

Emotional and behavioral problems and school repetition: a case-control study with adolescents

Angela Helena Marin¹

Vale do Rio dos Sinos University – Unisinos, RS, Brazil

Bruna Mainardi Rosso Borba

Vale do Rio dos Sinos University – Unisinos, RS, Brazil

Alessandra Turini Bolsoni-Silva

Federal University of São Paulo – Unesp, SP, Brazil

Abstract: Considering the suffering associated with learning difficulties and school failure, this study compared the indicators of emotional and behavioral problems assessed by adolescents, their parents and teachers among groups of students with and without a history of failure in elementary education. A cross-sectional case-control study was carried out, involving 24 adolescents with retention, who were compared to 24 adolescents without the same history, 48 mothers/fathers and 21 teachers who responded to Youth Self Report, Child Behavior Checklist and Teacher's Report Form, respectively. We also considered the grades of adolescents in Portuguese and Mathematics. The results showed that both externalizing and internalizing problems were associated with academic performance and that teachers identified more emotional and behavioral problems in school failure group compared to parents and adolescents. The evaluation by different informants made it possible to contemplate the complexity of the variables investigated.

Keywords: adolescence; mental health; behavior disorders; school performance; school failure.

PROBLEMAS EMOCIONAIS E DE COMPORTAMENTO E REPROVAÇÃO ESCOLAR: ESTUDO DE CASO-CONTROLE COM ADOLESCENTES

Resumo: Considerando o sofrimento associado a dificuldades de aprendizagem e reprovação escolar, este estudo comparou os indicadores de problemas emocionais e de comportamento avaliados por adolescentes, seus pais e professores, entre grupos de alunos com e sem histórico de reprovação no ensino fundamental. Desenvolveu-se uma pesquisa transversal, do tipo caso-controle, da qual participaram 24 adolescentes com reprovação, equiparados a outros 24 adolescentes sem o mesmo histórico, além de 48 mães/pais e 21 professores que responderam, respectivamente, ao Inventário de Comportamentos Autorreferidos para jovens e ao Inventário dos Comportamentos de Crianças e Adolescentes. Também foram consideradas as notas dos adolescentes nas disciplinas de Português e Matemática. Os resultados evidenciaram que tanto problemas externalizantes quanto internalizantes associaram-se ao desempenho acadêmico e que professores identificaram mais problemas no grupo com reprovação quando comparados com pais e adolescentes. Ressalta-se a pertinência de se avaliarem diferentes informantes, de modo a contemplar a complexidade das variáveis investigadas.

Palavras-chave: adolescência; saúde mental; distúrbios do comportamento; desempenho escolar; fracasso escolar.

¹ **Mailing address:** Angela Helena Marin – Avenida Unisinos, 950. Sala E01-109. São Leopoldo, RS, Brazil. CEP: 93.022-750. E-mail: angelahm@unisinos.br

PROBLEMAS EMOCIONALES, DE COMPORTAMIENTO Y EL FRACASO ESCOLAR: ESTUDIO DE CASO-CONTROL CON ADOLESCENTES

Resumen: Considerando el sufrimiento asociado a dificultades de aprendizaje y reprobación escolar, se compararon indicadores de problemas emocionales y de comportamiento evaluados por adolescentes, sus padres y profesores entre grupos de alumnos con y sin histórico de reprobación en enseñanza fundamental. Se desarrolló una investigación transversal, tipo caso-control, de la cual participaron 24 adolescentes con reprobación, equiparados a otros 24 sin el mismo histórico, además de 48 madres/padres y 21 profesores que respondieron respectivamente al Inventario de Comportamientos Autorreferidos para jóvenes y al Inventario de los Comportamientos de Niños y Adolescentes. También incluían las notas de los adolescentes en Portugués y Matemática. Resultados evidenciaron que tanto los problemas externalizantes como internalizantes se asociaran al desempeño académico y que los profesores identifican más problemas emocionales-conductuales en el grupo con reprobación escolar cuando comparados con padres y adolescentes. Se resalta la pertinencia de evaluar diferentes informantes, contemplando la complejidad de las variables investigadas.

Palabras clave: adolescencia; salud mental; trastornos de la conducta; rendimiento escolar; fracaso escolar.

Introduction

The Brazilian education policy aims at all children attending school, as well as guarantees quality learning that promotes their remaining. However, despite the advances made in previous decades, serious educational and structural problems remain. According to the indicators of the Anísio Teixeira National Institute of Educational Studies and Research (INEP, 2015), more than 22 million children and adolescents are enrolled in elementary education. However, approximately 5.8% of them have to repeat initial years and 11.1%, the final years. Repetition rates are related to dropping out, especially between the sixth and ninth grade of this education level, which constitutes a major national problem that needs to be observed and considered.

The experience of school repetition is negatively associated with interest in the school (Millones, Leeuwen, & Ghesquière, 2013; Moksnes, Lohre, Lillefjell, Byrne, & Haugan, 2016). For example, Nunes, Pontes, Silva, & Dell’Aglío (2014), in a study with 610 adolescents, found that students with a history of repetition had lower expectations in relation to high school graduation and career planning. Furthermore, these students may present a more negative representation of themselves, because they are praised less and criticized more by teachers (Osti & Brenelli, 2013), which can lead to poorer learning strategies and a greater fear of asking for help when there are doubts (Costa & Boruchovitch, 2010). In this sense, studies have highlighted the feeling of guilt that adolescents with a history of repetition manifest, as well as their family members, attributing this to demotivation, difficulties in learning and problems related to their behavior (Pezzi, Donelli, & Marin, 2016).

Emotional and behavioral problems and their relationship with school repetition have been the subject of interest of several researchers (Dazzani, Cunha, Luttigards, Zucoloto, & Santos, 2014; Millones et al., 2013). Externalizing symptoms, characterized

by opposition, aggression, and impulsivity, are associated with frequent interruptions during the class, which tend to overload the teachers (Sutherland, Lewis-Palmer, Stichter, & Morgan, 2008). In addition, internalization symptoms, which involve depression, anxiety, social withdrawal, somatic complaints, fear, excess worry, sadness, and shyness, can generate insecurity, isolation, and school repetition (Moksnes et al., 2016). However, it is important to mention that there is no consensus in the literature regarding the direction of the association between emotional and behavioral problems and school repetition (Borba & Marin, 2017; Marturano & Elias, 2016). While some studies indicate that emotional and behavioral problems lead to poorer school performance (Borba & Marin, 2017; Cia & Costa, 2012; Rocha, 2012), others show that poor school performance leads to the development of these problems (D'Abreu & Marturano, 2010; Millones et al., 2013). However, it is believed that there is an interrelation between these variables, considering that one presents a risk condition for the other (Algozzine, Wang, & Violette 2010).

There is also divergence regarding the type of symptom that is related to school difficulties and, consequently, repetition. Some studies have highlighted externalizing problems (Dazzani et al., 2014), while others have indicated internalizing problems (Moksnes et al., 2016; Svansdottir, Arngrimsson, Sveinsson, & Johannsson, 2015), and some studies also indicated that both are associated with school repetition (Millones et al., 2013). For example, the Brazilian study conducted by Bandeira, Rocha, Souza, Del Prette, & Del Prette (2006) found that students with unsuccessful schooling presented internalizing and externalizing behaviors in the evaluation of parents and teachers.

It should be noted that the association between emotional and behavioral problems and school repetition is among the main complaints that motivate seeking mental health services (Valverde, Vitale, Sampaio, & Schoen, 2012). However, adherence to treatments is still low, which indicates the need for greater understanding of this demand, considering it from an individual and systemic perspective. In this sense, it is important to include the evaluation by multiple informants in relation to emotional and behavioral problems, for clinical or research purposes, thus contemplating different development contexts, such as family and school (Gomez, Vance, & Gomez, 2014). In addition, any discrepancies found between them are valuable as they demonstrate the need to consider the characteristics and demands of each reality (De Los Reyes, Thomas, Goodman, & Kundey, 2013).

Thus, the present study aimed to compare the indicators of emotional and behavioral problems assessed by adolescents, their parents, and teachers, among groups of students with and without a history of repetition in elementary education. In addition, it was sought to examine the performance of the adolescents in the subjects of Portuguese and Mathematics, associating this with the severity of the symptoms identified by the different informants. Considering the literature reviewed, it was expected that adolescents with school repetition would present more indicators of the problems considered.

Method

Design and participants

This was a case-control, cross-sectional and quantitative study, in which the sample, selected by convenience, was composed of 24 adolescents with a history of school repetition that was matched for sex and school year, as well as for the family configuration and socioeconomic level, with 24 adolescents with no history of school repetition (control group). All were enrolled in two public institutions located in a lower-middle-class neighborhood of the city of Porto Alegre. A total of 48 family members were also included in the study, represented by the mothers and fathers of these adolescents, and 21 teachers, who evaluated the corresponding number of students included in this study.

As predicted, comparisons between the groups considering sex ($X^2 = 0.00$, $p = 1.00$) and school year ($X^2 = 0.14$, $p = 0.71$) did not differentiate them. However, the age group differentiated the groups ($X^2 = 19.09$, $p = 0.00$), with the adolescents aged 14 years having the highest number of repetitions (six without and one with a history of repetition among those aged 12 years; 17 without and eight with a history of repetition among those aged 13 years, one without and 13 with a history of repetition among those aged 14 years, and two with a history of repetition among those aged 15 years).

In the group with a history of repetition, the adolescents were aged between 12 and 14 years ($M = 13.67$; $SD = 0.70$), with 13 females (54.2%) and 11 males (45.8%). Regarding their schooling, five were in the sixth year (20.8%), and 19 were in the seventh year (79.2%) of elementary education. The families were represented by 22 mothers (91.7%) and 2 fathers (8.3%).

In relation to the group without a history of repetition, the adolescents were also aged between 12 and 14 years ($M = 12.79$; $SD = 0.51$), with 13 females (54.2%) and 11 males (45.8%). Regarding their schooling, four were in the sixth year (16.7%), and 20 were in the seventh year (83.3%) of elementary education. The families were represented by 22 mothers (91.6%) and 2 fathers (8.3%).

Finally, among the participating teachers, who taught different disciplines covering the entire curriculum, 5 were male (23.81%) and 16 female (76.19%). All of them had contact with the assessed students for at least six months prior to the performance of the study.

Instruments

- *School Performance Record*: the grades in the Portuguese and Mathematics subjects for the three evaluated trimesters of the academic year of the study (2015) were considered. The final mean of the participating schools for continuation to the subsequent grade was 50 points, and the academic performance was classified as weak (0-49 points), average (50-69 points), and strong (above 70 points), as indicated by the school itself. The Portuguese and Mathematics subjects were chosen

as they stimulate complex cognitive processes such as analogical and analytical reasoning (Oliveira, Boruchovitch, & Santos, 2008).

- *Youth Self Report* – YSR (Achenbach & Rescorla, 2001): assesses the mental health of adolescents aged 11 to 18 years through items for the assessment of skills and self-reported indicators of emotional and behavioral problems. For the purpose of the present study, only the second part was used, which included eight scales that compose three general indices: internalizing problems (anxiety/depression, isolation/depression and somatic complaints), externalizing problems (deviant behavior and aggressive behavior) and total problems (encompasses all the behavior problem items), as well as social problems, thinking problems, and attention problems. In relation to the psychometric properties of the instrument, Bordin et al. (2013) revealed that the mean test-retest reliability was 0.82 and the internal consistency of the problem scales, as measured by Cronbach's alpha, ranged from 0.67 to 0.95. The YSR is undergoing validation for the Brazilian population, and adequate indices of internal consistency have already been demonstrated, with an RMSEA index of 0.03, indicating good fit (Rocha, 2012).
- *Child Behavior Checklist* – CBCL (Achenbach & Rescorla, 2001): assesses social competence and the presence of emotional and behavioral problems in children and adolescents according to the perceptions of their parents/caregivers. As in the YSR, only the second part of the inventory was included, which presents the same indicators as the outcome. Although the CBCL has not been validated for the Brazilian population, Silveira, Rocha, & Emerich (2016) demonstrated good internal consistency rates for a sample of children and adolescents not referred to mental health services ($\alpha = 0.95$) and for another attending a psychology service in Porto Alegre ($\alpha = 0.95$).
- *Teacher's Report Form* – TRF (Achenbach & Rescorla, 2001): evaluates the adaptive functioning, composed of academic performance, dedication to school work, appropriate behavior, learning, and happiness, as well as internalizing and externalizing problems. The instrument is a parallel measure to the CBCL, which was developed to provide an overall understanding of the functioning of the child/adolescent in different environments, when used together, and should be completed by a teacher who has known the student for at least two months, a criterion that was fulfilled in the present study. Bordin et al. (2013) state that the instrument is one of the most used in the world, presenting good test-retest reliability (0.90) and internal consistency, measured by Cronbach's alpha, ranging from 0.72 to 0.97. However, validations of the instrument are still being conducted in Brazil by researchers from the University of Sao Paulo (USP) and the Federal University of Sao Paulo (UNIFESP).

Ethical procedures and data collection

Initially, face-to-face contact was made with the State Department of Education of Rio Grande do Sul to obtain authorization for the study, with two schools of the city

of Porto Alegre, in the state of Rio Grande do Sul, selected by convenience, considering the location accessible to the researchers. Subsequently, the study was evaluated and approved by the Research Ethics Committee of the Vale do Rio dos Sinos University (CAAE 47369215.2.0000.5344).

The family members were contacted through informative talks, as well as meetings for the delivery of the evaluations. Those who agreed to participate signed a consent form and received an envelope that included a Study Presentation Letter, instructions on filling out the CBCL and the instrument itself. The completion deadline for those responsible was one week, whereupon they had to give the instruments to the adolescents to be returned. The material was collected at the school.

The adolescents, in turn, were approached in the classroom, with authorization from the directors of the school and approval from the teacher responsible for the discipline, to sign the Assent Term and to respond collectively to the YSR. Finally, the teachers scheduled a day and time when they would be available at the school to sign the consent form and complete the TRF. In view of the extent of the instrument, the period of the start of the collection (third term of the semester) and the fact that many of the participating adolescents were part of the same class, all the teachers of the final years were invited to participate and individually advised about who they should consider for the evaluation, so as not to overload them. Thus, none of them completed more than seven inventories.

Data analysis procedures

The responses to the YSR, CBCL and TRF instruments were analyzed using the ASEBA-PC. For the purposes of this study, the scales guided by the criteria of the *Diagnostic and Statistical Manual of Mental Disorders (DSM-IV)* were not considered. The scores of the scales included were classified as clinical (percentiles from 70), borderline (percentiles between 65 and 69), and nonclinical (percentiles below 65), however, in this study it was chosen to include the adolescents categorized as borderline in the clinical category, as recommended by Achenbach & Rescorla (2001). This classification does not represent a diagnosis. However, it aids in the identification of risk factors that would indicate the need for professional help.

The analyses were conducted considering the T scores for each subscale and the scale of the instruments, since this standardizes the results, with no interference from the number of items (Rocha, 2012). Non-parametric statistics (Mann-Whitney Test) were used to compare the measures of emotional and behavior problems and school repetition. Comparisons (Chi-Square Test) between the indicators of emotional and behavioral problems classified as clinical and nonclinical were also made, considering the history of school repetition and the performance in the subjects of Portuguese and Mathematics, classified as weak, average and strong. In addition, Pearson's correlation analysis was performed between the general measures of the instruments (externalizing, internalizing and total problems) and general gross grades in Portuguese and Mathematics.

Results

The data derived from the statistical analyses carried out are arranged as follows. Tables 1 and 2 describe, respectively, the findings of the comparisons of the indicators of emotional and behavioral problems, considering numerical (standardized scores) and categorical measures (classification of the severity of the symptoms as clinical or nonclinical) between the groups with and without a history of repetition. All the analyses conducted are in agreement with the aims since they compared and associated general and specific indicators of emotional and behavioral problems with indicators of academic performance. It should be noted that in the evaluation carried out by the adolescents themselves (YSR), none of the indicators examined differentiated the groups as to whether or not they had a history of repetition.

Table 1. Comparisons, with statistical differences, between the groups without and with school repetition, considering the indicators of emotional and behavioral problems evaluated by mothers/fathers and teachers (Mann-Whitney test).

| Scales | Without repetition | With repetition | U | p |
|---------------------|--------------------|-----------------|--------|------|
| | Mean (SD) | Mean (SD) | | |
| CBCL | | | | |
| Aggressive behavior | 53.50 (8.83) | 58.96 (8.43) | 188.50 | 0.04 |
| Total externalizing | 56.71 (11.01) | 61.54 (7.68) | 190.50 | 0.04 |
| TRF | | | | |
| Social isolation | 54.50 (4.95) | 59.92 (10.82) | 194.50 | 0.05 |
| Aggressive behavior | 55.13 (6.12) | 59.46 (7.92) | 181.50 | 0.03 |
| Total internalizing | 52.21 (8.11) | 57.96 (10.64) | 187.50 | 0.03 |
| Total externalizing | 51.96 (8.40) | 57.54 (8.97) | 186.50 | 0.04 |
| Total problems | 52.67 (8.08) | 57.88 (8.07) | 165.50 | 0.01 |

According to Table 1, mothers/fathers and teachers evaluated the adolescents with a history of repetition as having higher scores in aggressive behavior and total externalizing problems. In the assessment of the teachers (TRF), the adolescents in this group also more frequently exhibited social isolation behaviors, total internalizing problems and total problems.

Table 2. Comparisons, with statistical differences, between the groups without and with school repetition, considering the indicators of emotional and behavioral problems classified as clinical and nonclinical, evaluated by mothers/fathers and teachers (Chi-Square Test).

| Scales | | Classification | Without repetition | With repetition | X ² | p | | | | | | | | | | | | | | | |
|--------|------------------------|----------------|--------------------|-----------------|----------------|------|-----|------------------------|-------------|----|---|------|------|----------|----|----|------------------------|-------------|----|---|------|
| CBCL | Externalizing behavior | Nonclinical | 17 | 7 | 4.15 | 0.04 | | | | | | | | | | | | | | | |
| | | Clinical | 10 | 14 | | | TRF | Anxiety/depression | Nonclinical | 24 | 0 | 4.36 | 0.04 | Clinical | 20 | 4 | Internalizing behavior | Nonclinical | 20 | 4 | 6.00 |
| TRF | Anxiety/depression | Nonclinical | 24 | 0 | 4.36 | 0.04 | | | | | | | | | | | | | | | |
| | | Clinical | 20 | 4 | | | | Internalizing behavior | Nonclinical | 20 | 4 | 6.00 | 0.01 | Clinical | 12 | 12 | | | | | |
| | Internalizing behavior | Nonclinical | 20 | 4 | 6.00 | 0.01 | | | | | | | | | | | | | | | |
| | | Clinical | 12 | 12 | | | | | | | | | | | | | | | | | |

According to Table 2, the severity of the indicators evaluated (clinical and non-clinical) in relation to school repetition was considered, with it being observed that in the examination of the mothers/fathers (CBCL) there were indications of more clinical externalizing problems among the young people with repetitions. In the evaluation of the teachers (TRF), it was found that internalizing behavior problems, especially anxiety/depression, occurred more frequently in the group of adolescents with a history of repetition.

Table 3 presents the comparisons regarding school performance (weak, average, strong), considering the severity of the indicators of emotional and behavioral problems assessed (clinical and nonclinical), and differentiating these between the Portuguese and Mathematics subjects (six comparison groups). In the reports of the mothers/fathers, the comparisons indicated that both internalizing and externalizing problems were more commonly reported for the groups of adolescents with weak and average performance in Mathematics. Considering the responses of the teachers (TRF), it was found that the adolescents from the nonclinical group presented better school performance (average and strong) compared to those who were in the clinical group for the indicators of deviant and aggressive behavior, in relation to the Portuguese subject; and for the indicators of attention problems, deviant, aggressive and total externalizing behaviors, regarding the Mathematics subject. It should be highlighted that the general scales of the TRF (internalizing, externalizing and total problems) did not statistically differentiate the groups.

Table 4 presents the correlations found between the variables of interest in the study, that is, the general indicators of emotional and behavioral problems (internalizing behavior, externalizing behavior, and total problems) and the scores obtained in the Portuguese and Mathematics subjects (average). The data represent the three informants considered, adolescents, mothers/fathers, and teachers.

Table 3. Comparisons, with statistical differences, of indicators of emotional and behavioral problems, classified as clinical and nonclinical, evaluated by mothers/fathers and teachers considering the frequencies of performance (weak, average, strong) in the subjects of Mathematics and Portuguese (Chi-Square Test).

| Scales | | Classification | Weak | Average | Strong | χ^2 | <i>p</i> |
|-------------|------------------------|----------------|------|---------|--------|----------|----------|
| Mathematics | | | | | | | |
| CBCL | Internalizing behavior | Nonclinical | 6 | 7 | 6 | 6.00 | 0.05 |
| | | Clinical | 2 | 19 | 8 | | |
| | Externalizing behavior | Nonclinical | 4 | 11 | 12 | 7.12 | 0.03 |
| | | Clinical | 4 | 15 | 2 | | |
| Portuguese | | | | | | | |
| TRF | Deviant behavior | Nonclinical | 5 | 21 | 16 | 6.86 | 0.03 |
| | | Clinical | 3 | 3 | 0 | | |
| | Aggressive behavior | Nonclinical | 5 | 19 | 16 | 6.00 | 0.05 |
| | | Clinical | 3 | 5 | 0 | | |
| Mathematics | | | | | | | |
| TRF | Attention problems | Nonclinical | 5 | 25 | 13 | 7.65 | 0.02 |
| | | Clinical | 3 | 1 | 1 | | |
| | Deviant behavior | Nonclinical | 4 | 24 | 14 | 12.83 | 0.00 |
| | | Clinical | 4 | 2 | 0 | | |
| | Aggressive behavior | Nonclinical | 4 | 22 | 14 | 9.23 | 0.01 |
| | | Clinical | 4 | 4 | 0 | | |
| | Externalizing behavior | Nonclinical | 2 | 20 | 11 | 8.56 | 0.01 |
| | | Clinical | 6 | 6 | 3 | | |

Table 4. Correlations between general indicators of emotional and behavioral problems (internalizing behavior, externalizing behavior and total problems), considering the responses of the adolescents, mothers/fathers and teachers and the scores obtained in the subjects of Portuguese and Mathematics (Pearson's Correlation).

| Scales | | General | Portuguese | Mathematics | |
|--------|------------------------|----------|------------|-------------|----------------|
| YSR | Internalizing behavior | Pearson | -0.08 | -0.09 | -0.18 |
| | | <i>P</i> | 0.60 | 0.51 | 0.23 |
| | Externalizing behavior | Pearson | -0.21 | -0.21 | -0.23 |
| | | <i>P</i> | 0.15 | 0.15 | 0.12 |
| | Total problems | Pearson | -0.21 | -0.20 | -0.29* |
| | | <i>P</i> | 0.15 | 0.17 | 0.04 |
| CBCL | Internalizing behavior | Pearson | 0.18 | 0.21 | 0.14 |
| | | <i>P</i> | 0.21 | 0.14 | 0.33 |
| | Externalizing behavior | Pearson | -0.08 | -0.10 | -0.18 |
| | | <i>P</i> | 0.58 | 0.48 | 0.23 |
| | Total problems | Pearson | 0.02 | 0.01 | -0.07 |
| | | <i>P</i> | 0.91 | 0.95 | 0.62 |
| TRF | Internalizing behavior | Pearson | -0.06 | -0.07 | -0.18 |
| | | <i>P</i> | 0.66 | 0.63 | 0.23 |
| | Externalizing behavior | Pearson | -0.30* | -0.33* | -0.35* |
| | | <i>P</i> | 0.04 | 0.02 | 0.01 |
| | Total problems | Pearson | -0.32* | 0.37** | -0.40** |
| | | <i>P</i> | 0.02 | 0.01 | 0.00 |

In the reports of the adolescents (YRS), only the total behavioral problems indicator was associated, negatively and weakly, with their performance in Mathematics. In the evaluation of the mothers/fathers (CBCL), the data did not reveal significant correlations. However, with regard to the assessment of the teachers (TRF), some correlations were observed: the occurrence of externalizing problems and of total problems was negatively associated with general performance (mean of the Portuguese and Mathematics scores), performance in Portuguese and performance in Mathematics. Among these, the most important correlation found, being moderate, was the negative association between total problems and performance in Mathematics.

Discussion

Considering the results presented, it was verified that emotional and behavioral problems were identified with greater frequency in the group of students with a history of school repetition. Specifically in the evaluation of mothers/fathers, the adolescents with a history of school repetition were identified as exhibiting more aggressive behavior and total externalizing behaviors, including at a clinical level for the latter, in relation to the students without this history. These results confirm findings from the literature, which highlight that when these symptoms are present parents are often contacted by the school because both classroom dynamics and the relationships of the children with their peers and teachers are compromised (Bordin et al., 2013; Dazzani et al., 2014).

Regarding the school performance, there was an association between clinical indicators of externalizing and internalizing problems perceived by the parents and the performance classified as weak or average in the Mathematics subject. It is known that questioning rules and limits are important for healthy development, however they can also be considered by mothers and fathers, who tend to be more distant during this stage, as challenging and problematic behaviors (Lubenko & Sebre, 2010). In this sense, it is believed that they may have associated the weaker school performance with such behaviors.

In the evaluation of teachers, the adolescents with a history of school repetition were indicated as presenting more social isolation, total internalizing problems and total problems, as well as being recognized as clinical for total internalizing problems, especially in the anxiety/depression scale, in comparison to the students without this history. This fact contradicts, in part, the study by Lyra, Assis, Njaine, Oliveira, & Pires (2009), which indicated externalizing problems as the most identified and associated with school difficulties, as there seems to be a tendency to underestimate the severity of internalizing problems, because they draw less attention in the classroom.

However, as Moksnes et al. (2016) mentioned, adolescents with internalizing symptoms tend to have a negative style of evaluating themselves and new discoveries, with it being probable that, faced with a situation of school repetition, they would nurture thoughts of devaluation, hopelessness and pessimism that may have been perceived by their teachers due to the expression of their intensity. However, externalizing behaviors were also associated with the scores obtained by the adolescents, considering the performance in the Portuguese and Mathematics subjects. According to this data, the teachers recognized that the adolescents who performed better in Portuguese and Mathematics were those that were classified as nonclinical in relation to deviant and aggressive behavior, and inattention, deviant and aggressive behavior and total externalizing problems, respectively.

The greater number of relationships between the emotional and behavioral problem indicators and the performance in the Mathematics subject may indicate that the deficit in the ability to understand the meanings of operations and algorithms,

which requires reasoning and problem-solving skills (Millones et al., 2013), may lead to more negative emotions such as disappointment, frustration, panic and anger (Martínez-Sierra & García-González, 2015). Thus, it is possible that such feelings will trigger or intensify the manifestation of internalizing and externalizing symptoms.

Another aspect to be emphasized is that the adolescents did not recognize their behavioral and emotional problems as clinical. In their evaluation, the only significant finding was the relationship between poor performance in the Mathematics subject and total problems. Therefore, the adolescents in this study, particularly those with a history of repetition, did not seem to relate their school difficulties with these problems, perhaps because they felt responsible or even guilty for their weaker school performance, as was also evidenced in the study of Pezzi et al. (2016). Therefore, it is believed that further investigations are necessary to examine other variables associated with the phenomenon.

Together, it was found that it was the teachers who identified the most emotional and behavioral problems among the adolescents, which were associated with school repetition and general performance, as well as with performance in the Portuguese and Mathematics subjects. It is plausible to suppose that, because they are responsible for evaluating students in relation to their school performance, they are attentive and more sensitive to identifying indicators of the problems evaluated. Despite this, the parents also presented interesting data regarding the indicators of emotional and behavioral problems among adolescents with a history of repetition. This cannot be disregarded when thinking of ways to intervene to avoid school repetition, considering the importance of the consequences that this may trigger, such as abandonment, indicated as a propellant toward involvement with drugs and crime (Rumberger, 2011), which may affect future educational and professional choices. In this sense, it is believed that psychology has much to contribute to education, not only through the elaboration of reports, opinions and referrals, but also through listening to and welcoming students, their parents and teachers who suffer and need to be guided in overcoming the school repetition (Pezzi et al., 2016).

It should be emphasized that the fact that the sample was derived only from public schools, located in districts with the characteristic of socioeconomic deficiency, and included only the final years of elementary school can be considered a bias in the present study. In addition, it is well known that other variables related to the family, such as age, sex and parental education, may have an influence on the school repetition of the children, however this information was not collected and weighted. Therefore, it is suggested that new studies contemplate these factors, as well as the contextual variables of the school. Cia & Costa (2012) warned that poor didactic resources, school strikes and changes of teachers, present in the public context, are risk factors for the occurrence or maintenance of emotional and behavioral problems in students, while Gomes (2016) indicated that the resources of the family environment are related to the school performance of the children.

It is believed that the present study provides contributions due to its case-control type design, making it possible to more accurately assess the association between emotional and behavioral problem indicators and school repetition. The relevance should be noted of the evaluation by different informants, who provided complementary data regarding the behaviors and their association with the school performance of the adolescents. Based on the findings of this study, the performance of new case-control studies is suggested, with larger and representative samples, evaluating the reason for the repetitions, together with a cognitive evaluation of the students, in order to deepen the understanding of the relationship between the emotional and behavioral problems and the school performance of the students. Thus, there would be a broadening of the comprehension that academic success/failure of the students not only depends on organic or cognitive factors but also on social and emotional factors, which need to be considered given the complexity of the phenomenon.

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