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The relationship between school performance and anxiety in adolescents

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Abstract: In this paper we analyzed the relationship between school performance and anxiety in adolescents. School performance is closely related to Education and competition, which are two components found in all cultures of the world. The foundations of competition are difficult to identify compared to those of education that are hidden in an unknown past. People have always considered competition and education as important aspects, both in the past and in the present. Educational competitions are found in Romania, as being organized in the form of Olympics and school competitions. These are carried out in accordance with the provisions of the National Education Law no. 1/2011, subsequently completed by the Methodology - framework for conducting and organizing school competitions and is addressed to students in middle and high school classes, being organized by subject, and have as general objective "stimulating students with high school performance or who have interest and special skills in the scientific, technical-applied, cultural-artistic, civic and sports fields "(MEN, 2011). Subsidiary to this objective we find as mentioned some secondary ones such as the desire to stimulate critical thinking and creativity through the opportunity to manifest motivation in learning and identifying the talents, abilities and knowledge of students of all ages. In Romania, through competitions, the state offers the winners cash prizes, scholarships or places in camps.

Keywords: relationship, performance, anxiety, adolescents

Anxiety in adolescents

In the broadest sense, adolescence refers to the period that marks the transition from childhood to adulthood.

It usually lasts between 12 and 18 years, which corresponds approximately to the time from the onset of puberty (ie, specific hormonal changes) to the independence of the guardian (ie, the legal definition of adulthood in many countries). Adolescence is the transition period from childhood to adulthood. It includes some big changes - in the body and in the way a young person relates to the world.

The many physical, sexual, cognitive, social and emotional changes that take place during this time can bring anticipation and anxiety for both children and their families. Understanding what an adolescent should expect in its various stages can promote healthy development during adolescence and into early adulthood.

Mielu Zlate in the work „Ego and personality” noted that the „need for originality” is so great in adolescents that sometimes it manifests itself at any cost, which led some authors to talk about the „crisis of originality of the adolescent” (Zlate, 2002).

Anxiety is not the same as fear, which is a response to a real or perceived threat, as anxiety involves waiting for a future threat. Anxiety is a feeling of restlessness and worry, which is usually generalized as an overreaction to a situation that is only subjectively seen as threatening. It is often accompanied by muscle tension, agitation, fatigue and concentration problems. If anxiety is experienced regularly, the individual may suffer from an anxiety disorder.

The implications of emotions in the school environment

There are many definitions in specialized materials that refer to emotions, most of which include the following components: cognitive (eg appreciation); physiological (heart rate); behavioral (approach, avoidance); facial expression (frown, smile) and affective (Kleinginna & Kleinginna, 1981; Parkinson et al., 1996; Scherer, 2000; Mauss et al., 2005). Pekrun et al. (2002) (Apud Holic, Crețu, 2018: 81) defined academic emotions as „those emotions experienced in school contexts that are associated with educational activities or their outcomes relative to a normative quality standard”. „These are the emotions that refer to the pleasure of learning and the pride offered by success or evaluation anxiety. In the past, these school emotions have been neglected in research in the field of educational psychology, with the exception of evaluation anxiety” (Holic, Crețu, 2018: 82).

Recent studies have classified school emotions in terms of valence and activation (Pekrun, 2000; Pekrun et al., 2002). Valence: refers to the extent to which emotions are considered positive (eg joy, delight) or negative (anger, anxiety, boredom). Activation: the extent to which emotions are considered to be physiologically activating (eg delight, optimism) or deactivating (eg relaxation, relaxation). Through them, four groups of school emotions were identified: positive-activating emotions (eg optimism, joy, pride); positive-disabling emotions (e.g., gratitude, relaxation, relief); negative-activating emotions (eg anger, anxiety, frustration, shame); and negative-disabling emotions (e.g., boredom, disappointment, sadness, helplessness).

In the last 10 years, there has been an increase in awareness that emotions are essential for people's efforts to achieve results. Emotions are no longer considered only epiphenomena that can occur in school environments, but that have no instrumental relevance. In current research, affect and emotions are recognized as very important for student learning, school achievement, personality development, and health (Schutz & Lanehart, 2002; Efklides & Volet, 2005; Linnenbrink, 2006; Linnenbrink -Garcia & Pekrun, 2011; Schutz & Pekrun, 2007).

The importance of emotions experienced by students in the educational context has been recognized by researchers in various fields, including the personality who has been concerned since the 1930s with the study of assessment anxiety (Zeidner, 1998), research on school motivation (Heckhausen, 1991) or recent studies in the field of educational psychology.

Controlling emotions in the school environment (Pekrun, 2000) is an attempt to provide such an integrative framework. This was based on the premise that current approaches to emotions experienced in the school environment share a number of hypotheses and, for this reason, can be

considered as complementary. It is assumed that students' assessments of ongoing school activities as well as past and future outcomes are considered of paramount importance in this theory. This key element of the theory states that individuals experience specific school emotions when they feel in control or not of learning activities and their outcomes that are important to them, which implies that control assessments and the value assigned to the activity / outcomes are the determining factors of these emotions.

Emotional regulation can be defined as a set of processes by which people try to redirect the spontaneous flow of their emotions. During emotional adjustment, people can intensify, maintain or reduce positive and negative emotions. Therefore, emotional regulation often involves changes in the emotional response.

Traditionally, psychologists have assumed that efforts to achieve emotional regulation serve hedonic needs aimed at obtaining pleasure and preventing pain (Westen, 1994; Larsen, 2000). Negative emotional states are costly because they mobilize a wide range of mental and physical resources of the individual (Sapolsky, 2007). Need-oriented emotional regulation can thus be adaptive, allowing individuals to conserve these resources by promoting a rapid return to the necessary pleasurable states. Because hedonic needs are supposed to operate on subcognitive levels of information processing (Panksepp, 1998), then need-oriented emotional regulation can function even in the absence of any conscious goal of emotion regulation. Indeed, hedonic needs can be activated immediately after the emergence of emotional stimuli (Berridge & Winkielman, 2003, Neumann, Förster & Strack, 2003) and because the functions of emotional regulation are aimed at obtaining immediate gratification, in most cases this regulation is one of impulsive type (Tice, Bratslavsky & Baumeister, 2001).

The link between anxiety and educational skills:

The concept of evaluation anxiety has been studied since 1952 and has aroused the interest of various researchers concerned with the fields of educational and social psychology. The phenomenon itself, its construction and measurement were the point of great interest of those passionate about this issue, paying increased attention especially in observing its manifestation and identifying the types of intervention.

Assessment anxiety is actually a strong emotional reaction that an individual experiences before and during an examination (Akca, 2011). „When students are placed in an evaluative situation, comparative behaviors will lead to increased anxiety that will disrupt their focus on doing what is needed to successfully complete work tasks” (Zeidner & Matthews, 2011 apud Holic, Crețu, 2018: 82).

Liebert and Morris (1967) indicated that „worry” and „emotionality” are present in measuring the concept of evaluation anxiety and represent two different components. The worry component refers to thoughts that distract from work, self-disapproving ruminations, and other distractors of the thought process associated with testing-evaluation. The emotionality component refers to biological and bodily responses that are associated with anxiety (increased heart rate, headaches, sweating, etc.) (Cassady, 2004a).

As results suggested by the meta-analyzes performed, cultural factors influence the frequency, intensity and quality by which anxiety is experienced and expressed. Examples of parameters affected by culture include: cognitions, such as assessments, perceptions, and meanings attributed to evaluative situations; affective issues such as frequency, intensity and quality of

anxiety in evaluative contexts; and behavioral issues such as coping modalities or specific-cultural resources (Zeidner, 1998).

School performance and motivation

School performance is a type of performance that appears as a product of continuous school experience and learning. High performance increases learning efficiency, and failures reduce it.

School performance is an important benchmark of a person's future achievements throughout life, but there are winners in school who have not confirmed these successes in the profession and / or personal life, this fact does not show the lack of importance of school results that can determine other significant achievements throughout.

The question is why some children / adolescents do not learn or do not solve school tasks satisfactorily. These results are given by aptitude factors, motivational factors (lack of valorization at home and in school, belief in the existence of alternative possibilities, easier, social achievement), but also environmental factors (young people come from disadvantaged social backgrounds, where the level of education is low and where family support is inadequate). It is the duty of educators and parents to pay close attention to these phenomena, due to the fact that they affect a large number of young people and mark their long-term lives.

On the other hand, people with high intellectual skills experience everything that happens around them from a different perspective compared to the general population, in terms of qualitative differences, such as sensitivity, idealism, receptivity, asynchrony, introversion, complexity, perfectionism and moral concerns (Silverman, 2002).

Performance as a general concept represents the achievement of excellence, special achievements, accomplishment of tasks at certain standards of completeness and correctness in a certain field of cultural or social life (sports, literary, artistic, technical, economic, financial, etc.).

The period of youth or prolonged adolescence is the period of full bio-psychic stabilization and maturation in which social, professional, marital, parental identities are balanced by gaining a status and role with relevant influences for the evolution of personality and behavior of young people. Man undertakes a lot of activities: he eats, plays, learns, collects works of art, helps others, etc. A common feature of these activities is motivation, which is their first chronological element. Recent experimental studies illustrate the influence of each factor, followed by a series of empirically derived causal models that link the factors involved to the results obtained. Higher education institutions are beginning to provide assistance to students, especially freshmen, to develop their so-called study and self-regulation skills (such as time management).

One of the biggest problems, but also the opportunities of the 21st century for all universities, will be the focus on students and working with them, so that they become more motivated and thus succeed in the educational process. In school, we often wonder why some students do not learn, why they behave undisciplined, why they are not respectful of teachers? and why other students are diligent, learn well or very well, are respectful, and get involved in university assignments. And in everyday life we find that some achieve something, while others prefer to do nothing or, if they do something, do that something of salvation. All this happens because the behavior of the human individual is always based on several motives: needs, intentions, tendencies, interests, aspirations, ideals, which support and strengthen or, on the contrary, do not support and weaken certain behaviors, facts or actions.

Motivation is the set of motives or predominantly internal factors that trigger the activity of the individual, and therefore of the student, orients it towards the achievement of certain goals and energetically supports it. physiological needs or abstract ideals” (Al. Roșca, 1943: 31).

Negative motivation is determined by stimuli such as punishment, threat, blame, etc. Negative motivation is considered a real calamity when it causes a drop in the learning activity of a student or a class. Maria-Elena Druță (Druță, 2000: 163-165) analyzes in detail the factors of spreading students' negative motivation or "school demotivation". Among the sources of demotivation are mentioned: understanding the learning process as an alienating work, as an uninteresting, useless and meaningless activity; the absence of clear objectives from the teacher, which determines that the student does not know what is expected of him; the teacher's poor training, the absence of pedagogical talent, his attempt to impose himself dictatorially and not by competence; the exaggerated indulgence of the teacher and the teaching staff; absence of feedback or the presence of only negative feedback; unfair treatment of students, which leads to a feeling of futility of efforts; family tension, due to misunderstandings between parents; lack of adequate conditions for study and rest; low family morality; exaggerated concern for the child's academic success.

Objection

The general objective of the paper was to identify a relationship between anxiety with its various forms (state anxiety) and indicators of school performance (attention difficulties).

Hypotheses

Hypothesis no. 1. It is assumed that there is a significant correlation between State Anxiety and DIFCON-difficulty concentrating.

Hypothesis no. 2. It is presumed that there is a correlation between State Anxiety and MOTSCA - academic motivation.

Hypothesis no. 3. It is assumed that there is a difference between girls and boys in terms of EMAS anxiety - the cognitive dimension of anxiety.

Hypothesis no. 4. It is assumed that there is a difference between girls and boys in terms of DIFCON- difficulty concentrating.

Research tools

The Endler Scales Multidimensional Anxiety Assessment Test and the School Motivation and Learning Strategies Questionnaire (SMALSI) were used as tools for this research.

Study participants

The research involved 60 subjects, namely 30 girls, students at a College in Constanta and 30 boys, students at the same College. The age of the students is between 15 and 16 years old. Informal consent was obtained from all students in the classes in which the test was performed.

Data analysis and processing

Hypothesis 1. It is assumed that there is a correlation between State Anxiety and DIFCON-difficulty concentrating.

Table 1. Correlations Spearman's rho

		TOTAL.EMAS.S	DIFCON	
Spearman's rho	TOTAL.EMAS.S	Correlation Coefficient	1.000	.493**
		Sig. (2-tailed)	.	.000
		N	60	60
	DIFCON	Correlation Coefficient	.493**	1.000
		Sig. (2-tailed)	.000	.
		N	60	60

** . Correlation is significant at the 0.01 level (2-tailed).

We used the non-parametric Spearman method because the TOTAL EMAS S and DIFCON scale (difficulty concentrating) have an asymmetric distribution according to the normality test and histograms.

The hypothesis is confirmed $p < 0.05$, at the significance threshold ($p = 0.000$), there is a positive correlation, statistically significant between the analyzed variables (Spearman correlation coefficient = 0.493), the higher the state anxiety, the greater the concentration difficulties.

Anxiety can occur at any age and is most often caused by a combination of factors. Among the most common causes are genetic predisposition, various imbalances in brain chemistry, family history, social influence and life experiences.

The brain seems to be extremely plastic in adolescence and extremely sensitive to stress - this conclusion comes from the fact that we remember that period much better than any other, then multiple changes occur, and statistics show that this is the preferred age at which they appear. serious psychological problems. Un mediu de lucru stresant, un eveniment traumatizant, posibil abuzuri in copilarie, divortul parintilor, viata alaturi de un parinte alcoolic, toate acestea pot contribui la dezvoltarea unei tulburari de anxietate.

We can describe anxiety as a state of anxiety that we feel throughout the body and that fills our minds with doubts, worries, obsessions and negative assumptions about future events. Annually, about a quarter of Europe's population suffers from symptoms of anxiety and depression, according to the World Health Organization.

Sometimes, in anticipation of an important event, anxiety can increase in intensity to a level that makes our lives difficult and prevents us from functioning normally (we are agitated, we suffer from headaches, difficulty concentrating).

Everyone is experiencing anxiety. It is a natural, important emotion and is expressed through agitation and worry, fear due to the danger a person feels, caused by some sudden changes. However, sometimes anxiety becomes a response to the unhealthy, exaggerated stimulus.

Somatize. They may complain of muscle tension and stomach cramps, headaches, pain in the limbs and back, fatigue or discomfort associated with pubertal changes. They may have excessive sweating, hyperventilation, tremor and all this is triggered little by little.

Anxiety during adolescence usually focuses on changes in the way the adolescent's body looks and feels, social acceptance, and conflicts over independence. When overwhelmed with anxiety, teens may seem extremely shy. They may avoid regular activities or may refuse to engage in new experiences.

To try to lessen or deny fears and worries, they may engage in risky behaviors: drug experimentation or impulsive sexual behaviors.

Avoiding school can be caused by a significant change at school, such as the transition to high school or high school. It can also be triggered by something unrelated to school, such as a divorce, illness or death in the family. Some young people become afraid of gang activities or insecurity in school.

After applying the tests to the DIFCON scale-attention difficulties, I noticed an average score of 20.10. Analyzing the values obtained from the application of the questionnaires, out of a total of 60 students, high scores had 8 of them, 7 girls and 1 boy, so it confirms the hypothesis studied below in which we show that girls have a higher degree of attention deficit than boys in stressful situations. Boys can control their condition better than girls. This fact has been studied, analyzed and confirmed by various psychologists and sociologists over the years.

As can be seen in the descriptive table, the statistical average for state anxiety is 32.40, a good average for the total score, but with certain exceptions that consist of high values obtained in the tests of some students (10 in number), they obtaining scores very big.

Hypothesis 2. It is assumed that there is a correlation between State Anxiety and MOTSCA - academic motivation.

Table 2. Correlations Spearman's rho

		TOTAL.EMAS.S	MOTSCA	
Spearman's rho	TOTAL.EMAS.S	Correlation Coefficient	1.000	
		Sig. (2-tailed)	.470**	
		N	.000	
	MOTSCA	Correlation Coefficient	.470**	1.000
		Sig. (2-tailed)	.000	.
		N	60	60

** . Correlation is significant at the 0.01 level (2-tailed).

Hypothesis no. II is confirmed, the significance threshold Sig 2 -tailed = 0.000, strong positive correlation between TOTAL EMAS -state and MOTSCA- academic motivation, we used the non-parametric method Spearman. observes very well in histograms and in the test of normality). The Spearman correlation coefficient is positive = standard deviation / sample mean = 0.470.

According to the study, it is observed that being anxious can be a beneficial component in terms of academic motivation. Subjects who had high scores on state anxiety (EMAS - state) and their motivation (MOTSCA - academic motivation) increased. These are positively correlated with each other.

It is understood here that people who are more anxious find motivation in everything they do to strengthen their self-esteem and confidence that they are capable and worthy of appreciation or perhaps are positively motivated by the group, teachers or family.

Overall I noticed that the values calculated on the academic motivation scale are quite low and now I mean the average that does not exceed half of the maximum score (average = 18, and

the maximum score = 51), According to the data resulting from the scores we have a number of 4 girls out of the total of 60 students, who obtained a high score compared to the rest of the students, which means that these people have a high motivation correlated with high scores on the state anxiety they perceive.

Academic motivation (motivation to learn) remains an important factor in maintaining students' performance during classes.

Motivation to learn deals with the psychological processes that explain the appearance and evolution of learning activities and its effects. Learning has a safe role for motivation to study; learning processes are naturally a part of education and academic motivation.

Hypothesis 3. It is assumed that there is a difference between girls and boys in terms of EMAS state anxiety - the cognitive dimension of state anxiety.

Table 3. Test Statistics

	COGNITIV
Mann-Whitney U	190.000
Wilcoxon W	655.000
Z	-3.863
Asymp. Sig. (2-tailed)	.000

a. Grouping Variable: GEN

We applied the non-parametric Mann-Whitney U method.

There is a significant difference between girls and boys Sig 2 tailed = 0.000 <0.05.

Cognitive anxiety is the mental manifestation of anxiety, are specific thought processes that occur during anxiety, such as worry.

Anxiety is a multisystem response to a perceived threat or danger. It reflects a combination of biochemical changes in the body, personal history, patient memory and social situation. As far as we know, anxiety is a unique human experience. Other animals clearly know fear, but human anxiety involves an ability to use memory and imagination to move forward and forward in time that animals do not seem to have. Anxiety that occurs in post-traumatic stress syndromes indicates that human memory is a much more complicated mental function than animal memory. Moreover, much of human anxiety is produced by anticipating future events. Without a sense of personal continuity over time, people would not have the „raw materials” of anxiety.

„It is important to distinguish between anxiety as a feeling or experience and an anxiety disorder as a psychiatric diagnosis. A person can feel anxious without having an anxiety disorder. In addition, a person who faces a clear and present danger or a realistic fear is not usually considered to be in a state of anxiety. Anxiety often appears as a symptom in other categories of psychiatric disorders” (Anxiety | Encyclopedia.com).

Regarding the present study, we observe that boys are more cerebral than girls, do not remain anchored in thinking games and do not let themselves be dominated by them, obtaining a much lower score than girls, the average is observed in male students of 14.13, and in girls = 21. Analyzing the table of scores, we found that 7 girls obtained almost maximum scores, which is

very worrying, because these students can not carry out their school activities properly due to the perceived anxiety, quite high, worryingly high.

Hypothesis 4. It is assumed that there is a difference between girls and boys in terms of DIFCON- difficulty concentrating.

Table 4. Test Statistics^a

	DIFCO N
Mann-Whitney U	254.500
Wilcoxon W	719.500
Z	-2.896
Asymp. Sig. (2-tailed)	.004

a. Grouping Variable: GEN

We have a significant difference between girls and boys = 0.004 < 0.05.

The hypothesis is confirmed, we have a significant difference between girls and boys in terms of attention difficulties.

This hypothesis is consistent with hypothesis no. 1 where we analyzed the difficulties of attention in a state of anxiety.

A worried teenager behaves less well in school, sports and social interactions. Too much worry can lead to the failure of its potential. A teenager who experiences great anxiety may be overly compliant, perfectionist, and insecure. Trying to get approval or avoid disapproval, he can redo tasks or postpone. The restless teenager often seeks excessive reassurance about his identity and whether he is good enough.

The high scores were obtained by the girls in number of 7 and one boy, they have registered values much higher than the average, this shows us that the girls are more fun, they can't get together, they concentrate as well as the boys who have a greater capacity for control over the self and thoughts.

School records can be viewed to identify how the adolescent's performance and functions in school have been affected by the anxiety felt by adolescents.

Conclusions

After analyzing the study hypotheses, we conclude that anxiety is a component that is part of adolescents' lives, they live with it and try their best to cope, but due to the fact that adolescence is a period with multiple changes, these young people need by the openings of the great people, of the teachers, of the competent ones and able to support them in their fight with the feelings, desires and thoughts that come upon them, in order to develop normally and beautifully and for the future of our country to be one that to be able to rely!

„If your teen is willing to talk about his fears and anxieties, listen to him carefully and respectfully. Without reducing your feelings, help him understand that increased feelings of anxiety about the body, performance and acceptance of colleagues and general uncertainty are all natural parts of adolescence” (Your Adolescent - Anxiety and Avoidant Disorders (aacap.org))

„By helping him pursue his anxiety towards specific situations and experiences, you can help him reduce the overwhelming nature of his feelings. Assure him that although his worries are real, he will most likely be able to treat them and that as he gets older, he will develop different techniques to better cope with stress and anxiety” Your Adolescent - Anxiety and Avoidant Disorders (aacap.org).

If fear begins to take over your teenager's life and limit his or her activities, or if anxiety lasts for more than six months, seek professional advice. Your doctor or teacher may be able to

recommend a child and adolescent psychiatrist or another professional who specializes in treating adolescents.

Managing anxiety disorders - as with any adolescent emotional disorder - usually requires a combination of treatment interventions. The most effective plan must be individualized for the adolescent and his family. While these disorders can cause considerable suffering and disruption in the adolescent's life, the overall prognosis is good.

Treatment for an anxiety disorder begins with an assessment of symptoms, family and social context, and the degree of interference or impairment in the adolescent. Parents, as well as the adolescent, should be included in this process.

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