The Impact of Anxiety Caused by the Matura Exams in High School Graduates Results

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Abstract: This study presents the results of a research work, aimed at highlighting the anxiety, which appears to seniors Matura exam season, its impact on the performance of students graduating in these exams.

Graduates are in a period in which projected somewhat future in professional guidance. They should study and achieve results much higher in the future have the opportunity to study in branches desired to have a good profession and create a positive image of themselves in their future in society.

Being that graduates Matura exams should be tested on the knowledge gained during three years of high education, the sheer volume of material to be learned and the short time available to prepare, longing for the achieve the highest possible results, pressure from parents and teachers to high expectations from their children or graduates, that in itself cause anxiety tests, undoubtedly increases anxiety to graduates before graduation exams, which affects their performance school final achievements.

This study wants to prove the hypotheses that:

Anxiety that accompanies graduation exams negatively affects seniors’ performance on these tests.

The purpose of this study is:
- To highlight the importance of Matura exams to graduate from high school academic performance;
- To highlight positive or negative impact of anxiety, causing Matura exams in high school graduate performance on these tests;
- To compare the individual with experience findings of studies conducted in connection with the anxiety that tests generally cause the results of the students;
- To bring something new to the field of studies on the impact of anxiety that accompanies Matura exams to graduates in their scores on these exams.

Empirical data were taken through the method of surveying to 110 high school graduates “Vasil Kamami” in Elbasan, in 2013.

The results of the research have concluded that Matura exams graduates cause anxiety and distress adversely affects those high school students who have above average academic achievement.

Key words: anxiety, Matura exams, graduates, impact
1. Introduction

The emotional reaction toward stress is called anxiety. The concept of anxiety is difficult to understand. It may be defined like a feeling of fear, sadness about the future. Anxiety it is classified in chronic anxiety that has began in childhood and anxiety during teenage years that comes from the need and concern to position of themselves on society.

Anxiety may be part of character or may be caused only on some situation.

Anxiety affects every age but most affected are the teenagers due to the big changes that happen in a short time. Physical and emotional changes, the need to be independent, self-esteem, the pressure in school all these things bring anxiety. Anxiety influences school results. When students are in good physical and emotional health they reach higher results. Being tested for their knowledge it’s a important and very spread custom but often brings anxiety (Austin Patridge, 1995). Anxiety may take over every time the students think of the punishments of failure or when he compares his grades with those of other students (Wigfield ç Eccles, 1989; Isooc Orit, 1997; Salend, 2012). Hembree (1988) concludes that anxiety during the exams brings negative results because anxiety makes students think that they won’t make it, blocking their memory and they don’t remember the concepts. Wine (1971) says that anxiety is related with worry and fear of failure. As result of low concentration on the questions on the exam, they have a low performance on their tests. Sian Beilock (2010) says that students that have a bad memory cause by the stress give only short answers meanwhile students who don’t suffer from anxiety are able to pass the test without problem. When the pressure was high many of the students failed the test by giving only short answers. Zeidner (1998) says that students get confused even in the easy section on the question and can’t remember much. According to a study Jan Owes (1990), 20% of the students due to the anxiety from the test have a low performance reflecting on their grades too. But other studies deny this hypothesis. Not always negative emotions make a person unable to face situations. Mc Donald (2001) says that if a person believes in its skills, all the negative feeling will be disappeared including anxiety. Mwamwenda (1994) says that anxiety grows much more in those situations when the academic future of the student is at risk.

2. Methodology

This study shows that anxiety is bigger during finals. The study is focused in finals because these exams are made to test the knowledge that students have achieved during high school, and these tests are the best way to value every senior. Exams take 80% and the average takes over 20% on the finals results.

This study seeks to prove the hypothesis that:
Anxiety that accompanies graduation exams negatively affects seniors’ performance on these tests.
Null hypothesis: the anxiety proven during exams doesn’t affect the results.

The research has been done on:
- Review of literature
- Questionnaires and surveys

The review of literature was to offer a contemporary overview about anxiety that appears to pupils, students, along exams, its impact on their performance on these tests.

The other option has been the questionnaires and surveys conducted 10 days before literature exam with 110 participants of the “Vasil Kamami” school, in Elbasan.
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The purposes of the application of questionnaires:

- Identification of experiencing the symptoms anxious before exams as a result of experiencing stress and anxiety.
- Identification of anxiety, which appears in Matura exam as a factor influencing the expectations of graduate outcomes of these exams.

The search is based on the negative effects of anxiety that accompanies the pupils and students in exams, has their expectations in these exams. This is noticed more to graduates, Matura exams, the importance of these tests have in giving a direction to the individual academic, anxiety that occurs before these exams, duplicated and anxiety in the transitional period to late teens.

Advantages and disadvantages of the used methodology:

Advantages of the questionnaires used for the realization of this study lies in the fact that:

1. The two questionnaires were used at the same time and the same persons, doing so results, assumptions about my study, to be more accurate and comparable.
2. The time in which they were thrown to the study questionnaires before the exam season. If measurements were made after completion will be exams, the results were not real and their credibility will be low, thus making the study so that the values fall.

3. Limitations

The main problem was collecting dates because the main purpose was that students should be asked for every exam they took. Unfortunately the questionnaires were made only for the math exam and literature exam. It must be stated that these polls do not represent our whole country system of finals.

3.1 The Sampling

They were 120 seniors from “Vasil Kamani” school, who took the questionnaires. They were chosen casually while they were on their break and they were free to reveal their identity or not. Only 110 revealed their identity from whom 75 were females and 35 were males. Their age varied from 18 to 19 years old.

3.2 The Time of the Study

The questionnaires were taken one day before the exams but the valuation of the polls and the result of math exam and literature exam took more than a month. The results were taken using the code of every senior with the permission of the school headmaster. In the questionnaires the only private information was that about the age, gender and if they wanted about their name.

Making the surveys and questionnaires;

The literature that I have read about anxiety has helped me to measure the anxiety that these student feel.

The first questionnaire was about literature and math exam. We wanted to know which of the exams caused more anxiety and then compared the result with their grades during the years and their performance during the finals. These exams were chosen because every student was obliged to do these two exams. In the questionnaires was a level from 1 to 5 to measure the anxiety that each exam caused to them. It scored with 5 the maximum of the anxiety cause by one exam and if the score is below 3 than we can say that’s a normal level of anxiety.

The second questionnaire is about physiological anxiety symptoms. These surveys try to show that the performance of the student and his emotional health is worse when in exam, the questionnaire is made up from 8
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statements which are valued from the senior with expression like: not at all, somewhat, and a lot. The measurement is according to likert scale with claims from: not at all (0), somewhat (1), a lot (3), adding up this point it would be

- Up to 10 points minimal symptoms of anxiety
- Up to 20 points moderate symptoms of anxiety
- Up to 30 points severe symptoms of anxiety

I would make a comparison between the annual valuation in math and literature and the results of the finals in both these subjects to prove the hypothesis.

### Table 1  The First Questionnaire: How Do You Feel When You Are Doing Exams?

<table>
<thead>
<tr>
<th>Nr</th>
<th>F</th>
<th>M</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>4.6</td>
<td>4.2</td>
<td>4.4</td>
</tr>
<tr>
<td>2</td>
<td>3.8</td>
<td>3.6</td>
<td>3.7</td>
</tr>
</tbody>
</table>

As we can see in the table Math exam causes 4.4 level of anxiety so is above the average. The anxiety level is higher in the female senior than in the male one. But in the Literature exam the anxiety level is almost the same in both genders.

The second questionnaire is about the symptoms of anxiety, and it was with likert scale and it consists on 10 affirmations.

### Table 2  The Second Questionnaire

**Have You Ever Feel the Symptoms of Anxiety (Dizziness, Hand Sweating, Headache, Vomiting)?**

<table>
<thead>
<tr>
<th>Nr of people</th>
<th>Minimal symptoms of anxiety</th>
<th>Moderate symptoms of anxiety</th>
<th>Severe symptoms of anxiety</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>F</td>
<td>64</td>
<td>43 F (95%)</td>
</tr>
<tr>
<td></td>
<td>32 F</td>
<td>32 M</td>
<td>2-M (2%)</td>
</tr>
</tbody>
</table>

As we can see from the table only one person answered the question with 9 not at all and 1 somewhat, this person suffers from the instability in the symptoms. 64 people suffer from moderate anxiety symptoms 32 of them are females and 32 others are males. 45 people suffer from severe symptoms of anxiety from them 43 are females and only 2 are males.

### 4. Analysis of the Results of the Study

Math exams cause more anxiety than Literature exams. More anxious seems to be the females but there is no much difference between to gender.

### Table 3  The Level of Anxiety in Math and Literature

<table>
<thead>
<tr>
<th>Nr</th>
<th>F</th>
<th>M</th>
<th>total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>4.6</td>
<td>4.2</td>
<td>4.4</td>
</tr>
<tr>
<td>2</td>
<td>3.8</td>
<td>3.6</td>
<td>3.7</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Nr</th>
<th>F</th>
<th>M</th>
<th>total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>6</td>
<td>5.4</td>
<td>6.4</td>
</tr>
<tr>
<td>2</td>
<td>6.2</td>
<td>6.4</td>
<td>6</td>
</tr>
<tr>
<td>3</td>
<td>6</td>
<td>6.2</td>
<td>6</td>
</tr>
<tr>
<td>4</td>
<td>6.7</td>
<td>7</td>
<td>6.2</td>
</tr>
</tbody>
</table>
As we can see that female students are more anxious about math exams than boys so it says even in the study conducted by Ostorne (2001) that states the same thing. But we can see in the second Table (Have you ever feel the symptoms of anxiety (dizziness, hand sweating, headache, vomiting), that male student even though are less anxious than the females about math exam have lower grades than females in both annual and finals grades. Therefore men tend to hide their emotions while females tend to be more honest about them. This has been confirmed even by Ashcraff in 2002 who says that females do not have more anxiety than males in math exams. Another thing is that literature causes less anxiety than math, because of math requires a more logical thinking and it uses more abstract concepts. In both subjects, seniors have been marked with 6, which is below the average and so it proves that their anxiety were justified.

### Table 4  The Symptoms of Anxiety (Dizziness, Hand Sweating, Headache, Vomiting)

<table>
<thead>
<tr>
<th>No</th>
<th>Minimal anxiety symptoms</th>
<th>Moderate anxiety symptoms</th>
<th>Severe anxiety symptoms</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td>64</td>
<td>45</td>
</tr>
<tr>
<td>Gender</td>
<td>M</td>
<td>32 F</td>
<td>43F</td>
</tr>
<tr>
<td></td>
<td></td>
<td>32M</td>
<td>2M</td>
</tr>
</tbody>
</table>

This table shows that 64 students experience moderate anxiety symptoms 32 of them are females and the other 32 are males. Also there are 45 students that have severe anxiety symptoms 43 of them are females and only 2 are males. This huge gap might come from the fact that:
(1) Females are more expressive about their feeling than males
(2) the questionnaires were filled on mostly by females (75 females and 35 males)

Anxiety has a bad influence on the average point grade and in the result of the finals.
The study and all the collected data show that anxiety is a very negative issue during finals making students not productive and confused about exams.

Hembree (1988) Concludes that anxiety during the exams brings negative results because anxiety makes students think that they won’t make it, blocking their memory and they don’t remember the concepts.

Sian Beilock (2010) says that in overpressure students gave short answers and got lower grades. Sarason reports than in 1980 the performance of the students is reduced when they had anxiety. To these hypotheses we added the data we collected from our polls. We tried to calculate the data by splitting the main sample in two halves. In one half were the senior who had an average above 7 and on the other half were the students who had an average below 7.

### Table 5  Annual Average Grade in Mathematics and in Literature, Compared with the Assessment in Matura Exams

<table>
<thead>
<tr>
<th>Nr</th>
<th>Assessment</th>
<th>total</th>
<th>female</th>
<th>male</th>
<th>Average above 7</th>
<th>Average below 7</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Annual average score in Mathematics</td>
<td>6</td>
<td>6.5</td>
<td>5.4</td>
<td>8</td>
<td>5.4</td>
</tr>
<tr>
<td>2</td>
<td>The final exam grade in Mathematics</td>
<td>6.2</td>
<td>6.4</td>
<td>6</td>
<td>7.4</td>
<td>6</td>
</tr>
<tr>
<td>3</td>
<td>Annual average score in Literature</td>
<td>66</td>
<td>6.2</td>
<td>6</td>
<td>7.6</td>
<td>5.5</td>
</tr>
<tr>
<td>4</td>
<td>The final exam grade in Literature</td>
<td>6.7</td>
<td>7</td>
<td>6.2</td>
<td>7.1</td>
<td>6.4</td>
</tr>
</tbody>
</table>

As we can see in the math sample male seniors have reached higher grades in their finals than in their annual point grade. Same thing happens with the females but in literature exam. Adding up everything in this table we can see that senior had a level of anxiety higher than normal but in the same time they got better results, meaning that anxiety has had on these students a positive influence.
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Facing the reality during the process of finals has been many misuses and frauds making it possible for the student below 7 point average to take higher grades than they deserve. So it was impossible to have a sample fit the reality.

Students with an average above 7 took 6.5 in Matura exams compared to the 8 that they took during the whole year, but in the students with an average below 7 they took 6 in the finals compared to the 5.4 they took during the whole year. So our hypothesis that students with higher level of anxiety don’t do well on Matura exams has been proved.

5. Conclusions

Senior experience anxiety before finals which affects negatively their performance during the exam; Females experienced more anxiety than males;

From our data we found that in the sample of seniors who had an average below 7, anxiety had a positive effect, but in those who had an average above 7, anxiety had a negative effect.

6. Recommendations

• Some advices must be given to all those who are part of the process of Matura exams, starting from the MASH structure, to the teachers.
• To know the real value of a senior finals must not take up so much percentage and the average of 3 years so little (finals 80% and average of all years of high school 20%). We think that the average point grade is more important than the finals.
• Also I recommend that the school psychologists must do a better job in reducing the exam anxiety in students.

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