

# FACILITATORS OF PRO-ENVIRONMENTAL BEHAVIOR AMONG CITIZENS

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## Abstract

*The problem of environmental pollution, natural resource depletion, climate change, waste management, etc. seems to be never ending. In spite of numerous efforts made to safeguard the environment (which include conferences, meetings and framing of laws related to environmental protection) both at the national and the international level not much improvement in the current state of environment is perceptible. Most of the environmental problems arise due to human nature and the manner in which we behave (Zelezny and Schultz, 2000; Vlek and Steg, 2009; Nordlund and Garvill, 2002). If there was to be a change in the human behavior, improvement in the state of the environment would follow naturally.*

*Education plays an important role in modifying human behavior and in turn reforming society and directing it towards a more civilized path. But education, which aims only at increasing awareness level, is of little potential in bringing about a transformation in human behavior. The objectives of environmental education as stated in the Tbilisi Inter-governmental Conference on Environmental Education (1977) also focuses on developing a more environmentally responsible behavior among the citizens. Chapter 36 of Agenda 21, accepted in Rio in 1992 during the Earth Summit I, accentuated that education is vital to develop a capacity among people to tackle environment and development issues. So, there is a need to supplement the current system of environmental education with such aids that could prove to be effective in performing the task of behaviour change. The current work would thus try to explore the role of art, literature and media in creating environmentally responsible behaviour.*

## Environmentally Significant Behavior, Proenvironmental Behavior and Environmentalism

According to Stern (2000), environmentally significant behavior or environmental behavior includes all types of behaviors that change the availability of materials or energy from the environment or alters the structure and dynamics of ecosystems or the biosphere, regardless of whether people are aware of, or consider environmental impacts of specific behavior when making decisions. Certain behaviors directly lead to environmental change; for example, throwing garbage in the neighborhood, cutting of the forests, etc. (Stern, 2000). Other behaviors have indirect effect on the environment, by influencing the ability of people in which they make decisions that might directly affect the environment (Rosa and Dietz, 1998). For example, behaviors that affect international development policies. National environmental and related policies can have greater environmental impact indirectly than behaviors that directly change the environment (Stern, 2000).

While environmentally significant behavior can have both positive as well as negative impact on the environment, pro-environmental behaviour refers to behaviour that has least harmful impact on the environment, or may have beneficial impact.

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The term “environmentalism” is used to broadly refer to the processes related to the actions intended to lessen the impact of human behavior on the natural environment. Within the concept of environmentalism we include a variety of psychological constructs like behavior, intentions, motives, attitudes, beliefs and values and actions to lessen the impact on the environment such as activism, public policy and environmental justice (Zelezny and Schultz, 2000). To bring about a change in behavior it is important firstly to select the behaviours to be changed, secondly to find out reasons behind those behaviours, thirdly to apply ways to change related behaviours and their background, and lastly to evaluate the effects of such efforts (Geller, 2002; Steg and Vlek, 2009).

### **Factors Affecting Environmental Behavior**

According to Stern (2000), environmental concerns rarely affect behavior. Mostly, environmental behavior may follow from various non-environmental concerns, for example, electricity or petrol consumption might be reduced to save money. Many researchers state clearly according to goal-framing theory that behavior is an outcome of multiple motives (Stern, 2000). Three goal-frames are distinguished: a hedonic goal frame is related to one's pleasure at the moment, a gain goal-frame is related to protect and improve one's resources, and a normative goal-frame is related to act appropriately or to act in an environmentally sound way. Thus the factors that might affect environmental behavior include:

1. *Cost and benefits*—People tend to opt for alternatives with highest benefits against lowest costs (e.g., in terms of money or effort). In environmental psychology it is known as the gain-goal frame that makes people very sensitive towards change in their personal resources. The time duration of such goal frames is middle or long term. For example, people will choose cheaper products over expensive ones even if they have harmful impact on the environment. Hence the goals that are related to the increment of the resources especially the monetary resources will be easily triggered as compared to the sub goals that are related to ethics and morals. Behavior is strongly influenced by economic motives, thus highlighting the economic advantages of engaging in a specific activity (Mohr, 2000).
2. *Moral and normative concerns*—Many studies have highlighted the role of moral and normative concerns behind environmental behaviour. Studies have shown that if people are selfless and adopt good values that do not aim at fulfilling their personal interests then there is more likelihood that they will have a pro-environmental behavior (Poortinga, Steg, and Vlek, 2004). Ethics and morals if inculcated in a child from the very beginning influence behavior and encourage acting pro-environmentally. According to Lindenberg and Steg normative goal frame is related with right behavior (such as contributing to a clean and safe environment). It makes people responsive to what is right. For example, a person in a normative goal frame takes trouble to act in an environmentally sound way because this is the "correct" thing to do.
3. *Social customs*—Social norms and customs also influence one's behaviour. According to the theory of normative conduct (Cialdini, Kallgren, and Reno, 1991) social norms are of two types (Injunctive norms) firstly the behaviour that is commonly approved or disapproved for example, peer pressure may make some action accepted among the youth and might even result in their rejection and (Descriptive norms) extent to which behaviour is perceived as common, i.e. observation of actions of people around us (Steg and Vlek, 2009). The teachings of the Indian society during the Vedic period laid emphasis upon bringing the students close to nature and upon developing respect for the environment through customs like *bhumi poojan*, *yagya* lessons delivered under the trees etc.

4. *Method of information presentation*—As argued by Pichert and Katsikopoulos, (2007) if information is displayed lightly then there will be less possibility of its acceptance, but if the same information has some element that increases its impact will make that product or action more accepted.
5. *Reinforcement theory*—Positive reinforcement would lead to stabilization of a specific behavior.

### **Role of Media in Inducing Pro-environmental Behavior**

Several research studies have proved that mass media has a great potential for influencing knowledge gain, public attitude and behavior. Mass media both electronic and print media apart from creating environmental awareness, can play effective role in influencing the behavior of people also. They prove to be more effective than the personal contact. The printed media such as books, magazines, newspapers and brochures target the literate section of the society whereas electronic media such as radio, television and websites (and social media) help in dissemination of information at a fast speed both among the illiterates and among the students. Mass media can be used to deliver well-defined, behaviorally-focused messages to large number of people repeatedly (Melanie A Wakefield, Barbara Loken, Robert C Hornik, 2009). It can be used as a medium to influence the gain-goal frame of people in which sustainable actions are treated as "product" to be sold (Costanzo et al., 1986). Advertising, awareness campaigns eg. (Haryalo Rajasthan) and photo journalism (used by the United Nation Environmental Programme, UNEP) are some ways to influence behaviour.

### **Art as a Facilitator of Pro-environmental Behaviour**

Art forms, both visual and performing, can touch our emotions and can arouse feelings of concern about the environment, develop a connection with the environment, encourage people to think over environmental issues, provide them with new ways to solve them and compel us to change our habits. Art forms display the delicate relationship of human society and the natural world (Wallen, 2003). It can be used to communicate complex scientific concepts and to deliver unpleasant and urgent messages to the general public (Curtis, Reid and Ballard, 2012; Sandrine, 2006). Stern (2000), talks about 'private sphere' and 'public sphere' environmentalism and focuses on the importance of collective efforts to save environment. Theatre, street plays and dramas related to environmental themes promote students to work collectively and this is necessary for public sphere environmentalism where people can even pressurize the government to change policies.

Eco-art or ecological art is a multidisciplinary, emotionally loaded, holistic approach of providing a practical form of problem-solving environmental management model. Studies show that it has helped in improving people's understanding and awareness of environmental issues and problems and also initiate new policies and practical projects (Sandrine, 2006). Ecological artists, through landscape painting and photographs have been able to sensitively shake public, both by portraying the beauty of nature and the damage of the environment. In China and Europe, landscape painting evolved along with growth of cities, the shrinking landscapes developed respect and appreciation for nature and reconnected people to the land. Similarly, artists in their art forms expressed their distress for our mechanistic approach towards nature during the industrial revolution. For example, photographer Ansel Adams in Yosemite Valley through his landscape paintings played an essential role in the 'conservation movement' and creation of national parks in the USA and elsewhere (Sandrine, 2006).

### Role of Literature

Words have power. Through stories, poetry and other forms of literature artists have helped people learn about the environment. Poems and prose can (Pratham Rashmi by Sumitra Nandan Pant) present nature in a very astonishing way and could be used to arouse the interest of the people in the issues related to the environment.

*Ecocriticism*—Ecocriticism is an ecological outgrowth of post-structural criticism that studies human representations of nature. Ecocritics reread canonical texts from earth-centered approaches and promote teaching and research of environmental non-fiction. Ecocritics are interested in how discursive conventions enable and constrain our contact with environment and place, how much does place inform representations, and how do the means of representations inform our sense of place. Ecocritics also speak for human minorities whose exploitation is often closely interlinked with exploitation of nature. The fact that is often concealed in hegemonic systems.

Examples related to environmentally significant behavior

1. Rubber plant
2. Chipko Movement
3. Silent Valley
4. Narmada Bachao
5. Green Peace

### Obstacles

- Electronic mass media is not available to large number of people especially in the developing nations.
- High illiteracy percentage, lack of electricity and new electronic media devices in rural and remote areas prohibit dissemination of information.
- Print media is not relevant to illiterate people and is inaccessible to most people.
- Art forms are not perceptible to all the people.
- Literature will be able to influence only a particular section of society.
- Large amount of money is needed for advertisement.

### Suggestions

The aim of environmental education should be to not only increase the awareness level of the students and the citizens but also develop the desired behaviour. By targeting the gain-goal frame as well as the normative frame of the people such result could be achieved. The goal-gain frame could be targeted for the general public and the illiterate section of the society. Art forms and electronic media could be used to arouse specific behavior among such people. The students can be targeted by influencing the normative frame of the students. This can be done by making changes in the education system.

*Education system should be value based*—The current education system is focused on the development of the employable skills of the students. Along with the skill formation, value system should also be targeted. Using examples from and introducing the concept of environmental art, ecocriticism, environmental plays, theatre, street plays could arouse such pro-environmental behavior among the people. Making environmental education one of the mainstream subjects is necessary to induce behavior change. If environmental education is sidelined then all the efforts to induce environmentally significant behaviour would be futile. Serious consideration should be given to the issues of the environment; then only effective outcomes would be perceptible.

## Conclusions

It can be concluded from the above discussion that the issues of environment cannot be ignored and sidelined. There is an urgent need for inculcating such behavior among the citizens that would help the planet combat environmental problems. Such change is possible only when we try to move a step ahead of the awareness level and work to induce a change in the behavior. This could be achieved by enhancing the environmental education system with art, literature and media that would target the youth. Such aids prove to be more effective than the primitive methods of imparting education. It is necessary to create a relation between the citizens and the environment and only then effective outcomes would become perceptible.

## Works Cited

- Chawla, Louise, Cushing and Debra Flanders. "Education for Strategic Environmental Behavior." *Environmental Education Research*. (2007): 437-452.
- Cialdini, Robert B., Carl A. Kallgren, and Raymond R. Reno. "A focus theory of normative conduct: A theoretical refinement and reevaluation of the role of norms in human behavior." *Advances in experimental social psychology* 24.20 (1991): 1-243. <<http://books.google.co.in>
- Costanzo, Mark. "Energy Conservation Behavior: The Difficult Path from Information to Action." *American Psychologist*. 41.5 (1986): 521.
- Curtis, David J., Nick Reid, and Guy Ballard. "Communicating Ecology Through Art : What Scientists Think." *Ecology and Society*. (2012): 3.
- Curtis, D. J., Reid, N. and G. Ballard, "Communicating Ecology Through Art: What Scientists Think." *Ecology and Society*. (2012).
- DuNann Winter, D., and S. M. Koger. "The Psychology of Environmental Problems." Mahwah, NJ: Lawrence Erlbaum, 2004.
- Finger, Matthias. "From Knowledge to Action? Exploring the Relationships Between Environmental Experiences, Learning, and Behavior." *Journal of Social Issues*. (1994): 141-160.
- Gardner, G. T., and P. C. Stern, "Environmental Problems and Human Behavior." Boston, MA: Pearson Custom Publishing, 2002.
- Geller, E. Scott. "The Challenge of Increasing Proenvironment Behavior." *Handbook of Environmental Psychology*. 2 (2002): 525-540.
- Hugerford, Harold R. and Velk Trudi L. "Changing learner Behaviour Through Environmental Education." put link.
- Lehman, Philip K. and Geller E. Scott. "Behavior Analysis and Environmental Protection: Accomplishments and Potential for More." *Behavior and Social Issues*. (2004): 13-32.
- Lindenberg, S. and Steg, L. "Normative Gain and Hedonic Goal Frames Guiding Environmental Behavior." *Journal of Social Issue*. ( 2007): 117-137.
- Lindenberg, S. and Steg, L. "Encouraging Pro-environmental behaviour: An integrative review and research Agenda." *Journal of Environmental Psychology*. (2009): 309-317.

- McKenzie-Mohr, Doug. "Promoting Sustainable Behavior: An Introduction to Community-Based Social Marketing." *Journal of Social Issues*. (2000): 543-554.
- Nordlund, Annika M. and Jörgen Garvill. "Value Structures behind Proenvironmental Behavior." *Environment and Behavior*. (2002): 740-756.
- Pichert, Daniel, and Konstantinos V. Katsikopoulos. "Green Defaults: Information Presentation and Pro-environmental Behaviour." *Journal of Environmental Psychology*. 28.1 (2008): 63-73.  
<[https://www.mpib-berlin.mpg.de/volltexte/institut/dok/full/Katsikopoulos/Pichert/pichert\\_katsikopoulos.pdf](https://www.mpib-berlin.mpg.de/volltexte/institut/dok/full/Katsikopoulos/Pichert/pichert_katsikopoulos.pdf)>.
- Pichert, D., and Katsikopoulos, K. V. "Green defaults: Information Presentation and Pro-environmental." *Journal of Environmental Psychology*. (2007).
- Poortinga, Wouter, Linda Steg, and Charles Vlek. "Values, Environmental Concern, and Environmental Behavior A Study into Household Energy Use." *Environment and Behavior*. (2004): 70-93.
- Rosa, Eugene A. and Thomas Dietz. "Climate Change and Society Speculation, Construction and Scientific Investigation." *International Sociology*. (1998): 421-455.
- Rosenthal, Ann T. "Teaching Systems Thinking and Practice through Environment and Art." *Ethics and the Environment* (2003): 153-168.
- Sampei, Y. and Aoyagi-Usui, M. "Mass-media Coverage, Its Influence on Public Awareness of Climate-change Issues and Implications for Japan's National Campaign to Reduce Greenhouse Gas Emissions." *Global Environmental Change*. (2009): 203-212.
- Sandrine, Simon. "Systemic Educational Approaches to Environmental Issues: The Contribution of Ecological Art." *Systemic Practice and Action Research*. (2006): 143-157.
- Steg, L. and C. Vlek. "Encouraging Pro-environmental Behaviour: An Integrative Review and Research Agenda." *Journal of Environmental Psychology*. (2009): 309-317.
- Stern, Paul C. "Toward a Coherent Theory of Environmentally Significant Behavior." *Journal of Social Issues*. (2000): 407-424.
- Tiiu, Speek. "Environment in Literature: Lawrence Buell's Ecocritical Perspective." 160-172, put link.
- Wakefield, Melanie A., Barbara Loken, and Robert C. Hornik. "Use of Mass Media Campaigns to Change health behaviour." *The Lancet*. 376.9748 (2010): 1261-1271 <[http://www.childsurvival.net/?content=com\\_articles&artid=517](http://www.childsurvival.net/?content=com_articles&artid=517)>.
- Wakefield, Melanie A., Loken Barbara and Robert C. Hornik. "Use of mass media campaigns to change health behavior." (2010): 1262-1271.
- Zelezny, L. and Schultz, P.Wesley. "Promoting environmentalism." *Journal of Social Issues*. (2000): 365-372. <[http://www.stanford.edu/~kcarmel/CC\\_BehavChange\\_Course/readings/Additional%20Resources/J%20Soc%20Issues%202000/delivery%253Bid=2gms91ynk0pcr.pdf](http://www.stanford.edu/~kcarmel/CC_BehavChange_Course/readings/Additional%20Resources/J%20Soc%20Issues%202000/delivery%253Bid=2gms91ynk0pcr.pdf)>.