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Depression, anxiety, emotional self-regulation, perception of social and family support in schoolchildren

Depressão, ansiedade, autorregulação emocional, percepção do suporte social e familiar em escolares

Depresión, ansiedad, autorregulación emocional, percepción del soporte social y familiar en estudiantes

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This is a longitudinal research conducted in a municipality in the north of the state of Paraná, Brazil, in the year 2019, whose objective was to analyze, in a group of students, whether depression, anxiety, perception of social/family support and emotional self-regulation changed. due to sex and the onset of menarche. Instruments validated in Brazil were applied to assess anxiety, depression, emotional self-regulation and perception of social and family support. 453 students, from a public school, from the 6th to the 9th grade of elementary school participated, of which 58.3% were female. The girls obtained higher scores in somatic/vegetative, cognitive and paralysis anxiety, pessimism, experience evaluation and negative self-regulation scores and greater depressive symptoms. Girls who already had menarche had higher symptoms of somatic/vegetative anxiety and general anxiety, in addition to higher scores in paralysis, pessimism and in the combination of negative dimensions of self-regulation. They also had lower scores in facing problems and in the Perception of Social Support, greater depressive symptoms and more inadequacy in relation to the family. Boys and girls may have different functioning and it is necessary to look at organic issues as also associated with this functioning, as is the case with menarche in girls.
Descriptors: Depression; Anxiety; Emotional regulation; Social support.

Esta é uma pesquisa longitudinal realizada em um município do norte do estado do Paraná, no ano de 2019, cujo objetivo foi analisar, em um grupo de escolares, se a depressão, ansiedade, percepção dos suportes social/familiar e a autorregulação emocional se modificavam em razão do sexo e do início da menarca. Aplicou-instrumentos validados no Brasil para avaliar ansiedade, depressão, autorregulação emocional e percepção dos suportes social e familiar. Participaram 453 escolares, de uma escola pública, do 6º ao 9º ano do fundamental, das quais 58,3% do sexo feminino. As meninas obtiveram escores maiores em ansiedade somático/vegetativo, cognitivo e paralização, pessimismo, avaliação da experiência e nos escores negativos da autorregulação e maior sintomatologia depressiva. Meninas que já tiveram a menarca apresentaram maior sintomatologia de ansiedade somático/vegetativo e na ansiedade geral, além de maiores pontuações em paralização, pessimismo e na combinação das dimensões negativas da autorregulação. Também tiveram menores escores no enfrentamento de problemas e na Percepção de Suporte Social, maior sintomatologia depressiva e mais inadaptação em relação à família. Meninos e meninas podem ter funcionamento distintos e há que se olhar para as questões orgânicas também como associadas a esse funcionamento, como é o caso da menarca nas meninas.
Descritores: Depressão; Ansiedade; Regulação emocional; Apoio social.

Esta es una encuesta longitudinal realizada en un municipio del norte del estado de Paraná, Brasil, en el año 2019, cuyo objetivo fue analizar, en un grupo de estudiantes, si la depresión, la ansiedad, la percepción del soporte social/familiar y la autorregulación emocional cambiaban debido al sexo y al inicio de la menarquia. Fueron aplicadas herramientas validadas en Brasil para evaluar la ansiedad, la depresión, la autorregulación emocional y la percepción de los soportes social y familiar. Hubo 453 estudiantes, de 6º al 9º año de la educación primaria, el 58,3% del sexo femenino. Las chicas obtuvieron puntuaciones más altas en ansiedad somática/vegetativa, cognitiva y parálisis, pesimismo, evaluación de la experiencia y en las puntuaciones negativas de autorregulación y mayor sintomatología depresiva. Las chicas que ya tenían la menarquia presentaban una mayor sintomatología de ansiedad somática/vegetativa y ansiedad en general, además de mayores puntuaciones en parálisis, pesimismo y en la combinación de dimensiones negativas de autorregulación. También tuvieron puntuaciones más bajas en la confrontación de problemas y en la Percepción de Soporte Social, mayor sintomatología depresiva y menor adaptación en relación con la familia. Los chicos y las chicas pueden tener funcionamientos distintos y es necesario considerar las cuestiones orgánicas también como asociadas a este funcionamiento, como es el caso de la menarquia en las chicas.
Descriptores: Depresión; Ansiedad; Regulación emocional; Apoyo social.

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INTRODUCTION

The transition from childhood to adolescence is marked by physical, biological and psychic transformations that must be taken into account so that a biopsychosocial understanding of the subject who is in this stage of development is possible. This conception has led to the growing interest of researchers in studying depressive and anxious symptoms among children and adolescents[1,2].

There is also an increase in studies that seek to understand how emotional self-regulation and/or family support affect these symptoms in subjects at this stage of development[3-5]. Most of these research investments are justified by the important negative consequences that depression and anxiety can bring to the different spheres of life of these people, which may be associated with gender and biopsychosocial milestones in human life, such as menarche in girls, which can cause losses in school performance, higher risk of suicide and, even, a greater probability of experiencing depression in adulthood[6,7].

In the case of depression, the accumulation of knowledge in this area has indicated that depression in adolescence cannot be explained only by intrapersonal factors such as biological aspects, personality traits, capacity for self-regulation and coping with stressful events, but also by characteristics of interpersonal relationships and social experiences of these adolescents. Investments in research that associate depressive and anxious symptoms, presented by representatives of this part of the population, with the quality of bonds and the perception of family and social support are still scarce and necessary, in addition to the fact that few studies address the issue of gender difference on the protective variables for psychopathological symptoms[8].

Depression is a mental disorder and it is characterized by the presence of depressed mood and loss of interest and pleasure in performing activities. Guilt, low self-esteem and difficulty concentrating can also be observed. There is a loss in the person's daily activities and in their interpersonal relationships, in addition to which depressive symptoms can occur regardless of a diagnosis, in a subsyndromic way, also harming various spheres of the individual's life[9].

The World Health Organization[10] indicates that this disorder occurs more frequently in women than in men and it is considered one of the most disabling conditions, affecting approximately 300 million people worldwide. Depressive symptoms are also observed in childhood and adolescence, although these symptoms are often disregarded or undertreated, with a higher prevalence in adolescents when compared to children. As with adults, depression among children and adolescents commonly manifests itself from a set of factors that can include social withdrawal, dysphoria, fatigue, self-destructive behaviors and impaired school performance[11].

Anxiety, despite not having a single definition, can be considered as a set of physiological, cognitive and behavioral reactions that are activated by the brain, triggering flight, fight, freeze, or other reactions that avoid contact with the stimulus that generates anxiety[12]. Thus, it can be considered as a common behavior of every human being, seen as protective in certain situations. However, from a pathological point of view, when anxious behavior ceases to be adaptive, it becomes a problem in the person's life. Anxiety also represents one of the psychopathologies with a high prevalence among children and adolescents, also affecting more women than men, with the expectation of affecting 10 to 30% of the population[13].

The emotions associated with the feeling of alertness can constitute a threat to children and adolescents and interfere negatively in different aspects, such as learning and adaptation to the school context, interpersonal relationships, and even accentuate conflicts with family, friends and leads to situations of isolation social[4]. Despite anxiety and family dynamics, the influence of parents on the emotional reactivity of anxious young people is observed, linked to negative events during the transition from childhood to adolescence[1]. Thus, the family

dynamics focuses on the child's anxious behavior and on the child's way of interpreting situations, since families with less anxious and aggressive patterns have children with perceptions less reactive to situations of anguish and fear[1].

Given the possible consequences of depression and anxiety for the development of children and adolescents, it is important to identify psychological and social characteristics that, when well developed, serve as protective mechanisms for these psychopathologies. In this sense, psychological constructs such as emotional self-regulation[4], perception of family support[8] and social support[14] are constructs that can protect or contribute to children and adolescents coping and/or facing depressive and/or anxiogenic symptoms[2].

Emotional self-regulation corresponds to the person's ability to deal with aversive emotions and maintain control of emotions even in the face of stressful situations and/or the ability to change behaviors[15]. Thus, studies conducted with children and adolescents have shown that this ability to manage emotions is negatively associated with psychopathological symptoms, given that people with higher levels in this construct would present more adaptive emotional and behavioral responses/strategies in the face of negative emotional experiences[4,5]. In addition, gender appears to be associated with the type of regulation employed. For example, girls who forgive more also use more cognitive reevaluation strategies such as emotional regulation[14].

With regard to children specifically, understanding and using emotional self-regulation strategies, especially those aimed at managing anxiety and depressive symptoms, are essential for adaptive development, cognitive functions, social competence[5] and perception of well-being of elementary school students[3]. It is possible to expect that interventional measures to teach and promote strategies for the emotional management of students will lead to effective results in reducing unpleasant or harmful emotions[3,5].

When children perceive a situation as uncontrollable and/or unwanted, it is expected that they begin efforts at emotional regulation that lead to the management of their emotions to act in the presented reality[5]. If the adopted emotional strategy proves to be inadequate, there will be an increase in negative feelings and, consequently, an increase in psychological suffering. Thus, the child or adolescent who repeatedly experiences frustrated or insufficient attempts to regulate their emotions can evolve to a symptomatological picture of anxiety and/or depression disorder[5].

While family support corresponds to the quality of family interactions in relation to expressions of attention, affection and affective proximity between family members, as well as autonomy and independence in their daily decision-making. Certainly, in the case of children and adolescents, this autonomy and freedom should not be confused with a lack of care and/or supervision, but with respect for the choices of these individuals within the possibilities that characterize their stage of development[16].

The perception of family support has been shown to be negatively associated with depressive symptoms[15], and positively to general health indicators, and it is interesting to note that there are few studies on gender difference in relation to this construct. Sometimes there are no differences between boys and girls in family support[17]. In turn, social support can be defined as a support network that makes the individual believe that they are loved, valued and that they belong to a network of communication and mutual obligations, in addition to the fact that girls tend to perceive this support as greater when compared to boys[18].

Family support is also recognized as an important factor for emotional self-regulation[19,20]. Studies[21,22] point out that children whose parents react to their emotions in a non-supportive way, with punishments, minimization or neglect, have greater difficulties in managing their emotions[21]. Support, family atmosphere and attachment relationships affect children's emotional regulation. Evidence was also reached indicating that the form, frequency and intensity with which parents express their emotions can act as models for their children, directing styles of emotional regulation[22].

In addition to psychosocial variables, biological ones also seem to be of paramount importance in the variation of depressive, anxious and even suicidal ideation symptoms, since puberty brings with it important hormonal changes, especially in girls, when the phenomenon of the first menstruation[19]. Reviews have shown that the reproductive cycle of women has important influences on anxiety disorders[23], as well as affective disorders (including emotional self-regulation), especially when the age of menarche occurs early[24].

There are studies that have shown that depressive disorders in girls are more evident in those who have already experienced their first period, and that girls who experienced menarche early may continue to report high psychopathology in adolescence and early adulthood, however, in other studies not such results were found[7,24,25].

Gender, as well as early menarche, are also associated with mood or anxiety disorders[6]. Anxiety levels were higher in girls who started menstruation at a younger age, and as with depression[7], early menarche seems to act as a predictor of anxiety disorders in adulthood[6]. Thus, the aim of this study was to analyze, in a group of students, whether depression, anxiety, perception of social/family support and emotional self-regulation changed due to gender and the onset of menarche.

METHOD

This is a longitudinal survey carried out in a municipality in the north of the state of Paraná, in the year 2019. The study had different scales to collect data from the participants, in addition to a sociodemographic questionnaire. Thus, to measure students' emotional self-regulation, the Child-Youth Emotional Self-Regulation Scale - EARE-IJ[26] was applied. EARE-IJ has 28 items distributed among the dimensions: Paralysis/Misunderstanding, Pessimism/Negativism/Pessimistic vision of the future, Coping Strategies and Experience Evaluation.

To assess the anxiety construct, the Children and Adolescents Anxiety Scale - ESAN-IJ[27] was applied. The scale contains 27 items that structure the Somatic/Vegetative and Cognitive Component dimensions.

The student's perception of the social support experienced was assessed using the Social Support Perception Scale, version for children and adolescents - EPSUS-IJ[28]. The aforementioned instrument, with 23 items, is composed of the Facing Problems, Social Interactions and Affectivity factors.

The student's impressions/perceptions regarding family support were also measured using the Family Support Perception Inventory, version for children and adolescents - IPSF-IJ29. This inventory is structured in 42 statements and has three dimensions, namely: Affective-Consistent, Family Adaptation and Family Autonomy. The Baptista Depression Scale (children's and youth version) - EBADEP-IJ[9] was also used, consisting of 27 items and representing 24 descriptors (negativism, helplessness, crying, depressed mood, guilt, indecision, thought of death, among others).

The participating educational institution was contacted to check its availability and as soon as they issued the authorization, data collection was carried out. The collections developed, with the same sample of students, took place in 2019. The data collection procedure took place in the classroom, respecting the day and times scheduled by the school, and took approximately 45 minutes to complete. Participated in this research students, from the 6th to the 9th years of elementary school in a public school, located in a municipality in the north of the state of Paraná.

The data, organized in an electronic spreadsheet, were submitted to descriptive statistics (means, standard deviation and standard error) and inferential statistics (Student's t-test for independent samples) with the groups having or not having menarche and gender. The analyzes were performed using version 24 of the IBM-SPSS software. Levels of significance below 0.05 were considered as indicators of difference between groups. As a complement,

Cohen's *d* effect size statistics were also estimated, having as reference the values proposed by the author himself, namely: d between 0 and 0.19 (insignificant), between 0.2 and 0.49 (small), between 0.50 and 0.79 (medium) and greater than 0.8 (large).

The study was approved by the Research Ethics Committee of Universidade São Francisco, complying with the precepts of Resolution No. 510/2016 and the complements of the National Health Council, according to CAAE - 06903812.4.0000.5514. Prior to the student's effective participation, it was requested to read and agree to the free and informed consent form (ICF). Underage students were given a copy of the ICF and Free Informed Agreement Form (FIAF), also requesting authorization from parents/guardians to participate in the research. Thus, parents and students signed the document.

RESULTS

453 students from the 6th to the 9th grade of elementary school participated, of which 238 were girls and 215 were boys (41.7%). The students had an average age of 12.38 (SD = 1.42) years and a minimum age of 10 and a maximum age of 16 years.

For the analysis of the second variable (menstruation) the sample consisted of 238 girls (children and adolescents), however, only 66.38% answered about the first menstruation, reaching 158 student girls. The students who reported not having had menarche had an average age of 11.47 (*SD* = 0.73) years and a minimum age of 10 and a maximum age of 14 years. Those with the first menstruation had a mean age of 13.0 (SD = 1.15) years and a minimum age of 11 and a maximum age of 16 years.

Initially, an inferential analysis was made considering the gender of the participants (Table 1), it is important to remember that, due to the large number of variables, only those that were statistically significant were presented. In relation to gender, the girls obtained significantly higher scores in somatic/vegetative, cognitive anxiety and total ESAN score, higher scores in paralysis, pessimism, experience evaluation and in the total negative scores of the self-regulation scale (EARE), in addition to higher depressive symptoms in EBADEP.

Table 1. Students according to sex and age according to instruments. Municipality of Northern Paraná, 2019.

	Gender	M	Standard Deviation	Standard Error of the Average	*t*	gl	*p*	*d*
ESAN_Soma_Veg	Female	9.08	7.02	0.45	4.60	449.2	<0.001	0.52
	Male	6.27	5.95	0.41				
ESAN_Cog	Female	15.87	12.23	0.79	4.20	448.2	<0.001	0.62
	Male	11.43	10.22	0.70				
ESAN_Total	Female	24.95	18.19	1.18	4.63	447.8	<0.001	0.83
	Male	17.70	15.11	1.03				
EARE_Paral	Female	15.91	7.78	0.54	6.59	385	<0.001	0.96
	Male	10.61	7.99	0.60				
EARE_Pess.	Female	11.99	9.92	0.69	5.84	381.1	<0.001	0.89
	Male	6.78	7.62	0.57				
EARE_ExpEv	Female	7.29	3.33	0.24	2.57	363	0.011	0.27
	Male	6.34	3.70	0.29				
EARE_Total_NEG	Female	27.90	16.42	1.13	6.88	384.6	<0.001	1.38
	Male	17.39	13.59	1.02				
EBADEP_Tot	Female	18.79	11.21	0.82	4.07	341.3	<0.001	0.77
	Male	14.15	9.93	0.79				

*Abbreviation of the Variables observed: Anxiety Scale for Children and Adolescents (ESAN-IJ), Emotional Self-Regulation Scale for children and adolescents (EARE-IJ), Baptista Depression Scale (children's version) (EBADEP-IJ); ESAN Soma_Veg - somatic vegetative dimension; ESAN_Cog - cognitive dimension; Total ESAN - sum of all dimensions; EARE_Paral - Paralysis/Misunderstanding dimension; EARE_Pess - Pessimism/Negativism/Pessimistic view of the future dimension; EARE_ExpEv - Experience Evaluation dimension; EARE_Total_NEG - sum of the first two dimensions of EARE; EBADEP_Tot - sum of all EBADEP items.

Table 2 shows the statistics of the groups of girls separated by those who had or did not have their first menstruation. Regarding the comparison of girls who had or did not have their first menstruation, those who had already experienced it had higher symptoms of somatic/vegetative, cognitive anxiety and total score on the Anxiety Scale (ESAN), in addition

to higher scores in paralysis, pessimism and the combination of negative dimensions of the Self-Regulation Scale (EARE). Girls with menarche also had lower scores in facing problems and in the total score of the Social Support Perception Scale (EPSUS), greater depressive symptoms (EBADEP) and more inadequacy (negative feelings) in relation to the family in the Support Perception Scale (IPSF).

Table 2. Student girls according to groups from the onset of menarche. Municipality of northern Paraná, 2019.

	Group Statistics							
	Menarche	**M**	**Standard Deviation**	**Standard Error of the Average**	***t***	**gl**	***p***	***d***
ESAN_Soma_Veg	No	7.26	5.54	0.84	-4.62	95.70	<0.001	-0.67
	Yes	12.23	6.79	0.66				
ESAN_Cog	No	13.19	9.97	1.52	-4.02	144	<0.001	-0.82
	Yes	21.30	11.55	1.14				
ESAN_Total	No	20.44	14.44	2.20	-4.50	144	0.001	-0.11
	Yes	33.53	16.61	1.64				
EARE_Paral	No	13.19	7.58	1.16	-3.23	144	0.01	-0.58
	Yes	18.14	8.75	0.86				
EARE_Pess.	No	7.16	8.22	1.25	-4.09	144	<0.001	-0.80
	Yes	14.49	10.43	1.03				
EARE_Total_NEG	No	20.35	14.23	2.17	-4.46	93.95	<0.001	-1.03
	Yes	32.62	17.11	1.69				
EPSUS_Prob_Cop	No	24.08	7.46	1.21	3.93	129	<0.001	0.66
	Yes	18.76	6.823	0.71				
EPSUS_Tot	No	52.44	15.47	2.58	2.61	121	0.010	0.66
	Yes	44.81	14.38	1.54				
EBADEP_Tot	No	15.36	10.51	1.64	-3.57	123	<0.001	0.77
	Yes	23.07	11.67	1.27				
IPSF_Adaptation	No	2.67	2.80	0.44	-2.50	118	0.014	0.29
	Yes	4.19	3.27	0.36				

* Acronym for the Variables observed: Anxiety Scale for Children and Adolescents (ESAN-IJ), Emotional Self-Regulation Scale for children and adolescents (EARE-IJ), Social Support Perception Scale, version for children and adolescents (EPSUS-IJ), Baptista Depression Scale (children's version) (EBADEP-IJ) and Family Support Perception Inventory, children's version (PSF-IJ); ESAN Soma_Veg - somatic vegetative dimension; ESAN_Cog - cognitive dimension; Total ESAN - sum of all dimensions; EARE_Paral - Paralysis/Misunderstanding dimension; EARE_Pess - Pessimism/Negativism/Pessimistic view of the future dimension; EARE_Total_NEG - sum of the first two dimensions of EARE; EPSUS_Prob_Cop - Problem Coping dimension; EPSUS_Tot - sum of the three dimensions of EPSUS; EBADEP_Tot - sum of all EBADEP items; IPSF_Adaptation - Family Adaptation dimension.

DISCUSSION

It was observed that several psychosocial variables (supports), people (self-regulation) and the presence of psychopathological symptoms were different between genders, generally with worse results for girls, in addition, it seems that the first menstruation also brings negative results in these variables. Probably denoting that psychosocial aspects are important variables in these stages of development, but that one cannot fail to take into account the possible biological aspects, specifically the role of hormones in the developmental cycle of women.

The period between the end of the childhood phase until adolescence is combined with several variations in biopsychosocial aspects that can influence the frequency of symptoms, such as depression[11] and anxiety[13], the onset of psychopathologies, as well as changes in emotional regulation and perception of supports family and social[4, 8, 14].

In addition to biological/hormonal issues, which seem to be important milestones related to various internalization/externalization problems, cultural issues related to the passage of life cycles, such as increased responsibilities, thinking about a professional career, must also be taken into account, dealing with self-image and its relationship with specific social standards, the existence in a sexist society and its prejudices, the greatest violence directed at women, among other characteristics[7].

Initially, it was observed that girls had higher scores in somatic/vegetative, cognitive anxiety and total ESAN and EARE score in emotional dysregulation (paralysis, pessimism, experience evaluation) and in depressive symptoms. These data are consistent with other research, since anxiety, depressive, obsessive-compulsive and eating disorders are more observed in female children and adolescents, while substance abuse, autistic disorders, attention-deficit hyperactivity and behavioral disorders are more prevalent in boys[30].

In women, from puberty until 18 years of age, depression rates in females increase significantly in relation to males, remaining until the end of adulthood and old age[28]. Probably pubertal girls are more likely to suffer from hormonal changes when compared to boys, which would increase the likelihood of developing, for example, depressive symptoms related to hypoactivation of the hypothalamic-pituitary-adrenocortical axis[9,10].

However, distal factors (events that occurred in the past life history) as proximal (events and situations that are occurring now) must be considered in the equation for the development of depressive symptoms in both genders. Girls may be more vulnerable to rumination, neuroticism, a greater presence of negative affects and less of positive affects, dissatisfaction with the body, greater chances of experiencing important stressful events (such as: sexual abuse, interpersonal violence), in addition to girls they usually suffer from cultural inequality from a cultural point of view (sexism). It is hypothesized that the comorbidity between depression and anxiety is much more common in girls than in boys, which may also explain the greater symptomatology of both problems in females.

Girls with menarche had lower scores in coping with problems in the perception of social support, greater depressive symptoms and more inadequacy directed at the family, coinciding with other studies[7,24]. However, such a result is not always proven[2].

In the national context, there are no studies that investigated the constructs with menarche as a discriminating variable, and it is important to indicate the need for other studies to be carried out, aiming to better understand whether depressive symptoms, among others investigated in the present study, affect more girls who have already had their menarche, especially because if this result is confirmed in other studies, there is evidence that depressive symptoms can affect adult life[23].

Even girls who menstruate earlier are more likely to develop depressive symptoms in adulthood[7]. This idea can also be generalized to anxiety disorders. In Italy, girls are getting their menarche sooner as time goes on, and an increase in diagnoses of depression and anxiety is also observed earlier, suggesting that biological factors can robustly explain these findings[6].

In addition, the need for future research that investigates in greater depth the relationship established between menarche and the use of emotional self-regulation strategies is being considered. Individuals who use strategies to regulate emotions are more easily able to manage impulsive behaviors and to balance the intensity of their emotional responses[8]. It seems salutary, that educational institutions can discuss and implement interventional forms, in order to develop self-regulatory emotional strategies in their students, aiming to deal with healthier conflicts in adolescence and pre-adolescence.

In the present study, no gender differences were found in social and family support[18] and it is important to remember that the models offered by parents can affect their children's emotions (and consequently their own emotional regulation)[21]. Therefore, it seems necessary in future investigations to observe how the emotional support offered by parents can affect the emotional health of their sons and daughters[19]. Especially in the case of girls, seeking to understand how the menarche variable, in this phase of transition to adolescence, can negatively interfere in this process of the perception of social and family supports.

In addition, negatively analyzing one's own experiences (emotional deregulation) can lead to behaviors that would impair school performance[31]. Among the behaviors are social withdrawal, self-destructive behavior, and others. To minimize this situation, depressive symptoms can be minimized with the use of self-regulatory strategies that lead the subject to

perceive positive emotions in the face of adverse situations that generate feelings/perceptions of distress[14,32].

The impairment in the perception of one's ability to adapt to family situations or changes is a condition that can favor the strengthening of negative feelings such as anger, isolation, shame, irritability, guilt, among others[17]. For a healthy adaptive development, we must look at the emotional self-regulation of young schoolchildren, so that emotional self-regulation can act preventively in the control of anxiety and depressive symptoms[5], being important the role of the family and the family support offered and perceived by young people[19].

Emotional dysregulation may be associated with the onset of various psychopathologies and vice versa, which is why the observation that girls who had greater depressive symptoms also had higher scores on symptoms of anxiety and emotional dysregulation[3]. And the onset of menarche, along with other psychosocial factors, may be associated, in addition to psychopathological symptoms and emotional dysregulation, also with specific aspects of social support and the view that girls have of the family[16,21].

CONCLUSION

The study identified that, compared to boys, girls perform worse in regards of anxious and depressive symptoms, show a greater difficulty in managing emotions and perceive themselves with less family and social support. There was an aggravation in this situation, especially in the students who had already experienced their first menstruation.

As limiting aspects of the research, the sample investigated here was limited and could be extended to other regions of the country. In this way, it would be possible to better understand in future studies the dynamics of socio-affective variables in the school performance of Brazilian students and how all this dynamics can testify in a negative or positive way in mental health.

Like other limitations of the study, it was not possible to make a diagnosis of mood and anxiety disorder, in addition to the self-report scales were collected only with children and adolescents, and the parents' perceptions were not evaluated. In addition, the comparisons of the constructs in terms of gender, decreased dramatically when inferential statistics on menarche were calculated, therefore, studies with larger samples of comparison of girls who started menarche or not are necessary to support the hypotheses found in the current study, in addition to the insertion of other psychosocial variables (such as violence, prejudice, rumination, and others).

This study described only two important variables (gender and menarche) explored as mean differences, and in future studies it is intended to evaluate these variables together with the constructs, in order to perform regressions and/or path analysis by inserting other sociodemographic variables (grade/age) and clinical (previous diagnosis of diagnosed mood and/or anxiety disorders).

As contributions of the study, it is necessary to think that research and scientific discussions little explore questions that advance in answers about menarche, age, gender and questions related to the psychoeducational context, as is the case of socio-emotional variables.

Thus, this study expands the questions about the difference between gender, but not in a way that seeks to indicate a relationship that expresses which gender is better or worse in some factor, but rather thickens the reflection that boys and girls may have different functioning and that it is necessary to look at organic issues as also associated with this functioning (as is the case with menarche in girls).

Educational institutions should have an action plan in order to identify and work in an inclusive way with students who have indicators that can cause damage to students' mental health. Looking at the big picture, it would be necessary to include in the Political Pedagogical Plans at both the municipal and state levels, ways of identifying and intervening in the socio-

affective aspects of the students. In this way, the role of training not only the student, but the whole person would be fulfilled.

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CONTRIBUTIONS
Makilim Nunes Baptista contributed to the study design, data analysis and writing. **Katya Luciane de Oliveira** and **Andrea Carvalho Beluce** participated in the study design, data collection and writing. **Evandro Morais Peixoto** worked in data analysis, writing and review.

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