



Review of Environmental Awareness, Environmental Attitudes, and Environmental Behavior of Prospective Teacher Students: Towards Sustainable Education

Saringatun Mudrikah^{1*}, Lola Kurnia Pitaloka²

¹Economic Education Department, Universitas Negeri Semarang, Semarang, Indonesia

*Email: saringatunmudrikah@mail.unnes.ac.id

Abstract. Environmental damage in the world has reached an alarming level, such as climate change, ecological damage, deforestation, air and water pollution, damage to coral reefs and mangrove forests, and the threat of plastic waste. Prospective economics teachers with environmental literacy have a vital role in forming future generations aware of the importance of sustainability. This research aims to analyse the literacy level and differences in ecological understanding of prospective economics teachers, including environmental awareness, attitude and behaviour. This research is quantitative. The research population was 744 prospective economic education teacher students. The sampling technique used was proportional random sampling with 260 students. The data collection technique uses a questionnaire. The analysis technique used is descriptive analysis and a one-way ANOVA test. The research results showed significant differences in Environmental Behavior between prospective teacher students from the Accounting Education and Office Administration Education study programs. No differences were found in Environmental Awareness and Environmental Attitudes between the three study programs. This research recommends reviewing and enriching the curriculum with practical activities focusing on implementing environmental action and expanding existing ecological programs to ensure all students have equal opportunities to participate in environmental activities.

Keywords: Environmental Awareness, Environmental Attitudes, Environmental Behavior, Prospective Teacher Students, Sustainable Education

1 Introduction

Environmental degradation in the world has reached alarming levels, affecting various aspects of life on the planet. [1]. One of the most prominent issues is climate change, caused by greenhouse gas emissions from burning fossil fuels, deforestation, and industrial activity. Rising global temperatures are causing melting ice at the North and

© The Author(s) 2024

K. B. Abiprayu and A. B. Setiawan (eds.), *Proceedings of the International conference of Economics Business and Economics Education Science (ICE-BEES-24)*, Advances in Economics, Business and Management Research 298, https://doi.org/10.2991/978-94-6463-522-5_50

industrial activity. Rising global temperatures are causing melting ice at the North and South Poles, which in turn is raising sea levels and threatening coastal communities. In addition, climate change also causes extreme weather, such as storms, floods and droughts, which hurt agriculture and the availability of clean water.

Deforestation is another big problem, especially in tropical rainforests. Deforestation for agriculture, plantations, settlements, and the timber industry has caused habitat loss for many species and led to declining biodiversity. Deforestation also worsens climate change because felled trees can no longer absorb CO₂ from the atmosphere. This damage to forest ecosystems disrupts the water cycle, causes soil erosion, and affects regional rainfall patterns.

Another environmental problem is pollution. Air and water pollution also severely threatens human health and the environment. Emissions from motor vehicles, burning fossil fuels, and industrial activities pollute the air with harmful substances such as carbon monoxide, sulfur dioxide, and fine particles. This air pollution can cause various respiratory and cardiovascular diseases in humans, crop damage and depletion of the ozone layer. On the other hand, water pollution caused by industrial, agricultural and household waste results in water quality degradation, kills aquatic life and poses health risks to humans who consume polluted water.

Damage to coral reefs and mangrove forests is another environmental problem that requires serious attention. Coral reefs damaged by ocean warming, pollution and human activities reduce marine biodiversity and threaten the livelihoods of coastal communities that depend on fisheries. Mangrove forests that are cleared to convert land into ponds or settlements cause coastal erosion and loss of natural protection from storms and sea waves. Without appropriate intervention, this damage will continue to threaten the stability of marine ecosystems and the lives of the people who depend on them.

Another environmental threat is plastic waste, which is increasing with the rampant use of single-use plastic. Plastic that must be appropriately managed often ends up in the sea, forming islands of rubbish and polluting marine ecosystems. Marine creatures such as fish, birds and turtles frequently mistake plastic for food, which can cause death. Additionally, microplastics resulting from more significant plastic degradation can enter the food chain and pose health risks to humans. Overcoming this problem requires collective efforts to reduce plastic use and improve waste management systems.

Prospective economics teachers who care about the environment are crucial in producing a more aware and responsible generation for sustainability. In an increasingly complex world facing global environmental challenges such as climate change, pollution and deforestation, and plastic waste, a deep understanding of the relationship between the economy and the environment is becoming increasingly important. Prospective economics teachers who understand and care about environmental issues can integrate sustainability concepts into their curriculum, helping students understand how economic activity affects ecosystems and why pursuing environmentally friendly growth models is essential.

In addition, economic education enriched with an environmental perspective can build awareness and responsibility among students. Teachers who care about the envi-

ronment can instil sustainability values in the teaching and learning process, encouraging students to think critically about the environmental impact of their economic decisions. This prepares students to face future challenges and equips them with the knowledge and skills to develop innovative solutions that support sustainability. Thus, prospective economics teachers who care about the environment can create a more environmentally aware society that acts responsibly.

Furthermore, economics teachers who care about the environment can be strong role models for students. Teachers can provide concrete examples that students can follow by implementing environmentally friendly practices in everyday life, such as reducing plastic use, recycling, and saving energy. When students see and feel the positive impact of these actions, they are more likely to adopt the same habits in their own lives. This creates a chain effect that extends the positive impact of environmental awareness to the broader community.

In addition, prospective economics teachers who understand the importance of environmental sustainability can connect economic theory with actual practice through various projects and case studies. They can encourage students to analyse the financial impact of environmental policies, explore sustainable businesses, and develop projects that support environmental conservation. These experiences enrich students' understanding of economics and equip them with practical skills relevant to a world of work increasingly focused on sustainability.

Concern for the environment for prospective economics teachers is a crucial element that enriches education, encourages innovation, and creates a generation ready to face environmental challenges with sustainable solutions. By integrating sustainability values in economic education, prospective teachers educate students about monetary theory and shape them into responsible individuals who contribute positively to the earth's sustainability.

Prospective economics teachers with environmental literacy play a vital role in forming future generations aware of the importance of sustainability. Environmental literacy allows prospective teachers to understand and teach concepts integrating economic and ecological aspects, such as the green economy and sustainable development [2] [3]. With this knowledge, they can develop a curriculum that focuses on economic growth and pays attention to its environmental impact. Students educated in this context will better understand that economic prosperity and ecological sustainability are interrelated and equally important.

Considering the critical role of teachers, many studies [4]; [5] Show the need to increase environmental literacy for prospective teachers. In this case, understanding their perceptions of the environment can result in more effective environmental education and higher levels of ecological literacy. [6]. Therefore, in this research, the ecological literacy components of prospective teachers will be studied: Environmental awareness , Environmental attitude, and Environmental behaviour.

Environmental awareness is individual awareness of environmental issues and concern for ecosystem conditions. [7] [8]. This includes understanding the importance of protecting the environment and recognising ecosystems' threats. [9]. Environmental attitude refers to an individual's attitude towards environmental issues, which provides for beliefs, feelings, and tendencies to act towards ecological protection. [10] [11].

This attitude reflects a person's values and priorities regarding ecosystems and sustainability. [12]. Environmental behaviour is real action individuals or groups take to protect and preserve the environment. This includes recycling, reducing energy use, supporting environmentally friendly products, and engaging in nature conservation. [13].

Many studies have examined environmental literacy in prospective teachers, but most research was conducted on prospective science teachers and very limited to prospective economics teachers. Thus, this research aims to assess the environmental literacy of prospective economics teachers and to find out their opinions about environmental education to improve various types of existing ecological education training.

Based on the previous description, the formulation of this research problem is as follows: What are prospective economics teachers' environmental awareness, attitude, and ecological behaviour levels? Are there differences in the levels of Environmental Awareness, Environmental Attitude, and Environmental Behavior of prospective economics teachers?

2 Method

This research is quantitative. Questionnaires were given to economic education students, divided into three concentrations: accounting education, cooperative education, and office administration education. The population of this study was 744 students who had previously received conservation education courses. The sample size was determined using the Slovin formula to obtain a sample of 260 students. The sampling technique used was proportional random sampling, so 108 students were taken for the accounting education concentration, 76 office administration education students, and 76 cooperative education students.

The data collection technique uses a questionnaire with closed questions on a 5-point Likert-type scale. Quantitative data from the questionnaire was analysed using SPSS software, with the analysis technique used as descriptive analysis and a one-way ANOVA test. According to Sánchez & Lafuente (2010) Environmental awareness is measured using indicators such as knowledge of environmental issues, positive attitudes, and actions towards the environment. According to [15] Ecological attitude is measured using indicators, including worry about the future environment and paying attention to things that are more important than protecting the environment. Paying attention to the environment is possible if other people do the same. Many claims about the climate are exaggerated. -exaggerate. Environmental behaviour variables are measured using Sousa et al., (2021) Indicators, which consist of changing to more environmentally friendly vehicles or public transportation, recycling paper and plastic waste, recycling battery waste, reusing fabric bags, avoiding single-use plastic waste, using paper wisely, consuming water strictly, and consuming energy strictly.

3 Results and Analysis

The results of the sample description analysis obtained in this study are presented in Table 1.

Table 1. Sample Description

Characteristics	Absolute Values	Percentage Values
Gender:		
Female	184	70.77%
Male	76	29.23%
Age:		
17-19	18	6.92%
20-22	207	79.62%
23-25	35	13.46%
>25	0	0%
Cohabitation with:		
Family	98	37.69%
Alone	21	8.08%
Other friends	141	54.23%
Other situations	0	0%
Experience participating in environmental conservation activities:		
1-5 times	177	68.07%
6-10 times	51	19.62%
10-15 times	30	11.54%
>16 times	2	0.77%

Source: Primary data processed (2024)

From the data presented, it can be seen that most respondents were women (70.77%) and aged between 20-22 years (79.62%). Most respondents lived with other friends or in boarding houses (54.23%), while 37.69% lived with family. Regarding experience participating in environmental conservation activities, most respondents participated 1-5 times (68.07%), with a small portion participating more than 16 times (0.77%). This data shows that research respondents' demographic distribution and environmental participation experience are relatively tiny. Next is related to the results of descriptive statistical analysis of ecological awareness of prospective economic education student teachers, presented in Table 2.

Table 2. Environmental Awareness of Economic Education Students

No	Indicators	Concentration of study program	Min	Max	Mean	Std. Dev
1	Knowledge of environmental issues	Accounting Education	3	5	4.03	0.84
		Office Administration Education	1	5	3.06	1.53
		Cooperative Education	2	5	3.39	1.21

2	positive attitude towards the environment	Accounting Education	1	5	3.86	1.01
		Office Administration Education	1	5	4.05	1.43
		Cooperative Education	1	5	3.98	1.35
3	action towards the environment	Accounting Education	1	5	3.94	0.89
		Office Administration Education	1	5	3.52	1.16
		Cooperative Education	1	5	3.61	1.33

Source: Primary data processed (2024)

Based on Table 2, students in the Accounting Education concentration show a good understanding of environmental issues, with an average score of 4.03 and a range that does not vary too much (standard deviation 0.84). Students in the Office Administration Education concentration demonstrated a more varied understanding of environmental issues, with a lower mean score of 3.06 and a higher standard deviation (1.53), indicating significant differences in knowledge levels among students. Understanding environmental issues in the Cooperative Education concentration shows an average score of 3.39 with substantial variations (standard deviation 1.21), indicating variations in students' knowledge levels. The results of descriptive statistical analysis for the environmental attitude of prospective economic education student teachers are presented in Table 3:

Table 3. Environmental Attitude of Economics Education Students

No	Indicators	Concentration of study program	Min	Max	Mean	Std. Dev
1	worry about the future environment	Accounting Education	3	5	3.96	0.83
		Office Administration Education	3	5	4.00	0.91
		Cooperative Education	3	5	4.05	0.83
2	Pay attention to things that are more important than protecting the environment	Accounting Education	1	5	3.83	0.90
		Office Administration Education	1	5	3.92	0.91
		Cooperative Education	1	5	3.89	0.87
3	There's no point in paying attention to your surroundings unless other people	Accounting Education	2	5	4.81	0.83
		Office Administration Education	2	5	3.97	0.99

	do the same	Cooperative Educa- tion	1	5	3.97	0.88
4	Many claims about the environment are exaggerated.	Accounting Educa- tion	1	5	3.87	0.91
		Office Administra- tion Education	1	5	4.05	0.92
		Cooperative Educa- tion	1	5	3.99	0.97

Source: Primary data processed (2024)

Based on Table 3. Accounting education, Administration office Education, and Cooperative Education show a high concern about the environment's future, with an average score above 3.9. Cooperative Education students showed the highest concern (mean 4.05) with relatively minor variations (std. dev 0.83). Regarding priorities, Office Administration Education and Cooperative Education students were more likely to pay attention to other things than protecting the environment, with an average score of around 3.9. However, the view that paying attention to the environment is only helpful if other people do so is more robust in the Accounting Education concentration (mean 4.81), indicating more significant scepticism than in different courses. Finally, the perception that many environmental claims are exaggerated was evenly distributed across concentrations. Office Administration Education students showed slightly higher (mean 4.05), indicating moderate scepticism about environmental issues across all classes.

The results of the descriptive analysis of the environmental behaviour of prospective economic education student teachers are presented in Table 4:

Table 4. Environmental Behavior of Economics Education Students

No	Indicators	Concentration of study program	Min	Max	Mean	Std. Dev
1	Replace more envi- ronmentally friend- ly vehicles or use public transporta- tion	Accounting Educa- tion	4	5	3.86	0.81
		Office Administra- tion Education	3	5	3.88	0.83
		Cooperative Educa- tion	3	5	3.78	0.80
2	Recycle paper and plastic waste.	Accounting Educa- tion	2	4	3.27	0.91
		Office Administra- tion Education	2	4	3.19	0.74
		Cooperative Educa- tion	2	4	3.19	0.73
3	Recycle battery waste	Accounting Educa- tion	1	4	3.26	1.13
		Office Administra- tion Education	1	3	3.22	1.15
		Cooperative Educa- tion	1	3	3.17	1.08

4	Reuse fabric bags	Accounting Educa- tion	3	5	3.38	1.09
		Office Administra- tion Education	2	5	3.42	1.14
		Cooperative Educa- tion	3	5	3.43	1.09
5	Avoid using single- use plastic waste.	Accounting Educa- tion	2	5	3.46	1.22
		Office Administra- tion Education	2	5	3.48	1.20
		Cooperative Educa- tion	2	5	3.43	1.18
6	Use paper wisely	Accounting Educa- tion	3	5	3.48	1.11
		Office Administra- tion Education	3	5	3.56	1.12
		Cooperative Educa- tion	2	5	3.53	1.11
7	Consume water strictly	Accounting Educa- tion	3	5	3.44	1.15
		Office Administra- tion Education	2	5	3.48	1.14
		Cooperative Educa- tion	2	5	3.50	1.12
8	Consume energy strictly	Accounting Educa- tion	4	5	3.40	1.13
		Office Administra- tion Education	3	5	3.39	1.10
		Cooperative Educa- tion	3	5	3.44	1.06

Source: Primary data processed (2024)

Based on Table 4, the results obtained show that environmental actions show that students from the three concentration of study program (Accounting Education, Office Administration Education, and Cooperative Education) have a reasonably uniform tendency to replace more environmentally friendly vehicles or use public transportation with a mean of around 3.8 and low variation. Regarding paper and plastic recycling and battery waste, the average score is around 3.2, with moderate variations, indicating a need for increased awareness and action in this area. The reuse of cloth bags showed a slightly higher value, around 3.4, indicating better awareness towards reducing the use of single-use plastics. Students also demonstrated an excellent commitment to judicious use of paper and water, with an average above 3.4. Although slight variations exist between classes, this data shows that all indicators have positive environmental awareness and action. However, there is room for improvement, espe-

cially in recycling waste batteries and wise energy use. Next are the results of different tests using one-way ANOVA, which are presented in Table 5:

Table 5. ANOVA Test

		Sum of	df	Mean	F	Sig.
		Squares		Square		
E_Awareness	Between Groups	7,307	2	3,653	,977	,378
	Within Groups	960,709	257	3,738		
	Total	968,015	259			
E_Attitude	Between Groups	8,175	2	4,088	,744	,476
	Within Groups	1411,825	257	5,493		
	Total	1420,000	259			
E_Behavior	Between Groups	103,354	2	51,677	4,216	.016
	Within Groups	3149,950	257	12,257		
	Total	3253,304	259			

Source: processed primary data (2024)

The results of the ANOVA test show significant differences in the environmental behavior variable between the concentration of accounting education, office administration education, and cooperative education in the study program. Meanwhile, the Environmental Awareness and Environmental Attitude variables are the same. For the environmental awareness variable, the F value (0.977) with a significance level (Sig.) of 0.378 means no significant difference between the accounting education, office administration education, and cooperative education classes. Likewise, the environmental attribute variable with an F value (0.744) and a significance level of 0.476 shows no significant difference between Accounting Education, Office Administration Education and Cooperative Education. In contrast, the Environmental Behavior variable shows different results. The F value of 4.216 with a significance level of 0.016 indicates a significant difference in behaviour between Accounting Education, Office Administration Education and Cooperative Education.

Based on the results of post hoc tests (Bonferroni and Games-Howell) on the Environmental Awareness and Environmental Attitude variables, no significant differences were found between any groups. This can be seen from the overall significance value (Sig.), which is more critical than 0.05, which means that although there are differences in averages between groups, there are no significant differences. On the other hand, there is a substantial difference between the Accounting Education and Cooperative Education groups in the Environmental Behaviour variable. The Bonferroni test shows a significant difference with a mean difference of -1.52096 (Sig. 0.012), and this result is confirmed by the Games-Howell test with the same mean difference and a significance level of 0.016. This shows that the Cooperative Education group has significantly different behaviour than Accounting Education, with the Cooperative Education group showing more significant changes in behaviour.

The absence of differences in environmental awareness and environmental attitudes among prospective teacher students from Accounting Education, Office Administration Education, and Cooperative Education study programs can be caused by several factors. First, the educational curriculum in the three study programs has similar content related to environmental education. This is proven by the fact that there are courses that students must take compulsorily, namely the Conservation Education course, which has a credit weight of 2 credits. Suppose each study program includes the same material about the importance of environmental awareness and a good attitude towards the environment. In that case, students will likely have the same knowledge and attitudes towards environmental issues, and the results of this research are in line with research conducted by Bozdemir et al., (2014), Tan (2014).

Apart from that, students' backgrounds and social environment can also influence these results. Students from these three study programs are in the same campus environment. They are exposed to the same environmental programs, such as campuses that actively promote environmentally friendly practices through campus activities, student organisations, and environmental events that can instil awareness and positive attitudes towards the environment evenly among all students. As a result, even though they come from different study programs, the same exposure to campus environmental initiatives can equalise their awareness and attitudes towards the environment.

Different results occurred in environmental behaviour conditions. In this condition, among prospective teacher students from Accounting Education, Office Administration Education and Cooperative Education study programs, there are differences caused by variations in the application of environmental knowledge and attitudes into concrete actions. The Cooperative Education study program emphasises collaboration and practical implementation in its curriculum, encouraging students to be more actively involved in environmental conservation activities. Additionally, the characteristics and culture of each study program may influence student behaviour, with some study programs being more supportive or providing more opportunities for participation in environmental activities than others. These differences in participation opportunities can result in significant variations in students' ecological behaviour. [19].

Overall, this ANOVA analysis reveals that the interventions or variables tested have different impacts on Environmental Awareness, Attitude, and Environmental Behavior. While there were no significant differences in awareness and attitudes, significant differences in behaviour indicate that although awareness and attitudes may remain the same, respondents' behaviour is influenced by the variables tested.

Conclusions and Recommendations

The research results show significant differences in Environmental behaviour among prospective teacher students from Accounting Education, Office Administration Education, and Cooperative Education study programs. Cooperative Education students show more active behaviour in environmental conservation activities. However, the three study programs found no significant differences in Environmental Awareness and Environmental Attitudes. This is due to similar curricula and similar exposure to environmental initiatives on campus, resulting in comparable awareness and attitudes. Instead, variations in ecological behaviour are caused by differences in the emphasis on collaboration and practical implementation in the curricula of each

study program, as well as different opportunities for participation in environmental activities.

Based on the results of this research, several recommendations can be proposed to improve environmental behaviour among student teachers from various study programs. First, study programs that have yet to demonstrate significant changes in environmental behaviour should review and enrich their curricula with practical activities that focus on implementing environmental actions that could include environmental projects, collaboration with environmental organisations, and an emphasis on environmentally friendly practices in life. Students' daily lives. Second, campuses should improve and expand existing environmental programs to ensure that all students have equal opportunities to participate in environmental activities, such as holding seminars, workshops and more intensive environmental campaigns and creating inclusive environmental working groups. By providing more opportunities for participation and building a campus culture that is more supportive of environmental practices, it is hoped that there will be an increase in environmental behaviour that is more evenly distributed among all students.

4 References

1. Feinberg M, Willer R. The Moral Roots of Environmental Attitudes. *Psychol Sci.* 2013;24(1):56–62. doi: 10.1177/0956797612449177.
2. Daban Ş, Kahyaoğlu M. The Relationship between Teacher Candidates' Environmentally Responsible Behaviours and Attitudes towards Green Advertising. *Procedia - Soc Behav Sci.* 2013;106:3046–51. doi: 10.1016/j.sbspro.2013.12.351.
3. Karatekin K, İmat F. Evaluation of the Level of the Environment Knowledge of Teacher Candidates of Social Studies (Sample Turkey). *Procedia - Soc Behav Sci.* 2014;116:4436–42. doi: 10.1016/j.sbspro.2014.01.962.
4. Goulgouti A, Plakitsi K, Stylos G. Environmental Literacy: Evaluating Knowledge, Affect, and Behavior of Pre-service Teachers in Greece. *Interdiscip J Environ Sci Educ.* 2019;15(1):1–9. doi: 10.29333/ijese/6287.
5. Sadik F, Sadik S. A Study on Environmental Knowledge and Attitudes of Teacher Candidates. *Procedia - Soc Behav Sci.* 2014;116:2379–85. doi: 10.1016/j.sbspro.2014.01.577.
6. Spiropoulou D, Antonakaki T, Kontaxaki S, Bouras S. Primary teachers' literacy and attitudes on education for sustainable development. *J Sci Educ Technol.* 2007;16(5):443–50. doi: 10.1007/s10956-007-9061-7.
7. Hastürk HG. Examining teacher candidates' environmental awareness in terms of different variables. *Int J Act Learn.* 2021;6(1):52–68. doi: 10.48067/ijal.889798.
8. Milfont TL, Duckitt J. The environmental attitudes inventory: A valid and reliable measure to assess the structure of environmental attitudes. *J Environ Psychol.* 2010;30(1):80–94. doi: 10.1016/j.jenvp.2009.09.001.
9. Kahyaoğlu M. The Research of the Relationship between Environmentally Aware Prospective Teachers' Qualities and Self Efficacy Beliefs towards Environmental Education. *Procedia - Soc Behav Sci.* 2014;116:4493–7. doi: 10.1016/j.sbspro.2014.01.973.
10. Sarıkaya R, Saraç E. An analysis of pre-service teachers' attitudes towards environmental issues in terms of various variables. *Univers J Educ Res.* 2018;6(1):99–109. doi: 10.13189/ujer.2018.060109.

11. Erwinsyah E. Environmental knowledge, attitudes, and practices for behavior change of university students: the case of Indonesia. *J STEAM Educ.* 2022;5(2):181–92. doi: 10.55290/steam.1075516.
12. Berberoglu EO. The Effect of Ecopedagogy-Based Environmental Education on Environmental Attitude of In-. *Int Electron J Environ Educ.* 2015;5(2):86–110.
13. Onder R, Kocaeren AA. Analysis of Science Teacher Candidates' Environmental Knowledge, Environmental Behavior and Self-efficacy through a Project Called 'Environment and Energy with Professional Science Education.' *Procedia - Soc Behav Sci.* 2015;186:105–12. doi: 10.1016/j.sbspro.2015.04.049.
14. Sánchez MJ, Lafuente R. Defining and measuring environmental consciousness. *Rev Int Sociol.* 2010;68(3):731–55. doi: 10.3989/ris.2008.11.03.
15. Mayerl J, Best H. Attitudes and behavioral intentions to protect the environment: How consistent is the structure of environmental concern in cross-national comparison? *Int J Sociol.* 2019;49(1):27–52. doi: 10.1080/00207659.2018.1560980.
16. Sousa S, Correia E, Leite J, Viseu C. Environmental knowledge, attitudes and behavior of higher education students: a case study in Portugal. *Int Res Geogr Environ Educ.* 2021;30(4):348–65. doi: 10.1080/10382046.2020.1838122.
17. Bozdemir H, Kodan H, Akdaş HB. Primary School Teacher Candidates' Offers to Primary School Students about Environmental Consciousness. *Procedia - Soc Behav Sci.* 2014;143:649–56. doi: 10.1016/j.sbspro.2014.07.457.
18. Tan Ç. An Assessment of Pre-service Teachers' Attitudes toward Books on Environment and the Relationship between Attitudes and Environmental Behaviours; Environmental Thinking. *Procedia - Soc Behav Sci.* 2014;116:4357–61. doi: 10.1016/j.sbspro.2014.01.946.
19. Yurt Ö, Cevher-Kalburan N, Kandir A. WCES-2010: Investigation of the environmental attitudes of the early childhood teacher candidates. *Procedia - Soc Behav Sci.* 2010;2(2):4977–84. doi: 10.1016/j.sbspro.2010.03.806.

Open Access This chapter is licensed under the terms of the Creative Commons Attribution-NonCommercial 4.0 International License (<http://creativecommons.org/licenses/by-nc/4.0/>), which permits any noncommercial use, sharing, adaptation, distribution and reproduction in any medium or format, as long as you give appropriate credit to the original author(s) and the source, provide a link to the Creative Commons license and indicate if changes were made.

The images or other third party material in this chapter are included in the chapter's Creative Commons license, unless indicated otherwise in a credit line to the material. If material is not included in the chapter's Creative Commons license and your intended use is not permitted by statutory regulation or exceeds the permitted use, you will need to obtain permission directly from the copyright holder.

