referrals from teachers<sup>39</sup>. In research with teachers from 1st to 4th grade it was found that 62% of teachers surveyed believe that the referral of students with suspected changes in written language is a way of correcting changes, of these, 82% reported refer students with suspicious of any problems to the speech therapist<sup>10</sup>. In this study, it is believed that the high rates of referrals to the audiologist were due to the initial presentation of the researcher, who may had an effect on the answers.

In the teachers' referral conduct the psychologist had the second highest quotation of the referenced professional. In research surveying referrals to the psychological service that meets the public schools of Caxias do Sul (Rio Grande do Sul), it was found that 36% of referrals were related to learning problems (including students' difficulties in reading and writing)40.

The marking of the answer without justification does not necessarily reflect the knowledge of teachers about the content of the hypothetical case questions. Thus, It will be necessary a justification to complement the response and enable more reliable findings regarding the perception of teachers. Therefore, preserving the comprehension in this study that teachers have shown more perceptions of the changes in written language, the consistency of the justifications of the answers was higher in oral language than in written language. The inconsistency in the justifications of the questions of hypothetical cases in written language points to an insufficient awareness of teachers in this subject reinforced by the researched literature<sup>10-12</sup>.

### CONCLUSION

The teachers surveyed had a higher percentage of practical perception about the alterations on fluency and phonology and less perception on written language.

Although show inconsistency to characterize the student's difficulties on the presented hypothetical cases, the faculty surveyed, mostly opt for the referral conducts on which the speech therapist, together with the psychologist are the most cited professionals.

The difference on the answers of the teachers between the questions of hypothetical cases of oral language alterations and written language alteration generates quantitative subsidies that enable a reflection on theme elaboration of teachers' formation programs.

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# **RESUMO**

Objetivo: caracterizar a percepção e a conduta de docentes do ensino fundamental diante de alterações de linguagem oral e escrita dos alunos. Métodos: trata-se de um estudo descritivo de corte transversal que utilizado um questionário de oito questões mistas. Em cada questão foi apresentado um caso hipotético que abordava desenvolvimento ou alteração da linguagem oral ou escrita. Os professores responderam a percepção diante dos casos e a conduta de encaminhamentos. Resultados: a amostra consistiu de 48 docentes do ensino fundamental, com idade média de 40,3 anos e tempo de atuação docente com média de 8,7 anos. As análises das respostas mostram que os professores possuem maior percepção sobre alterações da linguagem oral do que da linguagem escrita. Quanto à condutas de encaminhamentos, o profissional de referência mais citado foi o fonoaudiólogo seguido do psicólogo. Conclusões: os professores pesquisados apresentam maior percentual de percepção prática sobre as alterações na fluência e na fonologia e pouca percepção em linguagem escrita. A diferença das respostas dos professores entre as questões de casos hipotéticos de alterações da linguagem oral e alterações da linguagem escrita gerou subsídios quantitativos que possibilitam uma reflexão na elaboração temática de programas de formação para os professores.

DESCRITORES: Conhecimento; Docentes; Ensino Fundamental e Médio; Transtornos da Linguagem

#### REFERENCES

- 1. Meira MIM. Breve relato da história da fonoaudiologia no Brasil. In: Marchesan IQ, Zorzi JL, Gomes ICD. Tópicos em fonoaudiologia, IV. São Paulo: Lovise; 1997/1998, Introdução.
- 2. CFFa. Conselho Federal de Fonoaudiologia. Resolução n° 309, de 1° de abril de 2005. Disponível em: http://www.fonoaudiologia.org.br. [Acesso em 09 de janeiro de 2013].
- 3. Darling-Hammond L, Baratz-Snowden J. (Eds). Preparing Teachers for a Chaning World What teachers should learn and be able to do. The National Academy of Education. San Francisco: Jossey-Bass; 2005.
- 4. Chiari BM, Goulart BNG. The role of research methodology in the rational use of technology in monitoring and preventing communication disorders. An. Acad. Bras. Ciênc. 2009;81(3):497-502.
- 5. Ruben RJ. Redefining the survival of the fittest: communication disorders in the 2st century. Laryngoscope. 2000;110:241-5.
- 6. McKinnon DH, McLeod S, Reilly S. The prevalence of stuttering, voice, and speech-sound disorders in primary school students in Australia. Lang Speech Hear Serv Sch. 2007;38:5-15.
- 7. Rufino D, Souza IA. As dificuldades de aprendizagem na escola: o olhar do professor. Rev Event Pedag. 2012;3(3):44-52.
- 8. Petit M. Através do professor, o aluno. Rev Fonoaudiol Brasil. 2006; 67(1):12-5.
- Santos LM, Friche AAL, Lemos SMA. Conhecimento e instrumentalização de professores sobre desenvolvimento da fala: ações de promoção da saúde. Rev CEFAC. 2011;13(4):645-56.

- 10. Fernandes GB, Crenitte PAP. O conhecimento de professores de 1ª a 4ª série quanto aos distúrbios da leitura e escrita. Rev CEFAC. 2008;8(2):182-90.
- 11. Oliveira JP, Natal RMP. A linguagem escrita na perspectiva de educadores: subsídios para propostas de assessoria fonoaudiológica escolar. Rev CEFAC. 2011;14(6):1036-46.
- 12. Harb L, Doria SC, Lombardi JAC. Conocimientos y prácticas de los docentes delarea de lenguaje de primero elemental de instituciones educativas del norte-centro histórico de laciudad de Barranquilla (Colombia) sobre las dificultades de aprendizaje de lectoescritura. Psicol. desde el Carib [periódico na internet]. Julho 2005 [acesso em 10 de outubro de 2013]; 15: [32 páginas]. Disponível em: http://www. redalyc.org/pdf/213/21301502.pdf.
- 13. Berbel NN. "Problematization" and Problem-Based Learning: different words or different ways? Interface. 1998;2(2):139-54.
- 14. Mitre SM, Siqueira-Batista R, Girardi-De-Mendonca JM, de Morais-Pinto NM, Meirelles CDB, Pinto-Porto C et al. Active teaching-learning methodologies in health education: current debates. Cienc Saude Coletiva. 2008;13:2133-44.
- 15. Wertzner HF. Fonologia: Desenvolvimento e Alterações. In: Ferreira LP, Befi-Lopes DM, Limongi SCO. Tratado de Fonoaudiologia. São Paulo: Roca, 2004. p. 772-86.
- 16. Puyuelo M, Rondal J. Manual de Desenvolvimento e alterações da linguagem na criança e no adulto. Porto Alegre: Artmed, 2007.
- 17. Zorzi JL. As trocas surdas sonoras no contexto das alterações ortográficas. In: Zorzi JL, Marchesan IQ, Gomes IDG, organizadores. Tópicos em Fonoaudiologia . São Paulo: Lovise, 1997. p.441-62

- 18. Zorzi JL. Os distúrbios de aprendizagem e os distúrbios específicos de leitura e da escrita. In: Britto ATBO (org.) Livro de fonoaudiologia. São José dos Campos: Pulso Editorial; 2005. p.217-30.
- 19. Zorzi JL, Ciasca SM. Caracterização dos erros ortográficos em crianças com transtornos de aprendizagem. Rev CEFAC. 2008;10(3):321-31.
- 20. Juste F, Andrade CRF. Typology of speech disruptions and grammatical classes in stuttering and fluent children. Pró-Fono Rev Atual Cient. 2006;18(2):129-40.
- 21. Costa PP, Mezzomo CL, Soares MK. Verificação da eficiência da abordagem terapêutica miofuncional em casos de desvio fonológico, fonético e fonéticofonológico. Rev CEFAC. 2013;15(6):1703-11.
- 22. Alves LM, Pinheiro A, Capellini S, Reis C. Aspectos Temporais e Entonativos na leitura e compreensão de crianças com transtorno de aprendizagem. Rev Soc Bras Fonoaudiol. 2006;11(3):151-7.
- 23. Bizzotto MI, Aroeira ML, Porto A. Alfabetização Linguística: da teoria à prática. xx ed. Belo Horizonte: Dimensão, 2010.
- Luzardo R, Nemr K.Instrumentalização fonoaudiológica para professores da educação infantil. Rev CEFAC. 2006;8(3):289-300.
- 25. Maranhão PCS. Pinto SMPC. Pedruzzi CM. Fonoaudiologia e educação infantil: uma parceria necessária. Rev CEFAC. 2009;1(1):59-66.
- 26. BRASIL. Ministério da Educação. Censo Escolar da Educação Básica 2007. INEP - Instituto Nacional de Estudos e Pesquisas Educacionais Anísio Teixeira, Educacenso, Censo Escolar 2007: caderno de instrução. 2007. Disponível em: http://www.scribd.com/doc/925483/Caderno-de-Instrucoes-para-Censo-Escolar-1204?page=12.
- 27. Libâneo JL. O ensino da Didática, das metodologias específicas e dos conteúdos específicos do ensino fundamental nos currículos dos cursos de Pedagogia. Rev Bras de Estudos Pedag. 2010;91(220):562-83.
- 28. Gatti MGN. A prática pedagógica como núcleo do processo de formação de professores. In: Gatti BA, Silva Junior CA, Nicoletti MG, Pagotto MDS. Por uma Politica Nacional de formação de professores. São Paulo: Unesp; 2013. p.95-106.

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- 29. Paula CAM. Percepções de conhecimento sobre deficiência auditiva em um grupo de professores do ensino fundamental [monografia de especialização]. Brasília (DF): Universidade de Brasília; 2011.
- 30. Mizukami MGN. Escola e desenvolvimento profissional da docência. In: Gatti BA, Silva Junior CA, Nicoletti MG, Pagotto MDS. Por uma Politica Nacional de formação de professores. São Paulo: Unesp: 2013, p.23-54
- 31. Cross M. I CAN Talk Language and Social Exclusion Issue 4 London: I CAN: 2007, Jacesso em 14 de março de 2014]. Disponível em: http://www. ican.org.uk/~/media/lcan2/Whats%20the%20Issue/ Evidence/4%20Language%20and%20Social%20 Exclusion%20pdf.ashx.
- 32. Lima LMB, Almeida NMGS. Procura da emergência pediátrica pelas mães: implicações para a superlotação. Saúde em 2013;37(96):51-61.
- 33. Colares MFA, Silva AFV, França JA. Percepção dos professores do ensino fundamental sobre as dificuldades de aprendizagem. Rev Eletr de Letras [periódico na Internet]. 2013 [Acesso em 13 de fevereiro de 2014]; 6(1): [60 páginas]. Disponível em: http://periodicos.unifacef.com.br/index.php/rel/ article/view/562.
- 34. Vitor RM, Martins CC. Desenvolvimento fonológico de crianças pré-escolares da Região Noroeste de Belo Horizonte. Psicol em Rev. 2007;13(2):383-98.
- 35. Chiquetto MM. Reflexões sobre a gagueira: concepções e atitudes dos professores. Pró-Fono R Atual Cient. 1996;8(1):13-8.
- 36. Mendonça JE, Lemos SMA. Promoção da saúde e ações fonoaudiológicas em educação infantil. Rev CEFAC. 2011;13(6):1017-30.
- 37. Pereira LV, Simões MG, Siqueira CM, Alves LM. Estudo investigativo sobre o conhecimento da dislexia em educadores da rede pública e privada dos municípios de Belo Horizonte e de Nova Lima. Rev Tecer. 2011;4(6):26-40.
- 38. Oliveira ND, Grassi LH, Teixeira SM. A importância do conhecimento sobre a língua para a prática pedagógica de professores das séries iniciais. Universidade Federal de Pelotas- UFPel, 2010. Disponível em: <a href="http://wp.ufpel.edu.br/geale/">http://wp.ufpel.edu.br/geale/</a> files/2010/11/Trabalho-NISINOS20091.pdf> Acesso em março de 2014.
- 39. Hage SRV, Faiad LNV. Perfil de pacientes com alteração de linguagem atendidos na clínica de diagnóstico dos distúrbios da comunicação. Rev CEFAC. 2005;7(4):433-9.
- 40. Scortegagna P, Levandowski D. Análise dos encaminhamentos de crianças com queixa escolar da rede municipal de ensino de Caxias do Sul. Interações. 2005;9:127-52.