

The Investigation of Various Aspects of Sustainable Environmental Behavior

K. Karatekin¹, B. Aydinli²

The world is now experiencing environmental problems which require international collaboration. The basic argument is that human behavior can be transformed into an ecologically friendly one. The habits imposed by modern life have caused acceleration in environmental problems such as global warming. Normally, Earth has mild temperatures compared to rest of the universe, and this is necessary for the existence of carbon-based life. There are many aspects of global warming and not all of them are harmful to the environment. People should be aware of and understand the various aspects of this issue. It is generally agreed that the negative effects of global climate change outweigh any positive impacts. Firstly, the increasing fluctuations in precipitation may result in regional flooding or aridity, and can cause soil erosion and infertility of soils in agricultural lands. Secondly, the inefficiency of carbon sequestration due to increases in consumption, deforestation and increased usage of agricultural chemicals can result in various environmental problems in which the underlying factor is destructive human behavior. Unless these destructive behaviors are replaced with positive ones, these environmental problems may ultimately result in catastrophic future failure of civilization. The responsible behaviors towards the solution of environmental problems have five categories, and cover planned, effective and participatory inclusion (Volk and Mcbeth, 2001). These categories are as follows;

- **Eco-management** is direct environmental activities to protect the environment.
- **Economic/consumer action** is the boycotting and discriminating use of goods.
- **Persuasion** is a communication skill to motivate someone to take a position of environmental action in a positive way.
- **Political action** is the lobbying, voting or other activities that drive government policies.
- **Legal action** is support of the laws on environmental actions (Hungerford and Peyton, 1980; Marcinkowski, 2001).

The young populations in developing countries are the targets to protect the environment which can only be possible with increased awareness (İleri, 1998). Educators and instructors are also in this category in terms of directing human behavior because of the global importance on the world's agenda, that theoretical knowledge on this issue needs to be converted into behavior. In this study, a questionnaire having dimensions of the aforementioned aspects was developed for candidate teachers to determine their understanding of environmental issues and teaching practices related to them. This survey model was executed covering 1587 social studies candidate teachers in Turkey. The results from the survey are summarized in the Table 1.

¹Kadir Karatekin, Associate Professor, Faculty of Education, Kastamonu University, Kastamonu, Turkey; ²Bahattin Aydinli, Associate Professor, Faculty of Education, Kastamonu University, Kastamonu, Turkey. Corresponding author: K. Karatekin, email: kadirkaratekin@gmail.com.

Table 1. The results of the environmental behaviors survey by subdimension.

Subdimensions	N	Least Scores	Highest Scores	\bar{X}	S
Eco-management	1587	7	35	23.15	4.62
Persuasion	1587	6	30	23.78	3.52
Political Legal Action	1587	6	30	11.85	5.18
Total	1587	19	95	54.77	12.16

The eco-management and persuasion behavior scores were found to be moderate, while the political and legal action behavior scores were low. The existing agro-environmental issues cannot be just mitigated with eco-management behavior but must also include both political and legal behaviors. In summary, the research indicated that we need to educate participatory peoples to have active behaviors towards these environmental concepts. Additionally, educational curricula for training teachers should cover all aspects, including political and legal activities that their students will need to know to impact world environmental issues.

References

- Hungerford, H., and R. Peyton. 1980. A paradigm for citizen responsibility: Environmental action. In: Current Issues VI: The Yearbook of Environmental Education and Environmental Studies, A. Sacks, L.L. Burrus-Bammal, C.B. Davis, and L.A. Iozzi, eds. ERIC/SMEAC, Columbus, Ohio. pp. 146-154.
- İleri, R. 1998. Çevre eğitimi ve katılımın sağlanması, *Ekoloji Çevre Dergisi* 7(28): 3-9.
- Marcinkowski, T. 2001. Predictors of responsible environmental behavior: A review of three dissertation studies. In: Essential Readings In Environmental Education, 2nd Ed., H.R. Hungerford, W.J. Bluhm, T.L. Volk, and J.M. Ramsey, eds. Stipes Publishing L.L.C., Champaign, Illinois.
- Volk, L.T., and W. Mcbeth, W. 2001. Environmental literacy in the United States, In: Essential Readings In Environmental Education, 2nd Ed., H.R. Hungerford, W.J. Bluhm, T.L. Volk, and J.M. Ramsey, eds. Stipes Publishing L.L.C., Champaign, Illinois.