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Environmental Attitudes and Behaviors Across Cultures

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Environmental Attitudes and Behaviors Across Cultures

Abstract

One of the fundamental aspects of culture is the relationship it prescribes between individuals and environment. Am I part of the natural environment, or am I separate and perhaps superior to nature? The answer to this question influences the types of attitudes that individuals within a given culture are likely to develop, the types of environmental behaviors that individuals are likely to adopt, and more generally, beliefs about how to solve environmental problems. This chapter examines differences in attitudes about environmental issues across cultures. We distinguish between egoistic environmental attitudes, and biospheric environmental attitudes, and summarize recent cross-cultural research on the relationship between cultural values and attitudes about the natural environment.

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Introduction

We live in an era of unprecedented growth and change. The last 100 years have seen the transformation of the daily lives of millions of people living in industrialized nations, brought about by scientific discoveries. Every facet of our daily lives has been changed by technology-from how we work, travel, and obtain food, to recreating and maintaining social relationships. People living today in industrialized countries spend a large portion of their lives mediated by technology. We live, work, drive, shop, and do almost every other daily activity in a built environment. But this is a relatively new phenomenon, and many of the modern comforts that we take for granted (air travel, supermarkets, cars, computers, electric lights, telephones, televisions, etc.) were fantasies 100 years ago. Yet with this growth have come challenges. One in particular is the damaging effect of consumptive lifestyles on the natural environment. By the dawn of the 21st century, these effects were becoming readily apparent.

The cumulative result of technology and economic development has wreaked havoc on the natural environment. This is not to say that damage to the natural environment did not occur prior to the 21st century, because it did. Throughout history human activity has impacted surrounding environments (Ponting, 1991). But what has changed is the magnitude of the effects. The once localized damage that resulted from production and consumption has reached global proportions. By the end of the 20th century, it was clear that the lifestyles of those people living in industrialized countries were not sustainable (Hertsgaard, 1999). Pollution of air, water, and land that resulted from human activity threaten the very existence of our species.

Problems Associated with Environmental Issues

Two problems in particular deserve elaboration: consumption and population.

Consumption

With the industrial revolution came increasing demands for raw materials. Coal, oil, wood, and metal ore are needed to manufacture the many products that we take for granted today. Yet the rate at which we consume these materials is not sustainable and cannot continue indefinitely. The term ***sustainability*** refers to the balance between the rate at which a particular system is depleted and the rate at which it replenishes itself. Human use of nearly every natural resource is currently occurring at unsustainable rates. Our use of natural resources must change, and our throw-away society where products are used only once and then discarded cannot continue for much longer.

Following is a brief list of some of the environmental problems that have resulted from human activity and consumption, excerpted from a recent article by Oskamp (2001). For a more complete description of these problems, see Oskamp (2000; 2001), or the most recent volume of the ***State of the World***, edited by Lester Brown.

- Global warming due to the greenhouse effect. The primary source of human-made greenhouse gasses is the burning of fossil fuels in cars and to produce electricity.
- Loss of the earth's protective ozone layer due to the release of cloroflourocarbons (CFCs).
- Global climate change and loss of biodiversity due to destruction of tropical and temperate rain forests.
- Overfishing and exhaustion of the world's ocean fisheries and decreasing agricultural productivity due to many unsustainable harvesting practices.
- Acid rain, which damages forests and crops and also kills fish, plants, and other organisms in lakes and rivers.
- Toxic pollution of air and drinking water supplies.
- Genetic and hormonal damage and cancer due to exposure to dioxin and other toxic chemicals.

Population

A second, and related problem to consumption, is population growth. More people means more consumption, greater demand for resources, and more pollution and waste. Population growth over the past 100 years has been staggering. For 99.9% of human existence on this planet, fewer than 10 million people inhabited the planet. In 1830, less than 200 years ago, the human population reached 1 billion; in 1930 it reached 2 billion, and the growth continued exponentially. As of 2000, there were approximately 6 billion people on the planet. Projections about the number of people the earth can support vary, but it is clear that 6 billion people living the consumptive lifestyle widespread in industrialized nations like the United States, Western Europe, or Japan, is not sustainable (Meadows, Meadows, & Randers, 1992).

Environmental problems are particularly insidious because they develop slowly. Research on human perception suggests that sensory changes (visual, auditory, tactile, gustatory) that occur slowly are difficult to detect. As long as the change occurs slowly, we adapt to the surroundings, and are unlikely to detect a change. From one day to the next, we notice little (if any) change in the natural world around us, or even changes in our lifestyles. Yet if we were to jump 10 years into the future, we would likely notice a substantial change.

The science of psychology can play an important role in understanding and solving these problems. Environmental problems are ***caused*** by human behavior, and solving these problems will require changes in behavior. Psychology, as the science of behavior, can make a substantial contribution to this change. Psychologists can work to develop theories of human cognition and behavior that lead to environmental problems develop and assess program that move us toward sustainability, or study the impact of culture on environmental attitudes, beliefs, or behavior.

At the very core of environmental problems is an individual's understanding of his or her relationship with the natural environment. All cultures that exist today, and throughout history, have addressed the issue of the relationship between individuals and the natural

environment (Ponting, 1991). Just as every culture has prescribed a set of rules for social interaction, culture also frames the relationship between the individual and nature. As environmental problems have become more apparent, our understanding of the problems, and the solutions we develop to address the problems, occur through the filter of culture. This chapter examines the influence of culture on the beliefs, attitudes, and behaviors of individuals relevant to environmental issues.

Attitudes about Environmental Issues

Attitudes about Environmental Issues in the United States of America

As the extent and severity of human-caused environmental problems became apparent, people in the United States began to take notice. Survey research on attitudes about environmental issues showed a slow-but-steady increase in recognition and concern about environmental issues. Beginning in the 1960s and lasting through the 1990s, people in the United States expressed increasing levels of concern. Sparked by the first Earth Day in 1970, environmental problems began to emerge as one of the most pressing set of social issues. Although shadowed by the threat of global nuclear war that dominated public concern throughout the 1960s, 70s, and 80s, recognition of the importance and severity of environmental problems continued to grow. Public concern continued to rise fairly steadily throughout the 1970s and 1980s, and reached an all-time peak in the mid-1990s.

An example of the high level of environmental concern in the U.S. is a 1990 nationwide survey which found that 71% of respondents believed the U.S. was spending "too little" on "improving and protecting the environment," while only 4% stated "too much" (Dunlap, 1991). Similar results were found in a series of surveys about the environment conducted between 1981 and 1990. The survey item read: "Do you agree or disagree with the following statement? Protecting the environment is so important that requirements and standards cannot be too high, and continuing environmental improvements must be made ***regardless*** of cost." The data from the 10-year period showed a steady increase in the number of people who agreed, with an extra jump in 1989 following the crash of the Exxon Valdez, which spread oil sludge over hundreds of miles of ocean and beaches in Alaska (Dunlap, 1991).

Attitudes about Environmental Issues in Other Countries

Concern for environmental issues is not solely a U.S. or Western phenomenon. Recently researchers have found high levels of support for environmental protection from countries around the world (e.g., Dunlap, Gallup, & Gallup, 1993). In the most ambitious multi-national study of environmental issues conducted to date, Riley Dunlap and the Gallup Organization surveyed approximately 1,000 people in each of 24 countries, which ranged widely in economic development, political structure, and geographic region. The countries were divided into industrialized nations (Denmark, Germany, Finland, Norway, Canada, Ireland, Switzerland, USA, Netherlands, Japan, Great Britain, and Portugal) and

developing nations (Mexico, Brazil, Uruguay, Chile, Korea, Philippines, Poland, Russia, Hungary, India, Turkey, and Nigeria).

The first question in the survey asked people "What do you think is the most important problem facing our nation?" At this point, respondents did not know anything about the survey and they were not prompted to think about environmental issues. Yet in 16 of the 24 countries, environmental issues were among the top three problems identified; only economic issues were mentioned more often. When asked about their "personal concern about the environment," more than 50% of respondents in all but three of the countries (Switzerland, Turkey, and Poland) stated "a great deal" or a "fair amount."

The issue of economic growth versus environmental protection has been a long-standing tension in the environmental movement. However, as we saw above with U.S. samples, a high percentage of people express a willingness to pay more for environmental protection. But would people in other countries express a similar willingness? People in the United States are generally financially comfortable (compared to many other countries in the world), so perhaps it is easier for them to say this. However, the cross-cultural results show that a majority of people in 17 of the 24 countries (including many developing countries like India, Chile, and Mexico) express a willingness to pay more for products in order to improve environmental quality. When asked which should be given priority-economic growth or environment-more than 50% chose environment in 21of the 24 countries. Only India (43%), Turkey (43%), and Nigeria (30%) favored economic growth over environmental protection (Dunlap, Gallup, & Gallup, 1992)

Taken together, these results suggest that concern for environmental issues is high in countries around the world. Even in poorer countries, people are concerned about environmental issues and even favor protecting the environment over economic growth.

Different Types of Attitudes (Egoistic versus Biospheric)

When we think about attitudes toward environmental issues, we often assume that these attitudes fall along a continuum from low (not concerned) to high (very concerned). These attitudes might reflect general concern for environmental issues, or attitudes about specific issues like recycling, energy conservation, or public transportation. However, research suggests that there are different types of attitudes, and that two people can be equally concerned about environmental problems, but for very different reasons. For psychologists, the more interesting question is not whether or not a person is concerned about environmental problems (most people are), but ***why*** they are concerned.

Research examining the different types of environmental attitudes has attempted to identify the values associated with different concerns. In my own research, we began by asking people to write a short essay about "The environmental problems that concern you the most, and why." Think about this for yourself-what specific issue concerns you the most, and why. We collected essays from college students in the United States, Mexico, Nicaragua, Peru, and Spain. In coding the responses, we found a wide range of answers. One case in particular exemplifies the research findings. Many of the respondents indicated that their greatest concern was pollution. Among these, some respondents

indicated that their concern was based on the fact that air pollution has been shown to cause cancer, and they (the individuals) didn't want to breath polluted air. Another set of respondents indicated that polluted air will increase the rate of sickness in people around the world and reduce the quality of life for everyone. Finally, a third group of respondents indicated that pollution is killing plants and animals and threatens to disrupt the balance of nature.

Each of these sets of concerns reflects different underlying values. We refer to these as egoistic, altruistic, and biospheric attitudes (Schultz, 2000). ***Egoistic*** concerns are focused on the individual, and reflect a concern about environmental problems for self. These concerns include personal health, financial well-being, quality of life, and availability of resources. ***Altruistic*** concerns focus on people other than self, including friends, family, community, future generations, or humanity. Finally, ***biospheric*** concerns focus on all living things, including plants, animals, ecosystems, and the biosphere.

In subsequent research, we have developed a closed-ended question to measure egoistic, altruistic, and biospheric attitudes. The question reads: "People around the world are generally concerned about environmental problems because of the consequences that result from harming nature. However, people differ in the consequences that concern them the most. Please rate each of the following items from 1 (not important) to 7 (supreme importance) in response to the question, I am concern about environmental problems because of the consequences for ____." Participants then rate a series of items, some of which are egoistic (my health, my prosperity, my lifestyle), altruistic (future generations, humanity, children), or biospheric (plants, animals, birds).

To date, we have collected data using this question from over 20 countries. The results from this research have provided three clear findings. First, the attitudes of people from all of these countries can be classified as egoistic, altruistic, or biospheric. That is, the tri-partite classification system captures the way in which people think about environmental problems. Yet even within countries, there are differences in the attitudes of respondents. It is not that case that all people from one country or one culture share the same sets of attitudes or concerns. What is clear is that the attitudes that are expressed tend to fall within one of the three attitudinal types.

The second finding that has emerged from this research is that there are clear differences across countries in the level of concern, and in the overall level of egoistic, altruistic, and biospheric attitudes. For ease of presentation and interpretation, let's examine the egoistic and biospheric scores. Some of this data was reported in a recent journal article (Schultz, 2001), and the rest is based on unpublished data. The cumulative results are shown in Figure 1. In looking at the data reported in Figure 1, three findings are evident. The first is that the three U.S. samples scored substantially lower on both the egoistic and biospheric concerns than did respondents from any of the countries. The three U.S. samples were collected independently and in different areas of the country. The first (N =245) was based on a sample of college students attending a private university in Northern New York; the second (N = 1,010) consisted of college students attending a public University in California; and the third (N= 1,005) was a random sample of California

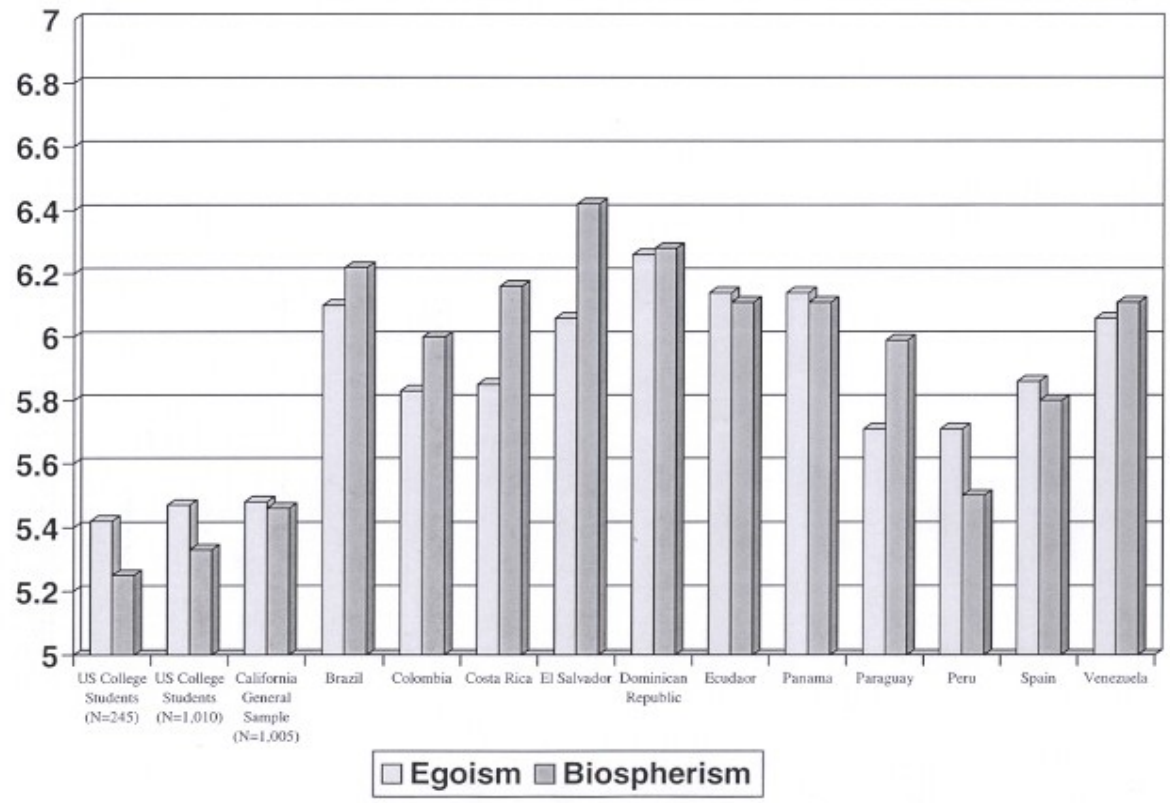

Figure 1. Egoistic and biospheric attitudes across countries.
Note. The data shown in this figure were reported in a journal article by Schultz (2001). Additional unpublished samples are also available from New Zealand, Germany, Mexico, and Brazil.

residents. The results across all three samples were very similar, and show a lower overall level of concern than that seen in any of the other samples.

Figure 1 also shows that the U.S. sample scored higher on egoistic concerns than biospheric concerns, while most of the other samples (Brazil, Colombia, Costa Rica, El Salvador, the Dominican Republic, Paraguay, and Venezuela) showed the opposite pattern, with biospheric attitudes higher than egoistic.

The final finding from these studies is the relationship between values and attitudes of environmental concern. Throughout this volume, scholars have elaborated on the differences between individualistic and collectivistic cultures, and the values that characterize each. ***Cultural values*** are the ideals and goals that are viewed as guiding principles in a person's life. The results from our research indicate that values focused on the individual are associated with egoistic attitudes about environmental issues, while values focused outside the self are associated with more altruistic and biospheric attitudes. That is, value self-enhancing goals (like power, wealth, success, or personal ambition) are associated with more egoistic environmental attitudes. In contrast, values that transcend the self (like broad-minded, honesty, forgiving, or loyalty) are associated with more biospheric environmental attitudes. This finding makes sense, given that the focus within individualistic cultures is placed on an autonomous self, while the focus within collectivistic

cultures is placed on relationships with others. Indeed, it may be the case that biospheric attitudes are an extension of "relationship" with others to include the natural environment. Biospheric attitudes reflect an underlying concern for plants and animals, and people who have a broad self-construal are more likely to include other people, and aspects of nature, within their notion of self.

Culture and Attitudes

The interpretation that cultural differences in environmental attitudes result from differences in the importance of social relationships is consistent with social psychological research on the diffusion of responsibility and social loafing. One aspect of environmental problems is that they occur on a grand scale. Air pollution causes acid rain over thousands of square miles; greenhouse gasses cause warming of the entire planet; and water pollution is dispersed over miles of ocean. Research conducted in the United States suggests that on broad, dispersed types of issues, there is a tendency for people to *loaf*--to exert less effort when working collectively toward a common goal (Karau & Williams, 1993).

Solving environmental problems will require a concerted effort by a large group of people. But why should I work hard, when I am just a small part of the group. Indeed, as the group size increases, people are more likely to loaf. This is what we tend to see in the United States--unless the problem directly affects me (the individual), or unless I see a direct result of my action (e.g., saving money, or a benefit to my local community), I am less likely to be concerned about the issue, and less likely to act in ways that address the problem (e.g., recycling, conserve energy, use public transportation).

But we see a different pattern in collectivistic cultures. A considerable amount of research conducted in Asia and other collectivistic cultures suggests a lesser tendency to loaf than that found for people in individualistic cultures. The importance of social relations (the core element of a collectivistic culture) leads people to work harder toward goals that benefit the group, rather than the individual. This suggests that in collectivistic cultures, people should be more likely to engage in actions that address large-scale social issues like environmental problems, even when the problem does not directly affect them or when the action does not directly benefit the individual.

As an extension of this argument, we might expect to find that women are more concerned about environmental issues than men, more biospheric in their attitudes, and more likely to act in pro-environmental ways. On the aggregate, women tend to be more relationship-oriented than men, and we might expect results similar to those reported above for culture. The cumulative research evidence suggests that this is in fact the case. In studies conducted in the United States, the effect appears to be small but consistent. In a review of 32 published studies, Zelezny, Chua, and Aldrich (2000) reported that women tend to express more concern for environmental issues and to report engaging in pro-environmental behavior and activism than men. Zelezny et al. (2000) reported similar findings among children (ages 6-10) and across cultures (based on data from Central and South America).

Conclusions

In this paper, we have reviewed some of the research on environmental attitudes in other countries. The research evidence collected to date has examined the types of attitudes that people have about environmental problems, as well as the reasons that people give for their concerns. Across several studies, the evidence suggests that people in the United States tend to be less concerned about environmental issues overall than people from most other countries. In addition, the attitudes that people in the United States develop tend to be more focused on local issues that are related to the individual, while people in many other countries tend to develop broader, more biospheric attitudes. We have suggested that these differences are the result of cultural differences, and that collectivistic cultures, which tend to focus more on social relationships than on the individual, are more likely to foster biospheric attitudes.

It is tempting to conclude that people in the United States are anti-environmental, or that we should all strive to be more collectivistic in our thinking and lifestyles. Indeed, this has been suggested by many researchers, activists, and politicians. However, it is not the case that environmental problems are limited to individualistic cultures, or to people with egoistic attitudes. While it is true that overconsumption and pollution are more serious in Northern industrialized countries than in less industrialized countries, it is also the case that population growth is a more serious problem in less industrialized nations. It is also the case that the consumptive lifestyle so prevalent in the richer countries in the world (i.e., Western Europe, Japan, the United States) has become the model success for many developing countries like China, India, Brazil, Thailand, and many other areas of the world (Hertsgaard, 1999).

Environmental problems affect all living beings on this planet. The rapid growth and technological development that was ushered in by the industrial revolution have caused serious environmental problems. If life on this plant-both human and nonhuman-is to continue, we need to change. Psychology can play an important role in moving toward sustainable lifestyles.

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Related Websites

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- Environmental Protection Agency
- Atmosphere, Climate & Environment Information Programme
- Environmental Defense

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Questions for Discussion

1. Define and give an example of egoistic, altruistic, and biospheric attitudes.
2. Some researchers have suggested that concern for environmental issues is more likely to develop once people's basic needs (like food, shelter, safety) have been met. If this were true, we would expect to find that wealthier countries would show higher levels of

concern than poorer countries. Does the cross-cultural research support this conclusion, or not?

3. The NIMBY (Not In MY Back Yard) mentality is often singled out as a "bad" form of environmentalism. Are NIMBY attitudes egoistic, altruistic, or biospheric in nature? Why are they seen as "bad?"
4. This chapter has suggested that culture influences the types of attitudes that people are likely to develop. What types of environmental attitudes are likely to develop in individualistic and collectivistic cultures? Why?
5. Based on other readings in this collection (or from other sources), identify another dimension along which cultures vary. How might these cultural differences lead to egoistic, altruistic, or biospheric attitudes?