

Empathy and Perceptions of Spirituality and Spiritual Care Among Turkish Nursing Students: A Correlational Study

Türk Hemşirelik Öğrencilerinin Empati Düzeyleri ile Maneviyat ve Manevi Bakım Algıları Arasındaki İlişki: Korelasyonel Bir Çalışma

Gizem Nur KATI^{a*}  , Tuğba GÖZÜTOK KONUK^b 

^a Research Assistant, Department of Fundamentals of Nursing, Seydişehir Kamil Akkanat Faculty of Health Sciences, Necmettin Erbakan University, Konya, Türkiye. [ROR](#)

^a Araştırma Görevlisi, Hemşirelik Esasları Anabilim Dalı, Seydişehir Kamil Akkanat Sağlık Bilimleri Fakültesi, Necmettin Erbakan Üniversitesi, Konya, Türkiye. [ROR](#)

^b Research Assistant PhD., Department of Fundamentals of Nursing, Faculty of Nursing, Selçuk University, Konya, Türkiye. [ROR](#)

^b Araştırma Görevlisi Dr., Hemşirelik Esasları Anabilim Dalı, Hemşirelik Fakültesi, Selçuk Üniversitesi, Konya, Türkiye. [ROR](#)

*Corresponding Author / İletişimden Sorumlu Yazar, E-mail: gizemkati4@gmail.com

ARTICLE INFO

Article History:

Received: 28.12.2024

Accepted: 17.03.2025

Publication: 14.04.2025

Citation:

Kati, G.N., and Gozutok Konuk, T. (2025). Empathy and perceptions of spirituality and spiritual care among turkish nursing students: a correlational study. Artuklu Health, 11, 28-36. <https://doi.org/10.58252/artukluhealth.1608911>

ABSTRACT

Introduction: This study aimed to determine the relationship between nursing students' levels of empathy and their perceptions of spirituality and spiritual care

Methods: This descriptive, correlational study included a sample of 401 nursing students in their second, third, and fourth years at a state university's nursing faculty. Data were collected using the Introductory Information Form, the Toronto Empathy Scale, and the Spirituality and Spiritual Care Rating Scale.

Results: The students' mean total score on Toronto Empathy Scale was 54.26±6.75, and their mean total score on Spirituality and Spiritual Care Rating Scale was 65.88±7.99. A significant difference was found between the total Toronto Empathy Scale scores and variables such as gender, receiving education on spirituality and spiritual care, and the need for education on spiritual care (p<0.05). Similarly, a significant difference was also found between the total Spirituality and Spiritual Care Rating Scale and variables such as gender, the need for education on spiritual care, and the experience of providing care related to spiritual care (p<0.05). A moderate positive and significant correlation was found between the total scores of the Toronto Empathy Scale and the Spirituality and Spiritual Care Rating Scale (r=0.482, p<0.01).

Conclusion: The findings suggest that nursing students possess relatively high levels of both empathy and positive perceptions of spirituality and spiritual care. Furthermore, the study concludes that increased empathy levels are associated with more positive perceptions of spirituality and spiritual care. Based on these results, it is recommended that nursing curricula incorporate content designed to enhance students' empathy levels and perceptions of spiritual care, and that their specific skill needs in this area are addressed.

Keywords: Nursing students, Empathy, Spirituality, Spiritual care, Perception of spiritual care

MAKALE BİLGİLERİ

Makale Geçmişi:

Geliş Tarihi: 28.12.2024

Kabul Tarihi: 17.03.2025

Yayın Tarihi: 14.04.2025

Atıf Bilgisi:

Kati, G.N., ve Gözütok Konuk, T. (2025). Türk hemşirelik öğrencilerinin empati düzeyleri ile maneviyat ve manevi bakım algıları arasındaki ilişki: korelasyonel bir çalışma. Artuklu Health, 11, 28-36. <https://doi.org/10.58252/artukluhealth.1608911>

ÖZET

Giriş: Bu çalışma, hemşirelik öğrencilerinin empati düzeyleri ile maneviyat ve manevi bakım algıları arasındaki ilişkiyi belirlemek amacıyla yapılmıştır.

Yöntem: Bu tanımlayıcı, ilişkisel çalışma, bir devlet üniversitesinin hemşirelik fakültesinde öğrenim gören ikinci, üçüncü ve dördüncü sınıf 401 hemşirelik öğrencisinden oluşan bir örneklem içermektedir. Veriler Tanıtıcı Bilgi Formu, Toronto Empati Ölçeği ve Maneviyat ve Manevi Bakım Dereceleme Ölçeği ile toplanmıştır.

Bulgular: Öğrencilerin Toronto Empati Ölçeği toplam puan ortalaması 54.26±6.75 ve Maneviyat ve Manevi Bakım Dereceleme Ölçeği toplam ortalama puan 65.88±7.99'dur. Toronto Empati Ölçeği toplam puan ortalaması ile cinsiyet, maneviyat ve manevi bakım konusunda eğitim alma durumu ve manevi bakım ile ilgili eğitime ihtiyaç duyma durumu arasında anlamlı farklılık bulunmuştur (p<0.05). Maneviyat ve Manevi Bakım Dereceleme Ölçeği toplam puan ortalaması ile cinsiyet, manevi bakım ile ilgili eğitime ihtiyaç duyma durumu ve manevi bakımla ilgili bakım verme deneyimi arasında anlamlı farklılık saptanmıştır (p<0.05). Öğrencilerin Toronto Empati Ölçeği ile Maneviyat ve Manevi Bakım Dereceleme Ölçeği toplam puan ortalamaları arasında pozitif yönde zayıf düzey anlamlı ilişki bulunmuştur (r=0.482, p<0.01).

Sonuç: Araştırma sonuçları, hemşirelik öğrencilerinin yüksek düzeyde empatiye ve maneviyat ve manevi bakım algılarına sahip olduğunu göstermektedir. Ayrıca, öğrencilerin empati düzeyleri arttıkça maneviyat ve manevi bakım algılarının da arttığı sonucuna varılmıştır. Bu sonuçlara dayanarak, hemşirelik müfredatlarının öğrencilerin empati düzeylerini ve manevi bakım algılarını geliştirmek için tasarlanmış içerikler içermesi ve bu alandaki özel beceri ihtiyaçlarının karşılanması önerilmektedir.

Anahtar Kelimeler: Hemşirelik öğrencileri, Empati, Maneviyat, Manevi bakım, Manevi bakım algısı

1. Introduction

Empathy is the ability of a nurse to understand and share the feelings of a patient by placing themselves in the patient's situation, enables them to feel and understand the patient's physical and psychological needs and alleviate their suffering (Peng et al., 2020). This skill helps nurses fully comprehend patients' needs during nursing practice and make informed decisions (Ağaçdiken and Aydoğan, 2017). Empathy is a crucial skill for nursing students in their clinical practice (Jia-Ru et al., 2022). Nursing students with higher levels of empathy are reported to demonstrate strong compassion and humanistic care behaviors. This is because they are better able to accurately interpret both the verbal and non-verbal behaviors of patients, assess the emotional state of patients and their families from their perspective, understand their internal experiences, and meet their physical, psychological, social, and spiritual needs (Wang et al., 2022).

In today's world, with the extension of adulthood (Ng et al., 2022), chronic and life-limiting diseases impose a significant burden on patients (Cao et al., 2022). Patients particularly face physical, economic, and psychosocial challenges, which lead to suffering on physical, psychological, social, and spiritual levels (Kang et al., 2021). Consequently, spiritual care needs emerge as a priority during the disease process (O'Brien et al., 2019). The concept of spirituality is defined as "the effort to understand and accept one's relationships with oneself and others, their place in the universe, and the meaning of life, which stems from experiences gained throughout life" (Gürsu and Ay, 2018). Spirituality becomes especially prominent during difficult situations like illness (Weathers et al., 2016). It provides hope, strength, comfort, and peace, while also alleviating pain and suffering, and facilitating acceptance of the illness (Miller et al., 2022; Oliveira et al., 2021). Spiritual care practices in nursing interventions include therapeutic approaches such as building trust with the patient, showing empathy, understanding the patient's concerns and values, and respecting and considering their religious beliefs (Taylor et al., 2019). During spiritual care practices, nurses can empathize, help patients discover the value of life, find meaning, and support their physical, psychological, and spiritual well-being (Donesky et al., 2020; Musa, 2020). However, subjective approaches to spiritual care, insufficient assessment of patients' spiritual needs, and inadequacies in providing spiritual care hinder effective spiritual care practices (Caldeira et al., 2016). Studies report that nursing students'

perceptions of spirituality and spiritual care are generally low to moderate (Bulut and Meral, 2019; Okuyan and Kerkez, 2023; Wang et al., 2022). It is emphasized that the best way to teach the nature of spiritual care and equip students with necessary skills in this area is through education (Petersen et al., 2017). Enhancing nursing students' perceptions of spiritual care during their education is considered essential for their ability to provide effective spiritual care in the future. Nursing students with a strong perception of spiritual care are better able to meet patients' and their families' needs through empathy, alleviating their anxieties, and improve the quality of care and patient satisfaction by establishing a good nurse-patient relationship (Chen et al., 2018).

It is believed that nursing students possessing high levels of empathy may positively influence their perceptions of spiritual care by enabling them to better understand patients' psychological states. In the literature, the relationship between nursing students' perceptions of spiritual care and empathy has been examined through the mediating role of various factors (Zhao et al., 2022; Wang et al., 2022). However, no study has directly addressed the relationship between nursing students' empathy levels and their perceptions of spirituality and spiritual care. The primary aim of this research is to clearly establish the relationship between nursing students' levels of empathy and their perceptions of spirituality and spiritual care, thereby providing a significant contribution to the literature on this topic.

Research Questions

- What are the empathy levels and perceptions of spirituality and spiritual care among nursing students?
- Do empathy levels of nursing students differ based on their demographic characteristics?
- Do nursing students' perceptions of spirituality and spiritual care differ based on their demographic characteristics?
- Is there a relationship between nursing students' levels of empathy and their perceptions of spirituality and spiritual care?

2. Methods

2.1. Study Design, Setting and Sample

The study employed a descriptive and correlational design. It was conducted with second-, third-, and fourth-year nursing students at a nursing faculty in the Central Anatolia region of Turkey. Data were collected between May 15, 2024, and June 4, 2024, via face-

to-face interviews conducted by the researchers during students' class breaks. In each class, the researchers explained the research and its objectives before distributing the questionnaires.

The inclusion criteria were: (1) agreement to participate in the study complete completion of the survey forms, (2) no barriers in verbal communication, and (3) enrollment in the second, third, or fourth year of the nursing program during the study period. Exclusion criteria were: first-year students, as they were deemed to lack sufficient clinical experience in the hospital environment to have an in-depth perspective on providing spiritual care to patients, and international students, as their perceptions of spiritual care might be influenced by cultural factors. This aligns with other research that acknowledges the importance of cultural factors in spiritual care.

The study population comprised 533 second-, third-, and fourth-year nursing students at the faculty where the study was conducted. The aim was to reach the entire population without selecting a sample. Ultimately, 401 students voluntarily agreed to participate and were reached. The participation rate was 75.2%.

2.2. Data Collection Tools

Data were collected using the "Introductory Information Form," "Toronto Empathy Scale (TES)," and "Spirituality and Spiritual Care Rating Scale (SSCRS)."

Introductory Information Form: Prepared pursuant to previous studies (Zhao et al., 2022; Wang et al., 2022), the form consisted of a total of 7 items, including age, gender, income, grade level, training status on spirituality and spiritual care outside of the normal academic curriculum (seminars/courses/certificates, etc.), need for education on spiritual care, and experience of caregiving related to spiritual care.

Toronto Empathy Scale (TES): TES was developed by Spreng et al. (2009) and adapted to Turkish language by Totan et al. (2012). The single-domain 13-item scale is aimed to determine the level of empathy in individuals. Items are scored as 1 'never', 2 'rarely', 3 'sometimes', 4 'often' and 5 'always'. Questions 1, 3, 5, 7-9, 11, and 12 are reverse coded. The total score from the scale is at least 13 and at most 65, and the higher the score, the higher the level of empathy. The Cronbach's alpha value of the scale is 0.79 (Totan et al., 2012). In the present study, Cronbach's alpha value was 0.83.

Spirituality and Spiritual Care Rating Scale (SSCRS): The scale was developed by McSherry et al. (2002), and the validity and

reliability study for the Turkish language was conducted by Ergül and Temel (2007). The five-point Likert-type scale includes 17 items with responses ranging between "1=definitely do not agree" and "5=totally agree." Thirteen items are scored directly (1, 2, 5, 6, 7, 8, 9, 10, 11, 12, 14, 15, and 17) and four items are scored conversely (3, 4, 13, and 16). The lowest and highest score on the scale is 17 and 85, respectively. Higher total scores are indicative of a higher level of perception of spirituality and spiritual care. The Cronbach's alpha value of the scale was 0.76 (Ergül and Temel, 2007). In the present study, the Cronbach's alpha value was 0.83.

2.3. Data Collection Process

The study data were collected by the author using face-to-face interviews with the students in the classroom between May and June 2024. Prior to the data collection, the students were informed about the research, and their verbal and written consent was obtained. Completing the surveys took approximately 15 minutes. Anonymity and confidentiality were ensured.

2.4. Data Analysis

The Statistical Package for the Social Sciences Version 25 software package was used to analyze study data. Normal distribution of data conformity was assessed by skewness, kurtosis values and Kolmogorov-Smirnov test. Skewness and Kurtosis were used to test the normal distribution hypothesis for the variables prior to data analysis. If these values are in the range -2 to +2 means that the data have a normal distribution (George and Mallery, 2010). All data met the normal distribution hypothesis in the range of -2 to +2 except for the SSCRS score. SSCRS does not conform to normal distribution because $p < 0.05$ was found in Kolmogorov-Smirnov test. Statistical parameters were expressed as mean \pm standard deviation, median, number, and percentage. For the purpose of analysis, independent samples t-test, one-way analysis of variance, Mann-Whitney U test, Kruskal-Wallis test, and Pearson and Spearman correlation analysis were used. In the correlation evaluation, $r \leq 0.25$ is very weak; $0.26 \leq r \leq 0.49$ is weak; $0.50 \leq r \leq 0.69$ is moderate; $0.70 \leq r \leq 0.89$ is strong; $0.90 \leq r < 1$ is very strong (Erdoğan et al., 2018).

2.5. Ethical Consideration

Ethics committee approval (Date: April 2, 2024, Decision No: 2024/27) was obtained from the Health Sciences Scientific Research Ethics Committee of a university. Application permission was also obtained from the dean's office of the relevant faculty (Date: April 25, 2024, Number: E-81647866-900-742936)

to conduct the study. Permission to use the scales was obtained from the corresponding authors via email. All participants who agreed to participate in the study were informed about its purpose, and their verbal and written consent were obtained. This study was prepared, implemented, and reported according to the Strengthening the Reporting of Observational Studies in Epidemiology statement and in accordance with the ethical principles outlined in the Declaration of Helsinki (Von Elm et al., 2014).

3. Results

Table 1. Descriptive Characteristics of Students (n=401)

Characteristics	n	%
Age (year) X±SD (Min- Max)	21.60±1.40	(19-27)
Gender	Female	319 79.6
	Male	82 20.4
Income Level	Lower	24 6
	Medium	342 85.3
	Higher	35 8.7
Class	2	103 25.7
	3	169 42.1
	4	129 32.2
Receiving training on spirituality and spiritual care outside the normal academic curriculum (Seminar/course/certificate etc.)	Yes	57 14.2
	No	344 85.8
Need for training on spiritual care	Yes	161 40.1
	No	240 59.9
Caregiving experience related to spirituality and spiritual care	Yes	56 14
	No	345 86

X=Mean, SD=Standard Deviation, Min=Minimum, Max=Maximum.

The mean age of the students was 21.60±1.40 years; 79.6% were female, 85.3% had a middle-level income, and 42.1% were third-year students. About 85.8% of the students did not receive any training on spirituality and spiritual care, 59.9% thought that they did not need training on spiritual care, and 86% did not have any caregiving experience in spirituality and spiritual care (Table 1).

Table 2 shows the mean scores, minimum–maximum values, and Cronbach's alpha coefficients of the scales. The students' mean total score on the empathy scale was 54.26±6.75, and their mean total score on the spirituality and spiritual care scale was 65.88±7.99.

Table 2. Total Mean Scores of TES and SSCRS

	X±SD	Min-Max	Cronbach Alpha
TES	54.26±6.75	30-65	0.83
SSCRS	65.88±7.99	25-85	0.83

SSCRS=Spirituality and Spiritual Care Rating Scale, TES=Toronto Empathy Scale, X=Mean, SD=Standard Deviation, Min=Minimum, Max=Maximum.

Significant differences existed between gender, training status on spirituality and spiritual care, need for training on spiritual care, and the mean total score of TES (p<0.05). There was a significant difference in gender, the need for training on spiritual care, the caregiving experience related to spiritual care, and the mean total score of the SSCRS (p<0.05) (Table 3).

Table 3. Comparison of Total Score Averages of TES and SSCRS according to Students' Descriptive Characteristics (n=401)

Variables	TES X±SD	Test Value	P	SSCRS Median (Min-Max)	Test Value	P	
Gender	Female	54.93±6.27	t=7.215	0.001	66 (33-85)	U=9864.500	0.001
	Male	51.64±7.85			64 (25-82)		
Income Level	Lower	53.45±6.82	F=0.466	0.631	64.50(25-79)	KW=1.637	0.441
	Medium	54.43±6.33			66(32-85)		
	Higher	53.17±10.04			65(33-81)		
Class	2	54.58±5.56	F=0.213	0.809	67(32-82)	KW=0.841	0.657
	3	54.10±6.73			65(42-85)		
	4	54.22±7.62			66(25-85)		
Receiving training on spirituality and spiritual care outside the normal academic curriculum (Seminar/course/certificate etc.)	Yes	56.54±6.28	t=0.004	0.008	66(25-83)	U=9490.000	0.698
	No	53.88±6.67			66(32-85)		
Need for training on spiritual care	Yes	55.30±5.96	t=2.070	0.009	67(25-85)	U=15980.00	0.003
	No	53.56±7.16			65(32-85)		
Caregiving experience related to spirituality and spiritual care	Yes	55.71±6.15	t=0.596	0.065	68(25-81)	U=7838.00	0.023
	No	54.02±6.82			66(32-85)		

t=Independent Simple T Test, F=One Way Anova, U=Mann-Whitney U, KW=Kruskal-Wallis, TES=Toronto Empathy Scale, SSCRS=Spirituality and Spiritual Care Rating Scale

There was a positive, weakly significant correlation between the students' mean total scores from TES and SSCRS ($r=0.482$, $p<0.01$). There was no significant correlation between the age variable and TES and SSCRS ($p>0.05$) (Table 4).

Table 4. The Relationship Between Scale Scores and Age Variable

		TES	SSCRS
Age(year)	r	-0.052	-0.14 ^b
	p	0.299 ^a	0.781
TES	r	1.000	0.482 ^{**}
	p	---	0.000 ^b
SSCRS	r	0.482 ^{**}	1.000
	p	0.000 ^b	---

^{**}Correlation is significant at the 0.01 level (2-tailed), ^aPearson Correlation (Normal Distribution), ^bSpearman Correlation (Abnormal Distribution)

4. Discussion

In the present study, the students' empathy levels (54.26 ± 6.75) were high. This contrasts with previous studies that reported moderate empathy levels in nursing students (Hamaideh et al., 2024; İltter and Ovayolu, 2023; Wang et al., 2022). This finding suggests that the students' empathy skills, including their ability to perceive patients' emotions, address their physical and psychological needs, and alleviate their suffering, are well-developed. Empathy is a skill that can be cultivated through education and practice (Robinson et al., 2023), and prior research has highlighted the importance of incorporating empathy training into the nursing curriculum (Atta et al., 2024). Therefore, it is plausible that these nursing students benefit from effectively structured coursework designed to foster empathy from the beginning of their undergraduate education.

In this study, female students exhibited higher levels of empathy. This aligns with previous research consistently demonstrating that female students tend to have higher empathy levels than their male counterparts (Aktaş et al., 2018; Atta et al., 2024; Strelakova, 2019). However, some studies have reported no significant relationship between gender and empathy levels in nursing students (Hamaideh et al., 2024; İltter and Ovayolu, 2023; Liu et al., 2023). These discrepancies may be attributable to variations in students' cultural backgrounds, upbringing, and personal values.

Students who receive education on spirituality and spiritual care often demonstrate higher levels of empathy. Prior research indicates that training in spiritual care can enhance empathic communication skills (Kang and Yong, 2019; Petersen and Schiltz, 2020). It is plausible that participation in spiritual care

programs beyond the standard curriculum contributes to the development of empathy. Incorporating additional educational content into the nursing curriculum can increase the visibility of spiritual nursing care in clinical practice, promote a culture of spiritual care, and improve nurses' understanding and knowledge of spirituality (Hawthorne and Gordon, 2020). Incorporating additional educational content into the nursing curriculum can increase the visibility of spiritual nursing care in clinical practice, promote a culture of spiritual care, and improve nurses' understanding and knowledge of spirituality. In the present study, a substantial proportion (40.1%) of participants expressed a need for training in spiritual care, while only 14.2% had received such training. This is consistent with previous findings indicating that a large majority (87.7%–89.3%) of nursing students desire training in spiritual care, yet only a small fraction (7.4%–9.2%) have access to it (Zhao et al., 2022; Wang et al., 2022). This highlights a prevalent international issue. The unmet need for spiritual care training may contribute to empathy levels not reaching their full potential. Addressing this gap is crucial for improving nursing students' empathy and their ability to provide holistic care.

In the present study, students' perceptions of spirituality and spiritual care levels (65.88 ± 7.99) were high. Similarly, other studies reported that nursing students had high perceptions of spirituality and spiritual care (Akkuş and Karabağ Aydın, 2022; Balay-Odao et al., 2024; Çetintaş et al., 2021; Musa 2020; Zhao et al., 2022). Nevertheless, there are also other studies which reported that nursing students' perceptions of spirituality and spiritual care were at lower and medium levels (Bulut and Meral, 2019; Okuyan and Kerkez, 2023; Wang et al., 2022). Although it is well-established that the training provided for spiritual care during undergraduate education increases students' knowledge and skills about spiritual care, there are deficiencies in this field in the nursing curriculum (Petersen and Schiltz, 2020). It can be said that although it is inadequately included in the curriculum, it is effective in raising students' awareness and positive perceptions.

Female students had higher perceptions of spirituality and spiritual care. Similarly, it was reported that female students had higher perceptions of spirituality and spiritual care. (Akkuş and Karabağ Aydın, 2022; Aslan and Unsal 2021; Çetintaş et al., 2021). The female students' perceptions of spiritual care are expected to be higher than the male students since female students can express their emotions more easily and traditionally

assume more of a caregiving role (Akkuş and Karabağ Aydın, 2022). Notwithstanding the above, other studies reported that the gender variable was not related to the level of spirituality and spiritual care perceptions in nursing students, unlike the results of the present study (Balay-Odao et al., 2024; Bulut and Meral, 2019; Okuyan and Kerkez, 2023; Zhao et al., 2022). This difference may be because male students were the minority in the sample groups in such studies.

Students in need of training in spiritual care had higher perceptions of spirituality and spiritual care. Similarly, it was suggested that students who needed training on spiritual care had higher levels of spirituality and spiritual care perceptions, and it was reported that the majority of the students heavily needed training (Çetintaş et al., 2021; Okuyan and Kerkez, 2023; Zhao et al., 2022). Addressing the training needs for spiritual care requested by the students is necessary to increase their perceptions of spiritual care. Additionally, it was a promising result that students were willing to receive training on spiritual care and wanted to improve themselves in this field. The fact that students were aware of the need for training in this field during their undergraduate education suggested that they would be sensitive in meeting the spiritual care needs of their patients in the future.

Students with caregiving experience related to spiritual care had higher levels of perceptions of spirituality and spiritual care. It was found that students who practiced spiritual care in their clinical practice had higher perceptions of spirituality and spiritual care (Bulut and Meral, 2019). Unlike the results of the present study, it was reported that there was no relationship between students' spiritual care practice status and their perceptions of spirituality and spiritual care (Akkuş and Karabağ Aydın, 2022). In such studies, it was reported that students provided spiritual care at lower rates in clinical practice. It can be suggested that students cannot provide spiritual care due to inadequate knowledge and skills in spiritual care practice. It was reported that it was possible to provide students with skills through training (Petersen et al., 2017). Therefore, eliminating students' lack of training can increase their spiritual care practice skills and allow them to provide further spiritual care in clinical practice.

In the present study, as the empathy levels of the students increased, their perceptions of spirituality and spiritual care increased as well. Similarly, in previous reports, it was shown that the empathy levels of the students were positively correlated

with their perceptions of spirituality and spiritual care (Zhao et al., 2022; Wang et al., 2022). Students with higher empathy could more accurately understand the patient's verbal and non-verbal behaviors and practice spiritual care in a compassionate and humanistic way (Chen et al., 2018). Nursing students with a higher level of spiritual care perception can share their feelings and empathize with their patients while providing them with spiritual care.

4.1. Limitations

One limitation of this study is the disproportionate representation of female students among the participants. Another limitation stems from the reliance on students' self-reported data, which may be subject to bias.

5. Conclusion

In conclusion, this study found that students exhibited high levels of empathy and positive perceptions of spirituality and spiritual care. Furthermore, a positive correlation was observed between empathy levels and perceptions of spirituality and spiritual care. Gender, training in spirituality and spiritual care, and the perceived need for such training were found to influence students' empathy levels. Additionally, gender, the need for training in spiritual care, and caregiving experience related to spiritual care affected students' perceptions of spirituality and spiritual care. Based on these findings, it is recommended that students receive support in clinical practice to translate their knowledge into practical empathy and spiritual care skills. Providing experienced mentors during clinical practice can enhance their ability to offer spiritual support through empathic engagement with patients.

Article Information / Makale Bilgileri

Evaluation: Two External Reviewers / Double Blind

Değerlendirme: İki Dış Hakem / Çift Taraflı Körleme

Ethical Consideration: Ethics committee permission (Date: 02.04.2024, Decision No: 2024/27) was obtained from the Health Sciences Scientific Research Ethics Committee of a university and the necessary application permission was obtained from the dean's office (Date: 25.04.2024, Number: E-81647866-900-742936) of the relevant faculty to conduct the study.

It is declared that scientific and ethical principles were complied with during the preparation of this study and all the studies used in this study were cited in the bibliography.

Etik Beyan: Bir üniversitenin Sağlık Bilimleri Bilimsel Araştırmalar Etik Kurulu'ndan etik kurul izni (Tarih: 02.04.2024, Karar No: 2024/27) ve ilgili fakültenin dekanlığından çalışmanın yapılabilmesi için gerekli başvuru izni (Tarih: 25.04.2024, Sayı: E-81647866-900-742936) alınmıştır.

Bu çalışmanın hazırlanma sürecinde bilimsel ve etik ilkelere uyulduğu ve yararlanılan tüm çalışmaların kaynakçada belirtildiği beyan olunur.

Similarity Screening: Done – iThenticate and intihal.net

Benzerlik Taraması: Yapıldı – iThenticate ve intihal.net

Ethical Statement / Etik Bildirim: health@artuklu.edu.tr

Authorship Contribution/ Yazar Katkıları:

Araştırmanın Tasarımı (CRediT 1)	GNK (50%) - TGK (50%)
Veri Toplanması (CRediT 2)	GNK (50%) - TGK (50%)
Araştırma - Veri Analizi - Doğrulama (CRediT 3-4-6-11)	GNK (50%) - TGK (50%)
Makalenin Yazımı (CRediT 12-13)	GNK (%50) - TGK(%50)
Metnin Geliştirilmesi ve Tashihi (CRediT 14)	GNK (%50) -TGK(%50)

Research Design (CRediT 1)	GNK (50%) - TGK (50%)
Data Collection (CRediT 2)	GNK (50%) - TGK (50%)
Research - Data Analysis - Verification (CRediT 3-4-6-11)	GNK (50%) - TGK (50%)
Writing the Article (CRediT 12-13)	GNK (%50) - TGK(%50)
Development and Revision of the Text (CRediT 14)	GNK (%50) -TGK(%50)

Conflict of Interest: No conflict of interest declared.

Çıkar Çatışması: Çıkar çatışması beyan edilmemiştir.

Financing: No external funding was used to support this research.

Finansman: Bu çalışma için herhangi bir bütçe desteği yoktur.

Copyright & Licence: The authors own the copyright of their work published in the journal and their work is published under the CC BY-NC 4.0 licence. 

Telif Hakkı & Lisans: Yazarlar dergide yayınlanan çalışmalarının telif hakkına sahiptirler ve çalışmalarını CC BY-NC 4.0 lisansı altında yayımlanmaktadır. 

Acknowledgments: Thank you to all the students who participated in the study.

Teşekkür: Çalışmaya katılan tüm öğrencilere teşekkür ederiz.

References

- Ağaçdiken, S., and Aydoğan, A. (2017). Empathic skills and ethical sensitivity relationship in nurses. *Gümüşhane University Journal of Health Sciences*, 6(2), 122-129.
- Akkuş, Y., and Karabağ Aydın, A. (2022). Determining the relationship between spirituality and perceptions of care in nursing students: A cross-sectional

study. *Perspectives in Psychiatric Care*, 58(4), 2079–2087. <https://doi.org/10.1111/ppc.13034>

Aktaş, M.C., Bulduk, B., Çelik, D., and Ensarioğlu, K. (2018). Evaluation of relationship between self esteem and empatic level in nursing students according to various variables. *Journal of Nursing Science*, 1(3), 21-26.

Aslan, H., and Unsal, A. (2021). Nursing students' perception levels of spirituality and spiritual care in Turkey. *Journal of Religion and Health*, 60(6), 4316–4330. <https://doi.org/10.1007/s10943-021-01262-1>

Atta, M.H.R., Hammad, H.A., and Elzohairy, N.W. (2024). The role of empathy in the relationship between emotional support and caring behavior towards patients among intern nursing students. *BMC Nursing*, 23(1), 443. <https://doi.org/10.1186/s12912-024-02074-w>

Balay-Odao, E.M., Amwao, D.M.D.D., Balisong, J.S., and Cruz, J.P. (2024). Spirituality, religiosity, caring behavior, spiritual care, and personalized care among student nurses: a descriptive correlational study in the Philippines. *Journal of Religion and Health*, 1-27. <https://doi.org/10.1007/s10943-024-02089-2>

Bulut, H.K., and Meral, B. (2019). Evaluation of perceptions of spiritual and spiritual care of student nurses. *Gümüşhane University Journal of Health Sciences*, 8 (4), 353, 362.

Caldeira, S., Timmins, F., de Carvalho, E.C., and Vieira, M. (2016). Nursing diagnosis of "spiritual distress" in women with breast cancer: prevalence and major defining characteristics. *Cancer Nursing*, 39(4), 321–327. <https://doi.org/10.1097/NCC.0000000000000310>

Cao, X., Ma, C., Zheng, Z., He, L., Hao, M., Chen, X., Crimmins, E.M., Gill, T.M., Levine, M.E., and Liu, Z. (2022). Contribution of life course circumstances to the acceleration of phenotypic and functional aging: A retrospective study. *EClinicalMedicine*, 51, 101548. <https://doi.org/10.1016/j.eclinm.2022.101548>

Çetintaş, İ., Dirik, F.Z., İlhan, E., and Kostak, M.A. (2021). Perceptions of nursing students about spirituality and spiritual care and affecting factors. *Eurasian Journal of Health Sciences*, 4(1), 38-46. <https://dergipark.org.tr/en/pub/avrasyasbd/issue/60098/790392>

Chen, Z.M., Xu, X.D., Zhang, Q., and Wu, S.Y. (2018). Mediating effect analysis of humanistic care ability between empathy ability and professional identity in undergraduate nursing students. *Modern Preventive Medicine*, 45(20), 3837-3840. <https://doi.org/10.3389/fpsyg.2023.1339194>

Donesky, D., Sprague, E., and Joseph, D. (2020). A new perspective on spiritual care: collaborative chaplaincy and nursing practice. *ANS. Advances in Nursing Science*, 43(2), 147–158. <https://doi.org/10.1097/ANS.0000000000000298>

Erdoğan S., Nahcivan N., and Esin M.N. (2018). *Hemşirelikte Araştırma* (3rd ed.). Nobel Tıp Kitapevi.

Ergül, Ş., and Temel, A.B. (2007). Validity and reliability of 'the spirituality and spiritual care rating scale' Turkish version. *Journal of Ege University School of Nursing*, 23(1), 75–87.

Von Elm, E., Altman, D.G., Egger, M., Pocock, S.J., Gøtzsche, P.C., Vandenbroucke, J.P., and Strobe Initiative. (2014). The Strengthening the Reporting of Observational Studies in Epidemiology (STROBE) Statement: guidelines for reporting observational studies. *International journal of surgery*, 12(12), 1495-1499. <https://doi.org/10.1016/j.jclinepi.2007.11.008>

George, D., Mallery, M. (2010). *SPSS for Windows Step by Step: A Simple Guide and Reference*, 17.0 update (10a ed.) Boston: Pearson.

Gürsu O., and Ay, Y. (2018). Religion, spiritual well-being and aging. *Journal of International Social Research*. 11(61), 1176-1190. <https://doi.org/10.17719/jisr.2018.3007>

Hamaideh, S.H., Abuhammad, S., Khait, A.A., Al-Modallal, H., Hamdan-Mansour, A.M., Masa'deh, R., and Alrjoub, S. (2024). Levels and predictors of empathy, self-awareness, and perceived stress among nursing students: a cross-sectional study. *BMC Nursing*, 23(1), 131. <https://doi.org/10.1186/s12912-024-01774-7>

- Hawthorne, D.M., and Gordon, S.C. (2020). The invisibility of spiritual nursing care in clinical practice. *Journal of Holistic Nursing: Official Journal of the American Holistic Nurses' Association*, 38(1), 147–155. <https://doi.org/10.1177/0898010119889704>
- İlter, S.M., and Owayolu, Ö. (2023). Investigation of the relationship between the nursing department students' behaviors about aging and empathy levels: descriptive Cross-Sectional Research. *Turkiye Klinikleri Journal of Nursing Sciences*, 15(4), 1156-1163. <https://doi.org/10.5336/nurses.2023-97615>
- Jia-Ru, J., Yan-Xue, Z., and Wen-Nv, H. (2022). Empathy ability of nursing students: A systematic review and meta-analysis. *Medicine*, 101(32), e30017. <https://doi.org/10.1097/MD.00000000000030017>
- Kang, S.J., and Yong, J. (2019). Effects of a spirituality promotion program on spirituality, empathy and stress in nursing students. *Journal of Korean Academy of Fundamentals of Nursing*, 26(4), 240-247. <https://doi.org/10.7739/jkafn.2019.26.4.240>
- Kang, K.A., Chun, J., Kim, H.Y., and Kim, H.Y. (2021). Hospice palliative care nurses' perceptions of spiritual care and their spiritual care competence: A mixed-methods study. *Journal of Clinical Nursing*, 30(7-8), 961–974. <https://doi.org/10.1111/jocn.15638>
- Liu, F., Zhou, H., Yuan, L., and Cai, Y. (2023). Effect of empathy competence on moral sensitivity in Chinese student nurses: the mediating role of emotional intelligence. *BMC Nursing*, 22(1), 483. <https://doi.org/10.1186/s12912-023-01650-w>
- McSherry, W., Draper, P., and Kendrick, D. (2002). The construct validity of a rating scale designed to assess spirituality and spiritual care. *International Journal of Nursing Studies*, 39(7), 723–734. [https://doi.org/10.1016/s0020-7489\(02\)00014-7](https://doi.org/10.1016/s0020-7489(02)00014-7)
- Miller, M., Kwekkeboom, K., and Cherwin, C. (2022). The role of spirituality in symptom experiences among adults with cancer. *Supportive Care in Cancer: official journal of the Multinational Association of Supportive Care in Cancer*, 30(1), 49–57. <https://doi.org/10.1007/s00520-021-06399-z>
- Musa A.S. (2020). Attitudes toward spiritual care and the provision of spiritual care interventions among Jordanian baccalaureate nursing students: prevalence and correlates. *Nursing Education Perspectives*, 41(6), 349–354. <https://doi.org/10.1097/01.NEP.0000000000000637>
- Ng, C.P., Singh, D.K.A., Tan, M.P., and Kumar, S. (2022). Malaysian older persons' perceptions about falls and their desired educational website characteristics: A qualitative study. *PLoS one*, 17(7), e0270741. <https://doi.org/10.1371/journal.pone.0270741>
- O'Brien, M. R., Kinloch, K., Groves, K. E., and Jack, B. A. (2019). Meeting patients' spiritual needs during end-of-life care: A qualitative study of nurses' and healthcare professionals' perceptions of spiritual care training. *Journal Of Clinical Nursing*, 28(1-2), 182–189. <https://doi.org/10.1111/jocn.14648>
- Okuyan, C.B., and Kerkez, M. (2023). Students' perceptions about spirituality and spiritual care during the COVID-19 pandemic. *International Journal of Caring Sciences*, 16(3), 1116-1127.
- Oliveira, S.S.W., Vasconcelos, R.S., Amaral, V.R.S., Sousa, H.F.P.E., Dinis, M.A. P., Vidal, D.G., and Sá, K.N. (2021). Spirituality in coping with pain in cancer patients: a cross-sectional study. *Healthcare (Basel, Switzerland)*, 9(12), 1671. <https://doi.org/10.3390/healthcare9121671>
- Peng, X., Wu, L., Xie, X., Dai, M., and Wang, D. (2020). Impact of virtual dementia tour on empathy level of nursing students: a quasi-experimental study. *International Journal of Nursing Sciences*, 7(3), 258-261. <https://doi.org/10.1016/j.ijnss.2020.06.010>
- Petersen, C.L., Callahan, M.F., McCarthy, D.O., Hughes, R.G., White-Traut, R., and Bansal, N. K. (2017). An online educational program improves pediatric oncology nurses' knowledge, attitudes, and spiritual care competence. *Journal of Pediatric Oncology Nursing: Official Journal of the Association of Pediatric Oncology Nurses*, 34(2), 130–139. <https://doi.org/10.1177/1043454216646542>
- Petersen, C.L., and Schiltz, S. (2020). Care of the spirit: effects of an interdisciplinary undergraduate end-of-life course on knowledge, competence, and response empathy. *Journal of hospice and palliative nursing : JHPN : the official journal of the Hospice and Palliative Nurses Association*, 22(4), 298–304. <https://doi.org/10.1097/NJH.0000000000000660>
- Robinson, R., Meluski, K., Hellem, T., Hedwig, T., Hansen, N., Adams, J., Nies, M., and Salazar, K. (2023). Rapid scoping review: empathy in health sciences curriculum. *Healthcare (Basel, Switzerland)*, 11(10), 1429. <https://doi.org/10.3390/healthcare11101429>
- Spreng, R.N., McKinnon, M.C., Mar, R.A., and Levine, B. (2009). The toronto empathy questionnaire: scale development and initial validation of a factor-analytic solution to multiple empathy measures. *Journal of personality assessment*, 91(1), 62–71. <https://doi.org/10.1080/00223890802484381>
- Strekalova, Y.A., Kong, S., Kleinheksel, A.J., and Gerstenfeld, A. (2019). Gender differences in the expression and cognition of empathy among nursing students: An educational assessment study. *Nurse Education Today*, 81, 1–6. <https://doi.org/10.1016/j.nedt.2019.04.004>
- Taylor, E.J., Gober-Park, C., Schoonover-Shoffner, K., Mamier, I., Somaiya, C.K., and Bahjri, K. (2019). Nurse religiosity and spiritual care: an online survey. *Clinical Nursing Research*, 28(5), 636–652. <https://doi.org/10.1177/1054773817725869>
- Totan, T., Dogan, T., and Sapmaz, F. (2012). The toronto empathy questionnaire: evaluation of psychometric properties among turkish university students. *Eurasian Journal of Educational Research*, 46, 179-198.
- Wang, Z., Liang, Y., Zhao, H., Zhu, Y., Liu, M., Zhang, Y., Xiao, L., Piao, J., Zhao, X., Liu, Z., Liu, L., Pang, X., and Peng, L. (2022). Spiritual care perceptions and empathy of Chinese nursing students: The mediating roles of spiritual well-being. *Palliative & Supportive Care*, 20(5), 701–710. <https://doi.org/10.1017/S1478951522001134>
- Weathers, E., McCarthy, G., and Coffey, A. (2016). Concept analysis of spirituality: an evolutionary approach. *Nursing Forum*, 51(2), 79–96. <https://doi.org/10.1111/nuf.12128>
- Zhao, H.M., Wang, Z.Y., Yan, W., Piao, J.J., Ye, J.Y., and Di, S.Z. (2022). Spiritual health, empathy ability and their relationships with spiritual care perceptions among nursing students in China: A cross-sectional correlational study. *Nursing Communications*, 6(1): e2022003. <https://doi.org/10.53388/IN2022003>