

**Conceptions of stress according to high school students in a small town****Concepções sobre estresse segundo alunos do ensino médio de uma cidade de pequeno porte****Concepciones de estrés según estudiantes de secundaria en una pequeña ciudad****Received: 03/11/2019****Approved: 06/05/2020****Published: 01/08/2020****Caroline Francisca Eltink<sup>1</sup>****Carolina Woetyla Batista Nunes<sup>2</sup>**

The interviews were transcribed and analyzed using content analysis and descriptive statistics. 23 adolescents participated, of which the majority of students ( $n = 21$ ) considered themselves under stress, and a large part are female. Five categories were constructed: *Definition of the concept of stress*, *Perception of stress and strategies used to reduce or control stress*, *Stress contexts: social environment, family and school*, *Fears and expectations in relation to their own future*, and *Large city x Small town*. It was found that the most mentioned stress inducing context was 'school'. Participants report that they use coping strategies, such as: relaxing activities; control of impulsive actions; sports, and they feel these strategies are effective. It is concluded that even when living in smaller cities, adolescents are subject to stressful contexts and present conflicts similar to those who live in larger cities.

**Descriptors:** Adolescent; Stress, psychological; Education, primary and secondary; Mental health.

As entrevistas foram transcritas e analisadas por meio da análise de conteúdo e estatística descritiva. Participaram 23 adolescentes, das quais a maioria dos alunos ( $n=21$ ) se considera estressado, e boa parte é do sexo feminino. Construiu-se cinco categorias: *Definição do conceito de estresse*, *Percepção do estresse e estratégias utilizadas para reduzir ou controlar o estresse*, *Contextos estressores: ambiente social, família e escola*, *Receios e expectativas em relação ao próprio futuro* e, *Cidade de grande porte x Cidade de pequeno porte*. Verificou-se que o contexto estressor mais referido foi a escola. Os participantes referem que utilizam estratégias de enfrentamento, como: atividades relaxantes; controle de ações impulsivas; esportes e, sentem que elas são eficazes. Conclui-se que mesmo vivendo em cidades menores os adolescentes estão sujeitos a contextos estressores e apresentam conflitos semelhantes aos daqueles que vivem em cidades maiores.

**Descritores:** Adolescente; Estresse psicológico; e Ensino fundamental e médio; Saúde mental.

Las entrevistas se transcribieron y analizaron mediante análisis de contenido y estadística descriptiva. Participaron 23 adolescentes, la mayoría de los cuales ( $n=21$ ) se consideran estresados, y la mayoría son mujeres. Se construyeron cinco categorías: *Definición del concepto de estrés*, *Percepción del estrés y estrategias utilizadas para reducir o controlar el estrés*, *Contextos de estrés: entorno social, familia y escuela*, *Miedos y expectativas respecto al propio futuro* y, *Ciudad grande x Ciudad pequeña*. Se encontró que el contexto más estresante al que se refería era la escuela. Los participantes informaron de que utilizan estrategias de enfrentamiento como: actividades relajantes, control de acciones impulsivas, deportes y, sienten que son eficaces. Se llegó a la conclusión de que, incluso viviendo en ciudades más pequeñas, los adolescentes están sujetos a contextos estresantes y presentan conflictos similares a los de las ciudades más grandes.

**Descriptor:** Adolescente; Estrés psicológico; Educación primaria y secundaria; Salud mental.

1. Psychologist. Master and PhD in Psychology. Professor of the Psychology course of the Universidade Paulista – (UNIP), Ribeirão Preto, SP, Brazil. ORCID: 0000-0001-8296-1507 E-mail: caroline.eltink@docente.unip.br.

2. Psychology undergraduate student. Volunteer Scientific Initiation Scholarship for UNIP. Ribeirão Preto, SP, Brazil. ORCID: 0000-0002-5392-3402 E-mail: carolwoetylabn@hotmail.com.

## INTRODUCTION

Adolescence was first considered a distinct phase of human development in the 20<sup>th</sup> century, in 1904, when Granville Stanley Hall [1844-1924] published, for the first time, a study of this period of life. Hall presented adolescence as a stage marked by "storm and stress". Later studies reinforced this view and highlighted common conflicts of this phase of life<sup>1</sup>.

Adolescence can be defined as a stage of transition from development between childhood and adulthood, marked by significant cognitive, physical, psychological and social changes<sup>2,3</sup>. Some aspects stand out, such as: hormonal changes, progressive separation of parents and, at the same time, a closer relationship with the friends, the search for oneself, ability to develop totally abstract and hypothetical-deductive thoughts, emergence of concerns metaphysical and ethical, social claiming attitudes, among others<sup>2</sup>. These changes guide the adolescent to success of their autonomy for management of adult life, without parental support<sup>1</sup>.

It is at this stage of life that young people begin to build a life project, and are more seriously concerned with the definition of a professional choice<sup>2</sup>. Also, in this period of life, school continues to be an important context for the development of adolescents<sup>4</sup>, playing a major role in their lives, along with friends and family.

In Brazil, between 15 and 18 years old, approximately, teenagers start attending high school. This is the final stage of basic education in our country. Currently, the New High School has as proposal to offer formation of the person, in order to develop values and more complex skills of study, making possible integration of the student's individual project to the project of society. It seeks to prepare young people for the work market and their training as a human person, developing intellectual autonomy and critical thinking<sup>5</sup>.

Despite the proposals present in the National Curriculum Common Base (*Base Curricular Nacional Comum - BNCC*) of Secondary Education<sup>5</sup>, currently, the school environment remains predominantly marked by the pedagogical model of traditional teaching. This model of education emphasizes transmission of knowledge, internalization of behaviors and creation of specific skills, more geared towards approval in selective entrance exams at higher levels of education, which is charged with reproducing rather than reinventing and rebuilding<sup>6</sup>.

The school can function both as a context that promotes potentialities and can also produce pathologies<sup>7-9</sup>. School routines are sick and causes of sickness, and as a result, several pedagogical proposals were and are being created to educate and teach in order to promote health in the school context<sup>6</sup>. Educational work can only reach its potential when each individual manages to appropriate the humanity produced historically and collectively, and Education can improve the individual, as it offers conditions for them to be constituted as a human being, humanized and humanizing<sup>10,11</sup>.

Regardless of the new emerging pedagogical proposals, studies indicate that the school environment is often considered a stressful context<sup>12-14</sup>. Also, because it is a phase of intense emotions and because it requires certain responsibilities that were not previously demanded, adolescence has several factors that collaborate to raising stress. Among them are the search for greater closeness with colleagues, search to meet expectations of adults, the need for self-assertion, pressure of school and entrance exams, and professional choice<sup>12</sup>.

The concept of stress was introduced in Health Psychology by Hans Selye in 1926, becoming popular after the Second World War. This concept can be conceived differently considering the different approaches that investigate the theme<sup>15</sup>. Among the three theoretical approaches recognized as explanatory contributions on the subject, the present study adopts the cognitive perspective, which considers stress a particular relationship between the individual and the environment. In other words, stress is understood as a reaction of the organism to any event that is interpreted by the person as challenging or a threat to their physical or mental stability. It can involve reactions in physical, psychological, mental and/or hormonal areas<sup>12,14,16,17</sup>.

Thus, it is understood that stress can be explained as a tremor between the subject's perceptions of the circumstance's demand and their ability to respond to these demands, leading them to expend a lot of energy to deal with stressful experiences<sup>15,16</sup>.

Its symptoms can be divided into four phases<sup>16</sup>. The first is the lightest (Alarm Phase), which involves emergence of behavioral reactions of excitation or escape from the stressor, which is more adaptive. The second phase (Resistance Phase) is marked by a change in perception of normality and an increase in the secretion of adrenocorticoid hormones. In the third (Near-exhaustion phase), the subject's illness begins. And in the last phase (Exhaustion Phase) the individual starts to manifest organic illnesses, showing themselves exhausted by the high consumption of energy and excess of activity<sup>16</sup>.

A study carried out with 295 students from different schools in a metropolis in the interior of the state of São Paulo found high values of stress, which were significantly more present in female participants<sup>12</sup>. Another study carried out with third-year high school and pre-university entrance course students showed that 67.7% of the sampled individuals showed alarming rates of stress<sup>12</sup>.

By experiencing stressful situations at this stage of life, they will be better prepared to experience other situations in adulthood. However, the amount and type of stressor to which they are exposed must be adequate/proportional to their ability and maturity to deal with it<sup>12</sup>. In addition to this, prevention depends on obtaining an adequate and realistic perspective of everyday situations, and on the development of healthy lifestyle habits regarding eating habits, sleep schedule, physical activity, and leisure time<sup>12</sup>.

Currently, due to the increase in availability of places in school contexts at secondary and higher levels, it has become increasingly common for society to impose on teenagers and young adults the need to invest in studies. Because the students are people in the developmental process, they can be fragile at this stage of life and in their academic career, as they experience great bodily, cognitive, and psychosocial changes, factors that can function as possible stressful sources.

The emergence of these changes in the broader social context, combined with characteristics of this phase of life, makes stress increasingly present in the lives of teenagers. As a result, the development of studies on the theme at this stage of life has become increasingly relevant today.

It was noted that many of the Brazilian studies were carried out with teenagers who live in cities, considered more stressful<sup>1,18-20</sup>. The objective of this study was to investigate concepts about stress from the point of view of high school students living in a small city in the interior of the state of Minas Gerais.

## METHOD

The research had a descriptive, exploratory and cross-sectional characteristic, with a qualitative and quantitative approach. The combination of qualitative and quantitative data was chosen because it allows a broader view of the problem being investigated, and the data obtained were used as complementary data, in an embedded mixed approach<sup>21,22</sup>.

The instrument constructed included an interview composed of 15 questions, nine open question and six closed questions, referring to the teenager's school, social, family and personal environment. The open questions investigated were: the concept of stress from the point of view of the participants, self perception of stress, which contexts and factors are seen as stressors, which strategies are used to cope with stress and how they help to reduce it, and whether respondents believe that students who live in large cities are more stressed or not and why. The closed questions investigated the frequency with which certain aspects related to stress occurred and sought information about the physical and extra-curricular activities the participants take part in.

The analysis used was quali-quantitative. The qualitative analysis used was Content

Analysis, which included three stages: pre-analysis; exploration of material (in which analysis categories were built); and treatment of results (which allowed for more in-depth interpretations of the collected material)<sup>23</sup>. The closed questions were presented in the format of the Likert Scale, and sought to investigate the frequency of aspects related to stress and coping strategies. They were analyzed using simple frequency and percentage.

Data collection took place between the years 2018 and 2019, in a small city in the state of Minas Gerais. According to the 2010 census, the municipality had 8,183 inhabitants, and the city's demographic index was 15.68 inhabitants/km<sup>2</sup>. GDP per capita was R \$ 23,317.35 (2016 data). Still, according to 2010 data, the schooling rate from six to fourteen years was 99%<sup>24</sup>. The main source of current income for the municipality is tourism.

To start the collection, initially, two high schools in the municipality were contacted and invited to participate in the study. They were presented with the objectives and the instrument to be used to accomplish it. Both schools expressed an interest in participating and allowed it to be developed with their students.

After approval by the Research Ethics Committee of Universidade Paulista (nº CAAE 90646218.2.0000.5512), the schools were contacted again, in order to contact students from each school. On the appointed day, the proposal was presented in classrooms - with the permission of the teacher. The objectives of the study and the teenager's participation would be presented, if they accepted. Each student was given a small form, where they wrote whether or not they would like to participate in the research and provided a form of contact (email or telephone).

Then, students from the three years of high school were invited, chosen at random and by lot. Participants and their guardians were informed about the topic, the research objective and the confidentiality of the information collected. A joint reading and signing of the Free and Informed Consent Form (to minors) and the Free and Informed Consent Form (to those responsible for them) was also carried out. After acceptance, after reading and signing the terms, the interviews started.

The interviews took place in the homes of most of those who agreed to participate, in an environment that guaranteed confidentiality of the interview and that there were no distractions or interruptions during the interview and, in some cases, were conducted in environments of the interviewee's choice, as long as they respected the same criteria. In all situations, ethical standards for research with human beings were respected. The interviews lasted an average of 15 minutes, were recorded and transcribed in full.

## RESULTS

23 high school students were interviewed, six from the first year (between 15 and 17 years old), nine from the second year (between 16 and 17 years old) and eight from the third year (between 17 and 18 years old). The average age of the students was 16.7 years. Of the total participants, 16 were female and seven male. From the process of exploring the interviews, five categories of analysis were constructed, namely: *Definition of the concept of stress*, *Perception of stress and strategies used to reduce or control stress*, *Stress contexts: social environment, family and school*, *Fears and expectations in relation to own future*, and *large city x small town*.

### **Definition of the concept of stress**

There were several conceptions that emerged in the interviewees' speech. A4 (First year of high school, female, 16 years old) and A15 (Second year of high school, female, 17 year old) stated that stress is something that causes tension and that hinders studies, being that A15 added by saying it is a torturous feeling, especially if it is of long duration. A16 (Third year, female, 17 years old) stated that stress is something that *makes you mad* (sic), and A18 (Third year, female, 18 years old) defined stress as an accumulation of pressure.

The participants stated that it is a feeling that can be generated by another person's speech or attitude (A1 - First year, female, 15 years old), by gossip and negative attitudes from colleagues (A19 - Third year, female, 17 years). It can also arise due to excessive demands: from family (A17- Third year, male, 17 years old), from school (A5- First year, female, 16 years old; A16- Third year, female, 17 years old; and A21- Third year, female, 18 years old), or even friends or significant others.

According to teenagers, stress is capable of generating a feeling of irritation or discomfort, and an accumulation of thoughts and sensations. According to A14 (Second year, female, 17 years old) stress is:

*A lot of thoughts at the same time, small problems that I can't solve due to anxiety, lack of attention, among others.*

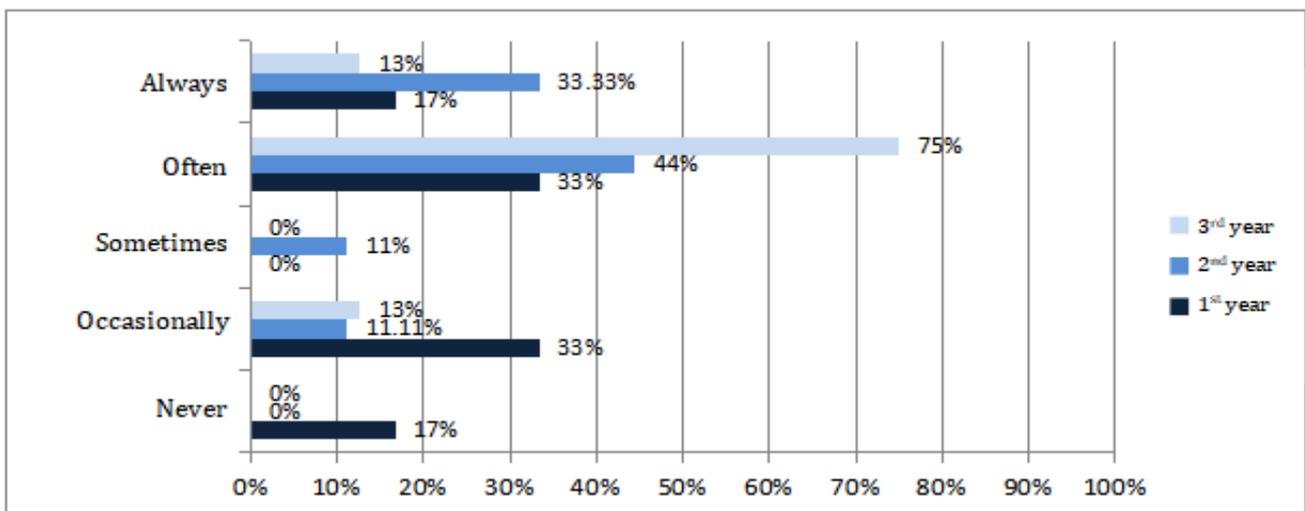
Still, according to interviewees, this accumulation of thoughts and feelings can turn into physical symptoms, such as headache (A12- Second year, female, 17 years old), or psychological symptoms (anxiety, lack of attention, irritability).

### **Perception of stress and strategies used to reduce or control stress**

When asked how they defined themselves in relation to stress, 90.3% of the adolescents considered themselves stressed, and of these, 70% were female. When analyzing the same data considering the three school years, it was noted that the majority of Second and Third Year students often felt stressed, and that First Year students were less stressed, compared to Second and Third Year students. (Graph 1).

When asked about how they deal with stress, that is, what strategies they used, the participants referred from strategies that do not involve movement, to physical activities. They reported that: they are quiet; seek to calm down before acting; take a deep breath and count to ten; seek to be alone, or go to sleep; they will watch a movie or series, listen to music; read books; go for a walk; they look for someone to talk to, to vent; they try to think of good things, to have positive thoughts. They also stated that they like to develop activities such as: playing with pets; meditate; eat; doing pleasurable and relaxing activities.

Also, 65% of the participants stated that they practice some extra-curricular physical activity at least once a week, and of these practitioners, the majority (93%) stated that these activities help to reduce stress. The extra-curricular activities most practiced by these interviewees were running/walking (50%) and gym (42.86%). The practice of sports (28.57%) and dance (14.29%) were also mentioned as alternative activities.



**Graph1.** Self perception on the presence of stress on different school years. Small sized town in the state of Minas Gerais, 2019.

### **Stress contexts: social environment, family and school**

When asking students to assess which contexts would be stressful to them (social, family and school), most reported that the educational context is a source of stress (82.61% of

students). The response of participant A16 (Third year, female, 17 years old) was:

*(...) Entrance exam and grade. Because there is a lot of pressure on us, right, with everything... passing the entrance exam, doing well at Enem, doing well at school (...).*

In addition to school, 78% of participants revealed that the social environment also contains stressors. Of these, 61% highlighted friendships as the most stressful source, as revealed by A8 (Second year, male, 16 years old):

*In such a matter of friendship nowadays, it is a very complicated thing to deal with, we have a problem, like that, and it turns out that something unpleasant occurs, something like that makes you nervous sometimes.*

The family environment was also assessed as a stressor by 69.57% of the participants. Teenager A14 (Second year, female, 17 years old) reported:

*(...) asking me for things all the time, not letting me take time for myself without calling me at least once, needing me to help in everything and all the time, because I like to have my time alone, to rest, think among other things.*

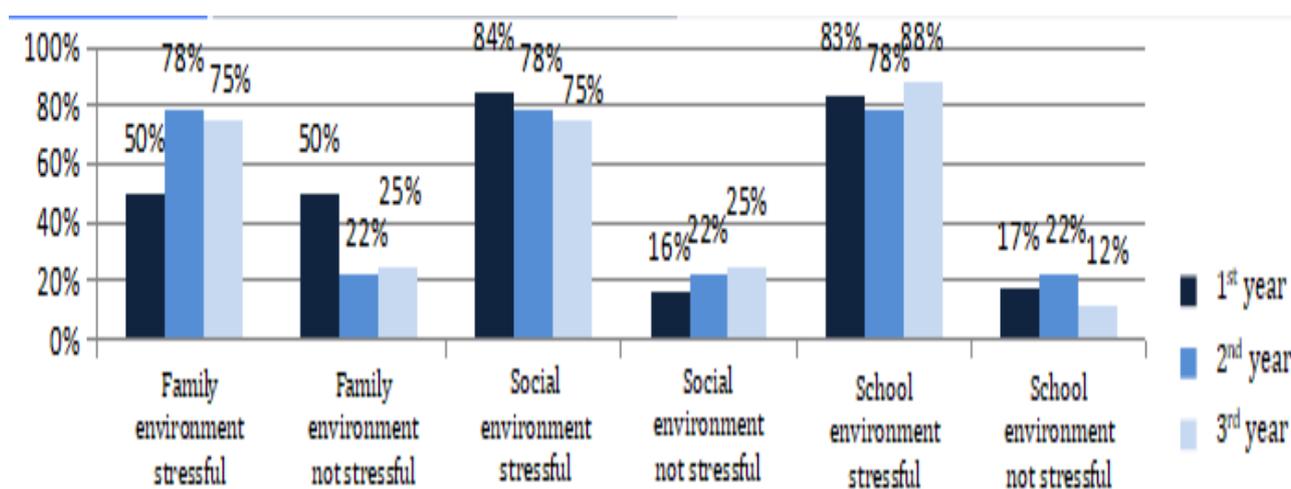
Graph 2 shows the incidence of positive and negative assessments in relation to social, family and school contexts, analyzing each school year separately.

When comparing information obtained for each context, comparing each of the school years, it is noted that for students in the first year of high school the social context is the most stressful (84% of the sample), and very close to it, the school environment appears (83%). For students in the second year of high school, the three areas are indicated as stressors, with similar assessments (78% and 75%). And for third year students, the educational scenario is the most stressful (88% of participants).

### **Fears and expectations in relation to their own future**

The expectations mentioned by the teenagers regarding their own future were diverse. They wanted to: be successful professionally; being able to graduate from high school; being able to be autonomous professionally; getting into a good college; take a higher education course with which they have an affinity; be happy; make all dreams come true; getting married and building a family; travel; become a better person; and have a good life. On the other hand, their main fears were related to not getting what they wanted. As A5 said (First year, female, 16 years old):

*(...) Expectations I have to attend a college that I like, in a course that I like, to be happy, to fulfill all my dreams... Now, I am afraid that I will not be able to do any of this, you know, that I end up doing something that I don't like.*



**Graph 2.** Stress factors in different school years. Small town of Minas Gerais, 2019.

### **Large city x Small town**

From the point of view of the participants as to who would have more stress: a student from a big city or from a small city like theirs, the interviewees, in their majority (87%) answered that they believe that students living in large cities have more stress, and justified it by stating that life in a big city is more busy and chaotic, that it is more difficult to get to school

(public transport, traffic congestion), that students in big cities need to deal with more pressure and bullying, and because they live with a greater number of people.

Also, participants stated that large cities presented more dangers. However, the rest of the sample (13%) stated that the level of stress experienced in the two city sizes would be the same, as what would determine the level of stress in students is a set of factors, and that the place where a person lives might or might not be one of them. No participant stated that the small town would have more stressors.

## DISCUSSION

The content analysis of the interviews allowed a more in-depth understanding of factors seen as stressors by high school students, and allowed them to know what strategies they use when experiencing stressful situations in this context.

The concept of stress exposed by students is close to those presented in other studies<sup>1,12,15,16,19,20</sup>. A16's statements (third year, female, 17 years old) that stress is something that "makes a person mad", from A15 (second year, female, 17 years old) as a torturous feeling, of A4 (First year, female, 16 years old) who states that it can hinder someone's studies, and A18 (Third year, female, 18 years old) as being an accumulation of pressure, show that the participants are referring to a stimulus or situation that is being interpreted as challenging or threatening to the subject's physical or mental stability, and that generate physical (headache) and psychological reactions in the individual (anxiety, lack of attention and irritability)<sup>1,12</sup>.

It is observed that none of the participants characterized stress as an expected response of the organism to naturally stressful situations (such as in theories that are based on the perspective supported by the stimulus<sup>15,25</sup>), and even intuitively present it as something more relational, dependent on external factors and the way the individual deals. In general, the interviewees associated the concept of stress with something harmful and, in some cases, pathological.

According to the teenagers, from the different areas investigated in the study, the one that most caused them stress was the educational one (82.61% of interviewees see this environment as stressful), especially from the point of view of students of the Third year of High School. In this context, the teenagers highlighted the concern with grades (43.5% of the answers) and with exams (13%), an aspect already pointed out and studied in another Brazilian study<sup>26</sup>. The participants were concerned with the selection process for universities (entrance exam) and with ENEM, relating them with concerns about their future life and the fulfillment of their wishes as future professionals (21.7%).

It is also clear that the entrance exam is closely linked to idealization of the teenager's personal life project, becoming a goal for their personal fulfillment<sup>9,20</sup>. As a consequence of this, the great pressure that students feel, especially in the final year of high school, is accompanied by the fear of failure and the realization of unsuccessful choices; the fear of facing the competition for a place in university; the feeling that there is little time to prepare for this competition; the feeling that if they fail, they will have lost a year of their life<sup>12</sup>. It should be added that these young people need to deal with other stressors arising from family and social contexts, through "pressure" to pass entrance exams<sup>12</sup>, and to make their choice for a professional career at a higher level.

At this stage of life, teenagers often do not have the maturity necessary to make their professional choice and end up experiencing stress in the face of this demand. This situation can cause a lot of anxiety and insecurities, producing negative effects on their lives, such as a dive in productivity<sup>12</sup> and increase in concerns about grades, showing even more the feeling, for the interviewees, that barriers present in the school context are invincible.

However, today, despite the proposal of the educational system to offer personal training and student preparation for the job market, schools continue to be predominantly focused on approval of selective processes in higher education levels<sup>6</sup>. In this way, the school, which could

be a space that promotes healthy and humanized developments<sup>10,11</sup>, starts to function as a harmful environment to the development and well-being of teenagers, promoting failures and pathologies. The emergence of schooling problems has led School Psychology to develop several studies in the area, seeking to understand the reasons related to school failure and behavior problems emerging in this context<sup>1,27,28</sup>.

The second most stressful area mentioned by the participants was the social one. In 78% of cases, interviewees stated that the main factors would be personal relationships (romantic relationships and friendships) and demands arising from people who are the closest. Relationships with friends occupy a prominent place at this stage in the lives of young people, and when affective relationships cause difficulties (fights or problems with friends), they become powerful sources of stress<sup>1</sup>. The social expectations imposed on teenagers nowadays are antagonistic. On the one hand, the period of dependence has been increasingly extended, and on the other hand, there has been a greater "maturation" in love relationships and in the choices of future life. This fact raises an anticipated concern in adolescents in relation to their development phase<sup>1,12</sup>.

The third area most referred to as stressor by the interviewees was family (69.57%), and the most reported reasons were: the relationship with parents, expectations of adults in relation to their children, and the burden of responsibilities they are given. Studies indicate that many demands, criticisms, uninterrupted conflicts, and the excess or inexistence of rules, cause the impression that, no matter how much they do, they are unable to live up to their parents' expectations. Furthermore, the lack or excess of responsibilities can become sources of stress<sup>12</sup>. On the one hand, it is important that they gradually take on new responsibilities, as they are no longer children, on the other hand, these responsibilities need to be in line with their maturity and capacity<sup>12</sup>.

When analyzing the perceived stress, presented in the *Stress perception* category and *strategies used to reduce or control stress*, it is noted that they corroborate data found in other studies<sup>1,2,12-14,18-20,26</sup>, since most of the teenagers considered themselves stressed (90%), and of these, the majority were female (70%). Only two participants did not consider themselves stressed, both male.

When analyzing each of the groups, male and female separately, we note again the high incidence of perceived stress, since 71.43% of boys and 100% of girls consider themselves stressed. This study did not propose a diagnostic evaluation, but rather an investigation into the perception of stress from the point of view of teenage high school students, however, the data found are concerning, as the participants comprised a non-clinical sample, and even so they reported that they felt stressed.

Studies point out that adolescents at higher risk for emotional and behavioral problems are those exposed to a greater number of stressors and with a higher frequency of symptoms of stress<sup>1</sup>. However, it is known that, in order to develop strategies to deal with stress, it is necessary to be in contact with it<sup>12</sup>.

Considering that they are people in the process of development, it is a fact that the intensity and type of stressor to which they are exposed must be adequate/proportional to their ability and maturity to deal with these<sup>12</sup>. Therefore, it is also important to know how these young people cope and their perception of controllability in stressful situations<sup>12,13,29</sup>.

Part of the interviewees is willing to face new challenges posed by different contexts, even considering them stressful. A5 (First year, female, 16 years old), for example, stated that: *(...) I think it is good for us to have this experience of something difficult, because nothing in life will be easy (...)*.

It is added that the participants described several actions and strategies they used to deal with stressful situations and events, ranging from quieter activities (being quiet, being alone, reading books, watching movies) to activities of greater movement (attending gym, running, walking, playing sports or dancing). And, 65.22% of students said they practice some extra-curricular activity; of these 50% said they run or walk, and 42.86% go to the gym.

The practice of regular physical activities favors relaxation and outpouring of anger and anguish. They also condition the body, adapting it to the increase in heart rate, blood pressure and stress hormones that happen during exercise, enabling and strengthening it to face situations that involve similar responses to emotional stress<sup>11, 12</sup>.

In addition to these activities, young people also described actions that help to control their reactions, such as: taking a deep breath, counting to ten, closing their eyes and breathing, trying to calm down before acting. Attitudes were also mentioned, such as thinking about the good side of the situation, trying to get rid of what is in excess, looking for someone to talk to, eat and sleep.

This information confirms data obtained in another study<sup>12</sup>, which shows that teenagers need to find something that is stimulating, that generates "passion" in them in order to feel enthusiastic about something positive, that completes them, at the same time that relaxes them, and occupy their thoughts (a physical or artistic activity or a musical instrument, for example). When they find this passion, the teenager develops a way to better deal with the stress experienced on a daily basis<sup>12</sup>.

It is noted that most of the coping strategies originate from positive experiences that teenagers had in the face of stressors, but are not necessarily linked to the school context. They are usually activities/actions experienced outside of school.

In a broader contextual assessment, respondents were asked to reflect on a context different from their own. They were asked whether, in their view, which environment could be seen as most stressful for students: a large city or a small city. Of all participants (residents of a small city), 87% said they believe students from a large city live in an even more stressful environment.

The reasons mentioned were: the more hectic and chaotic life in big cities, the greater difficulty in reaching school (public transport, traffic congestion), the fact that students deal more with pressure and bullying, among others. The students also stated that large cities presented more dangers than small cities, which would also generate more stress. The remaining 13% of the sampled teenagers stated that the level of stress would be the same, as they believe that what would define this level would be a set of several factors, in which place of residence is not necessarily a factor that generates stress.

In general, in a broader analysis, the concept of stress found in this research is close to the relational concept presented in another study<sup>15</sup> and in Brazilian studies on this same theme. It is also noted that, although they often feel stressed, especially third year students, the participants in this study were able to, in the face of stressors, develop and use coping strategies, which helped in controlling and reducing the stress. This fact is very important, especially when considering that the experiences in this phase of life will be very important in future life. The teenager is preparing for adulthood, a phase in which they will often face stressful situations, with greater responsibility and demands, in contexts different from those they already know, especially in the workplace.

Considering that the school is an important space for formation of subjectivity and teenage development<sup>4</sup>, it could be reinforced the importance of school developing actions that promote development and that offer interesting activities.

Thus, by providing activities considered pleasurable by young people, the school will encourage and help its students to develop strategies to cope with stress in view of the factors that are inherently present in this context.

## CONCLUSION

Through this research it was possible to know the view of teenage students about stress, which aspects are seen as stressors for these young people, and how they deal with these stressors.

The results showed that the perceived stress is greater than was supposed, especially in

the case of girls, and indicate that there is the influence of different contexts (school, family and social) in the production of stress among adolescents aged 15 to 18 years, being that the more they advance in high school, the more stressed they feel. The school context was identified as the biggest stressor, and the two most mentioned aspects were concern with grades and exams, and “pressure” for winning a place in higher education (entrance exam).

Social and family contexts were also perceived as promoters of stress, usually associated with relational conflicts (friendships and dating) or demands from family members. On the other hand, the teenagers' reports pointed out that the coping strategies they used were effective in reducing and controlling stress, ranging from quieter activities (being quiet, being alone, reading books, watching movies); development of activities with greater movement (attending a gym, running, walking, playing sports or dancing); or the use of strategies that help control impulsive reactions (taking a deep breath, counting to ten, thinking before acting, having positive thoughts, among others).

These are people in the process of development, who are attending high school, and who still demand care, but at the same time need to take on new responsibilities. The school is an important context in the formation of teenagers, and it should, in addition to providing information and knowledge, be a space for health promotion. It can be challenging, but the amount and type of stressors must be considered, which must be adequate/proportional to the degree of maturity of these developing people. Understanding the processes involved in the adolescent-school-family-social context will favor prevention and the development of more effective interventions in the educational environment for this population.

The present study has some limitations regarding the non-evaluative character of the participants, with no psychological instrument being used to compare the information obtained through interviews with the results of psychological tests or stress inventories; and the transversal character of the study, which did not allow studying the evolution of self-perceived stress over time.

The findings show students' exposure to various vulnerabilities, even in small cities and point to the need to expand the discussion around adolescents' mental health. Also, they show the importance of developing stress prevention and intervention programs in specific cases already in the school context.

New studies are necessary to provide parents, teachers and school coordinators with the opportunity to listen to their views on the subject. This measure will enable the construction of a facilitating instrument to be used in schools to promote the health of adolescents in coping with stress at this stage of their life.

## REFERENCES

1. Justo AP, Enumo SRF. Problemas emocionais e de comportamento na adolescência: o papel do estresse. *Bol Acad PaulPsicol.* [Internet]. 2015 [cited in 18 July 2019]; 35(89):350-70. Available from: [http://pepsic.bvsalud.org/scielo.php?script=sci\\_arttext&pid=S1415-711X2015000200007](http://pepsic.bvsalud.org/scielo.php?script=sci_arttext&pid=S1415-711X2015000200007)
2. Schermann LB, Béria JU, Metello MHV, Arossi JG, Benchaya MC, Nádia Krubskaya Bisch NK, et al. Estresse em adolescentes: estudo com escolares de uma cidade do sul do Brasil. *Aletheia* [Internet]. 2014 [cited in 19 July 2019]; 43-44:160-73. Available from: <http://www.periodicos.ulbra.br/index.php/aletheia/article/view/3310/2439>
3. Griffa MC. *Chaves para a psicologia do desenvolvimento.* 8ed. São Paulo: Paulinas; 2011. tomo 2, 348p.
4. Vygotsky LS. *A formação social da mente.* São Paulo: Martins Fontes; 2008. 224p.
5. Ministério da Educação (Brasil). *Base Nacional Comum Curricular (BNCC). Educação é a Base* [Internet]. Brasília, DF: MEC/CONSED/UNDIME; 2017 [cited in 26 Aug 2019]. Available from: [http://basenacionalcomum.mec.gov.br/images/BNCC\\_EI\\_EF\\_110518\\_versaofinal\\_site.pdf](http://basenacionalcomum.mec.gov.br/images/BNCC_EI_EF_110518_versaofinal_site.pdf)
6. Mizukami MG. *Ensino: as abordagens do processo.* São Paulo: EPU; 2013. 136p.

7. Souza, BP. Orientação à queixa escolar. São Paulo: Casa do Psicólogo; 2007. 419p.
8. Collares CAL, Moyses MAA. Transformação do espaço pedagógico em espaço clínico (Apatologização da educação). Séries Ideias [Internet]. 1994 [cited in 26 Aug 2019]; 23:25-31. Available from: [http://www.crmariocovas.sp.gov.br/pdf/ideias\\_23\\_p025-031\\_c.pdf](http://www.crmariocovas.sp.gov.br/pdf/ideias_23_p025-031_c.pdf)
9. Eltink CF. Desenvolvimento humano no contexto escolar. In: Benzoni, PE, organizador. Práticas psicossociais em saúde mental. Novo Hamburgo: Sinopsys; 2019. p.40-65.
10. Vigotski LS. Pensamento e linguagem. São Paulo: Ed. Martins Fontes; 1987. 212p.
11. Duarte N. A educação escolar e a teoria das esferas de objetivação do gênero humano. Perspectiva[Internet]. 1993 [cited in 26 Aug 2019]; 11(19):67-80.DOI: <https://doi.org/10.5007/%x>
12. Lipp MEN, organizador. Stress em crianças e adolescentes. Campinas, SP: Papirus; 2014. 336p.
13. Padovani RC, NeufeldCB, Maltoni J,Barbosa LNF,Souza WF,CavalcantiHAF, et al. Vulnerabilidade e bem-estar psicológicos do estudante universitário. Rev Bras Ter Cogn.[Internet]. 2014 [cited in 19 July 2019]; 10(1). DOI:<http://dx.doi.org/10.5935/1808-5687.20140002>
14. Dias JCR, Silva WR, Maroco J, Campos JADB. Escala de estresse percebido aplicada a estudantes universitárias: estudo de validação.Psychol, CommunHealth [Internet]. 2015 [cited in 19 July 2019]; 4(1):1-13. Available from: <https://repositorio.unesp.br/handle/11449/126011>
15. Baqutayan S. Stress and coping mechanisms: a historical overview. Mediterr]SocSci. [Internet]. 2015 [cited in 27 Aug 2019]; 6(2): 479-88. DOI: <https://doi.org/10.5901/mjss.2015.v6n2s1p479>
16. Nodari NL, Flor SRA, Ribeiro AS, Hayasida NMA, Carvalho GJR. Estresse, conceitos, manifestações e avaliação em saúde: revisão de literatura. Saúde DesHum. [Internet]. 2014 [cited in 19 July 2019]; 2(1):61-74. Available from: [https://revistas.unilasalle.edu.br/index.php/saude\\_desenvolvimento/article/view/1543/1100](https://revistas.unilasalle.edu.br/index.php/saude_desenvolvimento/article/view/1543/1100)
17. Mota NIF, Alves ERP, Leite GO, Sousa BSMA, Ferreira Filha MO, Dias MD. Estresse entre graduandos de enfermagem de uma universidade pública. SMAD, Rev Eletrônica Saúde Mental Álcool Drog. [Internet]. 2016 [cited in 19 July 2019]; 12(3):163-70. Available from: <https://www.revistas.usp.br/smad/article/view/120787/117852>
18. Kristensen CH, Leon JS, D'incao DB, Dell'aglio DD. Análise da frequência e do impacto de eventos estressores em uma amostra de adolescentes. Interação Psicol. [Internet]. 2004 [cited in 18 July 2019]; 8(1): 45-55. Available from: <http://revistas.ufpr.br/psicologia/article/view/3238>
19. Peruzzo AS, Cattani BC, Guimarães ER, Boechat LC, Argimon IIL, Scarparo HBK. Estresse e vestibular como desencadeadores de somatizações em adolescentes e adultos jovens. PsicolArgum. [Internet]. 2008 [cited in 18 July 2019]; 26(55):319-27. Available from: <http://www2.pucpr.br/reol/pb/index.php/pa?dd1=2527&dd99=view&dd98=pb>
20. Pires EAG, Duarte MFS, Pires MC, Souza GS. Hábitos de atividade física e o estresse em adolescentes de Florianópolis – SC, Brasil. Rev Bras Ciênc Mov. [Internet]. 2004 [cited in 19 July 2019]; 12(1): 51-6. Available from: <https://portalrevistas.ucb.br/index.php/RBCM/article/viewFile/542/566>
21. Souza KR, Kerbauy MTM. Abordagem quanti-qualitativa: superação da dicotomia quantitativa-qualitativa na pesquisa em educação.Educ Filos. [Internet]. 2017 [cited in 20 Sep 2019]; 31(61):21-44. DOI: <http://dx.doi.org/10.14393/REVEDFIL>
22. Creswell JW. Projeto de pesquisa: métodos qualitativos, quantitativos e mistos. 2ed. Porto Alegre: Artmed; 2007.
23. Minayo MCS. O desafio do conhecimento-pesquisa qualitativa em saúde. 8ed. São Paulo: Hucitec; 2004. 408p.

24. Instituto Brasileiro de Geografia e Estatística. Cidades [Internet]. Rio de Janeiro: IBGE; 2017 [cited in 20 Sep 2019]. Available from: <https://cidades.ibge.gov.br/>
25. Faro A, Pereira ME. Estresse: revisão narrativa da evolução conceitual, perspectivas teóricas e metodológicas. *PsicolSaúdeDoenças* [Internet]. 2013 [cited in 30 Aug 2019]; 14(1):78-100. Available from: <http://www.scielo.mec.pt/pdf/psd/v14n1/v14n1a06.pdf>
26. Gonzaga LRV, Silva AMB, Enumo SRF. Ansiedade de provas em estudantes do ensino médio. *PsicolArgum.* [Internet]. 2017 [cited in 30 Aug 2019]; 34(84):76-88. DOI: <http://dx.doi.org/10.7213/psicol.argum.34.084.A007>
27. Lima CP, Prado MBS, Souza BP. Orientação quanto à queixa escolar relativa a adolescentes: especificidades. *Psicol Esc Educ.* [Internet]. 2014 [cited in 30 Aug 2019]; 18(1):67-75. DOI: <http://dx.doi.org/10.1590/S1413-85572014000100007>
28. Carneiro C, Coutinho LG. Infância e adolescência: como chegam as queixas escolares à saúde mental. *EducRev.* [Internet]. 2015 [cited in 30 Aug 2019]; 56:181-92. Available from: <http://www.scielo.br/pdf/er/n56/0101-4358-er-56-00181.pdf>
29. Omar A, Silva Junior SHA, Paris L, Souza MA, Peña RP. Resiliência e enfrentamento do estresse em adolescentes: efeitos mediadores dos valores culturais. *PsicolRev.* (Belo Horizonte) [Internet]. 2010. [cited in 30 Aug 2019]; 16(3):448-68. Available from: [http://pep-sic.bvsalud.org/scielo.php?script=sci\\_arttext&pid=S1677-11682010000300003&lng=pt&tlng=pt](http://pep-sic.bvsalud.org/scielo.php?script=sci_arttext&pid=S1677-11682010000300003&lng=pt&tlng=pt)

**CONTRIBUTIONS**

**Caroline Francisca Eltink** contributed with the conception and outlining, data analysis, writing and revision. **Carolina Woetyla Batista Nunes** participated in the conception, data collection, data analysis, writing and revision.

**How to cite this article (Vancouver)**

Eltink CF, Nunes CWB. Conceptions of stress according to high school students in a small town. REFACS [Internet]. 2020 [cited in *insert day, month and year of access*]; 8(Suppl. 1):549-561. Available from: *insert access link*. DOI: *insert DOI link*.

**How to cite this article (ABNT)**

ELTINK, C. F.; NUNES, C. W. B. Conceptions of stress according to high school students in a small town. REFACS, Uberaba, MG, v. 8, p. 549-561, 2020. Suppl. 1. Available from: *insert access link*. Access in: *insert day, month and year of access*. DOI: *insert DOI link*.

**How to cite this article (APA)**

Eltink, C. F., & Nunes, C. W. B. (2020). Conceptions of stress according to high school students in a small town. REFACS, 8(Suppl. 1), 549-561. Retrieved in: *insert day, month and year of access from insert link of access*. DOI: *insere link do DOI*.