Objective Cultural Capital and Environmental Behaviors
(Case Study: Sanandaj City)

Yaghoub Ahmadi

Department of Social science, Payame Noor University, PO BOX 19395 - 3697, Tehran, IRAN
E-mail address: yahmady2001@yahoo.com

Keywords: Environment, Cultural Capital, belief, Citizen, Behavior

ABSTRACT. One of important areas of interest in sociology is the so-called environmental or pro-environmental behavior. In response to the rapidly growing global environmental problems many call for changes in how individuals should deal with the environment. An important aspect of moving towards an environmentally sustainable world is to promote pro-environmental behavior. This paper investigates the cultural factors that affect on people's Environmental Behaviors on Sanandaj City.

This paper is a survey study by control of terms, is a broaden study by extended and is a cutting study by time (in the first half of 2015). The population is the entire person that has citizens in Sanandaj city. The sample size based on kockran formula is 320. The questionnaires with suitable structures validity (based on Kronbach’s coefficient of Alfa) in the ratio of age, sex in deferent areas have been distributed.

Results indicate that the most effective variable on Environmental Behaviors of citizens is Objective Cultural Capital.

1. INTRODUCTION

They are examples of human behavior which has a certain influence on the environment – greater or smaller, positive or negative. Nevertheless, as people are in an interaction with their environment almost constantly, almost all human behavior could be called environmental behavior. That means, that this term would include all activities regardless the fact, how insignificant cant their impact on the environment is - e.g. A walk, any human movement, even breathing.1 This overall interpretation of environmental behavior is, from the logical point of view, correct, nevertheless for the needs of disciplinary communication totally useless.

The meaning of the term “environmental behavior” unwinds from the contemporary conditions in which social studies study environmental behavior. In the period when the society registers changes of the environment, ecosystems, biosphere and climate which proceed in connection with human activity, the attention of professionals is focused mainly on such environmental behavior which is connected with the usage of energy, raw materials, waste production and pollution. Environmental behavior therefore is, in narrow sense, such a behavior which has a significant impact on the environment.

In this sense, the term “environmentally-relevant behaviors” is also sometimes used (environmentally-relevant behaviors, Bechtel, Churchman 2002, Stern 2000). Environmental behavior of an individual may be unintentional and not reflected; in such case the person does not realize the impact of his/her behavior – e.g. many people buy soya products, cut fl owners or cigarettes.

In case the person realizes the environmental impact of his/her action, we speak about so called intentional environmental behavior or directly about environmental behavior – e.g. exporting the waste into the countryside or feeding the titmice in winter (see table Nr. 1). Most cases of environmental behavior can be, based on the knowledge of environmental science or ecology, judged according to their impact on the environment, and labeled as environmentally friendly or unfriendly. Some cases can be judged easily, e.g. a bicycle ride is more positive than the ride in a car, holiday located near home are more favorable than travelling to another continent.
Nevertheless, evaluation of certain cases is doubtful (is the attendance on a political meeting about climate change in South Africa where travelling by plane is necessary environmentally positive?) or scientifically demanding (buying a new hybrid car instead of a ten-year-old one?). These factors have to be taken into consideration in the following definition:

Proenvironmental behavior is such behavior which is generally (or according to knowledge of environmental science) judged in the context of the considered society as a protective way of environmental behavior or a tribute to the healthy environment.

Environmentally protective option is to write a letter by handwriting instead of using a computer, vegetarian lunch instead of a pork steak originated from mass breeding; attribute to the healthy environment is e.g. a disposal of illegal dumping (see table Nr. 1).

The following terms can be used as equivalents for proenvironmental behavior “environment-protective behavior”, “environment-preserving behavior”, “environmentally responsible behavior” (Kaiser et al., 1999), “ecological behavior” (Axelrod, Lehman 1993, Kaiser et al., 1999), “sustainable behavior” (Clayton, Myers, 2009). The opposite is “environment-destructive behavior” or Czech “environmentally unfriendly behavior”.

2. LITERATURE AND REVIEW OF PREVIOUS STUDY

Many voices have called for changes in human behavior, changes that would harm the environment less. Collectively, we humans have had an enormous impact on the land, water, and air of the planet, far out of proportion to our role as merely one species out of millions. We have massively shaped the planet to suit our comfort and perceived needs, using our outstanding technical abilities and dexterity. In doing so, we have very heavily exploited many of the world’s natural resources, pushed aside other species, and left the by-products of our efforts to improve our lifestyles in pools, pits, oceans, lakes, rivers, and landfills around the world, on the highest mountains, and in the air. And this trend is increasing.

Many possible solutions for changing this behavioral direction have been proposed, including a variety of theories, policies, and interventions (e.g., Abrahamse, Steg, Vlek, & Rothengatter, 2005; Swim et al., 2011). Several attempts have been made to describe the categories of factors that result in pro-environmental behavior or the lack of it. These attempts include visualizing the problem at the macro scale and therefore include such non-psychological factors as geophysical conditions and political influences (Gifford, 2006; 2008).

At the meso scale, which focuses on psychological influences, the values-beliefs-norm model (Stern, 2000), the theory of planned behavior (Ajzen, 1991), norm activation theory (Schwartz, 1977), and the focus theory of normative conduct (Cialdini, Reno, & Kallgren, 1990) have been proposed as succinct models of pro-environmental concern and behavior. Yet many studies have shown that the elements of these models could be expanded to include other personal and social factors (e.g., Chen, & Tung, 2010; Heath & Gifford, 2002; Hinds & Sparks, 2008; Raymond, Brown, & Robinson, 2011).

At the same time, self-reported concern often does not translate to objective pro-environmental behavior; the correlation has been estimated in one meta-analysis to be about .45 (Kormos & Gifford, submitted). This occurs partly because as many as 30 barriers to behavior change have been described (Gifford, 2011). Humans are an extremely protean species. Succinct or “shorthand” theories and models may help to capture important portions of the variability in environmental concern and pro-environmental behavior, but a full account inevitably must include a broad range of personal and social influences. To that end, this article summarizes many of the personal and social influences on whether a given person will tend to have concern about the environment or act in pro-environmental ways. It cannot summarize all the efforts; 25 years ago, over 300 relevant studies were gathered in a meta-analysis by Hines, Hungerford and Tomera (1986-87), and many more studies have been conducted since then. Rather, we hope to provide a reasonable, selective guide to the personal and social influences.

These influences on environmental concern and behavior include childhood experience, knowledge and education, personality, sense of control, values, political and world views, felt
responsibility, place attachment, norms, age, gender, social class, chosen activities, religion, urban-rural differences, proximity to problematic environmental sites, and cultural and ethnic

Education is important. Individuals with more education in general are more concerned about the environment (Arcury & Christianson, 1993; Chanda, 1999; Hsu & Rothe, 1996; Klineberg, McKeever, & Rothenbach, 1998; Ostman & Parker, 1987), although a study in Norway found the opposite (Grendstad & Wollebaek, 1998). More specifically, however, business (Synodinos, 1990) and technology (McKnight, 1991) majors are less concerned than students in other disciplines (Tikka, Kuitnen, & Tynys, 2000). Students enrolled in a university environmental education (EE) program have significantly greater environmental knowledge, verbal commitment, and actual commitment than similar students who are not enrolled in (Gifford, Hay, & Boros, 1982–83), although it may be that students in EE programs had more environmental concern before they entered the EE program (Reid & Sa’di, 1997); EE programs may not necessarily increase environmental attitudes.

Values (and related concepts that are relatively stable within a person) are strongly related to environmental attitudes (Schultz & Zelezny, 1999). Not surprisingly, persons who hold more altruistic and biospheric values report being more environmentally concerned (Milfont & Gouveia, 2006). Individuals who simply have stronger value orientations, are more people-oriented, less authoritarian (Schultz & Stone, 1994), have higher levels of moral development (Swearingen, 1990), and believe their actions will make a difference (Axelrod & Lehman, 1993) tend to be more environmentally concerned. Younger people are less ecocentric than older people, at least in some samples (Grendstad & Wollebaek, 1998).

An Australian study reports that committed environmentalists have more secular and post-materialist values (McAllister & Studlar, 1999). Post-materialistic values seem positively related to environmental concern; in turn, environmental concern, perceived threat, and perceived behavioral control apparently predict willingness to sacrifice, which then seems to lead to a variety of pro-environmental behaviors (Oreg & Katz-Gerro, 2006).

Post-materialist values typically are held by more affluent citizens who have fewer worries about the basic materials of life; they tend to be concerned with “higher-level” goals and actions such as self-improvement, personal freedom, and providing direct input to government. Among students, holding moral principles is a better predictor of environmental actions, whereas among community residents, tangible possessions (such as material economic rewards) are better predictors of environmental actions (Axelrod & Lehman, 1993). Holding post-materialist values and political competence is related to increased interest in environmental political action (Paloniemi & Vainio, 2011).

Materialists and post-materialists may be concerned about different environmental issues. In Turkey, materialists tend to be more concerned about local environmental issues (Gökksen, Adaman, & Zenginobuz, 2002). However, post-material values may be less important than other factors, such as whether an actual environmental hazard is nearby (Drori & Yuchtman-Yaar, 2002).

Individuals who believe in free-market principles, that technology will solve environmental problems, and that economics is the best measure of progress tend to have less environmental concern (Heath & Gifford, 2006; Kilbourne, Beckmann, & Thelen 2002). Similarly, Less environmental concern has been reported for individuals with conservative political views (Eiser, Hannover, Mann, Morin et al. 1990; Schultz & Stone, 1994). However, the relation between values and environmental views may not be simple. People have multiple values and they can conflict. When two values are in conflict, for example, the difference between the preexisting level of endorsement of the two values may predict one’s environmental views than the endorsement level of either single value (Howes & Gifford, 2009).

Early studies (Hines, Hungerford, & Tomera, 1986/87; Roberts, 1993) as well as more recent ones (Gilg, Barr, & Ford, 2005; Pinto, Nique, Añaña, & Herter, 2011) find that older people report more pro-environmental consumer behaviors than younger people. These findings may support the hypothesis that something important happened to an older generation that did not happen to the younger generation. If so, such a cohort effect would not be caused by aging itself, but by events
that had a greater impact on one age group than another. This effect seems plausible if it stems from a background of limited resources and the need to conserve in the depression 1930s and wartime 1940s. However, the behaviors measured often are not only conservation behaviors, but include such choices as fairly traded goods and recycled products (Gilg, Barr, & Ford, 2005). This may hint at another hypothesis that is as yet poorly understood.

The picture for environmental concern, however, is not the same as that for environmental behavior. Most (but not all) research shows that younger people report being more environmentally concerned than older people, at least about the general environment (Arcury & Christianson, 1993; Honnold, 1984–85; Klineberg, McKeever, & Rothenbach, 1998; Zhang, 1993), although why this is so when younger people may be less ecocentric (see above) remains to be discovered. This trend even seems to hold within the younger age range; a German study found that 12-year-olds were more concerned than 15- and 18-year-olds (Szagun & Mesenholl, 1993). However, environmental concern is quite variable among older adults, so concluding that all older people are unconcerned would be an obvious mistake (Wright, Caserta, & Lund, 2003).

Apart from the cohort effect, two other possible interpretations of this age-related trend are possible. First, as people age, they may become less concerned about the environment; this would be a true age effect. Second, perhaps the times are changing; that is, if the overall political-social climate is growing more conservative, everyone may be less concerned about the environment than they were earlier. This is an era effect. In a clever study that compared concern across different ages, generations, and eras to answer this question, support appeared for an era effect, although true age effects also appear strong within the young-adult age group (Honnold, 1984–85). However, this study is now almost thirty years old, so a current examination of this issue is needed.

Early research reviews of gender differences in environmental attitudes and behaviors (Hines, Hungerford, & Tomera, 1986–87; Van Liere & Dunlap, 1980) concluded that the literature was inconsistent; that no clear differences could be discerned. However, a clearer—but not entirely uniform—picture seems to have emerged more recently, in which women tend report stronger environmental attitudes, concern, and behaviors than men (Blocker & Eckberg, 1997; Gutteling & Wiegman, 1993; Luchs & Mooradian, 2012; Scannell & Gifford, 2013; Tikka, Kuiten, & Tynys, 2000; Zhang, 1993). Indeed, this gender difference in environmental attitudes and behaviors was also supported across age and across 14 countries and was consistently stronger for behaviors than for environmental attitudes (Zelezny, Chua & Aldrich, 2000). The exceptions to this trend seem to be in China, where the above pattern was observed in domestic environmental behaviors (e.g., recycling), whereas outside the home (e.g., environmental organization donations) no gender differences were exhibited, and women expressed lower levels of concern than men (Xiao & Hong, 2010).

Based on topic was mentioned above in this study the hypothesis of this study is:

**H1: Objective Cultural Capital impact on Environmental Behaviors**

### 3. METHODS

#### 3.1. Data and Sample

The responders of the study were 320 citizens of Sanandj from three regions. For the determining of 320 citizens used of the under formula:

\[
N = \frac{\left(\frac{t^2 \cdot p \cdot q}{d^2}\right)}{1 + \frac{1}{N} \left(\frac{t^2 \cdot p \cdot q}{d^2} - 1\right)} \approx 320
\]

\[
N = 179000
\]

\[
t = 2.58
\]

\[
p = 0.6
\]

\[
q = 0.4
\]

\[
d = 0.05
\]
3.2. Reliability of questionnaire
Reliability of questionnaire was tested by Cronbach's alpha reliability test. According to Table 1, reliability of questions related to Environmental Behaviors 0/911 and Objective Cultural Capital 0/854.

Table 1: Results of Cronbach's alpha for variables in questionnaire

| variable                  | Number of items | Alpha amount |
|---------------------------|-----------------|--------------|
| Environmental Behaviors   | 20              | 0/911        |
| Objective Cultural Capital| 5               | 0/854        |

4. RESULTS
In this section, results of research results were indicated based on two dimensions, descriptive and explanation results:

4.1. Descriptive results:
H1: level of Environmental Behaviors and Objective Cultural Capital of citizen of Sanandaj
For determining situation of Environmental Behaviors and Objective Cultural Capital of citizenships of Sanandaj was used of mean responses of sample. The mean responses of sample were showed in Table 2:

Table 2: Mean responses of sample statistics based of Likert scale

| Variable                  | Number | Man    | S.D     | Minimum | Maximum |
|---------------------------|--------|--------|---------|---------|---------|
| Environmental Behaviors   | 320    | 64/48  | 9/73    | 20      | 100     |
| Objective Cultural Capital| 320    | 17/32  | 2/24    | 5       | 25      |

Based of the table 2, results indicat Mean of Environmental Behaviors from 20 to 100 is 64/48 that shows Environmental Behaviors is in good situation. Results also show that level of Objective Cultural Capital is in middle(17/32).

4.2. Explanation results:
H1, 2: Objective Cultural Capital Impact on Environmental Behaviors and
For survey impact Objective Cultural Capital and Environmental Behaviors, because both of variables have measured in Distance level, by use of Pearson Test, the meaningfully of their relationship was computed.
Table 3 indicates situation of relationship between Environmental Behaviors and Objective Cultural Capital.

Table 3: The results of Pearson Correlation Test

| Independent Variables | Objective Cultural Capital | Environmental Behaviors |
|-----------------------|----------------------------|--------------------------|
|                       |                            | Sig. (2-tailed) | Pearson value |
|                       |                            | 0/097         | 0/338         |

Based of table 3, results indicate:
1. There is positive and meaningful relationship between Objective Cultural Capital and Environmental Behaviors (Sig= 0.097).
2. Strength of relationship between Objective Cultural Capital and Environmental Behaviors is in high (value=0/338).
CONCLUSION

As mentioned above the main objective of this paper described situation of Environmental Behaviors of Sanandaj citizenships and explain it by Objective Cultural Capital factor.

The findings of the study have determined that Environmental Behaviors of citizenships is 64/48 that shows Environmental Behaviors is in good situation. Results also showed that level of Objective Cultural Capital were in high middle. The result also shows that Objective Cultural Capital has been meaningful impact on Environmental Behaviors of citizenships. The above theoretical study associated with Environmental Behaviors and Objective Cultural Capital also confirms these results. It is mentioned that the high level of Objective Cultural Capital due to best Environmental Behaviors.

This project sponsored by PNU Kurdistan province and in particular credit (Grant) has been performed.

Reference

[1] Abrahamse, W., Steg, L., Gifford, R., & Vlek, C. (2009). Factors influencing car use and the intention to reduce it: A question of morality? Transportation Research Part F: Psychology and Behavior, 12, 317-324.

[2] Abrahamse, W., Steg, L., Vlek, C., & Rothengatter, T. (2005). A review of intervention studies aimed at household energy conservation. Journal of Environmental Psychology, 25, 273-291.

[3] Adams, J. (1995). Risk. London: Routledge, Taylor, & Francis.

[4] Ajzen, I. (1991). The theory of planned behavior. Organizational Behavior and Human Decision Processes, 50, 179-211.

[5] Allport, G. W. (1954). The historical background of modern social psychology. In G. Lindzey, (Ed.), Handbook of social psychology (Vol. 1, pp. 3-56). Reading, MA: Addison-Wesley.

[6] Ando, K., Ohnuma, S., Blöbaum, A., Matthies, E., & Sugiura, J. (2010). Determinants of individual and collective pro-environmental behaviors: Comparing Germany and Japan. Journal of Environmental Information Science, 38, 21-32.

[7] Arcury, T. A., & Christianson, E. H. (1993). Rural-urban differences in environmental knowledge and actions. Journal of Environmental Education, 25, 19–25.

[8] Arcury, T. A., Scollay, S. J., & Johnson, T. P. (1987). Sex differences in environmental concern and knowledge: The case of acid rain. Sex Roles, 16, 463–472.

[9] Arp, W., & Boekelman, K. (1997). Religiosity: A source of Black environmentalism and empowerment? Journal of Black Studies, 28, 255–267. NOT IN TEXT Arp, W., & Kenny, C. (1996). Black environmentalism in the local community context. Environment and Behavior, 28, 267–282.

[10] Axelrod, L. J., & Lehman, D. R. (1993). Responding to environmental concerns: What factors guide individual action? Journal of Environmental Psychology, 13, 149–159.

[11] Baldassare, M., & Katz, C. (1992). The personal threat of environmental problems as predictor of environmental practices. Environment and Behavior, 24, 602–616.

[12] Balderjahn, I. (1988). Personality variables and environmental attitudes as predictors of ecologically responsible consumption patterns. Journal of Business Research, 17, 51–56.

[13] Bamberg, S, & Möser, G. (2007). Twenty years after Hines, Hungerford, and Tomera: A new meta-analysis of psycho-social determinants of pro-environmental behaviour. Journal of Environmental Psychology, 27, 14-25.
[14] Bandura, A. (1977). Self-efficacy: Toward a unifying theory of behavioral change. *Psychological Review, 84*, 191-215.

[15] Bassett, G. W., Jr., Jenkins-Smith, H. C., & Silva, C. (1996). Onsite storage of high level nuclear waste: Attitudes and perceptions of local residents. *Risk Analysis, 16*, 309–319.

[16] Bechtel, R. B., Verdugo, V. C., & Pinheiro, J. D. Q. (1999). Environmental belief systems: United States, Brazil, and Mexico. *Journal of Cross-Cultural Psychology, 30*, 122–128.

[17] Biel, A., & Nilsson, A. (2005). Religious values and environmental concern: Harmony and detachment. *Social Science Quarterly, 86*, 178-191.

[18] Bjerke, T., & Kaltenborn, B. P. (1999). The relationship of ecocentric and anthropocentric motives to attitudes toward large carnivores. *Journal of Environmental Psychology, 19*, 415–421.

[19] Blocker, T. J., & Eckberg, D. L. (1997). Gender and environmentalism: Results from the 1993 General Social Survey. *Social Science Quarterly, 78*, 841–858.

[20] Bogner, F. X., & Wiseman, M (1997). Environmental perception of rural and urban pupils.

[21] Urien, B., & Kilbourne, W. (2011). Generativity and self-enhancement values in eco-friendly behavioral intentions and environmentally responsible consumption behavior. *Psychology and Marketing, 28*, 69-90. doi: 10.1002/mar.

[22] Uyeki, E. S., & Holland, L. J. (2000). Diffusion of pro environmental attitudes. *American Behavioral Scientist, 43*, 646–662.

[23] Van Liere, K. D., & Dunlap, R. E. (1980). The social bases of environmental concern: A review of hypotheses, explanations, and empirical evidence. *Public Opinion Quarterly, 44*, 181-197.

[24] Walton, T., & Austin, D. M. (2011). Pro-environmental behavior in an urban structural context. *Sociological Spectrum, 31*, 260-287. doi: 10.

[25] White, L. (1967). The historical roots of our ecological crisis. *Science, 155*, 1203-1207.

[26] Whitmarsh, L. (2009). Behavioural responses to climate change: Asymmetry of intentions and impacts. *Journal of Environmental Psychology, 29*, 13–23.

[27] Whitney, E. (1993). Lynn White, ecotheology, and history. *Environmental Ethics, 15*, 151-169.

[28] Wolkomir, M., Futreal, M., Woodrum, E., & Hoban, T. (1997). Substantive religious belief and environmentalism. *Social Science Quarterly, 78*, 96–108.

[29] Woodrum, E., & Hoban, T. (1994). Theology and religiosity effects on environmentalism. *Review of Religious Research, 35*, 193-206.

[30] Wright, S. D., Caserta, M., & Lund, D. A (2003). Older adults’ attitudes, concerns, and support for environmental issues in the ‘new west.’ *International Journal of Aging & Human Development, 57*, 151–179.