Service-Learning as a Novelty Experience at Central and Eastern European Universities: Students' Narratives of Satisfaction and Premises of Change

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As a proxy of community-engaged teaching and learning pedagogy in higher education institutions (HEIs), service-learning (SL) has just recently become a phenomenon of research and policy interest in the European Higher Education Area (EHEA). This study explores the first-ever service-learning experience of 246 students coming from three universities at Central and Eastern Europe (Slovakia, Romania and Croatia). The quantitative part of the survey was used to compare the differences between countries, whereas the qualitative part of the survey was a summative assessment, i.e., reflections on the satisfaction with SL experiences were collected through the open-ended questions of the survey, by treating the three countries as one dataset. Research findings speak in favour of students' satisfaction with their first-ever SL experience, regardless of the country of their residence. Students from all three countries highly value their SL experience as it provided them with possibilities to learn a lot about the academic field and community as well, by facilitating their personal and professional contribution to the community. The legacy of SL courses relates with paradigmatic shifts in various academic aspects, like students and professors changing roles, students being placed in the centre of the learning process, connectedness of the curricula with the real-life setting, better understanding and appreciation of subjects studied. As for the non-academic related aspects, students' reflection disclose their acknowledgment of personal growth and changes related with cognitive, emotional and behavioural dimensions. Our findings reveal that the unique experience students had with the SL courses shaped their narratives into ones of satisfaction and change.

Keywords: service-learning, service learning as novelty, students' satisfaction with service-learning course, service-learning at central and eastern european universities, service-learning benefiting students, service-learning as paradigmatic shift

INTRODUCTION

As a proxy of community-engaged teaching and learning pedagogy in higher education institutions (HEIs), service-learning (SL) has just recently become a phenomenon of research and policy interest in the European Higher Education Area (EHEA). Numerous policy documents, recommendations and reports published within the last years by the European political and educational institutions show an increasing commitment to adapting the teaching process at HEIs to the needs of new generations of students. With the aim of reporting on higher education trends in Europe, the European University Association (EUA) continuously emphasizes the benefits of a student-centered teaching approach as one of the key determinants for creating an effective teaching environment. EUA reports on trends in learning and teaching in European universities emphasize the need to change the teaching paradigm at European universities while bringing to the light the salient point of such a change—placing students to the center of the teaching process (EUA 2010; EUA, 2015).

The need for such a change and integration of a student-centered approach stems, above all, from the fact that the student population at European universities is becoming increasingly heterogeneous, leading to the difficulties in unifying the teaching process. In the process of learning at modern European universities, the EUA points out, the university professor should encourage the development of critical thinking, while students independently create meaning through proactive learning, research and reflection. In addition to the aforementioned reports of the EUA, the importance of such shaped teaching that aims at developing critical thinking and social responsibility of students is emphasized in the publications of the European Commission (e.g., European Commission, 2013; European Commission, 2017), the OECD, The European Association for Quality Assurance in Higher Education (ENQA, 2015), and strongly advocated by the European Students' Union as well.

Known for its influence on shaping changes in membering countries' national (HE) systems, such a policy framework opened up a space for various initiatives aiming to promote service-learning and its integration in higher education to flourish—for example, funding schemes (on both European and national level) that contributed significantly to building capacities of academics and universities in many countries, particularly of those in the CEE region[1]; there are national associations and/or networks for service-learning established in

many European countries and regions (e.g., Service-Learning Network for Central and Eastern Europe—CEE SL Network); beside, the European Association for Service-learning in Higher Education as well as European Observatory for Service-learning were established. Thematic conferences are taking place picking up on the recent research on SL in the European context, while new journals are being planned. Collaborative research and developmental projects, usually funded through various EU funding schemes, contributed to the creation of a certain European SL teaching and research community that engages in peer-teaching as well as in researching various SL perspectives in national, and/or European context.

The study presented in this paper evolves from one of such collaborative EU-funded Strategic Partnership project *Service-learning in Higher Education: Fostering the Third Mission of Universities and Civic Engagement of Students (SLIHE),* that aims to bring SL as an innovative teaching and learning pedagogy at (partnering) HEIs in Central and Eastern Europe. Project collaborators are researchers and educators coming from universities in six different countries—Slovakia, Croatia, Romania, Czech Republic, Austria, and Germany. One of the project's focus was strengthening the capacities of (partnering) HEIs for introducing and/or improving SL courses. Lectures and workshops for academics were organised in four (partnering) universities as part of the professional development activities, and were anchored in tailor-made syllabus and a handbook, both developed jointly by the SLIHE project members.[2] In addition to lectures and workshops, the mentoring programme allowed for academics to engage into one-on-one consultancy with SL project members (lecturers and mentors) through the whole process of planning and delivering their (first) SL course. The SL courses planned and delivered under the SLIHE mentoring programme took place during the 2018–2019 and 2019–2020 academic year. They are affiliated in various disciplinary backgrounds, and each was one semester long (15 weeks). Most of the academics engaged in this educational 'package' had no prior SL experience, and most of them chose to redesign existing courses, rather than creating new one(s).

For most of the students engaged in those courses, and subsequently in this study, that was a first-time-ever SL experience. While coming from various countries and disciplinary fields, students who participated in this study were/are homogenous in one particular context—they had not been engaged in a course anchored in SL pedagogy prior to these 'project' ones, meaning—they hadn't had prior experience in partnering with organisations and institutions from local community, in synergising curricular concepts from the course with recognised issues/problems in their local communities, and/or engaging in various assignments of a reflexive nature,

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[1]Central and Eastern European Countries (CEECs) is a term coined by the Organisation for Economic Co-operation and Development (OECD) for the group of countries comprising Albania, Bulgaria, Croatia, the Czech Republic, Hungary, Poland, Romania, the Slovak Republic, Slovenia, and the three Baltic States: Estonia, Latvia and Lithuania. The CEE countries are further subdivided by their accession status to the European Union (EU): the eight first-wave accession (Estonia, Latvia, Lithuania, Czech Republic, Slovakia, Poland, Hungary, and Slovenia in 2004), the two second-wave accession (Romania and Bulgaria in 2007) and the third-wave accession (Croatia in 2013). Other countries in the CEE region are not part of the EU. Since the 1990s all CEE countries are undergoing different kinds of reforms - political and economic, but there are also many cultural and social transformations related to wider societal changes such as globalization, migration or modernization. These changes are reflected in the educational systems, as well (Brozmanova Gregorova et al., 2019).

[2]In each partnering country both the syllabus and the handbook were subjects of a double peer-review, with national experts in the field being targeted as reviewers. All of their comments and constructive suggestions were acknowledged in creating the final versions.

including writing (reflexive) diaries. In many aspects these SL courses were indeed a novelty for this group of students.

While emphasized and advocated in many policy documents, community-engaged (teaching and learning) practices in higher education in Europe are still at their early stage. This paper therefore aims to contribute to the academic field by focusing on students' first-time-ever experience with SL courses in three CEE countries—Slovakia, Romania and Croatia. The rationale for comparing these three countries lies in the common historical and political context (socialism and communism), as well as the process of transformation to democracy, that both shaped the (higher) education sector in similar ways. In an institutional environment which is still dominantly anchored in transmissive paradigm and the power-related relationship that comes along with it—as is the case in Slovakian, Romanian and Croatian higher education sectors—service-learning pedagogy still presents a novelty for many academics and students as well, as it was the case with our research participants.

With the aim of contributing to the academic discussion and developing a better understanding of the specific aspects of students' first of such a (service) learning experiences, in this paper we explore various issues in order to answer following three research questions:

- How do students who are first-time SL course attendees, assess their satisfaction in relation to the perception of the course value, their own learning about the academic field and the community, and of their personal contribution to the community?
- Are there and what are the differences in the assessment of students' satisfaction with the SL course in regard to the resident country?
- How do students portray the "novelty" that SL experience brought on their personal, educational and professional paths?

SERVICE-LEARNING AND STUDENTS

Most of the studies investigating the benefits that service-learning has on students, indicate significant positive effects on various aspects of their academic performance, social skills as well as civic abilities. Novak et al. (2007) in meta-analysis of nine studies compares courses with and without a service-learning component on the basis of the amount of learning. The summary finds that the addition of a service-learning component increases learning outcomes. Astin et al. (2000) report on significant positive impact on critical thinking, GPA (grade point average), and on students' (critical) writing skills. Studies by Frazer et al. (2007), Moely and Ilustre (2014), Liu and Hsiung (2019) documented benefits in knowledge development in service-learning courses. Several studies also reported development of professional skills (Okpala et al., 2009; Carrica-Ochoa, 2017; Martínez-Campillo et al., 2019). Other literature reviews (Rutti et al., 2016; Salam et al., 2019) showed development of student's skills like problem-solving, especially innovative solutions, communication skills,

analytical thinking, critical thinking, ability to work independently, and ability to work in a group.

Other studies were illustrative of the SL courses contributing to the students' prosocial attitudes, and the level of acceptance of cultural diversity and reduction of prejudices (Simons and Cleary, 2006; Sass and Coll, 2015; Augustin and Freshman, 2016; Cabedo et al., 2018). In a recent paper, Brozmanova Gregorova and Heinzova (2019) summarize a series of benefits regarding the students' social functioning and academic performance (Novak et al., 2007; Conway et al., 2009; Yorio and Ye, 2012; Ćulum and Jelenc, 2015), such as: understanding, learning and mastering the theoretical part of the course in relation to real life problems and situations, enabling the ability to develop managing skills in unpredictable situations, developing competences that students can further use at the workplace, expanding the social contacts network—getting to know potential employers, associates, partners, clients, developing a sense of responsibility within the relationship with the community partners etc. When compared with the non-SL courses, studies like Buth's (2008) find that students who participated in SL projects had significantly higher scores on the Civic Action Scale (Moely et al., 2002) than the students from the control group, thus validating SL as a possible mechanism to foster social responsibility in students. There are additional studies that report on positive results in measuring students' civic attitudes, using various instruments, such as: the Community Service Attitude Scale (CSAS, Shiarella et al., 2000), the Civic Action Scale (CAS, Moely et al., 2002), the Civic Engagement Scale, (Doolittle and Faul, 2013). Steinberg et al. (2011) present in their work the basis for assessment and research on the civic outcomes of the SL courses based on the concept of the civic-minded graduate (CMG). Service-learning participants, in comparisons to other students, report greater understanding of community problems (Astin and Sax, 1998), have higher appreciation of and for their own commitment to future engagement in the community (Markus et al., 1993; Eyler and Giles 1994; Reed et al., 2005; Ngai, 2009; Richard et al., 2016), higher social responsibility (Cabedo et al., 2018; Shin et al., 2018) and developed civic competences thanks to service-learning courses (Conrad and Hedine, 1981; Segal, 2011; Greenwood, 2015; Richard et al., 2016; Langhout and Gordon, 2019; Liu and Hsiung, 2019).

The studies mentioned above were conducted in a socio-cultural space with a long tradition of civic engagement through structured volunteering activities in the community (e.g., formal volunteering is documented in the United States from the middle of 1800, by Harris et al., 2016). However, in the countries of our study—Slovakia, Romania and Croatia—that share common historical and political context, such civic engagement was interrupted in totalitarian regimes, or, in 'better' cases, subjected to (strict) governmental control.

This is (mainly) the reason for interpreting the beginning of the '90s as a period of searching and constructing new identities in many CEE countries, as the issue of European integration arose in those countries after the collapse of communism in the early nineties. Dealing with profound transformations in their recent history, these countries were/are more sensitive to the tensions of

the political, economic, educational and cultural (re)organisation. Strengthening of the newly democracy 'agenda', among various efforts, implied that CEE countries, including those three of our study, needed to find innovative means and techniques for making the people, particularly youth, participate in civic and political life. Taking into account all the efforts and numerous changes introduced (in every societal aspect), national education policy frameworks that would support students' civic engagement as part of their (higher) education studies have not been of a priority. Learning about democracy, human rights, political participation, civic engagement, volunteering, social responsibility and activism, has been left dominantly to the non-for-profit organisations' efforts, leaving public educational institutions on the side. It is of no surprise therefore that many EU reports as well as national studies done, prove that Slovakian, Romanian and/or Croatian youth political literacy and civic participation is much lower than of the youth in other European countries with substantial democratic history. For example, according to Flash Eurobarometer 455: European Youth from 2018, involvement in voluntary activities of young people in all three countries is lower than average in EU (SK = 21%, RO = 27%, HR = 23%, EU = 31%; European Union Open Data Portal, 2020). The political interest index in all three countries is also, based on the Standard Eurobarometer 86 realized in 2016, lower than in EU (in EU 17% of population was evaluated with the strong index, in Slovakia and Romania only 8%, and in Croatia 15%; European Union Open Data Portal, 2017). This is why in particular we agree with Gerholz et al. (2017) who argue that the (research) results of many (Western) studies are not directly transferable to different and heterogeneous European contexts, mainly due to huge differences in learning and teaching tradition, and particularly in understanding(s) of society and civic engagement.

Acknowledging those differences and taking into account that the service-learning experience for our research participants is truly a new one, we argue that assessing students' satisfaction with such a course is an initial (research) step that has the potential to inform not only academic community, but university management and other decision-makers in higher education. Previous studies indicate that satisfaction with the engagement experience lends itself to increased commitment, productivity, creativity, and indicates areas of the service-learning course that need improvement (Kerber and Campbell, 1987; Grant et al., 2010). Moley and Ilustre (2014) cited a study by Furco and Moely (2006) which indicates that quality of service learning experience reported by college students is a significant predictor of the SL outcomes in general. Bringle et al. (2010) found that course quality was a significant mediator of the SL effects on students' plans for continued study at the university and their actual re-enrollment the following year. Ensuring that students are satisfied with their engagement experience is critical as it may influence their civic engagement in the future (Wozencroft and Hardin, 2014). Plethora of studies focus on comparative analysis of various aspects of SL and non SL courses and their legacy on students. For example, Gallini and Moely (2003) reported that students involved in SL courses were more appreciative of their courses than a comparable group of students who did not

participate in service-learning, particularly in the context of the academic-related factors. Elyer and Giles (1999) reported that students who participated in SL projects enjoyed their courses, reported substantial learning, and made efforts to seek out further similar engaging experiences. Garcia-Romero et al. (2018), by using the Course Value Inventory scale, showed relevant differences between service-learning and other models of practice from the perspective of students. Students reported higher satisfaction, better perception of personal change and skills acquisition. Results show clear differences in learning results between SL and classical pedagogies.

As indicated by the references mentioned above, we are fully aware that there are many indicators and variables that can be considered when assessing the impact of SL experiences on students. However, due to the exploratory nature of our study within the cooperative framework of SLIHE Erasmus + project, we decided to focus on the satisfaction of students with SL experience, which was assessed in regards to several dimensions, which are translated in the variables described in the following section. The study's exploratory nature resides in the first-ever done collaborative frame of these three countries in the field of SL.

METHODOLOGY—METHOD, PARTICIPANTS AND DATA ANALYSIS

To assess students' multifaceted perceptions of their first-time SL experience, researchers from the SLIHE project developed a questionnaire in English that was later translated into each national language of the participating countries.[3] The questionnaire acknowledges previous studies in the field and includes various dimensions already recognized in similar studies. However, this paper mainly draws from the work of Moely et al. (2002). Knowing that attending the SL courses was a first of such an experience for our research participants, we decided to focus our analysis on the course satisfaction measures developed by Moely et al. (2002), with four key subscales as they follow:

1) *Course Value.* Eight items asked students to evaluate how important or useful the material covered in the academic course had been. Students indicated on a five-point Likert scale their agreement or disagreement with the statements such as: *"It is important for me to learn what is being taught in this course", "I think that I will be able to use what I am learning in this class in other classes later on",* or *"My coursework is relevant to everyday life."*

2) *Learning about the Academic Field.* Five items assessed students' learning from, and interest in, the content of his/ her academic course, such as understanding and

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[3]In each partnering country the questionnaire was subject of a double peer-review process, with national experts in the field being targeted as reviewers. All of their comments and constructive suggestions were acknowledged in creating the final version of the questionnaire.

application of course concepts, interest in the field, and understanding a professional's role in the field of study represented by the course.

3) *Learning about the Community.* Five items assessed students' views of how much they had learned about the community, different cultures, working with others effectively, and seeing social problems in a new way.

4) *Contribution to the Community.* Students completed four items indicating perceptions of how useful their service activities had been to the community.

In **Table 1** we present the results of the data reliability of subscales using Cronbach's Alpha coefficients.

The questionnaire also consists of (nine) open questions allowing students to reflect upon several course-related aspects, among which, new and changing roles in the process of teaching and learning, or to provide more in-depth reflection on the personal changes perceived. Students were invited to fill in the on-line questionnaire at the end of the SL course/semester. The whole instrument completion took approximately 30–45 min, and participants could go 'in-and-out' the questionnaire with the data from each previous session being saved. This allowed students to think about certain issues raised, to reflect upon their experience and then come back with answers. Students were free to choose whether or not they wished to participate.

Participants

A total number of 246 students from Slovakia, Croatia and Romania completed the SLIHE assessment questionnaire of students' assessment of their SL experience, as it follows: Croatia (167 students, University of Rijeka, Faculty of Economics and Business, master level), Slovakia (47 students, 40 females and seven males, age range 20–25 years, Matej Bel University, School of Education, bachelor and master level), and Romania (32 students, 24 females and eight males, age range 19–24 years, Babe-Bolyai University, School of Psychology and Sciences of Education, bachelor level).

Description of the Nature of the Service-Learning Courses

In Romania, the SL component was included in the following four one-semester courses during the academic year 2018–2019, all within the School of Psychology and Sciences of Education, bachelor level: 1) *Psycho-pedagogy of persons with intellectual disabilities* (second year, Department of Special Education); the SL component consisted of individual tutoring projects addressing the learning needs of students in a local Special Education school; 2) *Psycho-biology of sexuality* (second year, Department of Psychology); the SL component consisted of developing of a series of student-for-student Sexual Health Education awareness campaigns, including workshops and discussion sessions with members of the community, such as LGBTQA + associations; 3). *Animal Psychology* (first year, Department of Psychology); the SL projects consisted of several community-oriented campaigns developed by the

TABLE 1 | Cronbach's Alpha for subscales.

Course satisfaction measures subscales	Whole sample	Slovakia	Croatia	Romania
Course value	0.9015	0.79	0.902	0.769
Learning about the academic field	0.848	0.678	0.867	0.715
Learning about the community	0.901	0.79	0.916	0.866
Contribution to the community	0.861	0.819	0.893	0.554

students in collaboration with local and national NGOs in the area of animal protection and with the School of Veterinary Medicine, aiming to promote responsible ownership and optimal human-animal interactions; 4). *Psycho-pedagogy of Early Interventions* (first year, Department of Special Education); the SL component included individual projects of the students, such as designing and implementing daily activities to address specific emotional needs of children in the five local nurseries. There were seven teachers involved in the SL courses (two of them were PhD students).

In Croatia the SL component was included in the following seven one-semester courses during the academic year 2018–2019, all within the Faculty of Economics and Business, master level: 1) Decision Theory, 2) Business logistics, 3) Management of small and medium enterprises, 4) International marketing, 5) Strategic marketing management, 6) Market research, and 7) Internet in Business. In all of the courses, having in mind the disciplinary perceptive, students were collaborating mostly with various business-related stakeholders in the local community, but several non-for profit organisations have been engaged as well. Students were engaged in problem-thinking and problem-solving projects focused on real case studies from the community. During that academic year the Faculty of Economics and Business has been a partner with several local and national NGOs in a large EU funded project related with the food waste and foundation of the food bank, so all of the SL projects were created in line with the mentioned project and related topics. There were all together 12 teachers involved in the courses, seven professors and five teaching assistants.

In Slovakia, the SL component was included in the one-semester courses during the academic year 2018–2019 and 2019–2020, all within the Faculty of Education coordinated by different departments. In bachelor level: 1) *Service-learning for psychology* (second year, Department of Psychology), the SL component consists of planning and implementing intervention in school for talented children; 2) *Social prevention* (second year, Department of Social Work and Department of Pedagogy), SL projects were planned and implemented by teams of students of social work and pedagogy with the aim prevent negative phenomenon in schools and in house for social services; 3) *Economy and management of non-profit organizations* (second year, Department of Social Work in cooperation with the Faculty of Economy), students set up the social enterprise

as an legal entity. In Master level: 4) *Education of children with special needs* (second year, Department of Primary and Pre-primary education); different individual Sl project implemented in after school activities with children with special needs, 5) *Volunteer management* (first year, Department of Social Work), SL project consists of organizing volunteers for special events organized by students; 6) *Pedagogy of leisure-time* (first year, Department of Pedagogy), SL component consists of organizing free time activities for children and youth after school in different organizations. In Slovakia eight teachers participated in the courses.

Data Analysis

Data analysis took two pathways. For the quantitative items (course satisfaction scale), descriptive statistics and comparative analysis of the data were used (three countries—three data sets). The data were analyzed using SPSS version 19.0. We grouped the results in one datasheet and calculated the descriptive characteristics for each scale in each country. Because there was no normal distribution (Shapir-Wilk test of normality), non-parametric tests were used to further test the differences between countries in each of the subscales (Kruskal Wallis test). To look into differences between countries more deeply, we tested the differences in the subscales between each pair of countries (Mann–Whitney *U* test).

As for the qualitative data, students' written reflections from nine open questions were treated as transcripts, and therefore coded thematically. In the first round of coding we searched for the (four) subscales related themes (course value, learning about the academic field, learning about the community, and contribution to the community) to complement the related quantitative data. The second round was more emerging and verbatim-focused, as we approached the data inductively using the constant comparative method of data analysis that involves mining the data, selecting emerging themes, defining categories, and redefining them as new themes or disagreements arise related to a critical reflection on observed themes (Merriam, 1998). We identified the following four categories in response to our interest in students' reflections on their first-ever SL experience: 1) theory and practice synergy, 2) course and real-life relationship, 3) personal growth and professional development, and 4) changing roles and agency. This part of the paper explores and in the interpretation highlights salient points in the students' understanding of their first-ever SL experience and its (perceived) legacy.

FINDINGS AND DISCUSSION

This subchapter serves as a platform for presenting and discussing our findings, organised in two parts—first we will present quantitative data related to students' satisfaction with the SL course, followed by the qualitative

TABLE 2 | Descriptive data in the whole sample (*N* = 245) on the four subscales of the SL-based course satisfaction measures.

Course satisfaction measures	Mean	Median	Std. dev
Course value	4.41	4.5	0.475
Learning about the academic field	4.17	4.2	0.610
Learning about community	4.13	4	0.697
Contribution to the community	4.20	4.25	0.692

analysis of students' reflection on various aspects of their SL experience.

Students' Perspective(s) on Service-Learning Course Satisfaction: Comparative Approach

In this part of the paper we present and discuss the results in regard to the students' satisfaction with the SL course, using the course satisfaction measures developed by Moely et al. (2002). We present the data on the whole sample, while variables of disciplinary field, level of study (undergraduate/graduate) and gender are not in our current focus. We treat students' data set as that of one homogenous group—of students experiencing the SL course for the first time during their studies. The descriptive data in **Table 2** presents students' satisfaction in relation to the four subscales of the measure—course values, learning about the academic field, learning about the community, and contribution to the community—showing average values. **Table 3** presents descriptive data by country. We are also providing **Figure 1**. with average measures for the subscales.

Students in all the three countries assessed the specific dimensions of the course satisfaction measures (very) positively. As shown in **Table 3**, on the five-point Likert scale, where five is the most favorable, the average values for the subscales are between 3.84 and 4.68, with Croatian students scoring a bit lower on all subscales than their counterparts in Slovakia and Romania. Students from both Slovakia and Romania assessed with the highest score the subscale of *Course value*, while their colleagues from Croatia scored the highest on the subscale of *Contribution to the community*. As indicated in **Table 4**, the Kruskal Wallis test showed significant differences between the students' assessment in every subscale depending on the resident country.

To analyze the data more in-depth, differences were tested separately for each pair of countries. As the data in **Table 1** did not show a normal distribution, a nonparametric test was further used (Mann–Whitney *U* test) to compare the results among the three countries, and the results are presented in **Table 5**.

In the subscale *Course value*, differences were observed between the perceptions of students from Slovakia and Croatia, and from Romania and Croatia. The comparative analysis of students' responses indicates that the students from Slovakia and Romania assessed the course value more positively when compared to the students from Croatia. In the following two subscales, *Learning about academic field* and *Learning about community*, significant differences were found

TABLE 3 | Descriptive data by countries (Slovakia, Romania, Croatia) on the four subscales of the SL-based course satisfaction measures.

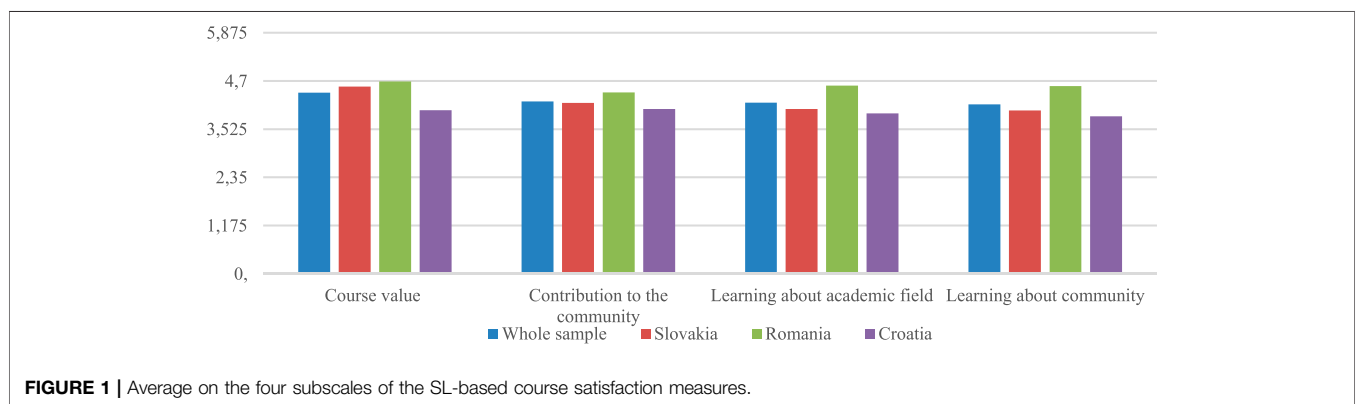| Country/N	Course satisfaction measures	Mean	Median	Std. dev.	Skewness	Kurtosis
Slovakia (N = 47)	Course value	4.56	4.5	0.396	−0.981	1.086
	Learning about the academic field	4.02	4.2	0.585	−1.018	0.561
	Learning about community	3.97	4	0.706	−0.887	1.533
	Contribution to the community	4.16	4.25	0.709	−0.782	0.066
Romania (N = 32)	Course value	4.68	4.75	0.323	−1.598	3.131
	Learning about the academic field	4.59	4.6	0.457	−1.372	1.74
	Learning about community	4.58	4.8	0.529	−1.4	1.267
	Contribution to the community	4.42	4.5	0.540	−0.958	0.17
Croatia (N = 166)	Course value	3.99	4	0.707	−0.474	−0.111
	Learning about the academic field	3.91	4	0.788	−0.656	0.371
	Learning about community	3.84	3.8	0.854	−0.458	−0.143
	Contribution to the community	4.02	4	0.827	−0.926	1.069

FIGURE 1 | Average on the four subscales of the SL-based course satisfaction measures.

TABLE 4 | Comparative analysis of the SL course assessment between countries (Kruskal Wallis test).

Subscale	Course value	Learning about the academic field	Learning about community	Contribution to community
Chi-square	47,521	25,867	22,663	6,526
Df	2	2	2	2
Asymp. Sig.	0.000	0.000	0.000	0.038

TABLE 5 | Comparative analysis of the students' assessment of the SL-based course between pairs of countries (Mann-Whitney U test).

Countries compared	Subscale	Course value	Learning about the academic field	Learning about community	Contribution to community
Slovakia vs. Romania	Mann-Whitney U	607	287	365.5	599.5
	Wilcoxon W	1,735	1,415	1,493.5	1,727.5
	Z	−1.464	−4.685	−3.894	−1.54
	Asymp. Sig. (2-tailed)	0.143	**0.000**	**0.000**	0.124
Slovakia vs. Croatia	Mann-Whitney U	1,961.5	3,674.5	3,511.5	3,541
	Wilcoxon W	15,822.5	17,535.5	17,372.5	17,402
	Z	−5.213	−0.61	−1.049	−0.973
	Asymp. Sig. (2-tailed)	**0.000**	0.542	0.294	0.331
Croatia vs. Romania	Mann-Whitney U	1068.5	1234.5	1304.5	1928.5
	Wilcoxon W	14,929.5	15,095.5	15,165.5	15,789.5
	Z	−5.361	−4.812	−4.58	−2.472
	Asymp. Sig. (2-tailed)	**0.000**	**0.000**	**0.000**	**0.013**

Note: The bold entries indicate the p values < 0.05.

among students from Romania and Slovakia, and among students from Romania and Croatia. The students from Romania assessed the SL course contribution to their learning more positively than their colleagues from Slovakia and Croatia. In the fourth subscale, *Contribution to the community*, differences were identified between the responses offered by the students from Croatia and those of the students from Romania. Specifically, the students from Romania assessed their contribution to the community more positively than the students from Croatia.

We can interpret these differences taking into consideration several factors that we are aware of. To start with, students who participated in this research study are affiliated in different disciplinary fields. Service-learning courses for Croatian students/research participants were organised at the Faculty of Economics and Business, and within the (existing) courses anchored in management and marketing, so it could be that students perceived the SL component of the course as an additional one, or as a supplementary task. In addition, they were working in much bigger groups of students, as each course 'hosts' around one hundred students. Research participants from Romania study at the School of Psychology and Educational Sciences and those from Slovakia at the School of Education. In these two countries, the SL-based courses were delivered to a lower number of students to begin with, and were additionally structured to support teamwork organised around 'small projects'. Also, it is important to mention that one of the courses with SL component in which the students from Romania participated included direct activities with therapy animals (dogs) and interactions with owners of companion animals from the local community. Hence, the variable "animal presence" might be one of the factors associated with the positive perceptions of SL experience by the Romanian students. Literature in the field of human-animal interactions indicates that positive animal presence can bring not only psycho-physiological benefits to humans, but also it can facilitate the social connectedness among people interacting with animals (Komorsky and O'Neal, 2015; Rusu and Davis, 2018). Of course, we have to take into account many other possible reasons related with not only the course structure, but also with the motivation of the actors included, resources available, the quality of collaboration, etc. Nevertheless, all students engaged in this study assessed their satisfaction with all four subscales of the SL course quite high. Compared to the SL students in the study by Moely et al. (2002), our students showed higher average in the subscale *Course value* (difference 0.27), subscale *Learning about academic field* (difference 0.36) and subscale *Learning about community* (difference 0.29). We couldn´t find average data about the subscale *Contribution to the Community* in the Moely's study. Another research study by Garcia-Romero et al. (2018) showed, that students who participated in SL value their practice as more relevant to their learning than those students who participated in the classroom seminar model. Students who participated in SL courses showed a higher level in the subscale assessment of the course, personal learning and behavioral learning compared to non SL students.

Students' Narratives on the Satisfaction With Service-Learning Experience as a Novelty

Students' written reflections were treated as one dataset, meaning that attributes like country, disciplinary field, or gender for example, were not of our research interests in this respect. The rationale behind is the fact that attending the SL course was the first of such an experience for our research participants, thus making them a homogeneous sampling group, with a potential for rich data gathering. Our decision to treat the qualitative data as one dataset was also based on the observed similarity of the students' written reflections in the three countries. Also, it is important to mention that we decided to include here only the students' reflections on the positive aspects of the SL experience. While reflections on the dissatisfaction were collected, they were mainly indicating the students' concerns regarding the lack of official crediting mechanisms for SL experiences. These expressed needs were further translated into recommendations that can be found in detail in the report provided by the SLIHE project (Brozmanova Gregorova et al., 2020). Thematic analysis of students' self-reflection on their SL experience yielded four emerging themes that we derived from their narratives as acknowledged SL course legacy—1) theory and practice synergy, 2) course and real-life relationship, 3) personal growth and professional development, and 4) changing roles and agency. See results of thematic analysis of students' self-reflection in **Scheme 1**.

Students' reflections on their SL experience 'talk' about the constructive alignment between theory and practice that students portrait as *"a pleasant and refreshing experience"*. They are quite unanimous when acknowledging the *"bigger space for the application of theoretical knowledge into practice"* that SL courses offered, making them *"finally more acquainted with what is going on in the field"*. Many of the students recognize the importance of the synergy between theory and practice within the SL courses, and are *"thankful for the possibility to connect the course with professional practice in their field"*. Beside, their narratives are inline with believing in continuity of the knowledge gained at the course, as students talk about how they are *"sure that so many things we have learned at this course we can and will use not only in our professional engagement in the close future, but in everyday life as well"*. Prentice and Robinson (2010), also point to the relevance of the link between the service project and the course content in SL projects.

Another SL course added value that students acknowledged as *"the rare kind of experience"* is related to the relationship being built to better connect courses and the curricular concepts taught, with their real-life application. For students, this was a great platform to make their mark and give their contribution to the community, and they speak very fondly of such an opportunity. As Vogelgesang and Astin (2000) claim, service-learning represents a potentially powerful form of pedagogy because it provides a means of linking two seemingly separated worlds—the academic and the practical one. Service-learning setting allows for those more abstract and theoretical parts of the traditional classroom to be taken on a new level where students have the

SCHEME 1 | Thematic analysis of students' self-refelection.
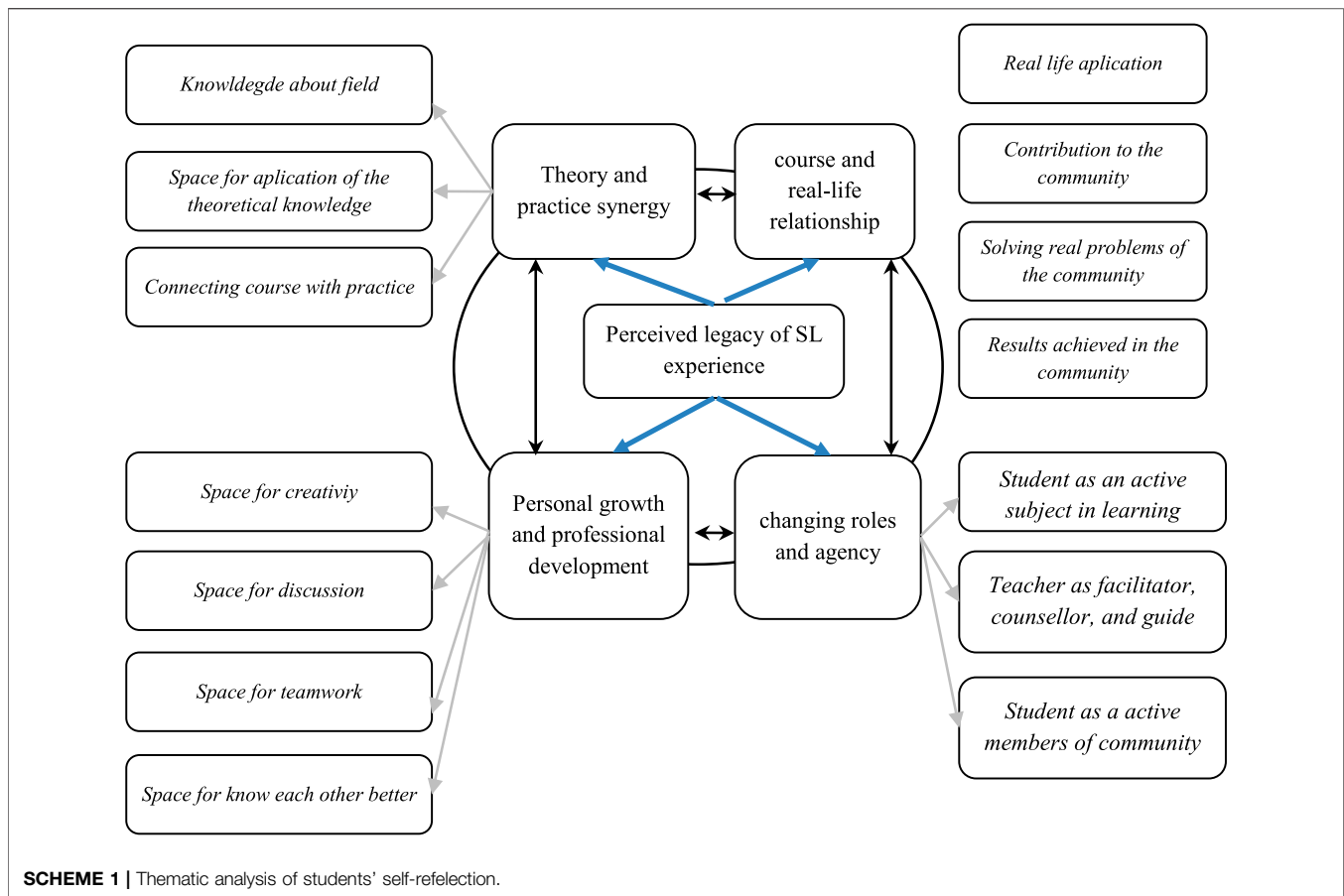
opportunity to construct new knowledge and meanings. Connecting course concepts and real-life application is an essential part of reflection, which is an integral part of SL experience. So, as stated for example, by Godfrey et al. (2005) and Yorio and Ye (2012), the effect of service-learning courses is related to the intensity of the reflection and how students digest and adjust their knowledge acquired during the service activity.

The sense of contributing to the community was closely coupled with the *"possibility of solving real problems of the community"*. What appears to be even more memorable for students is the *"real-life actually matters"* notion that SL course 'produced' while engaging them in various community-based activities. To go even further, students' reflections talk about their gratitude for being engaged into activities that made them *"see the real results of our joint work"*, and being *"very proud of the engagement and the results achieved in the community"*. Leaning on such a positive impression of SL courses serving as a certain university-community link, students find this experience as influential in a long-term run for both themselves, and community partners. They recognize the importance and benefit of their own engagement for the community partners, and community in general, talking about *"the importance of bringing something to that organisation that could help them in their further work"*, about *"new ideas our partners can continue developing even after we finish the course"*, or about *"assisting*

them in acquiring a certain habit of engaging in community-based activities"*. All those nuances aside, students' narratives are quite alike in the context of a shared vision of this SL experience being *"one of the most significant changes"* and *"that kind of a big change because we students were actually contributing to the solutions of real-life problems with our own experience and knowledge"*. In the study conducted by Gerholz et al. (2017), the students also realized that their capabilities could make a valuable contribution to society. On the other hand, students received personal insights into their strengths and weaknesses. Also, in our study, we find out that students named not only what they learned by also what they need to know in the future and that they were able to recognize their limitations. These variations are also pointed out by Yorio and Ye (2012).

Personal growth and professional development is the third perceived legacy of the SL experience that students' narratives reveal. On a personal level students share their appreciation of *"being listened to and invited to share our own ideas"*, as they feel this was crucial to create the space for their self-development and self-realization. There is a shared idea among students that the SL courses they attended contributed significantly to *"the development of each of us"*, and *"the transformation of all students from my group"*. For some, the SL experience was truly transformative, as illustrated by one participant—*"it opened my horizons and changed me"*. In addition to this

personal note, students appreciate the opportunity to be engaged in such a course that successfully facilitates their journey in gaining new knowledge and skills. What they value in particular is the *"learning that grows from different kinds of space and time in the course"*. That different kind of course experience unwinds certain attributes students attach to the SL courses and its legacy on their professional self—*space to express the creativity, safe space to ask any kind of questions, time dedicated to serious discussions, space to communicate openly and freely about every idea, space to actually learn how to work in a team with shared responsibilities, space to know each other better, space that uncovers how their profession looks like in a real-life setting,* and other similar space-constructs. As stated by Gallini and Moely (2003), students participating in service-learning show increased interpersonal and community engagement because of special opportunities offered through the SL experience. The service itself provides students with opportunities to leave the campus and experience the 'real world', i.e., they have opportunities to show initiative, understanding, and flexibility in interacting with new situations and individuals with different backgrounds, thus increasing their engagement with the community. As also stated by Eyler and Gilles (1994), even limited experience may help reshape the way students think about obligations and opportunities for service. Garcia-Romero et al. (2018) have shown that the SL experience has been perceived by the students as relevant for personal change and the learning of professional skills.

The last category presented here as a perceived legacy of the SL experience is related with students' perception on the old and the new roles that various actors play in the SL course, as well as with their perspective on their own post-course agency. Without surprise, students unanimously talk about enjoying the whole process of being an active subject in every aspect, with rights to co-create their own engagement activities, but noticing that such an approach asks for them to act independently and be responsible for the learning process. However, one of the perceived changes students have shared vision about is related with their renewed experience of *"learning being so much fun"*. In comparisons with other courses students reflect upon, they feel a connectedness, or how they phrase it, a *"special bond"* with the SL course and their team projects. While they describe their new roles as *"something completely different"*—those of *course creators, course decision-makers, project developers, active contributors,* or those *actively involved in everything*—the attributes given to their professors are dominantly those of *facilitator, counsellor, and guide.* As also stated by other authors (for example Enos, 2015; Opazo et al., 2014) SL offers students the possibility of carrying out social commitment activities so that they gradually increase their confidence in their ability to improve the environment through practices linked to their professional training and strengthen their leading role in projects.

Such a change echoes in other dimensions as well, for example in changed patterns in communication between students and professors. Students' reflection reveals narratives of satisfaction coming out of an *open and affirmative communication,* *communicating without being afraid, constant communication with constructive feedback, communicating by discussing with arguments, patience that professors had for communicating various issues,* and other similar students' expressions. And last, but certainly not the least, students reflect on the (perceived) changes of their role in society, as this SL experience gave them the *"opportunity to take more active roles in the community"*, thus making them more responsible 'neighbours', since *"we were not mere observers of whatever was going in our community; we actively contributed to re-think existing ideas and efforts in solving some problems by putting our experiences, knowledge, ideas, and engagement out there in the community."* According to Winterbottom et al. (2015) the perception of self-competence fosters the students' potential projection of their future selves, both as professionals and active social agents.

Our findings of students' course satisfaction assessment are in line with Rice's (1996) reflection on service-learning pedagogy, as this (first-ever) SL experience obviously presented a paradigmatic shift, highlighting students' role in their own knowledge (de)construction. Furthermore, this newly service-learning setting provided a platform for changing roles in other aspects as well, so students witnessed the transformation of professors' centrality and power that (usually) comes along with it, as they played the role of facilitators, (successfully) guiding students through their first SL experience.

Our study points to compatibility of service-learning courses with changes advocated in the EU policies focused on higher education—there was a shift made from centrality of teaching on students' learning, giving them alongside an opportunity to co-create the course; SL course enabled previously dominantly autonomous and individualistic engagement of students to transfer into vivid teamwork and collaborative projects with non-academic community; professors encouraged the development of critical thinking, while students independently created meanings of curricular concepts through proactive learning, research, engagement and reflection. Leaning on the contemporary call of European University Association for changing (teaching and learning) paradigm at European universities, our study contributes to the argument that service-learning courses have a potential to be treated as an answer to such a call, as they place students in the core of teaching and learning process, developing their critical thinking and social responsibility.

FINAL REMARKS

The focus of this paper has been on exploring how do (higher education) students from Slovakia, Romania and Croatia appreciate their first-ever service-learning experience. Going back to our first research question—the one that targeted our research participants' satisfaction in relation to the perception of the course value, their own learning about the academic field and the community, and of their personal contribution to the community—our research findings speak in favour of students' satisfaction with their first-ever SL experience, regardless of the country of their residence. Students from all three countries valued their SL experience as one that provided them with possibilities to learn a lot about the academic field and community as well. Beside their positive reflection upon the process of learning,

students think highly of the opportunity given within the SL course in the context of their personal contribution to the community. Knowing that for most of the academics engaged, meaning most of the SL courses our research participants attended this was a first experience with the service-learning pedagogy, we find these results quite important, particularly in the context of further service-learning promotion in national higher education systems of the countries included in the study.

Leaning on the national context just mentioned, findings from our study indicate differences in our research participants' assessment, depending on the country of residence. Without further analysis it is very hard to explain the differences reported (e.g., Croatian students valuing all subscales of the course satisfaction measure lower than their counterparts in Slovakia and Romania), as they may be facilitated by various (non) institutionally related reasons. In addition, students from both Slovakia and Romania assessed with the highest score the subscale of course value, while their student colleagues from Croatia scored the highest on the subscale of contribution to the community. As noted before, at this point we can only speculate if such a difference could be related with students' institutional and disciplinary background, as those from Slovakia and Romania are affiliated within the educational sciences, while those participants from Croatia within the field of economy. Acknowledging the differences, we still may conclude that all 246 students from all three countries expressed high levels of satisfaction with their (first) SL course. As already mentioned, the aspects related to the dissatisfaction with SL experience, in all the three countries, reflected the need of students for forms of official recognition of their engagement in SL experiences, e.g., ECTS. Although these aspects were not discussed in this paper, they were addressed in the recommendations developed within the SLIHE Erasmus + collaborative project (Brozmanova Gregorova et al., 2020). For example, one of the recommendations is to build awareness of the positive impacts of SL experience on students before implementing SL projects by offering them access to research-informed examples of SL good practices and testimonials of other students who have already experienced SL. Thus, it is assumed that the students might develop an intrinsic motivation for SL experiences, including those students that are coming from educational systems that had not yet developed an official recognition system of the SL experiences.

Building upon students' satisfaction, we wanted to further explore how students portray the 'novelty' that SL experience brought on their personal, educational and professional paths, which brings us to our third, and last research question. Our findings speak highly in favour of transformative potential and changing narratives of various aspects of their (higher) education experience and personal agency. Students find their experience within the SL course prosperous in many contexts, both academic and non-academic related. As for those aligned with the academic context, students appreciate the opportunity to place their learning in such a structured course that connected them with the profession in the field, and allowed them to actively participate in various problem-solving projects, thus creating connectedness with the real-life setting. Continuing, students highly value the opportunity to experience a certain role change, as their narratives talk about their responsibility and 'ownership' of the course and the process of learning, while they perceive professors as facilitators. When reflecting upon their SL experience, a lot of students drew

comparisons on other courses, claiming that the SL course provided them with opportunities to take the curricular concepts on a whole different level of understanding and practicing. As for the non-academic related 'legacy', students' reflection disclose their acknowledgment of personal growth and changes related with cognitive, emotional and behavioural dimensions. Our results are similar to the conclusions of the study provided by Garcia-Romero et al. (2018). They found indicators that service-learning contributes to the construction of authentic learning, and hence, to changes in the students' identity, i.e., the relation with the object of knowledge, social commitment and their self-concept as agents of change. In the same line, due to the promising results of this exploratory investigation of student's perceptions of their first SL experience, future studies are planning to be performed in the three countries following experimental designs with control groups and repeated measures, as well as in-depth qualitative interviews. Moreover, based on the already existing frame of collaboration among the three countries, future studies are being planned to explore comparatively multiple aspects (e.g., satisfaction, academic achievements, civic attitudes, etc.) of students' engagement in service-learning.

Our study has certain limitations we are well aware of. To start with, the study did not include a control group of the non-SL course attendees. This would be a serious limitation if we wanted to argue that SL experience by default provides the narratives of satisfaction, change and transformative potential, that we discuss in this paper. However, we do not have such an ambition, as we merely acknowledge the fact that for our research participants attending the SL courses was a novelty on their educational path—they had never (or barely) been exposed to such a teaching and learning experience prior to this course; the reflexive nature of many assignments presented novelty *per se*, as well. Their learning had not been placed before in such an environment where they are true collaborators, treated as active contributors to their community. Counting all that, this paper gives students' voice of that novelty experience, trying to better understand various meanings that students attribute to their (first) SL journey. We do believe that within the (HE) institutional environment where service-learning has just start 'knocking on the door' and is still not recognised as an innovative pedagogy, like it is the case for Slovakian, Romanian and Croatian higher education, studies like this can contribute to the evidence-based platform of students' satisfaction with such organised teaching and learning process, as well as for arguing its transformative potential. For sure, those areas of inquiry call for more research in the European context, and are especially suited for the qualitative studies that can contribute to better understanding of various contextual factors that this particular study of ours has (deliberately) left out of the focus. Another set of limitations arises from the purposeful sampling as our research participants were only those students who attended the courses run by the academics who started their SL courses under the SLIHE team guidance. In addition, we haven't looked into particularities related to disciplinary backgrounds, gender, level of study and other (contextual) variables that we have in our datasets. For this particular paper we wanted to treat all 246 students as one 'subculture', with mere look into the country specifics, so we do suggest further analysis and comparisons that will take more into account other relevant contextual aspects.

Despite the limitations discussed, mirroring students' narratives of satisfaction and change, we can say they divulge students' inclination towards this *"completely different experience"* that *"made all students more active"*—not only as 'authorities' responsible of their own learning process, but as responsible neighbours in their communities as well. At the end, we do strongly believe this is actually one of the SL courses greatest legacy—the group of young people appreciative of (new) learning and supportive of (positive) changes in their communities.

DATA AVAILABILITY STATEMENT

The raw data supporting the conclusions of this article will be made available by the authors, without undue reservation.

ETHICS STATEMENT

Ethical review and approval was not required for the study on human participants in accordance with the local legislation and institutional requirements. The patients/participants provided their written informed consent to participate in this study.

AUTHOR CONTRIBUTIONS

All authors made substantial contributions to the theoretical framework of the manuscript and the data collection. Specific contributions were made as it follows: BI has contributed to the coordination of tasks in the writing process, with a special attention to introduction, results, discussion and text finalization; AG has contributed with performing the statistical quantitative and qualitative analyses, with a special attention to introduction, methodology, and the results; AR has contributed with the elaboration of the introduction and interpretation of the results.

FUNDING

ACKNOWLEDGMENTS

REFERENCES

Astin, A. W., and Sax, L. J. (1998). How undergraduates are affected by service participation. *J. Coll. Student Dev.* 39, 251–262.

Astin, A. W., Vogelgesang, L. J., Ikeda, E. K., and Yee, J. A. (2000). *How service-learning affects students*. Los Angeles, CA: University of California.

Augustin, F., and Freshman, B. (2016). The effects of service-learning on college students' attitudes toward older adults. *Gerontol. Geriatr. Educ.* 37 (2), 123–144. doi:10.1080/02701960.2015.1079705

Bringle, R. G., Hatcher, J. A., and Muthiah, R. N. (2010). The role of service-learning on the retention of first-year students to second year. *Mich. J. Community Serv. Learn.* 16 (2), 38–49.

Brozmanova Gregorova, A., Bariaková, Z., Kubišová, Ľ., Murray Svidroňová, M., and Šolcová, J. (2019). *Report from mapping of the educational situation in the Central and Eastern European region with focus on service-learning*. Ciudad Autónoma de Buenos Aires: CLAYSS.

Brozmanova Gregorova, A., and Heinzova, Z. (2019). Specifics of measuring social and personal responsibility of university students after completion of a service-learning course in Slovak conditions. *J. Higher Educ. Outreach Engagem.* 23 (3), 104–120.

Brozmanova Gregorova, A., Matulayová, T., Tkadlčíková, L., Rusu, A. S., Costea Barlutiu, C., Fellner, M., et al. (2020). *Recommendations for promoting and strengthening service-learning in European higher education*. Rijeka: Faculty of Humanities and Social Sciences in Rijeka.

Buch, K. (2008). Building community through service-learning. *Acad. Exchange Q.* 12 (3), 57–61.

Cabedo, L., Royo, M., Moliner, L., and Guraya, T. (2018). University social responsibility towards engineering undergraduates: the effect of methodology on a service-learning experience. *Sustainability* 10 (6), 1823. doi:10.3390/su10061823

Carrica-Ochoa, S. (2017). La educación emocional del docente y su labor: una experiencia de Aprendizaje-Servicio en la universidad y su evaluación. *Contextos educativos* 20, 147–164. doi:10.18172/con.2995

Conrad, D., and Hedin, D. (1981). *Instruments and scoring guide of the experiential education evaluation project*. St. Paul, MN: Center for Youth Development and Research.

Conway, J. M., Amel, E. L., and Gerwien, D. P. (2009). Teaching and learning in the social context: a meta-analysis of service learning's effects on academic, personal, social, and citizenship outcomes. *Teach. Psychol.* 36, 233–245. doi:10.1080/00986280903172969

Ćulum, B., and Jelenc, L. (2015). *Učenje zalaganjem u zajednici, Prikaz modela, iskustava i smjernica za primjenu*. Rijeka: Sveučilište u Rijeci.

Doolittle, A., and Faul, A. (2013). Civic engagement scale. *SAGE Open* 3, 1–7. doi:10.1177/2158244013495542

Enos, S. (2015). *Service-learning and social entrepreneurship in higher education: a pedagogy of social change*. New York: Palgrave Pivot.

ENQA (2015). Standards and guidelines for quality assurance in the European higher education area. Available at: http://www.eua.be/Libraries/quality-assurance/esg_2015.pdf ?sfvrsn=0 (Accessed July 1, 2020).

EUA (2010). *Trends 2010: a decade of change in European higher education*. Brussels: European University Association.

EUA (2015). *Trends 2015: learning and teaching in European Universities*. Brussels: European University Association.

European Commission (2013). Report to the European Commission on improving the quality of teaching and learning in europe's higher education institutions. Available at: http://ec.europa.eu/dgs/education_culture/repository/education/library/reports/modernisation_en.pdf (Accessed July 10, 2020).

European Commission (2017). Comminication from the Commission to the European Parlament, the Council, The European economic and social comitee of the regions on a renewed EU agenda for higher education. Available at: https://eur-lex.europa.eu/legal-content/EN/TXT/?uri=CELEX%3A52017DC024774 (Accessed July 8, 2020).

European Union Open Data Portal (2017). *Standard eurobarometer 86.* Brussels: Directorate general for communication.

European Union Open Data Portal (2020). *Flash eurobarometer 455: European Youth.* Brussels: Directorate general for communication.

Eyler, J., Giles, D. E., Stenson, C. M., and Gray, C. J. (2001). *At a glance: what we know about the effects of service-learning on college students, faculty, institutions and communities, 1993–2000.* Nashville, TN: Vanderbilt University.

Eyler, J., and Giles, D. E. (1994). The impact of a college community service laboratory on students' personal, social, and cognitive outcomes. *J. Adolescence* 17, 327–339. doi:10.1006/jado.1994.1030

Eyler, J., and Giles, D. E. (1999). *Where's the learning in service-learning?.* San Francisco, CA: Jossey-Bass.

Frazer, L., Raasch, M., Pertzborn, D., and Bradley, F. (2007). The impact of community clients on student learning: the case of a university service-learning course. *J. Exp. Educ.* 29 (3), 407–412. doi:10.1177/105382590702900317

Furco, A., and Moely, B. E. (2006). "A comparative analysis of the impacts of service-learning on students,"in Paper presented at the annual meeting of the American Educational Research Association, San Francisco, CA.

Gallini, S., and Moely, B. (2003). Service-learning and engagement, academic challenge, and retention. *Mich. J. Community Serv. Learn.* 10 (1), 5–14.

García Romero, D., Sànchez Busqués, S., and Lalueza Sazatornil, J. L. (2018). Exploring the value of service learning: students' assessments of personal, procedural and content learning. *Estudios Sobre Educación* 35, 557–577. doi:10.15581/004.35.557-577

Gerholz, K.-H., Liszt, V., and Klingsieck, K. B. (2017). Effects of learning design patterns in service learning courses. *Active Learn. Higher Educ.* 19 (1), 47–59. doi:10.1177/1469787417721420

Godfrey, P. C., Illes, L. M., and Berry, G. R. (2005). Creating breadth in business education through service-learning. *AMLE* 4 (3), 309–323. doi:10.5465/amle.2005.18122420

Grant, A., Fried, Y., and Juillerat, T. (2010). "Workmatters. Job design in classical and contemporary perspectives," in *APA handbook of industrial and organizational psychology.* Editor S. Zedeck (Washington: APA), 417–453.

Greenwood, A., and Topiwala, H. (2015). Race and medicine. *J. Educ. Train. Stud.* 3 (3), 61–84. doi:10.1057/9781137440532_4

Harris, B., Morris, A., Ascough, R. S., Chikoto, G. L., Elson, P. R., McLoughlin, J., et al. (2016). "History of associations and volunteering," in *Palgrave research handbook on volunteering and nonprofit associations.* Editors D. H. Smith, R. A. Stebbins, and J. Grotz (London: Palgrave Macmillan).

Kerber, K. W., and Campbell, J. P. (1987). Job satisfaction: identifying the important parts among computer sales and service personnel. *J. Bus Psychol.* 1 (4), 337–352. doi:10.1007/bf01018143

Komorosky, D., and O'Neal, K. K. (2015). The development of empathy and prosocial behavior through humane education, restorative justice, and animal-assisted programs. *Contemp. Justice Rev.* 18, 395–406. doi:10.1080/10282580.2015.1093684

Langhout, R. D., and Gordon, D. L. (2019). Outcomes for underrepresented and misrepresented college students in service-learning classes: supporting agents of change. *J. Divers. Higher Educ.* [Epub ahead of print]. doi:10.1037/dhe0000151

Liu, R.-L., and Hsiung, H.-l. (2019). The impact on the learning outcomes of service-learning curriculum for college students in Taiwan. *Citizensh. Teach. Learn.* 14 (2), 213–223. doi:10.1386/ctl_00006_1

Markus, G. B., Howard, J. P. F., and King, D. C. (1993). Integrating community service and classroom instruction enhances learning: results from an experiment. *Educ. Eval. Pol. Anal.* 15, 410–419. doi:10.2307/1164538

Martínez-Campillo, A., Sierra-Fernández, M. d. P., and Fernández-Santos, Y. (2019). Service-learning for sustainability entrepreneurship in rural areas: What is its global impact on business university students?. *Sustainability* 11 (19), 5296. doi:10.3390/su11195296

Merriam, S. B. (1998). *Qualitative research and case study applications in education.* San Francisco: Jossey-Bass.

Moely, B., and Ilustre, V. (2014). The impact of service-learning course characteristics on university students' learning outcomes. *Mich. J. Serv. Learn.* 21 (1), 5–16.

Moely, B., McFarland, M., Miron, D., Mercer, S., and Ilustre, V. (2002). Changes in college students' attitudes and intentions for civic involvement as a function of service learning experiences. *Mich. J. Serv. Learn.* 9 (1), 18–26.

Ngai, S. S. (2009). The effects of program characteristics and psychological engagement on service-learning outcomes: a study of university students in Hong Kong. *Adolescence* 44 (174), 375–389.

Novak, J. M., Markey, V., and Allen, M. (2007). Evaluating cognitive outcomes of service learning in higher education: a meta-analysis. *Commun. Res. Rep.* 24 (2), 149–157. doi:10.1080/08824090701304881

Okpala, C. O., Sturdivant, L., and Hopson, L. (2009). Assessment of the impact of service learning on academic growth of college students. *J. Coll. Teach. Learn.* 6 (4), 65–68. doi:10.19030/tlc.v6i4.1156

Opazo, H., Aramburuzabala, P., and García-Peinado, R. (2014). Service-learning methodology as a tool of ethical development: reflections from the university experience. *All Ireland J. Teach. Learn. Higher Educ.* 6, 1531–1556.

Prentice, M., and Robinson, G. (2010). Improving student learning outcomes with service learning. american association of community colleges. Available at: https://www.researchgate.net/publication/242562014_Improving_Student_Learning_Outcomes_with_Service_Learning (Accessed May 15, 2020).

Reed, V. A., Jernstedt, G., Hawley, J. K., Reber, E. S., and DuBois, C. A. (2005). Effects of a small-scale, very short-term service-learning experience on college students. *J. Adolesc.* 28 (3), 359–368. doi:10.1016/j.adolescence.2004.08.003

Rice, R. E. (1996). *Making a place for the new American scholar.* Washington, D.C.: American Association for Higher Education.

Richard, D., Keen, C., Hatcher, J. A., and Pease, H. A. (2016). Pathways to adult civic engagement: benefits of reflection and dialogue across difference in higher education service-learning programs. *Mich. J. Community Serv. Learn.* 23 (1), 60–74.

Rusu, A. S., and Davis, R. (2018). "Civic engagement of students through human-animal interactions: ideas for an Interdisciplinary Service Learning-based curriculum," in CIEA 2018 Proceedings of the fifth international conference on adult education, Iasi, Romania, April 25th–27th, 2018, 583–590.

Rutti, R. M., LaBonte, J., Helms, M. M., Hervani, A. A., and Sarkarat, S. (2016). The service learning projects: stakeholder benefits and potential class topics. *Educ. Train.* 58 (4), 422–438. doi:10.1108/et-06-2015-0050

Salam, M., Awang Iskandar, D. N., Ibrahim, D. H. A., and Farooq, M. S. (2019). Service learning in higher education: a systematic literature review. *Asia Pac. Educ. Rev.* 20, 573–593. doi:10.1007/s12564-019-09580-6

Sass, M. S., and Coll, K. (2015). The effect of service learning on community college students. *Community Coll. J. Res. Pract.* 39 (3), 280–288. doi:10.1080/10668926.2012.756838

Segal, E. A. (2011). Social empathy: a model built on empathy, contextual understanding, and social responsibility that promotes social justice. *J. Soc. Serv. Res.* 37, 266–277. doi:10.1080/01488376.2011.564040

Shiarella, A. H., McCarthy, A. M., and Tucker, M. L. (2000). Development and construct validity of scores on the community service attitudes scale. *Educ. Psychol. Meas.* 60 (2), 286–300. doi:10.1177/00131640021970510

Shin, J., Kim, M.-S., Hwang, H., and Lee, B.-Y. (2018). Effects of intrinsic motivation and informative feedback in service-learning on the development of college students' life purpose. *J. Moral Educ.* 47 (2), 159–174. doi:10.1080/03057240.2017.1419943

Simons, L., and Cleary, B. (2006). The influence of service learning on students' personal and social development. *Coll. Teach.* 54 (4), 307–319. doi:10.3200/ctch.54.4.307-319

Steinberg, K. S., Hatcher, J. A., and Bringle, R. G. (2011). Civic-minded graduate: a north star. *Mich. J. Community Serv. Learn.* 18 (1), 19–33.

Vogelgesang, L. J., and Astin, A. W. (2000). Comparing the effects of community service and service-learning. *Mich. J. Community Serv. Learn.* 7 (1), 25–34.

Winterbottom, C., Lake, V. E., Ethridge, E. A., Kelly, L., and Stubblefield, J. L. (2015). Fostering social justice through service-learning in early childhood teacher education. *Revista Int. De Educ. Para La Justicia Soc.* 2 (2), 33–53.

Wozencroft, A. J., and Hardin, R. (2014). Students' job satisfaction in a therapeutic recreation service learning project. *J. Hospitality Leis. Sport Tourism Educ.* 15, 103–115. doi:10.1016/j.jhlste.2014.07.001

Yorio, P. L., and Ye, F. (2012). A meta-analysis on the effects of service-learning on the social, personal, and cognitive outcomes of learning. *AMLE* 11 (1), 9–27. doi:10.5465/amle.2010.0072