

**EDU WORLD 2022****Edu World International Conference Education Facing Contemporary World Issues****EVALUATION ANXIETY IN EDUCATIONAL ACTIVITIES**

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**Abstract**

This study presents theoretical and practical aspects regarding the child's assessment anxiety in middle and high school education. The main objectives of the study are focusing on the factors that influence test anxiety, identifying the relation between emotional states and assessment anxiety, finding the main emotions that students experience at the time of the assessment, comparing the assessment anxiety levels of high school and middle school students after the assessments. The aim of this paper is to identify the most obvious emotional mood between students when they pass an exam and to discover the efficient solutions for this test anxiety. We use the questionnaire for measuring text anxiety level. This study makes a comparison of significant results on study levels of test anxiety and its influence on school performance. In this paper we underline the value of formative assessment and self-assessment as efficient methods for using assessment for learning. We propose to use a various way for evaluating the competences and the self-assessment in education.

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## 1. Introduction

Anxiety for the test is a very common experience for many people, in general in life, and before the test or exam, especially. In many educational situation, a low level of stress can help you do more efficient, but the higher anxious level can be very difficult to control. In educational field, when the peoples have high level of stress that it interferes with exam performance and it is define as anxiety for evaluation or test anxiety. Anxiety is a psychological disorder that makes people deal with an extremely high level of stress, especially when they assessed. While many persons deal with a certain level of stress who appear before or during the tests, assessment anxiety can influence style of learning and determine the low test performances. Anxiety for the test is a kind of anxiety which are influenced the level of performance. The articles about assessment in educational field are numerous and varied because there are influenced by many changes of this process, but also because there were re-discovered the consequences for moral development, for decisional responsibility for entire personality of the people. (Clipa, 2015; Manolescu, 2019). Most of the people have the abilities and knowledge to manage very well with this stress for evaluation. The persons are very different in these perceptions and reactions upon this level of stress. One of these people fell only the low level of stress and they consider the challenging situations and others consider like a very hard situation who affect the focus during the exam. A low level of the stress can be helpful, put the mind in alert zone and focusing the attention to the exam subjects and approach. The authors (Everson et al., 2020) suggests that there is a relation between excitement levels and performance. In essence, the grow up the level of stress can help to concentrate, but it is a point for perception and if the level of stress are more that point, the person are influenced in a negative way and the focus are affected. Once these stress levels fit within limits, excessive anxiety that you can face may influence test performances. Excessive fear can hold back concentration and you may force yourself to remember all studied information. You may feel that all the information you studied for a long time seem inaccessible in your brain. This lack of concentration and reminder of information adds more anxiety and stress, making difficult concentration on the test. It can also be the variant where all this stress, anxiety or fear may have a reverse effect, meaning an improvement in performance and school achievement level. This paper presents theoretical and practical aspects regarding the child's assessment anxiety in different levels of education.

## 2. Problem Statement

According to Sarason (1961) “anxiety is an emotion characterized by an unpleasant state of inner disorder, often accompanied by a nervousness, as rocking back and forth, somatic disorders and rumination” (p. 15). 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. 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 term of “anxiety” was introduced for the first time by Freud in 1936. He thought that anxiety is in fact the result of some repressed sexual tensions. Later, he replaces the term with something more precise. Neagoe and Iordan (2002) define the term differently and they affirm that 'anxiety occurs, as a combined reaction to stress and actor factors, defence mechanisms and diverse defence reaction' (p.

75). Although the cognitive and behavioural models of anxiety are often grouped, proponents of each perspective tend to emphasize different variables within their theories (Popa et al., 2018, p. 22). Behavioural theorists tend to focus on experiential learning that involves classical and operant conditioning that leads to the development and maintenance of fear. An example of a behavioural model is Mowrer's model of spreading and maintaining fear. According to Mowrer, fear begins with a classic event of conditioning, where an object is related to an aversive event, so that the body learns to fear of that object. Fear is maintained by the operant conditioning in which the avoidance behaviour leads to fear diminishing, which in its turn reinforces avoidance.

Perhaps the best-known cognitive model of anxiety disorder is David Clark's PD model (Clark, 1986). According to Clark, unexpected panic attacks are triggered by the appearance of normal physical sensations that are misinterpreted catastrophically by the individual indicating an immediate threat. This misinterpretation leads to an increased level of anxiety, which brings more sensations and catastrophic interpretations. Very quickly, what started as a physical phenomenon slowly turns into a panic attack. Many researchers were interested about *assessment anxiety* phenomena, and it has accumulated various definitions. According to this authors this was measured using a scale who are in unidimensional way, as it has a singular attribute (Cassady & Johnson, 2002). Other authors, Sarason (1961) noticed the levels of test anxiety can have many factors, which imply both an increase of the change in physiological values of the people and many negative and irrationals thoughts. After many years of the research of this special type of anxiety, it is well known the compositions with two different factors: focus and emotionality. These factors may influence social interactions and collaboration between peoples. The authors during the years, are agree about mixture between the psychological and physiological components who determine the level of anxiety test. Within this general conceptualization there are broad and narrow definitions. Restricted definitions focus on fear of failure (emphasizing on how performance is assessed) or anxiety about assessment (emphasizing on how assessment anxiety can be localized with other, so-called, subclinical anxieties, including athletic performance, speaking in public, etc.). They emphasize a social dimension in which performance is judged by others.

Zeidner (1995, p. 35) presents three components of assessment anxiety:

- i. cognitive: negative thoughts and self-depreciation that occur during assessments (e.g., If I fail this exam, my whole life is a failure) and difficulties of performance inhibiting that may occur (e.g., remembering facts and difficulties in reading and understanding questions)
- ii. affective: assessment of the person on its physiological state (as tension, tight muscles and trembling);
- iii. behavioural: poor learning skills, work avoidance and postponing.

The same as many psychological constructs, the more carefully they are analysed, the more problematic they become. For example, studies show that many students who are extremely anxious about assessment put more effort into it, than students who have low assessment anxiety, as a compensatory mechanism; and some students who are anxious about assessment have good study skills, and some do not. Some of these components define the test in terms of characteristics, others in terms of effects, and some in terms of the outcome.

Assessment anxiety is the experience of feeling an intense moment of fear or panic before and/or during an exam or test. There are two types of anxiety:

1. Low anxiety: students who suffer from low anxiety can feel a little bit nervous regarding the following exam but are still able to focus on studies or addressed questions during the assessment. Usually, the students with low anxiety are not invaded by intrusive thoughts or feel weakened by the exam.

2. High anxiety: Students who have high anxiety show an immediate anxiety reaction when exposed to the test situation. They try to avoid the situation by not taking the exam or they can endure it, but with extreme fear.

Students with high or low anxiety may respond to assessment in different ways. However, research shows that managing anxiety efficiently can effectively help with exam performance. The challenge is to recognize when the anxiety passed an optimal level, so that it begins to affect the ability to complete that assessment, this situation corresponding to a high level of anxiety. Some physical responses to high anxiety include very fast heartbeats, wet hands, rapid breathing, and restlessness. The physical response is usually experienced at high levels of anxiety when the "fight or fly" response is triggered. Thus, our bodies react to a perceived threat and, while it is uncomfortable, it is not harmful. Anxiety can be helpful in certain situations, for example, if you are in danger (jump out of the way of a car). It can also help increase attention to the threatening event and improve the response. But it is not as useful when the threat you face is cognitive, as an exam. Thoughts involved in assessment anxiety usually include negative thinking about performance (also known as worries) and / or physical reaction to the thought of the next exam: "I will fail", "I gave up", and „My heart skips my chest, and I can't concentrate". Studies proved that assessment anxiety is spread within large population, especially among women. It is estimated that 2 of 3 students from each classroom are affected by high level of anxious and ten million students from primary school do not have the best performance because of the assessment anxiety (Noel & Cartier, 2016; Talbot, 2016).

Furthermore, previous research asserted that women are predisposed to experience high levels of assessment anxiety. A recent article used Test Anxiety Inventory (TAI), a scale with sub-scales that assess concern and emotional state, to study gender differences regarding assessment anxiety. This study discovered that female respondents obtained a higher level both regarding concern as well as emotionality, fact that proves a higher level of assessment anxiety generally (Everson et al., 2020). Also, Cassady and Johnson (2002) underline the tendency of woman to have the high levels of emotionality then man and to determine the growing up the test anxiety (p.283). When we consider the previous papers, the principal causes for test anxiety were growing academic requirements for the students. The level of stress for test is higher and the students can live the exceed test expectation who are increases. The focus is more on this exceeding stress and anxiety becomes an issue.

These requirements reflect the modern evaluation on the school who received the scores after results of the students and this affect the general stress about evaluation in school and increases the pressure on teachers to have performance of the students (Von der Embse et al., 2013). Due to the concern about meeting the objectives for objectivity of the evaluation, less time and energy for reducing students' anxiety resulted from these tests. Five of the most interesting papers studied that came in

support of the study are summarized in the table below (Table 1). They provide details about assessment anxiety and how it influences school performance.

### 3. Research Questions

The research questions of the study aim are relative to identifying the relation between emotional states and assessment anxiety, to finding the main emotions that students experience during assessment and to comparing the assessment anxiety level of the middle school students to the one of the high school students as a result of the assessments.

**Table 1.** The studies for test anxiety

Authors	Theme	Studied variables	Sample	Instruments	Results
(Cassady & Johnson, 2002)	Cognitive Test Anxiety and Academic Performance	v.i high/low anxiety level v.d school performance assessment situations	Sample 168students.,144 male and 53 female	Test Procrastination Questionnaire (TPQ) is a 10 items Likert test, scale that assesses self-reported probability of the student to post-poner the tests. The Cognitive Test Anxiety scale.	The study's results targeted cognitive power identification. The results of the correlational analysis are presented at the beginning, followed by variance analysis examining the differences between the students with high\low emotionality levels and cognitive test anxiety, as well as a gender test for differences regarding anxiety and performance test
(Everson et al., 2020)	a confirmatory factor analysis of the test anxiety inventory	v.i gender female/male, level of anxiety v.d emotions, concern	The research samples 501 persons 219 male and 282 female	Test Anxiety Inventory (TAI) All analysis were done using LISREL VI	-there are differences of anxiety levels between men and women -women have higher levels of concern and emotions than men do
(Iulia, 2020)	Anxiety psychology in children and teenagers	v.i male/female low/high anxiety level v d: family climate, hostility, sense of inferiority	Research sample comprised 792 children of different ages: 152 pre-schooler,	The anxiety test for children R. Temml, V. Amen and M. Dorca. Unfinished	-46% of pre-schoolers present high levels of anxiety; -pre-schoolers coming from mono-

			170 small schoolers aged between 7 and 11, 320 pre-teens aged between 10 and 15 and 150 teenagers aged between 16 and 18.	Sentences Test Family Drawing Test Ollendick Children Phobias Test CPQ Children Questionnaire. Children Anxiety and Taylor Anxiety Scale	parental or disintegrated families have a higher anxiety level -girls are more prone to anxiety than boys -preteens present a moderate anxiety level -teenagers have a high anxiety level due to certain factors
(Aydin et al., 2020)	Test Anxiety among Foreign Language Learners: A Qualitative Study	v.i gender, age, skills level v.d anxiety before, during and after assessment	Sample 57 participants – 30 women and 27 men	18 participated to the focus group, 19 wrote essays about feelings felt during assessment and 20 were interviewed	-First of all, because data were collected by the quantitative use of instruments and research techniques, the findings reflected noticeable phenomena and the realistic opinions and experiences of the participants regarding the research questions, more than their perceptions.
(Blood et al., 2007)	Anxiety levels in adolescents who stutter	v.i anxiety level, gender v.s self-esteem, students with speaking problems	Sample 36 students that stutter and 36 are normal	Standard books for anxiety and self-esteem	83% of the teenagers that stutter and 95% of the ones that do not stutter got scores within the normal interval. - There were no significant differences at the self-esteem scale, 86% of the teenagers that stutter and 97% of the teenagers that do not stutter got scores within the normal-positive interval.

#### 4. Purpose of the Study

**The aim of the research** is the identification of the most obvious emotional states between students when they give any assessment test as well as the discovery of some efficient and effective solutions to overcome this assessment anxiety.

#### 5. Research Methods

The method used was the survey based on a questionnaire. The tool used was the Assessment Anxiety Scale, filled in by the students. The scale was developed by Douglas & Benson and taken from the paper *Measuring test anxiety in children: scale development and internal construct validation* (2004) and adjusted for research purposes. A 24-item scale was given to a developmental sample (N = 100) of students from grades 8-12 (N1-8th grade, N2-12th grade,) to obtain element analyses and reliability estimates that led to a scale of 23 items. The reduced scale was given to a validation sample (N = 100) to obtain evidence of structure validity. This scale includes 24 items of which 10 questions are related to the variable symptoms (e.g. I feel dizzy), 5 consider behaviour (e.g. my arms and legs tremble and shake.), 7 deal with automatic reactions (e.g. I feel more nervous and anxious than usual), 1 is related to the test results and one for suggestions to reduce the level of anxiety.

The independent variables are: Vi-Anxiety level - high/low, VI- gender - female/male, Vi-Panic attacks -often/rare

The dependent variables are: Vd - academic performances and Vd - students reactions.

**The sample** of this research consists in 100 pupils from middle school and high school, namely 8<sup>th</sup> and 12<sup>th</sup> grade from a rural school from Suceava County.

The questionnaire was applied on May-June 2021.

**The hypothesis of the research** were:

**Hypothesis no. 1;** *We suppose that the students from 12th grade have panic attacks more often than those in 8<sup>th</sup> grade;*

**Hypothesis no 2** *There is a correlation between the performances of the students and their gender category*

**Hypothesis no. 3** *There is a correlation between the anxiety level and students' reactions.*

H1 For hypothesis 1 we have the following results: analysing the hypothesis We assume that students in grades XII have more frequent panic attacks than those in VIII grade; we concluded there are significant differences between students' answers. Doing "A descriptive analysis" of the two levels it can be noticed that the high school students had panic attacks in a higher percentage than middle level students. So only 40% of the students surveyed in middle level answered that they had panic attacks while in high school 72% of students answered that they had them. The difference between N1 and N2 on panic attacks is 32 percent.

H2 For the second hypothesis, There is a correlation between the students performances and gender category" the results were different on classes.

**Table 2.** Correlation between gender and performance for VIII grades

Correlations			
	12 <sup>th</sup> grade	Specify the gender	As are the results
Specify the gender	Pearson Correlation	1	,418*
	Sig. (2-tailed)		,038
	N	50	50
As are the results	Pearson Correlation	-,418*	1
	Sig. (2-tailed)	,038	
	N	50	50

\*. Correlation is significant at the 0.05 level (2-tailed).

In order to analyse the relationship between the gender variable and the students' results, we performed a Pearson correlation analysis. For the 12th grade students, the analysis result indicated that there is a significant correlation between the two variables. The extent of the correlation is average, the coefficient being -, 418. Given the value of the significance threshold  $p < 0.05$  we can say that there is a significant and negative relationship between the two variables (sig /  $p = 0.038 < 0.05$ ).

**Table 3.** The correlations between the performance and gender for XII grades

Correlations			
	8 <sup>th</sup> grade	Specify your gender	As are the results
Specify your gender	Pearson Correlation	1	-,027
	Sig. (2-tailed)		,898
	N	50	50
As are the results	Pearson Correlation	-,027	1
	Sig. (2-tailed)	,898	
	N	50	50

Analysing the same hypothesis for 8<sup>th</sup> grade we can't notice significant results. In table no.2 Person correlation is low. There is no significant relation between the variables students' results and gender. "Person Correlation" , $r = -,027$  and  $p = ,898$ . ( $p > 0,05$ )

**Table 4.** The correlations between the Student anxiety and level of their reactions

Correlations			
	8 <sup>th</sup> grade	Level anxiety	I feel more nervous and anxious than usual
Level anxiety	Pearson Correlation	1	-,329
	Sig. (2-tailed)		,108
	N	50	50
I feel more nervous and anxious than usual	Pearson Correlation	-,329	1
	Sig. (2-tailed)	,108	
	N	50	50



H3. For the third hypothesis “There is a positive correlation between the students anxiety level and their reactions”.

**Table 5.** Correlations between anxiety level and reactions of students

		<b>Correlations</b>	
		Level anxiety	I feel more nervous and anxious than usual
Level anxiety	Pearson Correlation	1	-,549**
	Sig. (2-tailed)		,004
	N	50	50
I feel more nervous and anxious than usual	Pearson Correlation	-,549**	1
	Sig. (2-tailed)	,004	
	N	50	50

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

In order to analyse the relationship between the anxiety level variable and the reactions, we performed a Pearson correlation analysis in the SPSS program. For the 12th grade students, the analysis result indicated that there is a significant correlation between the two variables. The size of the correlation according to Cohen (1988) is large,  $r = -.549$ . Given that the value of the significance threshold  $p$  is less than 0.05 we can say that there is a significant relationship between the two variables ( $sig\ 0.04 < 0.05$ )

Table no. 5 Correlation between the level of anxiety general and test anxiety.

## 6. Findings

This study presents theoretical and practical aspects regarding the child's assessment anxiety assessment in different levels of education. The main objectives of this paper were based on the analysis of children's assessment anxiety in several levels of education, the effects of anxiety and directions through which we can remove this assessment anxiety. *All our hypothesis were confirmed after the analysis of the results.*

As a result of the results' processing the following conclusions were drawn:

Over time, students' assessment anxiety increases. If in the 8th grade only 40% of the students' state that they had a panic attack, in the 12th grade, 72% state the same thing.

The most common symptoms of anxiety are: dizziness, sweating, loss of balance, heart palpitations, abdominal pain and nausea, fear of going crazy and making a stupid gesture.

For 12th graders there are significant differences between the academic performance variable and the gender variable. We can assert that the level of test anxiety influences students' reactions and they become more nervous and anxious. Middle school students do not have the same reactions and are not as nervous and anxious as those in high school. The school performances of the 8th graders are not influenced by the gender of the students.

## 7. Conclusions

The most of the people describes a stressful situations before the exam and they experienced a high level of anxiety who affects the performance. In fact, a low level a stress can help you do your best. However, when this suffering becomes so excessive that it interferes with performance in an examination, it is known as assessment anxiety. Assessment anxiety is a psychological condition in which people face stress and an extremely high level of anxiety in assessment situations. Assessment anxiety is a type of performance anxiety. In situations where pressure is active and good performance matters, people can become so anxious that they are not actually able to give their best. When children have the skills and knowledge to do very well in these situations, their excessive anxiety affects their school performance (Clipa et al., 2021). A little nervousness can be helpful, making you feel mentally alert and ready to take on the exam's challenges. In essence, the increased level of excitement can help you do better in exams, but only up to a certain point. Once these stress levels fall in this line, the excessive anxiety you may experience can affect test performance. Excessive fear can make it difficult to concentrate and you may struggle to remember the things you have studied. This lack of ability to concentrate and recall information then contributes to even more anxiety and stress, which makes it difficult to focus on the test. But this stress, anxiety or fear may produce an opposite effect, namely increasing the level of performance and school success. Pupils' individualism and responsibility are two characteristics that lead to "considering the pupil who studies, the actor and co-responsible of its learning" (Noel & Cartier, 2016, p. 16). For teacher will be very appropriate to use the alternative forms of assessment for reducing the level of anxiety (Allal, 2016). There are much research who underline the added value of self-assessment in this cases or to prepare future teacher for teaching the test (Shogbesan & Faleye, 2016). Consequently, *self-assessment becomes a component of the metacognition* (Allal, 2016) and a way to assume the responsibility of the evaluation process. Clipa (2015) found that the use of some interactive strategies in the process of didactic assessment leads to an obvious improvement of both school and personal performance of students (Yan & Boud, 2021).

It is very important for teachers and for parents to be aware about this possibility to live the anxious the exam and to promote a peaceful relationship with children, to be near they in learning process and to try various way for assessment, inclusive assessment for learning.

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