



## Research Paper

# A twostep cluster analysis model concerning civic education efficiency in Greek educational system: empirical research in a sample of university students

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### ABSTRACT

*This paper presents a twostep cluster analysis model of a research that was carried out in autumn 2019 concerning civic education efficiency of public schools in Greece. The sample consisted of students of the department of Political Sciences of Aristotle University of Thessaloniki Greece. Amongst the findings, the segregation of students regarding the performance in school can be stated. More specifically, it was observed that diligent students were more reluctant in changes. On the opposite, they prefer the current state of art where sterile reproduction of knowledge takes place. In that way civic education fails to succeed its scope.*

**KEY WORDS:** civic education, Greek public school, students.

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## I. INTRODUCTION

Political participation as an element of active citizenship in democracies has been significantly promoted in education policies at both international and national levels. The main direction of these policies is to provide participation-skills and knowledge to all young people. For political decision-makers, political participation is now a fundamental component of the democratic order (Battistoni, 1985. Council of Europe, 2010b. OJ, 2007, 2010). Activities for participatory education, as presented by the EU, the Council of Europe and other national education organizations can be seen as an attempt to combine practical application and knowledge (Boyte, 2004. Birzea et al., 2005. Gollob, Krapf & Weidinger, 2010a, 2010b). Education policy makers draw a promising picture of views and practices: due to the fact that democracy needs active citizens, research-based policies ensure that schools must teach political participation effectively to all students, who as citizens, will use the skills they will acquire, will be active and will therefore contribute to the perpetuation of democracy (Boyte & Kari, 1996. Council of Europe 2002. Schulz et al., 2010a, 2010b). At the same time, the feedback guarantees the best implementation of the educational programs and their continuous improvement. In these educational policies and in the relevant teaching material as well as in relevant research on political education, the basic ideas of democracy are taken for granted while in essence they need to be understood and consolidated. Therefore, many theoretical approaches are built on unstable ground with the basic concepts of political education, democracy and participation being ambiguous and not well defined. On the contrary, they often refer to democracy emphatically as a good, just and harmonious feature of European societies, which, however, must be supported and experientially consolidated by educating citizens for their active participation (Callan, 1999. Eurydice, 2005. Hoskins, 2006). This pursuit of empowerment of participation tends to highlight a difference in the policies and practices of participatory democracy and an idealized image of democracy.

Controversy and exchange of views, however, as well as participation theories, institutions and, of course, participation practices themselves are an embedded feature of democracy. Despite the complexity of modern society and the conditions of political participation, there is a general consensus on what is or should be an active political behavior, at least in the democracies of the western world. This finding now seems to be taken for granted: at European level, political education and research is based on an expected common understanding of active political behavior, democracy and participation (Conover & Searing, 2000. Hoskins & Mascherini, 2009. Torney - Purta et al., 2001). Scholars now believe that policies of participation and active political behavior do not require further research and theoretical construction. Differences regarding cultural differences, gender or the dominant political and social narrative are considered unnecessary. Education policies at the interna-

tional level are based on a single picture of political education, which now has a number of good and bad practices. The only difference is the obvious social and cultural differentiation between people, societies and states that must recognize them in order to live harmoniously. The human subject is essentially treated as a single being who is not influenced by his or her gender or culture in relation to issues of political activism (Mascherini, 2009). Good or bad practices in political education have the same impact depending on the background of the actor (Torney - Purta et al., 2001). It is possible that actors who are politically committed to establishing and implementing a common European model through education will inevitably have to ignore structural differences between countries in Europe. But despite the theoretical, political and educational differentiation and controversy, the unified construction of concepts such as democracy, active political behavior and participation as common models of European politics remains a challenge. This weakness is masked by the use of indirect and partly abstract concepts of active political behavior and participation, which often lack a unified interpretation. Critical analyzes of participation policies and practices show that these problems are significant and cannot be understood easily (Damon, 2001. Held, 2006. Norris, 2011). That is why political education in schools risks achieving the exact opposite result: that of depoliticization if it remains a simple pedagogical practice without the creation of conditions for political participation and intervention. In other words, political education may not yet be a part of the program schedule. It requires disconnection from the sterile supply of knowledge and the evaluation of students through the traditional ways of the past. It is necessary to connect the lesson directly with reality and to encourage active political participation in order to escape from the vicious circle of sterile reproduction of useless knowledge (Hoskins, 2006).

The aim of this paper is to present a research conducted in Aristotle University of Thessaloniki in Greece and specifically in the department of Political Sciences. The particular sample was chosen due to their affiliation to the subject discussed. The contribution of the various courses of the curriculum that directly or indirectly contribute to political education, the politicization of students and the preparation for the active political participation that will follow will be explored. The working hypothesis is the fact that students are not interested in political education courses in school due to various factors related to the lack of teaching staff, lack of training and the sloppiness with which curricula are designed. For this reason, a questionnaire was compiled, which was distributed to university students in order to capture their views on the subject.

## **II. RESEARCH METHODOLOGY**

A questionnaire was used as a means of data collection. The questions were adapted to the educational level of the respondents. Particular importance was given to maximizing the validity of the research tool. For the final configuration of the content of the questionnaire, the critical remarks of Greek and foreign experts in matters of political education were taken into account (Hoskins & Mascherini, 2009. Matsagouras, 2007). The test application of the questionnaire to a small sample of students (25 people) aimed to assess the time required to complete the process, to identify any difficulties of young people in understanding the questions and to identify any shortcomings of the questionnaire. After the adaptations, the final questionnaire was distributed to 400 students approximately. The final sample consisted of 324 responses.

### **Description of the questionnaire**

The questionnaire used is divided into six sections, which consist of closed-ended questions. Beyond these sections there are questions related to some demographic data. In the first section

(A) the views of the respondents regarding the subject of political education in the school, its possibilities and its place in the timetable are requested. In the second section

(B) the questions aim at the detailed recording of the reasons for the existence of the course, always according to the point of view of the respondent. Emphasis was placed on its strengths and weaknesses, as well as its current teaching framework. The third section

(C) deals with the importance of the lesson for the politicization of the individual but also the attitude of the teachers, in the view of the students as far as this lesson is concerned. The questions of the fourth section

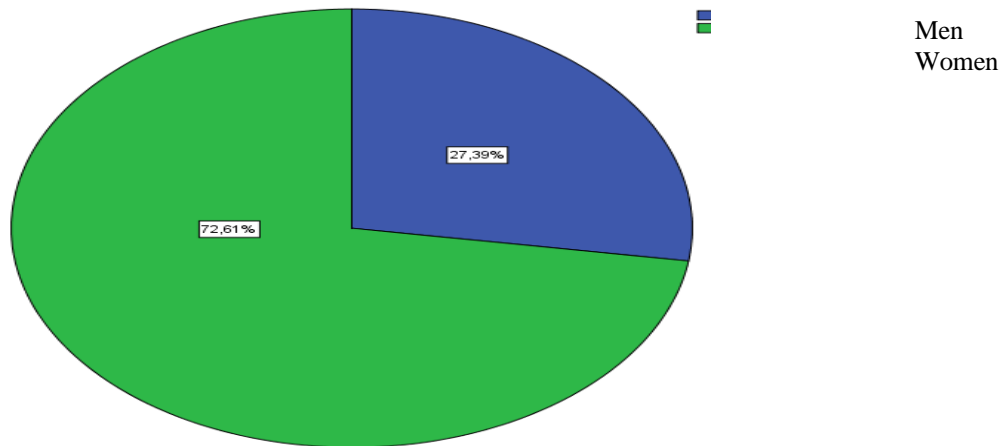
(D) relate to the emphasis placed on the respondent's school in relation to political education. The personal experiences of each student and the general skills he / she acquired were requested. The questions of the fifth section

(E) were about what students should learn in school as far as political education is concerned and, finally, in the last sixth section

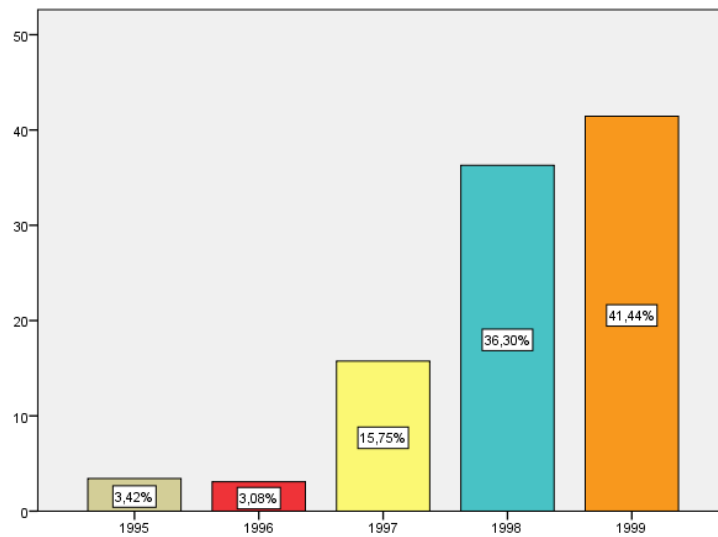
(G) the students were asked about their views in relation to the good citizen and the emphasis to be given.

### **Sample characteristics**

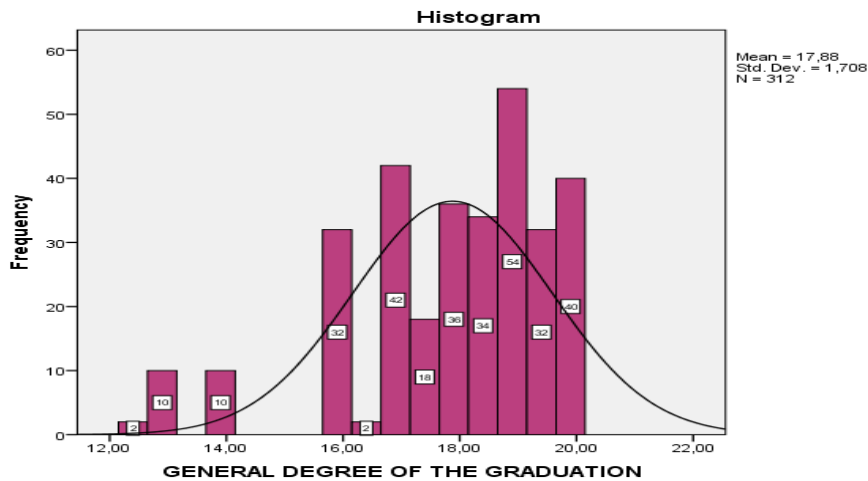
The response rate was 87% per cent. The participants in the study were 324 students from the department of political sciences of Aristotle University of Thessaloniki in Greece. About 72,61 per cent were women and about 27,39 per cent were men



About 41,44 per cent aged 21 years, about 36.3 per cent aged 24 years old and about 22.25% per cent aged 23–25 years old.



As far as the degree of graduation, we can observe that the majority of the students who participated in this research received excellent marks, a fact that shows their consistency and diligence. It has to be noted that the range of grades in Greek educational system is from 1 to 20.



**A twostep cluster analysis model**

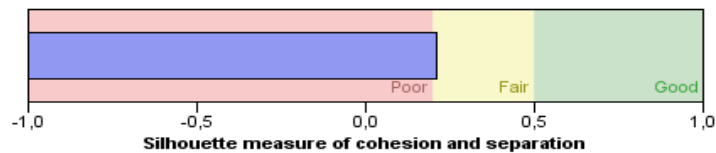
Cluster analysis is an exploratory analysis that tries to identify structures within the data. Cluster analysis is also called segmentation analysis or taxonomy analysis. More specifically, it tries to identify homogeneous groups of cases if the grouping is not previously known. Because it is exploratory, it does not make any distinction between dependent and independent variables. The different cluster analysis methods that SPSS offers can handle binary, nominal, ordinal, and scale (interval or ratio) data.

In our case, because of the existence of categorical and continuous variables the twostep cluster analysis was used. Silhouette measure of cohesion and separation showed a fair fit of the cluster quality. The final model displayed 4 clusters and 15 inputs as it can be shown in the following chart:

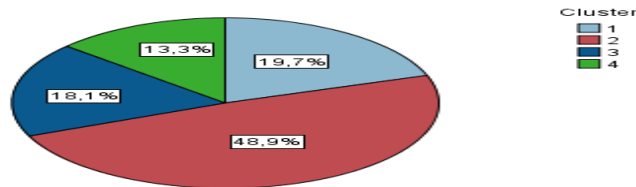
**Model Summary**

<b>Algorithm</b>	TwoStep
<b>Inputs</b>	15
<b>Clusters</b>	4

**Cluster Quality**



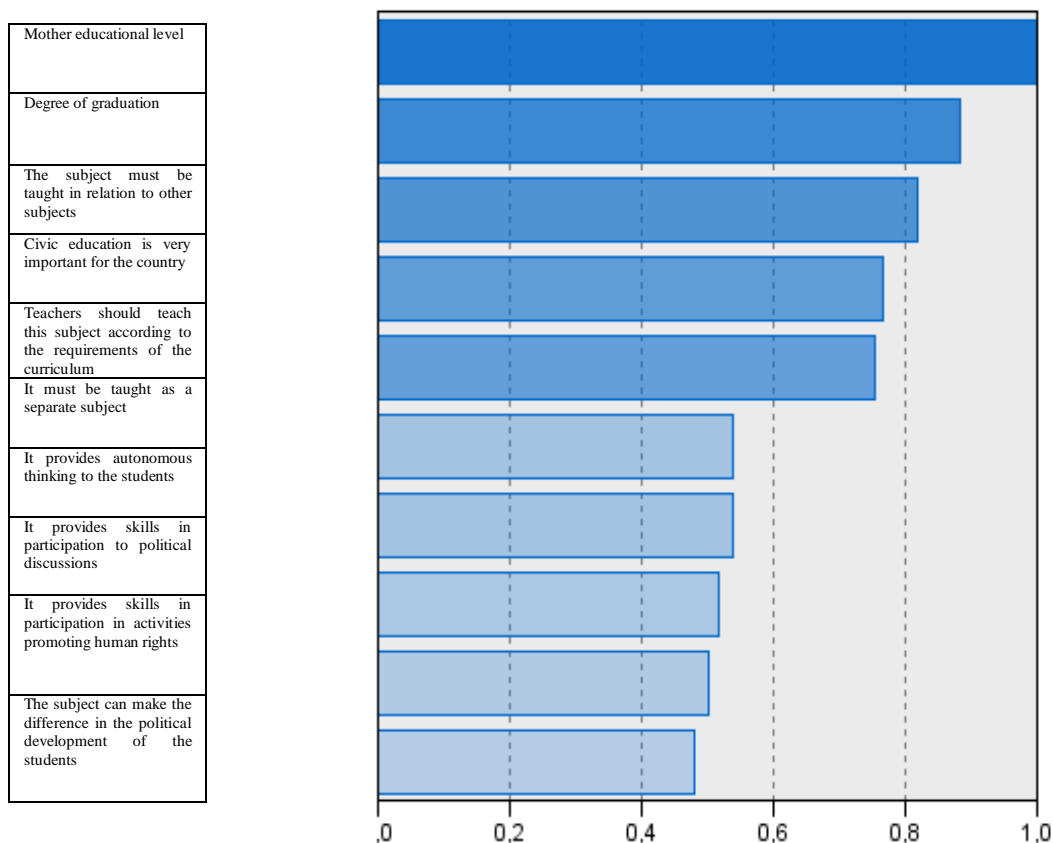
**Cluster Sizes**



<b>Size of Smallest Cluster</b>	25 (13,3%)
<b>Size of Largest Cluster</b>	92 (48,9%)
<b>Ratio of Sizes: Largest Cluster to Smallest Cluster</b>	3,68

As far as the predictor importance, as it can be seen in the chart below, mother educational level is the most important whereas the level of difference that political education can make to the politicization of students is the least important.

### Predictor Importance



The following table shows the centroids of the analysis. It can be observed that the first and the second cluster consist of students that are more diligent than the other two clusters. This is an important factor that can be used furthermore in the analysis of the attitudes of the students towards civic education.

Centroids					
		GENERAL DEGREE OF THE GRADUATION		YEAR OF BIRTH	
		Mean	Std. Deviation	Mean	Std. Deviation
Cluster	1	18,9784	,75430	1997,70	1,175
	2	18,2674	,95343	1998,15	,971
	3	16,5941	1,52573	1998,32	1,065
	4	14,6320	2,15014	1998,00	,913
	Combined	17,6213	1,87411	1998,07	1,037

As far as the first cluster that was created by the analysis, it was observed that students whose mothers have a university degree are connected with an excellent performance in their school requirements (degree of graduation 18.9). This group disagrees with the combination of this subject with others in the school curriculum. Similarly, they are neutral to the view that this subject is very important for a country. Most of the students that participated in this research (56.8%) believe that teachers should not have the opportunity to improvise but should teach it according to the requirements of the national curriculum. Additionally, this group of students is neutral to the teaching of this subject in a special way (89.2%). Also, they are neutral to the point of view that civic education provides the ground to the active understanding of the political discussion (78.4%). Nevertheless, they generally agree that political education promotes human rights activities and can make the difference in the political development of the students, a fact that is contradicted to their neutral attitude towards the

strengthening of patriotism through civic education. They generally agree to the fact that the changes happen too slow and the teachers cannot keep the pace. The least important variable is the contribution of civic education to strengthen the obedience to the law.

The second cluster consists of students whose mothers are generally graduates of a senior high school. They are very diligent students since their degree was excellent. They generally agree to the combined teaching of civic education with other subjects (52.2%). They also agree to the fact that the teaching of civic education is a very important issue for a country (67.4%). They are neutral to the view that teachers should teach this subject according to the requirements of the national curriculum. Additionally, they believe that this subject should be taught as an autonomous course without intermingling with other subjects (54.3%). Their most strong belief is that the benefit that comes from this subject is the development of students' participation in political discussions (63%) and in activities that promote human rights. On the opposite, they are neutral to the view that this subject strengthens patriotism (54.3%). Lastly, a minor contribution to the creation of this cluster is the promoting of the obedience to the law on behalf of the future citizens.

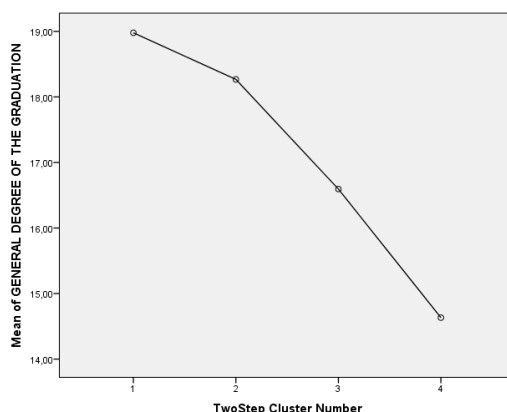
The third cluster involves students whose mothers hold a postgraduate degree (64.7%) and performed poorer in school. They generally agree to the fact that civic education should be combined with other subjects (52.9%). An important parameter of this group is that they totally agree that this subject is very significant as far as the educational policy of a country is concerned (94.1%). On the other hand, they disagree in a great extent to the fact that teachers should follow the requirements of the national curriculum. Connected to the previous finding is the fact that members of this cluster totally agree that civic education is a vehicle of strengthening autonomous critical thinking of students (64.7%). They agree in a great extent that civic education develops students' abilities to participate in political discussions and in activities promoting human rights. Similarly, they totally agree to the fact that political education can make the difference in the politicization process of young people (94.1%). On the other hand, they disagree with the fact that changes are so many in the last years that teachers do not know what to teach to their students (35.3%).

The last cluster consists of students whose mothers are graduates of junior high school. They are the group with the poorest performance in school (mean=14.63). They disagree with the combined teaching of civic education with other subjects (60%). They all agree with the great importance of civic education (100%) and they completely disagree with the fact that teachers should stick to the curriculum (60%). Also, they agree with the autonomous teaching of this subject (64%). Nevertheless, they are neutral to the view that civic education strengthens the students' ability to participate in political discussions, whereas they totally agree (100%) that this subject develops participation in activities that promote human rights. Also, they agree to the fact that civic education is a means of students' politicization (100%). Lastly, they are neutral to a great extent to the fact that civic education can contribute to the patriotism of the students. On the other hand, they totally agree that this subject promotes obedience to the law (64%).

### III. CONCLUSION

This paper presented a cluster analysis model of a research that took place in autumn 2019 in Aristotle University of Thessaloniki Greece regarding civic education and its impact in the politicization of young people. Theoretical admission of this research is the fact that civic education should not be considered by educational in the same way as the other subjects of the curriculum. It prepares future citizens to actively take part in the society as a functional member. So, methods that promote the sterile reproduction of knowledge without the active use of it, are a priori inefficient.

A quite important finding of this research is the segregation of the sample into two different categories: on the one hand we have students with excellent performance in school and on the other students with mediocre or poor performance. This fact is presented in the following means plot after an ANOVA test:



One would expect that the two categories would have contradictory points of view as far as the teaching of civic education is concerned. The expected view would be the students with excellent performance to be more active and to put emphasis on obtaining political attitudes through this subject. Nevertheless, what is striking is the fact that the opposite is true. Students with an excellent performance care less about the upgrade of teaching methodology. Even though they understand the importance of this subject, they regard it as “another subject of the curriculum” that has to be taught in the old-fashioned way. The consequences of such an attitude undermine civic education efficiency and the final result are citizens without active interest in politics.

Another major disadvantage of Greek educational system is of course the teaching staff that teaches this subject, since the majority of them does not have a degree of political science. In that way they do not have the theoretical background so as to undertake this effort. Many scholars, both in Greece and internationally, have tried to shed light on the negative phenomenon of political apathy, analyzing factors such as disappointment about current policy makers and degeneration of living conditions (<https://www.europeansocialsurvey.org/findings/details.html?p=2875>. Accessed in 17/12/2020). Few of them have considered that policy is the reflection of the society and consequently the society is made of citizens that are properly socialized and politicized in it (Sevastakis, 2008). School is not only a place where future citizens learn basic skills and knowledge but also a place where pupils learn how to apply the new knowledge into their everyday lives. This research showed quite obviously the lack of connection between theory and praxis in Greek educational system. Subjects that connect with students’ everyday lives are regarded as tools for obtaining good marks, as burdens. These findings should reach decision makers in order for the necessary reformation to be realized for the sake of the society as a whole.

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