

Attitudes of University Students Towards Economic and Sustainable Development, in Istanbul

Eyuboglu K.T.*, Uslu O.** , Oz M.D.***

Sustainability is of high economic significance to national economies, has important effects in satisfying the basic needs, and improving the quality of life of individuals. The importance of the sustainable development in reducing the impact of the social, economic and environmental burdens by efficient use of natural resources, reducing energy consumption, reducing emissions, minimizing waste, more efficient land use and creating better employment conditions has long been recognized in developed countries. In spite of this, in the developing countries the importance, benefits and advantages, and the positive impact, not only on the individuals but also on the communities, have not been widely understood. On the other hand, the attitudes and behaviours of people have a direct influence on the sustainability process. Commitments from the government and the industry are important factors in sustainable development strategies, but cannot ensure rapidly improving sustainable environment without the support, engagement and the involvement of public. The aim of this research is to emphasize the importance of attitudes in the economic growth and sustainable development, and to explore the thoughts, feelings and behaviours of University students in Turkey. The results of this study will help policy makers, researchers and industry in evolving new, effective and implementable strategies in changing attitudes towards sustainable development.

Field of Research: Environmental and National Economy

1. Introduction

The focus of early studies on sustainable development was limited only to the protection of the environment. However, today, it is accepted that development has economic, social and environmental dynamics and that it is impossible for governments to implement new strategies, achieve and maintain success in any developmental process without the awareness of the importance of sustainability among all members of the population. From this point of view, a better understanding and reorientation of the thoughts, feelings and behaviours of the population is needed for achieving suitable attitudes for sustainability. This paper aims to assess

*Kezban Talak Eyüboğlu, economist, Yeditepe University

e-mail: ktalak@yeditepe.edu.tr

address: Yeditepe Universitesi, 26 Agustos Yerlesimi Guzel Sanatlar Binasi, Yabancı Diller, Kat:4, Kayisdagi Cad. Kadikoy/Istanbul TURKEY

**Ozden Uslu, psychologist, Yeditepe University

e-mail: ozdenuslu@yeditepe.edu.tr

address: Yeditepe Universitesi, 26 Agustos Yerlesimi Tip Binasi, 6. Kat, Ofis 1022, Kayisdagi Cad. Kadikoy/Istanbul TURKEY

***Mehmet Deniz Oz, economist, independent researcher

e-mail: mdenizoz@me.com

address: 3 Binsey Lane, Oxford, Oxon, OX2 0EX

the baseline awareness of environmental issues among university students in Istanbul, in order to gain a better understanding on how people think and behave in their daily lives.

2. Literature Review

Throughout its evolution, humanity moulded its environment to fulfil its needs, but did not harm the supporting systems of the environment which it needs to survive. Especially in the 20th century we achieved unprecedented economic development and improved our standards of living, however, in doing so altered our environment drastically, sometimes beyond repair. Starting in the early '70s the adverse impact of economic activities on the environment could no longer be ignored, but the environment and economic development were considered, and remained, as two separate concepts. Indeed, the Stockholm conference and the World Conservation Strategy of 1980 focused mainly on the environmental factors. The concept of sustainable development, popularized with The Brundtland Commission Report, accepted the limitations set by the carrying capacity of the environment, and established a link between a healthy economy and healthy environment (WCED, 1987). The notion of sustainable development was further developed following the 1992 United Nations Conference on Environment and Development in Rio de Janeiro. Sustainable development, "development that meets the needs of the present without compromising the ability of future generations to meet their needs" (WCED, 1987, p. 43) is widely accepted as the road to the future. Sustainability is a long-term and open-ended process, thus an interdisciplinary approach is needed to develop the knowledge and skills of people. It is recognized that sustainable development targets cannot be accomplished successfully without taking an integrated approach to its three components -environmental, social and economic factors (Burgan and Sansom, 2006; George, 2007). It has benefited from strong political will and commitment internationally, and as a result gained huge momentum in recent years.

On the other hand, concerns about the welfare of future generations can go against the welfare and needs of the poor today, especially in underdeveloped and developing countries, and was labelled as "a terrible inconsistency in our thinking" by some authors (Solow 1991). Nonetheless, in order to meet people's needs, development with significantly lower social and environmental costs is achievable, in which attitudes and behaviors of people have a direct influence. At the same time a clear understanding of sustainable development should be promoted, so that all people within the population can contribute to the overall goal through their individual attitudes in their daily lives (Martin, 2008). Attitudes are person's tendencies to think, feel and behave generally in a positive or negative way and can be analysed from its three components. The first is the cognitive component, which consists of the specific thoughts and ideas about a subject or event. Second, the affective component is in which we can understand the persons feelings and emotions. Finally, the third component is the outcome of the attitude, which are the behavioural tendencies to act (Uslu, 2006).

In the Rio Earth Summit, in 1992, the importance of personal attitudes and the role of education was defined as "education for sustainable development is an emerging but

dynamic concept that encompasses a new vision of education that seeks to empower people of all ages to assume responsibility for creating a sustainable future” (Unesco, 2002). However, the international response to date, including the Rio Declaration and Agenda 21, fails to address the issue adequately (Meyers, McLeod, and Anbarci, 2006). Although a wide variety of literature exists that discusses what students should learn in terms of sustainability, only a limited number of publications explore what students actually know about the subject (Carew and Mitchell, 2002). In a survey Azapagic et al. (2005) found out that undergraduate engineering students considered sustainable development was more important for future generations than for them personally, and that the students lacked knowledge of the social and economic aspects of sustainable development, even though they were relatively familiar with key environmental legislations, policies and standards. Another research among Oxford University students revealed that a large percentage of participants recognized the environmental and economic dimensions but more than half of the participants could not identify the social dimension of sustainable development (Summers et al., 2004). Stir (2006) as well as Kagawa (2007) found that although students had strong environmental concerns, their understanding of social, cultural and economic dimensions was superficial and pointed out the major knowledge deficit among university students.

These key studies from developed nations highlight the need to improve basic education and to reorient the existing education to address the importance of, and a better familiarity with, sustainability. Although no extensive researches from developing countries exist, we can expect that the public understanding and awareness is lower in these countries. Thus, development and promotion of education for sustainable development is a more urgent issue in developing countries, where the conflict between the environment and social and economic factors is more pressing.

3. The Methodology and Model

In this research a total of 60 Turkish students from Yeditepe University were selected with convenience sampling method. The age of the 29 male and 31 female participants ranged from 19 to 28 years ($M = 22.4$). A questionnaire with 25 open-ended items was given to the students. 2 of the questions were about the definition and importance of sustainability, 10 items were on the ideas and thoughts, 5 items were about emotions and feelings of the respondents, and 8 items was about their actions in their daily lives. The data was qualitatively analysed within and across the cases.

4. Findings

4.1. Definition And Importance

Survey respondents were asked to indicate whether or not they had heard the term “sustainability” and subsequently asked to describe in their own words what these terms define. Only 12 (20%) of the students had heard the terms, however only 4 (6.67%) could describe what the term refers to. In the same way, only 4 (6.67%) students considered sustainable development as important, while for the rest of the

students it was either not important, or the importance was contingent on the situation..

4.2. Environmental Concerns

Several questions were designed to measure the sensitivity of the survey respondents about environmental issues. The protection of public health was an important issue for 55 (91.67%) of the students, stating safety at the work place, eating healthy food, preventive medicine and implementing environmental policies as factors for increasing public health. All respondents believed that preventive measures such as regular health controls and vaccinations were important for the well being of the individual as well as the society. For 57 (95%) students the well-being, and the quality of life of future generations were important, while 3 (5%) blamed the actions of past generations for affecting the lives of present and future generations. Overwhelming majority (57, 95%) of the respondents were well aware of the causes of the global warming, stating industrial waste (57 students, 95%), car emissions (57 students, 95%), scientific and technological advance (46 students, 76.67%) as main causes, while 3 (5%) of the students did not name any cause. All respondents believed that more attention has to be given to prevent environmental pollution stating the responsibility belongs to the government, however only 38 respondents (63.33%) held individuals responsible as well. Correspondingly respondents believed government policies (57 students, 95%), personal awareness (46 students, 76.67%) and education (8 students, 13.33%) were important factors in preventing environmental pollution. 58 respondents (96.67%) knew about organic farming, however 23 (38.33%) respondents did not find it an important consideration in their lives. Majority of the respondents (47 students, 78.33%) preferred renewable energy, while 3 (5%) students stated nuclear energy, and 1 (1.67%) student stated both nuclear and renewable energy as preferred source; 9 (15%) students did not state any preference. When asked if there is any difference between using concrete, steel or wood as construction material, 26 (43.33%) respondents stated that they had no idea, while 22 respondents (36.67%) preferred concrete, 11 (18.33%) steel; only 1 (1.67%) wood.

4.3. Emotional Feelings

53 (88.33%) respondents stated that they would feel sad or angry when learning someone had lost his health due to lack of prevention, 7 (11.67%) did not comment. When asked what they would feel on learning that natural resources of the country would be depleted in thirty years, 52 (86.67%) responded that they would feel sadness, anger or fear; 4 (6.67%) stated they would not feel anything, while 4 (6.67%) did not comment. Similarly 54 (90%) respondents expressed they would feel sadness, anger, and would be willing to take an active role when witnessing pollution in a river or sea; 6 (10%) did not comment. However, only 36 (60%) stated that they would feel sadness, take individual action or participate in a collective action when encountering an industrial plant polluting its surroundings, while 18 (30%) stated they would not do anything; 6 (10%) did not comment. In contrast, 58 (96.67%) respondents appreciate and approve people who are sensitive to the environment; 3 (5%) did not answer.

4.4. Personal Daily Behaviour

54 (90%) respondents stated that they are careful about saving electricity and turn unnecessary lights and appliances; 6 (10%) students were not concerned. Similarly, 53 (88.33%) of the respondents were also careful about their water consumption; 6 (10%) students were not concerned; 1 (1.67%) did not comment. 33 (55%) of the respondents stated that they sort their rubbish (i.e. paper, glass, plastic), while 22 (36.67%) do not, 4 students (6.67%) did not comment. While 20 (33.33%) respondents do not use aerosols, 39 (65%) use them; 1 (1.67%) respondent did not comment. While respondents stated that they are careful in selecting organic foods 22 (36.67%) stated that they do not think about when purchasing food; 2 (3.33%) respondents did not comment. While 28 respondents (46.67%) are cautious about purchasing recyclable products, the same number of students stated the opposite; 2 (3.33%) respondents did not comment.

4.5. Education

Only 3 (5%) of the students had some education about sustainability that would affect their choices and daily behaviours, whereas 56 students (93.33%) stated that they had not received any education at all; 1 student did not respond to the question. Majority of the respondents (55, 91.67%) declared that they gathered information necessary to answer the questionnaire through family, television, newspapers and magazines.

5. Summary and Conclusion

Results showed that overwhelming majority of students are aware of the environmental problems they are facing, care for the environment and other people around them, consider the health and quality of life of future generations as very important and willing to take action to create a fair, healthy, and safe world for all. However, the respondents are not familiar with the term, the definition or the importance of sustainability, which shows serious problems with the dissemination of knowledge, information and thoughts about the environment, environmental protection and sustainability among the university students in Turkey. The knowledge students have is transferred mainly through commercial media and not through proper education. As a result they have knowledge about how they can change their daily activities, and most of them are ready to take action accordingly, however they lack knowledge about things they do not encounter daily, as indicated by their choices of construction materials. Looking at their behavioural patterns, respondents are more likely to realize positive behaviour, if the actions are easy to implement, e.g. turning off the electricity or the water. The respondents are holding the government as the primary responsible for protecting the environment and do not take individual responsibility, and underestimate the power they have as individuals. The disparity between respondents' responses on environmental pollution caused by an unknown source and pollution caused by a plant is interesting, as it is indicative of a general acceptance among respondents that industrial activity inevitably causes pollution. The study also showed that if individuals lack emotional responses then the outcome of their thoughts or actions is negative.

The study shows that Turkey needs to improve basic education and reorient existing education to address the importance of sustainability, which is essential to nation's ability to improve its economy and environment. Information that will help people understand and learn methods to protect their environment are essential in developing the knowledge and skills needed for a sustainable future. Developing new training programs for all ages within the population can promote a public understanding and awareness of the need for sustainable development. However, provided education should also incorporate what the target audience can do as individuals and include emotional information in order to change values, behaviours and lifestyles. Thus, for a sustainable future, analysing not only the behaviours but also the thoughts and feelings of people about sustainability is important.

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