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Sustainability and Human Rights Practices and Training

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Abstract

Twenty-first century citizens live in an interconnected, diverse and intensively changing world. Developing sustainability and human rights practices is of major importance for the survival of both the present and the future generations. This research study comes to investigate primary education teachers' sustainability practices in their daily lives concerning the three basic pillars of sustainable development, environment, society and economy. At a second level, it is sought to investigate whether there is a correlation between teachers' practices and their training in sustainability and human rights issues. The "Sustainability Consciousness Questionnaire", in its short version with closed-ended questions-statements was delivered, whereas its reliability and validity were positively assessed. The technique of convenient sampling process was applied, and the sample consisted of 452 primary education teachers working in the Region of Western Greece. Data were analyzed by using IBM SPSS v.28 software. Percentages, frequencies of the mean value and standard deviation were calculated. The test of normality of variables for skills was done with Kolmogorov-Smirnov, and the parametric t-Test was applied to investigate correlations. The internal consistency reliability of the questions of the sustainability practices questionnaire is satisfactory. The findings of the research indicate that the participants are sensitive towards the necessity of recycling, waste management, saving energy, respecting others, and supporting economically weaker people. Finally, it is worth mentioning that teachers who have been trained in sustainability and human rights issues show a greater positive attitude towards sustainability practices than those who have not been

trained.

Keywords: Sustainability, human rights, practices, primary education teachers

Introduction

Development could be defined as a process of personal and social transformation, of active participation and of widening people's choices and capabilities (Sen, 1999; UNDP, 2016). However, there are many obstacles, such as social and cognitive constraints, norms, values, mechanisms and policies, preventing people from achieving it (Karanikola & Panagiotopoulos, 2020).

In this vein, a great number of important texts have been drafted by the European and International Organizations in order to support member-states to achieve growth and prosperity. Specifically, in 1986, Member States of the United Nations proclaimed the "Declaration on the Right to Development", which stated that everyone should be entitled to participate in, contribute to, and enjoy economic, social, cultural and political development, in which all human rights and fundamental freedoms can be realized through inclusive and universal policies.

The year 2000 marks the United Nations' Program with the following Millennium Development Goals (2000-2015): eradicating extreme poverty and hunger, achieving universal primary education, promoting gender equality and empowering women, reducing child mortality, improving maternal health, fighting HIV/AIDS, malaria and other diseases and ensuring environmental sustainability (WHO, 2018).

Following, in 2015 the United Nations come to propose the Program "Agenda, 2030 - Sustainable Development Goals" (2015-2030), which includes seventeen universal and indivisible goals and 169 individual goals. Its main axes are the eradication of poverty, the generalization of education at all levels, gender equality, ensuring health and well-being, access to alternative forms of energy, environmental protection and respect for fundamental human rights (Karanikola & Pitsou, 2019; Karanikola & Panagiotopoulos, 2017; UN, 2015). Sustainability could be regarded as a balance between present and future, meaning that people should achieve their present demands through natural resources without threatening future generations' capacity to meet their needs as well (Diri, 2021; Karanikola & Panagiotopoulos, 2019).

Interest in life, awareness on the state of the planet, sound decision-making, modeling of sustainable behavior, transformation of societies (social change) (Glasser & Hirsh, 2016), systems thinking competence, anticipatory competence, normative competence, strategic competency, interpersonal

competence, and integrated problem solving are recognized as some of the main dimensions of sustainability (Panagiotopoulos, Karanikola, & Zogopoulos, 2023; Wiek et al., 2011).

How could, though, sustainability be cultivated? The role of education, both in formal and non-formal settings- is widely recognized as important by the international discourse (Bianchi, 2020).

Lozano and his colleagues (2017), through an overview of the relevant literature, propose twelve pedagogical approaches, which are categorized into three groups: a) universal, which are applied in multiple contexts and fields and include case studies, interdisciplinary team teaching, lectures, concept maps, b) community and social justice pedagogy that focuses on community building through practices such as participatory action research and c) environmental education based on practices of ecological justice, the circular economy, the food chain and the cycle of life (Panagiotopoulos, Karanikola, & Zogopoulos, 2023). Abiding by that, several scales have been developed towards the sustainable development goals and practices (indicatively: United Nations, 2019; Sidiropoulos, 2018; Lange et al., 2018; Brevers et al., 2021), an element showing that there is an increased national and international interest in measuring and assessing individuals' sustainability mindset and skillset.

In this context this study could serve as a guide to raising awareness about the importance of training programmes and their effect on applying sustainability and human rights practices on a metacognitive level; in this same line, useful thoughts and ideas could be provided to learners and workers in this field.

Methods

This research study comes to shed light into primary education teachers' sustainability practices in their daily lives concerning the three basic pillars of sustainable development, environment, society and economy. At a second level, it is sought to investigate whether there is a correlation between teachers' practices and their training in sustainability and human rights issues.

The "Sustainability Consciousness Questionnaire" (Gericke et al., 2019), in its short version with closed-ended questions-statements, was delivered, whereas its reliability and validity were positively assessed (Ogishima et al., 2023).

For the needs of the study, which was conducted in February 2023, the axis concerning sustainability practices related to the pillars of environment (3 questions), economy (3 questions) and society (3 questions) was used, consisting of a total of nine questions. Participants were asked to answer closed-ended questions on a five-point Likert scale from 1 to 5

(1=strongly disagree, 2=somewhat disagree, 3=neutral opinion, 4=somewhat agree, 5=strongly agree).

The technique of convenient sampling process was applied, whereas the sample used for the questionnaire portion of the study consisted of 452 teachers working in primary education in the Region of Western Greece. Regarding their demographic data, 23.6% were male and 76.4% female; 44.9% had "1-10" years of total service; 26.1% "11-20" years; 19.9% "21-30" and 9.1.2% 31 years and over. In terms of their educational level, 33.4% had only a Bachelor's degree; 6.2% a Second degree; 57.3% a Master's degree and 3.1% a PhD degree. Regarding their training on sustainable development and human rights, 80.5% have never been trained on sustainability issues and 75.9% had never been trained on human rights issues.

Results

Data were analyzed by using IBM SPSS v.28 software. Percentages, frequencies of the mean value and standard deviation were calculated. The test of normality of variables for skills was done with Kolmogorov-Smirnov. The results showed that there is a normal distribution of the variables (p-value>0.05). The parametric t-Test was used to investigate correlations. The internal consistency reliability of the questions of the sustainability practices questionnaire (Table 1) is satisfactory (Cronbach's Alpha=0.762>0.70).

Table 1. Internal consistency reliability check

	N	Cronbach's Alpha
Sustainability practices	9	0,762

Descriptors of environmental sustainability practices

Regarding environmental sustainability practices (Table 2) participants somewhat agree that they recycle as much as they can (4.32); separate food scraps from garbage (3.94); and have changed their personal lifestyle for waste reduction (4.20).

Table 2. Distribution of Percentages, Mean and Standard Deviation for Sustainability practices-environment

	Statements	Mean	S.D.	Minimum	Maximum
1	I recycle as much as I can.	4,32	0,042	1	5
2	I always separate food scraps from trash when I have the chance.	3,94	0,054	1	5
3	I have changed my personal lifestyle to reduce waste (e.g., throwing away less food or not wasting materials).	4,20	0,041	1	5

Note:1=strongly disagree, 2=somewhat disagree, 3=neutral opinion, 4=somewhat agree, 5=strongly agree

Regarding sustainability practices for society (Table 3) the respondents strongly agree that they save energy and show respect to others online as well (4.65) and treat everyone equally and with respect regardless of their gender and age (4.79). They also agree to support organizations that deal with issues of supporting financially vulnerable people or protecting the environment (3,62).

Table 3. Distribution of Percentages, Mean and Standard Deviation for Sustainability practices-Society

	Statements	Mean	S.D.	Minimum	Maximum
4	When I use a computer or cell phone to chat, text, play games, etc., I always treat others with the same respect as I would in real life.	4,65	0,026	1	5
5	I support a charity or an environmental group.	3,62	0,064	1	5
6	I show equal respect to men and women, boys and girls.	4,79	0,027	1	5

Note:1=strongly disagree, 2=somewhat disagree, 3=neutral opinion, 4=somewhat agree, 5=strongly agree

Regarding sustainability practices for the economy (Table 4) participants slightly agree that they take actions to help the poor (4.26) and avoid purchasing products from companies with a bad reputation for employee and environmental behavior (4.07). They express a neutral opinion (2.78) about the frequency of buying used products from a physical store or internet.

Table 4. Distribution of Percentages, Mean and Standard Deviation for Sustainability practices-Economy

	Statements	Mean	S.D.	Minimum	Maximum
7	I take actions that help the poor.	4,26	0,057	1	5
8	I often buy used products from a store or online.	2,78	0,055	1	5
9	I avoid buying goods from companies with a bad reputation for treating employees and the environment.	4,07	0,054	1	5

Note:1=strongly disagree, 2=somewhat disagree, 3=neutral opinion, 4=somewhat agree, 5=strongly agree

The overall mean value in the responses of the participants for sustainability practices is 4.20 (I somewhat agree) (Table 5).

Table 5. Distribution of Mean Value and Standard Deviation for Sustainability practices

	Mean	S.D.
Sustainability practices	4,20	0,027

Correlating sustainability practices with training in sustainability education

An independent samples t-test (Table 6) was applied in order to determine if there is a statistically significant difference between sustainability attitudes and sustainability training. Based on Levene's Test, the mean values in sustainability practices [t(450)=3.04, p=0.002<0.05] differ from each other. Thus, there is a statistically significant difference of sustainability practices with sustainability training.

Table 6. T-test results for correlating sustainability practices with Sustainability training

		Levene's Test for Equality of Variances				Significance	
		F	Sig.*	t	df	One-Sided p	Two-Sided p
Sustainability practices	Equal variances assumed	1,046	0,306	3,04	450	0,001	0,002
	Equal variances not assumed			2,922	120,386	0,002	0,003

** =p< 0,05*

Those who have been trained in sustainability issues present to a greater extent (mean=4.37) a positive attitude towards sustainability behaviors than those who have not been trained (mean=4.08) (Table 7).

Table 7. Descriptive Measures of Sustainability practices for Sustainability training

	Sustainabily training	N	Mean	S.D.	Std. Error Mean
Sustainability practices	Yes	88	4,37	0,576	0,066
	No	364	4,08	0,525	0,03

Correlating Sustainability practices with human rights training

An independent samples T-test (Table 8) was used in order to determine if there is a statistically significant difference of respondents' attitudes in sustainability practices and human rights training in education. Based on the Levene's Test, the mean values in sustainability practices [t(450)=2.872, p=0.003<0.05] differ from each other. There is a statistically significant difference of sustainability practices with human rights training.

Table 8. T-test results for Correlating sustainability practices with human rights training

		Levene's Test for Equality of Variances				Significance	
		F	Sig.*	t	df	One-Sided p	Two-Sided p
Sustainability practices	Equal variances assumed	0,392	0,527	2,872	450	0,002	0,003
	Equal variances not assumed			2,886	176,489	0,002	0,004

** =p< 0,05*

Finally, those who have been trained in human rights issues show a greater (mean=4.34) positive attitude towards sustainability behaviors than those who have not been trained (mean=4.03) (Table 9).

Table 9. Descriptive Measures of sustainability practices for human rights training

	Human rights training	N	Mean	S. D.	Std. Error Mean
Sustainability practices	Yes	109	4,35	0,556	0,045
	No	343	4,03	0,567	0,030

Discussion

In summary, we can see that primary education teachers are in favor of sustainability practices in their daily lives concerning the three basic pillars of sustainable development, environment, society and economy, whereas there is a statistically significant correlation between teachers' practices and their training in sustainability and human rights issues.

The aforementioned findings corroborate those of a survey conducted by Sfakianaki and Papastephanaki (2020), according to which secondary education teachers of the prefecture of Heraklion in Crete demonstrate positive attitudes towards sustainability and issues of democracy, justice and social responsibility. On the other hand, research results of Spiropoulou et al. (2007) are quite different as primary school teachers argue that sustainability is mainly about local and national environmental problems and downplays global problems related to climate change, waste management and the depletion of energy reserves.

Regarding the role of training, it is demonstrated that those who have been trained in sustainability issues and in human rights issues present to a greater extent a positive attitude towards sustainability practices than those who have not been trained. In a similar study, Stoeckln and Bogner (2008) emphasize that sustainability education affects teachers' pro-environmental

behavior, highlighting the importance of education in behavior change. In his article, Sterling (2010) considers that training in the context of sustainability affects teachers, strengthening their perceptions and practices.

Accordingly, Rickinson et al. (2011) argue that teacher training on sustainability affects their teaching and behavior, whereas Sybramanian et al. (2016) and Moradeke et al. (2021) claim that people's capacity to encourage pro-environmental attitudes and behaviors is improved by employing green training and sustainable methodologies.

Conclusion

Sachs (as cited in Kim & Coonan, 2023, p. 2) argues that "the call for the sustainable development goals was a historic move to forward a new global agenda engaging the world community, including not only governments but also business, non-governmental organizations, civil society, scientists and students". Towards this direction human rights community has increasingly sought ways to impact education and foster improved human rights, whereas schools have an important role to play in educating new generations that will be aware of the complex challenges facing societies and the global community.

Training and education are critical for enhancing the way that sustainability science is practiced (Weinberg et al. 2020), and it should incorporate an in-depth analysis of the environmental reality, issues related to human rights, social inequality and cultural diversity (Tuay-Sigua, 2023). Teachers' perceptions of environmental sustainability behaviors could be developed through educational practice, professional development, and personal experience. They should reflect on the critical importance of sustainability for the environment and society and understand that the long-term well-being of the planet depends on sustainable behaviors in the environment. These perceptions influence their teaching tactics and offer students the opportunity to develop more sustainable attitudes towards the environment and understand the importance of preserving the environment for future generations. In this vein, they are called to develop various pedagogical strategies in which the vision of "thinking globally and acting locally is embraced, by linking objectives of collaboration, solidarity and participation with their students to contribute to a sustainable future" (Tuay-Sigua, 2023, p. 13).

Regarding the training programs, there are some basic elements that should be taken into account. Both trainers and organizations should discuss and work together in order to plan a program, and meet the participants' training needs. What is more, learners should be empowered through individual support in order to achieve appropriate knowledge, capacities and competencies (Büker & Schell-Straub, 2017) in order to participate in

relative programs and modules, reflect on their attitudes and initiate the appropriate practices.

The conduction of a study involves a demanding and time-consuming procedure. However, it is inevitable for almost every study to come up against any limitations and shortcomings, no matter how well-organized it may be. Thus, among the limitations of the work, it stands out that the results cannot be generalizable for the whole population, since the inquiry was carried in the region of Western Greece in a specific time period. Finally, regarding future exploration, this study could constitute a starting point for further relevant studies that may examine the issue more deeply and in the context of school environment.

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Data Availability: All of the data are included in the content of the paper.

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Human Studies: The study was conducted in accordance with the Declaration of Helsinki and approved by the Ethics Committee of the University of Patras (13 March 2023).

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