

How Do Demographic Factors Influence Environmental Attitudes?

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Abstract

Environmental attitudes and preferences differ widely within and across countries. How do demographic factors and major events in the life-course affect these attitudes? This paper is a comparative perspective on how demographic characteristics influence environmental values. We utilize three waves of the World Values Survey (WVS) to investigate how cohort effects, education, and other demographic characteristics such as having a child impact environmental attitudes over time and by country. The analysis shows that education enhances environmental awareness, and that cohort effects have a significant role in determining demand for environmental quality as well.

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I Introduction

Environmental attitudes and preferences differ widely within and across countries. How do demographic factors and major events in the life-course affect these attitudes? This paper will be a comparative perspective on how demographic characteristics influence environmental values. Inglehart (1995) argues that support for environmental protection arises not only from pollution and poor environmental quality, but also from subjective values that confer greater importance to the environment overall. Beyond increased income or wealth, higher levels of education, having children, and cohort effects are factors that must be analyzed in order to better understand the formation of these attitudes and how they may change over time.

Much of the contemporary research surrounding preferences for enhanced environmental quality considers broad theoretical approaches that may explain cross-country differences in attitudes. The first is an emphasis on post-material values, where prosperity and/or the challenge of local environmental issues lead to a demand for better environmental quality. The second is that preferences for a better environment are much more dispersed across rich and poor countries, and even among the rich and poor within individual countries. This is the globalization version of environmental awareness. Finally, a third approach stems from the economics literature, whereby environmental quality is a public good that people are willing to pay for as incomes rise, but potentially at a declining rate. Within the domain of local environmental issues (such as regional air or water conditions, as opposed to global warming), empirical evidence has largely confirmed the inverted-U curve that is generally thought to link per-capita wealth and environmental concern. Franzen and Meyer (2010) address these in turn and note that aspects of each could contribute to growing environmental concern. They discuss some individual- and nation-level variables that may have an effect as well, such as age, gender, political or religious activity, income inequality, and visibility of environmental problems.

Missing from the literature so far, however, is a closer look at variables such as the level of education, its interaction with other socio-demographic variables, the household characteristics (marriage status, number of children), and cohort effects. Furthermore, these factors may have differential effects between developed and developing countries or other country strata.

II Data and Research methods

The World Values Survey (WVS) obtains data from nationally representative samples of the citizens from over a hundred countries. Using individual responses from the most recent three waves (1995-1998, 2000-2004, 2005-2009) of the WVS, we create various measures of environmental concern, such as willingness to pay for environmental improvement, ranking environmental protection against economic growth, and personal environmental actions, among

others. Our data is initially split among OECD and non-OECD countries, but ultimately the purpose is to investigate each country's changes over time.

Using multi-level models, our goal is to observe how these quantities change by our traditional economic and demographic factors, such as age, sex, income, and education, as well as their interactions. The additional contribution we make is to attempt to distinguish between age and cohort effects. With multiple waves of the WVS, we look to distinguish between the age and cohort effects that are likely both present in the rise of environmental awareness.

We are also interested in noting how major events in the life-course, such as having a child, influence attitudes toward the environment. The effects of pollution can be substantial, particularly for children, so we can hypothesize that the impact of having children would be to generate heightened environmental awareness. Additionally, significant gender differences have been found in the health impacts of pollution. Incorporating education and income variables, and their longitudinal changes, will reveal more about the changes over time in beliefs about environmental protection in one's community and in the world.

III Anticipated Results

Our results will provide insight into the change in environmental attitudes over time and by country. We will present evidence with cross-country regressions. When categorizing by OECD-country status, gender, and age group, our results so far reinforce some existing findings (i.e., that females generally have stronger preferences for environmental protection, those in younger age groups are willing to pay or sacrifice more for assured environmental quality, and that higher levels of education raise environmental awareness). We look to more directly connect changes in environmental attitudes to cohort effects by taking advantage of the longitudinal setup of the WVS and its large sample sizes. Our work will indicate a significant impact of other important demographic factors, such as number of children, education, and their interactions.

Greenstone and Jack (2013) posit that, in many developing countries, environmental quality should be valued much more highly than it is currently, considering its impact on health and productivity. They develop a rigorous framework for evaluating this puzzle and proposing solutions, but do not address how demographic effects can affect individuals' valuations of environmental quality or willingness to pay.

References

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