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Dr. Seyid Amjad Ali



A Comparative Study of Quality and Efficiency of Education System in Turkey

Murat Alkan - 21601439

Erdem Sert - 21602145

ABOUT THIS STUDY

This study will investigate all aspects of Turkey's education system and also the most effective education system around the world. Therefore, this study will compare Turkey's education system with Finnish and South Korean education systems, which are known as two of the best education systems according to OECD, by including the determinants of education quality. After analyzing the determinants, this study will compare the PISA test results among Turkey, Finland and South Korea.

There are some existing datasets, which this study can benefit from. All these existing datasets will be cleaned and prepared to be used. In addition to existing datasets, there are websites like TUIK, OECD, MEB and YOK to create new datasets. These websites will be visited to find specific education statistics about Turkey. And also, OECD, World Bank and UNESCO websites will be visited to gather statistics about Finnish education system and South Korean education system.

I. INTRODUCTION

Education is a way of gaining knowledge and acquiring skills. To manage education, there are different education systems around the world. Some countries have a classical system but other countries have an exclusive education system to make students successful in their careers. Moreover, some countries have been caring education system and they have been trying to have an effective education system because it is known that if they have an effective education system, they can also have a strong economy. In other words, an effective education system paves the way for having a sustainable and developed economy [1].

II. QUALITY AND EFFICIENCY OF EDUCATION SYSTEM IN TURKEY

Qualification is the main term while analyzing education in a country. There are many factors to determine the quality of education system. Teaching hours, teaching methods, studying hours, exams, learning environment, students' happiness and other education-related factors are the key to determine the quality [2], [3]. Turkey's education system has also its special methods, factors.

A. Turkey's Education System

Turkey changes its education system frequently. In 2020, a student in Turkey is supposed to complete 4 years in primary school, 4 years in middle school, 4 years in high school. In Turkey, it is mandatory to complete these 12 years while going to a university is optional. Moreover, students have to enter LGS exam to enter a high school. Besides, students who completed their high school education have to enter TYT and AYT exams to be able to enter a university [4], [5].

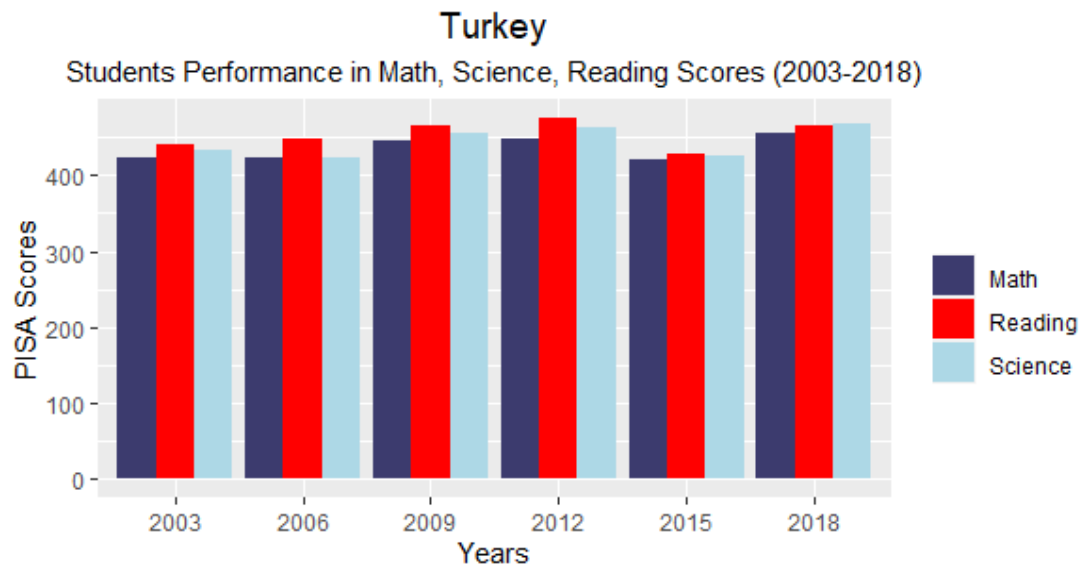


Figure 1: Turkish Students Performance in Math, Science, Reading Scores [6], [7]

In Figure 1, the grouped bar chart illustrates Turkey's Math, Reading and Science PISA scores between 2003 and 2018. All of these scores are below the OECD average. It means that Turkey has not been performing well in PISA tests since 2003 [6], [7].

Students' Life Satisfaction | Turkey

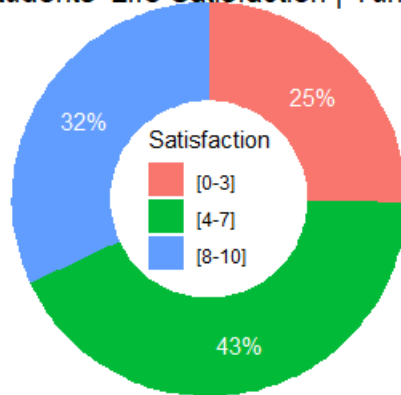


Figure 2: Student Wellbeing in Turkey [8]

Students' Life Satisfaction | OECD

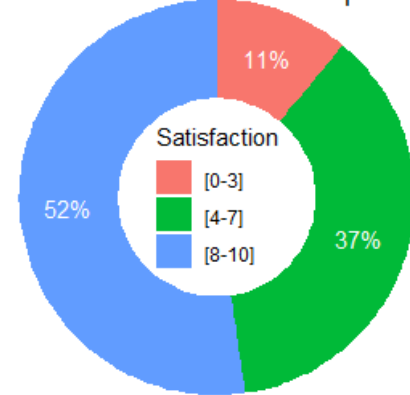


Figure 3: Student Wellbeing Among OECD Countries [8]

In these pie charts, 0 corresponds to “not satisfied at all” and 10 corresponds to “completely satisfied”. The left pie chart illustrates students’ life satisfaction in Turkey. The right pie chart illustrates the student’s life satisfaction among OECD countries. It can be easily seen that students in Turkey are less satisfied with their life when it is compared with OECD countries [8].

B. Comparison with Finnish and South Korean Education Systems

There are some advanced education systems around the world. Two of them belong to Finland and South Korea. Education System in Finland and in South Korean is completely different but both of them have been succeeding in tests [9], [10]. Finland implements a flexible education system which allows students to spend less time in schools and take less exam. On the other hand, South Korea implements a rigid education system which forces students to spend more time in schools, take more courses and take more tests throughout their education life [9], [11]. In

Turkey, education system is neither flexible nor rigid. It is between those two systems but it is similar to South Korean system more because students in Turkey are required to spend more time in schools and take more competitive tests throughout students' education life [9], [12].

B.1. Country Comparison by Education Spending

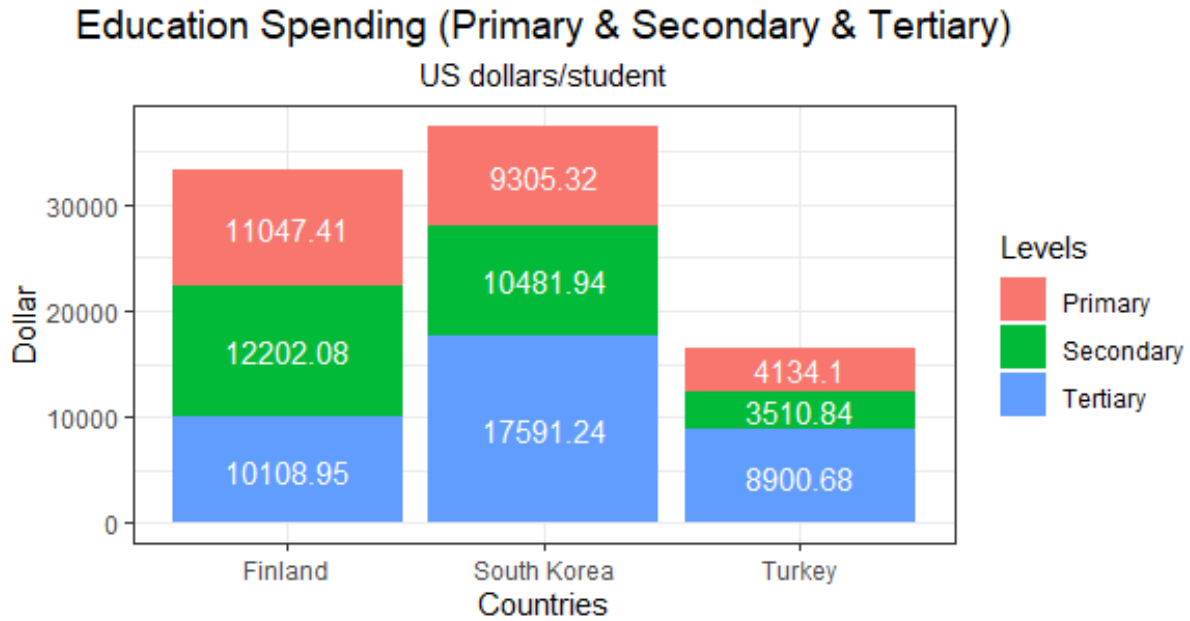


Figure 4: Education Spending Among Turkey, Finland, South Korea [6], [7]

In Figure 4, the stacked barplot shows education spending among Turkey, Finland and South Korea. It is determined by US dollars per student [6], [7].

Turkey spends less money on its education when it is compared with Finland and South Korea. This also shows how these countries give importance to their education system. In primary, secondary and tertiary education, the money, which Finland and South Korea spend is much more than Turkey's spending [6], [7].

B.2. Country Comparison by Student Enrollment Rate

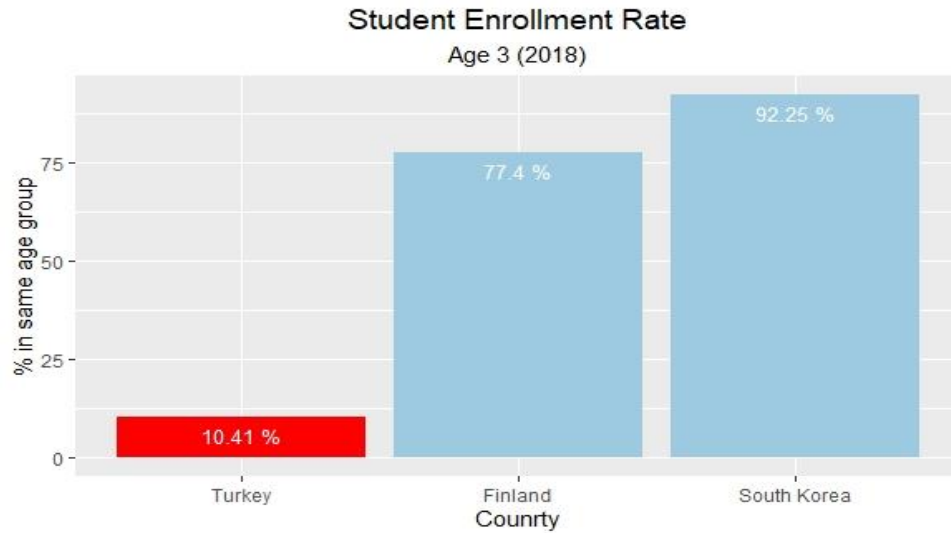


Figure 5: Student Enrollment Rate Among Turkey, Finland, South Korea [6], [7]

In Figure 5, the bar chart shows the rate of early childhood education in Turkey and in other countries. Students whose age is 3, is 10.41% when Finland has 77.4% and South Korea has 92.25% [6], [7].

B.3. Country Comparison by Average Class Sizes

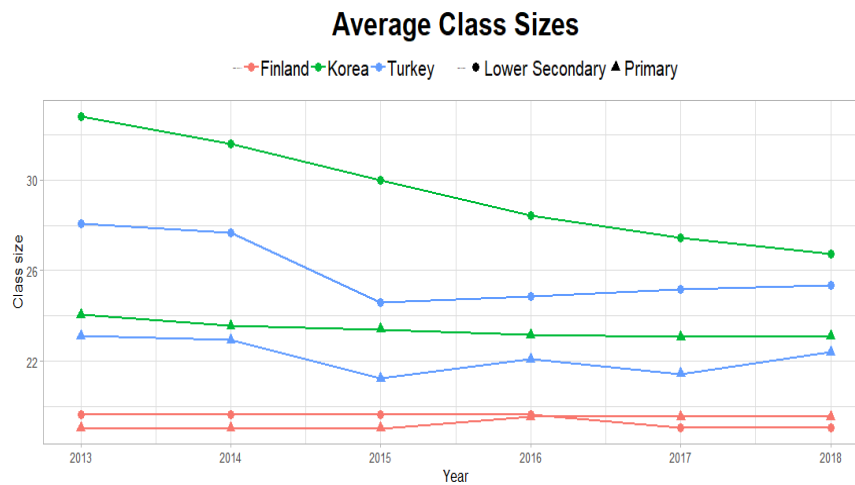


Figure 6: Average Class Sizes Among Turkey, Finland, South Korea [13]

In Figure 6, class size means that the number of students in a class. Finland's class sizes are less than in Korea and Turkey. Turkey again fails to provide flexible classes for its students. Moreover, this proves that Finland implements a flexible education system [13].

B.4. Comparison by Average PISA Scores

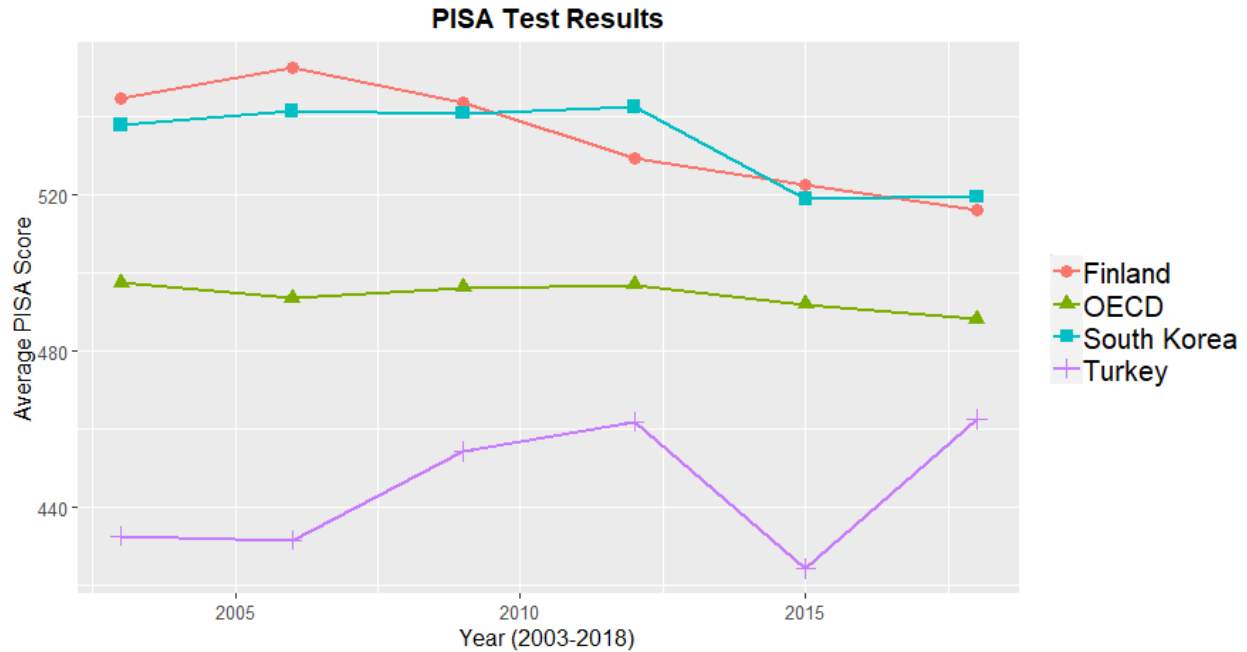


Figure 7: Average PISA Test Scores Among Turkey, Finland, South Korea Between 2003-2018 [6], [7]

When it comes to test scores, South Korea's rigid education system and Finland's flexible education system are more successful than Turkey's education system. According to PISA 2018 worldwide ranking (average score of math, science and reading), South Korea got 6th place with a score of 519.7, Finland got 10th place with a score of 516.3 and Turkey got 40th place with a score of 462.7 [6], [7], [14].

Descriptive Statistics

PISA Scores		Descriptive statistics						
	MIN	25%	Mean	75%	MAX	STD	SKW	KUR
Turkey	424.3	431.9	444.6	460.1	462.7	16.99	-0.01	1.22
Finland	516.3	524.3	534.9	544.7	552.7	14.28	-0.09	1.49
South Korea	519.0	524.2	533.7	541.5	542.7	11.21	-0.65	1.5
OECD	488.3	492.4	494.2	496.8	497.7	3.57	-0.64	2.08

Table 1: Descriptive Statistical PISA Scores from Selected Countries [6], [7]

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