

Self-perception of the learning difficulties of elementary school students

Autopercepção das dificuldades de aprendizagem de estudantes do ensino fundamental

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ABSTRACT

Purpose: To verify the self-perception of reading and writing difficulties of elementary school students from region of high social risk and elevated health vulnerability index, as well as the perception of their parents about these difficulties. **Methods:** sixty-five students (from both genders), from the 4th to the 7th years of elementary school, and those responsible for them participated in the survey. Two questionnaires, one for students and another for the ones responsible for them, were used, with questions about reading and writing difficulties. It was used the School Performance Test (*Teste de Desempenho Escolar* - TDE, with reading and writing tests). **Results:** Of the students assessed, 2/3 had a positive self-perception of their performance in reading and writing and their parents appeared to realize the difficulties more sharply than their children. There was relationship between student self-perception and lower performance in reading and writing tests, which was also verified in relation to the perception of the parents. **Conclusion:** Less students presented negative self-perception of their performance in reading and writing when it is compared to the perception of the parents. Those children with better performance perceive themselves better and so do their parents. However, reading and writing tests revealed a higher percentage of students with lower performances than the self-perception indicated. In this sense, especially in areas of high social risk as in this study, educators and professionals involved in the teaching-learning process should be alert to signs of difficulties, even before complaints from the family and from the children.

Keywords: Self concept; Self efficacy; Language; Learning; Family; Child; Speech, language and hearing sciences

RESUMO

Objetivo: Verificar a autopercepção das dificuldades de leitura e escrita de estudantes do ensino fundamental de uma região de alto risco social e elevado índice de vulnerabilidade à saúde, bem como a percepção de seus pais sobre essas dificuldades. **Métodos:** Participaram 65 alunos (ambos os gêneros), do 4^o ao 7^o ano do ensino fundamental de uma escola municipal e seus responsáveis. Foram utilizados dois questionários, um para os estudantes e outro para seus responsáveis, com perguntas sobre dificuldades na leitura e na escrita. Utilizou-se também o Teste de Desempenho Escolar (TDE) (provas de leitura e escrita). **Resultados:** Dos estudantes avaliados, 2/3 apresentaram autopercepção positiva do seu desempenho em leitura e escrita e seus pais aparentaram perceber as dificuldades de forma mais acentuada do que seus filhos. Observou-se relação entre autopercepção do estudante e desempenho inferior nos testes de leitura e escrita, o que também foi verificado em relação à percepção dos pais. **Conclusão:** Menos estudantes apresentaram autopercepção negativa do seu desempenho em leitura e escrita, quando comparado à percepção dos pais. Aquelas crianças com melhor desempenho percebem-se melhor e seus pais também. No entanto, os testes de leitura e escrita revelaram um percentual maior de estudantes com desempenho inferior do que a autopercepção indicou. Neste sentido, especialmente em regiões de alto risco social, como a deste estudo, os educadores e profissionais envolvidos no processo de ensino-aprendizagem devem estar atentos aos sinais de dificuldades, antes mesmo das queixas familiares e da criança.

Descritores: Autoimagem; Autoeficácia; Linguagem; Aprendizagem; Família; Criança; Fonoaudiologia

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INTRODUCTION

The poor school performance should be seen as a symptom related to multiple etiologies. Two large groups of causes to be considered are the pedagogical difficulties and the pathologies and associated disorders. Within the group of causes related to pedagogical difficulties, the unfavorable socio-cultural conditions, or little stimulatory ones, directly influence the poor school performance^(1,2). The positive self-perception of learning and the family involvement in the lives of children/adolescents are associated with good academic performance^(3,4,5).

The belief of the individual in relation to his/her ability to cope with certain situations is called self-perception. The perceptions follow him/her in all situations of his/her life and can positively or negatively influence his/her performance in several contexts⁽⁶⁾. The self-perception of students, together with other beliefs related to learning, is considered a predictor of academic development. Thus, the sense of self-perception affects the actual performance of the students and it is influenced by it.

In adolescence, there are fundamental changes in thinking, in particular the achievement of the full control of the language and communication⁽⁷⁾, which favors the self-perception. In Brazil, there are only few studies that use the information from children and adolescents, as it is believed that it may occur possible failures due to poor neuronal maturation⁽⁷⁾. According to the authors, children tend to overestimate their competence, because they do not have the cognitive maturity to critically evaluate their skills and integrate information from multiple sources⁽⁷⁾. With the development, the adolescents can understand and see their own abilities and better distinguish between their efforts and skills. As a result, their self-perception becomes highly accurate.

In the formation of the self-perception, both the quality of relationships between parents and children and the teacher-student relationship are important aspects. Thus, the way parents express their affection for the child, how the control and discipline are exercised, the democratic or authoritarian mood at home, the use of praise or disapproval in successful or unsuccessful experiences or tasks are factors that contribute to the formation of positive or negative self-perception by the child⁽⁸⁾.

An international study, conducted with a representative sample of students with reading difficulties, in the United States, examined the relationship between self-perception and academic performance and concluded that there are significant correlations between these variables and that the self-perception is a potential predictor of academic performance for students with learning difficulties⁽⁹⁾.

The parents and the family can positively direct the school learning, the child motivation for the studies and the development of interpersonal skills that ensure a good relationship with teachers and schoolmates. Several aspects of family life are important, from the atmosphere and home organization to the direct involvement of the parents in the school life of

the child^(3,4,10). Thus, collect information on the perception of parents about the academic performance of the children can bring data from the family involvement and the development of the child/adolescent.

The aim of this study was to verify the self-perception of reading and writing difficulties of elementary school students from a region with high social risk and elevated vulnerability to health, as well as the perception of their parents about these difficulties. Furthermore, it was also intended to analyze the perceptions in the light of the performance of the students.

METHODS

This study is part of the research “Health at School Program: present situation and future prospects”, developed by the thematic line Programa Saúde na Escola (PSE, ‘Health at School Program’) of PET-Saúde of *Universidade Federal de Minas Gerais*, whose aim is to assess the health conditions of the students assisted by PSE, in partnership with three Basic Health Units. In PET-Saúde study, many variables are analyzed: food habits of the child, feeding behavior, anthropometry, body perception, blood pressure, basic health information, evaluation of communication and learning, hearing assessment, evaluation of micturition-bowel habits, assessment of motor development and oral health evaluation. For this study, it was used the variable assessment of communication and learning. The project was approved by the Comitê de Ética em Pesquisa (Ethics Committee in Research) of *Universidade Federal de Minas Gerais* under Protocol nº CAAE - 08757812.3.0000.5149.

In this study, data of the students of one of the schools offering elementary education from the 4th year were presented. Based on the calculation of the number of students required for this study, the proportional distribution was made, according to the school year: ten students of the 4th year, ten of the 5th year, 18 of the 6th year and 27 of the 7th year of elementary school, regularly enrolled, totalizing 65 students, 39 female and 26 male, aged between 10 and 15 years (SD=1.35).

The inclusion criteria were: students enrolled in the school and Informed Consent signed by them and by those responsible for them. Incomplete questionnaires were considered as exclusion criteria. For the research, the students and the responsible for them were informed about the voluntary nature of the study, its objectives and consequences.

The school where this study was conducted is located in a region of high social risk and high health vulnerability index (*Índice de Vulnerabilidade à Saúde* - IVS). IVS is calculated from sanitation, housing, education and income indicators as well as from social indicators and characteristics around the households (lighting, sidewalk, curb, among others⁽¹¹⁾).

The survey was conducted through the application of two questionnaires: one for the parents/responsible ones and one for the students. Among the questions in the questionnaire applied to the students, one was selected for this study: “Do

you think you have difficulties to read and write?”. From the questionnaire applied to the parents/responsible, two questions were selected: “Do you think your child has difficulties to read and write?” and “Do you think your child has reading difficulties?” The possible answers were: “Yes”, “No” or “I do not know”.

It was also used, the School Performance Test (*Teste de Desempenho Escolar* - TDE, with reading and writing tests), conducted according to the protocol⁽¹²⁾. The writing subtest, composed of 34 words presented in the form of saying, was conducted collectively in the classroom of students, for approximately 30 minutes. The reading subtest, composed of 70 words read by the student, was conducted individually, in a quiet and well-lit environment, for about 20 minutes. For further analysis, the reading was recorded with the aid of a digital voice recorder. The School Performance Test assesses reading and writing through single words, not investigating the difficulties of understanding and elaboration.

First, interviews with the parents were conducted, followed by interviews with the students and then the reading subtest was held. After that, collectively, the writing subtest was given. The interviews and the tests were conducted at school and the parents were summoned for informative notes. In the cases the parents did not attend the school for the interview, home visits were made with the support of the health team of the region Basic Health Unit.

A descriptive analysis of the frequency distribution of all variables was performed. Pearson’s Chi-square test was used to check whether there was an association between the following variables: a) self-perception of the students and the performance in the School Performance Test; b) perception of the parents about their children and School Performance Test. The adopted significance level was 5%. Data were entered into a database and processed in the IBM SPSS Statistics 21.0 software.

RESULTS

Sixty-five students and the responsible for them were evaluated and interviewed. Of the total sample, 60% of students were female (39) and 40% were male (26). The mean age was 12 years (SD=1.4). In relation to the responsible for them, 4.6% of the interviews were answered by the father of the student, 87.7% by the mother and 7.7% by other responsible. The mean age of the responsible was 36 years (SD=8.8).

The association between self-perception of the students about their difficulty to read and write and the performance on writing and reading tests, respectively, are shown in Tables 1 and 2.

In the tests of School Performance Test, 15.4% of the students had lower performance only in the written test and 15.4% had lower performance only in the reading test; 24.6% of students had lower performance on both tests and 44.6% had no difficulty.

Table 1. Comparison between the question “Do you think you have difficulties to read and write?” and the assessment of writing

Do you think you have difficulties to read and write?			
TDE - Writing	Yes	No	Total
Inferior	07	14	21
Mean or superior	12	32	44
Total	19	46	65
Pearson’s chi-square		X ² =5.999; p=0.014*	

*Significant value (p<0.05)

Subtitle: TDE = *Teste de Desempenho Escolar* (School Performance Test)

Table 2. Comparison between the question “Do you think you have difficulties to read and write?” and the assessment of reading

Do you think you have difficulties to read and write?			
TDE - Reading	Yes	No	Total
Inferior	14	12	26
Mean or superior	05	34	39
Total	19	46	65
Pearson’s chi-square		X ² =12.693; p<0.001*	

*Significant value (p<0.05)

Subtitle: TDE = *Teste de Desempenho Escolar* (School Performance Test)

Table 3. Comparison between the question “Do you think your child has reading difficulties?” and the objective assessment of the reading

Do you think your child has reading difficulties?			
TDE - Reading	Yes	No	Total
Inferior	14	12	26
Mean or superior	11	28	39
Total	25	40	65
Pearson’s chi-square		X ² =4.333; p=0.037*	

* Significant value (p<0,05)

Subtitle: TDE = *Teste de Desempenho Escolar* (School Performance Test)

Table 4. Comparison between the question “Do you think your child has reading difficulties?” and the objective assessment of the writing

Do you think your child has reading difficulties?			
TDE - Writing	Yes	No	Total
Inferior	14	12	26
Mean or superior	11	28	39
Total	25	40	65
Pearson’s chi-square		X ² =4.333; p=0.037*	

*Significant value (p<0.05)

Subtitle: TDE = *Teste de Desempenho Escolar* (School Performance Test)

The association between the perception of parents about the reading difficulty of the children and the performance on the reading and writing tests, respectively, can be observed in Tables 3 and 4. Identical values were observed for both analyzes.

DISCUSSION

This study aimed to verify the self-perception of reading and

writing difficulties of elementary school students in a region of high social risk and elevated health vulnerability index⁽¹¹⁾. In addition, it sought to investigate the perception of the parents in relation to the difficulties of the children. The adopted methodological option was the application of questions of easy understanding to the participants and the comparison of the answers with the results of School Performance Test⁽¹²⁾. There is not, in the literature, another test validated for assessing school performance in the studied age group which justified the choice. Furthermore, studies to assess the psychometric properties of the School Performance Test showed that the reading subtest has appropriate discrimination for low and medium skill levels⁽¹³⁾ and the writing subtest presents evidences of one-dimensionality, with high capacity of discrimination⁽¹⁴⁾, indicating that both subtests of School Performance Test are appropriate tools for what they are proposed^(13,14).

The self-concept or self-perception, can also be defined as the way in which the child or adolescent realize their individual skills and difficulties (motor, cognitive, familiar, social, emotional ones) and the idea they have of themselves, with great influence on self-esteem⁽¹⁵⁾. It is known that the self-perception of students, together with other beliefs related to learning, is considered a predictor of academic development. Thus it is fundamental to study it in different populations of students^(9,15). In this study, the researched students were mostly belonging to the lower social classes and to families with few academic opportunities, reflected by low parental education, residents of an area with high levels of violence, factors that contribute to poor school performance^(2,3,16).

Although there is an association between self-perception of reading and writing difficulties and the School Performance Test, 29% of the interviewed showed negative self-perception of reading and 40% showed inappropriate performance in the reading test, which shows that the self-perception is not satisfactory. It is worth considering that the School Performance Test assesses the reading and writing of only single words, with reliability⁽¹³⁾ and the population to be investigated may have reading understanding for the reading of complex and extensive texts as well as for the production of texts. It is believed that the population of this study has also more difficulties, if evaluated for these skills, since, in the evaluation of IDEB (*Índice de Desenvolvimento da Educação Básica* - Basic Education Development Index), the school score was 4.5 for the 5th year and 3.4 for the 9th year, in a test that only evaluated the reading, being the text the smallest unit of meaning⁽¹⁷⁾. According to the organizers, the most important thing in this test is the understanding of the text.

Although reading precedes writing⁽¹⁸⁾ in the literacy process, the assessed students realized better their difficulties of writing than reading, since 29% conceived themselves negatively and 32% had lower performance in the School Performance Test.

Studies that compared the self-perception of students with and without learning complaints, concluded that those with

school complaint had worse self-perception^(18,19). It is believed that this factor may have also influenced the results of this study, and students who complained had low self-esteem and negative self-perception about their performances⁽²⁰⁾. The literature suggests that educators teach and encourage the self-determination skills (origin of the actions, learn from failures, greater well-being feeling) for students, regardless of family situation, personal difficulties or environmental characteristics, in order to enhance self-esteem, self-concept and academic performance, thus reducing school dropout rates and promoting, in the future, the social and professional insertion⁽⁹⁾.

Studies that verified the relationship among the parenting practices and the student performance at school have shown that, when parents follow routinely school activities of the children, these ones have better performances^(2,3,10). Therefore, it is assumed that if those parents follow their children in school activities, they may also have better perception about their performances. In this study, most parents (n=14) perceived reading difficulties of their children (n=26). However, they were more perceivers (n=28) to the appropriate performance (n=39). These findings may have been influenced by maternal and paternal education, as literature asserts that the higher is the parents' study time, the lower is the chance of the children to present alterations, which indicates the importance of the education level of parents in promoting child development^(21,22), with future reflections on academic progress and greater knowledge of the performance of their children^(23,24). In this study, it was verified that the mean education of the parents and the responsible ones was 6.8 years of studies (SD=2.8), which may explain their limitations in understanding the actual school condition of their children.

The results showed that the students perceived better their performance in reading than their parents did, agreeing with a previous study, which found that the information obtained by adolescents differs from those obtained by their mothers⁽⁷⁾ and that the information received from adolescents may be close to their reality and their experiences.

Most interviews were conducted with mothers, matching with an earlier study, performed with public school students, in which almost 100% of the interviews were conducted with mothers⁽²⁵⁾. Moreover, the study authors observed that mothers are more present in the aid for the performance of school activities. More specifically, in the case of children with school failure, it was observed that the parents are no stranger to the problems of the children, but they wait for guidance on how to help them at home.

In the present study, it was not possible to analyze several factors related to the perception of reading and writing difficulties, since such difficulties are multifactorial ones. Also, it could not be established direct relationship between self-perception and school performance because it is a cross-sectional study. A study conducted in the United States, in order to investigate the relationship between self-concept and

academic performance of students with school difficulties, pointed out that, at the elementary level, there was a reciprocal causal relationship between academic performance and self-concept. It also pointed out that the socioeconomic level of the families was a significant predictor of self-concept, and the academic performance and parental involvement in school activities was an important predictor for the academic performance of children in the elementary level⁽⁵⁾. In this sense, it is suggested that further studies investigate the relationship of self-perception and reading and writing difficulties of children and adolescents from different socioeconomic classes, with a longitudinal design, in order to allow the establishment of direct relations between such variables.

The results of this study reinforce the need to work the self-concept of the students with learning difficulties, from the initial series, which may contribute to the improvement of the academic performance⁽⁵⁾. Such objective should be guided by speech therapists who work in the school environment.

CONCLUSION

Fewer students showed negative self-perception of their performance in reading and writing, when compared to the perception of the parents. The parents of the students seem to realize such difficulties more acutely than their children.

There was relationship between self-perception of the student and inferior performance in reading and writing tests, which was also verified in relation to the perception of the parents.

However, the reading and writing tests revealed a higher percentage of students with inferior performance than the self-perception indicated. In this regard, especially in areas of social risk, such as the one of this study, the educators and professionals involved in the process of teaching and learning should be alert to the signs of difficulties, even before the family and the child complaints.

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