# Entrance exams for the Universities and Technological Institutes of the country 2000-1. A statistical analysis.

## **Katopodis Giannis**

#### Abstract

### AIMS OF THE DISSERTATION

The basic aim of this dissertation is to pinpoint and present the quantitative differences (grading differences) and the qualitative differences (which concern the success or the failure of the Senior High Schools' graduates in the 2000-1 entrance exams for the Universities and Technological Institutes of the country) between the different kinds of Senior High Schools.

The analysis was based on various categories of Senior High Schools and specifically:

**Evening - Morning Senior High Schools** 

Private-Public

Large-Medium-Small

Athens' –Province's

Urban-Provincial

Terrestrial-Insular

Tourist regions' - Non-tourist regions'

By geographic prefecture

By county

By office and Direction of Education.

Where differences are pinpointed (quantitative and qualitative), an effort is made to investigate the different defining factors of success and failure. The factors that were investigated are the following:

Gender

Age

Study Direction

The fields that the candidates declared in their application forms

The preferences in the application forms

The ranking of the preferences in the succeeded faculty

The size of the Senior High School

The geographic position of the school

Combinations of the above

The evaluation of the quantitative differences was based on

- a) the marks in the two final grades of the Senior High School, when the candidates competed in common exam topics all over the country, and
- b) the general entrance mark which is the main factor for the calculation of the entrance rates for Higher Education studies.

The evaluation of the qualitative differences was based on the percentages of the successful and unsuccessful candidates of the various sub-groups.

This dissertation is part of the postgraduate degree specialising in Statistics, of the Statistics Department of the Economic University of Athens, for employees, under the supervision of the Statistics Professor, Mr Panaretos during the academic year 2002-3.

The interpretation and sociological approach of the differences that appear between the several types of Senior High Schools do not belong in the aims of this dissertation, but we hope that this research can be the starting point for further and in-depth investigation, which will indicate the deeper causes of these divergences.

The facts and the conclusions concern the school year 2000-2001, which is the second year of the implementation of the new system for accessing Higher Education Studies (known as the 'reform'). This system substituted, as it is known, the previous system and up to now has already suffered many modifications in order to cover its initial weaknesses.

In short we can mention some of the conclusions which we drew from this research. It seems that very few candidates prefer evening schools as a way to continue their studies in third-grade education despite the fact that these schools offer an attractive alternative way for University level studies mainly for those who are older than the usual students. Important divergences are being noticed in the success percentages between the three Senior High Schools' directions of studies, resulting in the constant increase of the candidates' preferences for the technological direction at the expense of the other two directions.

Although male students do not get better marks than female, they manage to be more successful. This phenomenon is being noticed only in the public schools, not in the private ones. Private schools seem to excel in marks and successes the public ones. Luminous exceptions are the public experimental Senior High schools, which have important grading and success percentages differences. The size of the schools and the geographical apportionment seem to relate with the success percentages and with significant grading differences. So, the bigger the school the more successful, while differences are found between Athenian and provincial schools at the expense of the second, between terrestrial and insular regions, between tourist and non-tourist regions at the expense of the insular and tourist regions.

Significant differences are also noticed between different prefectures of the country, which are bigger and more impressive if we look at the different Directional and Educational offices. So, we note 'privileged' regions with impressive high percentages of successes which are found mainly in big urban centres, and 'non-privileged' regions with high percentages of failure which are mainly found in insular, mountainous or particularly poor and problematic urban districts. Finally, we have to note that the new system creates two big categories of successful candidates; the 'favoured' (nearly the half) who manage to translate the success into their preferred studies, and the 'disfavoured' who simply manage to enter in a University Department but their attendance in this kind of studies is far from their real wishes.

#### THE STRUCTURE OF THE DISSERTATION

The dissertation consists of the introduction, six chapters and an appendix with charts. In the introduction (first chapter) there is a presentation of the 'New' Senior High school and the new system of accessing Higher and Highest Educational Institutions, as it was in force during the 2000-1 academic year. The basic characteristics as well as the basic definitions and terms relating to the new system, are described (used in the following chapters) and examples are given for better comprehension.

Finally, the statistical methods used in the research are described and also the way the statistical results in the charts, which were produced with the use of the instruments and analysis techniques of the data, can be read and proved.

In the second chapter the grading progress for morning and evening schools, the success and failure percentages, the candidates' preferences for studies for both categories as well as analyses of the results based on the gender and study direction, are presented.

In the third chapter the grading differences and the differences in the success percentages between public and private Senior High Schools are presented, as well as some defining factors, which explain these differences.

In the fourth chapter, the several categories of private and public schools are analysed and conclusions are drawn on the performance and success rates of the candidates in each category.

In the fifth chapter differences between schools of different sizes are pinpointed and evaluated.

In the sixth chapter, the results are evaluated in relation to geographical apportionments and specifically based on the dividing of candidates coming from Athens or the provinces, from big urban centres or the provinces, from tourist regions or non-tourist, from terrestrial or tourist regions, from different prefectures, counties and educational offices.

In the seventh chapter, the results and conclusions of the research are presented in concisely, and suggestions are made for a more analytical research which will explain the differences between the various categories of schools that were pinpointed in this dissertation.

Finally in the appendix there are analytical charts to which the main part of the essay refers, a description of the data that were used and a registration of the sources and the bibliography that was used in this dissertation.