

EMPOWERING THE FUTURE: CULTIVATING SUSTAINABLE DEVELOPMENT IN UNIVERSITY STUDENTS

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Abstract

Maintaining the world's livability depends heavily on increasing awareness of sustainable development. It is the duty of education institutions to help people incorporate sustainable development into their daily lives. In this study, being one of the most influential institutions in the education life of the people, university level students' sustainable development awareness was aimed to be investigated. Data, for this major purpose were gathered through Sustainable Development Awareness Scale (Atmaca et al., 2019). 336 junior and senior level university students took part in the study on voluntary basis. The results of the study showed that there is no significant difference between grades. Additionally, no significant difference appeared among students of different faculties. The only significant difference was found between genders in overall sustainability development awareness. However, when the difference between genders with regards to subscales was analyzed, while social ($p=,003$) and environmental ($p=,030$) sustainability development awareness appeared to be significantly different, no sufficient difference revealed with regards to economy.

Key words: Sustainability, Awareness, Higher Education

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GELECEĞİ GÜÇLENDİRMEK: ÜNİVERSİTE ÖĞRENCİLERİNDE SÜRDÜRÜLEBİLİR GELİŞİMİN GELİŞTİRİLMESİ

Özet

Dünyanın yaşanabilirliğini sürdürebilmek büyük ölçüde sürdürülebilir kalkınma bilincinin artmasına bağlıdır. İnsanların sürdürülebilir kalkınmayı günlük yaşamlarına dahil etmelerine yardımcı olmak eğitim kurumlarının görevidir. Bu çalışmada halkın eğitim hayatındaki en etkili kurumlardan biri olan üniversite düzeyindeki öğrencilerin sürdürülebilir kalkınma farkındalıklarının araştırılması amaçlanmıştır. Bu temel amaca yönelik veriler Sürdürülebilir Kalkınma Farkındalık Ölçeği (Atmaca vd., 2019) aracılığıyla toplanmıştır. Araştırmaya gönüllü olarak 336 birinci ve son sınıf üniversite öğrencisi katılmıştır. Araştırmanın sonuçları, sınıflar arasında anlamlı bir fark olmadığını gösterdi. Ayrıca farklı fakültelerdeki öğrenciler arasında da anlamlı bir farklılık ortaya çıkmamıştır. Tek önemli fark, genel sürdürülebilirlik gelişimi farkındalığı açısından cinsiyetler arasında bulundu. Ancak alt ölçekler açısından cinsiyetler arasındaki fark incelendiğinde sosyal ($p=,003$) ve çevresel ($p=,030$) sürdürülebilirlik kalkınma farkındalığı anlamlı düzeyde farklı görünürken, ekonomi açısından yeterli bir farklılık ortaya çıkmamıştır.

Anahtar Kelimeler: Sürdürülebilirlik, Farkındalık, Yükseköğretim

INTRODUCTION

Concerns about human health and the future of the world were raised by industrialization in the 20th century, which resulted in environmental destruction due to careless actions made in the name of development and rapid population growth (Altunbaş, 2003). Many regions of the world are experiencing food and water scarcity as a result of the destruction of natural life and the careless use of resources, which has led to numerous fatal issues like hunger, disease, and poverty. Furthermore, the two most significant concerns influencing the future of our planet are global warming and climate change (Yerdelen, Cansiz, Cansiz, & Akcay, 2018).

Every community has noticed that there is serious damage to the planet's ability to renew itself. It has been acknowledged that if this trajectory continues, Earth will no longer be a habitable planet. Realizing that if these issues are not addressed, they will endanger not just one area but the entire planet has prompted efforts to find global solutions (Baykal & Baykal, 2008). It has been determined that education programs should incorporate sustainable development, given that these issues can only be resolved if all people, societies, and states on Earth are able to cooperate and assume certain responsibilities (Biasutti & Frate, 2017; Erten, 2015).

"Sustainable development that meets the needs of the present generation without jeopardizing the ability of future generations of people to meet their own needs" is how the corresponding rapporteur defined it when it was first officially discussed in the Brundtland Report, which was published by the World Commission on Environment and Development in 1987 (WCED, 1987). The three dimensions of sustainable development are economy, environment, and society, as can be seen when examining definitions, international texts, and approaches to sustainable development (Borg, Gericke, Höglund, & Bergman, 2012; Olsson, Gericke, & Chang Rundgren, 2016). The sustainability of these three dimensions needs to be guaranteed concurrently for sustainable development to occur (Alkış, 2007; Sandel, Öhman, & Östman, 2006).

The notions of equality for all, gender equality, peace as well as human security, cultural diversity and understanding among cultures (UNESCO, 2006), social services, health and education rights, and social justice are all included in the society dimension of sustainable development (Atmaca, Kiray, & Pehlivan, 2018; Özmete & Akgul-Gök, 2015). Safety of natural assets (water, air, soil, energy, agriculture, and ecological diversity), environmentally friendly development (UNESCO, 2006), decreasing pollution of the environment (water, air, and soil pollution), substitution of renewable energy sources (geothermal, wind, etc.) for non-renewable energy sources (coal, gasoline, etc.), preservation of forests and expansion of green spaces, diminution of ecological footprint, recycling of wastes, and halting global warming are all examples of issues that fall under the umbrella of environmental sustainability (Atmaca, et al., 2018; Koçak & Balcı, 2010).

The idea of sustainable development is the most recent paradigm shift in how people think about economic growth or development. It connects environmental degradation to the disturbance of the balance between human activity and nature (Marin, 2004: 169). Three major headings define the fundamental components of the concept of sustainable development. These are widely acknowledged as the social, environmental, and economic elements. These three components actually have an organic relationship with one another.

Economic: At the bounds of growth in the economy "If the world population continues to increase at the current rate, if the industrialization rate and economic growth rate maintain their current tempo, if new food reserves that will feed humanity and new natural resources (minerals, energy resources, etc.) that will enable the production mechanism to

continue are not discovered and the environment will not be polluted." Humanity's existence on Earth will only last a century if a solution is not found to stop its degradation (Meadows et al., 1990). Economic growth drives people into an unending race of production and consumption based on harsh and unfair competition in an attempt to increase their income because it is predicated on the ideas of infinite growth and needs. As a result, when considering sustainable development, one's perspective and method of production and consumption become crucial. The future of the immediate environment, the nation, and the world at large are all at risk due to the never-ending race to produce more, while ethical values are gradually losing significance in the never-ending race of consumption.

Environmental: Our surroundings are the areas in which we reside. It is only recently that man has become interested in how his actions affect the environment (Meadows et al., 1990: 75). This is significant when examining the extent of the damage done to our planet given its age. Because sustainable development addresses a perspective that is much more stable, much healthier, and where welfare and living standards are at respectable levels in addition to the goal of creating a clean, livable, and safe environment (Gönen, 2012,p.291). All environmental effects are regarded as "environmental factors" in sustainable development.

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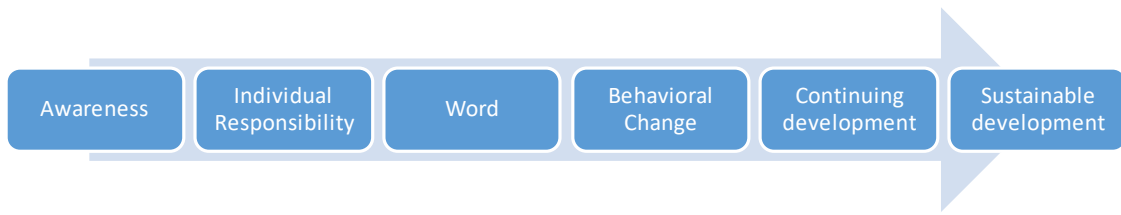
Furthermore, from an environmental standpoint, systems linked to renewable resources should not be overused or exploited. Instead, non-renewable resources should only be used to the extent that sufficient replacements are made and a stable resource base is maintained (Gedik, 2020). This will help create a system with high sustainability. In the interest of balance, it is vital to consider the opinions regarding the return of items taken from nature in different forms.

Social: Every person who lives in a society is impacted by it as a whole. The sustainable understanding incorporated the social dimension of the sustainable development approach subsequent to the incorporation of the economic and environmental dimensions. Social effects are crucial because they gradually manifest and bring about specific changes and transformations. Meeting the fundamental needs of members of the community is emphasized by the social dimension of sustainable development (Bilgili, 2017). Adequate social services, such as gender equality, health and education, political

accountability, and participation, should be provided in a socially sustainable system (Gedik, 2020).

Generally speaking, gaining awareness is a crucial first step in comprehending the idea of sustainability. Assuming awareness is the first step in this process (Figure 1), there are several phases that come after awareness to guarantee sustainability: individual responsibility, word, behavioral change, continuing development, and sustainable development (Lourdel et al. as cited in Çobanoğlu & Türer, 2015).

Figure 1: Stages of Sustainable Development



Source: Adapted from Sustainable Development Stages, Çobanoğlu & Türer.

The stages depicted in Figure 1 are assessed in a priority-after manner, and if people go through and surpass these phases gradually, the idea of sustainable development will become ingrained in their daily lives (Lourdel et al. as cited in Çobanoğlu & Türer, 2015). After first learning about the problem, people enter the awareness phase. This is followed by the action phase, which changes people's language and behaviors and helps them comprehend sustainable development. It matters a great deal how we live and carry out our consumption activities in relation to our personal obligations. Because excessive or inappropriate consumption is a hidden threat to natural resources, our own health and well-being, and the continued existence of the environment in which we must live.

In general, discussions about consumption center on the facts that youth represent the largest target demographic for consumption patterns and that the media's encouragement of the advertising trade steers youth toward unsustainable behaviors. In order to achieve this, topics like educating youth and raising their awareness of sustainable consumption patterns were covered on a variety of platforms (such as during a "youth action summit" organized by Habitat, for example). Controlling long-term unconscious and unnecessary consumption and ensuring an increase in the economic growth and social welfare level of

countries worldwide are among the main objectives of sustainability and sustainable development, which are shaped in the economic, environmental, and social fields (Hatipler & Köksalan, 2020).

1. LITERATURE REVIEW

Sustainable development awareness has attracted attention especially in the last decade internationally in the field of educational research. According to Omisore, Babarinde, Bakare, and Asekun-Olarinmoye (2017), only 43% of the 450 students and staff at Osun State University in southwest Nigeria knew about the SDGs, and only 4.2% had good knowledge of them. Regardless of age, gender, or academic level, Mojilis (2019) found that 70% of students at a Malaysian university were aware of this. While the majority of students (54.8%) agreed that their university supports policies that advance campus sustainability, a similar study carried out in the United States of America revealed that 60% of students were unaware of the university's membership in the Association for the Advancement of Sustainability in Higher Education or its signature on the "American college and university presidents' climate commitments." This bolsters the idea that university students around the world have a similar level of awareness regarding sustainability (Msengi et al., 2019).

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Study by Michael et al. (2020) demonstrates that there was a statistically significant difference in the study year for sustainability and awareness ($p=.001$). All in all, Year 1, Year 2, and Year 3 students demonstrated a high degree of awareness related to sustainability. In contrast to first- and second-year students, the results showed that third-year students have the highest mean levels of sustainability awareness ($M=3.918$, $SD=.517$). A generally higher score for Year 3 students might suggest that as they advance in their education, they are exposed to more campaigns raising awareness of sustainability.

One of the things that increases public awareness of sustainability is believed to be social media. Suraya et al. (2019), demonstrated that staff and students' awareness of environmental sustainability can be influenced by social media. University-level sustainability initiatives, like recycling and cutting back on water and electricity use, educate students about environmental issues. Social media can serve as a platform for staff members to communicate university policies and support their efforts to become

fully accredited "green" universities. It's interesting to note that this is in line with earlier research (Levine & Strube, 2012) that found more mature college students had more favorable attitudes regarding environmental issues.

Another study on the same topic Jati et al. (2019) evaluated Universitas Muhammadiyah Yogyakarta, Indonesian university students' awareness and knowledge of the Sustainable Development Goals (SDGs). According to the findings, 89.5% of students are aware of the SDGs, and 62.5% have a high level of knowledge about them. They discovered that students' awareness is correlated with both gender and information accessibility, and that students' knowledge is solely impacted by the accessibility of information. The grade level and institution they attend has no effect on awareness or knowledge. According to this study, 89.5% of university students were aware of the Sustainable Development Goals.

Another strand of research investigated the effect of year of study on university students' sustainable awareness levels. Studies in the literature show that as the grade level increases, university students' awareness of sustainable development and the environment increases (Çabuk & Karacaoğlu, 2003; Ek et al., 2009; Erol & Gezer, 2006; Koçulu, 2018).

As an additional strand of research, the awareness levels of different genders can be listed. Aydın Gürler (2023) found that women were more aware than men of sustainable development in general as well as the sustainability of their economy, society, and environment. However, a number of studies in the literature have discovered that awareness of sustainable development, both generally and in terms of its subdimensions, is not significantly impacted by gender (Atmaca, 2018; Çobanoğlu & Türer, 2015; Öztürk Demirbaş, 2015; Türer, 2010). Nonetheless, numerous studies have found that compared to male students, female students have more positive attitudes and behaviors regarding the environment, are more inquisitive about it, are more sensitive to it, and behave in an environmentally friendly manner. According to them, the situation arises because women are inherently more helpful and compassionate than men, have a stronger emotional connection to the natural world, are more sensitive because of their maternal instinct, and care more about the generations that will come after them (Faiz & 2011; Zelezny et al., 2000). Similarly, it is also stated that women's economic, social, and environmental

sustainability may be higher than men's because they are more emotional, sensitive, nervous, and likely to act like future mothers (Aydın Gürler, 2023; Yurtsever Kılıçgün & Kılıçkaya, 2016).

1.1. Significance of Research

Raising people who are conscious of and actively shape their lives in accordance with sustainable development principles is the only way that sustainable development initiatives can fulfill their purpose and become a way of life. The most promising strategy for building a more sustainable future is education. In other words, education is the only means of increasing people's awareness of sustainable development (Aydoğan, 2010). The foundation of sustainable development is education. This is also declared as "Education has long been recognized as a critical factor in addressing environmental and sustainability issues and ensuring human well-being," in the Global Education Monitoring Report. Through a curriculum that covers environmental, economic, and social issues, education for sustainable development seeks to educate people in line with sustainable development principles, such as knowledge, attitudes, values, and behavior (Summers, Kruger, Childs, & Mant, 2010). In this case, higher education is crucial for preparing students who will be able to use the best technologies in their personal and professional lives to solve these issues, as well as to develop more effective industrial processes, support the personal and societal development of individuals, aid in the development of less developed nations. The younger generation of today holds the key to the future of both humanity and our planet.

Although gaining knowledge about sustainability is a prerequisite for students to participate in sustainable development, it is not the only one. "Increasing students' level of sustainability knowledge should be a top priority of institutions of higher learning," state Michel and Zwickle (2021). According to Dzimińska et al. (2020) universities can foster a culture of sustainability by: (1) addressing sustainability issues in their teaching; (2) employing real-world problem-based research that is inspired by real-world issues; and (3) interacting with people and organizations.

With all these issues in mind, the present study aims at investigating the university level students' sustainable development awareness levels with a quantitative research design.

In order to provide results regarding the issue, first and last year students from five different faculties were asked to participate in the study.

Therefore, the major research questions addressed for the purpose of the study are as follows;

- Is there a significant difference between the genders with regards to sustainable development awareness of university students?
- Is there a significant difference between the first and last year university students with regards to sustainable development awareness?
- What are the sustainable development awareness levels of the university students in different faculties?

2. METHODOLOGY

2.1. Research Design

The study was carried out using a descriptive survey methodology. According to Karasar (1999), survey models are research models that try to capture the reality of the past or present. The purpose of the study was to characterize the degree of sustainable development awareness of the university level students of a foundation university in Turkey.

2.2. Participants

Regarding the sample size in the study, Cohen & Morrison's (2007, p.104) statements that a sample size of 384 would be sufficient at a 95% reliability level with a 5% error rate were taken into account. Considering that there may be incomplete and incorrectly answered surveys within the scope of the study and that there will be a decrease in the number of participants. It was planned to reach a total of 400 university students (specifically associate degree students). During the study process, 416 students were reached and 336 of the answered surveys were accepted as valid.

Due to difficulties such as not being able to reach the entire population, time, cost and other reasons, convenience sampling was used in selecting the research sample (İslamoğlu & Almaçık, 2019, p. 197). The participants of this research consist of first and

fourth year students studying at different faculties of one of Turkey's leading foundation universities. The demographic information of the participants, consisting of 336 students, is summarized in Table 1.

Table 1: Demographic Information of the Participants

		N	%	
Faculty	Engineering and Architecture	34	10,1	
	Economics and Finance	24	7,1	
	Applied Sciences	207	61,6	
	Visual Arts	19	5,7	
	Health Sciences	52	15,5	
Gender	Male		Female	
	N	%	N	%
	214	63,7	122	36,3
Grade	Junior		Senior	
	N	%	N	%
	204	60,7	132	39,3

As can be seen in Table 1, university students (N=336) from five different faculties (i.e. Engineering and architecture (N=34), economics and finance (N=24), applied sciences (N=207), visual arts (N=19) and health sciences (N=52)) participated in the study. 214 of the participants were male while 122 were female. Additionally, 204 students were Junior level whereas 132 of them were in the last year of their university education.

2.3. Instrument

In this study, it was investigated whether university students' awareness of sustainable development differs according to gender, class and the faculty they study at. After the literature review within the scope of the purpose of the study, the "sustainable development awareness scale" developed by Atmaca et al., (2019) was chosen as the data collection tool. The data collection tool consists of a personal information section and a

total of 36 items. The economy, society, and environment are the three sub-dimensions that make up the 36 items on the Sustainable Development Awareness Scale. The scale's items 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, and 13 are associated with the sub-dimension of economic sustainability. The sub-dimension of social sustainability includes the items 14, 15, 16, 17, 18, 19, 20, 21, and 22. The sub-dimension of environmental sustainability includes the items 23, 24, 25, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36.

Each of the items in the scale was scaled as "(1) completely disagree", "(2) disagree", "(3) undecided", "(4) agree" and "(5) completely agree". The Cronbach's Alpha value of the scales used in research must be 0.600 and above (Kalaycı, 2017: 405). Internal consistency coefficients of the scale were calculated using the Cronbach Alpha reliability formula. The reliability value of the administered questionnaire as a whole was found to be ,90. More specifically, it was determined that reliability was 0.75 for the economic factor, 0.81 for the social factor, and 0.79 for the environmental factor.

2.4. Data Analysis

The data evaluated according to the SPSS 22.0 program were analyzed with statistical tests. The Kolmogorov-Smirnov test was performed to understand whether the data obtained within the framework of the research showed a "normal distribution". Since the p value in Table 2 is less than 0.05, it is understood that the data obtained does not show a normal distribution (Kalaycı, 2017). Accordingly, non-parametric tests were applied in the study.

Table 2: Tests of Normality

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
GeneralMean	,145	336	,000	,891	336	,000

a. Lilliefors Significance Correction

RESULTS AND DISCUSSION

In order to answer the first research question which aims to explore the difference between genders about the sustainability development awareness, Mann-Whitney U test was run and the results of the analysis is provided in tables 3 and 4. From this data, it can be concluded that the general sustainable development awareness level of female students is significantly higher than the male university students (U=113, p=,041). This finding

has been supported by many other studies in the field (Zelezny et al., 2000; Faiz & 2011; Yurtsever Kılıçgün & Kılıçkaya, 2016; Aydın Gürlü, 2023). As previously stated, this result can be related to the general positive attitude and actions of women toward the environment. They also tend to be more curious, sensitive, and eco-friendly in their behavior compared to men. Moreover, because of their innate maternal instinct, women are more sensitive, helpful, and compassionate than men. They also care more about the generations that will come after them and have a stronger emotional bond with nature.

Table 3: Mann-Whitney U Test Results

	Gender	N	Mean Rank	Sum of Ranks	U	P
GeneralMean	Female	214	176,66	37805,50	11307,500	,041
	Male	122	154,18	18810,50		
	Total	336				

More specifically, the difference between genders about the subscales (i.e. economy, social, environmental) of the sustainability development awareness scale was analyzed (see table 4). Statistical analysis results in the following table shows that there is a significant difference between genders with regards to social ($p=,003$) and environmental ($p=,030$) sustainability. However, no significant difference was found regarding economical sustainability.

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Table 4: Mann-Whitney U Test Results

	Gender	N	Mean Rank	Sum of Ranks	U	P
Economical	Female	214	170,25	36433,50	12679,500	,661
	Male	122	165,43	20182,50		
	Total	336				
Social	Female	214	180,28	38580,00	10533,000	,003
	Male	122	147,84	18036,00		
	Total	336				
Environmental	Female	214	177,15	37911,00	11202,000	,030
	Male	122	153,32	18705,00		
	Total	336				

As for the analysis of the second purpose of the study regarding the difference between first and last grade university students' sustainability development awareness levels, same statistical tests with the first research question were administered. On the contrary to the difference between genders, statistical analysis of the data about this research question showed no significant difference between grades ($U=125$, $p=,285$). In other words, the general sustainability development awareness levels of the first and last year university students is not significantly different. However, the overall mean score of both grades appeared to be ,4.08 which can be accepted a high level of awareness.

This result is contrary to the findings of research conducted by Michael et al. (2020) which presents there was a statistically significant difference in the study year for sustainability awareness ($p=.001$). Oppositely, the result regarding the overall awareness of university is parallel to the findings of Michael et al. (2020) claiming that Year 1, Year 2, and Year 3 students demonstrated a high degree of awareness related to sustainability. However, in the national context, there are some studies showing that as the grade level increases, university students' awareness of sustainable development and the environment increases as well (Çabuk & Karacaoğlu, 2003; Ek et al., 2009; Erol & Gezer, 2006; Koçulu, 2018).

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Table 5: Mann-Whitney U Test Statistics

	Grade	N	Mean Rank	Sum of Ranks	U	P
General Mean	First Grade	204	163,94	33444,00	12534,000	,285
	Last Grade	132	175,55	23172,00		
	Total	336				

Additionally, analysis was done on the grade differences regarding the sustainability development awareness scale's subscales (economical, social, and environmental). As table 6 presents that there is no significant difference between first and last grade students' economical, environmental and social sustainability development awareness. It is not surprising to find no sufficient difference with regards to subscales because of the result

related to overall awareness level. This result can also be explained with statistical analysis showing mean ranks between first and last year students. The ranks present very close scores.

This finding necessitates some in-depth elaboration, though. This finding obviously is in the fashion of a warning to the university. This is because the students graduate from the university without any sufficient improvement in the sustainable development awareness on the contrary to general expectance. The reason why this study gathered data form first and last year students was actually to identify this issue.

Table 6: Mann-Whitney U Test Statistics

	Grade	N	Mean Rank	Sum of Ranks	U	P
Environmental	First	204	168,13	34297,50	13387,500	,930
	Last	132	169,08	22318,50		
	Total	336				
Economical	First	204	167,74	34219,50	13309,500	,859
	Last	132	169,67	22396,50		
	Total	336				
Social	First	204	164,44	33546,50	12636,500	,338
	Last	132	174,77	23069,50		
	Total	336				

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As a final purpose, the awareness level of university students in different faculties was investigated. Descriptive statistics were used to explore this final research question. According to the findings depicted in Table 7, awareness levels of the students in varying faculties more or the less similar to each other. However, more specifically, the awareness of Economics and Finance faculty students appeared to be higher (M=4,24) compared to the other faculties. On the contrary, the applied sciences faculty students' awareness levels were found to be the lowest (M=4.03). In order to see whether the difference among faculties is significant, a Kruskal-Wallis test was used (see table 8). A Kruskal-Wallis H test showed that there was not a statistically significant difference in general sustainability development awareness levels of students in different faculties, $\chi^2(5) = 7.228$, $p = 0.124$. This result is parallel to the findings of the study by Jati et al. (2019) in which they noted the awareness level of university students is independent of their grade levels and majors.

One of the reasons why Economics and Finance faculty students scored higher compared to other universities can be related to their common stream course which is economics. Due to the fact that the students of this faculty are probably more knowledgeable about the consumption and production issues, this result can be understood better.

Table 7: Descriptive Statistics

Descriptives				
Faculty			Statistic	Std. Error
GeneralMean	Engineering and Architecture	Mean	4,0376	,07588
		95% Confidence Interval for Mean	Lower Bound	3,8832
			Upper Bound	4,1920
Economics and Finance	Economics and Finance	Mean	4,2477	,05799
		95% Confidence Interval for Mean	Lower Bound	4,1277
			Upper Bound	4,3676
Applied Sciences	Applied Sciences	Mean	4,0377	,03565
		95% Confidence Interval for Mean	Lower Bound	3,9674
			Upper Bound	4,1080
Visual Arts	Visual Arts	Mean	4,1842	,07103
		95% Confidence Interval for Mean	Lower Bound	4,0350
			Upper Bound	4,3334
Health Sciences	Health Sciences	Mean	4,1635	,07029
		95% Confidence Interval for Mean	Lower Bound	4,0224
			Upper Bound	4,3046

Table 8: Kruskal-Wallis Test Results

General Mean	
Chi-Square	7,228
df	4
Asymp. Sig.	,124

a. Kruskal Wallis Test

b. Grouping Variable: Faculty

Implications

Sustainability awareness among higher education students ensures the understanding of our co-dependence with the environment that we live in. As such, universities, through educators, play an important role in the education and development of students' awareness, attitude and behaviour towards sustainability development. Although there is

increasing value placed on educating students in this area, there is still room for improvement in increasing the level of awareness among individual students of sustainable development.

Findings have a number of implications. It is first advised that curricula be revised in order to improve students' knowledge and develop the so-called new skillset, or green skills. The focus of 21st-century skills should not be limited to technical and generic skills, but also to knowledge, abilities, values, and attitudes related to sustainability. This will help control human activities that negatively impact the environment. To make sure that students understand the interdisciplinary connections of the sustainable development agenda, sustainability education may be integrated into the courses that are offered. An independent course on sustainability development, on the other hand, will help students become familiar with the subject.

Moreover, encouraging students' involvement in volunteerism projects that enhance their critical thinking, such as recycling is of great importance. This view is supported by Alkhayyal et al. (2020), who highlighted that support from faculty members will strengthen the awareness of and knowledge on sustainability in higher education institutions, especially among the younger generations.

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Last but not least, supporting the evolution of sustainability education begins with addressing the elements of mission, vision, objectives, and philosophy in management structures. These include formal committee considerations, roles and responsibilities, and performance assessment frameworks. Naturally, the most significant effect of these practices will be a direct alteration to the staff performance evaluation process and the program structure with respect to key performance indicators.

CONCLUSION

Keeping people livable in the world largely depends on raising awareness of sustainable development. Education institutions have a responsibility to assist individuals in integrating sustainable development into their daily routines. The purpose of this study was to examine university-level students' awareness of sustainable development, as universities are among the most important educational institutions in the lives of their students. The Sustainable Development Awareness Scale was used to collect data for this

main objective (Atmaca et al., 2019). 336 university students in their junior and senior years voluntarily participated in the study. The study's findings demonstrated that there are no appreciable differences between grades. Furthermore, there was no discernible difference between students from various faculties.

When the gender differences in the subscales were examined, however, no discernible difference was found in the economy, despite the fact that social ($p=,003$) and environmental ($p=,030$) sustainability development awareness seemed to differ significantly. The only discernible gender difference in general awareness of sustainable development was found.

This research is restricted to a single university. It is recommended that more research be done to find out how much awareness there is about sustainability at other universities. It is also recommended that future research investigate the most effective ways to raise students' awareness and comprehension of sustainability in higher education.

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