# Nursing Students' Views on Psychiatric Nursing Course and Their Perceptions of Psychiatric Nursing: A Comparison of Traditional and Distance Learning Methods

### Abstract

**Background:** Due to the coronavirus disease 2019 (COVID-19) pandemic, universities in many countries worldwide have suddenly switched to the distance learning (DL) system. Before the COVID-19 pandemic, the psychiatric nursing course was delivered in traditional learning (TL) in Türkiye; however, in 2020, emergency DL started for the psychiatric nursing course.

**Aims:** The aim of the study was to compare the evaluations of the efficacy of the psychiatric nursing course delivered through TL and DL by the students and their perceptions of psychiatric nursing.

**Methods:** This comparative-descriptive study was conducted at a university in Türkiye. The sample included 148 students: 84 in the TL group and 64 in the DL group. The data were collected using an online questionnaire form, the psychiatric nursing perception scale (PNPS), and the evaluation form of psychiatric nursing education (EFPNE). The data were analyzed with SPSS 23 package programs. Independent samples t-test, Pearson correlation test, and chi-square analysis were used in the statistical analysis, and the results were presented as numbers, means, standard deviation, and percentages. The distribution of the data was evaluated with the Kolmogorov–Smirnov test.

**Results:** The mean age of the TL groups was 22.09 ± 1.42, and 70.2% were female. About 67.8% of the TL students were satisfied with the psychiatric nursing course they took. The mean age of the DL groups was 23.17 ± 1.31, and 59.3% were female. In addition, 42.1% of the DL students were satisfied with the psychiatric nursing course they took. The TL students' total EFPNE scale score was 61.48 ± 7.65 and the PNPS score was 71.02 ± 13.18. The DL students' total EFPNE scale score was 51.17 ± 7.79 and the PNPS score was 61.29 ± 9.23. There was a statistically significant difference between the "evaluations of the efficacy of the psychiatry course" and "perceptions of psychiatric nursing" of the traditional and DL groups ($P < 0.05$). A positive and significant correlation was found between the PNPS total score and the EFPNE scores in the traditional groups ($P < 0.05$).

**Conclusion:** Students in the traditional groups had positive opinions about the course and a high perception of psychiatric nursing. In this sense, it is recommended that the psychiatric nursing course, which is an applied course, should be given with the traditional education method after the COVID-19 pandemic.

*Keywords: Distance learning, nursing students, psychiatric nursing education, psychiatric nursing, traditional learning*

Merve Aydın[1] , Hacer Erdöl[1] ,
Mehmet Görgöz[2]

[1]Department of Nursing, Department of Mental Health and Psychiatric Nursing, Karadeniz Technical University, Faculty of Health Sciences, Trabzon, Türkiye
[2]Department of Nursing, Department of Mental Health and Psychiatric Nursing, Ordu University, Health Sciences Institute, Ordu, Türkiye

## Introduction

The global crisis caused by the coronavirus disease 2019 (COVID-19) pandemic has deeply impacted all aspects of life, especially health, economy, and education.[1] The education system is one of the most affected ones after health.[2] On March 16, 2020, in Türkiye, face-to-face university education was suspended for 3 weeks, and due to the ongoing pandemic, as of March 23, 2020, it was switched into online learning.[3] With necessary amendments in many countries like Türkiye, educational institutions made the transition from traditional learning (TL) to distance learning (DL).[4]

The DL system was not a new system for Türkiye.[5] However, despite being already used in the infrastructure of many universities in Türkiye, the "emergency structured distance education" has brought new solutions and adaptation requirements.[6] Emergency structured distance education involves DL solutions for education, which will revert to face-to-face education as its old format once the crisis or emergency disappears.[7] As

a quick solution to the crisis caused by COVID-19, universities structured according to formal education have started to work rapidly and switched to emergency distance education to continue their courses and programs with web-based distance education.[8] Universities providing nursing education and all educational institutions, including undergraduate and graduate education, have taken part in the distance education system through a rapid transition to continue the academic programs. While discussing the place of distance education in nursing before COVID-19, educators are now seeking an answer to the question "How effective is DL performed in nursing education?"[5]

DL has advantages and disadvantages over TL. Among the advantages are the chances of being able to teach hundreds of students at the same time independent of the physical structure, saving on the equipment that is required in face-to-face education, eliminating the educational inequality caused by different schools or educators, ensuring that all students are educated at the same level,[9] providing students with an opportunity of watching the recorded video lectures in the system again,[10] and offering the students in rural areas to receive equal education supported by a university.[11] The disadvantages are lack of face-to-face interaction,[6] difficulties in offering motivation and thus social isolation, lack of mutual interaction, difficulty in receiving immediate feedback, difficulties in conducting the clinical practice of courses, and situations related to accreditation.[12]

The study results on the effectiveness of distance education in the field of nursing in the literature are contradictory. While some studies suggest that DL is as efficient/effective as face-to-face education for nursing students,[13-16] some others argue that it is not suitable for students studying in health, and TL should resume in the post-pandemic period.[17-19]

Psychiatric nursing is one of the distinctive areas of the nursing profession.[20] Psychiatric nursing education and practices aim to encourage students to gain emotional awareness, approach, deal with patients' emotions, and recognize and control the factors that affect emotion avoidance as well as develop their communication skills.[21] Moreover, in the clinical practice of psychiatric nursing lessons, students deal with individuals with severe mental illness and their subjective recovery, as well as general nursing practices. They also witness unique human-specific experiences such as mourning, suicide attempts, and loneliness.[22] In such a special application area, the quality and efficacy of the education student nurses receive are of great importance.

In the literature, no studies, to the best of our knowledge, have compared the efficacy of the psychiatric nursing course perceptions of students receiving the course delivered through TL and DL methods yet. Comparison of the competencies and perceptions of these students in the structuring of the psychiatric nursing course, in a period in which discussions continue about the fact that distance education can become the principal basis of education instead of being an alternative or a support function in face-to-face learning in the post-COVID-19 world, can contribute to the strategy development of institutions and educators. The aim of this study is to compare the views and perceptions of the students who took the psychiatric nursing course with traditional and DL methods about the psychiatric nursing course.

### Study Question

- Is there a significant difference between the perceptions of psychiatric nursing of students who take psychiatric nursing course with traditional and distance education method?
- Is there a significant difference between the opinions of the students who take the psychiatric nursing course with traditional and distance education method?

## Methods

### Design and Sample

This study was a comparative-descriptive study. The study data were obtained between January 10, and November 30, 2021, at a university in the north of Türkiye. The population consists of 4th-year nursing students at a state university who took the psychiatric nursing course with DL method (n = 64) and TL method in the 2020–2021 Spring and 2021–2022 Fall semesters (n = 170).

In the DL group, the entire population was reached without sampling. In the TL group, the sample was calculated as 84 students at an 80% confidence interval using the Openepi program. Using the simple random sampling method, 84 volunteering students who filled out the data collection form were included in the sample. The rate of participation in the study is 100% in the DL group and 49.4% in the TL group. The sample included 148 voluntarily nursing students: 84 in TL group and 64 in DL group. Inclusion criteria were being enrolled in a psychiatric nursing course, having a smartphone, and volunteering to participate in the study. Nursing students retaking the psychiatric nursing course were excluded from the study.

Psychiatric nursing course is given in the spring and fall semesters of the fourth grade of the undergraduate nursing education program. The course deals with learning about human behaviors, psychiatric disorders, basic principles, concepts, functions, and processes of psychiatric nursing, ways of developing human relations, and using the knowledge, skills, and attitudes gained in this field effectively to protect, improve, and maintain mental health and provide care and rehabilitation in case of mental health deterioration. The psychiatric nursing course includes weekly 6 h of theoretical and 10 h of clinical practice; a total of 84 h of theoretical and 140 h of clinical practice in the TL method. The DL method, on the other hand, consists of weekly 3 h of theoretical, 5 h of clinical practice; a total of 42 h of theoretical, and 70 h of practice. The theoretical content is the same in both training methods, and but the clinical practice content differs. In the TL method, the lessons were taught in the classroom environment, and in the clinical practice phase of the course, students took care of patients in hospitals under the supervision of expert instructors in the field of psychiatric nursing and have the opportunity to transfer the theoretical knowledge they learned to practice. In the DL method, theoretical content was presented through methods such as creating presentation files and sharing course contents (article, ppt, word, pdf, etc.), uploading the courses to the system with live lecture and video recording, asking instant questions, and giving feedback, and homework sharing. In the clinical practice part of the course, the students were divided into groups of 8–10 and prepared a case example under the supervision of expert instructors in the field of psychiatric nursing and presented it to the whole group. The theoretical and practical parts of the course in the DL are conducted synchronously, supported by the question-answer method and multimedia materials (text, graphics, animated pictures, animation, sound, video, etc.).

### Data Collection Tools

The data were collected using a questionnaire created by the researchers, the evaluation form of psychiatric nursing education (EFPNE), and the psychiatric nursing perception scale (PNPS).

### The Questionnaire Form

The questionnaire consisted of two parts and seven questions. The first part included three questions about the nursing students' sociodemographic characteristics (age, gender, and educational methods), and the second part had four questions about their satisfaction with the psychiatric nursing course, the change in their perceptions of individuals with mental disorders, and their career preferences.

### The Evaluation Form of Psychiatric Nursing Education

It is a 15-item scale developed in 1999 by Wynaden and Popescu[23] and identifies student nurses' perceptions of their level of preparedness to work with individuals with mental illnesses and their evaluations of the lesson that they have taken. The scale consists of three sub-dimensions: "significance and value," "competence and trust," and "equality." Items 2, 4, 5, 6, 7, 8, 9, and 11 are included in the "significance and value," items 10, 12, 13, 14, and 15 in "competence and trust," and items 1 and 3 in "equality."[24] The scale is a five-point Likert-type rating between "strongly disagree (1)" and "strongly agree (5)." There is no reverse-coded item on the scale. The highest and the lowest scores to be obtained on the scale are 75 and 15. The high scores indicate that student nurses' perceptions of their preparedness to work with individuals with mental illnesses and their evaluations about the lessons that they receive are positive. The Turkish validity and reliability of the scale were performed in 2009 by Baysan-Arabacı and Çam,[24] and the Cronbach Alpha correlation coefficient was found to be 0.82. In the present study, the Cronbach alpha reliability coefficient of the scale was found to be 0.92.

### The Psychiatric Nursing Perception Scale

The scale was developed in 2009 by Çam and Baysan-Arabacı.[25] The PNPS is based on the nursing-related items of the "Student Nurses' Attitudes toward Psychiatric Nursing and Mental Illnesses" questionnaire developed by Calvert et al. (1999) to define the attitudes of medical students toward psychiatry and psychiatric patients and modified in 2005 by Surgenor et al.[26] The one-dimensional scale has a seventh Likert-type grading between "strongly disagree (1) and strongly agree (7). The scale has straight and reverse-coded items. Items 1, 3, 5, 8, 9, and 11 are scored straight, and items 2, 4, 6, 7, 10, 12, 13, and 14 are reverse scored. The highest and the lowest scores to be obtained from the scale are 98 and 7. High scores indicate a positive perception of psychiatric nursing. The Cronbach Alpha correlation coefficient was found to be 0.76 by Çam and Baysan-Arabacı.[25] In this study, the Cronbach alpha reliability coefficient was determined to be 0.81.

### Data Collection

The questionnaires were applied to the nursing students after the theoretical part of the psychiatric nursing course, and clinical practice was completed. Nursing students were assured that their privacy and confidentiality would be protected. After obtaining the necessary permissions, the online questionnaire form was prepared using the Google Forms web application and sent to the nursing students' smartphones through the WhatsApp messaging program. It took about 10 min to fill in the forms.

### Data Analysis

The data were analyzed with the Statistical Package for Social Sciences version 23.0 (IBM Corp., Armonk, NY, USA). In the analysis of the data, descriptive statistical methods (percentile, arithmetic mean, standard deviation, and min-max), and Kolmogorov–Smirnov to examine the normal distribution were used. The relationship between grouped variables was tested using Chi-square ($\chi^2$) analysis. In addition, independent $t$-tests were used to compare the scale scores, and Pearson correlation was used to evaluate the data. The results were evaluated at the statistical significance level of $P < 0.05$ and a 95% confidence interval.

### Ethical Considerations

Before the study, permission to use the scale was obtained from the authors through e-mail. Ethical approval was received from the Ethics Committee of Gümüşhane University (Date: 06.01.2021 Approval Number: 2020/12). All the participants gave their electronic informed consent before their inclusion in the study, and they were informed that they could withdraw from the survey at any moment without providing any justification. The study was performed in accordance with the Declaration of Helsinki.

## Results

The results revealed that the mean age of the TL groups was 22.09 ± 1.42 (min.21; max.26), and 70.2% (n = 59) were female. In addition, 67.8% (n = 57) of the TL students were satisfied with the psychiatric nursing course they took, and 53.5% (n = 45) would like to work in a psychiatry clinic after graduation. While 44.0% (n = 37) had a partially positive attitude toward individuals with mental illnesses before receiving the psychiatric nursing course, 85.7% (n = 72) had a positive attitude toward individuals with mental illnesses after receiving the course.

The mean age of the DL groups was 23.17 ± 1.31 (min.21; max.26), and 59.3% (n = 38) were female. About 42.1% (n = 27) of the DL students were satisfied with the psychiatric nursing course they took, and 32.8% (n = 21) would like to work in a psychiatry clinic after graduation. While 29.6% (n = 19) had a partially positive attitude toward individuals with mental illnesses before receiving the psychiatric nursing course, 87.5% (n = 56) had a positive attitude toward individuals with mental illnesses after receiving the course.

In this study, a statistically significant difference was seen between the TL and DL nursing students' satisfaction with the psychiatric nursing course and their willingness to work in a psychiatric clinic after graduation ($P < 0.05$). No statistically significant difference was found between their attitudes on mental illnesses before and after taking the psychiatric nursing course ($P > 0.05$) (Table 1).

In the study, the total mean scores that TL nursing students obtained from the scales and subdimensions were as follows: 61.48 ± 7.65 (min.45; max.75) in the EFPNE, 33.47. ± 5.50 (min: 22; max.40) in the "Significance/Value" sub-dimension, 20.40 ± 3.43 (min.10; max.25) in the "Competence/trust," 7.15 ± 1.87 (min.4; max.10) in the "Equality" sub-dimension, 71.02 ± 13.18 (min.46; max.95) in the PNPS (Table 2). The total mean scores that DL nursing students obtained from the scales and subdimensions were as follows: 51.17 ± 7.79

| Table 1. Students' descriptive characteristics (n=148) | | | | | |
|---|---|---|---|---|---|
| | Traditional learning group (n=84) | | Distance learning group (n=64) | | |
| Characteristics | X±SS | Min-Max | X±SS | Min-Max | Test and *P*-value |
| Age | 22.09 ±1.42 | 21-26 | 23.17±1.31 | 21-26 | –4.699* *P*<0.001 |
| | n | % | n | % | |
| Gender | | | | | |
| Female | 59 | 70.2 | 38 | 59.3 | 1.898** *P*=0.168 |
| Male | 25 | 29.8 | 26 | 40.7 | |
| Satisfaction with the psychiatric nursing course | | | | | |
| Yes | 57 | 67.8 | 27 | 42.1 | 7.159** *P*=0.007 |
| No | 30 | 32.2 | 37 | 57.9 | |
| Willingness to work in a psychiatric clinic after graduation | | | | | |
| Yes | 45 | 53.5 | 21 | 32.8 | 6.335** *P*=0.012 |
| No | 39 | 46.5 | 43 | 67.2 | |
| Views on mental illnesses before taking psychiatric nursing course | | | | | |
| Good | 37 | 44.0 | 19 | 29.6 | 3.185** *P*=0.074 |
| Bad | 47 | 56.0 | 45 | 70.4 | |
| Views on mental illnesses after taking psychiatric nursing course | | | | | |
| Good | 72 | 85.7 | 56 | 87.5 | 0.099** *P*=0.753 |
| Bad | 12 | 14.3 | 8 | 12.5 | |
| *Independent samples *t*-tests, **Chi-square test statistics. | | | | | |

(min.40; max.75) in the EFPNE, 28.76 ± 6.04 (min.16; max.40) in the "Significance/Value" sub-dimension, 16.78 ± 4.67 (min.8; max.25) in the "Competence/Trust" subdimension, and 5.31 ± 1.97 (min.2; max.10) in the "Equality" sub-dimension, 61.29 ± 9.23 (min.45; max.83) in the PNPS (Table 2). A positive and significant correlation was found between the PNPS total score and the EFPNE scores of the nursing students in the TL groups ($P < 0.05$) (Table 3).

There was not found correlation between the PNPS total score and the EFPNE sub-dimension scores of the nursing students in the DL groups ($P > 0.05$) (Table 4).

## Discussion

Psychiatric nursing is one of the distinctive fields of the nursing profession. In the international sense, psychiatric nurses are defined as nurses who have completed their undergraduate education and received higher education or training in psychiatric nursing. In the mental health services in Türkiye, nurses with undergraduate/associate degree graduates with general nursing education are employed, which reveals the importance of the undergraduate psychiatric nursing course.[27] Before the COVID-19 pandemic, the psychiatric nursing course was delivered in a traditional environment and clinical practice in Türkiye; however, in 2020, emergency distance education started

| Table 2. The mean scores of EFPNE and PNPS and sub-dimensions according to traditional learning and distance learning methods (n=148) | | | | | |
|---|---|---|---|---|---|
| | Traditional learning group (n=84) | | Distance learning group (n=64) | | |
| Scale | Mean±SD | Min-Max | Mean±SD | Min-Max | Test and *P*-value |
| The evaluation form of psychiatric nursing education | 61.48±7.65 | 45–75 | 51.17±7.79 | 40–75 | 8.061* *P*<0.001 |
| Significance and value | 33.47±5.48 | 22–40 | 28.76±6.04 | 16–40 | 4.953* *P*<0.001 |
| Competence/trust | 20.40±3.43 | 10–25 | 16.78±4.67 | 8–25 | 5.435* *P*<0.001 |
| Equality | 7.15±1.87 | 4–10 | 5.31±1.97 | 2–10 | 5.780* *P*<0.001 |
| The psychiatric nursing perception scale | 71.02±13.18 | 46–95 | 61.29±9.23 | 45–83 | 5.034* *P*<0.001 |
| *Independent samples *t*-tests, SD: Standard deviation, EFPNE: Evaluation form of psychiatric nursing education, PNPS: Psychiatric nursing perception scale. | | | | | |

**Table 3.** Relationship between PNPS, EFPNE, and sub-dimensions mean scores of the students receiving traditional learning (n=148)

| Characteristics | PNPS | Significance and value | Competence/trust | Equality | EFPNE |
|---|---|---|---|---|---|
| PNPS | 1 | | | | |
| Significance and value | r=0.163 | 1 | | | |
| | P=0.138 | | | | |
| Competence/trust | r=0.228 | r=0.051 | 1 | | |
| | P<0.001 | P=0.645 | | | |
| Equality | r=0.287 | r=0.370 | r=0.097 | 1 | |
| | P<0.001 | P<0.001 | P=0.382 | | |
| EFPNE | r=0.300 | r=0.837 | r=0.500 | r=0.531 | 1 |
| | P<0.001 | P<0.001 | P<0.001 | P<0.001 | |

r: Correlation coefficient (Cohen 1992), P: Pearson correlation analysis, EFPNE: Evaluation form of psychiatric nursing education, PNPS: Psychiatric nursing perception scale.

for the psychiatric nursing course like other courses. In this study, the psychiatric nursing education perceptions of nursing students who received the course through TL and DL methods and the efficacy of the course were compared.

In this study, the psychiatry course satisfaction rates of the students in the TL group were higher than those in the DL group. Likewise, Nepal et al.[17] reported that medical faculty students were not satisfied with distance courses as much as TL, suggesting that TL should continue in the post-pandemic period. Dutta et al.,[18] in their studies with medical and nursing students, described that students were highly dissatisfied with the theoretical and practical stages of distance education, and this method was not suitable for health sciences students. In the study with 1541 medical and 684 nursing students, Singh et al.[19] found that only 20.4% would prefer DL to face-to-face learning. However, some studies in the literature report satisfaction with distance education.[28,29] Sharma et al.[30] emphasized that more than half of the medical faculty students (53.5%) were satisfied with distance education. In their study on 2520 students studying in health-related fields, Puljak et al.[15] indicated that students were satisfied with DL,

they adapted to DL, and that DL should be integrated into TL in the future. Jamil et al.[13] found that nursing students believed that DL was a better teaching tool than face-to-face education and preferred it as a learning method. It is thought that for the students in the face-to-face education group, taking the course with the method they are accustomed to, having a face-to-face instructor-student interaction, and conducting clinical practices in hospitals accompanied by the course instructor have a positive effect on their satisfaction with the psychiatric nursing course. The fact that the students in the distance education group were not in face-to-face interaction and lacked clinical skills and interaction with patients may have negatively affected their satisfaction with the course.

In this study, TL nursing students were preferences about working as psychiatric nurses after graduation. Relevant literature shows that the number of nursing students who would like to become psychiatric nurses is relatively low.[31,32] This study result, consistent with that of Duman and Günüşen,[27] is noteworthy in terms of emphasizing that it is possible to increase the tendency of nursing students to rank psychiatric nursing first in their career choices

**Table 4.** Relationship between PNPS, EFPNE, and sub-dimensions mean scores of the students receiving distance learning (n=148)

| Characteristics | PNPS | Significance and value | Competence/trust | Equality | EFPNE |
|---|---|---|---|---|---|
| PNPS | 1 | | | | |
| Significance and value | r=0.021 | 1 | | | |
| | P=0.868 | | | | |
| Competence/Trust | r=0.101 | r=−0.031 | 1 | | |
| | P=0.428 | P=0.811 | | | |
| Equality | r=−0.027 | r=0.021 | r=0.154 | 1 | |
| | P=0.833 | P=0.870 | P=0.225 | | |
| EFPNE | r=0.051 | r=0.737 | r=0.565 | r=0.355 | 1 |
| | P=0.688 | P<0.001 | P<0.001 | P<0.001 | |

r: Correlation coefficient (Cohen 1992), P: Pearson correlation analysis, EFPNE; Evaluation form of psychiatric nursing education, PNPS; Psychiatric nursing perception scale.

after satisfactory psychiatric nursing theoretical and clinical train-ing. It is thought that the students in the TL group having clinical practice experience in the presence of experts in the field of psy-chiatry and psychiatric nurses and having the opportunity to care for individuals with mental illness may lead them to know the field of psychiatry better and prefer to work as a psychiatric nurse after graduation.

In this study, the views of the students who took the psychiatric nursing course with the TL group are more positive than those in the DL group. Evli and Şimşek[33] reported that nursing students' per-ceptions of their evaluations about the psychiatric nursing course they receive are positive. Students find face-to-face lessons valu-able in the classroom environment. Since TL has been in use for many years, instructors, and students are accustomed to this method. It is thought that students taking the psychiatric nursing course with the TL method that they are used to affect their opinions about the course positively.

In the present study, the perceptions of the students who take the psychiatric nursing course with the TL method were more positive than the students who took the course with the DL method. The lit-erature cites that clinical practices are effective in students' percep-tions of psychiatric nursing.[34,35] The duration of clinical practice, the quality of the practice, the time spent with the instructor,[34] the atti-tude of clinical staff,[36] and the nurse models they encounter in the clinic[35] affect their perceptions of psychiatric nursing.[20] The fact that the students in the TL method group had the opportunity to do clini-cal practice after the theoretical course may have positively affected their perceptions of psychiatric nursing.

In the study, a relationship was found between PNPS and the EFPNE total scale scores subdimension scores (Competence/trust; equal-ity) of TL group nursing students. According to our study results, it can be said that the psychiatric nursing perception of the nursing students who are confident enough to work with individuals with mental illness and who think that psychiatric nursing concepts are equally emphasized in other nursing course contents, is positive. Like our study results, Çam and Arabacı[31] found a relationship between students' perceptions of psychiatric nursing and the efficacy of the psychiatric nursing course delivered in the traditional environment. They reported that students who found psychiatric nursing training insufficient perceived psychiatric nursing negatively. Barmak et al.[37] noted that nurses, who evaluated their theoretical knowledge of psy-chiatric nursing as sufficient, had a positive perception of psychiatric nursing. It is thought that the views and attitudes about the course are an effective factor in students' perceptions of their profession. Students' positive attitudes toward psychiatric nursing course and their positive perceptions toward psychiatric nursing may encour-age them to focus on psychiatric nursing in their career choices after graduation.

### Limitations of Study

The main identified limitation of this study is that the study was conducted with nursing students who took the psychiatric nursing course in different periods. Another limitation of the study was that it was conducted on a compulsory course. However, the data were collected after the theoretical and clinical practice of the course was completed and care was taken not to create grade anxiety in nursing students.

## Conclusion

It was observed in the study that the education method used in the psychiatric nursing course affected the nursing students' views about the course and their perceptions of psychiatric nursing. Nursing students who took the psychiatric nursing course with the TL method had positive opinions about the course and a high perception of psychiatric nursing. The students in the TL group tended to pre-fer psychiatric nursing in their career choices. TL groups of students were satisfied with the psychiatric nursing education they received. It is recommended that the psychiatric nursing course, which is an applied course, should be given with the traditional education method after the COVID-19 pandemic. To better evaluate the effectiveness of educational methods, it is recommended to plan further randomized controlled studies with nursing students studying in the same period. In addition, it is recommended that further studies comparing the effectiveness of traditional and distance education be planned with a larger sample and cover all compulsory nursing courses.

## References

1. Karakaş M. The multi-sociological aspects of the COVID-19 pandemic and the new normal. *Istanb Univ J Sociol*. 2020;*40*(1):541-573. Available at: https ://dergipark.org.tr/en/pub/iusosyoloji/issue/56274/776402.
2. Uzun Şahin C, Serbest Baz AN. Views and anxiety levels of university stu-dents regarding distance education during the Covid-19 pandemic. *Yükseköğretim Derg*. 2021;*11*(3):617-624. [CrossRef]
3. Higher Education Institution (YÖK). Press briefing. Available at: https://ww w.yok.gov.tr/Sayfalar/Haberler/2020/YKSPostponementBas%C4%B1 nA%C3%A7%C4%B1klamas%C4%B1.aspx. Accessed April 16, 2020.
4. Al Lily AE, Ismail AF, Abunasser FM, Alhajhoj Alqahtani RHA. Distance educa-tion as a response to pandemics: coronavirus and Arab culture. *Technol Soc*. 2020;*63*:101317. [CrossRef]
5. Yüksekdag BB. Perceptions on distance nursing education. *Educ Technol Theor Pract*. 2020;*10*(2):490-503 . [CrossRef]
6. Keskin M, Özer KD. Evaluation of students' feedbacks on web-based dis-tance education in the COVID-19 process. *İzmir Katip Çelebi University Fac-ulty of Health Science Journal*. 2020;*5*(2):59-67. Available at: https://dergipa rk.org.tr/en/pub/ikcusbfd/issue/55773/754174.
7. Hodges C, Moore S, Lockee B, Trust T, Bond A. The difference between emergency remote teaching and online learning. *Educause Rev*. 2020;*27*:1-12. Available at: https://er.educause.edu/articles/2020/3/the-difference-between-emergency-remote-teaching-and-online-learning.
8. Gewin V. Five tips for moving teaching online as COVID-19 takes hold. *Nature*. 2020;*580*(7802):295-296. [CrossRef]

9. Özdoğan AÇ, Berkant HG. The examination of stakeholders' opinions on distance education during the COVID-19 epidemic. *J Natl Educ*. 2020;*49*(1):13-43. [CrossRef]

10. Afşar B, Büyükdoğan B. Assessments of FBAS and FSHS students about distance education during the Covid-19 pandemic period. *J Karatay Soc Res*. 2020;*5*:161-182. Available at: https://dergipark.org.tr/tr/pub/karataysad/issue/57615/818536.

11. Wang C, Cheng Z, Yue XG, McAleer M. Risk management of Covıd-19 by universities in China. *J Risk Financ Manag*. 2020;*13*(2):36. [CrossRef]

12. Kürtüncü M, Kurt A. Covid-19 pandemisi döneminde hemşirelik öğrencilerinin uzaktan eğitim konusunda yaşadıkları sorunlar. *Avrasya Sosyal Ekon Araştırmaları Derg*. 2020;*7*(5):66-77. Available at: https://dergipark.org.tr/tr/pub/asead/issue/54658/725503.

13. Jamil B, Sethi A, Ali S. Attitude of nursing students towards e-learning. *Adv Health Prof Educ*. 2016;*2*:24-29. Available at: http://ahpe.kmu.edu.pk/index.php/ahpe/article/view/67.

14. Lahti M, Hätönen H, Välimäki M. Impact of e-learning on nurses' and student nurses knowledge, skills, and satisfaction: a systematic review and meta-analysis. *Int J Nurs Stud*. 2014;*51*(1):136-149. [CrossRef]

15. Puljak L, Čivljak M, Haramina A, et al. Attitudes and concerns of undergraduate university health sciences students in Croatia regarding complete switch to e-learning during COVID-19 pandemic: a survey. *BMC Med Educ*. 2020;*20*(1):416. [CrossRef]

16. Vaona A, Banzi R, Kwag KH, et al. E-learning for health professionals. *Cochrane Database Syst Rev*. 2018;*1*(1):CD011736. [CrossRef]

17. Nepal S, Atreya A, Menezes RG, Joshi RR. Students' perspective on online medical education amidst the COVID-19 pandemic in Nepal. *J Nepal Health Res Counc*. 2020;*18*(3):551-555. [CrossRef]

18. Dutta S, Ambwani S, Lal H, et al. The satisfaction level of undergraduate medical and nursing students regarding distant preclinical and clinical teaching amidst COVID-19 across India. *Adv Med Educ Pract*. 2021;*12*:113-122. [CrossRef]

19. Singh HK, Joshi A, Malepati RN, et al. A survey of e-learning methods in nursing and medical education during COVID-19 pandemic in India. *Nurse Educ Today*. 2021;*99*:104796. [CrossRef]

20. Duman ZÇ, Günüşen NP, İnan FŞ, Ince SÇ, Sari A. Effects of two different psychiatric nursing courses on nursing students' attitudes towards mental illness, perceptions of psychiatric nursing, and career choices. *J Prof Nurs*. 2017;*33*(6):452-459. [CrossRef]

21. Uzun S, Demir S. Views of the senior nursing students about working at a psychiatry clinic after graduation: a qualitative study. *Gümüşhane Univ J Health Sci*. 2020;*9*(2):172-185. [CrossRef]

22. Çam MO, Külig D, Demirkol H, Uğuryol M, Kaçmaz ED. Opinions and suggestions of a group of intern nurses about psychiatry nursing practices: a focus group study. *J Int Soc Res*. 2020;*13*(73). Available at: http://eds.a.ebscohost.com/eds/pdfviewer/pdfviewer?vid=0&sid=b19f8be8-61cb-4b8a-9bb7-e850232de340%40sdc-v-sessmgr03.

23. Wynaden D, Popescu A. *Graduate Nurse Study*. Perth: Mental Health Division of the Health Department of Western Australia; 1999.

24. Baysan-Arabacı L, Çam O. The validity and reliability of the Turkish version of the psychiatric nursing education evaluation form. *J Ege Univ Nurs Fac*. 2009;*25*(1):1-12.

25. Çam O, Baysan-Arabacı L. Development of psychiatric nursing perception scale. *J Anatolia Nurs Health Sci*. 2009;*12*(4):29-40. Available at: https://dergipark.org.tr/en/pub/ataunihem/issue/2647/34048.

26. Surgenor LJ, Dunn J, Horn J. Nursing student attitudes to psychiatric nursing and psychiatric disorders in New Zealand. *Int J Ment Health Nurs*. 2005;*14*(2):103-108. [CrossRef]

27. Duman ZÇ, Günüşen NP. Effects of the psychiatric nursing course on students' attitudes towards mental ıllnesses, perceptions of psychiatric nursing and career choices. *Turk Klin Hemsirelik Bilimleri*. 2017;*9*(4). [CrossRef]

28. Prati C, Pelliccioni GA, Sambri V, Chersoni S, Gandolfi MG. COVID-19: its impact on dental schools in Italy, clinical problems in endodontic therapy and general considerations. *Int Endod J*. 2020;*53*(5):723-725. [CrossRef]

29. Richardson JC, Maeda Y, Lv J, Caskurlu S. Social presence in relation to students' satisfaction and learning in the online environment: a meta-analysis. *Comput Hum Behav*. 2017;*71*:402-417. [CrossRef]

30. Sharma K, Deo G, Timalsina S, Joshi A, Shrestha N, Neupane HC. Online learning in the face of COVID-19 Pandemic: assessment of students' satisfaction at chitwan medical college of Nepal. *Kathmandu Univ Med J (KUMJ)*. 2020;*18*(70):40-47. [CrossRef]

31. Çam O, Arabacı BL. Öğrenci hemşirelerin psikiyatri hemşireliğini, ruhsal hastalıkları ve psikiyatri hemşireliği eğitimini değerlendirmeleri. *Ege Univ Hemşirelik Fak Derg*. 2010;*26*(2):49-66. Available at: https://dergipark.org.tr/tr/pub/egehemsire/issue/49595/635537.

32. Happell B. The importance of clinical experience for mental health nursing -part 2: Relationships between undergraduate nursing students' attitudes, preparedness, and satisfaction. *Int J Ment Health Nurs*. 2008;*17*(5):333-340. [CrossRef]

33. Evli M, Şimsek N. The effect of psychiatric nursing education on student communication satisfaction: path analysis. *Ek Sayı*. 2020;*17*:45-52. [CrossRef]

34. Gough K, Happell B. Undergraduate nursing students' attitude to mental health nursing: a cluster analysis approach. *J Clin Nurs*. 2009;*18*(22):3155-3164. [CrossRef]

35. Happell B, Gaskin CJ. The attitudes of undergraduate nursing students towards mental health nursing: a systematic review. *J Clin Nurs*. 2013;*22*(1-2):148-158. [CrossRef]

36. Henderson S, Happell B, Martin T. Impact of theory and clinical placement on undergraduate students' mental health nursing knowledge, skills, and attitudes. *Int J Ment Health Nurs*. 2007;*16*(2):116-125. [CrossRef]

37. Barmak F, Arabacı LB, Taş G. Investigatıon of the perceptions of psychiatric nursing of nurses working in non-psychiatric clinics. *J Nurs Sci*. 2019;*2*(3):1-7. Available at: https://dergipark.org.tr/en/pub/hbd/issue/51481/660003.