

Opinions, concerns and knowledge of people
before their adulthood, in Greece

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1 Abstract

Climate change has started to affect many countries, and one of these is Greece. Therefore, it has a great interest to learn the opinions and ideas of people in Greece that soon will become adults, about that phenomenon. This research, consequently, will examine how much students in the last year of high school know and are concerned about the phenomenon of anthropogenic global warming and what they think are the optimal ways to deal with that problem. In addition, the answers from the sample will be compared, it will be studied if there are any differences between the students whose school is in an urban area from those who live in the country, between men and women, and as well between the students who chose to study social sciences or positive science. The research will use a closed-ended questionnaire, which will be shared in 50 representative classes, that will bring out the students' preferences. From the data that will be collected, we will learn the climate change misunderstandings of the Greek new generation, how major they think is that problem, and which social groups have a deeper understanding of these environmental issues. Thus, these results will help the educational system to understand which environmental topics students, and how many of those, stay behind when they finish school.

2 Introduction

The present research proposal is about the concerns, ideas, and knowledge of the oldest high school students, who will soon take part and affect political decisions with their votes. The research will happen in Greece which has never surveyed this age group about climate change or other environmental issues.

The research is based on a big literature review since it will try to cover many aspects of a specific topic. From other research, it is easily understood that the knowledge and the concerns of climate change are positively correlated with the acceptance of anthropogenic global warming. Therefore, it is important to observe what people believe about this problem. That is exactly what other researchers did in other countries for a lot of different age groups and, also, a research for Greek adults.

Some other researchers have shown that are noticeable similarities in answers people gave with the rest of their social group, and differences with other groups as well. For that reason, it is worth studying if there are any differences among the social groups we will survey.

Therefore, after the literature review, new questions have been created related to the beliefs of Greek young people. Specifically, about their knowledge, concerns, and opinions about climate change and the differences that may be shown among diverse groups. To achieve that purpose, the optimal method should be used which will give the clearest answers in the most efficient way possible. This method is the quantitative method with the use of closed-ended questions. Moreover, the questionnaires will be distributed with the help of the high school professors in the classes that they are teaching.

This research will help Greece obtain data that could be used for improving the educational system and specifically its environmental education and other non-profit organizations that occupy with the information of people about environmental issues. Of course, the further purpose of this research and all the educational actions is the reduction of climate change effects.

3 Literature Review

As many studies have shown, climate change gets worse at a very fast rate which has caused a lot of concerns in scientific circles. Therefore, a lot of scientists try to find ways to solve that crucial problem. One way that will help in that purpose is the environmental information of a high volume of people all around the globe. Specifically, scientists have found a positive relationship between people's climate change knowledge and the acceptance of anthropogenic global warming and their will, as well, to obtain a greener lifestyle.

In particular, the research "Overcoming skepticism with education: interacting influences of worldview and climate change knowledge on perceived climate change risk among adolescents" takes answers from 378 students that were 11 to 14 years old from 24 classes in North Carolina. The classes were selected from random sampling and every student was asked personally. Students have to describe how they perceive the environment and the results have shown the positive correlation discussed above. Another research proves similar results. In the research "Public Perception of Climate Change: The Importance of Knowledge and Cultural Worldviews" where 1,065 German-speaking adults from Switzerland were asked, with the use of post offices, about their concerns, their worldviews, and their acceptance of measures to deal with climate change. The study has shown that their knowledge and their worldviews are positively related to their concerns and their will to switch to greener behaviors.

Therefore, it seems to be important to examine more closely the knowledge and the concerns of the individuals. Which is exactly what some researchers did.

In the research "Consumers' knowledge about climate change" which took place with the use of a random sample and post office in 2010, 546 German-speaking adults from Switzerland were asked about their knowledge of CO_2 , greenhouse effects, and the overall causes and effects of climate change. The results showed that people have still a lot of misunderstandings, however, it was observed an increase in their knowledge from previous research.

Another research compared the knowledge about climate change between adults and teenagers ("American Teens' Knowledge of Climate change"). With the use of the quantitative method, the research tested 1,513 adults and 517 teenagers, who were 13 to 17 years old, from the USA to find out their knowledge and their misconceptions about climate change. The results have shown that adults were better informed, but teenagers showed greater interest to learn more about that phenomenon.

From the research "The effects of gender on climate change knowledge and

concern in the American public” we find out that there are, also, differences between women and men. With the use of the quantitative method and particularly a questionnaire by telephone women and men citizens of the USA were asked about their knowledge and their concerns. The results have shown that women know more, but they underestimate the knowledge compared to men.

Moreover, other researchers measured the concern of the people like the “Public perception of climate change in China: results from the questionnaire survey”, which shows the way of properly estimating the individual’s concern about climate change.

Last, a Ph.D. thesis about the knowledge of Greek citizens (“Environmental communication and sustainable development: public views, knowledge, and attitudes towards climate change”) shows that the Greek population is well informed about the issues of climate change and they are concerned about the danger of that phenomenon. In that survey, 1,536 Greek adults were asked.

4 Research questions

1. Which do young people think are the main causes of climate change?
2. which do they think are the optimal ways to deal with climate change?
3. How important do they think is the problem of climate change and how much are they concerned?
4. Which are the differences in the answers among diverse social groups, if they exist (women-men, urban-country residents, students who study positive science - social sciences)?

5 Methods

The research will be quantitative and will use as its tool the questionnaire. Specifically, the research will use a random sample and the questionnaire will be close-ended. Quantitative research is the most preferable option because of the importance of a large number of answers that will help approach more efficiently the preferences of the overall students. By using qualitative research, it would be mandatory to spend a lot more time and resources. However, a disadvantage of the close-ended questionnaire is that it will not be feasible to understand the precise opinions of the students.

Another reason why the quantitative method is the most likable is that a lot of technical issues would be avoided with the approach of the students. A closed-ended questionnaire is more likely to get accepted by the students’ guardians to be filled in by their children, in contrast to any other qualitative method. Therefore, with the quantitative method, the non-sample errors will be reduced.

In addition, the purpose of that research is the generalizability of the findings and not the interpretation of them, so again the quantitative method is more efficient than the qualitative one.

The sample, moreover, should be representative. Therefore, the sample should have schools from both big urban areas such as Athens and also schools in small villages. Additionally, it should be taken into consideration the different types of high schools (for example private-public schools), and take a representative number of answers from all of them.

The questionnaires will be distributed with the help of the professors. Particularly, fifty high-school professors from all over Greece will distribute the questionnaires to the senior students of the high school they are working at. So, approximately 1,000 answers will be collected.

The problems that may come up are the lack of cooperation by the professors, the disinterest of the students, or the group answering of the questionnaire. For that reason, it is important to perceive all of the professors about the significance of that research. Then, they should precisely explain to the students how to answer the questionnaires and the substance of the research to make them answer carefully and honestly. Further, professors have to not permit students to discuss the questions together because their answers will get affected.

6 Implications and Contribution to Knowledge

Climate change is the most crucial problem we face right now as humans. Therefore, we have to use any possible way to deal with that environmental issue. One of that is environmental education (“An evaluation of characteristics of environmental education practice in New Zealand schools”) which governments should take care of due to the externalities. Also, there is a rich bibliography that suggests the ways that this education could have an impact.

However, if we want to optimize the impact of that education, it would be helpful to know what topics students do not understand and where they need to improve their knowledge. Similar research made in other countries, but that is not adequate. Greece has its own educational system and culture, and therefore it is expected to be differences among the students in Greece and other countries.

Thus, with the data of this research, pedagogical scientists could structure a curriculum that includes a more efficient environmental education, that clears possible misconceptions, make students concerned enough about that phenomenon and focus on the social groups that need the most caution.

There are, also, non-profit organizations that care about environmental education, like Green Peace, that could use the results of that study to inform people and arouse their interest in that issue.

Last but not least, that research will contribute to the overall science and its knowledge enrichment. Specifically, the results could be compared with other research and find out the differences between young people in Greece and young people in other countries or other age groups in Greece.

7 conclusion

To minimize the consequences of climate change is important to start a discussion about environmental topics. In that discussion, of course, citizens and their opinions have a huge effect. For that reason, it is important to research what people think about that problem, and more specifically what are the opinions, concerns, and knowledge of the people that soon, if not already, will take part in the sociopolitical actions of their countries.

If we want to solve a problem, we must, firstly, set its base. That is exactly the purpose of that research which wants to put the bases to improve environmental education in Greece and obtain another tool to deal with climate change. However, climate change is a phenomenon that affects everyone and is affected by every individual. Therefore, more research on other age and social groups is needed.

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