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Psychosocial adjustment profiles of Elementary School 6th graders: a Cluster-based analysis

Perfis de ajustamento psicossocial de estudantes do 6º ano do Ensino Fundamental: uma análise baseada em Clusters

Aline **PENNA-DE-CARVALHO**[1] 0000-0001-9595-9852
Vanessa Barbosa Romera **LEME**[1] 0000-0002-9721-0439
Susana Maria Gonçalves **COIMBRA**[2] 0000-0002-7738-4757
Fernanda de Azevedo **FRANÇA**[1] 0000-0003-1062-2164

Abstract

Based on the resilience theory, this study aimed to analyze different psychosocial adjustment profiles of Elementary School 6th graders, considering risk factors (school stressors and daily discrimination), protection (social skills, family support, and school climate) and adjustment indicators (general and academic self-efficacy beliefs). A total of 448 students (between 10 and 17 years old) from public schools in the state of Rio de Janeiro (Brazil) participated. Through cluster analysis, two profiles were identified: resilient, with high levels of risk indicators and good adjustment; and vulnerable, with high levels of risk and low adjustment. The results indicated that the protective factors do not neutralize the stressful psychophysiological phenomena associated with the transition, but they mitigate the impact of the risk, increasing the coping capacity in the new context, promoting students' resilience.

Keywords: Adolescent; Protective factors; Risk factors.

Resumo

Fundamentado na teoria da resiliência, este estudo teve por objetivo analisar diferentes perfis de ajustamento psicossocial de estudantes do 6º ano do Ensino Fundamental. Foram considerados fatores de risco (estressores escolares e discriminação

[1] Universidade do Estado do Rio de Janeiro, Faculdade de Psicologia, Programa de Pós-Graduação em Psicologia Social. R. São Francisco Xavier, 524, Maracanã, 24030-060, Rio de Janeiro, RJ, Brasil. Correspondence to: A. PENNA-DE-CARVALHO. E-mail: <alinepennadecarvalho@gmail.com>.
[2] Universidade do Porto, Centro de Psicologia, Faculdade de Psicologia e Ciências da Educação. Porto, Porto, Portugal.

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cotidiana), proteção (habilidades sociais, suporte familiar e clima escolar) e indicadores de ajustamento (crenças de autoeficácia geral e acadêmica). Participaram 448 alunos, com idade entre 10 e 17 anos, de escolas públicas do Estado do Rio de Janeiro (Brasil). Por meio da análise de clusters, dois perfis foram identificados: resiliente, com valores altos de indicadores de risco com bom ajustamento, e vulnerável, com índices altos de risco e baixo ajustamento. Os resultados indicaram que os fatores de proteção não anulam os fenômenos psicofisiológicos estressantes associados à transição, mas amortizam o impacto do risco, aumentando a capacidade de enfrentamento diante do novo contexto, promovendo a resiliência dos alunos.

Palavras-chave: *Adolescente; Fatores de proteção; Fatores de risco.*

Adolescents experience different school transitions along their trajectory, which can interfere with their academic performance (Symonds & Galton, 2014). It is in the 6th grade that the transition to the final years of the Brazilian Middle School, known as *Ensino Fundamental II* (EF, Elementary School II), occurs, where there is a change from a structure centered on one or two teachers to a system with several teachers (Eccles & Roeser, 2011). The literature shows that 6th graders can lead to both positive (Coelho et al., 2017) and negative (Hoigaard et al., 2015) outcomes, which can result in adaptation difficulties in several domains. Thus, this period is a moment that has been associated with a decline in academic motivation, self-esteem, a greater perception of contextual stressors, and less social support (Coelho et al., 2017; Fernandes et al., 2018; Nelemans et al., 2018).

However, it is also in Middle School that several psychosocial changes can promote expectations in students, such as the strengthening of self-efficacy beliefs (Hoigaard et al., 2015). Thus, this school phase can offer important opportunities for positive school development (Costa et al., 2016; Symonds & Galton, 2014), but also demand a series of adaptations that underlie the adjustment of the new role. that goes through changes in both academic and socio-emotional development (Eccles & Roeser, 2011).

Adolescents are not alone in this adaptation, since the interactions they establish in different contexts with their families, peers, and teachers, can interfere in their school trajectories (Costa et al., 2016). According to Affuso et al. (2017), positive relationships between adolescents and their parents have a positive impact on motivation, academic self-efficacy, and well-being, improving academic performance. For this reason, the interpersonal relationships of students and their biopsychosocial characteristics can influence outcomes and lead to different results in socioemotional development during this period (Costa & Fleith, 2019; Symonds & Galton, 2014).

In line with the focus of the challenges faced by adolescents in this period and their adjustment, the resilience theory is used in this study to try to understand how adolescents face the demands of this new school stage. In this context, it is important to emphasize that, while some students overcome this phase through a healthy adaptation and showing resilience processes, others, however, have difficulties in solving several tasks pertinent to the new reality (Symonds & Galton, 2014). Although the resilience theory highlights risk exposure among adolescents, it focuses on strengths rather than deficits and focuses on understanding healthy development in spite of risk exposure (Fergus & Zimmerman, 2005).

Thus, when viewed ecologically, resilience is influenced by different contexts and cultures, providing tools that are associated with better development results (Achkar et al., 2019; Ungar et al., 2019). In addition, psychological resilience can be understood as the relationship between the stress suffered in the face of adversity and each person's adjustment response (Coimbra & Fontaine, 2015; Fergus & Zimmerman, 2005; Masten, 2015), being influenced by characteristics that encompass both temperament and aspects of family, educational, and sociocultural contexts (Linhares et al., 2013). Thus, resilience processes occur when good adaptation results are achieved after exposure to risk factors and will depend on internal factors (for example, the students' temperament and personality) and their proximal (for example, parenting) and distal contexts, such as gender stereotypes (Linhares et al., 2013; Masten, 2015).

It is understood that exposure to risk is related to events and negative characteristics of life, increasing the chances of physical, emotional, and social problems (Daily et al., 2019; Masten, 2015). These variables can increase school dropout rates, culminating in decreased well-being and weakening self-efficacy beliefs (Correia-Zanini et al., 2018; Achkar et al., 2017). Thus, risk factors, such as victimization among peers, decrease the subject's adaptation processes and increase the likelihood of maladjustment in the face of adversity (Coimbra & Fontaine, 2015; Freitas et al., 2015).

In contrast, protective factors, such as social skills, serve as risk prevention factors, reducing negative consequences when people are exposed (Coimbra & Fontaine, 2015). In view of this, the resilience processes take place from the interactions between risk and protection, determined by individual, family, and social attributes, in a dynamic process, influencing the adjustment of students in their lives (Masten, 2015; Ungar et al., 2019).

Fergus and Zimmerman (2005) highlighted a model in which the classification of someone as resilient presupposes, therefore, two types of criteria: the existence of threat, on the one hand, and adaptation, on the other. Thus, from the intersection between risk and adaptation, four groups of individuals with different trajectories can be outlined: a group of adapted individuals (low risk and high adaptation), a risk or vulnerability group (high risk and low competence), a resilient group (high risk and high adaptation), and a group with poorly adapted individuals, which have a surprisingly low adaptation due to the low (or underestimated) risk, to which they would be exposed (Fergus & Zimmerman, 2005; Masten, 2015).

In the present study, the variables that were characterized as risk factors included: (a) school stressors, which are understood as the experiences that students evaluate as harmful or threatening to their well-being (Correia-Zanini et al., 2018); (b) everyday discrimination, which is the perception of an action considered unfair by the person who suffers it and is related only to an individual's belonging to a group considered as socially stigmatized (Major & Sawyer, 2009).

The protective factors included: (a) social skills, understood as a set of socially acceptable behavior within a culture, which contribute to social performance and competence, promoting beneficial interpersonal relationships (Del Prette & Del Prette, 2017); (b) family support, seen as a supportive relationship, characterized by the involvement of parents in the academic life of their children (Guidetti & Martinelli, 2017); and (c) school climate, which refers to multiple aspects of the school that can directly or indirectly influence the socio-emotional development of students (Petrucci et al., 2016).

In relation to the adjustment indicators, there are: (a) general self-efficacy beliefs, which is the capacity that individuals have to realize how much they can do something, influencing how they regulate their own thoughts, feelings, and behaviors (Bandura, 2006); and (b) academic self-efficacy, defined as the students' beliefs about their ability to organize and perform courses of actions required to produce certain achievements related to intellectual and learning aspects (Bandura, 2006). Thus, during the school trajectory, students can adjust to the new role that permeates both changes in academic and socio-emotional development and may present changes in self-efficacy beliefs, increasing school dropout and grade retention perceptions (Symonds & Galton, 2014).

According to Symonds and Galton (2014), the behavioral changes of students who face school transition, the impact of learning during this cycle and their adaptation phase are still not fully elucidated, suggesting that more studies are needed. In relation to the national literature, the longitudinal research of Cassoni et al. (2020) stands out, which investigated the impact of the transition between the initial years and the final years of EF, exploring the properties of the context and the school transition , highlighting the complexity of the theme, and opening the field for future investigations. In view of this, the way students perceive the context and quality of significant interpersonal relationships can be predictors of self-efficacy beliefs, characterizing adaptation or adjustment in the face of challenges (Cassoni et al., 2017; Franco &

Rodrigues, 2018). For this reason, investing in the reduction of risk factors and the enhancement of protective factors can provide a more positive development in Middle School.

Thus, given the scarcity of studies that elucidate the various trajectories in the final years of EF, based on the resilience theory, this study aimed to analyze different profiles of psychosocial adjustment of 6th graders, considering risk factors (school stressors and daily discrimination), protection (social skills, family support and school climate), and adjustment indicators (general and academic self-efficacy beliefs). Therefore, we tried to classify students according to their risk factors and adjustment indicators, in order to understand the school trajectory of students belonging to risk groups for school evasion and drop-out.

Method

Participants

This study is configured as a correlational research, with a convenience sample and a quantitative approach. The participants were 448 6th graders from five municipal schools (from the public school system) in a city in the State of Rio de Janeiro (Brazil). They were evenly divided evenly in relation to gender, with 52.23% being male, with an average age of 12.40 years (*SD* = 1.19), ranging between 10 and 17 years old. The mean score of the *Índice de Desenvolvimento da Educação Básica* (IDEB, Basic Education Development Index), which makes it possible to contextualize the results of the evaluations and monitor the trajectory of the students, was 3.6 in the municipal schools, ranging between 2.7 and 3.8 in the schools of the present study ranged. The goal proposed by the federal government was 5.1.

Instruments

Inventory of School Stressors (Marturano et al., 2009) – This inventory the perception of school stressors in the school environment. The version used in the present study refers to the structure found in the study by Correia-Zanini (2013) with 17 items. For each situation presented, the students respond if it happened to them during the school year (no = 0 or yes = 1). If it did, they state how much the situation upset them on a four-point Likert scale (0 = nothing - 3 = a lot) on *Stress related to the student role* (Factor 1, with Cronbach's α = 0.69) and Interpersonal relationships (Factor 2, α = 0.71). In the present study, from the confirmatory factor analysis, with the 6th graders of this study, the SS was constituted by 13 items, the two factors remaining with alpha values of 0.67 and 0.66 for F1 and F2, respectively . The instrument showed a satisfactory global adjustment (χ^2/gl = 2.43; CFI = 0.90; GFI = 0.95; RMSEA = 0.05).

Daily Discrimination Scale (Williams et al., 1997) – It evaluates an action as unfair or undeserved, explained by a person's belonging to a socially stigmatized group. The scale was adapted by Freitas et al. (2015), for Portuguese adolescents and young adults (aged between 13 and 26), consisting of 11 items (α = 0.72), on a six-point Likert-type response scale (0 = never to 5 = always). The instrument is in the process of validation for the Brazilian population. In the present study, after a confirmatory factor analysis, the instrument presented a unifactorial structure, with an acceptable global adjustment (χ^2/gl = 3.67; CFI = 0.92; GFI = 0.94; RMSEA = 0.07) and a Cronbach's α = 0.86.

Inventory of Social Skills for Adolescents (Del Prette & Del Prette, 2009) – It evaluates social skills based on adolescents' self-reports about everyday situations. Leme et al. (2017) validated a brief version, which was used in the present study, consisting of 16 items on a five-point Likert scale (0 = never to 4 = always), with four factors: (1) empathy (α = 0.78); (2) self-control (α = 0.66); (3) assertiveness (α = 0.75); and (4) affective

approach (α = 0.69). In this study, the model presented an excellent global adjustment (χ^2/gl = 1.69; CFI = 0.93; GFI = 0.95; RMSEA = 0.03), with Cronbach's alpha values of 0.66, 0, 60, 0.56, and 0.59 for empathy, self-control, assertiveness, and affective approach, respectively.

School Climate Questionnaire (revised – Elementary School version). Developed by Emmons et al. (2002), it investigates the students' perceptions of different dimensions of their school climate. The instrument provides for a global measure of the school climate that is obtained by adding the results of all dimensions, with higher results indicating the more positive perception of the school climate. The questionnaire was adapted for Brazilian Elementary School students (aged between 8 and 16 years) by Petrucci et al. (2016), with 29 items that are answered using a three-point Likert scale (3 = agree to 1 = disagree), distributed in six dimensions: (1) justice/equity (α = 0.67); (2) order and discipline (α = 0.61); (3) parental involvement (α = 0.62); (4) exchange of resources (α = 0.63); (5) interpersonal relationships (α = 0.67); and (6) teacher-student relationship (α = 0.81). In the present study, the confirmatory factor analysis showed an excellent global adjustment (χ^2/gl = 1.52; CFI = 0.91; GFI = 0.92; RMSEA = 0.03), with Cronbach's alpha values of 0, 68, 0.53, 0.57, 0.56, 0.69, and 0.77 for justice, order and discipline, parental involvement, exchange of resources, relations between students, and teacher-student relationship, respectively.

Scale of Childhood Perception of Support for the Family Environment (Guidetti & Martinelli, 2010) – It evaluates how the child identifies the family support offered regarding the affective and educational aspects available in his family environment. The higher the child's score on the scale, the greater their perception of family support. The scale consists of 20 items that are evaluated using a four-point Likert scale (3 = always to 0 = never), with two dimensions: (1) affective support (α = 0.87); and educational support (α = 0.77). In the present study, the instrument presented in the confirmatory factor analysis a good global adjustment (χ^2/gl = 2.57; CFI = 0.91; GFI = 0.90; RMSEA = 0.05), with Cronbach's alpha values of 0.89 and 0.75 for affective support and educational support, respectively.

Academic Self-Efficiency Scale (Bandura, 2006) – This scale evaluates self-efficacy beliefs in the students' school context. After the process of adapting to the Brazilian context by Freitas (2011), the multidimensional scale had 54 items that include nine subscales that achieved satisfactory factor loads. The answers are arranged on a scale from 0 (I cannot do it at all) to 100 (I can do it for sure) in which students are asked to evaluate how confident they are in being able to do each of the things described. In this research, the Self-efficacy subscale for academic performance was used with 8 items (α = 0.77). In the present study, a confirmatory factor analysis showed excellent adjustment indices (χ^2/gl = 1.55; CFI = 0.98; GFI = 0.98; RMSEA = 0.03) with a good internal consistency index with a Cronbach's alpha index of 0.81.

Scale of Generalized Self-efficacy (Schwarzer & Jerusalem, 1995) – It identifies self-efficacy beliefs in the face of difficult situations of participants from different socioeconomic backgrounds and ages, including adolescents. In Brazil, it was adapted for teenagers by Leme et al. (2013), consisting of 10 items (α = 0.94), distributed on a four-point Likert scale (1 = Totally Disagree to 4 = Totally Agree). In the present study, the confirmatory factor analysis showed good fit indices (χ^2/gl = 2.70; CFI = 0.90; GFI = 0.96; RMSEA = 0.06) and presented an acceptable internal consistency index with a Cronbach's alpha value of 0.73.

Questionnaire with demographic information – Developed in this study to investigate students' social and demographic information, divided into three parts: (a) general application information; (b) information about the participants (name, age, gender, color, history of grade retention); (c) information about the family (education of the head of household, number of residents, and indication of who lives with the students, etc.).

Procedures

After approval by the Research Ethics Committee (CAAE nº 02867618.6.0000.5282), the instruments were applied in schools between May and June 2019. Data collection took place collectively in classrooms, in

a single application, with a mean duration of one hour, at the time agreed with the teachers and was carried out with the help of a master's student. The following order was used in the application of the instruments, which presented the outcomes first and then alternated between protective and risk factors: Demographic information; Academic Self-Efficiency Scale; Generalized Self-Efficiency Scale; Inventory of Social Skills for Adolescents; Inventory of School Stressors; School Climate Questionnaire; Scale of Childhood Perception of Support for the Family Environment; Daily Discrimination Scale.

Data were processed using the IBM®SPSS® Statistics Software (version 25), and AMOS (version 24). Based on the theoretical model of resilience, the first step was to select the guiding characteristics of the criteria for risk exposure indicators and adjustment indicators for the classification of profiles through cluster analysis. This test allows for a reduction of data by grouping subjects into homogeneous groups related to one or more common characteristics (Marôco, 2018). As a procedure, the hierarchical method was initially chosen, with a quadratic Euclidean distance criterion, aiming at an exploratory analysis of the data through the observation of its dendrogram, allowing to ascertain the number of clusters that was effectively represented in the sample (Marôco, 2018).

From the hierarchical algorithms, which create a hierarchy of relationships between the elements, two clusters were predicted, associated with a greater increase in the explained variance. Subsequently, the non-hierarchical method (k-means) was performed, based on the analysis of variance, making it possible to validate the clusters by comparing means between the risk mechanism and psychosocial adjustment variables. To compare the mean scores of the protection mechanism clusters (social skills, school climate, and family support), the t-test was performed and, to evaluate the size of the effect, Cohen's d was used. Finally, to explore the possible associations between the different adjustment profiles and the sociodemographic characteristics, the Chi-square test was used (Marôco, 2018).

Results

The results from the cluster analysis identified two profiles with considerable risk exposure. The first profile (Cluster 1) was named "resilient" for presenting high values in risk indicators (School Stress Inventory and Daily Discrimination Questionnaire), with good adjustment (academic and general self-efficacy). The second profile, defined as "vulnerable" (Cluster 2), although it had high risk indicators, obtained a low associated adjustment (Table 1).

The t-test results showed that there are no significant variations for risk indicators between clusters. The profile with and without adjustment had not been foreseen because it is a sample in which the risk is high (Fergus & Zimmerman, 2005; Masten, 2015). However, the adjustment indicators showed significant variation between groups. The resilient cluster showed higher levels of academic self-efficacy beliefs with

Table 1
Profiles According to the Risk Factors and Adjustment Indicators in the 6th grade (n = 448)

Dimensions	Profile 1 Resilient (*n* = 262)		Profile 2 Vulnerable (*n* = 186)		*t* (446)	*p**	Cohen's *d*
	M	*SD*	*M*	*SD*			
Academic self-efficacy	633.74	83.21	383.33	97.65	29.186	0.000	2.76
Overall self-efficacy	28.29	5.35	26.89	5.49	2.703	0.007	0.44
School stressors	8.82	7.92	8.59	7.81	0.310	0.756	0.02
Discrimination	13.15	12.03	12.82	12.04	0.279	0.780	0.02

Note: *$p < 0.05$.

a large effect (d = 2.76) and a small effect (d = 0.44) for general self-efficacy, when compared to the risk cluster. In order to verify the differences in function of the protection factors (internal and external) in relation to the clusters, the analysis of comparison of means was used. Table 2 shows the results related to the t-test regarding the internal protection indicator (social skills) and in relation to the external protection indicators (school climate and family support).

Table 2
Comparisons between Means and Protection Factors (Internal and External) in Relation to the Profiles (n = 448)

Dimensions	Profile 1 Resilient (n = 262)		Profile 2 Vulnerable (n = 186)		t (446)	p^*	Cohen's d
	M	*SD*	*M*	*SD*			
Social skills	34.18	11.21	30.21	11.47	3.653	0.000	0.35
School climate	63.70	7.57	61.45	7.82	3.065	0.002	0.29
Family support	38.63	11.76	35.41	11.88	2.839	0.005	0.27
Affective Support	29.76	8.57	27.70	9.16	2.439	0.015	0.23
Educational Support	8.86	4.61	7.71	4.32	2.673	0.008	0.25

Note: $^*p < 0.05$.

The t-test showed a statistical difference in all the studied indicators. The resilient cluster had higher protection indicators, with little effect when compared to the vulnerable group, whether in relation to social skills (d = 0.35), school climate (d = 0.29), or family support (d = 0.27). Regarding family support, we found differences between the types of support, both in the affective (d = 0.23) and in the educational scopes (d = 0.25).

In addition to the variables included (risk factors and adjustment indicators) for the creation of profiles and protection factors, students could vary according to gender, age, grade retention, and type of school they attended in the early years of EF. Then, the Chi-square test was performed to find out if the configurations found varied according to these characteristics. No association was found between grouping and gender [χ^2 (2, 448) = 0.815; p = 0.66], but there was an association between grouping and age [χ^2 (7, 448) = 16.585; p = 0.02], whether they had been retained or not [χ^2 (1, 448) = 9.954; p = 0.002], and the type of school attended in the early years of EF [χ^2 (3, 448) = 11.603; p = 0.009].

The predominant age of the students in the resilient group (63.97%) was 11. In the vulnerable group, on the other hand, there was a greater distribution, between 10 and 17 years old. Concomitantly, in relation to whether or not students had been retained, 52.5% of them had already been retained at least once, with the majority being allocated to the resilient group (27.0%). However, in the vulnerable group, the number of grade retentions is almost double the number of students who were never retained (61.20%), unlike the other group, where, in most cases, students were never retained (53.84%). Finally, regarding the type of school they attended in the early years of PE, most students (74.3%) had studied in public schools.

Discussion

The final stretch of EF begins on the 6th grade, an important stage that challenges students both academically and in interpersonally (Coelho et al., 2017; Symonds & Galton, 2014). This path has been recognized as a turning point that can be distressing, mainly due to changes in the school configuration, as they have more academic disciplines, a greater demand by their teachers, in addition to transformation in their social experiences (Cassoni et al., 2017; Coelho et al., 2017; Eccles & Roeser, 2011).

The results showed two adjustment profiles during the 6th grade: "resilient" and "vulnerable", considering school stressors and the perception of daily discrimination, as indicators of risk factors, and general and academic self-efficacy beliefs, as indicators of psychosocial adjustment. This result confirms the findings of previous studies on resilience, in which the authors presuppose a considerable risk exposure to identify adaptive profiles (Fergus & Zimmerman, 2005; Masten, 2015). In this sense, the identification of profiles in this study, resulting from the interaction between risk factors and adjustment indicators, showed different development trajectories.

Thus, only two clusters were constituted, since the occurrence of a high index of risk factors present in the lives of 6th graders from the five schools was considered, which can be especially harmful, increasing the risk of grade retention and evasion. In fact, IDEB levels at participating schools were low, increasing student risk exposure. For this reason, the adapted and poorly adapted profiles commonly present in the resilience theory, where the risk is low – were not formed in the present sample (Fergus & Zimmerman, 2005; Masten, 2015).

The risk factors reflect the negative events of life in the school domain, such as poor academic results, grade retention, discussions, and the breakdown of relationships between peers, which increase the likelihood of poor adaptation in the face of an adversity (Achkar et al., 2019; Symonds & Galton, 2014). Therefore, risk factors, such as school stressors and daily discrimination, resulted in the difficulties that adolescents faced in a different context than they were used to, requiring adjustment to go through this stage (Correia-Zanini et al., 2018; Major & Sawyer, 2009). However, the resilient group showed a good adjustment, despite a high index of risk indicators, unlike the vulnerable group that had a low adjustment, maximizing the risk of grade retention and evasion.

Regarding the characterization of adjustment (adaptation) in the face of challenges, the indicators considered the general and academic self-efficacy beliefs. By understanding the contexts and relationships in which self-efficacy beliefs are built, it also allows the student to improve the use of study strategies to improve learning (Achkar et al., 2017; Franco & Rodrigues, 2018). In addition, self-efficacy beliefs can favor motivation, engagement, persistence, and involvement in tasks (Costa & Fleith, 2019).

In this way, emotional resilience processes, which include self-efficacy beliefs, can act as a way for students to obtain a better quality of life in facing difficulties, enabling them to deal with the necessary changes and adaptations, thus reaching a repertoire greater solution to problem solving (Fergus & Zimmerman, 2005; Masten, 2015). In view of this, the resilient profile, although having a high perception of risk factors, proved to be more adjusted than the vulnerable group and managed to achieve a more favorable level of adaptation, even when exposed to risk.

Furthermore, when analyzing the relationship with protection indicators (social skills, family support, and school climate), students with a resilient profile had higher levels of individual and relational protection factors. The protective factors have the function of minimizing the influence of risk factors, increasing the individual's ability to cope with the school context which, in turn, can function as a resilience-promoting factor (Costa et al., 2016). Protection does not eliminate the psychological and physiological phenomena present in a stressful situation, common in the academic trajectory. However, the way students face adversity can change the course of their lives, providing the acquisition of relational skills for a positive school trajectory (Correia-Zanini et al., 2018; Daily et al., 2019).

In view of this, based on the theoretical model of resilience, the different risk effects on the adjustment indicators between the resilient and vulnerable groups, may be related to the presence of protective factors, as they have minimized the impact of stress and collaborated to strengthen self-efficacy beliefs. Thus, the differences in the resilient profile, in comparison with the vulnerable profile, may occur due to the presence of personal attributes, affective ties, and social contexts when coping with risk situations.

Regarding protection indicators as a personal attribute, the resilient profile showed higher levels of social skills when compared to the vulnerable profile. Social skills, which can be developed at school, facilitate the bond of students, in this context, with peers and with teachers, influencing the motivation and confidence of students to perform social and academic tasks, strengthening their self-efficacy beliefs (Coelho et al., 2017; Franco & Rodrigues, 2018; Petrucci et al., 2016). Furthermore, social skills are associated with adjusting to their new role as students, as seen in the study by Cassoni et al. (2020), who found a decrease in social skills in students who were making the transition from the initial years to the final years of EF, suggesting that the decrease was due to the breakdown of friendships with peers and a significant decrease in the perception of support from students. adults, which resulted in academic difficulties and interpersonal relationships.

In relation to affective ties such as family support (mainly affective support), the resilient profile showed higher rates when compared to the vulnerable profile, serving as a protective resource for these adolescents. Corroborating with the study by Affuso et al. (2017), with 6th graders who highlighted the importance of family support in engaging with institutional (for example, parents' advice) and non-institutional activities (for example, organizing and accompanying students on excursions) and the increased cooperation between family and school, for having a positive impact on motivation, academic self-efficacy, and well-being of adolescents, thus improving academic performance.

Regarding the social context, such as school, the school climate indicator was perceived positively by the students in the resilient group, unlike the vulnerable group. According to Hoigaard et al. (2015), the school climate has significant effects on students' academic performance in the final years of EF, considering self-efficacy beliefs as a mediating variable. For the authors, if teachers establish a school environment with goals that value the skills and competence of students, they will contribute to a greater personal effort in solving academic tasks, as their levels of intrinsic motivation will be higher (Hoigaard et al., 2015). However, if teachers encourage a more competitive environment, using performance-oriented goals, in which grades are valued above personal qualities, students may not be so involved with their tasks, which can decrease academic performance (Hoigaard et al., 2015).

In the associations between adjustment profiles and sociodemographic data, it is noted that there was no association between the grouping and the student's gender, but there were differences in relation to age and whether or not students had been retained in the early years of EF and also with the type of school attended previously. In Brazil, the age of six is considered the appropriate age for entering EF, so, at the 6th grade, the recommended age would be 11 (Presidência da República, 2014). Most 11-year-old students are in the resilient group, which can be explained by the fact that approximately twice as many adolescents in the vulnerable profile have been retained at least once. Regarding the type of school they attended in the early years of EF, most students have always studied in public schools, reflecting the purchasing power of families. According to Symonds and Galton (2014), the development of personal and social skills during adolescence can promote autonomy and positive social relationships, allowing adolescents to overcome the difficulties of this period, despite the risks. Therefore, it would be interesting that interventions were promoted by psychologists in the school context, not only with students, but also with their families and teachers. Thus, it would increase the understanding about the perceptions of the students' surroundings translated as protective factors, through satisfaction with family and school support and their self-perceptions. It also includes the evaluation of personal resources, feelings about oneself and emotional reactions, which can modify the effects of risks, minimizing reactions in negative chains and favoring healthier behavior.

It was concluded that the profiles of this study showed that not all 6th graders adjust homogeneously, revealing a high or low rate of adjustment, according to the exposure to adversity and the levels of interaction with protective factors and sociodemographic aspects. However, because the risks are multifaceted, they need a more rigorous evaluation of their effects, in addition to considering chronicity and the ecological complexity in which the person is involved when facing threats, as well as personal and contextual factors (Masten ,

2015). However, the students' personal characteristics and contextual variables can work as protective factors, influencing the adjustment of 6th graders, thus providing a successful adjustment, despite the adversities encountered by many adolescents in situations of social vulnerability in Brazil.

Conclusion

In the light of the resilience theory, the present study contributed to a greater understanding of the importance of protective factors in the adaptation of students in the new cycle of EF, namely, how individual and contextual characteristics influence the coping with often harmful contexts. Thus, the identification and analysis of the different types of profiles allow to distinguish the concrete needs of the individuals involved, guiding the formulation of interventions and public policies that are more sensitive to their particularities, both individually and collectively, focusing on equity in access to services and inclusion of the most vulnerable groups.

Although this research has its strengths, some limitations have been identified. It was not possible to generalize the data, considering that the sample consisted of students from a single city, only with self-reports. It is necessary to contextualize the data. Therefore, it is suggested that further studies expand the sample in different regions of Brazil and that it be done by means of longitudinal studies, to better understand the adolescents' adaptation process.

In addition, it would be important to rely on other informants who also play an important role in the variables studied, as is the case with legal guardians/caregivers and teachers. Furthermore, other adjustment indicators could help to better understand the adolescents' resilience processes, such as intra-individual variables, like their temperament, the inclusion of more objective and normative adjustment indicators, such as school progress or absence of offensive behaviors and more subjective indicators, but equally important for the adjustment, as is the case with well-being.

Contributors

A. PENNA-DE-CARVALHO collaborated in the literature review, data collection, and analysis and interpretation of results, writing the introduction and discussing the results. V. B. R. LEME and S. M. G. COIMBRA collaborated with the study conception and design, bibliographical research, writing the introduction and discussion of the results, and in the approval of the final version of the article. F. A. FRANCE. collaborated in the data collection and writing of the discussion of the results. The authors declare that they have no conflicting interests.

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