Interdisciplinary Journal of Environmental and Science Education
2026, 22(1), e2603
e-ISSN: 2633-6537
https://www.ijese.com/

MODESTUM

Research Article

OPEN ACCESS

Students' reflection on the contribution of common teaching methods and compulsory school subjects to sustainable development in Montenegro

Snežana Lješnjak [1*], Caković Danka [2], Andrej Šorgo [2,3]

[1] Elementary school "Marko Miljanov", MONTENEGRO
[2] University of Montenegro, MONTENEGRO
[3] University of Maribor, SLOVENIA
***Corresponding Author:** ljesnjak.snezana@gmail.com

Citation: Lješnjak, S., Caković, D., & Šorgo, A. (2026). Students' reflection on the contribution of common teaching methods and compulsory school subjects to sustainable development in Montenegro. *Interdisciplinary Journal of Environmental and Science Education, 22*(1), e2603. https://doi.org/10.29333/ijese/17563

ARTICLE INFO

Received: 02 Sep 2025

Accepted: 13 Nov 2025

ABSTRACT

Youth education is key to building skills and awareness for meaningful change that leads to a sustainable future. The main objective of the survey was to identify the most commonly used teaching methods and to explore Montenegrin students' reflections on the importance of and satisfaction with the teaching of Education for Sustainable Development (ESD) in 9-year compulsory school subjects. The data was collected between September and November 2022 using an online application, with 705 students responding. The results showed that traditional teaching methods, characterised by teacher-centred instruction and passive student engagement, are still the predominant approach in compulsory education, indicating a gap between current practices and the holistic learning objectives of the ESD guidelines. Secondly, the study showed that the Native language had the greatest influence on students' sustainable habits, followed by biology, geography, maths, and nature. This suggests that the number of lessons per week can influence students' ESD knowledge, although subjects with fewer lessons can still have an impact if they are centred on ESD topics. The third conclusion is that students were equally satisfied with the ESD knowledge acquired in all subjects. The results underline the urgent need for student-centred methods that focus on connecting students with nature, for more hours per week in ESD-related subjects, and for a stronger inclusion of ESD content in general-taught subjects.

Keywords: ESD, teaching methods, subjects, importance, satisfaction, students, Montenegro

INTRODUCTION

The claim that the world is on the brink of catastrophe has become proverbial, and it is common knowledge that something must be done to slow down the undesirable side effects of human activities that challenge the limited capacity of the world's ecosystems to neutralize them. However, in the search for strategies for a better and kinder future, opinions on what action to take are far from concurrent. Nonetheless, most agree that education is one of the keys to a sustainable future and that sustainable development is a path to follow. However, it is easier to suggest what should be done than to realize even the best intentions in a complex educational arena where teachers can walk a fine line between promoters and inhibitors of any intentions carried into their classrooms. Therefore, the present study intended to investigate teachers' willingness and capacities to incorporate teaching methods promoting sustainability into their teaching practice by asking students about the prevailing teaching methods and assessing the significance and satisfaction of students with compulsory subjects that include ESD content.

The Concept of Sustainable Development and the Key Documents Promoting It in Education

The concept of sustainable development is complex and subject to different interpretations, which is reflected in the wide range of definitions that have emerged over time. This process began in the 1970s (e.g., Pirages, 1977) and has led to more than one hundred definitions. The term was first formally defined in 1987 in the report "Our Common Future" (Brundtland, 1987, p. 41), where it was described as "development that meets the needs of the present generations without compromising the ability of future generations to meet their own needs" The modern concept of sustainable development (Lay, 2007) emerged in the last decades of the 20th century as a set of ideas aimed at addressing and solving the general problem of the disturbed balance between

continuous material growth, the survival of the environment, human survival and way of life. In this context, sustainability appears as a fundamental development criterion, emphasizing that there is a constant conceptual and practical tension between the aspects of sustainability. Despite the diversity of interpretations, the core is to conserve resources for present and future generations and to ensure a harmonious coexistence of people, planet, and economy (Shi et al., 2019). However, there is still a lack of a deeper understanding of sustainable development in academic circles, government institutions, and the private sector (Baumgartner, 2011; Broman & Robèrt, 2017; Lješnjak et al., 2024).

The importance of education was recognized at the international level more than half a century ago, and over time, important international documents have shaped education for sustainable development. The Stockholm Declaration introduced the term environmental education (United Nations Environment Programme [UNEP], 1972), while the Charter emphasized an interdisciplinary approach (The Belgrade Charter, 1975). Agenda 21 laid down guidelines for the integration of sustainability into education (United Nations [UN], 1992), which were reaffirmed by the Johannesburg Declaration (UN, 2002). The UNECE Strategy emphasised the role of educators (UN, 2005), and Resolution 57/254 launched the Decade of Education for Sustainable Development (UNESCO, 2002). The UNESCO World Conference promoted global sustainability goals (UNESCO, 2009), which were further advanced by Agenda 2030 (UN, 2015) and "Education for Sustainable Development: A Roadmap" (UNESCO, 2020). The Berlin Declaration addressed modern challenges (UNESCO, 2021), while the European Declaration on Global Education to 2050 (UNESCO, 2022) and the Political Declaration (UN, 2023) reaffirmed the role of education in sustainability.

Cross-Curricular Area- Education for Sustainable Development in 9-year compulsory schools in Montenegro

Driven by the fact that it has been declared an ecological country (Parliament of the Republic of Montenegro, 1991), Montenegro is one of the pioneers in Southeast Europe in creating a strategic and institutional framework for sustainable development in line with European Union standards. As early as 2001, Montenegro drew up a comprehensive document entitled "Directions of Development of Montenegro as an Ecological State" (Government of Montenegro, 2022), which represented a national response to the Agenda 21 goals.

In 2014, the National Council for Education introduced "Education for Sustainable Development – cross-curricular area" for the nine-year compulsory schools in Montenegro (Čabrilo et al., 2014). To implement this model, specific topics were defined in order to integrate general education and strengthen the links between subjects and thus promote the key competencies of pupils. Eight cross-curricular themes were identified that align with national priorities and international Education for Sustainable Development (ESD) strategies, as follows. The themes are: Climate Change, Green Economy, Environmental Protection, Sustainable Cities, Biodiversity, Health Education, Human Rights Education, and Entrepreneurial Learning. Each theme includes objectives, student activities, timelines, content, and subject correlations and covers almost all compulsory subjects (Čabrilo et al., 2014; Lješnjak et al., 2024).

Research Problem

The question of which method and what means should be used to achieve educational goals that are reflected in learner outcomes is part of the essence of educational research. Environmental education and, more recently, education for sustainable development are no exceptions to this rule. Researchers and practitioners at various levels of education have already investigated the most appropriate methods for implementing ESD and explored approaches that increase its effectiveness. Numerous studies emphasize the need for modern, alternative and innovative methods, with some even arguing for a new learning culture or pedagogy to achieve ESD goals (e.g., Frisk & Larson, 2011; Holdsworth & Thomas, 2016; Künzli & Kaufmann-Hayoz, 2008; Rieckmann, 2016; Riess et al., 2022; Seatter & Ceulemans, 2017; Segalàs et al., 2010; Sprenger et al., 2016; Tejedor et al., 2019).

Despite its great importance, there are only a few studies on ESD in Montenegro (e.g., Lješnjak et al., 2024), so the authors of the current paper wish to fill this research gap. This study examines the prevailing teaching methods and assesses the significance and satisfaction of students with compulsory subjects that include ESD content. Analysing students' perceptions can provide insights into challenges and opportunities in the implementation of ESD. The results contribute to targeted strategies to increase the effectiveness of ESD in promoting sustainability. Early awareness of sustainable development is important as it shapes students' knowledge, values, and behaviour and can influence their long-term commitment to sustainability.

Research Aims and Research Questions

The basic aim of this study is to fill the empirical gap regarding the introduction of ESD objectives by answering some key questions about the first-hand experiences of Montenegrin 9-year compulsory school students.

The following research questions were derived from the objectives of the study:

- **RQ1** Teaching methods in ESD: Which teaching methods were predominantly used for teaching ESD content in compulsory schools?
- **RQ2** Subject-specific relevance: How do the different subjects in compulsory education contribute to students' knowledge about ESD?
- **RQ3** Satisfaction with ESD knowledge: How satisfied are compulsory school students with the ESD knowledge they have acquired in the different subjects?

By analyzing the answers to these questions, the study aims to gain valuable insights into the effectiveness of ESD implementation in Montenegrin compulsory schools and students' views on these efforts.

Table 1. Central tendency measures of teaching methods used in compulsory school. Results are sorted by decreasing means

Code	Text	N	$\bar{\chi}$	$\tilde{\chi}$	χ	*s*
$Q4a_2$	The teacher delivers a lesson, and students listen.	670	5.04	5	6	1.18
$Q4b_2$	Debate and dialogue between students and teachers.	669	3.63	4	4	1.56
$Q4g_2$	Presentations and workshops.	672	3.40	4	4	1.51
$Q4c_2$	Group work.	671	3.34	4	4	1.44
$Q4l_2$	Marking important dates for the environment and the community.	670	3.28	3	1	1.68
$Q4e_2$	Work on projects important to the school and community.	672	3.03	3	4	1.50
$Q4k_2$	Learning through quizzes and educational games.	671	2.74	3	1	1.52
$Q4h_2$	Trips to become familiar with nature.	670	2.73	2	1	1.53
$Q4m_2$	Organizing activities related to environmental problems in the town.	668	2.63	2	1	1.51
$Q4n_2$	Ecological sections.	667	2.60	2	1	1.58
$Q4j_2$	Work involving teachers from different subjects.	667	2.54	2	1	1.50
$Q4i_2$	Waste recycling.	669	2.51	2	1	1.58
$Q4o_2$	Visits to competent institutions.	667	2.40	2	1	1.45
$Q4f_2$	Organizing afforestation actions.	670	2.29	2	1	1.49
$Q4d_2$	Teaching in the schoolyard.	672	2.17	2	1	1.31

Scale: 1 - Never; 2 - Very rare; 3 - Rarely; 4 - Sometimes; 5 - Often; 6 - Very often
Legend: $\bar{\chi}$ - Mean; $\tilde{\chi}$ - Median; χ - Mode; *s* - standard deviation

RESEARCH METHODOLOGY

Methodologically, this study can be described as a non-experimental pedagogical study in which questionnaires were used as a tool to collect data from the population surveyed in order to capture their experiences of teaching and opinions on the impact of these practices.

Population and Sample

Compulsory education in Montenegro lasts nine years and is divided into three cycles, comprising six years of primary school and three years of lower secondary school (Eurydice, 2023). After completing compulsory education, students move on to upper non-compulsory secondary education. Students in the first year of upper secondary school were selected as the research population for several reasons. The first reason was to evaluate the comprehensive reflection of the general implementation of ESD in compulsory education, the second reason was to ensure honest and reliable answers without fear of possible consequences and the third because in this way it was possible to get an insight into a much larger number of schools, since in secondary schools students from different compulsory schools are mixed. According to data from the Montenegrin Statistical Office (Statistical Office of Montenegro, 2023), a total of 7,097 students were enrolled in the first grade of secondary schools in the 2022/23 school year, spread across 53 secondary schools throughout Montenegro.

Since every student had an equal chance to participate in the survey, a sample size of approximately 400 respondents would typically ensure a 95% confidence level with a 5% margin of error (Moore et al., 2009). In this study, responses were collected from 705 students, of which 634 provided complete data, suggesting that the sample is likely to be representative. However, it is important to be aware of the possibility of self-selection bias, as participants who chose to respond may differ systematically from those who did not, which could affect the generalizability of the results. In order to focus on the curriculum topics and ensure complete anonymity, no socio-demographic data was collected.

Sampling

The study was approved by the Montenegrin Ministry of Education, which confirmed that no official authorisation is required for this research with underage students. Data collection took place between 17 September and 17 November 2022. Emails were sent to all secondary schools in Montenegro explaining the research objectives and asking for support. Participation was voluntary and anonymous, and students could withdraw at any time. To maximize the response rate, two reminder emails were sent asking schools to share the survey link or complete the survey in computer science class. The survey was conducted via the 1KA.si platform, which ensures secure and anonymous data collection. The study was also approved by the University of Montenegro as part of the doctoral thesis (Lješnjak et al., 2024).

Instrument and Procedures

To answer the research questions, a survey questionnaire consisting of three tables was developed. These tables are described in detail below. To ensure student anonymity, no personal information or data regarding their background was requested intentionally.

Frequencies and measures of central tendencies of using different teaching methods which are used during compulsory school (**Table 1**).

Table 1 lists fifteen different teaching methods used in the implementation of sustainable development content. Students were asked to indicate the frequency with which each method was used during compulsory school, with the following six options provided: (1) Never; (2) Very rarely; (3) Rarely; (4) Sometimes; (5) Often; (6) Very often.

Frequencies and measures of central tendencies of the importance of different subjects in gaining knowledge about ESD (**Table 2**).

Table 2 lists eleven compulsory school subjects, with students asked to select a number on a six-point scale corresponding to their opinion on the importance of each subject. The question posed was: "Express the importance of the mentioned subjects from compulsory school when it comes to your knowledge about the importance of coordinated

Table 2. Results of exploratory factorial analysis of using different teaching methods in compulsory school

	Factor loadings	Factor			
	Subject	**1**	**2**	**3**	**Uniqueness**
Q4m	Organizing activities regarding environmental problems in the city	0.900			0.247
Q4n	Ecological sections	0.875			0.306
Q4o	Visits to competent institutions	0.781			0.377
Q4i	Waste recycling	0.715			0.388
Q4l	Marking important dates for the environment and the community	0.627		-0.318	0.303
Q4f	Organizing afforestation actions	0.590			0.414
Q4k	Learning through quizzes and educational games	0.589			0.390
Q4j	Work involving teachers from different subjects	0.580			0.371
Q4h	Excursions with the aim of getting to know nature	0.460	0.326		0.392
Q4c	Group work		0.899		0.293
Q4b	Debate and dialogue between students and teacher		0.699		0.541
Q4e	Work on projects important to the school and community		0.690		0.318
Q4g	Presentations and workshops		0.637		0.373
Q4d	Teaching lessons in the schoolyard		0.411	0.342	0.453
Q4a	The teacher teaches the lesson, the students listen				0.965

Note. 'Principal axis factoring' extraction method was used in combination with an 'oblimin' rotation

Table 3. Measures of central tendencies of the importance of compulsory school subjects in gaining knowledge about ESD. Results are sorted by decreasing mean

Code	Subject	grades	LH	TLC	N	$\bar{\chi}$	$\tilde{\chi}$	χ	*s*
Q2g	Native language	1 – 9	41	1382	696	4.77	6	6	1.73
Q2a	Biology	6-9	6	201	697	4.47	5	5	1.57
Q2d	Geography	7-9	5	167	694	4.27	5	5	1.59
Q2j	Mathematics	1-9	36	1212	697	4.15	5	6	1.85
Q2e	The nature	1-3	4	136	696	4.09	5	5	1.67
Q2i	Physical education	1-9	24	816	696	3.84	4	6	1.84
Q2k	History	6-9	6	201	697	3.8	4	5	1.70
Q2f	The nature and society	4-5	6	204	696	3.72	4	5	1.69
Q2b	Chemistry	7-9	4	130	695	3.63	4	5	1.65
Q2c	Physics	7-9	5	164	696	3.34	4	1	1.66
Q2h	Arts	1-9	12	405	696	2.68	3	1	1.46

Legend: 1 - Completely unimportant; 2 - Quite unimportant; 3 - Little important; 4 - Medium important; 5 - Important; 6 - Very important. $\bar{\chi}$ - Mean; $\tilde{\chi}$ - Median; χ - Mode; s - standard deviation; grades - those in which subjects are studied; LH - number of classes per week; TLC - total number of classes during compulsory schooling

ecological, economic, and social development on Earth." The response scale was as follows: (1) Completely unimportant; (2) Quite unimportant; (3) Little important; (4) Medium important; (5) Important; (6) Very important.

Frequencies and measures of central tendencies of level of satisfaction with acquired knowledge about ESD from different subjects in compulsory school (**Table 3**).

Table 3 presents a list of eleven mandatory compulsory school subjects, with students asked to select a number that reflected their satisfaction with the knowledge gained from each subject. The question posed was: "Express the level of satisfaction with the adopted knowledge from the mentioned subjects, which relate to harmonized ecological, economic, and social development." The response scale was as follows: (1) Completely dissatisfied; (2) Quite dissatisfied; (3) Little satisfied; (4) Medium satisfied; (5) Satisfied; (6) Very satisfied.

Data Analyses

During the initial data exploration, each research variable was assessed for missing values, central tendency, dispersion, and normality using the Shapiro-Wilk test. Since the ordinal nature of the scales and the normality assumption was often violated, nonparametric statistical tests were applied to compare groups. Given that the instruments had not been used in this form before, an exploratory factor analysis (EFA) was conducted using Principal Axis Factoring for factor extraction and direct oblimin rotation to examine their latent structure. Parallel analysis was employed to determine the number of factors to retain. Reliability was evaluated using Cronbach's alpha, with 0.7 set as the threshold for further analysis. All statistical analyses were performed using the open-source software Jamovi 2.3 (Jamovi, 2022).

RESEARCH RESULTS

The results are divided into two parts: The first examines the most common teaching methods in compulsory education, while the second focuses on the importance and satisfaction with compulsory school subjects in adopting ESD content.

The Most Frequently Used Teaching Methods During Compulsory School Education

The results of the measures of central tendency and exploratory factor analysis of the teaching methods used in compulsory schools are presented in **Table 1**, **Table 2**, and **Table A1** in the **Appendix**.

Table 4. Results of exploratory factorial analysis of using different teaching methods in compulsory school

	Factor loadings	Factor			
	Subject	**1**	**2**	**3**	**Uniqueness**
Q2g	Native language	0.860			
Q2j	Mathematics	0.717			
Q2i	Physical education	0.706			
Q2k	History	0.599			
Q2d	Geography	0.434		0.429	
Q2h	Arts	0.335			
Q2f	The nature and society			0.885	
Q2e	The nature			0.883	
Q2b	Chemistry				
Q2c	Physics				
Q2a	Biology			0.380	

Note. 'Principal axis factoring' extraction method was used in combination with a 'oblimin' rotation

Upon reviewing the data in **Table 1**, several key observations emerge. Traditional teaching methods, where the teacher delivers a lesson while students passively listen (Q4a), were frequently employed in compulsory school education. This is supported by a mode value of 6, indicating that this approach was commonly used. In contrast, interactive teaching methods, which encourage student participation, were less frequently implemented, generally falling into the categories of "sometimes" or "rarely." Alternative teaching methods involving direct engagement with the natural environment were used only rarely, as reflected in a mode value of 1 for all items and a median of 2.

Further analysis of the importance of different teaching methods reveals that the instrument demonstrated high internal consistency, with a Cronbach's alpha of 0.934. Exploratory factor analysis (EFA) identified three highly correlated factors, with the third factor showing a lower correlation with the first two. Together, these factors explained 59.1% of the variance (**Table 2**). The correlations between factors were as follows: r12 = 0.78, r13 = 0.18, r23 = 0.13. Factor 1 (eigenvalue = 5.113; 34.1% of explained variance) includes interactive teaching methods primarily implemented as extracurricular activities. Factor 2 (eigenvalue = 3.265; 55.9% of explained variance) encompasses interactive methods used during regular classes. Factor 3 (eigenvalue = 0.491; 59.1% of explained variance) represents teaching methods conducted in the schoolyard.

Activities related to marking significant environmental and community dates are strongly loaded onto both the first and third factors. Notably, the most common teaching method—"The teacher teaches the lesson, the students listen"—did not load onto any of the extracted factors at a level greater than 0.3.

Importance and Satisfaction with Compulsory School Subjects in Gaining Knowledge about ESD

Importance of different compulsory school subjects in gaining knowledge about ESD

The results of frequency analysis, measures of central tendency, and exploratory factor analysis on the importance of different subjects in gaining knowledge about ESD are presented in **Table 3**, **Table 4**, and **Table A2** in the **Appendix**.

Analyzing the findings presented in **Table 3** reveals several key insights. The primary conclusion is that instruction in the native language (median = 6; mode = 6) has the strongest influence on students' acquisition of knowledge related to sustainable development and sustainable habits. Approximately two-thirds of respondents indicated that their native language (**Table A3**) was important or very important in shaping their understanding of ESD. Following closely are Biology, Geography, Mathematics, and Nature, all with modes and medians above the "Important" (5) level, with Mathematics even reaching a mode of 6 ("Very Important"). At the other end of the spectrum, Arts appears to have the least impact on students' knowledge of ESD, receiving the lowest ratings among all subjects. Physics was also rated relatively low, with its mode value reflecting a limited influence on ESD knowledge, according to students' responses. The remaining subjects were generally perceived as important or moderately important in contributing to students' understanding of ESD. Two key conclusions can be drawn from the data in **Table 2**. First, the subjects with the greatest influence on ESD knowledge are those with the highest number of instructional hours per week (Native Language and Mathematics), although their core content is not necessarily closely aligned with ESD topics. Conversely, Biology, Geography, and Nature—despite having fewer instructional hours—still have a notable impact. This can be attributed to their curricula, which inherently align with ESD-related topics, allowing them to significantly influence students even with limited weekly instruction time.

Further analysis of the importance of subjects, based on the data matrix, indicates that the instrument demonstrated high internal consistency, with a Cronbach's alpha of 0.91. Exploratory Factor Analysis (EFA) identified three highly correlated factors, collectively explaining 63.3% of the variance, highlighting the interconnectedness of school curricula. The factor correlations were as follows: r12 = 0.56r, r13 = 0.63r, and r23 = 0.54. The factor loadings of the extracted components are provided in **Table 4**. Factor 1 (eigenvalue = 2.76; 25.1% of explained variance) comprises humanistic and social science subjects. Factor 2 (eigenvalue = 2.29; 20.8% of explained variance) includes two subjects from early grades. Factor 3 (eigenvalue = 1.94; 17.6% of explained variance) consists of three science subjects taught at the lower secondary school level. Notably, Geography and Biology also significantly load onto the second factor, further demonstrating the connection between subjects taught in primary and secondary education.

Table 5. Results of exploratory factorial analysis of satisfaction with acquired knowledge about ESD from different subjects from compulsory school

	Factor loadings	Factor			
	Subject	**1**	**2**	**3**	**Uniqueness**
Q3e	The nature	0.979			0.0812
Q3f	The nature and society	0.837			0.1770
Q3d	Geography	0.468	0.310		0.3426
Q3a	Biology	0.446		0.426	0.4547
Q3i	Physical education		0.863		0.3311
Q3h	Arts		0.585		0.4324
Q3g	Native language		0.567		0.3544
Q3k	History		0.524		0.3773
Q3j	Mathematics		0.518	0.450	0.3275
Q3b	Chemistry			0.839	0.2579
Q3c	Physics			0.740	0.3294

Note. 'Principal axis factoring' extraction method was used in combination with an 'oblimin' rotation

Table 6. Measures of central tendencies of level of satisfaction with acquired knowledge about ESD from different subjects in compulsory school. Results are sorted by decreasing means

Code	Subject	N	$\bar{\chi}$	$\tilde{\chi}$	χ	*s*
Q3i	Physical education	679	4.87	5	7	2.14
Q3g	Native language	680	4.79	5	7	1.95
Q3a	Biology	679	4.67	5	5	1.75
Q3d	Geography	679	4.59	5	5	1.89
Q3k	History	679	4.48	5	5	2
Q3j	Mathematics	679	4.42	5	5	2.03
Q3e	The nature	674	4.36	5	5	1.92
Q3f	The nature and society	676	4.23	5	5	1.97
Q3h	Arts	676	4.12	4	5	2.03
Q3b	Chemistry	679	3.93	4	5	1.69
Q3c	Physics	678	3.71	4	5	1.88

Note. Used scale: 1 - Completely dissatisfied; 2 - Fairly dissatisfied; 3 - Slightly satisfied; 4 - Moderately satisfied; 5 - Satisfied; 6 - Very satisfied; 7 - Completely satisfied

Satisfaction with acquired knowledge about ESD from different subjects in compulsory school

The results of frequency analysis, measures of central tendency, and exploratory factor analysis on the level of satisfaction with acquired ESD knowledge from different subjects in compulsory school are presented in **Table 3**, **Table 5**, and **Table A3** in the **Appendix**.

Upon reviewing the data in **Table 6**, several key observations emerge. Measures of central tendency indicate that students are generally satisfied with all subjects included in the survey. No subject stands out as a source of complete dissatisfaction. However, an analysis of frequency values (**Table E**) reveals that Physical Education and Native Language received the highest satisfaction ratings, both with a mode value of 7. In contrast, students reported the lowest satisfaction with the ESD-related knowledge acquired in Physics, with one-fifth of respondents stating they were completely dissatisfied.

Further analysis of satisfaction with ESD-related knowledge across different subjects was conducted. The data matrix inspection shows a high internal consistency of the instrument, with a Cronbach's alpha of 0.934. Exploratory Factor Analysis (EFA) identified three highly correlated factors, collectively explaining 68.5% of the variance (**Table 5**). The factor correlations were as follows: $r_{12} = 0.61$, $r_{13} = 0.63$, and $r_{23} = 0.63$. Factor 1 (eigenvalue = 2.65; 24.1% of explained variance) includes two social science subjects from early grades, along with Geography and Biology, which also significantly load onto Factor 3. Factor 2 (eigenvalue = 2.62; 23.8% of explained variance) consists of humanistic subjects and Mathematics. Factor 3 (eigenvalue = 2.26; 20.6% of explained variance) comprises two science subjects taught in the final grades of compulsory school, as well as Mathematics (which also significantly loads onto Factor 2) and Biology (which also loads onto Factor 1).

DISCUSSION

During the preparation of the discussion, a challenge arose due to the inability to directly compare the results with similar international studies. However, a detailed analysis of the survey data provides a nuanced perspective.

Upon analyzing the data from **RQ1 (**What teaching methods were predominantly employed for imparting ESD content in compulsory schools?), several noteworthy observations come to light. Traditional teaching methods, characterized by the teacher delivering a lesson while students passively listen, were found to be prevalent during compulsory school education. This is substantiated by the mode value of 6, indicating that this approach was commonly employed. Conversely, interactive teaching methods, which encourage active student participation, were less frequently utilized and generally fell into the categories of "sometimes" or "rarely." Notably, alternative teaching methods that involve direct

actions and interactions with the natural environment were reported to be rarely used, as evidenced by the mode value of 1 for all corresponding items with a median of 2. This suggests a limited incorporation of hands-on, experiential approaches in the educational process, pointing towards potential areas for innovation and enhancement in pedagogical strategies. This finding stands in stark contrast to the guidelines outlined in the ESD curriculum, as well as broader educational directives unrelated to the implementation of cross-curricular areas. The prevalence of traditional teaching methods, coupled with the infrequent utilization of interactive and alternative approaches, indicates a misalignment between current teaching practices and the recommended strategies for fostering a holistic and experiential learning environment, as advocated by ESD guidelines. Addressing this disparity may necessitate a reevaluation and realignment of teaching methods to better align with the overarching educational objectives and principles outlined in relevant curricular guidelines. It is reasonable to acknowledge the necessity of employing methods that sometimes require student passivity, yet it becomes concerning when such methods overwhelmingly dominate compulsory school education. Considering the widely accepted conclusion among scientists that only active methods can lead to the desired ESD outcomes (Howell, 2021; UNESCO, 2020), the discrepancy between this claim and the results of this study is evident. Teaching methods should be used that not only inform students about the topic but also change their attitudes to become proactive citizens (Cottafava et al., 2019; O'Flaherty & Liddy, 2018; Sinakou et al., 2019). Addressing this disparity may require a reassessment and alignment of teaching methods to better align with the comprehensive educational goals and principles outlined in the ESD program guidelines. It is reasonable to acknowledge the necessity of using methods that sometimes require student passivity, but it becomes concerning when such methods largely dominate compulsory education. The prevalence of traditional teaching methods suggests that students are often passive observers rather than active participants in the learning process. This can be partly attributed to a potential lack of technical teaching aids that could support more innovative and engaging methods. However, it is crucial to recognize that the absence of technical aids is not the only determinant in shaping ecological awareness. Reliance on passive learning methods diminishes opportunities for meaningful dialogue, problem-solving debates, and direct contact with nature, which are essential elements for fostering a deep understanding of the importance of sustainable thinking and living. To develop a true awareness of environmental sustainability, a shift towards more interactive, participatory teaching approaches focused on nature is imperative.

An analysis of the data from **RQ2 (**How do different subjects in compulsory school contribute to students' knowledge of ESD?) reveals several intriguing findings. The basic conclusion is that instruction in the Native Language (median = 6; mode = 6) has the greatest impact on students' acquisition of knowledge regarding sustainable development and sustainable habits. Approximately two-thirds of respondents stated that the Native Language is important or very important in shaping their understanding of ESD. Following the Native Language are Biology, Geography, Mathematics, and Nature, all with modes and medians at the Important level (5), and Mathematics even with a mode of 6 (very important). On the opposite end of the spectrum, Art and Physics have the least impact on students' knowledge of ESD. The remaining subjects were considered important or moderately important.

The results suggest that the number of weekly classes may play a role in shaping students' knowledge. Two conclusions can be drawn from the data in **Table 2**. First, subjects with the highest weekly class frequency (Native Language and Mathematics) have the greatest impact on ESD knowledge, regardless of whether these subjects necessarily include content closely related to ESD. Conversely, although Biology, Geography, and Nature are taught with fewer weekly classes, they still have a noticeable impact on students regarding these areas. This can be explained by the fact that these subjects' mandatory curricula are closely aligned with ESD themes, thus achieving a significant impact on students despite the lower number of weekly classes.

Subjects with a higher frequency of classes, such as the Native Language and Mathematics (on average four times a week over nine years), had more opportunities to influence students and incorporate ESD content into their teaching. On the other hand, although Biology, Geography, and Nature are represented with fewer weekly classes, they have a noticeable impact on students in this area. Other subjects with fewer weekly classes and mandatory curricula not closely aligned with ESD can be challenging for implementing ESD in regular classes.

To achieve a greater impact on students across all subjects, it may be necessary to increase the promotion of extracurricular activities or clubs that delve into ESD topics in more detail than regular classes could. It is essential to alleviate the burden of mandatory educational content from all subjects and establish comprehensive guidelines for teachers. These guidelines should provide detailed instructions explaining strategies for seamlessly integrating educational content that aligns with the ESD program. By providing clear and practical implementation ideas, it facilitates more effective inclusion of sustainability principles throughout the curriculum, empowering teachers to impart key ESD knowledge and skills.

Upon analyzing the data from **RQ3 (**What is the level of satisfaction among compulsory school students regarding the ESD knowledge they have gained from different subjects?), several noteworthy observations come to light. The measures of central tendency consistently point towards overall satisfaction among students across all subjects covered in the survey. Notably, no individual subject emerges as a basic source of complete dissatisfaction. Upon further scrutiny of the frequency values, it is apparent that Physical Education and Native Language garnered the most positive responses, as reflected by the mode value of 7. Conversely, a distinct trend is observed in the realm of ESD knowledge within the Physics subject. Approximately a fifth of respondents expressed complete dissatisfaction with their understanding of ESD in Physics, highlighting an area of potential concern. This finding emphasizes the need for targeted improvements in delivering ESD-related content within the Physics curriculum to enhance

student satisfaction and comprehension. It is intriguing to note that student opinions on this question align with the data from the previous question (**RQ2**), albeit with a notable difference. In this instance, Physical Education received the highest rating from students, whereas in the earlier question, it held the fourth position. It is worth contemplating that the age of the students and the general affinity for Physical Education among compulsory school students may have played a role in influencing their responses. This variation underscores the importance of considering contextual factors, such as age and subject preferences, when interpreting student feedback and survey results.

LIMITATIONS OF THE STUDY

The basic strength and limitation of the study is its novelty, positioning it as pioneering work in the field. The instruments used have not yet been tested in an international context. The answers may only reflect the local dimension, and it is unclear whether they can be extrapolated to other population groups. The second limitation is a general one that applies to all studies of this type: the self-selection of respondents.

CONCLUSIONS AND IMPLICATIONS

The analysis of the first part yields a significant conclusion. Traditional teaching methods, characterized by teacher-centric lessons and passive student engagement, persist as the predominant approach in compulsory education. This finding underscores the inadequate implementation of the ESD curriculum in compulsory school. The prevalence of traditional teaching methods, coupled with the infrequent utilization of interactive and alternative approaches, indicates a misalignment between current teaching practices and the recommended strategies for fostering a holistic and experiential learning environment, as advocated by ESD guidelines. Addressing this disparity may necessitate a reevaluation and realignment of teaching methods to better align with the overarching educational objectives and principles outlined in relevant curricular guidelines. Secondly, the study showed that the Native language had the greatest influence on the sustainable habits of the students, followed by Biology, Geography, Mathematics, and Nature. That suggests the number of classes per week may influence students' ESD knowledge, though subjects with fewer hours can still have an impact if aligned with ESD themes. The third conclusion is that students were equally satisfied with the ESD knowledge gained across all subjects. The findings highlight the urgent need for teacher training, support, and promotion of interactive, student-centered methods focused on connecting students with nature. They also call for more weekly classes in ESD-related subjects, greater inclusion of ESD content in frequently taught subjects, and improved access to teaching materials and literature.

Author contributions: SL: conceptualization, data curation, investigation, writing – original draft, writing – review & editing; **CD:** writing – review & editing; **AŠ:** methodology, formal analysis, writing – review & editing, supervision. All authors agreed with the results and conclusions.

Acknowledgements: Authors declare that this study was supported by the funds of the MARDS project, which was co-founded by the Erasmus+ Program of the European Union.

Funding: No funding source is reported for this study.

Ethical statement: The authors stated that, at the time of data collection (17 September–17 November 2022), a formal written approval document was not required for research conducted in the field of education. For that reason, no written approval exists and cannot be provided. In line with the procedures valid during that period, the Ministry of Education was informed in advance, and an approval to conduct the student survey was granted by the Ministry Secretary. School administrations were given full insight into the survey content prior to participation. Upon their confirmation, they shared the survey link with teachers, who subsequently shared it with students. Participation was anonymous, voluntary, and no identifying personal information was collected.

AI statement: The authors stated that generative AI tools were used only for language and style improvements.

Declaration of interest: The authors reported no conflict of interest.

Data sharing statement: Data supporting the findings and conclusions are available upon request from the corresponding author.

REFERENCES

Baumgartner, R. J. (2011). Critical perspectives of sustainable development research and practice. *Journal of Cleaner Production, 19*(8), 783-786. https://doi.org/10.1016/j.jclepro.2011.01.005

Broman, G. I., & Robèrt, K.-H. (2017). A framework for strategic sustainable development. *Journal of Cleaner Production, 140*, 17-31. https://doi.org/10.1016/j.jclepro.2015.10.121

Brundtland, G. H. (1987). *Report of the World Commission on Environment and Development: Our Common Future*. United Nations. https://sustainabledevelopment.un.org/content/documents/5987our-common-future.pdf

Cottafava, D., Cavaglià, G., & Corazza, L. (2019). Education of sustainable development goals through students' active engagement: A transformative learning experience. *Sustainability Accounting, Management and Policy Journal, 10*(3), 521-544. https://doi.org/10.1108/SAMPJ-05-2018-0152

Čabrilo, N., Grbović, S., Lalović, Z., Novović, R., Đorđević, J., Kaluđerović, S., Gligorović, B. & Radusinović, T. (2014). *Obrazovanje za održivi razvoj -međupredmetna oblast u predmetnim programima - osnovna škola* [Education for sustainable development - a cross-curricular area in the subject programs - elementary school]. Institute for Education. https://wapi.gov.me/download-preview/cd5a360f-c25b-42dc-a6df-8a5d04828512?version=1.0

Eurydice. (2023). *Crna Gora: Organizacija i struktura obrazovnog sistema.* [Montenegro: Organization and structure of educational system]. https://eurydice.eacea.ec.europa.eu/me/national-education-systems/montenegro/crna-goraorganizacija-i-struktura-obrazovnog-sistema

Frisk, E., & Larson, K. L. (2011). Educating for sustainability: Competencies & practices for transformative action. *Journal of Sustainability Education*, *2*. https://www.researchgate.net/publication/228620687_Educating_for_Sustainability_Competencies_Practices_for_Transformative_Action

Government of Montenegro. (2022). Održivi razvoj u Crnoj Gori [Sustainable development in Montenegro]. https://www.gov.me/clanak/odrzivi-razvoj-u-crnoj-gori

Holdsworth, S., & Thomas, I. (2016). A sustainability education academic development framework (SEAD). *Environmental Education Research, 22*(8), 1073-1097. https://doi.org/10.1080/13504622.2015.1029876

Howell, R. A. (2021). Engaging students in education for sustainable development: The benefits of active learning, reflective practices and flipped classroom pedagogies. *Journal of Cleaner Production, 325*, Article 129318. https://doi.org/10.1016/j.jclepro.2021.129318

Künzli, D. C., & Kaufmann-Hayoz, R. (2008). Bildung für eine nachhaltige entwicklung – konzeptionelle grundlagen, didaktische ausgestaltung und umsetzung [Education for sustainable development – conceptual foundations, didactical design, and implementation]. *Umweltpsychologie, 12*(1), 9-28.

Lay, V. (2007). *Razvoj sposoban za budućnost. Prinosi promišljanju održivog razvoja Hrvatske.* [Future-ready development: Contributions to reflecting on sustainable development in Croatia]. V. Lay (Ed.). Institut društvenih znanosti Ivo Pilar.

Lješnjak, S., Caković, D., & Šorgo, A. (2024). Familiarity and opinions of Montenegrin basic school leavers toward education for sustainable development. *Journal of Baltic Science Education, 23*(4), 679-693. https://doi.org/10.33225/jbse/24.23.679

Moore, D. S., McCabe, G. P., & Craig, B. A. (2009). *Introduction to the practice of statistics* (Vol. 4). WH Freeman. https://bcs.whfreeman.com/webpub/statistics/ips6e/manuals/student_excel_manual/ips6e.ex.st.pdf

O'Flaherty, J., & Liddy, M. (2018). The impact of development education and education for sustainable development interventions: A synthesis of the research. *Environmental Education Research, 24*(7), 1031-1049. https://doi.org/10.1080/13504622.2017.1392484

Parliament of the Republic of Montenegro. (1991). *Declaration on ecological state*. https://epa.org.me/deklaracija-o-ekoloskoj-drzavi/

Pirages, D. (1977). *The sustainable society: Implications for limited growth*. Praeger. https://books.google.me/books/about/The_Sustainable_Society.html?id=Yiq5AAAAIAAJ&redir_esc=y

Rieckmann, M. (2016). Bildung für nachhaltige entwicklung – konzeptionelle grundlagen und stand der implementierung [Education for sustainable development – Conceptual foundations and status of implementation]. In M. K. W. Schweer (Ed.), *Bildung für nachhaltige Entwicklung in pädagogischen Handlungsfeldern: Grundlagen, Verankerung und Methodik in ausgewählten Lehr-Lern-Kontexten* (pp. 11-32). PL Academic Research.

Riess, W., Martin, M., Mischo, C., Kotthoff, H.-G., & Waltner, E.-M. (2022). How can education for sustainable development (ESD) be effectively implemented in teaching and learning? An analysis of educational science recommendations of methods and procedures to promote ESD goals. *Sustainability*, *14*(7), Article 3708. https://doi.org/10.3390/su14073708

Seatter, C. S., & Ceulemans, K. (2017). Teaching sustainability in higher education: Pedagogical styles that make a difference. *Canadian Journal of Higher Education, 47*(2), https://doi.org/10.47678/cjhe.v47i2.186284

Segalàs, J., Ferrer-Balas, D., & Mulder, K. (2010). What do engineering students learn in sustainability courses? The effect of the pedagogical approach. *Journal of Cleaner Production, 18*(3), 275-284. https://doi.org/10.1016/j.jclepro.2009.09.012

Shi, L., Han, L., Yang, F., & Gao, L. (2019) The evolution of sustainable development theory: Types, goals, and research prospects. *Sustainability, 11*(24), Article 7158. https://doi.org/10.3390/su11247158

Sinakou, E., Donche, V., Boeve-de Pauw, J., & Van Petegem, P. (2019). Designing powerful learning environments in education for sustainable development: A conceptual framework. *Sustainability, 11*(21), Article 5994. https://doi.org/10.3390/su11215994

Sprenger, S., Menthe, J., & Höttecke, D. (2016). Methodenkonzeption und - einsatz [Method design and use]. In *Bildung für Nachhaltige Entwicklung in Pädagogischen Handlungsfeldern: Grundlagen, Verankerung und Methodik in Ausgewählten Lehr-Lern-Kontexten* (pp. 95-108). PL Academic Reseearch.

Statistical Office of Montenegro [MONSTAT]. (2023). Srednje obrazovanje-podaci [Secondary education-data]. https://www.monstat.org/cg/page.php?id=195&pageid=76

Tejedor, G., Segalàs, J., Barrón, Á., Fernández-Morilla, M., Fuertes, M. T., Ruiz-Morales, J., Gutiérrez, I., García-González, E., Aramburuzabala, P., & Hernández, À. (2019). Didactic strategies to promote competencies in sustainability. *Sustainability*, *11*(7), Article 2086. https://doi.org/10.3390/su11072086

The Belgrade charter: A framework for environmental education. (1975). https://www.eusteps.eu/wp-content/uploads/2020/12/Belgrade-Charter.pdf

The jamovi project. (2022). jamovi (Version 2.3) [Computer Software]. https://www.jamovi.org

UNESCO (2020). *Education for sustainable development: A roadmap*. https://unesdoc.unesco.org/ark:/48223/pf0000374802

UNESCO. (2009). Main outcomes of the workshop: Education for water sustainability: Where decades meet. In *Workshop 1 of the UNESCO World Conference on Education for Sustainable Development*. https://unesdoc.unesco.org/search/N-EXPLORE-e42b8382-c642-486e-b410-45a68478eded

UNESCO. (2002). *Resolution 57/254: United Nations decade of education for sustainable development*. https://unesdoc.unesco.org/ark:/48223/pf0000127162

UNESCO. (2021). *Berlin declaration on education for sustainable development preamble*. https://en.unesco.org/sites/default/files/esdfor2030-berlin-declaration-en.pdf

UNESCO. (2022). *The European declaration on global education to 2050. The Dublin declaration. A strategy framework for improving and increasing global education in Europe to 2050*. https://www.unesco.at/fileadmin/user_upload/final_GE2050-declaration.pdf

United Nations [UN]. (1992). *United Nations conference on environment and development.* https://www.un.org/en/conferences/environment/rio1992

United Nations [UN]. (2002). *World Summit on Sustainable Development.* https://www.un.org/en/conferences/environment/johannesburg2002

United Nations [UN]. (2005). *UNECE strategy for education for sustainable development*. https://unece.org/DAM/env/documents/2005/cep/ac.13/cep.ac.13.2005.3.rev.1.e.pdf

United Nations [UN]. (2015). *Transforming our world:Tthe 2030 agenda for sustainable development*. https://sustainabledevelopment.un.org/content/documents/21252030%20Agenda%20for%20Sustainable%20Development%20web.pdf

United Nations [UN]. (2023). *Political declaration*. United Nations https://www.un.org/en/conferences/SDGSummit2023/political-declaration

United Nations Environment Programme [UNEP]. (1972). *United Nations conference on the environment. Stockholm declaration*. UNEP. https://wedocs.unep.org/bitstream/handle/20.500.11822/29567/ELGP1StockD.pdf

APPENDIX

Table A1. Frequencies of using different teaching methods in compulsory school. Results are sorted by increasing respondents to item 1 (1 - Never). The highest values are bolded

Code	Subject	1	2	3	4	5	6
Q4a	The teacher delivers the lesson while the students listen	16 2.4	21 3.1	30 4.5	78 11.6	235 35.1	**290** **43.3**
Q4c	Group work	93 13.9	109 16.2	131 19.5	**202** **30.1**	88 13.1	48 7.2
Q4g	Presentations and workshops	97 14.4	121 18	94 14	**183** **27.2**	128 19	49 7.3
Q4b	Debate and dialogue between students and teacher	99 14.8	75 11.2	92 13.8	**182** **27.2**	151 22.6	70 10.5
Q4l	Marking important dates for the environment and the community	**148** **22.1**	102 15.2	94 14	135 20.1	121 18.1	70 10.4
Q4e	Work on projects important to the school and community	15 22.5	108 16.1	134 19.9	**158** **23.5**	89 13.2	32 4.8
Q4h	Excursions with the aim of getting to know nature	**195** **29.1**	146 21.8	99 14.8	139 20.7	55 8.2	36 5.4
Q4k	Learning through quizzes and educational games	197 29.4	135 10.1	112 16.7	**136** **20.3**	55 8.2	36 5.4
Q4m	Organizing activities regarding environmental problems in the city	**226** **33.8**	117 17.5	108 16.2	136 20.4	56 8.4	25 3.7
Q4j	Work involving teachers from different subjects	**236** **35.4**	134 20.1	107 16	110 16.5	54 8.1	26 3.9
Q4n	Ecological sections	**245** **36.7**	117 17.5	94 14.1	120 18	54 8.1	37 5.5
Q4o	Visits to competent institutions	**254** **38.1**	140 21	115 17.2	96 14.4	35 5.2	27 4
Q4i	Waste recycling	**262** **39.2**	124 18.5	93 13.9	90 13.5	69 10.3	31 4.6
Q4d	Teaching lessons in the schoolyard	**294** **43.8**	143 21.3	118 17.6	80 11.9	21 3.1	16 2.4
Q4f	Organizing afforestation actions	**297** **44.3**	130 19.4	91 13.6	80 11.9	46 6.9	26 3.9

Note. Scale: 1 - Never; 2 - Very rarely; 3 - Rarely; 4 - Sometimes; 5 - Often; 6 - Very often

Table A2. Frequencies of the importance of different subjects in gaining knowledge about ESD. Results are sorted by decreasing number of respondents to item 6 (6-Very important). The highest values are bolded

Code	Subject	Grades	TLC	1	2	3	4	5	6
Q2g	Native language	1 - 9	1382	87	15	43	55	123	**373**
				12.5	2,2	6.2	7.9	17.7	**53.6**
Q2j	Mathematics	1-9	1212	125	40	51	97	154	**230**
				17.9	5,7	7.3	13.9	22.1	**33**
Q2a	Biology	6-9	201	79	22	37	110	253	**196**
				11.3	3.2	5.3	15.8	26.3	**28.1**
Q2i	Physical education	1-9	816	150	34	75	124	146	**167**
				21.6	4.9	10.8	17.8	21	**24**
Q2e	The nature	1-3	136	104	32	69	136	**205**	150
				14.9	4.6	9.9	19.5	**29.5**	21.6
Q2d	Geography	7-9	167	89	26	50	115	**273**	141
				12.8	3.7	7.2	16.6	**39.3**	20.3
Q2k	History	6-9	201	129	37	91	145	**180**	112
				18.5	5.3	13.1	20.8	**25.8**	16.5
Q2f	The nature and society	4-5	204	129	46	102	138	**175**	106
				18.5	6.6	14.7	19.8	**25.1**	15.2
Q2b	Chemistry	7-9	130	133	47	99	165	**166**	85
				19.1	6,8	14.2	23.7	**23.9**	12.2
Q2c	Physics	7-9	164	**165**	59	112	159	137	64
				23.7	8.5	16.1	22.8	19.7	9.2
Q2h	Arts	1-9	405	**211**	119	155	137	43	31
				30.3	17.1	22.3	19.7	6.2	4.5

Note. 1 - Completely unimportant; 2 - Quite unimportant; 3 - Little important; 4 - Medium important; 5 - Important; 6 - Very important; LH - number of classes per week; TLC - total number of classes during compulsory schooling

Table A3. Frequencies of satisfaction with acquired knowledge about ESD from different subjects from compulsory school. Results are sorted by decreasing number of respondents to item 6 (6 - Very important). The highest values are bolded

Code	Subject	1	2	3	4	5	6	7
Q3i	Physical education	105	23	44	57	131	89	**230**
		15.5	3,4	6.5	8.4	19.3	13.1	**33.9**
Q3g	Native Language	89	16	45	96	151	121	**162**
		13.1	2,4	6.6	14.1	22.2	17.8	**23.8**
Q3k	History	108	32	40	102	**170**	94	133
		15.9	4.7	5.9	15	**25**	13.8	19.6
Q3j	Mathematics	119	19	62	96	**155**	99	129
		17.5	2.8	9.1	14.1	**22.8**	14.6	19
Q3a	Biology	74	15	51	96	**238**	94	111
		10.9	2,2	7.5	14.1	**35.1**	13.8	16.3
Q3h	Arts	131	36	69	106	**160**	67	107
		19.4	5.3	10.2	15.7	**23.7**	9.9	15.8
Q3d	Geography	95	23	47	71	**209**	131	103
		14	3,4	6.9	10.5	**30.8**	19.3	15.2
Q3e	The Nature	107	24	61	104	**185**	93	100
		15.9	3.6	9.1	15.4	**27.4**	13.8	14.8
Q3f	The Nature and Society	120	30	58	116	**164**	94	94
		17.8	4,4	8.6	17.2	**24.3**	13.9	13.9
Q3b	Chemistry	128	50	74	121	**176**	56	74
		18.9	7.4	10.9	17.8	**25.9**	8.2	10.9
Q3c	Physics	144	51	99	110	**163**	63	48
		21.2	7.5	14.6	16.2	**24**	9.3	7.1

Note. Scale: 1 - Completely dissatisfied; 2 - Fairly dissatisfied; 3 - Slightly satisfied; 4 - Moderately satisfied; 5 - Satisfied; 6 - Very satisfied; 7 - Completely satisfied