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Developing sustainability competences through facilitating youth motivation to engage in voluntary activities

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ABSTRACT: This article aims to investigate young people's motivations for participating in voluntary activities and identify the sustainability competencies they develop. The research question is: What is the relationship between young people's motivations for volunteering and the development of sustainability-related competencies?

The following methods were used to achieve the aim: analytical and comparative literature analysis, quantitative questionnaire survey. Based on the literature analysis, hypotheses and a conceptual model of volunteering motivation facilitation for development of sustainability competences were formulated.

A quantitative study was conducted in the form of a questionnaire survey. More than 803 young people participated in the survey. A large proportion of the respondents were young people from Lithuania,

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Latvia, Portugal, and other European countries (Poland, Greece, Bulgaria, Italy, Estonia, Ukraine, France, Spain, Romania, Netherlands, Finland, Czech Republic and Malta).
The research showed that young people are motivated to participate in volunteering by the desire to help others and understand different cultures, communities and people's needs, as well as to contribute to solving social and environmental problems. Intrinsic motivations encourage people to take up volunteering and contribute to various volunteering activities. The results also showed that sustainability competences are developed through value-based social and emotional education, experiential learning, systematic thinking and civic engagement. Intrinsic motivation strengthens the personal connection with meaningful activities and shapes attitudes towards values, while extrinsic motivation creates practical opportunities and a social context for the realization of these values. Together, these factors form the basis for the comprehensive development of sustainability competences, which is very important in developing responsible, conscious and sustainable thinking.

KEYWORDS: volunteering, youth, sustainability competencies, intrinsic motives, extrinsic motives.

RESUMO: Este artigo tem como objetivo investigar as motivações dos jovens para participar em atividades de voluntariado e identificar as competências de sustentabilidade que desenvolvem. A questão de investigação é: Qual é a relação entre as motivações dos jovens para o voluntariado e o desenvolvimento de competências relacionadas com a sustentabilidade?
Para atingir o objetivo, foram utilizados os seguintes métodos: análise analítica e comparativa da literatura. Com base na análise da literatura, foram formuladas hipóteses e um modelo conceptual de facilitação da motivação para o voluntariado para o desenvolvimento de competências de sustentabilidade.
Foi realizado um estudo quantitativo sob a forma de um inquérito por questionário. Mais de 803 jovens participaram no inquérito. Uma grande parte dos inquiridos eram jovens da Lituânia, Letónia, Portugal e outros países europeus (Polónia, Grécia, Bulgária, Itália, Estónia, Ucrânia, França, Espanha, Roménia, Países Baixos, Finlândia, República Checa e Malta).
O estudo demostrou que os jovens são motivados a participar no voluntariado pelo desejo de ajudar os outros e compreender diferentes culturas, comunidades e necessidades das pessoas, bem como contribuir para a resolução de problemas sociais e ambientais. O estudo demostrou ainda que as competências de sustentabilidade são desenvolvidas através da educação social e emocional baseada em valores, aprendizagem experiencial, pensamento sistemático e envolvimento cívico. A motivação intrínseca

fortalece a conexão pessoal com atividades significativas e molda atitudes em relação aos valores, enquanto a motivação extrínseca oferece oportunidades práticas e um contexto social para a realização desses valores. Juntos, esses fatores formam a base para o desenvolvimento abrangente de competências de sustentabilidade, o que é muito importante no desenvolvimento de um pensamento responsável, consciente e sustentável.

PALAVRAS-CHAVE: voluntariado, juventude, competências de sustentabilidade, motivos intrínsecos, motivos extrínsecos.

Introduction

Ensuring a fair and decent livelihood for all people, regenerating nature and enabling biodiversity to thrive have never been more important. It is one of the most pressing duties that humanity faces (Bianchi, et al., 2022). Bianchi et al. (2022) indicate the cognitive dissonance that comes from knowing about an issue but lacking the agency to act; scientists highlight the necessity to overcome this gap by becoming competent in sustainability issues.

EU Skills Agenda aligns with the broader objectives of the EEA and the European Green Deal, fostering a generation of environmentally conscious and digitally adept citizens capable of driving sustainable development and innovation (Javorka et al., 2024). As Javorka et al. (2024) indicate “learning for sustainability links to and builds on other similar agendas, including environmental education, sustainability education, climate change education, peace education, global education and education for sustainable development". Developing sustainability competences through education and training has become a policy objective for the EU and its Member States. Sustainability was one of the European Commission’s key priorities in education and training for 2019 – 2024 (Bianchi et al. 2022). EU Skills Agenda is prioritizing digital and green skills and aligning them with the broader objectives of the EEA and the European Green Deal (Javorka et al. 2024). The European Commission GreenComp model of sustainability competencies, as well as sustainability education studies, includes the following: a value base (e.g. responsibility, empathy, and justice); systemic thinking (i.e. the ability to see connections between social, economic, and environmental factors); future thinking (i.e. anticipating long-term consequences); acting for change (i.e. active engagement in sustainable solutions); collaboration and participation (i.e. sustainable relationships and community engagement) (Bianchi et al., 2022). These competencies are rooted in value-based thinking, empathy, responsibility, and the capacity to foresee the

ramifications of one's actions and promote positive change. These competencies can be developed through volunteering, civic engagement, or community activities. Volunteering is an effective way to develop listed competencies as it provides opportunities for young people to address real-world challenges, reflect on their experiences, and engage in community activities.

The aim of the article is to investigate young people's motivations for participating in voluntary activities and identify the sustainability competencies they develop.

The research question is: What is the relationship between young people's motivations for volunteering and the development of sustainability-related competencies?

Methods: analytical, comparative literature review, quantitative study in the form of a questionnaire survey.

1. Literature review

1.1 Sustainability competences

In the context of the analysis of the development of sustainability competences through encouraging young people to engage in volunteering, it is appropriate to first discuss the framework of the sustainability competences model, the prerequisites and the challenges of development, and the overcoming of these challenges through volunteering. Sustainability has already been analysed in a variety of dimensions in the scientific works and political agendas of the last two decades of the twentieth century. Wiek et al. (2011) first synthesized a framework of sustainability-problem solving competence, integrating five key competencies: systems-thinking, anticipatory, normative, strategic, and interpersonal. After a decade, Redman and Wiek (2021) described a framework of eight key sustainability competencies, incorporating substantive changes into the model. The competences constituting the model were systems thinking, futures thinking, values thinking, strategy thinking, implementation, interpersonal skills, intrapersonal skills, and integration. Bianchi et al. (2022), while formulating the European sustainability competence framework – Green Deal, constitute framework of four main areas and twelve competences: the area of embodying sustainability values is composed of valuing sustainability, supporting fairness and promoting nature; the area of embracing complexity in sustainability is created of systems thinking, critical thinking and problem framing; the area of envisioning sustainable futures is composed of futures literacy, adaptability and exploratory thinking; the area of acting for sustainability is constituted of political agency, collective action and individual initiative. As the authors (Bianchi et al., 2022) explain, sustainability competence "focuses on developing sustainability knowledge, skills and attitudes for

learners so they can think, plan and act with sustainability in mind, to live in tune with the planet". Also, Bianchi et al. (2022) express their anticipation that a sustainability competence will empower learners to embody sustainability values, and embrace complex systems, to take or request action that restores and maintains eco system health and enhances justice, generating visions for sustainable futures. Thus, as sustainability issues become more complex and complicated, the definition and modelling of sustainability competences involve more sophisticated knowledge, skills and their practical application.

The scientific literature and reports also expose the gap between sustainability knowledge and sustainable behavior, the defeat of sustainability in the face of economic costs. Therefore, preconditions and challenges for the successful development of sustainability competences are a very relevant topic in policy initiatives and academic research (Bianchi et al., 2022; Vesterinen, Ratinen, 2024). Bianchi et al. (2022) indicate that "learning for environmental sustainability is essential to achieve a sustainability mindset and trigger the willingness to act for a sustainable future". Experts (Bianchi et al., 2022; Javorka et al., 2024) point out that sustainability education aims to provide learners with sustainability competences to reflect and embrace sustainability in their daily lives.

A large number of authors examine various methods for developing sustainability competence. As Bianchi et al. (2022) indicate that "since emerging in the 1960s, sustainability education and related concepts has often been associated with transformative learning, as it aims to profoundly change our perspectives, beliefs and behaviour through reflecting on what we know and do not know. It encourages us to question how we interpret our surroundings and the role we play in them". Authors (Bianch et al., 2022; Jevorka et al., 2024) highlight the importance of transformative, embracing change, learning for development of sustainability competence. For example, Vesterinen and Ratinen (2024) systemized that even in early age development of sustainability competences is based on one's dialogue, cooperation, collaboration, and co-working with others. The meta-analysis of Vesterinen and Ratinen (2024, p. 62) revealed that even in primary education children are learning sustainability while "collaborating with other pupils and teachers and using imagination to achieve common environmental goals in their daily lives". According to Vesterinen and Ratinen, (2024), sociocultural environmental education is based on social interactions: "the knowledge is not within the learners or the teacher but within the social dialogue that takes place in the learning (activity) environment". Findings of Olsson et al. (2022) indicate that education for sustainable development positively influences students' self-perceived action competence, which includes the motivation and ability to act towards sustainability goals. However, authors (Olsson et al., 2022) notice that the development of confidence to act independently under one's own influence appears

less pronounced, suggesting that motivation to engage voluntarily may require sustained educational support over time. But as Javorka et al. (2024, p. 27) summarize, "there is a notable challenge in putting the GreenComp framework into practice. Some stakeholders, particularly non-expert users, acknowledge a sense of familiarity with GreenComp, but express limitations in their capacity to effectively apply it. Translating the competences into the realities of classrooms, training programmes and curricula is a challenging task". Therefore, it is necessary to seek measures and approaches that can support the development of sustainability competencies.

Political documents and authors (Bianchi et al., 2022; Javorka et al., 2024) recognize the interconnected nature of environmental, social, and economic issues in the sustainable development. Sustainable development competencies (such as systemic thinking, critical evaluation, responsibility, cooperation, civic engagement) correspond to the context of voluntary activities, which address social, environmental, or economic issues. At the same time, the literature treats volunteering as a space for informal and experiential learning, where individuals develop sustainable development competencies through real-life activities. For example Sousa et. al. (2016) indicate that environmental education plays a significant role in enhancing competencies among young community volunteers by fostering environmental knowledge, pro-environmental behaviors, and civic engagement. While Herodotou et. al. (2024) note that participation in authentic research and citizen science platforms (such as Naturalist), further supports the development of science competencies and understanding among young volunteers. So volunteering and development of sustainability competencies seems to be mutually reinforcing.

1.2 Motives for volunteering

Therefore, theories and experiences of facilitating motivation for volunteering can be used in the pursuit of ensuring the development of sustainability competencies, and to strengthen these competencies. Scientists (Cornelis et al., 2013; Miranda-Diaz et al., 2020) demonstrated through rigorous research that that volunteer motivations can be a predictor for volunteers' satisfaction, performance, commitment to their volunteer role in the setting where they choose to volunteer, and volunteers' success in performing altruistic activities. Therefore, the motives for engaging in voluntary activities are further examined as a possible way to ensure the acquisition and development of sustainability competencies.

Scientists (Miranda-Diaz et al., 2020; Nowakowska and Rajchert, 2025) use different approaches to analyze the phenomenon of motivation for volunteering and identify different groups of motives facilitating the engagement of volunteering activities. Miranda-Diaz et al. (2020, p. 180) composed a

volunteer motivation scale of two main factors: self-oriented motivation, and altruistic motivations, while Nowakowska and Rajchert (2025) details the motives for volunteering into intrinsic, endocentric, and ipsocentric.

One of the more mentioned group of motives are intrinsic motives or those motives that are concentrated on other people's welfare (Nowakowska and Rajchert, 2025). Miranda-Diaz et al. (2020) conceptualize altruism "as humanitarian or selfless acts of giving service to others (for example, to give something back to the community" (Miranda-Diaz et al., 2020, p. 180)). According to the theory by Batson (cited from Nowakowska and Rajchert, 2025), empathy activates the altruistic motivation to help a person to whom empathy is felt. Helping occurs when it is considered possible, more positive than leaving another without support or having another person's help. Moreover, helping brings rewards to the helper (such as positive emotions), while the aim of helping is to relieve another person's distress and increase their well-being (Nowakowska and Rajchert, 2025). According to Pohling et al. (2016), personal values play a central role with respect to ethical competence, as it was found that self-transcendence values are related to both high levels of empathy and ethical competence, in contrast to self-enhancement values. The authors also discuss the possibilities for developing empathy, which is important for volunteering and sustainable behavior. Pohling et al. (2016) indicate that regular compassion-meditation is able to generate sustaining affective experiences and lasting changes within brain regions that are linked to feeling states, planning of movement, and positive emotions. The insights of Pohling et al. (2016) suggest that by means of one's empathy and compassion, young people can transcend themselves in order to overcome their selfishness, act with higher ethical competence and become more sustainably oriented.

The other group of ponderous motives for volunteering are endocentric or those which are focused on staying congruent with self-standards and acting to avoid negative emotions or boost positive thinking about oneself (Nowakowska and Rajchert, 2025). According to Miranda-Diaz et al. (2020) volunteerism also serves as a protective function from unpleasant or negative feelings such as guilt, more specifically "reducing guilt over being more fortunate than others and to address one's own personal problems" (Clary et al., 1998, cited from, Miranda-Diaz et al., 2020). According to Thomaes et al. (2023) the sustainability motive-alignment hypothesis posits that adolescents are more likely to engage in sustainable behavior when it aligns with their personal motives for autonomy and status. Therefore authors (Thomaes et al., 2023) suggest that educational programs should reshape how adolescents perceive sustainability to make it a personal priority. Cornelis et al. (2013) found that both self- and other-oriented motives (e.g., altruism) were associated with a volunteer's overall satisfaction with their volunteer experience as well as extra-

role behavior in which volunteers engage in helping behaviors over and above those expected as part of their role or assigned tasks.

The other impactful group of motives are ipsocentric, which are concentrated on balancing costs and rewards from helping (Nowakowska and Rajchert, 2025). Miranda-Diaz et al. (2020) identify that motivation for volunteerism may include self-oriented growth (personal and/or career oriented), some personal benefit (for example, to help to build ones resume (Miranda-Diaz et al., 2020, p. 180) or the goal to enhance or establish relationships. The findings of Miranda-Diaz et al. (2020, p. 182) indicate that younger volunteering mentors "are more likely to endorse self-oriented motivation for volunteering than older mentors"; the average age volunteering mentors was 32 years-old, and it is possible that in their 30s and beyond, mentors have completed their educational studies and have some form of work experience or have an established career. "Thus, they (volunteers older that 30s) may not volunteer due to self-oriented reasons" (Miranda-Diaz et al., 2020). Based on the findings of their research results Miranda-Diaz et al. (2020) also assume that volunteering males feel more external pressure to become volunteers from members within their social network. Another possibility stems from research about gender differences in expectations for mentoring, which has indicated that "males tend to expect to have fun in their relationships and may enter into mentoring focused on this aspect of the relationship" (Spencer et al., 2018). While Nowakowska and Rajchert (2025) research indicates that empathy and concern for others and their welfare is the strongest factor associated with intensions to volunteer.

The other possible way to look for invariable motivation to volunteer or to participate in sustainable activities is through the lens of evidence-based theory of human motivation and growth – the self-determination theory. Scientists acknowledge self-determination theory as being one of the major motivational theories in mainstream psychology (Ryan and Deci, 2017; Ryan and Deci, 2020). The scientists already evidenced the usefulness of this theory for understanding factors that either support or undermine an individual's ability to sustain their self-determination to engage in certain behaviors. This theory can provide interesting insights into the motives that encourage people to engage in voluntary activities and, at the same time, improve their sustainability competencies. As Ryan and Deci (2020) identify, "self-determination theory assumes people are inherently prone toward psychological growth and integration, and thus toward learning, mastery and connection with others". So, considering this theory indicates perfect possibilities to reinforce volunteering and sustainability competencies. But the authors (Ryan and Deci, 2017; Ryan and Deci, 2020; Alberts, Lygns, and Lukoff, 2024) claim that proactive development requires supportive conditions to be robust. According to authors (Ryan and Deci, 2017;

Ryan and Deci, 2020) consistent development and improvement is facilitated by satisfaction of three basic psychological needs: needs for a sense of autonomy, competence, and relatedness. Ryan and Deci (2020) propose a conceptualization of autonomy as a sense of initiative and ownership in one's actions. They further posit that this sense is supported by experiences of interest and value, and undermined by experiences of being externally controlled (for example, with rewards or punishments). Competence is defined as the feeling of mastery, such as the sense that one can succeed and grow (Ryan and Deci, 2020). Finally, a sense of belonging and connection is named as relatedness and is facilitated by respect and caring. The satisfaction of these needs provide the essential nutrients for energizing more autonomous forms of regulation, which self-determination theory posits as necessary mechanisms that underlie long-term changes in behavior (Ryan and Deci 2017; Alberts et al., 2024). The self-determination theory highlights the intensity of the impact between intrinsic motivation, “doing something because it is inherently interesting or enjoyable”, and extrinsic motivation, “doing something because it leads to a separable outcome” (Ryan and Deci, 2000, cited from Alberts et al., 2024). As Ryan and Deci (2017), Alberts et al. (2024) indicate, while interventions based on extrinsic forms of motivation may work in the short term, they typically fail to sustain motivation in the long term, or after an intervention has ended. Contrarily, when motivation becomes internalised, actions can become self-determined, at which point interventions may no longer be required, and changes in behaviour tend to persist. Authors (Ryan and Deci, 2017; Ryan and Deci, 2020; Alberts et al., 2024) claim evidence for the efficacy of power in intrinsic motivation: when someone is intrinsically motivated to apply themselves in some way, they tend to be at their most creative, energized and driven, and one’s motivation for the behavior will persist for longer (Ryan and Deci 2020). Scientists (Ryan and Deci, 2017; Ryan and Deci, 2020; Alberts et al. 2024) indicate “that the fundamental needs for competence and autonomy are key factors that distinguish intrinsic and extrinsic motivation: feeling capable of doing the task, and feeling like one is willingly doing it for personal reasons” (Alberts et al., 2024). Complementing the insights of self-determination theory on autonomy and competence, it is important to consider a related aspect – empowerment. As the meta-analysis of Vesterinen and Ratinen (2024) revealed, empowerment is important for learning action-oriented competences, as self-empowerment helps individuals participate in new environmentally responsible activities, and this occurs if the individual also feels socially empowered. Authors (Vesterinen and Ratinen, 2024) highlight the importance of social trust, and indicate that civic action also helps pupils act constructively rather than falling into apathy, denial or despair. Therefore empowerment can be seen as a long-term motivation to engage in voluntary or sustainability activities and, at the same time, develop

sustainability competencies. According to Thomaes et. al. (2023) the sustainability motive-alignment hypothesis posits that adolescents are more likely to engage in sustainable behavior when it aligns with their personal motives for autonomy and status. Therefore authors (Thomaes et. al., 2023) suggest that educational programs should reshape how adolescents perceive sustainability to make it a personal priority.

Based on the analysis of the literature, such hypotheses were formulated and a conceptual model of sustainable development competence through participation in voluntary activities was created:

H1. Intrinsic motives for volunteering have an impact on extrinsic motivation to participate in voluntary activities

H2. Intrinsic motives for volunteering are a significant factor influencing (explaining) the perception of personal benefits

H3. Intrinsic motives for volunteering are a significant factor influencing (explaining) the perception of professional benefits

H4. Intrinsic motives for volunteering are a significant factor influencing (explaining) the perception of social benefits

H5. Intrinsic motives for volunteering influence the decision to engage in voluntary activities by developing sustainability competencies

H6. Extrinsic motives for volunteering influence the decision to engage in voluntary activities by developing sustainability competencies

1.3 Conceptual model

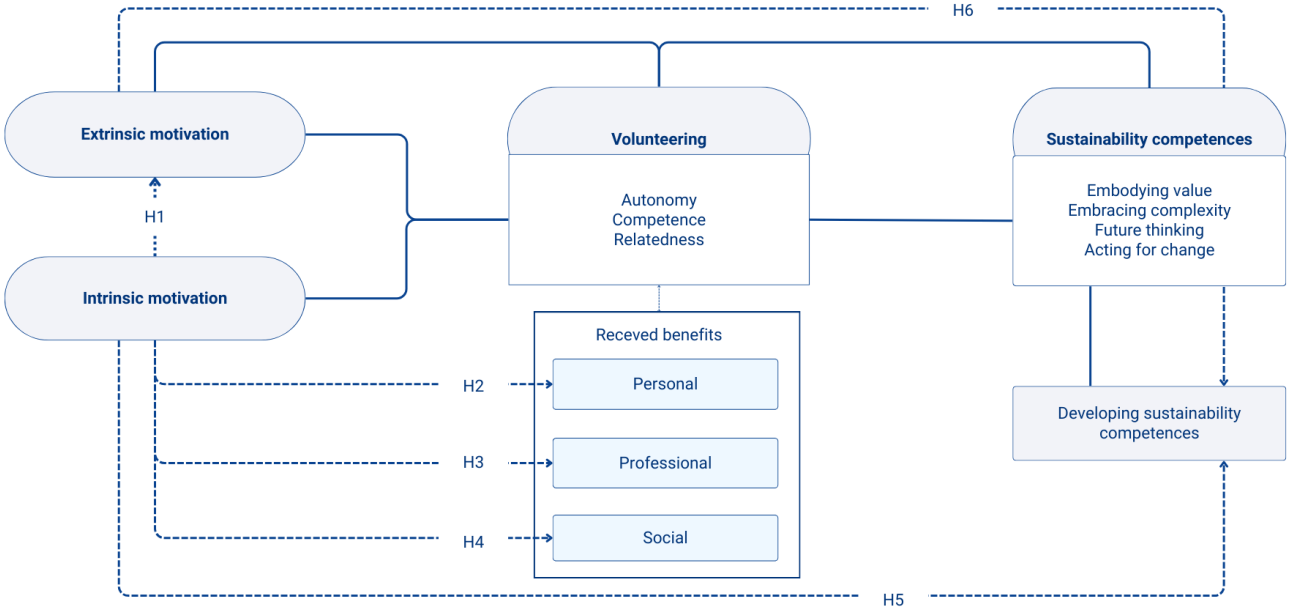

Figure 1. Conceptual model of volunteering motivation facilitation for the development of sustainability competences. Source: created by authors, based on literature analysis, 2026

The model reveals how volunteering contributes to the development of sustainability competencies by integrating personal motivation, volunteering experiences, and benefits gained. This model is based on two main theoretical perspectives: the GreenComp sustainability competency framework and self-determination theory.

According to Bianchi et al. (2022), sustainability competence is defined as the ability to embody sustainability values, understand complex systems, and take actions that contribute to restoring ecosystems, strengthening social justice, and creating sustainable visions for the future. This includes both individual and collective actions, such as participating in civic initiatives, volunteering, community organizing, or organizing capacity-building programs. In this way, volunteering becomes one of the important spaces where these competencies can be developed through real-life experience.

The model emphasizes that involvement in volunteering is determined by both intrinsic and extrinsic motivation. Intrinsic motivation is associated with a person's desire to act because of the meaningfulness of the activity itself, its alignment with values, and personal growth. Extrinsic motivation can vary in terms of internalization and is related to the pursuit of professional experience, social recognition, or career opportunities. Although self-determination theory also distinguishes between

amotivation, this model does not examine it, as volunteering is considered an activity that has at least a minimal motivational basis.

Volunteering provides possibilities for satisfaction of three basic psychological needs: autonomy, competence, and a sense of belonging. Volunteers choose their activities themselves, feel that they can make a meaningful contribution, develop their skills, and become part of the community. These factors strengthen intrinsic motivation and create favorable conditions for deeper engagement.

Through volunteering, individuals develop sustainability competencies in practice: they work for sustainability, encounter real environmental and social challenges, interact with various interest groups, and learn to understand the complexity of problems. This encourages systematic thinking, critical reflection, and a value-based commitment to sustainability – the key components of competence identified by GreenComp.

The model also reveals that volunteers, depending on their motives, expect different benefits: personal (sense of meaning, self-esteem, skills), professional (experience, competencies, networking), and social (positive impact on the community, improvement of the environment). These benefits reinforce continued involvement in volunteering and further deepen the development of sustainability competencies.

The model shows that volunteering works as a process: motivation encourages involvement, volunteering experiences develop sustainability competencies, and experienced benefits strengthen motivation and readiness to take on increasingly complex sustainability actions. Given the growing complexity of sustainability issues, volunteering is becoming an important practice in which the complex knowledge, skills, and values necessary for building a sustainable future are acquired and applied.

2. Research methodology

The quantitative research focuses on young people, as this age group is often perceived to have the potential to make a significant contribution to solving social problems through volunteering. By surveying young people across Europe, we aim to identify what motivates young people to engage in voluntary activities and what benefits they expect to gain from them, and how volunteering can contribute to the development of sustainability competences.

Research method: This study uses a quantitative research method, utilizing a structured questionnaire to collect data from respondents.

Research instrument: Respondents were given a questionnaire consisting of two groups of ordinal-scale questions, one nominal question, and a demographic section. The first set of ordinal questions aimed to assess the motivation for involvement in volunteering. The second set of ordinal questions explored the perceived benefits of volunteering. The nominal question inquired whether young people had volunteered and where. Lastly, the demographic questions were designed to gather information on the respondents' age, gender, country, and societal position.

Research sample: Young people from 15 to 29 years old from different European countries. There is no universal consensus on what "youth" is. Youth is socially constructed and refers to the period of complex transitions to autonomy, from childhood to adulthood. Definitions of young people vary between countries. The age range 15-29 is often selected for statistical purposes at EU level (Youth policy essentials, 2019). The questionnaire was distributed on the: https://pollmill.com/ website**.**

In this survey 803 respondents have participated from European countries. Respondents' ages ranged from 15 to 29 years old. 18 % of respondents are employed; 92.7% are students; 4.4% unemployed. 43.3% males, 54.8% females and others prefer not to disclose their gender. Most of the respondents were from Lithuania (33.0%) and Latvia (32.1). 15% of respondents were from Portugal, with the remaining respondents fairly evenly distributed among other countries (Poland, Greece, Bulgaria, Italy, Estonia, Ukraine, France, Spain, Romania, Netherlands, Finland, Czech Republic and Malta).

Data processing: The collected empirical data were processed using the SPSS 27 (*Statistical Package for the Social Sciences*). In the data processing, descriptive statistics were used, such as percentiles, mean, mode and standard deviation. Simple linear regression was used to test the hypotheses, as the study examines the linear relationship between internal motives (independent variable) and external motives for volunteering (dependent variables). The variables are quantitative, which allows the assessment of linear effects and the determination of the significance of the coefficients. The analysis of the items shows the mean and p-value, which indicate significant differences if $p \leq 0.05$.

Cronbach's alpha was used to assess the internal consistency of the question scale. A properly and qualitatively constructed item scale should have a Cronbach's alpha value greater than 0.7. Respondents to the survey were asked to rate a two-range scale, where 1 is strongly disagree and 5 is strongly agree. In our case, the item analysis of the questionnaire scales showed that Cronbach's alpha ranges from 0.950 to 0.951 (table 1). This indicates that the scale has been appropriately developed.

Question Scale	Cronbach's Alpha	Cronbach's Alpha Based on Standardized Items	N of Items
Motives for volunteering	0.950	0.951	21
Perceived benefits of volunteering	0.951	0.951	15

Table 1. Reliability Statistics, Cronbach's alpha coefficient (Source: created by authors, 2026)
Source: created by authors, based on research data 2026

Research ethics: The quantitative study was conducted in accordance with the fundamental principles of research ethics: voluntary participation, informed consent, and confidentiality. Before participating, respondents were informed about the purpose of the study, its procedure, and the use of data, and their consent to participate was obtained. The collected data was used for scientific purposes only, processed anonymously, and stored in such a way that individual persons could not be identified.

The questionnaire was designed in accordance with ethical requirements—it did not contain any sensitive, discriminatory, or potentially psychologically uncomfortable questions. The questions were formulated in a clear, respectful, and neutral manner to avoid bias in the respondents' answers. Respondents were also allowed to withdraw from the study at any time without any negative consequences.

3. Results of the research

The descriptive analysis showed that young people's involvement in voluntary activities is determined by a fairly wide range of both internal and external motives. Among the most important intrinsic motives are altruism (M–4.17; Mo–4), emotional satisfaction (M–3.92; Mo–4), personal self-realization (M–3.84; Mo–4), and the acquisition of new skills (M–3.90; Mo–4). Extrinsic motives are best reflected in the opportunity to discover new places (M–3.94; Mo–5), improve career prospects (M–3.77; Mo–4), and spend free time meaningfully (M–3.93; Mo–5) (see table 2). This leads to the conclusion that voluntary activities play not only a social role for young people, but also contribute to their personal and professional growth, and therefore, the structure of motivation is complex and multifaceted.

Motives for volunteering	Mean	Median	Mode	Std. Deviation
Intrinsic motives				
Self-knowledge	3.44	4.00	4	1.220
Self-confidence	3.53	4.00	4	1.292
Emotional satisfaction	3.92	4.00	4	1.203
Altruism	4.17	4.00	5	1.119
Compassion for others	3.54	4.00	4	1.305
Sense of responsibility	3.68	4.00	4	1.280
Strengthening connections with the community	3.52	4.00	4	1.270
Understanding social problems	3.58	4.00	4	1.271
Understanding and getting to know other people	3.68	4.00	4	1.235
Awareness	3.67	4.00	4	1.239
Acquiring new skills	4.10	4.00	5	1.195
Personal self-realization	3.84	4.00	4	1.202
Discovering the meaning of life and future direction	4.19	4.00	5	1.330
Extrinsic motives				
Improving career prospects	3.77	4.00	4	1.251
Developing social connections	3.63	4.00	4	1.315
Meaningful leisure time	3.93	4.00	5	1.389
Realizing contributions to the community	3.58	4.00	4	1.259
Acquiring social status/respect in society	3.09	3.00	4	1.438
Participating in activities of different cultures and communities	3.62	4.00	4	1.284
Participating in projects	3.58	4.00	4	1.287
Exploring new places	3.94	4.00	5	1.216

Table 2. Motives for volunteering
Source: created by authors, based on research data 2026

The greatest benefits of volunteering are associated with personal development and a sense of meaning – particularly skill development (M-4.10; Mo-5); finding purpose in life (M-4.17; Mo-5); and providing support to vulnerable groups (M-4.03; Mo-5). The high averages for these factors show that volunteering is perceived not only as a form of helping others, but also as an important means of self-

discovery and the realization of personal values. In addition, the survey data reveal a clear dimension of professional benefits – career opportunities (M-4.08; Mo-5); networking with professionals (M-4.14, Mo-5); learning opportunities (M-4.02; Mo-5); gaining practical experience (M-4.13; Mo-5) are particularly important factors encouraging respondents to engage in voluntary activities (see table 3). This leads to the conclusion that volunteering is seen by young people as a strategically beneficial activity that combines social benefits, personal growth, and professional preparation for the future.

Benefits of volunteering	Mean	Median	Mode	Std. Deviation
Personal benefit				
Skill development	4.10	4.00	5	1.100
Improved mental health	3.71	4.00	4	1.216
Finding purpose in life	4.17	4.00	5	1.222
Engagement in new social networks / new acquaintances, friend	3.89	4.00	4	1.172
Self-esteem and self-confidence	3.89	4.00	4	1.182
Professional benefit				
Career opportunities	4.08	4.00	5	1.102
Networking with professionals	4.14	4.00	5	1.185
Learning opportunities	4.02	4.00	5	1.132
Gaining practical experience	4.13	4.00	5	1.103
Improving your CV	3.97	4.00	4	1.127
Social benefit				
Strengthening communities	3.89	4.00	4	1.149
Civic engagement	3.74	4.00	4	1.173
Example and inspiration for others	3.80	4.00	4	1.249
Strengthening the social and cultural environment	3.87	4.00	4	1.193
Providing support to vulnerable groups	4.03	4.00	5	1.127

Table 3. Received benefits of volunteering
Source: created by authors, based on research data 2026

4. Regression model for testing hypotheses

H1. Intrinsic motives for volunteering have an impact on extrinsic motivation to participate in voluntary activities

Regression analysis showed that intrinsic motives to volunteer is a significant factor influencing external motivation to participate in voluntary activities, $F(1,801) = 1831.02$, $p < 0.001$. Regression coefficients revealed that a one-unit increase in internal motives is associated with an average increase of

0.924 units in extrinsic motives ($B = 0.924$, $\beta = 0.834$, $t = 42.79$, $p < 0.001$). The standardized coefficient $\beta = 0.834$ indicates a very strong positive relationship between intrinsic motives and extrinsic motivation to participate in voluntary activities.

The results confirm the hypothesis that intrinsic motivations for volunteering have a strong positive effect on extrinsic motivations to participate in voluntary activities.

H2. Intrinsic motives for volunteering are a significant factor influencing (explaining) the perception of personal benefits

Regression analysis showed that intrinsic motives for volunteering are a significant predictor of perceived professional benefits, $F(1,801) = 298.01$, $p < 0.001$. When the level of intrinsic motives increases by one unit, the level of perceived professional benefits increases by an average of 0.565 units ($B = 0.565$, $\beta = 0.521$, $t = 17.26$, $p < 0.001$). The standardized coefficient indicates a moderate positive relationship between internal motives and perceived benefits. The model explains about 27% of the variation in perceived professional benefits, with the remainder depending on other, unanalyzed factors.

These results confirm the hypothesis that intrinsic motives for volunteering contribute significantly to the perceived benefits of volunteering.

H3. Intrinsic motives for volunteering are a significant factor influencing (explaining) the perception of professional benefits

Regression analysis showed that intrinsic motives for volunteering are a significant predictor of perceived social benefit, $F(1,801) = 379.19$, $p < 0.001$. When the level of intrinsic motives increases by one unit, the level of perceived social benefit increases by an average of 0.621 units ($B = 0.621$, $\beta = 0.567$, $t = 19.47$, $p < 0.001$). The standardized coefficient indicates a strong positive relationship between intrinsic motivation and perceived social benefit. The model explains about 32% (252.537/785.995) of the variation in perceived social benefit, with the remainder depending on other, unanalyzed factors.

These results confirm the hypothesis that intrinsic motives for volunteering contribute significantly to the perceived social benefits of volunteering.

H4. Intrinsic motives for volunteering are a significant factor influencing (explaining) the perception of social benefits

The results of the regression analysis show that intrinsic motives have a statistically significant positive effect on the volunteering experience ($B = 0.039$; $\beta = 0.125$; $t = 3.572$; $p < 0.001$). Individuals with higher scores on intrinsic motivation are likely to have a greater need to engage in voluntary activities. Although the effect is small ($R^2 \approx 0.016$), the results confirm the hypothesis that intrinsic motivations can

encourage volunteering behavior, consistent with the principle of self-determination theory, according to which higher intrinsic motivation encourages active involvement in voluntary activities.

H5. Intrinsic motives for volunteering influence the decision to engage in voluntary activities by developing sustainability competencies

Regression analysis showed that intrinsic motives for volunteering are a significant factor influencing the perception of personal benefit, $F(1,801) = 440.72$, $p < 0.001$. Regression coefficients revealed that a one-unit increase in intrinsic motives was associated with an average increase of 0.632 units in the perception of personal benefit ($B = 0.632$, $\beta = 0.596$, $t = 20.99$, $p < 0.001$). The standardized coefficient indicates a moderate positive relationship between intrinsic motives and perceived personal benefit. Intrinsic motives explain a significant portion of the variation in perceived personal benefits, while the remainder depends on other, unanalyzed factors.

The results confirm the hypothesis that intrinsic motives for volunteering are a significant factor explaining the perception of personal benefit in voluntary activities.

H6. Extrinsic motives for volunteering influence the decision to engage in voluntary activities by developing sustainability competencies

Regression analysis shows that extrinsic motives for participating in voluntary activities are a statistically significant factor associated with voluntary participation in developing sustainability competencies, $F(1, 801) = 10.03$, $p = 0.002$. Regression coefficients revealed that each unit increase in extrinsic motivation was associated with an increase in voluntary participation of 0.031 units on average ($B = 0.031$, $\beta = 0.111$, $t = 3.17$, $p = 0.002$). The standardized coefficient indicates a weak but statistically significant positive relationship.

The explanatory power of the model was about 1.2%, i.e., external motives explain only a small part of the variation in voluntary participation, while the rest depends on other factors not analyzed in this study.

These results confirm the hypothesis that extrinsic motives have a positive, albeit relatively weak, effect on voluntary participation in the development of sustainability competencies.

Hypothesis	**Independent variable**	**Dependent variable**	**B**	**β**	**t**	**F**	**p**	**Result**
H1	Intrinsic motivation	Extrinsic motivation	0,924	0,834	42.790	1831.022	0,000	Accepted

H2	Intrinsic motivation	Personal benefits	0.632	0.596	20.993	440.716	0,000	Accepted
H3	Intrinsic motivation	Professional benefits	0.565	0.521	17.263	298.009	0,000	Accepted
H4	Intrinsic motivation	Social benefits	0.621	0.567	19.473	379.189	0,000	Accepted
H5	Intrinsic motivation	Volunteering experience	0.039	0.125	3.572	12.757	0,000	Accepted
H6	Extrinsic motivation	Volunteering experience	0.031	0.111	3.167	10.027	0,002	Accepted

Table 4. Hypothesis testing using linear regression
Source: created by authors, based on research data 2026

Respondents were asked whether they had volunteered and where. The results reveal that 53% of respondents have volunteered, 8.1% are currently volunteering, 30% have not tried this activity, and 19.2% plan to try it in the future.

The survey data reveals that respondents have diverse experiences of volunteering, covering social, environmental, cultural, educational, health, and civic areas. The duration and intensity of volunteering activities vary from one-off initiatives to long-term activities lasting several years.

The survey data shows that respondents' voluntary activities contribute significantly to the development of the competencies defined in the European sustainability competency framework GreenComp. Respondents' experiences cover all four core areas of GreenComp competencies: embodying sustainability values, thinking systemically, creating visions for the future, and acting for sustainability.

Embodying sustainability values: Most respondents' volunteering experiences reflect a strong commitment to social justice, solidarity, and caring for others. Volunteering with homeless people, people with disabilities, seniors, people with mental health issues, children, or people living in poor communities is consistent with GreenComp competencies related to empathy, respect for human dignity, and responsibility for the well-being of society. Providing informal assistance also demonstrates internalized sustainability values.

Embracing complexity in sustainability: Respondents' involvement in environmental activities (maintenance of public spaces and beaches, protection of nature and forests, waste sorting, animal welfare initiatives) reveals an ability to understand the impact of human activity on ecosystems and communities. Volunteering in the fields of social work, healthcare, and education demonstrates an understanding of the interrelated social, economic, and environmental systems and their impact on vulnerable groups.

Envisioning sustainable futures: Participation in educational projects, youth and student organizations, international programs (Erasmus+), cultural and community events contributes to the ability to imagine an inclusive, just, and sustainable future. Volunteering related to professional studies (e.g., social work) demonstrates a conscious alignment of personal career goals with the well-being of society and the environment, thereby fostering a sense of responsibility.

Acting for sustainability: The practical involvement of respondents in voluntary initiatives – from everyday assistance to participation in organized civic, environmental, or security structures (e.g., voluntary fire departments, the Red Cross, Maltese, youth and civic organizations) – directly corresponds to sustainability competencies related to active participation, cooperation, and implementation of collective decisions. Even short-term or episodic activities contribute to the ability to take initiative and act responsibly in real situations.

The survey results suggest that the voluntary activities of respondents not only reflect civic engagement but also create favorable conditions for the consistent development of sustainability competencies. Volunteering acts as a practical space where the values, knowledge, attitudes, and actions necessary for the development of a socially just, environmentally friendly, and sustainable society are integrated.

5. Discussion and conclusion

Volunteering provides a strong foundation for developing sustainability competencies. The results of the study show that young people associate volunteering primarily with altruistic attitudes, emotional satisfaction, and opportunities for self-realization, which suggests that this activity is perceived as meaningful and personally valuable. Also important is the acquisition of new skills, reflecting young people's desire to improve and gain experience. An analysis of extrinsic motives revealed that volunteering is also seen as an opportunity to spend free time meaningfully, discover new places, and strengthen future career prospects.

Based on the theoretical analysis, hypotheses were raised that intrinsic motivations for volunteering influence extrinsic motivation to participate in and implement voluntary activities, and to receive benefits accordingly. The study found that young people's intrinsic motivations significantly contribute to extrinsic motivations to engage in voluntary activities, which is consistent with the provisions of self-determination theory. Self-determination theory states that motivation exists on a continuum from completely extrinsic to completely autonomous, and that extrinsic motivations can be internalized and

become self-regulated and autonomous if they are consistent with a person's values and needs (Ryan and Deci, 2000). In this case, strong intrinsic motivation creates the conditions for external incentives to become personally meaningful. This suggests that intrinsic motivation not only directly encourages voluntary activity but also helps to transform external motives into more autonomous forms. According to Wu and Li (2019), volunteers who are more externally motivated (e.g., due to peer pressure or rewards) experience greater emotional exhaustion and lower life satisfaction than autonomously motivated volunteers. Understanding the motivations for volunteering is crucial because it allows organizations and policymakers to successfully harness the power of volunteers and create meaningful, long-term opportunities for civic engagement and social change (Heley et al., 2022, Kamri 2025).

The study revealed that intrinsic motivations for volunteering are a significant factor that not only encourages voluntary activity but also contributes significantly to the perception of social, professional, and personal benefits. Empirical studies reveal that intrinsic motivation strengthens the perceived benefits of volunteering at both the social and personal levels (Wu, Li, 2019).

The results of the study show that practical experience in volunteering has a significant impact on the development of sustainability competencies, as discussed in the study results. However, it is worth noting that both intrinsic and extrinsic motivation for volunteering are important in developing sustainability competencies, but they operate through different mechanisms. As noted by Brownell (2008) and Mircetic et.al. (2024), competencies reflect the behaviors, knowledge, skills, attitudes, values, and beliefs necessary to perform tasks effectively. Intrinsic motivations form the value and emotional basis for sustainable behavior — they promote empathy, self-awareness, ethical sensitivity, and systemic thinking. These competencies are essential for long-term and authentic engagement in sustainability activities. Intrinsic motivations for volunteering (self-knowledge, building self-confidence, searching for meaning in life, mindfulness, emotional satisfaction, etc.) are closely related to the area of competence of embodying sustainability values. Hence, an organizational context that highlights specific values promotes the activation of these values in the behavior of organization members. Finally, putting certain values into the limelight would help to shape and strengthen the moral identity of its members by means of role-modeling and moral approval of the respective peers and supervisors (Pohling et al. 2016, p. 469). Motivations such as altruism, a sense of responsibility, and strengthening ties with the community reflect action for the sake of sustainability. Understanding social problems and other people reflects acceptance of complexity, systematic and critical thinking. This shows that volunteering contributes to the

development of personal maturity, self-reflection, and ethical sensitivity, which are considered fundamental prerequisites for sustainable behavior.

Extrinsic motivators act as activating and sustaining factors that encourage practical engagement, application of competencies, and professional growth. In the context of GreenComp, such motivations contribute to the ability to act, collaborate, and create real change, especially through competencies related to the realization of ideas, gaining respect in society, and participating in projects. Our research revealed that career motivations are an important external factor for volunteering. According to Jeou-Shyan et al. (2011), career motivations strengthen the development of sustainability competencies, including strategic action, initiative, and change creation. Participation in voluntary activities allows young people to acquire important skills such as teamwork, communication, and problem-solving, which are valued by employers. Furthermore, volunteering experience demonstrates a commitment to the community and a willingness to go beyond the traditional academic or professional path (Mustafa et al., 2020). This is particularly beneficial for students seeking career opportunities, as volunteering provides insights into various fields and industries. Beyond the practical benefits, volunteering promotes a sense of civic responsibility and social awareness (Mustafa et al., 2020). As Tan et al. (2025) point out, career motivation, knowledge acquisition, personal norms, awareness of consequences, and responsibility are the main factors that encourage involvement in volunteering, and understanding these motives helps to create volunteer programs that are aligned with the intrinsic and extrinsic motivation of participants.

Participation in the activities of different cultures and communities and getting to know new places best correspond to the area of competence of accepting complexity. This suggests that volunteering provides opportunities to develop the skills of collective action, cooperation, and systematic thinking that are necessary for addressing complex social and environmental challenges. Volunteering in green spaces, especially post-disaster, can enhance community and environmental resilience. Volunteers often report positive feelings and outcomes, which can contribute to a stronger sense of community and personal well-being. This suggests that green volunteering not only benefits the environment but also fosters community cohesion and individual mental health (Miller, 2020).

Intrinsic motivations ensure value sustainability, while extrinsic motivations ensure continuity of activity. Cornelis et al. (2013) found that both self- and other-oriented motives (e.g., altruism) were associated with a volunteer's overall satisfaction with their volunteer experience as well as extra-role behavior in which volunteers engage in helping behaviors over and above those expected as part of their role or assigned tasks. Therefore, volunteering should be treated as an integrated educational practice that

combines personal meaning, social impact, and the creation of a sustainable future. Individuals who have developed sustainability competencies remain motivated by performance evaluation and reward methods that provide opportunities for ecological improvement (Renwick et al. 2013; Attaianese 2012; Mircetic et.al. (2024). The analysis reveals that volunteering acts as a multifaceted educational space in which complex sustainability competencies are formed. The results of the study suggest that volunteering not only reflects existing sustainability values, but also actively contributes to the development of sustainability competencies by acting as an integrated non-formal education practice. This analysis supports the inclusion of volunteering in education, youth policy, and sustainability strategies as an effective means of educating conscious, socially responsible citizens who are prepared for the challenges of the future.

Limitation and future research: Although the total sample size is around 800 respondents, the distribution of respondents across European countries is very uneven. For this reason, it is not possible to reliably compare results by country or to draw general conclusions about the situation in specific countries in the field of volunteering. The survey data can only be interpreted at a general, European level.

Future research should aim for a more balanced distribution of respondents across countries in order to enable reliable cross-cultural and international comparisons. This would allow for a more detailed analysis of the differences and similarities in volunteering and the factors that determine them in different national contexts. It would also be useful to apply mixed research methods, combining quantitative and qualitative data. Analysis of interviews or focus groups could provide deeper insights into volunteering experiences, motivations, and barriers.

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