

Ecology And Changing Lifestyles: Environmental Concern As A Determinant Of Household Items And Activities

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Among the most important issues to emerge in the past decade is the increased awareness of and concern for man's relationship with the environment. As more information has become available on environmental issues, it has become increasingly clear that people differ substantially in their response to this information. Indeed, the vast differences of opinion regarding such general environmental issues as energy, overpopulation and pollution, and specific topics like the SST, nuclear power, and pesticides indicate that environmental concern is fast becoming one of the most important contemporary value dimensions for society.

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In recent years, social scientists have become increasingly aware of their potential contributions to understanding and possibly alleviating a wide variety of environmental problems. In large part, this reorientation was prompted by an important paper by Maloney and Ward (1973). The solution to environmental problems, in their words, "does not lie in traditional technological approaches but rather in the alteration of human behavior. In short, the ecological crisis is a crisis of maladaptive behavior." They add: "We must go to the people in an attempt to understand these behaviors. We must determine what the population knows regarding ecology, the environment and pollution; how they feel about it; what commitments they are willing to make; and what commitments they do make. These are the necessary antecedent steps that must be made before an attempt can be made to modify critically relevant behaviors" (pg. 583). Finally, to stimulate such research, Maloney, Ward, and Braucht (1975) constructed and published a 45-item Environmental-Ecological Attitudes and Knowledge test. Briefly, the test is composed of four subscales which measure respectively, (a) the individual's degree of emotionality of affect associated with environmental issues, (b) the

individual's specific factual knowledge related to ecological issues, (c) the extent to which the individual says that he or she would be willing to undertake environmentally responsible behaviors in the future and (d) the individual's current level of environmentally responsible commitment. Finally, the authors of the scale provide contrasted groups criterion validity and split-half reliability data demonstrating that their instrument provides a highly useful, general measure of environmental attitudes.

To date, studies of the determinants of environmental concern have utilized several different levels of analysis. On one level, researchers have examined the extent to which political attitudes (Dunlap, 1975) and other demographic factors such as age, race, and socio-economic status are associated with environmental attitudes (Tognacci, Weigel, Wideen, and Vernon, 1972; McEvoy, 1972). At another level, researchers have also begun to examine the personality factors that underlie environmental concern (Borden and Francis, 1978; Trigg, Perlman, Perry, and Janisse, 1976).

While these studies have helped to explain the factors that predispose an individual to environmental responsibility, they have failed to clarify how pro-environmental attitudes take active form. In other words, if environmental problems are really *people* problems, then it is important that we understand how individuals who want to assist in solving these problems alter their lifestyles. Examination of the lifestyles of individuals differing in environmental concern may also provide insights relevant to the design of home environments, (Kühler, 1973; Mitchell, 1972) as well as changing trends in ecologically responsible marketing (Kangun, 1974; Henion and Kinnear, 1976).

The purpose of the present study was to locate individuals who differed in their level of environmental concern and demonstrate that their environmental attitudes importantly determine the types of household items that they currently possess, as well as the types of household activities

that they pursue. The assessed items and activities were chosen to reflect awareness of and concern for a wide variety of well publicized environmental issues. Specific hypotheses were:

1. As level of environmental concern increases, there is a corresponding increase in energy conservative behavior as reflected in a reduced usage of energy (i.e., electric, gasoline, etc.) consumptive devices.
2. As environmental concern increases, the desire for *new, improved, fashionable* and *easy* (but not energy-efficient) items and activities decreases.
3. Finally, aspects of the home environment can provide an unobtrusive predictor of an individual's general attitude toward environmental problems.

Method

Subjects and Instruments

In order to obtain groups of individuals that differed in level of environmental concern, Maloney, Ward, and Braucht's (1975) Environmental Attitudes and Knowledge Test was administered to 203 male and 327 female university students enrolled in introductory psychology courses. As noted above, this test is composed of four subscales (Affect, Knowledge, Verbal Commitment, and Actual Commitment). Scores on the four subscales were summed in order to obtain a Total Environmental Concern Score (cf. Borden and Francis, 1978). From this pool of 530 subjects, 42 subjects (19 males and 23 females) in the lower quartile were contacted and asked to attend a second session. In addition, 47 individuals (24 males and 23 females) with scores in the upper quartile were also contacted. Inspection of the subscale scores of the latter group revealed that they evidenced only moderate levels of environmental knowledge and commitment. In order to obtain a group of more highly knowledgeable and committed students, the Environmental

Attitudes and Knowledge Test was administered to 31 undergraduates (14 males and 17 females) in a specialized college ecology program. These individuals' scores were significantly higher than those of the moderate group. Hence the present study involved a total of 120 students designated as low (N=42), moderate (N=47), and high (N=31) in environmental concern. Mean Total Environmental Concern scores for each of these three groups were, respectively, 13.3, 30.5, and 36.0, $F(2, 117) = 465.83, p < .001$.

Individuals in each of these groups were administered a questionnaire regarding ownership of selected household items and participation in certain activities. Each subject was asked whether they currently possessed and/or used the following *household items*: (a) house plants, (b) insect sprays, (c) aerosol sprays, (d) a hair dryer, (e) hand-crafted items and (f) antiques. These items were chosen to reflect, respectively, concern for natural (i.e. living) objects in the home environment, sensitivity to widely publicized environmental effects of insecticides and aerosols, energy conservation, and a desire to possess unique and/or non-contemporary objects (versus mass-marketed non-energy conservative articles). A selection of the individuals' *household activities* was assessed by asking whether he or she regularly engaged in the following activities: (a) turning the lights off when leaving a room, (b) recycling of newspapers, bottles and other wastes, (c) involvement in do-it-yourself projects, (d) watching television and (e) reading. This last activity was assessed by asking each person whether they regularly read any of the following magazines: *National Geographic*, *Scientific American*, *Playboy/Girl* and *Cosmopolitan*. The first two periodicals have been involved in the environmental education process for several decades whereas the latter two are more oriented toward consumptive lifestyles and contemporary fashions.

Finally, each individual was questioned about the regularity with which he/she engaged in selected activities outside of his/her domicile.

These activities were chosen to reflect changes in one's lifestyle that illustrate the individual's attitude toward nature, conservation and technological sources of stimulation. These *other activities* were: (a) watching sunrises and sunsets as a source of pleasure, (b) pleasure driving of an automobile, (c) going to the library for *entertainment*, and (d) the regular consumption of *fast foods*.

Results

The main results are presented in Table 1, which shows the percent of individuals in the low, moderate, and high environmental concern groups who owned the selected household items and/or engaged in the assessed activities.

Chi-square analyses of these proportions revealed significant differences on nearly all of the measures (Winer, 1971). In support of Hypothesis 1, large significant differences were obtained for ownership of hair dryers and pleasure driving. A significant difference was also found for turning off of lights in unoccupied rooms. Taken together, these results are consistent with the notion that high environmentally concerned individuals do make an active effort to conserve energy. Further, the differences found for ownership of insect and aerosol sprays, in conjunction with the large observed differences in recycling, demonstrates that environmental attitudes are importantly linked with household activities that have broader environmental impact.

Hypothesis 2 focused on the assumption that as an individual becomes more environmentally concerned he or she should be less attracted to contemporary, consumption-oriented, fashions. Support for this idea derives from the significant differences associated with ownership of hand-made items, antiques, and engaging in do-it-yourself projects. Also, as environmental concern increases, there is a corresponding decrease in readership of such periodicals as *Playboy* and *Playgirl*, which emphasize *conspicuous* consumption. Conversely, readership of

Table 1. Percentage of Selected Household Items and Activities of Low, Moderate, and High Environmentally Concerned Individuals.

	Level of Environmental Concern			X ²
	Low (N=42)	Moderate (N=47)	High (N=31)	
Household Items				
House plants	57%	87%	82%	9.29**
Insect sprays	31%	36%	6%	9.14**
Aerosol sprays	78%	76%	6%	47.83***
Hair dryers	80%	81%	13%	45.56***
Hand-crafted items	66%	83%	96%	10.50**
Antiques	35%	62%	57%	6.68*
Household Activities				
Reading				
National Geographic	18%	30%	70%	24.14***
Scientific American	7%	13%	40%	13.66**
Playboy/Playgirl	28%	15%	7%	9.36**
Cosmopolitan	10%	9%	0%	3.08
Do-it-yourself	41%	68%	83%	15.21***
Watching television	88%	68%	27%	30.73***
Recycling	41%	76%	97%	28.76***
Lights off	83%	93%	100%	6.89*
Other Activities				
Sunrise/Sunsets	66%	81%	100%	12.62**
Pleasure driving	59%	41%	0%	27.77***
Library; entertainment	9%	30%	67%	27.62***
Eat "fast" foods	64%	60%	14%	22.01***

* p < .05
 ** p < .01
 *** p < .005

National Geographic and *Scientific American*, publications which emphasize understanding scientific and cultural issues, increases with environmental concern. Interestingly, as a person becomes more environmentally concerned, television viewing and eating of fast foods become substantially less frequent activities; whereas going to the library for entertainment, raising house plants, and watching sunrises and sunsets increase in frequency.

Taken together, all of these lifestyle differences imply a generalized ecological behavior continuum, where at one end we have what might be termed an *Ecophile* (someone concerned with ecological-environmental issues) and at the other end an *Ecopath* (an individual who is unconcerned or insensitive to ecological-environmental issues). In terms of lifestyle, the *Ecophile* would appear to be the type of person who: (a) constructs a home environment which includes natural and handmade items, (b) prepares most of his or her own food, and (c) derives many of his/her pleasures from self-motivated projects (i.e. do-it-yourself, reading, etc.). The *Ecopath*, on the other hand, would be characterized by: (a) creating a home environment with newer, manufactured items and with convenience items, (b) a reliance on fast, prepared foods, and (c) day-to-day enjoyment derived from some technological source of stimulation (i.e. television, automobiles, etc.).

Thus, these observed differences in ownership and behavior support the third hypothesis that an individual's attitude toward environmental problems can be inferred from his or her household objects and activities.

Discussion and Implications

Since Earth Day 1970, environmental issues have become increasingly salient features of our society. They have commanded a substantial degree of the public's attention in their own right, and as time goes on, they are also becoming central features of the political, economic, and educa-

tional arenas. Consequently, public opinion regarding the environment and its associated problems may well become a major factor shaping the future of these institutions (Sills, 1975). Psychologically, these differences in environmental orientation are reflections of how individuals define their own needs, aspirations, and expectations — or more generally, their quality of life.

As the results of the present study show, peoples' day-to-day activities are strongly associated with their feelings about the environment. Indeed, depending upon their environmental attitudes, people differ widely in terms of what they own, and the types of activities from which they derive pleasure. While the present results are by no means conclusive, they nonetheless have important implications for such varied fields of inquiry as leisure research, residential satisfaction, and consumer sciences, as well as practical implications in areas like interior design, marketing and entertainment.

The present research focused on a college population. No claim is made that the present findings should be generalized to the society as a whole or to portions of society which, on a variety of dimensions, might be considered unlike college students. On the other hand, a college population is important in two respects. First, the type of home environment which they structure for themselves is limited by the fairly homogeneous living conditions which are available in dormitories and apartments. Thus, a replication of the present study utilizing a non-college population may well find even more dramatic differences in home environments as a function of environmental attitudes. A second important implication from the college population is that these people represent the home owners of the immediate future. Consequently, their differential lifestyles should be considered predictive of changing trends, and further examination of young peoples' aspirations about future home ownership and related factors (e.g. home design, energy efficiency, location, etc.), should be considered.

A number of specific implications for housing education programs can also be derived from the present findings:

1. The development of special programs and seminars directed toward environmentally concerned home owners who desire means for "living with less" should be considered.
2. Similar programs may also be beneficial for educating environmentally unconcerned individuals as to the importance of certain home activities which have environmental impact.
3. In the coming era of energy efficient home design and an increasing dependence on solar energy sources, new standards for interior design must be developed.

Finally, this paper is offered as a stimulus to alert housing educators of the growing importance of environmental attitudes and their behavioral implications as they occur in everyday life. It is hoped that others will be prompted to explore the important factors that will serve to maximize the satisfactions of families faced with the newly emerging demands of environmentally responsible living.

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