

## ORIGINAL ARTICLE

# Understanding the Social Variations of Nursing Students' Service-Learning and its Effect on Development of Vocational and Social Responsibility

## Hizmet Ederek Öğrenme Yaklaşımının Hemşirelik Öğrencilerinin Mesleki ve Sosyal Sorumluluk Gelişimine Etkisinin İncelenmesi

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## ABSTRACT

**Aim:** The study which was carried on to define the effectiveness of the service-learning approach was realised with 2nd Grade nursing students of the faculty of health sciences of a state university operating in Türkiye during the fall semester of the 2022-2023 academic year (14 weeks).

**Material and Methods:** In this study using mixed methods, the sample group of the quantitative research consisted of 132 students. For this purpose, "Personal and Social Responsibility Questionnaire and Service-Learning Scale", validity and reliability of which was proved, was used. The qualitative part of the research was conducted with 10 participants who participated in the whole process of the study and a semi-structured questionnaire was used. In the qualitative part of the study, it was aimed to gain profound knowledge through the experiences that participants gained during the service-learning process.

**Results:** It was determined that the average score of the students participating in the research was  $58.51 \pm 17.59$  in the pre-test application of the personal and social responsibility survey and  $62.59 \pm 10.13$  in the post-test application. In addition, the average of the scores the students received in the pre-test from the total service-learning scale was  $82.78 \pm 13.88$ ; It was determined that the average score they received in the post-test was  $86.00 \pm 10.69$ . Qualitative data show that the service-learning approach positively contributed to the development of the participants' insight into the importance of community work, helped them understand social diversity, helped them develop social skills and increased their sense of responsibility.

**Conclusion:** Service-learning positively affected students' knowledge of vocational and social responsibility and their self-assessment of knowledge-skill-attitudes. It is recommended that the service-learning approach be used to teach nursing vocational and social responsibility.

**Keywords:** Nursing education, Nursing students, Service-learning, Social responsibility, Vocational development.

## ÖZ

**Amaç:** Hizmet ederek öğrenme yaklaşımının etkililiğini belirlemek amacıyla yürütülen çalışma, Türkiye'de faaliyet gösteren bir devlet üniversitesinin sağlık bilimleri fakültesi 2. sınıf hemşirelik öğrencileri ile 2022-2023 eğitim-öğretim yılı güz döneminde (14 hafta) yapılmıştır.

**Gereç ve Yöntem:** Karma yöntem kullanılarak yapılan bu çalışmada nicel araştırmanın örneklem grubu 132 öğrenciden oluşmuştur. Bu amaçla geçerliliği ve güvenilirliği kanıtlanmış "Bireysel ve Sosyal Sorumluluk Ölçeği ve Hizmet Ederek Öğrenme Ölçeği" kullanılmıştır. Araştırmanın nitel kısmı çalışmanın tamamına katılan 10 katılımcı ile gerçekleştirilmiş olup yarı yapılandırılmış anket kullanılmıştır. Araştırmanın nitel kısmında ise katılımcıların hizmet ederek öğrenme sürecinde edindikleri deneyimler aracılığıyla derinlemesine bilgi edinmesi amaçlanmıştır.

**Bulgular:** Araştırmaya katılan öğrencilerin Bireysel ve Sosyal Sorumluluk Ölçeği'nin ön test uygulamasında ortalama puanının  $58,51 \pm 17,59$ , son test uygulamasında ise  $62,59 \pm 10,13$  olduğu belirlenmiştir. Ayrıca öğrencilerin hizmet ederek öğrenme toplam ölçeğinden ön testte aldıkları puanların ortalaması  $82,78 \pm 13,88$ ; Son testte aldıkları puan ortalamasının  $86,00 \pm 10,69$  olduğu saptanmıştır. Araştırmanın nitel verileri, hizmet ederek öğrenme yaklaşımının katılımcıların toplum için çalışmasının önemine dair içgörülerinin gelişmesine olumlu katkıda bulunduğunu, sosyal çeşitliliği anlamalarına yardımcı olduğunu, sosyal becerilerinin gelişmesine yardımcı olduğunu ve sorumluluk duygularının arttığını göstermektedir.

**Sonuç:** Hizmet ederek öğrenme, öğrencilerin mesleki ve sosyal sorumluluk bilgilerini ve bilgi-beceri tutumlarına ilişkin öz değerlendirme sonuçları olumlu yönde etkilemiştir. Hemşireliğin mesleki ve sosyal sorumluluğunu öğretmek için hizmet ederek öğrenme yaklaşımının kullanılması önerilmektedir.

**Anahtar kelimeler:** Hemşirelik eğitimi, Hemşirelik öğrencileri, Hizmet ederek öğrenme, Sosyal sorumluluk, Mesleki gelişim.

## Introduction

Social responsibility, associated with the activities that a person or an institution works for for the benefits of community without taking into account her own interests or putting herself in the forefront, is an ideological concept aiming institutions or communities not to behave unethically, instead to contribute voluntarily to the welfare of the community where they interact and operate. As a matter of fact, educational institutions fulfil their responsibilities by educating their

students as individuals responsive to the environment and society (1). At this point, the question "what is the concept of the service-learning (CSL) in terms of its relation with social responsibility" is thought to be appropriate. Tens of descriptions have been developed for the CSL and it is generally stated that the service-learning is shaped around a "programme type and educational philosophy" theme (2). When the relevant literature taken into consideration, this concept is

understood to be defined as "educational experience based on modular (credit) lessons where students participate in organized service activities that meet the defined social needs; and also the experience where they reflect through service activities that enable students to gain a better understanding about the content of the lessons, to grasp the importance given to this discipline and to increase their commitment to personal values and civic responsibilities. According to the definition in question, it is expected that the service-learning should have an academic activity, contribute to the objectives of the lessons and create meaningful learning, and should carry a meaning for both the student and stakeholder of the society. However, one of the most important objectives of the service-learning is to gain civic responsibility (3). Facts such as offering meaningful and relevant services to the society, encouraging academic learning and preparation of the individual for active citizenship process are among the criteria required to enable learning by service and to make it a part of an academic programme (4).

The CSL is a reflective and relational pedagogy connecting community and public services with structural learning opportunities. This method prepares students to solve community-based problems on a practical level rather than focusing on preparing them for a specific job. Students are offered to discover the connections between the theoretical area of the classroom and the practical needs of the society. Perhaps the most important benefit of the service-learning is students' connection to a community and the motivation and the opportunity that the CSL would provide for them to define their own roles within that community (5). It increases academic achievement, enables school attendance in terms of learning responsibility and provides additional support for commitment to classroom work and high exam grades (6).

At the same time, while developing self-concept, self-esteem, self-efficacy in terms of identity development (7), it enables establishing positive relations by connecting the student with the society (8), and therefore supports fair society (9). In order for learning from service experience to have the desired level of impact, the CSL policy needs to be designed to facilitate the development of these skills as part of or in addition to other learning objectives. It is stated that the way to realise this is including students in the environments, processes, and interactions where the concept in question exists and can be critically examined and by comparing different worldviews (10).

No study has been found in the literature examining the service-learning approach of nursing students. In this regard, the study will be conducted to examine the effect of the service-learning approach on the professional and social responsibility development of nursing students.

## Material and Methods

### Subject of the Research

In the research conducted with the combination of qualitative and quantitative method and details of which are given in methodology chapter, it is aimed to find out whether the CSL activities contribute to the social responsibility and vocational skills of the students; and the study is designed in a way to answer the questions below:

If there are any significant difference between pre-test and post-test performances of the students participating in the CSL activities

To compare the results gained with the students who did not participate in the CSL activities

To find out whether the CSL activities contribute to the development of the social responsibility skills of the students.

### Universe and sample

The population of the research consists of the 2nd Grade nursing students of the faculty of health sciences of a state university in Türkiye. Sample of the research consists of the students taking an "Emergency Care and First Aid" lesson, in which the social responsibility levels of the students came to the fore the most. In this study, the sample size calculation developed by Krejcie and Morgan in 1970 was used. In the mentioned method, it is stated that according to  $\alpha=0.05$  significance and  $\pm 5\%$  error margin in a population consisting of 168 people, the required sample number is supposed to be 126. (11). Starting from these data, the research has been realised with 132 students (78.5% of the universe has been reached). The qualitative research part of the study has been carried out with 10 students who have participated in the pre- and post- tests.

### Data collection tools

The research is based on a combined qualitative and quantitative approach. In the quantitative part of the research "The CSL Scale and Social Responsibility Scale" validity and reliability of which was proven was used. In the qualitative part 10 participants were asked a semi-structured questionnaire. Before the interview, participants were briefly informed about the content of the research. It was stated that voice recorders would be used in order not to lose any data, and these would be used under the scope of the research and never be shared with the third parties. It was informed that participating in the research was voluntary and interviews lasted around 30 minutes on average. As the data from the participants were protected, they were coded as P1, P2, P3, ... and so on; no changes were made in the views of the participants and they were directly transferred.

### The service-learning scale

The original form of the scale is "Short Version of Scale of Service-Learning Involvement (SSLI)" and developed by Olney and Grande in 1995. Original language of the scale is English. Küçükoğlu and Ozan adapted The

Service-Learning Scale into Turkish in 2015. The internal consistency reliability parameter of the scale was found as .85 and the test-retest reliability coefficient was .81. The adapted scale consists of 30 items and is in 4-point Likert type (12).

### Personal and social responsibility questionnaire

The original form of the scale is "Personal and Social Responsibility Questionnaire (PSRQ)" and developed by Li Weidong, Paul M. Wright, Paul B. Rukavina and Molly Pickering in 2008. Original language of the scale is English. Filiz and Demirhan adapted the Personal and Social Responsibility Questionnaire (PSRQ) into Turkish in 2015. PSRQ can be used for different disciplines covering studies on responsibility behaviours. Within the scope of the reliability study, the internal consistency parameter was calculated as .925. It was determined that the Pearson Product Moment Correlation Coefficient calculated for the test-retest reliability study was significant. Findings from Confirmatory Factor Analysis showed that the structure composed of Exploratory Factor Analysis was at an acceptable level. The adapted scale consists of 13 items and is in 6-point Likert type (13).

### Semi-structured questionnaire

Research questions were prepared by taking the national and international literature into consideration. The reason why semi-structured questions were preferred was that they were neither as rigid as structured questions nor as flexible as unstructured questions. Therefore, since it is located between the two extremes, it was aimed to enable the participants to express their views on the subject more clearly. For this purpose, 11 questions were directed to the participants.

### Implementation background of the research

The research was completed in 14 weeks in the Fall Semester of the 2022-2023 Academic Year. First of all, the pre-test of the research was presented on 12 October 2022 and the CSL was introduced to this group. In the following weeks, workshops in and outside the classroom and activities based on social responsibility were carried out with the students participating in the study within the scope of the CSL. For instance, as part of extracurricular activities, a "Healthy Life Activity" was organized in the foyer area of the university campus on 29 December 2022. The last test of the study was conducted on 10 January 2023, which was in the last week of the Fall Semester. Qualitative interviews were held again this week. Qualitative data were checked using "Standards for Reporting Qualitative Research (SRQR)".

### Analysis of data

Data of the study were analyzed with IBM SPSS 23v package programme. After that, reliability of both the pre-test and post-test implementations of the scales used in the research was presented through the Cronbach Alpha internal consistency coefficient. An alpha coefficient of less than 0.5 is unacceptably

reliable, between 0.5 and 0.6 is poorly reliable, between 0.6 and 0.7 is acceptably reliable; between 0.7 and 0.9 means good reliability and if it is higher than 0.9, it shows that it is perfectly reliable (14).

After determining those scales yielded reliable results, the normal distribution situation of both the scales and the differences between the pre-test and post-test scores were examined in order to decide on the tests to be used in the analysis. Due to the normal distribution of the pre-test scores of the Personal and Social Responsibility Questionnaire and The CSL Scale, the relationship between the scales was examined with Pearson Product Moment Correlation; since the post-test scores did not show normal distribution, the relationship between the scales was examined through Spearman Rank Differences Correlation; and significant differences between the scores were examined using the Dependent Samples t-Test as the differences between the measurements showed a normal distribution.

Correlation coefficients between 0 and 0.30 were interpreted as low, between 0.30 and 0.70 as medium, between 0.70 and 1 as an indicator of a high level of correlation (15). For the pre-test and post-test measurements, the size of the differences between the units was calculated by Eta squared. An eta square ( $\eta^2$ ) of 0.01 was interpreted as low, 0.06 medium, and 0.138 as an indicator of a difference with a high effect size (16).

### Reliability analysis

Alpha coefficient was found as 0.977 in the pre-test application of the one-dimensional Personal and Social Responsibility Questionnaire and 0.901 in the post-test application and it was seen that it was perfectly reliable for both applications. Alpha coefficient was found as 0.826 for the pre-test application and 0.817 for the post-test application of the CSL Scale in general, and it was highly reliable for both applications.

### Results

According to Table 1, 0.8% of the students participating in the research were 18 years old ( $n=1$ ), 22.7% of them 19 ( $n=30$ ), 34.8% of them 20 ( $n=46$ ), 21.2% of them 21 ( $n=28$ ), 6.8% of them 22 ( $n=9$ ), 6.8% of them 23 ( $n=9$ ), 0.8% of them 24 ( $n=1$ ), 3.8% of them 25 ( $n=5$ ), 1.5% of them 26 ( $n=2$ ) and 0.8% of them were 30 years old ( $n=1$ ). 3% of the students participating in the research were married ( $n=4$ ), 97% of them were single ( $n=128$ ) 72.7% of the students were female ( $n=96$ ) and 27.3% of them were male ( $n=36$ ). The place where 14.4% of students lived the longest was a village ( $n=19$ ), 31.8% of them lived in a district ( $n=42$ ), 22.7% of them lived in a province ( $n=30$ ) and 31.1% of them lived in a big city ( $n=41$ ). 21.2% of the students still lived with their parents ( $n=28$ ), 19.7% of them lived with their friends at home ( $n=26$ ) and 50.8% of them lived in a state hotel ( $n=67$ ) and 8.3% of them lived in a private hostel ( $n=11$ ). According to Table 2, 34.8% of the students participating in the research were 20 years old ( $n=46$ ), 97% of them were single ( $n=128$ ), 72.7% of them were

female (n=96). The place where 31.8 % of students lived the longest was a district (n=42) and during the research was conducted 50.8 % of the students were staying in the state dormitory (n=67).

**Table 1.** Information on students participating in the research.

Variable	Category	N	%
Age	18	1	.8
	19	30	22.7
	20	46	34.8
	21	28	21.2
	22	9	6.8
	23	9	6.8
	24	1	.8
	25	5	3.8
	26	2	1.5
Marital Status	Married	4	3.0
	Single	128	97.0
Gender	Female	96	72.7
	Male	36	27.3
The place where they have lived the longest	Village	19	14.4
	District	42	31.8
	Province	30	22.7
	Big city	41	31.1
The place they live in now	With the family	28	21.2
	At home with friends	26	19.7
	State hostel	67	50.8
	Private hostel	11	8.3
Total		132	100

According to Table 2, 69.7 % of the students stated that the income and expenses of their families were equal (n=92). Mothers of 50.8% of the students are primary school graduates (n=67) and fathers of 38.6 % of the students are high school graduate (n=51). 57.6 % of the students participating in the study stated that they took part in social responsibility activities (n=76), when the social activities they took part examined, it was found out that 28 % of them were giving health training (n=37). Families of 44.7 % of the students (n=59) and social environment of 43.9 % of the students (n=74) involved in social responsibility activities.

According to Table 3, 22 % of the students stated that their income was less than their expenses (n=29), 69.7 % of them stated that their income and expenses were equal (n=92), 8.3 % of them stated that their income was more than expenses (n=11). Mothers of 4.5 % of the students were illiterate (n=6), 50.8 % were primary school graduates (n=67), 28 % of them were high school graduates (n=37) and 16.7 % of them had a university degree or above (n=22). Fathers of 0.8 % of the students were illiterate (n=1), 34.8 % of them primary school graduates (n= 46), 38.6 % of them were high school graduates (n=51) and 25.8 % of them had

a university degree or above (n=34). Of the students participating in the study, 57.6 % stated that they took part in social responsibility activities (n=76), and 42.4 % stated that they did not (n=56). When the social activities they took part examined, it was seen that 28 % of them planted trees (n=37), 28 % of them gave health training (n=37), 23.5 % of them helped those who needed (n=31), 15.2 % of them donated blood to the Red Crescent (n=20), 3.8 % of them paid support visits to the elderly and sick people (n=5) and 1.5 % of them fed the stray animals (n=2). Families of 44.7 % of the students participated in social responsibility activities (n=59) while 55.3 % of them did not (n=73). When the social circle of the students was examined, 43.9 % of them took part in social activities (n=58) while 56.1 % did not (n=74).

**Table 2.** Information on the family and participation status in social activities.

Variable	Category	N	%
Income Level of the Family	Income is less than expenses	29	22.0
	Income is equal to expenses	92	69.7
	Income is more than expenses	11	8.3
Mother's Education	Illiterate	6	4.5
	Primary School	67	50.8
	High School	37	28.0
	University Degree or above	22	16.7
Father's Education	Illiterate	1	.8
	Primary School	46	34.8
	High School	51	38.6
	University Degree or above	34	25.8
Status of Participating in the Social Responsibility Activities	I participated	76	57.6
	I did not participate	56	42.4
Social Activities Participated	Planting trees	37	28.0
	Giving health training	37	28.0
	Helping those who need help	31	23.5
	Donating blood to the Red Crescent	20	15.2
	Organizing support visits to the sick/ elderly people	5	3.8
	Feeding stray animals	2	1.5
Family Participating in the Social Responsibility Activities	They participated	59	44.7
	They did not participate	73	55.3
Social Environment Participating in the Social Responsibility Activities	They participated	58	43.9
	They did not participate	74	56.1
Total		132	100

## Results related to the quantitative methods

Descriptive statistics about Personal and Social Responsibility Questionnaire are given in Table 3.

**Table 3.** Descriptive statistics about personal and social responsibility questionnaire.

Measurement	N	X̄	SS	The Lowest	The Highest	Item Averages
Pre-test	132	58.51	17.59	15.00	78.00	4.50
Post-test	132	62.59	10.13	16.00	78.00	4.81

According to the findings in Table 3, it is seen that the average score ( $\bar{X}$ ) of the students who participated in the study was 58.51 in the pre-test application of the personal and social responsibility questionnaire, the standard deviation was (SD) 17.59, the lowest score gained from the scale was 15, and the highest was 78, and item averages were 4.50. In accordance with the item averages, personal and social responsibility levels of the students seemed "high" in the pre-test implementation. As regards the findings in Table 4, it was determined that the average score ( $\bar{X}$ ) of the students who participated in the study was 62.59 in the post-test application of the personal and social responsibility questionnaire, standard deviation was (SD) 10.13, the lowest score gained from the scale was 16, and the highest was 78, and item averages were 4.81. In accordance with the item averages, personal and social responsibility levels of the students seemed "high" in the post-test implementation.

With regard to the findings in Table 3, it is found that the average score of the students who participated in the study was  $58.51 \pm 17.59$  in the pre-test application and  $62.59 \pm 10.13$  in the post-test application of the personal and social responsibility questionnaire. In accordance with the item averages, personal and social responsibility levels of the students were determined as "high" in the pre and post-test implementation. Descriptive statistics about The Service-Learning are given in Table 4.

**Table 4.** Descriptive statistics about the service-learning.

Scale/Sub-Dimension	Measurement	N	X̄	SS	The Lowest	The Highest	Item Averages
Exploring	Pre-Test	132	27.62	4.91	16.00	38.00	2.76
	Post-Test	132	29.06	4.30	17.00	38.00	2.91
Realising	Pre-Test	132	28.69	6.53	13.00	37.00	2.87
	Post-Test	132	30.08	4.86	13.00	39.00	3.01
Internalization	Pre-Test	132	26.46	4.17	17.00	35.00	2.65
	Post-Test	132	26.86	3.24	18.00	38.00	2.69
Total	Pre-Test	132	82.78	13.88	48.00	102.00	2.76
	Post-Test	132	86.00	10.69	50.00	110.00	2.87

In Table 4, it was determined that in the pre-test application of the exploration sub-dimension of the CSL scale, the average score obtained by the students participating in the research was  $27.62 \pm 4.91$ . Considering the item averages, exploring levels of the students was seen as "medium" in the pre -test implementation. It was detected that in the post-test application of the exploration sub-dimension of

the CSL scale, the average score obtained by the students participating in the research was  $29.06 \pm 4.30$ . In compliance with the item averages, exploring levels of the students were seen as "high" in the post -test implementation.

According to the findings in Table 4, it is seen that the average score ( $\bar{X}$ ) of the students who participated in the study was 27.62 in the exploration sub-dimension pre-test application of the CSL Scale, standard deviation was (SD) 4.91, the lowest score gained from the sub-dimension was 16, and the highest was 38, and item averages were 2.76. In comparison with the item averages, exploring levels of the students were "medium" in the pre -test implementation. It was determined that the average score ( $\bar{X}$ ) of the students who participated in the study was 29.06 in the exploration sub-dimension post-test application of the CSL Scale, standard deviation was (SD) 4.30, the lowest score gained from the sub-dimension was 17, and the highest was 38, and item averages were 2.91. In accordance with the item averages, exploring levels of the students were "high" in the post -test implementation.

According to the findings in Table 4, it was established that the average score ( $\bar{X}$ ) of the students who participated in the study was  $28.69 \pm 6.53$  in the realization sub-dimension pre-test application of the CSL Scale. In reference to the item averages, realization levels of the students were "high" in the pre -test implementation. The average score of the students who participated in the study was  $30.08 \pm 4.86$  in the realization sub-dimension post-test application of the CSL Scale. With respect to the item averages, realization levels of the students were "high" in the post -test implementation.

According to the findings in Table 4, the average score ( $\bar{X}$ ) of the students who participated in the study was 28.69 in the realization sub-dimension pre-test application of the CSL Scale, standard deviation was (SD) 6.53, the lowest score gained from this sub-dimension was 13 and the highest was 37 and item averages were 2.87. In regard to the item averages, realization levels of the students were "high" in the pre -test implementation. It is seen that the average score ( $\bar{X}$ ) of the students who participated in the study was 30.08 in the realization sub-dimension post-test application of the CSL Scale, standard deviation was (SD) 4.86, the lowest score gained from this sub-dimension was 13 and the highest was 39 and item averages were 3.01. In accordance with the item averages, realization levels of the students were "high" in the post -test implementation.

In proportion to the findings in Table 4, the average scores ( $\bar{X}$ ) of the students participating in the research in the internalization sub-dimension were  $26.46 \pm 4.17$  in the pre-test application and  $26.86 \pm 3.24$  in the post test application of the CSL scale. In accordance with the item averages, internalization levels of the students were "medium" in the pre and post -test implementation.

According to the findings in Table 4, the average

score ( $\bar{X}$ ) of the students who participated in the study was 26.46 in the internalization sub-dimension pre-test application of the CSL Scale, standard deviation was (SD) 4.17, the lowest score gained from this sub-dimension was 17 and the highest was 35 and item averages were 2.65. In reference to the item averages, internalization levels of the students were "medium" in the pre -test implementation. It was detected that the average score ( $\bar{X}$ ) of the students who participated in the study was 26.86 in the internalization sub-dimension post-test application of the CSL Scale, standard deviation was (SD) 3.24, the lowest score gained from this sub-dimension was 18 and the highest was 38 and item averages were 2.69. In accordance with the item averages, internalization levels of the students were seen as "medium" in the post -test implementation.

With respect to the findings in Table 4, it is seen that for the total of the CSL scale, the average of the scores that the students who participated in the research got in the pre-test was  $82.78 \pm 13.88$ . As regard the item averages, the CSL level of the students were at the "medium" level in the pre-test application. It was determined that for the total of the CSL scale, the average scores that the students participating in the research got in the post-test application was  $86.00 \pm 10.69$ . Considering the item averages, the CSL level of the students were at the "high" level in the post-test application.

Considering the findings in Table 4 in the post-test application for the total of the CSL scale of the students participating in the research, the average ( $\bar{X}$ ) of the scores obtained in the pre-test application for the total of the CSL scale was 82.78, the standard deviation (SD) was 13.88, and the lowest score obtained from the scale. 48, the highest score is 102, and the item average is 2.76. With respect to the item averages, the CSL level of the students were at the "medium" level in the pre-test application. Pursuant to the findings in Table 5, the average ( $\bar{X}$ ) of the scores obtained in the post-test application for the total of the CSL scale was 86, the standard deviation (SD) was 10.69, and the lowest score obtained from the scale was 50 and the highest score was 110 and the item averages were 2.87. In terms of the item averages, the CSL level of the students were at the "high" level in the post-test application. Findings regarding the determination of the relations between Personal and Social Responsibility Questionnaire and The Service-Learning Scale are given in Table 6.

When Table 5 is examined, it is seen that the scores of the students in the pre-test application from the individual and social responsibility scale in general have a moderately significant positive correlation with the exploration sub-dimension scores of the CSL scale ( $p < .01$ ;  $r = .596$ ), a moderately significant positive correlation with the scores of the realization sub-dimension ( $p < .01$ ;  $r = .599$ ), a moderately significant positive correlation with internalization sub-dimension scores ( $p < .01$ ;  $r = .408$ ), and a moderately significant positive correlation ( $p < .01$ ;  $r = .616$ ) with the total scores of the CSL.

**Table 5.** The relations between personal and social responsibility questionnaire and the service-learning scale.

Implementation	Scale/Sub-dimension	The Service-Learning			
		Exploring	Realizing	Internalization	Total
Pre-test	Personal and Social Responsibility	.596**	.599**	.408**	.616**
Post-Test		.379**	.443**	.222*	.421**

\*\* $p < .01$ ; \* $p < .05$

When Table 5 is examined, it was determined that the scores of the students in the post-test application from the individual and social responsibility scale in general had a moderately significant positive correlation with the exploration sub-dimension scores of the CSL scale ( $p < .01$ ;  $r_s = .379$ ), and a moderately significant positive correlation with the realization sub-dimension scores ( $p < .01$ ;  $r_s = .443$ ), a low-level significant positive correlation with the internalization sub-dimension scores ( $p < .01$ ;  $r_s = .222$ ) and a moderately significant positive correlation with the total scores of the CSL scale ( $p < .01$ ;  $r_s = .421$ ).

The t-Test results, which were carried out to determine whether there was a significant difference between the pre-test and post-test average scores of the Personal and Social Responsibility Questionnaire, are given in Table 6.

According to Table 6, there is a significant difference in small effect size between personal and social responsibility questionnaire pre-test scores and post-test scores ( $t_{132} = -2.207$ ,  $p < 0.05$ ,  $\eta^2 = 0.036$ ). The average of the personal and social responsibility questionnaire scores of the students after the community service implementation ( $\bar{X} = 62.59$ ) is higher than the average of the personal and social responsibility questionnaire scores before the community service implementation ( $\bar{X} = 58.50$ ).

**Table 6.** The t-test results of the pre-test and post-test average scores of the personal and social responsibility questionnaire.

Measurement	N	$\bar{X}$	SS	sd	t	p	$\eta^2$
Pre-Test	132	58.50	17.58	131	-2.207	0.029*	0.036
Post-Test	132	62.59	10.12				

\* $p < .05$

The t-Test results, carried out to determine whether there was a significant difference between the students' personal and social responsibility questionnaire pre-test scores, and the pre-test and post-test average scores of the CSL Scale according to Table 6, are given in Table 7.

**Table 7.** The *t*-test results of the pre-test and post-test average scores of the service-learning scale.  $\bar{X}$ 

Scale /Sub-dimension	Measurement	N	$\bar{X}$	SS	sd	t	p	$\eta^2$
Exploring	Pre-Test	132	27.62	4.92	131	-2.368	0.019*	0.041
	Post-Test	132	29.06	4.30				
Realizing	Pre-Test	132	28.69	6.53	131	-1.894	0.060	-
	Post-Test	132	30.08	4.86				
Internalization	Pre-Test	132	26.46	4.17	131	-0.898	0.371	-
	Post-Test	132	26.86	3.25				
Total	Pre-Test	132	82.78	13.88	131	-2.065	0.041*	0.032
	Post-Test	132	86.00	10.70				

\* $p < .05$ 

According to Table 7, there is a significant difference in the small effect size between the students' pre-test scores of the exploration sub-dimension of the CSL scale and the post-test scores of the exploration sub-dimension of the CSL scale ( $t_{132}=-2.368$ ,  $p < .05$ ,  $\eta^2=0.041$ ). The average of the scores of the students for the scale exploration sub-dimension ( $\bar{X}=29.06$ ) of the CSL Scale after the community service application is higher than the average of the scores before the community service application ( $\bar{X}=27.62$ ). There is no significant difference between the students' pre-test scores and the post-test scores of the realization sub-dimension of the CSL scale ( $t_{132}=1.894$ ,  $p > .05$ ). There is no significant difference between the students' pre-test scores and the post-test scores of the internalization sub-dimension of the CSL scale ( $t_{132}=-0.898$ ,  $p > .05$ ). There is a significant difference in small effect size between the students' total pre-test scores and the total post-test scores of the CSL scale ( $t_{132}=-2.065$ ,  $p < .05$ ,  $\eta^2=0.032$ ). The average scores of the students after the community service practice ( $\bar{X}=86.00$ ) of the L CSL scale is higher than the ones before the community service practice ( $\bar{X}=82.78$ ).

### Results on the qualitative method

#### Social responsibility and social awareness perception

Social responsibility is a phenomenon that has material and spiritual elements. The concept in question has been tried to be defined by associating it with different points of views by the participants. In an approach, in which conscience is prominent, social responsibility is described as follows:

"Social responsibility, to me, is to help people - financially and morally - by taking care of their needs. Social responsibility, of course, is a situation that is up to the conscience of the person; you should be willing to help others. I think we can meet a lot of needs of the people within the scope of social responsibility" (P1).

Empathy approach that can be described as sympathy is to internalize a subject or an event by the individual by understanding the emotional state of another person. Another participant points out the relationship between social responsibility and

empathy.

"Man, first of all, is a social being. As we live in a state order after all, we have to show empathy. We are all a community, that is we are like combined chains. If we become selfish, we become the weak link in the chain" (P2).

Social responsibility concept is not limited only with its material dimension. At the same time, it should be taken into consideration with its spiritual aspects in accordance with the phenomenon that is put in the centre. Therefore, social responsibility is defined as follows:

"I think the concept of social responsibility is to show people what they do not know or to express their important problems and help them develop methods to cope with their problems. This could be material or spiritual" (P10).

In this respect, it seen that various approaches emerge when considering whether financial or moral assistance is provided to any person with or without close or distant relationship, and if so, what kinds of assistance is provided for them.

"Of course, I did. I mean, I have helped people- either old, or a child or at my age ... I love to help people. I mean, seeing their works are done or their problems are settled at that moment makes me very happy. Because, even this much is enough. The simplest one for example helping an elderly patient cross the street is something I do daily basis. I become happy when I help people solve their issues; that's why I help" (P1).

In another example it is understood that there happens discrimination among the people to be helped and priority is given to the immediate environment. The background reason of this is the real situation of the person to be helped is not known exactly.

"I mostly help my close ones. My priority is my immediate environment, because I am not in a close relationship and I cannot sense the needs of those who are far away, I help my immediate environment" (P6).

When the expectations from the individuals that are helped are focused on, it is understood that the subject is taken in a simple way and only a positive attitude from them will be sufficient.

"When I am helping, I do not expect anything as the other side already has a problem or needs something at that time. But of lesson, if the person I help is to resent me or bite my head off, this situation frankly makes me feel uneasy. The only thing I expect from the other side is to thank me. That's all. I do not expect anything else. Apart from this, I think if they are not able to do this, they can at least smile and that would be enough" (P1).

It is seen that another participant also shares the same thoughts and due to her/his religious belief s/he says positive wishes would be enough.

"I have no expectations. It is enough if they pray for me or thank me" (P7). "This is both the feeling of sympathy

and happiness and also it is because of our religion. This would help on the other side when we die" (P6).

When the motivations directing an individual to help are taken into consideration, it is understood that different meanings are attributed to the aids, but a psychological border emerges in terms of the size of the aids.

"I have limits in both financial and moral aids. After all I am a human being. Although I say I have no mental limits, I would say stop somewhere. But I do my best until the time my mind tells me to stop, of course, within the limits of my budget" (P2).

One participant who states that s/he can act in a more unlimited way in terms of moral assistance along with financial aid says s/he will not give up on this behaviour despite the possible negative consequences. S/he says that:

"I have a limit when sacrificing, I mean, I think I can help until the point that I hurt myself. It would be wrong to say I do not have any limits. I cannot continue after a point that I might give harm. I cannot continue helping financially but morally I might. Because there are people we love and we do not want them to be upset, we want to help them. In return we give harm to ourselves, but personally I would continue moral help" (P4).

The issue of the abuse of aid is another aspect of the border drawn.

"This happened a lot when I helped a person. They start using me for their benefits. I say stop to this situation now because I feel used – my good will is being abused. In this case, I would stop myself but other than that, I do my best to help" (P5).

However, there are examples that are exceptions to these approaches; it is stated that when necessary, aids are directed to those who are in need by taking from the others.

"I can sacrifice financially till the end. I can even give the last money in my pocket, really, if I feel that person really needs and if my money is not enough, I can ask from the people around me. I mean, I do not have limits when it comes to helping" (P3).

The contribution of the CSL activities to the education process and the development of social responsibility

In the CSL approach, a form of learning in which academic objectives and services for the benefit of the society are combined, academic learning is supported with real-life experiences. Thus, the experience of being an effective citizen is also provided. Moreover, it should be noted that, the phenomenon in question is widely used by all disciplines when the CSL contribution to the system and the personal development is taken into consideration. In this respect, when the contribution of the practices and theoretical information provided during the research to the education process and social responsibility understanding of the participants is examined, positive feedback that can be classified

under different headings draw attention. For instance, the importance of knowing an individual closely in the nursing profession is expressed as such:

"I think this approach has great contribution to the nursing field. Because, the nursing profession requires acting in line with the people's care needs. That is why; we assess each person we see outside differently. Thanks to these practices, I have been able to more closely experience that people's needs are various. We are given such an opportunity. Moreover, it also gave me the opportunity to practice taking blood, measuring blood sugar or checking blood pressure, it made me feel more useful for the society" (P1).

Learning is an action realized with different methods by seeing, hearing and doing by considering the characteristics differences between individuals. Activities carried out during the research process presented learning by doing experience to the participants. This approach, depending on the features of the practices, creates the feeling of being useful to the society, while combining theory and practice.

"We learn a lot of theoretical things in the lessons and in fact we do know a lot. But the knowledge can be fleeting, that is why practice is more important as it is visual, we were able to get good opportunities; we had the chance to practice what we learned. But more importantly, what we did was rewarded. Sometimes people can face bigger problems due to small precautions. We took blood and measured blood pressure; maybe with a small precaution we will be able to solve a bigger problem. This is a good feeling" (P10).

The CSL process arouses an interest in social problems while assisting development of social responsibility consciousness. At the same time, it supports the development of competences such as working based on collaboration, solidarity and communication.

"We study nursing in health sector. As a requirement of our profession, we will be in communication with patients all the time. I think the most important contribution of this experience was the opportunity to improve communication. Learning their needs by observing is very important for our job. There is something like this; we do not work only in the intensive care unit, emergency unit, or in other services. For instance, some of our friends are choosing public health; I believe the activities we carry on here will contribute to them a lot. I think social responsibility projects can contribute a lot more to public health nursing as there are old and infant patients here. A different experience is needed to deal with such groups, I believe, such approaches may help understand our profession" (P9).

While daily problems occur in the CSL concept, methods to solve these problems are tried to be developed. In this process, while enabling the individual to take responsibility through academic and social activities, it also contributes to their self-confidence development.

"Last year we could not do an internship at the hospital,



so this year when we went for internship, we faltered a bit. I am not talking about everyone but many friends of mine faltered when they approached people and helped them. Thanks to this lesson we learned how to approach people and we gained confidence" (P4).

There are many alternative methods to integrate CSL activities into the curricula. Therefore, different models can be developed in accordance with the learning objectives, the number of the students, education level of the students, and also the projects and the opportunities of the institution to be collaborated with in the community. Determining the suitable model is the most important stage of the preparation phase. In this respect, one of the questions wondered in this study was "outside clinical practices in nursing education, whether the education process with CSL could be reinforced or not". Although participants gave different and alternative answers to this question, they expressed as their common thought that a significantly positive benefit gained.

"As I stated in the previous questions, I think this approach can be very useful for instance in public health. After all, it will certainly help at the stage when we put the theoretical knowledge we learned into practice. Moreover, it contributes to the development of communication and empathy skills but the most importantly it helps us become a part of the community as an individual. I think this is what we need most, and this approach gives us a good opportunity" (P9).

Another participant offered a little bit more different approach in terms of the impact of this approach on the education process, and highlighted the contribution that emerged in reinforcing cognitive and affective competences.

".....for example, I am an excited and sensitive person. When I do something related with my job or in social life, my hands shake. I started learning how to get over these problems by taking part in the activities in this lesson. It was a good experience for me to communicate with people, otherwise my hands used to shake while measuring blood pressure; "I think I feel a little more confident now." (P7).

Another feature of the CSL approach is its offering participants the opportunity to express themselves in a more relaxed atmosphere. In this way, alternative approaches can emerge in terms of the benefit of the society and personal development outside the formal atmosphere. Thus, while the individual is acting at the centre of the social expectations, at the same time starts becoming a part of the society.

"We used to hesitate by thinking if people would misunderstand. Bu in this lesson, we found a more relaxed atmosphere beyond a formal approach and spoke to people more comfortably. Sometimes when we speak to the patients at the hospital, they become aggressive and we cannot get along. How to put it, it was as if we were provided with an experience outside the hospital and I think we felt more comfortable." (P8).

## Discussion

The CSL offers various benefits to the stakeholders, moreover, research in this field shows that the approach in question is frequently used in several academic disciplines such as medicine, nursing, business, economy, social sciences, education (17). This study carried out with nursing students for a long period of time shows that the CSL concept is an approach which is appropriate for the health sector. In this regard, the students who participated in the study stated that they had the opportunity to "learn by experiencing" through service-learning practices and that they integrated theoretical and practical knowledge with these approaches. In addition, students stated that this approach was effective in strengthening cognitive and affective competencies and that their self-confidence increased.

There are programmes making the CSL management a part of the education system. For instance, this approach is evaluated as an important component of graduate training program at the Fisher Institute of Health and Gerontology at Ball State University. Each student who is accepted to this programme as an assistant is trained in their responsibilities including social assistance to the elderly people living in that community and they present their experiences regularly through the Monthly Report Form. The results obtained from the analysis of a report selected as an example within the scope of the study show that students gained new competences in the professional and social fields, they understood disabled and elderly individuals better, that is, their feeling of sympathy improved, and the fear of working with the elderly that they used to have diminished (18). Students interviewed within the scope of the study gave similar feedback to the research in question and stated that their empathy skills improved and that coming together with different communities at early stages had advantages.

In the service-learning, learning objectives of the students are as important as the benefits of the services offered to society; more importantly both are interconnected and strengthen each other. Studies show that the service-learning contributes positively to the development of personal qualifications in different ways. However, when the CSL is implemented based on a compulsory curriculum, debates on its potential benefits are still ongoing (19). In the study students examined the effects emerged at the implementation stage of a compulsory the service-learning lesson, the results showed that learning experiences students gained from the service-learning had a strong impact on their personal developments. The benefit of the the service-learning approach is inevitable in the approaches in which field practices are not enough due to the large number of the students and the students are hesitant to contact the patient. Findings obtained from this research present similar results. The participants stated that there was a significant difference in their personal developments when they compared their situation before and after the research.

Scientific articles and studies on the CSL display various approaches, and present a wide perspective about the experiences obtained from the perspectives of the students, lecturers and the administrative staff. Most of these studies build a bridge between theory and practice; besides enabling students and the future professionals to gain competences and skills, they provide social awareness which is especially necessary for their professional performances (20). Based on these contributions the service-learning to professional performance, it is stated that when the CSL based academic learning process is integrated with community experience, students gain both personal/social and academic skills. At the same time, on one hand critical awareness with leadership and communication skills, on the other hand the ability to adapt and respond to real-world challenges as well as time and resource management are developing and all of which contribute significantly to the transition to the labor market.

A study carried out at a university in Portugal points out that how important it is to adopt "education market" understanding in order for students to be prepared to live in a community and therefore be raised with the perspective of existence. The results of the study in question show that when academic learning is combined with community experience, students gain both academic and social competences and at the same time they develop critical awareness about the real world and all of which are beneficial in the transition phase to the labour market (21,22). Participants taking part in the study gave similar feedback at the first stage of their personal developments when the experiences they gained were taken into consideration.

The world is experiencing a period in which great transformations have occurred in both education and labour market. It is thought that there is knowledge-based competence lies at the background of this transformation, especially in terms of employment. The most important concept stepping in at this point is a special or technical competence – that is cross competence – which consists of certain skills, values and attitudes and is at the same time valid in the environments they are developed. This concept has begun to be attributed more and more importance by organizations in order to adapt to today's competitive conditions. Within this framework, in a study carried out at a university in Spain, the impact of cross-competences on the employability degree of university students was examined within the framework of the CSL concept. One of the questions the answer to which was sought in the research was "Is there a significant difference between the students participating and not participating in the experimental activities in terms of the development of cross-competences?" The results showed that there was a positive relation between cross-competences and experimental activities connecting students to professional or social practices (23). The students taking part in the study expressed those similar contributions emerged at the point of development of cross-qualifications. It was stated that

this concept offered both the opportunity to practice in terms of professional experience and the chance to be an active member of the society.

### Conclusion

The CSL is a philosophical approach combining services for community or public field with structured learning opportunities. By means of this approach the individual is prepared to solve community-based problems. Moreover, students are offered the opportunity to discover the connections between theoretical atmosphere of the classroom and practical needs of the community. In this respect, the CSL transforms the individual into a phenomenon that helps the individual develop critical thinking ability by nature, enables them to take part in collective activities, develops civic consciousness, and strengthens his ability to become an active member of society.

The results of the study show that the CSL approach develops students' insight into the importance of community works and helps them to understand social diversity and contributes positively to the development of the sense of responsibility social skills of the individual. Moreover, participants stated that the service-learning helped them clarify the concepts they learned in their classes. On the other hand, they expressed that thanks to this programme, learning became a more enjoyable activity. This study, which lasted for 14 weeks, was realised by presenting an alternative method for learning experiences of the students by collecting data from different individuals in the same time of period. Therefore, when viewed from a general and limited framework, it is possible to state that a special effort to determine the latitudinal effect stands out a little more. In terms of future studies, it is thought that this method can be redesigned to include different time periods and through studies in which the longitudinal effect is prominent. For example, the attitude and behaviour changes of the students trained with the concept of the CSL after completing the program can be chosen as a research topic.

### Ethical considerations

Institutional permission (05.10.2022-E-43687250) and ethics committee approval (26.09.2022-2022/07) were obtained from the university where the research would be conducted. Written permission from the students was obtained and they were informed that their personal information would be used for research purposes only.

### Author contributions

Bora Balun: Conception, Resource, Materials, Analysis, Literature Review, Supervision, Writer, Critical Review. Yılmaz Olcay: Conception, Resource, Analysis, Literature Review, Writer. Durdane Yılmaz Güven: Conception, Design, Data collection, Analysis, Writer, Critical Review.

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### Declaration of competing interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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