



## YOUNG ATTITUDE ON SUSTAINABLE DEVELOPMENT: A CASE STUDY

### GENÇLERİN SÜRDÜRÜLEBİLİR KALKINMAYA YÖNELİK TUTUMLARI: BİR DURUM ÇALIŞMASI

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**ABSTRACT:** Patterns of consumption and production are not sustainable in developed / developing countries. In developed countries, the levels of pollution, especially those causing global change, are far too high and trends go in the wrong direction. In developing countries, there is too much strain on the local resource base, and this strain is increasing due to population growth, increases in wealth and urbanisation. Sustainable development, on the other hand, targets to compromise the living requirements of the next generations and the related action plans include changing life styles of the current generations, and concentrate especially on the young people. A sustainable future would not be possible without integrating three basic issues of sustainable development into our lives; consumption, production and distribution. Is it possible to change life styles and consumption patterns, especially for the young people of a developing country, where lots of brilliant marketing techniques are in charge? The current study is designed to move toward in this idea and to investigate the attitude of young people living in Ankara toward sustainability and changing consumption patterns, by means of questioning them. The results of the study bring the conclusion that, one way to equip young people to contribute more in the area of environmental concerns and sustainable development is through more effective environmental education.

**Keywords:** sustainable development, environmental attitude, environmental education.

**ÖZET:** Üretim ve tüketim kalıpları hem gelişmiş, hem de gelişmekte olan ülkelerde sürdürülebilir değildir. Gelişmiş ülkelerde kirlilik seviyesi yüksek ve yükselmeye devam etmektedir. Gelişmekte olan ülkelerde ise, nüfus artışı, kentleşme gibi nedenler yüzünden yerel kaynaklar üzerindeki baskı gittikçe artmaktadır. Öte yandan, sürdürülebilir kalkınma kavramı, gelecek nesillerin yaşam gereksinimlerini sağlamayı, ilgili eylem planları da günümüz neslinin yaşam tarzlarını değiştirmeyi hedefler ve özellikle gençler üzerine yoğunlaşmıştır. Çünkü, sürdürülebilir kalkınmanın temel bileşenleri olan ürete-tüketim ve kaynakların dağılımı yaşama entegre edilemez ise sürdürülebilir bir gelecek kurulması mümkün değildir. Söz konusu hedefin, sayısız parıltılı pazarlama tekniklerinin var olduğu, gelişmekte olan ülkelerdeki genç insanlar açısından işlevselliği nedir? Bu çalışma, bu fikir doğrultusunda, Ankara'da yaşayan gençlerin bu konudaki davranış tarzlarını belirlemek üzere hazırlanmıştır. Çalışmanın sonuçları, gençlerin çevresel duyarlılık ve sürdürülebilir kalkınma konularında daha fazla yer almalarının yollarından birinin etkili bir çevre eğitimi olduğu yönündedir.

**Anahtar Sözcükler:** sürdürülebilir kalkınma, çevreye yönelik tutum, çevre eğitimi.

## 1. INTRODUCTION

Sustainable development is about the interface between human society and the environment. It is about a better way of approaching the management of natural resources and the adverse effects of globalization in order to address a range of problems. These include loss of biodiversity, pollution and destruction of natural resources (such as forests, fisheries). This impact is not limited to the developing world. Many in the industrialized world also suffer the consequences of mismanagement of the Earth's environmental and human resources and that trend is likely to grow as the world's economic and social systems become increasingly inter-linked. Some examples are; about 1.2 billion people worldwide lack sufficient access to fresh water, and water-borne disease causes millions of deaths every year; air pollution, which crosses national borders and affects us all, is one of the major causes of illness and death worldwide.

Patterns of consumption and production are not sustainable in developed or developing countries. In developed countries, the levels of pollution, especially those causing global change, are far too high and trends go in the wrong direction. In developing countries, there is too much strain on

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the local resource base, and this strain is increasing due to population growth, increases in wealth and urbanisation. The need to "change unsustainable patterns of consumption and production" has been firmly acknowledged by the World Summit for Sustainable Development (WSSD) in Johannesburg. The WSSD Plan for Implementation contains a description of a "10-year framework of programmes in support of regional and national initiatives to accelerate the shift towards sustainable consumption and production" which world leaders resolve to implement.

Before WSSD, the Earth Summit in Rio de Janeiro in 1992 recognized the causal link between current consumption patterns and lifestyles and major environmental problems. There was concern over the climate change threat due to accumulation of greenhouse gases in the atmosphere, ozone depletion caused by CFC emissions, and acidification due to sulphur dioxide and nitrogen oxides. The Rio Conference also noted the contrast between lifestyles in industrialized countries and those in poorer countries, and the inequitable distribution, both among and within countries, of the use of the world's natural resources and the generation of emissions and solid waste.

Furthermore, it is stated in Chapter 25 of the major outcome of the 1992 Earth Summit (Agenda 21) that, "*Children not only will inherit the responsibility of looking after the Earth, but in many developing countries they comprise nearly half the population. Furthermore, children in both developing and industrialized countries are highly vulnerable to the effects of environmental degradation. They are also highly aware supporters of environmental thinking. The specific interests of children need to be taken fully into account in the participatory process on environment and development in order to safeguard the future sustainability of any actions taken to improve the environment*".

In 1997 the Conference on "Environment and Society: Education and Public Awareness for Sustainability" was organized by UNESCO. As a result of the conference, more than 1400 participants from 84 countries endorsed the "*Thessaloniki Declaration*" where the Education for Environment and Sustainability is proposed as the carries of the common and single message of hope for the future. The message of Thessaloniki is that education, first and foremost, should be in the center of the international, regional and national agendas and it is the foundation for all other "pillars" of sustainability namely Regulation, Innovation and Economy. In fact, the aim to maintain a healthy environment, which could secure a sustainable development, should be considered and taught as equally high, noble (and difficult to obtain) as also are the aims to maintain life, freedom, democracy, and human rights. In 2002, on the other hand, a follow up to the 1992 Earth Summit in Rio, the Johannesburg Summit, people from all over the world came together to discuss sustainable development and think about the best way to improve people's lives and conserve our natural resources-land, air and water. One of the major groups of the Summit is the "Children and Youth".

Therefore, referring to the above-summarized state of the debate on sustainability, the current study has been designed to find out answers of young people living in Ankara for the questions about their attitude on sustainable development.

## **2. METHOD**

### **2.1. Selection of Respondents**

A total of 1497 students from 6<sup>th</sup>, 7<sup>th</sup>, 8<sup>th</sup>, and 10<sup>th</sup> grades were selected from ten schools located in Ankara. The random selection of the schools had been realized according to the socio-economic background in which they were located. The aim was to include different socio-economic groups, so that representative profile of the young people could be obtained. The profile of the respondents is given in the Table 1.

## 2.2. The Questionnaire

A 45-item questionnaire was used to measure students' environmental attitude. The questionnaire was developed based on the one used by Worsley and Skrzypiec (1998), which was originally developed from Herrera's (1992) Questionnaire of Environmental Beliefs. Out of 45 items, answers of 22 were used in this study for the sake of evaluating the young attitude on sustainable development. It is a Likert type questionnaire and the choices for each item are strongly agree, agree, undecided, disagree, strongly disagree and I don't know. The answers for 22 items is comprised of two dimensions; general awareness on the sustainability concept – GASC- (11 items), general attitude on the relation between the concept and life styles–GALS - (11 items).

## 2.3. Analysis

Statistical analysis included tabulation of frequency distribution of students' responses to the questionnaire and one-way MANOVA. The internal consistency of the scale was determined to be .87 using Cronbach alpha.

## 3. RESULTS AND DISCUSSION

### 3.1. Respondents' Profile

Data were obtained from 1497 students (n=765 girls; n=715 boys; and n=17 gender not provided) from 6<sup>th</sup>, 7<sup>th</sup>, 8<sup>th</sup>, 10<sup>th</sup> grade classrooms of ten schools in different regions in Ankara. Five of the schools were private and the other five were state schools. Total number of students from the private schools was 892 (60 %), and that of for state schools are 603 (40 %). The mean age of the students was 13.5. The detailed profile of the respondents can be seen from Table 1.

Table 1. Respondents' profile

| Grades           | Number of students |               |               | Mean age |
|------------------|--------------------|---------------|---------------|----------|
|                  | Total (%)          | Girls (%)     | Boys (%)      |          |
| 6 <sup>th</sup>  | 509<br>(34)        | 267<br>(52.9) | 238<br>(47.1) | 12.0     |
| 7 <sup>th</sup>  | 447<br>(30)        | 226<br>(51.2) | 215<br>(48.8) | 13.0     |
| 8 <sup>th</sup>  | 277<br>(18)        | 142<br>(51.8) | 132<br>(48.2) | 14.0     |
| 10 <sup>th</sup> | 261<br>(18)        | 129<br>(50.0) | 129<br>(50.0) | 16.0     |
| Total            | 1497               | 765<br>(51.7) | 715<br>(48.3) | 13.5     |

### 3.2. Young Opinions on Sustainable Development

At a first glance to the frequencies (Table 2), the above defined young people's opinion on sustainable development is that; they do worry about the environmental problems and nature and do believe in that, environmental pollution is not a temporary problem (item no's: 4, 9, 11). They can make a correlation between economic growth, industrialization and environmental concerns (item no's: 1, 3, 7). They believe in the need for conserving resources for future generations (item no: 5). They do not accept to leave the environmental solutions just to science and technology (item no: 8). Because, they think that individual responsibilities are very important in protecting the environmental pollution. But, are sightless about what sustainability is and how can it be included in their lives? The answers for the Dimension 1 clearly show that, young people's awareness toward the general environmental problems and sustainability concept is positive. Although, they do not see the

environmental problems as something out of their lives, they seem undecided on the effect of economical and industrialization concerns on the environmental issues. Although they think that industrialized societies give a high standard of living, they do not discard environmental concerns for the sake of industrialization, or they do not accept to leave the solutions only to science and technology, or they do not think that the environmental problems will diminish in the near future. Therefore, the young attitude toward the defined general concept of this study is that, they are conscious about the environmental problems. The answers for Dimension 2, however, display another feature of the young attitude on sustainable development: Although the young people strongly agree on the importance of individual responsibilities in protecting the environment (item no: 15) and although they do confirm the relation between exploitation of resources and the consumption patterns (item no's: 14, 16, 17) they can not link the concept with the every-day life styles. This is obvious when looking at the frequencies for the item No's: 13, 18 and 22 (Table 2).

Similar conclusions were driven from the study about the attitudes and behaviour of young people in Japan (Barrett *et al.*, 2002). They concluded, as a result of their survey, that the young people's expectations about the future quality of the environment are mixed with the view that better environmental conservation requires changes in life styles, values and human behaviour. In the study, realised by Micheal and Jacquetta (1998) on the primary school children's environmental attitudes in England, on the other hand, it is concluded similarly that, while the children were aware of potential conflicts of interest between nature and human needs, this awareness had a rather academic and abstract quality. They had little sense of what might be involved in coming to resolutions. Moreover, the study conducted by Kuhlemeier *et al.*, (1999) revealed that, although Dutch students' willingness to make sacrifices for environmental protection were less favourable, they were aware of the relation between life styles and environmental destruction.

**Table 2.** Young opinions on sustainable development

| Dimension 1:<br>General awareness for sustainable development" (GASD )  | Strongly disagree | Disagree | Undecided | Agree | Strongly Agree | Don't know |
|---|-------------------|----------|-----------|-------|----------------|------------|
| 1. Industrialized societies give most people who live in them a high standard of living.  | 5.7               | 9.5      | 27.4      | 28.5  | 14.2           | 14.6       |
| 2. Mankind is very adaptive so there is no need to be concerned about his survival in a polluted environment.   | 43.0              | 26.8     | 11.0      | 7.4   | 4.9            | 6.8        |
| 3. Protection of the environment is more important than economic growth.  | 8.3               | 11.5     | 26.0      | 23.9  | 22.4           | 7.9        |
| 4. We are overloading the Earth's natural ability to support life on earth.   | 8.9               | 15.4     | 25.3      | 16.0  | 9.6            | 24.7       |
| 5. We must conserve our resources for future generations.   | 7.3               | 5.8      | 6.9       | 20.4  | 55.8           | 3.9        |
| 6. Environmental problems have always existed, and been solved, so there is no need to worry about the nature.  | 38.0              | 25.5     | 15.2      | 8.9   | 6.2            | 6.3        |
| 7. Turkey needs to be industrialized; therefore environmental destruction due to industrialization can be discarded.                                    | 26.6              | 21.4     | 19.1      | 13.2  | 8.2            | 11.5       |
| 8. Just as science and technology monitor environmental problems, they also solve them, so such issues will not be the points of concern in the future. | 22.5              | 24.6     | 22.2      | 12.2  | 6.5            | 11.9       |
| 9. The natural sources of energy, such as sun, wind and water, can never be exhausted, so energy will never be scarce on earth.                         | 33.1              | 19.7     | 17.2      | 11.2  | 8.3            | 10.5       |
| 10. In dealing with any kind of problem we need to first consider how it will effect the environment.   | 6.8               | 10.4     | 19.6      | 29.6  | 24.1           | 9.5        |
| 11. Over the next ten years environmental problems will diminish.   | 29.8              | 23.4     | 17.9      | 9.3   | 7.1            | 12.4       |

**Tablo 2 Cont.**

| Factor 2:<br>General attitude for changing life styles" (GALS)  | Strongly disagree | Disagree | Undecided | Agree | Strongly Agree | Don't know |
|---|-------------------|----------|-----------|-------|----------------|------------|
| 12. The ultimate solution for environmental problems depends on drastic changes in our life-style   | 7.3               | 16.2     | 18.5      | 29.7  | 19.0           | 9.3        |
| 13. Fast food consumption is harmful for both ours and nature's health.   | 15.5              | 13.6     | 20.0      | 20.3  | 22.0           | 8.6        |
| 14. If we do not change the current consumption patterns, land degradation and topsoil losses will increase to the point where they can no longer support crops.          | 6.6               | 11.2     | 18.6      | 25.9  | 23.0           | 14.8       |
| 15. Individual responsibilities are very important in protecting the environmental pollution.   | 8.6               | 5.7      | 6.7       | 18.8  | 54.7           | 5.6        |
| 16. The hole in the ozone layer will never stop growing if we continue to operate as we do now.   | 11.1              | 9.1      | 11.1      | 27.7  | 34.5           | 6.6        |
| 17. We can accept to change our life styles to protect natural resources.   | 8.5               | 10.7     | 22.0      | 27.1  | 19.2           | 12.5       |
| 18. Spending long times in shopping centers is a type of life style that has negative effects on both consumption patterns and the exploitation of the natural resources. | 15.4              | 18.6     | 23.1      | 16.5  | 10.2           | 16.3       |
| 19. Consumption patterns has noting to do with the exploitation of natural resources.   | 24.5              | 25.2     | 17.8      | 11.7  | 8.1            | 12.8       |
| 20. The sustainable use of the natural resources means the continuous use of them.  | 12.1              | 19.2     | 20.9      | 19.1  | 10.5           | 18.2       |
| 21. Economical use of water and energy is important for the sustainable use of the natural resources.   | 6.6               | 8.4      | 13.7      | 26.9  | 36.2           | 8.2        |
| 22. Everybody has a part in environmental degradation but it changes according to the individual consumption patterns.  | 8.5               | 8.5      | 19.2      | 28.4  | 19.8           | 15.6       |

### 3.3. Differences for the girls' and boys' attitude on sustainable development

A one-way multivariate analysis of variance (MANOVA) was conducted to determine the effect of the gender on two dimensions of the questionnaire. A significant difference was found between girls and boys on the dependent measures, Wilks'  $\Lambda = 0.977$ ,  $F(2,1477) = 17.01$   $p < 0.001$ . The multivariate  $\eta^2 = 0.23$  indicated 23% of multivariate variance of dependent variables is associated with the independent variable. Table 3 contains the means and standard deviations of the two factors of the questionnaire for girls and boys.

**Table 3.** Means and standard deviations of the two dimensions of the questionnaire

| Dimension | M     | SD   |
|-----------|-------|------|
| GASD      |       |      |
| girls     | 23.97 | 7.97 |
| boys      | 21.62 | 7.46 |
| GALS      |       |      |
| girls     | 23.13 | 8.32 |
| boys      | 21.66 | 7.82 |

According to Table 3, there is a gender difference on the young attitude on sustainability: Girls are more likely than boys to show a positive attitude for both general awareness and relation between the concept and life styles issues. The difference could be interpreted in several ways. In general thinking, girls are much more aware of the relation between sustainability and its concluding stages in

their daily lives, because they are more socialized than boys to a relational view of life. It could also be argued that girls are socialized to be more caring than boys and consequently display more care about the environment.

A review of the related literature supports these results. Loughland *et al.*, (2003), for example ends up with the similar result in their study on the factors influencing young people's conceptions of environment. Connell *et al.*, (1998) stated that girls are more environmentally conscious and active than boys and that girls have stronger feelings and verbal commitment to the environment while boys have greater knowledge. In general, it seems that, girls rather than boys of the ten schools in different regions in Ankara, are most likely to be aware of the general concepts of; environmental degradation – sustainable use of the natural resources – economical and industrial aspects of the environment. In general the young people see the environment, as something that supports their living and which in turn requires their support. But, in spite of their positive attitude on these issues, the young people are not equipped to make a relation between the environmental issues and life styles. This single finding could have an important implication that, education in its traditional forms, is not sufficient to meet the immense challenge posed by the phenomenon of unsustainable living. People are increasingly aware of the dangers we face and of the need for informed action. But, according to the *Thessaloniki Declaration* new educational approaches are required if people are to act upon this awareness, if we are to achieve the necessary changes of life-styles, if we are to be successful in combating waste, in mobilizing support for public and private initiatives, in developing a new ecological vision and in fostering a sense of global solidarity. The challenge is no less than that of reorienting education - to promote widespread public understanding, critical analysis and support for sustainable education in all its forms is essential to the achievement of sustainability. Basic education impacts positively in a multitude of ways on the interrelated problems of poverty, life styles and environmental degradation. Improved provision for girls brings benefits in terms of declining fertility rates and better standards of health care. Education is also an important factor in furthering social cohesion and democratic governance. Science education has a special role to play in sustainable development - through capacity building, particularly in such fields as eco-technology and renewable energies.

#### 4. CONCLUSIONS

The tension between high and rising consumption and decreasing resources is likely to become the key environmental problem in the next century. Young people have both special concern and special responsibility with regard to the environment. On the one hand, because of their longer life expectancy young people will have to live with the consequences of a deteriorating environment left to them by their parents. Also, youth has a special talent for invention and the developments of new forms of action and activism that can be enable and accelerate effective responses to environmental issues. Representing the concerns of future generations is of course difficult when it comes to policy-making in the present; ultimately, however, what is required is not to expand time horizons many years into the future, but simply to expand them beyond the short-term focus of much current decision-making. Recently, young people demonstrated through their participation at the World Summit on Sustainable Development that they could inject social values and notions of equity into debate.

Young people perhaps understand better than most that we are not living a zero-sum, environment-versus-economy world. One way to equip young people to contribute more in the area of environmental concerns is through more effective environmental education. As far as contents are concerned, environmental education goes beyond nature and environmental protection and covers both the natural environment and the cultural, technical and social aspects.

However, in spite of the steps taken by the environmental education researchers on the most effective environmental education strategies, with the incessant changes in the concept of "environment" over time, environmental education is still its infancy. The situation in Turkey, on the other hand, is in the stage of "just beginning" and as was also stated elsewhere (Ertepinar *et al.*, 2003). Therefore, having an increasing number of young people and being in a transitional phase of

development, and also having related international commitments, an environmental education strategy is needed to be developed in Turkey. However, it needs to be very effective in creating opportunities for young people to integrate environmental, economical and social values into their thinking. Thus, environmental education and awareness for sustainability has to be taken as a base as the carrier of the common message of the hope for future.

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