

Environmental consciousness: an indicator of Higher Consciousness

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Abstract: Wrong attitudes, beliefs and values are adversely affecting the natural environment today. In this research work the attitude towards the environment of two groups of people living in suburban and urban environments is examined and categorized as biospheric, altruistic and egoistic. The data obtained from questionnaires given to participants is used for correlation studies between the environmental attitudes of participants and the higher order values they uphold. Results show that urban respondents exhibit egoistic attitudes while suburban participants who are in close contact with nature show biospheric attitudes. Significant correlations are seen between egoistic attitude and value of self-enhancement (0.73) in case of urban participants and between biospheric attitude and the value of self-transcendence (0.59) for suburban participants. This is probably because the value of Self transcendence is a form of environmental consciousness which may develop into Higher Consciousness.

Index Terms: egoistic and biospheric attitude, values of self-enhancement and self-transcendence, environmental consciousness.

I. INTRODUCTION

The Earth today is experiencing a global environmental crisis. World peace is threatened not only by the arms race, regional conflicts and continued injustice among peoples and nations but also by a lack of due respect for nature. The environmental crisis of the twenty-first century is the result of rapid growth in consumerism and unprecedented human-induced climate change, without taking into account issues of values and ethics. This crisis is actually a spiritual and moral crisis of alienation from the natural world resulting in man's domination and exploitation of natural resources. Science and technology alone cannot prevent the calamity befalling the environment.

"We can pierce the ozone, poison fresh water, walk on and litter other planets and alter the climate. But a radical reverent 'new way of thinking' and acting – more humble and more loving towards the Earth-is essential 'if mankind is to move to high levels', indeed if we are to survive"

Echlin (2004).

A spiritual, ethical and moral view of the relationship of humans with nature must be taken into consideration. This leads to the concept of Environmentalism. Environmentalism is a question of values or general (primitive) beliefs on the relationship between human beings and the environment (Dunlap et al. 2000; Van liere and Dunlap 1981; Dunlap and Van liere 1978). A theoretical approach to distinguish between different types of environmental attitudes has been proposed by

Stern and his colleagues. They identify three types of attitudes which they label egoistic, social-altruistic, and biospheric attitudes. They also state that these attitudes towards environmental issues are based on the relative importance that a person places on themselves, other people and plants and animals and are derived from value orientations such as power, benevolence and universalism (Stern et al., 1993; Stern & Dietz, 1994; Schultz, 2001, Hansla et al, 2008).

The term environmental values refer to those values that are specifically related to nature or that have been found to correlate with specific environmental attitudes or concerns (Schultz et al., 2004). According to earlier studies environmental values are abstract guides to what is important in one's environment (Rohan, 2000; Roccas, 2005). Values appear to be universal across different cultures with people having similar values although to different degrees (Schwartz and Bardi, 2001). Values are desirable, trans-situational goals, varying in importance and serving as guiding principles in people's lives (Feather, 1975, 1999, 2004). The personal norms that guide conduct and increase feelings of self-efficacy are essentially triggered by information. However, different attitudes and levels of information depend on the nature of the behaviour (Stern, 2000). People who show high values in the affective dimension of environmental consciousness, or those who have environmental information identify with ecological beliefs about human-environment interaction. They have an altruistic or biospheric attitude and express feelings of moral obligation and engage in pro-environmental behaviours (Fig.1) to a greater extent than those who have an egoistic attitude.

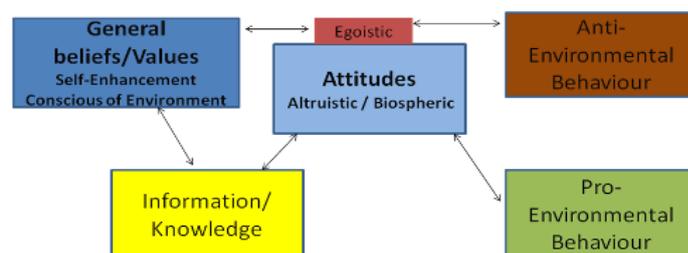


Figure 1: Pathway to Pro-Environmental Behaviour

According to Zelezny and Schultz (2000), 'environmental consciousness' refers to specific psychological factors related to an individuals' inclination to engage in pro-environmental behaviours of various kinds. This leads to a 'change of heart' such that the individual now views the Earth to restore it through his experience and education rather than as a resource to be exploited. The process of change in outlook is called ecological conversion. The individual understands that human estrangement from the natural world has given rise its destruction without conscience. The individual realises the

need for renewing and restoring the Earth because it belongs to God, because it is our home and provider of our needs and must not be exploited. This leads to the development of an intimate interconnectedness, balance and harmony with nature. The observation of the Earth and Universe as sacred and acknowledging the beauty, complexity and fragility of the Earth with awe and wonder is Higher Consciousness.

II. METHOD

A study carried out on how different types of environmental attitudes are oriented around valued objects namely self, other people and thirdly plants and animals was based on statements from Schultz's (2000) work. The study deals with environment-related attitudes and values associated with human behaviour. The environmental attitudes studied are:

Egoistic attitude: implying personal concern,

Altruistic attitude: implying concern for others,

Biospheric attitude: implying concern for environment.

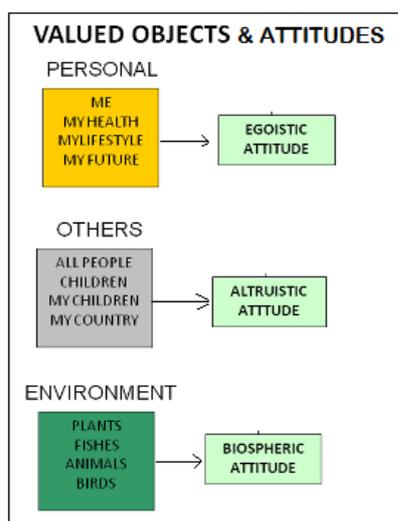


Figure 2: Environmental Attitudes Oriented Around Valued Objects

Further the relationship between these environmental concerns and Schwartz's higher order values are determined in different populations of suburban and urban people using ESS (European Social Survey version) on this population. Two Higher Order Values of Schwartz (1992) are used:

Value of Self-transcendence implies qualities of understanding, appreciation, benevolence, tolerance. Protection of the welfare of people and nature lead to higher consciousness. Value of Self-enhancement implies power, social status, prestige, achievement, personal success, control or dominance over people and resources leading to materialism.

The relationship between egoistic, altruistic, and biospheric environmental attitudes and Schwartz's value dimensions of self transcendence and self-enhancement scales is examined.

Hypothesis

It is hypothesized that socio-altruistic and biospheric attitudes of individual predict their possessing the value of self transcendence while egoistic attitude of individuals predict possession of the value of self enhancement.

Participants

Sixty individuals participated in the study. Thirty participants are from suburban areas and connected to nature and thirty are urban people, whose daily lives - their work, travel, eating habits, recreation and maintaining social relationships has been influenced by technology and who live in an urban environment. The other basic information such as age, sex, education level, and the environment in which they reside: suburban or urban is collected. Table I shows summary statistics for the survey.

Table I: Statistics of Demographics of Participants

Number of participants	60
Male/Female	30 males and 30 females
Age of participants	21 to 69 years
Minimum education	Under-graduate
Environment – suburban culture (SU)	30
urban culture (U)	30

Questionnaires

Participants are given structured questionnaires to rate their concern for animals, birds, plants, marine life, all people, people in my country, children, my children, my health, my future, my lifestyle and me through statements. They also answer queries which assess the values of self-transcendence or self-enhancement. The Questions given to participants are on various aspects of attitudes and human values. Measures include statements like 'My life is still fruitful if I live for myself,' or 'What is good for the society is good for the individual,' or 'Trees must be saved to preserve natural resources for the future,' or 'It is important for me to be successful at any cost,' or 'It is important for me to help the people around me.'

Throughout the questionnaire the respondents answer on a five point scale choosing from five options, Definitely Yes, Yes, Maybe, No, Definitely No. The response scale was 1 (Definitely No) to 5 (Definitely Yes).

Analysis

The returned questionnaires are scored and analyzed statistically. To identify the values associated with different attitudes Pearson's correlations are run between different types of environmental attitudes and values using SPSS. In this analysis personal concern, concern for others, concern for environment, value of self-transcendence and value of self-enhancement are known to be associated with human behaviour of the two groups and are included in the data base. Factor analysis is carried out on the data collected for the two individual groups (SU) and (U), with Varimax rotation considering Eigen values >1, using the SPSS PC + version 6 software. The analysis identified the factors and their percent contribution to the total variance. These results are presented in table form, but only loadings > 0.5 are considered statistically significant. The analysis identifies the percentage of factors that contribute to total variance. The grouped loadings in each factor could be attributed to biospheric, altruistic/socio-altruistic and egoistic attitudes towards the environment.

III. RESULTS AND DISCUSSION

Suburban Group (SU)

It is observed that suburban respondents rate most of the statements pertaining to environmental issues as 'Definitely

Yes or Yes' scoring 4 or 5. In the group 95% who had a high score are those who expressed concern for environment because they had a responsible attitude towards natural resources. Environmental attitudes differ as a result of differences in the importance given to environment as against social relationships. The results show that in this group most respondents seem to have pro-environmental behaviour. Pearson's correlations are determined using SPSS to examine the relationship between environmental attitudes and values of self-transcendence and self-enhancement.

Table II below shows positive significant correlations between self-transcendence and attitude towards environment (0.59), and negative correlations between self-transcendence and others (0.38) and self (-0.06). It may be said that those SU people who display a positive attitude towards environment have transcended the self and are protective and concerned about welfare of nature and all people. It is likely that the SU people feel more connected to nature as they spend time in natural environments. A similar study done earlier shows that the amount of time spent in nature is a predictor of emotional affinity and interest in nature (Kals et al., 1999; Vining et al., 2008). Further Mayer and Frantz (2004) report that amount of time spent outdoors is positively related to how connected an individual felt with nature. The positive correlation value of self-transcendence indicates that SU participants probably believe that man must take up the responsibility of caring for the Earth and save it. Their attitudes reflect an underlying concern for plants and animals, and their broad outlook includes other people, and self, within the notion of nature. Similar findings have also been reported where people who are concerned for the status of the environment in future do not waste environmental resources and make saving the earth their main aim in life (Corral-Verduro et al., 2006). Such suburban participants could be called eco-friendly because they have a biospheric attitude towards environment.

Table II: Correlations between attitudes and values of Suburban (SU) Participants

Values	Towards Environment	Towards Family & friends	Towards Self
self-transcendence	0.59*	0.38	-0.06
self-enhancement	-0.50	0.23	0.28

Note: ** signifies p<.001; * signifies p<.01

Moderate correlations exist (Table II) between self-enhancement and others (0.23) and self (0.28). Negative correlations are seen between self-enhancement and environment (-0.50) indicating their lack of understanding of nature. Schultz (2002b) suggests that two people could be equally concerned about environmental problems, but for very different reasons. This becomes clear in this exercise with SU respondents when correlation is seen between the value of self enhancement and attitude towards personal issues or towards family and friends for this group, the reason being their attitude of understanding, appreciation and tolerance of their fellow beings rather than nature. The moderate correlations between values of self-enhancement and attitudes towards other people and self can be attributed to an attitude towards fellow human beings which is neither egoistic nor totally altruistic.

Factor analysis carried out on the data for SU respondents (Table III) to determine which attitudes and values club together, shows that their concern for environment may be predicted as biospheric(environment and self-transcendence), altruistic (other people and self) or egoistic (self and self-enhancement). Results reveal these three factors contributed to 82.2 % of total variance.

Table III: Factor Analysis of Variables: Attitudes and Values (SU)

Variable	Factor 1	Factor 2	Factor 3	Communality
Other People	-.14	.94	.05	.90
Environment	.85	-.24	-.20	.82
Self	.11	.61	.62	.77
Self-enhancement	-.43	.02	.81	.78
Self-transcendence	.87	.08	-.11	.84
Eigen Value	2.23	1.3	1.1	
% Variance	44.6	25.4	12.2	
Cumulative %	44.6	70.0	82.2	
Predicted Attitude	Biosph-eric	Altru-ist/ego	Ego-istic	

Table III indicates that Factor I has high loadings on attitude towards environment (.85) and self-transcendence (.87). This reveals that the pro-environmental attitude prompts people towards the value of self-transcendence and so factor I may be attributed to Biospheric concern. Factor II is loaded on attitudes towards other people (.94) and towards self (.61) but not on values of self-enhancement or self-transcendence. This factor may be attributed to Altruistic/egoistic concern. The third factor displays high loadings on value of self-enhancement (.81) and moderate loadings on attitude towards self (.62). This indicates that the attitude towards self of some SU respondents inculcated the value of self-enhancement in them attributing factor III to an Egoistic attitude. Parallel to the findings of this study, Schultz (2000) reported three clusters of environmental attitudes which represent egoistic, altruistic and biospheric concerns in a study done on college students. Earlier studies (Schwartz, 1992) have reported similar results. Self-transcendence (value type universalism and benevolence) has been found to be positively related to pro-environmental attitudes and behaviour. Self-enhancement (value type achievement and power) has been shown to be negatively related to pro-environmental attitudes and behaviour. Also similar findings earlier reported (Stern and Dietz, 1994) a 'tripartite conceptualization of environmental concerns grounded in clusters of valued objects'. Self-transcendence (universalism) can be assumed, according to Schultz, to "... reflect the degree to which a person includes other people and other living things in their notion of self" (Schultz 2001; Hansla et al., 2008).

Urban Group

The number of urban respondents showing attitudes towards environmental issues, issues regarding other people and personal issues when determined reveal that 80% of the urban respondents rate the statements pertaining to environmental

issues as ‘Definitely Yes’ or ‘Yes’ scoring ‘5 or 4’ probably because they are clear about their concern for the environment. Most of the others give importance to issues of personal concern because they are highly influenced by the kind of environment in which they live or they are unsure about environmental issues probably because they have little direct connection with nature.

Table IV: Correlations between attitudes and values of Urban (U) Participants

Attitudes			
Values	Towards Environment	Towards Family & friends	Towards Self
Self-Transcendence	0.41	0.17	0.04
Self-Enhancement	-0.41	0.31	0.73**

Note: ** signifies $p < .001$; * signifies $p < .01$

Pearson’s correlation method is used to determine correlations between attitudes and values (Table IV). Correlation between self-transcendence and attitude towards environmental issues is found significant (0.41), implying that in spite of living in urban surroundings the attitudes of some urban individuals are eco-friendly. There is low correlation between self-transcendence and attitude of concern for others (0.17) and no correlation between self-transcendence and concern for self (0.04) in urban respondents. Similar findings are reported by Schultz (2001) about self-transcendence reflecting the degree to which a person includes other people and other living things in their notion of self. The value of self-enhancement shows significant correlation (0.73) with environmental attitude focused on self because the focus of the individual is towards personal success, and egoistic attitudes towards environment inculcating in him the value of self-enhancement. The urban respondents have little time for environmental issues and remain unaffected by environment. Their busy life-style may be a reason for lack of time and indifferent attitude towards everyone but themselves. This may be compared to a study done by Corral et al. (2003) who report that the time perspectives of ‘present-oriented’ individuals compel them to act in a non-eco-friendly manner. Earlier studies (Mayor and Frantz, 2004; Hirsh & Dolderman 2007) indicate that as group size increases, a feeling of indifference arises and each individual visualizes himself as only a small insignificant part of the group incapable of bringing about change. Moderate correlations (0.31) between self-enhancement and environmental attitudes focusing on other people are seen in individuals who have some inclination towards family and friends. Table IV indicates a negative correlation between self-enhancement and attitude towards environment (-0.41) because urban respondents probably believe that natural resources are for enrichment of life and environmental problems are not their concern and only lower the quality of life for themselves and everyone.

Factor analysis for Urban respondents (Table V) shows two significant factors namely egoistic (self and self-enhancement) concerns for environment and biospheric (environment and self-transcendence).

Table V: Factor Analysis of Variable Attitudes and Values (Urban)

Variable	Factor 1	Factor 2	Factor 3	Communality
Other People	.22	.06	.97	.99
Environment	-.46	.73	-.01	.75
Self	.84	-.06	.30	.80
Self-enhancement	.94	-.03	.09	.89
Self-transcendence	.15	.91	.07	.86
Eigen Value	2.2	1.4	1.1	
% Variance	44.3	27.7	13.8	
Cumulative %	44.3	72.0	85.8	
Predicted Attitude	Ego-istic	Bio-spheric		

Factor analysis (Table V) reveals two factors that contributed to 85.8 % of total variance. The first factor has high loadings on ‘attitude towards self’ (0.84) and self-enhancement (0.94). Egoism may be the contributing source to this factor and is attached to the value of self-enhancement. In the second factor, ‘attitudes towards environment’ (0.73) groups together with the value of self-transcendence (0.91). This factor is attributed to Biospheric attitude of some urban respondents similar to the suburban participants where self-transcendence and biospheric concerns group together. The third factor shows high loadings on ‘other people’ but not on either of the values of self-transcendence or self-enhancement. Similar findings are reported in the study done by Schultz and Zeleny (1999) who states that biospheric concern for environment correlates positively with self-transcendence and negatively with self-enhancement.

IV. CONCLUSION

It may be stated that the purpose of this study to see the effect of attitudes on environmental values is fulfilled. It is seen from the results of correlation studies that for the suburban group of respondents significant correlations are made between biospheric attitudes towards the environment and value of self-transcendence, which motivates the individual towards transcendental goals. The study also shows that biospheric and altruistic attitude of suburban respondents is higher than their urban counterparts. Altruistic attitude towards environment also correlates significantly with self-transcendence. For urban respondents, correlations between egoistic attitudes towards environment and values of self-enhancement which brings the focus of the individual towards personal success are significant.

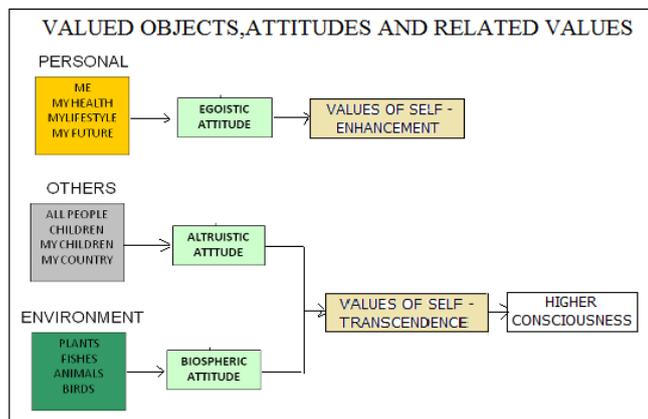


Figure 3: Values Underlying Environmental Attitudes towards Valued Objects

As shown in Fig.3 the three-fold classification of environmental attitudes organizes around valued objects like self, other people and environment. When biospheric attitude and altruistic attitudes towards environment are significant the value of self-transcendence or environmental consciousness is reflected while when the egoistic attitude towards environment is high the value of self-enhancement is perceived. It can also be concluded that participants of suburban areas are more 'ecologically converted' and have a humble and loving way of thinking and manner of acting toward the Earth and are thus 'moving to higher levels' of consciousness.

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