Adıyaman Üniversitesi Sağlık Bilimleri Dergisi, 2025;11(3):283-294
doi:10.30569.adiyamansaglik.1730640

E-ISSN: 2458-9179
ADIYAMAN ÜNİVERSİTESİ SAĞLIK BİLİMLERİ DERGİSİ
JOURNAL OF HEALTH SCIENCES OF ADIYAMAN UNIVERSITY

Research Article/Özgün Araştırma

The relationship between nurses' counseling and problem-solving skills and their job satisfaction

Hemşirelerin danışmanlık ve problem çözme becerileri ile iş doyumları arasındaki ilişki

Mehmet Hayrullah ÖZTÜRK[1], Serap PARLAR KILIÇ[2]

[1]Şırnak University, Health Services Vocational School, Department of Medical Services and Techniques, 73000, Şırnak-Turkey
[2]Inonu University Faculty of Nursing, Department of Nursing, Internal Medicine Nursing Division, 44210, Malatya-Turkey

Atıf gösterme/Cite this article as: Öztürk MH, Parlar Kılıç S. The relationship between nurses' counseling and problem-solving skills and their job satisfaction. *ADYÜ Sağlık Bilimleri Derg*. 2025;11(3):283-294. doi:10.30569.adiyamansaglik.1730640

Abstract

Aim: The aim of this descriptive and correlational study is to examine the relationship between nurses' counseling and problem-solving skills and their job satisfaction levels.

Materials and Methods: This study was conducted with 128 nurses working in a public hospital located in the Southeastern Anatolia Region of Turkey. Data were collected using the Nurse Information Form, the Counseling Skills Scale, the Problem-Solving Inventory, and the Minnesota Job Satisfaction Scale.

Results: When the correlation analysis between nurses' counseling skills, problem-solving skills, and job satisfaction scores was examined, a positive and very weak correlation was found between problem-solving skills and external satisfaction, a sub-dimension of the job satisfaction scale ($r = 0.178$, $p = 0.044 < 0.05$).

Conclusion: In our study, no significant relationship was found between counseling skills, problem-solving, and job satisfaction; however, nurses who perceived themselves as competent in counseling demonstrated higher problem-solving skills than those who did not.

Keywords: Counseling skills; Job satisfaction; Nursing; Problem-solving skills.

Öz

Amaç: Bu tanımlayıcı ve ilişki arayıcı araştırmanın amacı, hemşirelerin danışmanlık ve problem çözme becerileri ile iş doyumları arasındaki ilişkiyi incelemektir.

Gereç ve Yöntem: Bu araştırma, Türkiye'nin Güneydoğu Anadolu Bölgesi'ndeki bir devlet hastanesinde görev yapan 128 hemşire ile yürütülmüştür. Veriler; Hemşire Bilgi Formu, Danışmanlık Becerileri Ölçeği, Problem Çözme Envanteri ve Minnesota İş Doyum Ölçeği ile toplanmıştır.

Bulgular: Hemşirelerin danışmanlık becerileri, problem çözme becerileri ve iş doyumu puanları arasında korelasyon analizi incelendiğinde; iş doyumu ölçeğinin alt boyutu olan dışsal doyum ile problem çözme becerileri arasında r=0,178 pozitif ve çok zayıf (p=0,044<0,05) düzeyde bir ilişki bulunmuştur.

Sonuç: Çalışmamızda, danışmanlık becerileri ile problem çözme ve iş doyumu arasında anlamlı bir ilişki bulunmamış; ancak danışmanlıkta kendini yeterli gören hemşirelerin, yetersiz görenlere kıyasla daha yüksek problem çözme becerisine sahip oldukları belirlenmiştir.

Anahtar Kelimeler: Danışmanlık becerileri; İş doyumu; Hemşirelik; Problem çözme becerileri.

Yazışma Adresi/Address for Correspondence: Mehmet Hayrullah ÖZTÜRK, Şırnak University, Health Services Vocational School, Department of Medical Services and Techniques, 73000, Şırnak-Turkey, E-mail: hayrullah_047@hotmail.com

Geliş Tarihi/Received:30.06.2024 **Kabul Tarihi/Accepted:**23.11.2025 **Yayım Tarihi/Published online:**31.12.2025

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Bu makale araştırma ve yayın etiğine uygun hazırlanmıştır.
intihal incelemesinden geçirilmiştir.

Introduction

Rapid developments in science and technology have completely changed the lifestyles and expectations of individuals and societies. These developments have also led to changes in the professional roles of nurses.[1] Thanks to these changes, nursing has moved away from the traditional nursing model and has become a questioning, thinking, decision-making, autonomous and professional profession.[2] While nursing roles were ones aimed at healing the patient in the past, today they are shifting towards social roles such as counseling, education and guidance that will protect from disease and improve health.[3] The main tasks of nursing, such as protecting and promoting the public health, enhancing the quality of life and encouraging people to cope with deviation from health overlap with the counseling role.[4] The lack of sufficient understanding and awareness of counseling skills among nurses can be attributed to the recent introduction of counseling as a concept in the nursing field. Nurses need to have counseling skills in order to perform their counseling roles effectively.[2] Within the scope of the counseling role, nurses use counseling skills to protect and improve the health of the patient / healthy individual, to enhance the quality of life, to recognize and use the opportunities around them, and to cope effectively with the problems related to the disease.[1] Within the scope of counseling skills, nurses help individuals to evaluate the needs and problems of patients, what are the necessary conditions for their resolution and how to provide these conditions.[2,5,6] An effective counseling service to be provided to individuals is an important part of nursing care, and it is one of the basic elements of counseling that nurses who will provide this care have four basic counseling skills consisting of listening and learning, gaining confidence and providing support.[7] The effective use of counseling skills by nurses has a very important place in improving the quality of care, developing the nursing profession, and increasing the awareness of individuals, families and society about their health and their power to cope with existing health problems.[8]

Nurses are required to provide care to patients with diverse needs (such as nutrition, clothing, hygiene, mobility, rest, and problem-solving), identify and prioritize their problems, implement appropriate interventions, and evaluate the outcomes of these interventions.[9] Nurses encounter numerous work-related challenges throughout the day (such as workload, staff shortages, stress, and limited time for counseling and education) and require problem-solving skills to make informed decisions regarding nursing interventions.[10] An important condition for a nurse to provide safe, expert and individual-centered nursing care is to have problem-solving skills.[11] Therefore, improving the problem-solving skills of nurses is of great importance in terms of enhancing the quality of patient care and facilitating the identification of the causes of problems encountered in delivery of health service and the solution of these problems.[12,13] Therefore, nurses need to use problem-solving skills to enhance the quality of patient care and help individuals.[9]

Nursing services require careful and continuous work since they deal with human beings. It is extremely important for nurses to have high job satisfaction in order to provide quality care.[14] However, working life constitutes an important part of an individual's life.[12] Job satisfaction refers to the level of satisfaction and fulfillment that nurses experience in their jobs and directly affects the quality of patient care[15] and is influenced by the employee's willingness to use their skills and abilities.[16] Job satisfaction is an emotional reaction that the employee develops as a result of the experiences that occur in the work environment.[17] The development of nursing competencies under full professional autonomy constitutes one of the most significant factors influencing job satisfaction.[18-19] Enhancing nurses' job satisfaction is of critical importance, as it not only has the potential to elevate nurses' overall job satisfaction and improve perceptions of care quality but also contributes to maintaining an adequate nursing workforce. Understanding the indirect relationships and determinants of job satisfaction provides a more comprehensive insight into this complex

phenomenon, thereby facilitating the development of effective strategies to address nursing shortages and enhance the quality of nursing care.[20-21] The literature highlights that problem-solving skills are fundamental for maintaining a healthy life and safeguarding mental well-being, with a strong association consistently emphasized between these skills and mental health.[22] From this point of view, it is thought that being able to solve problems effectively or having a high level of problem-solving skills will not only provide a healthy and safe working environment for the individuals and those around them, but also elevate their job satisfaction to a higher level.[23] Furthermore, the counseling role is one of the roles with a high level of autonomy and an interaction process between the patient and the nurse[1] and it is emphasized that the successful realization of this interaction will enable nurses to be satisfied in their professional lives and increase their job satisfaction and motivation as well as their productivity.[2] In this context, the present study aims to assess nurses' counseling skills, problem-solving abilities, and job satisfaction levels, as well as to identify the sociodemographic and professional factors influencing these variables and to examine the relationships among them.

Research questions

- What are nurses' counseling skills, problem-solving skills and job satisfaction levels?
- Is there any correlation between some socio-demographic and professional characteristics of nurses and their counseling skills, problem-solving skills and job satisfaction levels?
- Is there any correlation between nurses' counseling skills, problem-solving skills and job satisfaction?

Materials and Methods

Type of research

This descriptive and correlational study was conducted between January-February 2024 to examine the correlation between counseling skills, problem-solving skills, and job satisfaction of nurses working in a state hospital in the Southeastern Anatolia Region of Türkiye.

Population and Sample of the Study

The study population consisted of 180 nurses employed at a state hospital in the Southeastern Anatolia Region during the study period. The sample size was calculated as 111 using the G*Power 3.1 program (Type I Error = 0.05; Power of Test = 0.80; Value of Effect = 0.57; Confidence Interval = 0.95).[24] Nurses who were employed at the hospital and voluntarily agreed to participate were included in the study.[1,2,5,9,17] The main objective of our study is to include the entire population. Ultimately, 128 valid questionnaires were obtained, yielding a response rate of 71.1%.

Data collection tools

Data were collected through face-to-face interviews following a brief explanation of the study and the data collection instruments by the researchers. Verbal and written informed consent was obtained from all participating nurses prior to data collection. Completing the forms took approximately 15 to 20 minutes on average.

Data collection tools

Nurse Information Form, Counseling Skills in Nurses Scale (CSNS), Problem Solving Inventory (PSI), and Minnesota Satisfaction Questionnaire (MSQ) were used as data collection tools in the study.

Nurse information form

This form was prepared by the researchers in line with literature[5,12] and includes data on socio-demographic and professional characteristics of the nurses. The data consisted of 15 questions including age, gender, educational status, marital status, unit, position, working style, total tenure in the profession, training on counseling and problem solving, and attitudes towards the problem.

Counseling skills in nurses scale (CSNS)

The scale was developed by Aydın Avcı and Kumcağız, who also conducted its validity and reliability analysis.[1] It comprises 10 items and is structured as a unidimensional, five-point Likert-type scale. The response options range from 1 (never) to 5 (always), with intermediate values of 2 (very rarely), 3 (sometimes), and 4 (most of the time). The

total score ranges from 10 to 50, with higher scores indicating greater counseling skills. In the original study by Aydın Avcı and Kumcağız, the Cronbach's alpha coefficient was reported as 0.88.[1] In the present study, the Cronbach's alpha was calculated as 0.84, indicating good internal consistency.

Problem solving inventory (PSI)

The Problem Solving Inventory was originally developed by Heppner and Petersen in 1982.[25] It was adapted into Turkish by Şahin et al. in 1993.[26] The inventory consists of 35 items and is designed as a 6-point Likert-type scale that assesses the stages of the problem-solving process and evaluates individuals' perceptions of their own problem-solving behaviors and approaches. The total score ranges from 32 to 192. A lower mean score indicates higher problem-solving ability, whereas a higher mean score reflects lower problem-solving ability. Items 9, 22, and 29 are excluded from the total score, and scoring is based on the remaining 32 items. Furthermore, items 1–4, 11, 13–15, 17, 21, 25–26, 30, and 34 are reverse scored. The Cronbach's alpha coefficient of the original scale was reported as 0.90, while in the current study, it was calculated as 0.84, indicating good internal consistency.

Minnesota satisfaction questionnaire (MSQ)

The questionnaire was developed by Weis et al. in 1963 to assess levels of job satisfaction.[27] The validity-reliability Turkish adaptation of the scale was conducted by Baycan and the Cronbach's alpha coefficient was found to be 0.77.[28] MSQ is a five-point Likert-type scale scored between 1-5, and the items in the scale are evaluated as "1=Not at all satisfied, 2=Not satisfied, 3=Unsure, 4=Satisfied, and 5=Very satisfied". MSQ consists of 20 items that reveal intrinsic and extrinsic satisfaction factors. The highest and lowest scores of the scale are 100 and 20, respectively. Scores below 25 indicate low job satisfaction, scores between 26-74 indicate normal job satisfaction and scores above 75 indicate high job satisfaction.[28] In this study, Cronbach's alpha coefficient was 0.93.

Data Analysis

Data were analyzed using IBM SPSS Statistics for Windows, Version 22.0.[29] A 95% confidence interval was adopted, and a p-value of <0.05 was considered statistically significant. Skewness and kurtosis values between -2.0 and +2.0 [30] were accepted as indicative of normal distribution for assessing the conformity of the data to normality. The variables were found to be normally distributed; therefore, parametric statistical methods were employed for data analysis. Pearson's correlation analysis was used to examine the relationships between the scales. To determine differences in scale scores based on the nurses' descriptive characteristics, independent samples t-test, one-way analysis of variance (ANOVA), and post hoc tests (Tukey, LSD) were conducted.

Ethics committee approval

Ethics Committee approval (08.12.2023-E.87038) was obtained from a university, and institutional permission (E-35694300-044-232011717) was obtained from the Provincial Health Directorate of the city where the study was conducted. The study was conducted in accordance with the principles outlined in the Declaration of Helsinki. Prior to data collection, participants were verbally informed about the purpose and procedures of the study. They were assured of their right to withdraw at any time without any consequences. Nurses who agreed to participate confirmed their voluntary participation, and both written and verbal informed consent were obtained from all participants.

Results

Socio-demographic and professional characteristics of the nurses

The mean age of the nurses was 27.19±3.15 years. Most of the nurses were aged between 26-30 years (53.1%), female (60.2%), single (60.9%) and university graduates (87.5%). 75.0% of the nurses were working in the profession for 2-6 years, 53.9% worked overnight shifts, and more than half of them did not receive any training on both counseling skills (60.9%) and problem-solving skills (55.5%). Most of the nurses felt professionally competent in counseling (75.0%) and problem solving (85.9%) for patients and their relatives.

CSNS, PSI, and MSQ scores of the nurses

The CSNS mean score was 46.65±3.87 (Min=35; Max=50), indicating that nurses had high counseling skills. PSI scores of the nurses ranged between 56 and 137 and the mean score was 99.42±18.64. This showed that the problem-solving skills of the nurses were at a low level. The mean MSQ score was 57.57±16.23 (Min=20; Max=89) and their job satisfaction was at a moderate level. The nurses' intrinsic satisfaction level was 36.03±9.64 (Min=12; Max=57) and extrinsic satisfaction level was 21.54±7.31 (Min=8; Max=38) (Table 1).

Table 1. CSNS, PSI, and MSQ scores of the nurses (n=128).

	X±SD	Min.	Max.	Kurtosis	Skewness	Alpha
CSNS	46.65±3.87	35.000	50.000	0.925	-1.283	0.845
PSI	99.42±18.64	56.000	137.000	-0.905	-0.050	0.869
MSQ						
Overall satisfaction	57.57±16.23	20.000	89.000	-0.377	-0.268	0.896
Intrinsic satisfaction	36.03±9.64	12.000	57.000	-0.027	-0.387	0.888
Extrinsic satisfaction	21.54±7.31	8.000	38.000	-0.684	-0.180	0.876

*Abbreviations: X: Mean; SD: Standard deviation; Min: Minimum; Max: Maximum; CSNS: Counseling Skills in Nurses Scale; PSI: Problem Solving Inventory; MSQ: Minnesota Satisfaction Questionnaire

CSNS, PSI, and MSQ scores of the nurses according to some characteristics

There were no statistically significant differences between the mean scores of counseling skills according to some characteristics of nurses (p>0.05) (Table 2). The PSI mean scores of the nurses showed a significant difference according to age (F=6.433; p=0.002<0.05; η^2=0.093). The reason for the difference was that the PSI scores of those aged 26-30 years were higher than those aged 25 years and younger (p<0.05) and the problem-solving skills scores of those aged 31 years and older were higher than those aged 25 years and younger (p<0.05). Nurses aged 25 years and younger were found to have higher levels of problem-solving skills than nurses in other age groups. The nurses who felt competent in counseling had higher problem-solving skills than those who did not (t=-3.438; p=0<0.05; d=0.702; η^2=0.086) and nurses who felt competent in problem solving had higher problem-solving skills than those who did not (t=-2.850; p=0.001<0.05; d=0.725; η^2=0.061). There was no statistically significant difference between the PSI mean scores of the nurses according to the other socio-demographic characteristics (p>0.05) (Table 2).

Job satisfaction scores of the nurses showed a significant difference according to the unit and working style (p<0.01). While the overall, intrinsic, and extrinsic job satisfaction scores of nurses working in operating rooms and delivery units are statistically significantly lower compared to those of nurses in all other units (p<0.01), day-shift nurses had statistically higher scores in both overall and extrinsic job satisfaction compared to those working overnight shift, whereas no significant differences were found between the shift-working nurses and other groups(p<0.01). There were no statistically significant differences between the mean scores of the overall MSQ and its subscales according to the other characteristics of the nurses (p>0.05) (Table 2).

The correlation between CSNS, PSI and MSQ scores of the nurses

When the correlation analysis between the nurses' CSNS, PSI, and MSQ overall, intrinsic satisfaction, and extrinsic satisfaction scores was examined, a positive and very weak (p=0.044<0.05) correlation was found between extrinsic satisfaction and problem-solving skills with r=0.178. Correlations between the other variables were not statistically significant (p>0.05) (Table 3).

Discussion

Nurses assume important roles in the time interval from hospitalization to discharge of patients. Counseling and problem-solving skills are among these roles. Such skills affect the individual's life in the work environment and positively affect job performance by ensuring that they are successful and productive[26] and increase job satisfaction.[2,23]

Even though there is a limited number of studies on nurses' counselling skills in the literature,[1,7,8] there are numerous studies on nurses' job satisfaction,[15,16,20,32,33,34] and problem-solving skills.[11,12,35,36] However, no study to date has specifically examined the association between nurses' counseling and problem-solving skills and their job satisfaction. The main purpose of this study is to examine the correlation between nurses' counseling skills and problem-solving skills and job satisfaction levels.

Table 2. CSNS, PSI, and MSQ scores of the nurses according to some characteristics.

Some characteristics	n			MSQ		
		CSNS	PSI	Overall satisfaction	Intrinsic satisfaction	Extrinsic satisfaction
		Mean ± SD	Mean ± SD	Mean ± SD	Mean ± SD	Mean ± SD
Age						
25 years and under	45	47.222±3.630	91.778±16.569	2.717±0.911	2.869±0.902	2.489±1.016
26-30 years	68	46.456±3.427	103.147±18.313	2.924±0.703	3.029±0.718	2.765±0.781
31 years and older	15	45.867±6.058	105.467±19.802	3.163±0.907	3.283±0.831	2.983±1.078
F=		0.881	6.433	1.950	1.594	2.126
p=		0.417	0.002	0.147	0.207	0.124
Post-Hoc=			2>1. 3>1 (*p*<0.05)			
Unit						
Intensive care	32	46.094±4.223	94.156±15.787	3.013±0.711	3.154±0.705	2.801±0.811
Emergency room	10	46.600±4.222	103.700±20.000	3.005±0.538	3.075±0.534	2.900±0.574
Internal medicine and surgical clinics	49	46.612±4.076	99.735±19.294	2.855±0.858	3.020±0.828	2.607±0.969
Outpatient clinics	25	46.760±3.419	102.880±20.344	3.086±0.727	3.167±0.710	2.965±0.913
Operating room and delivery room	12	48.167±2.657	101.417±18.123	2.083±0.853	2.125±0.875	2.021±0.914
F=		0.624	1.023	3.901	4.618	2.656
p=		0.647	0.398	0.005	0.002	0.036
Post-Hoc=				1>5. 2>5. 3>5. 4>5 (*p*<0.05)	1>5. 2>5. 3>5. 4>5 (*p*<0.05)	1>5. 2>5. 3>5. 4>5 (*p*<0.05)
Working style						
In shift	13	47.692±2.594	96.462±22.955	2.989±0.916	3.045±0.933	2.904±0.912
Day shift	46	46.609±4.379	101.413±19.345	3.100±0.806	3.199±0.799	2.951±0.925
Overnight shift	69	46.493±3.732	98.652±17.430	2.711±0.768	2.864±0.764	2.482±0.865
F=		0.526	0.481	3.428	2.484	4.226
p=		0.592	0.619	0.036	0.087	0.017
Post-Hoc=				2>3 (*p*<0.05)		2>3 (*p*<0.05)
The status of feeling competent to provide counseling						
Yes	96	46.625±4.035	96.281±19.005	2.855±0.804	2.992±0.783	2.650±0.914
No	32	46.750±3.408	108.844±13.984	2.950±0.843	3.034±0.874	2.824±0.916
t=		-0.157	-3.438	-0.570	-0.253	-0.935
p=		0.875	0.001	0.569	0.801	0.352
Status of feeling competent in problem solving						
Yes	110	46.746±3.873	97.573±18.857	2.917±0.813	3.050±0.794	2.717±0.927
No	18	46.111±3.954	110.722±12.667	2.647±0.790	2.713±0.828	2.549±0.840
t=		0.642	-2.850	1.310	1.661	0.724
p=		0.522	0.001	0.193	0.099	0.471

Table 3. The correlation between CSNS, PSI and MSQ scores of the nurses.

MSQ		CSNS	PSI
Overall satisfaction	r	0.131	0.134
	p	0.142	0.130
Intrinsic satisfaction	r	0.123	0.091
	p	0.167	0.306
Extrinsic satisfaction	r	0.128	0.178*
	p	0.150	0.044

*Abbreviations: r: Pearson correlation coefficient; *: Correlation coefficient is significant at the level of 0.05 (p<0.05); Pearson's Correlation Analysis

In this study, it was found that nurses had high counseling skills, there was no difference between the mean scores of counseling skills according to some characteristics of nurses (Table 1). Likewise, Durmuş et al.[8] also found that the counseling skills of nurses were high (43.95±4.23), but 51.1% of the nurses stated that they evaluated their counseling skills as moderate.[8] In their study, Akcan et al.[7] found that the mean score of midwives' and nurses' frequency of performing counseling skills was 55.0±0.72 (Min/Max= 21/63), which is close to the highest scale total score.[7] Another study reported that nurses' counseling skills were 43.12±7.70, again at a high level.[37] The high CSNS mean score in the present study may indicate that nurses effectively used the role of counseling for patients on necessary issues while working in clinics. In addition, as stated in one study, this result is also important in terms of showing that nurses have high-level counseling skills, which are key factors in protecting and promoting individual and public health, coping with diseases and enhancing quality of life.[6]

Problem-solving skills occupy an important place in nursing care and practices. Nurses must quickly find solutions to problems experienced during emergencies and changes in the process of patient care and treatment.[38] Therefore, it is essential for nurses to possess strong problem-solving skills in order to enhance the quality of patient care and to further develop their professional competencies.[9] Moreover, problem-solving skill is regarded an important skill for nurses to have autonomy in their profession.[39] A study reported that the mean score of problem-solving skills of nurses working in emergency clinics was moderate (81.33±19.91).[40] Many similar studies have reported that the mean score of problem-solving skills of nurses was at a moderate level.[9,35,40,41] In a single-group pretest–posttest study conducted with 173 second-year nursing students at a public university in Vietnam, the mean score of the PSI ınventory posttest (127.24±12.11) was found to be lower than the pretest score (131.42±16.95).[42] In a study conducted with 140 healthcare workers (n=70 nurses) working in outpatient clinics or emergency services during the COVID-19 period, the relationship between various variables and the problem-solving skills of the healthcare workers was examined. It was found that the mean Problem-Solving Inventory (PSI) score of the nurses (97.9 ± 17.2) was at a low level.[43] A study found that the mean Problem-Solving Inventory (PSI) score of nursing students was at a low level prior to the training (87.0 ± 16.7). Following the training, a statistically significant decrease was observed in the mean PSI score (82.0 ± 12.9).[44] The PSI mean score of the present study is similar to the findings of the literature and it was found that the problem-solving skills of nurses were at a low level (Table 1). Another finding of this study is that nurses aged 25 years and younger had a high level of problem-solving skills compared to nurses in other age groups (Table 2). Similarly, Turan and Alialah[45] identified a significant difference between the constructive problem-solving factor and the age variable, reporting that nurses aged 18–25 had higher mean scores on the problem-solving scale compared to those aged 46 and above.[45] High problem-solving skills of young nurses can be attributed to the fact that the educational institutions they graduate from emphasize the roles and duties of the nurse, they want to prove themselves in the new work environment, and they have a high desire to address problems and seek solutions. In addition, it is stated that problem-solving skills and counseling skills may be higher in the younger age group due to the fact that they are more acquainted with the computer and digital world and have more self-confidence than the older age group.[6] Contrary to age-related finding of the present study, some studies reported that nurses felt themselves more competent in terms of problem-solving skills as their age increased.[12,46] These different age-related results in the literature can be interpreted as being affected by variables such as nurses' level of education, communication skills, willingness to take responsibility and working conditions.

Nurses are an important building block in terms of workforce potential in the World Health Organization (WHO), there is a shortage of nurses worldwide, and the main

reasons for the shortage of nurses include the labor difficulty of the nursing profession, lack of motivation in nurses, family and social factors, advancing age, stress, lack of communication and job dissatisfaction in general.[33,47] It has been reported that high job satisfaction is positively associated with quality of care in nurses[31]; whereas, low job satisfaction may cause them to quit their jobs, increase the risk of making medical errors and impair the quality of care.[20] Studies have shown that job satisfaction has an effect on the mental and physical health of nurses.[48] In this study, nurses' job satisfaction was found to be moderate(Table 1). Likewise, Çelik and Kılıç[49] conducted a study with nurses and found that the overall satisfaction score was 3.15±0.69, the intrinsic satisfaction score was 3.33±0.68 and the extrinsic satisfaction score was 2.93±0.84, and the overall job satisfaction levels of nurses were at a moderate level (3 on a 5-point scale indicates a moderate value).[49] In another study, the MSQ mean scores of academic nurses were found to be 3.74±0.56 for overall satisfaction, 3.91±0.57 for intrinsic satisfaction and 3.49±0.67 for extrinsic satisfaction.[34] In other similar studies, the job satisfaction of nurses was found to be 62.49±12.35 by Düzgün et al.[50] and 76.40±16.26 by Zhang et al.[51] namely at a moderate level.[50,51] In some other studies, general job satisfaction of nurses was found to be low.[52,53]

In the present study, nurses working in outpatient clinics and those assigned to day shifts were found to have the highest mean scores for job satisfaction (Table 2). The high level of job satisfaction of nurses working in outpatient clinics in the present study is not surprising considering that they only work during daytime hours. In their study, Düzgün et al.[50] found in their studies that job satisfaction levels of day shift workers were higher than shift workers.[50] In another study, it was found that the job satisfaction scores of nurses whose working system was only day shift were statistically significantly higher.[22] Yusuf's[54] study also found that nurses working in outpatient clinics reported high levels of job satisfaction.[54] In their 2019 study examining job satisfaction among nurses of different generations, Dursun Ergezen et al.[32] found that nurses working in outpatient clinics reported the highest levels of job satisfaction among the various units.[32] The findings of the present study are consistent with the literature (Table 2). Job satisfaction is an important factor that can affect the performance of nurses in working conditions.[55] Factors such as demanding working conditions, irregular work schedules, low salaries, and a diminished professional reputation may adversely impact job satisfaction within the nursing profession.[49] In this context, factors such as the fact that day shift workers do not have to work overnight shifts, spend more time with family members, start the day energetically with regular sleep hours, and share more work with more colleagues in the division of labor may lead to an increase in general job satisfaction. In addition, shift work may decrease job satisfaction by making nurses feel tired and sleepless.

In the correlation analysis between nurses' counseling skills, problem-solving skills and job satisfaction, only a positive and very weak correlation was found between extrinsic satisfaction and problem-solving skills (Table 3). In this study, the correlation analysis revealed no significant overall relationship among nurses' counseling skills, problem-solving skills, and job satisfaction. However, a positive but very weak correlation was identified between problem-solving skills and external satisfaction, which is a sub-dimension of the job satisfaction scale. This finding suggests that the low level of nurses' problem-solving skills may be partially associated with external satisfaction factors such as salary, working conditions, stress, familial and social factors, institutional policies, or administrative practices. However, given the very weak level of this correlation, it indicates that problem-solving skills alone do not strongly determine external satisfaction, and other factors are likely to play a significant role. In the literature, no study investigating the correlation between nurses' counseling skills, problem- solving skills and job satisfaction was found. However, there are studies examining either of these variables together. In their study, Kayış and Doğan[56] found that there

was a strong positive correlation between employees' problem-solving skills and job satisfaction and as their level of job satisfaction increased, their problem-solving skills also increased.[56] In another study, it was reported that problem-solving skills had a partial mediating role in the correlation between nurses' autonomy levels and job satisfaction.[21] In the thesis study by Alıalah[57] the relationship between nurses' confidence in their problem solving abilities and their job satisfaction and organizational commitment was examined using structural equation modeling and it was found that the highest level of correlation in the model was observed between job satisfaction and problem solving variable (β= 0.789).[57] In a thesis study, it was stated that as the problem-solving skills of the coaches working in the Eastern Anatolia region increased, their job satisfaction levels elevated.[58] Based on the results of the literature, it can be asserted that as the problem-solving skill levels of nurses elevated, this will positively affect their job satisfaction.

In the present study, it was found that there was no correlation between counseling skills, problem-solving skills and job satisfaction; however, nurses who felt competent in counseling had higher problem-solving skills than those who did not. Although there was no similar study, one study showed that nurses who felt professionally competent in communicating with patients had higher levels of problem-solving skills.[36] In their study, Abaan and Altıntoprak[59] found that 65% of executive nurses and 68.0% of clinical nurses felt themselves competent in terms of problem-solving skills.[59] The findings of the present study and the studies in the literature are similar.

Study limitations

The study was conducted with nurses working in a state hospital in the south-eastern region of Türkiye, which is smaller than the surrounding provinces. It was conducted in a single center and no comparison was made with other hospitals. Therefore, the results of this study may be limited to the center of the study and should not be generalized.

Conclusion

Consequently, it was revealed that while counseling skills of nurses were at high level, problem- solving skills and job satisfaction levels were at medium level. In addition, a positive and low correlation was found between the MSQ extrinsic satisfaction subscale of the nurses and their problem-solving skills. When the results of the present study and the findings in the relevant literature are evaluated, since high levels of nurses' counseling and problem-solving skills may lead to an increase in their job satisfaction levels, strategies can be developed to improve counseling and problem-solving skills that play an effective role in promoting quality patient care. In future research, counseling and problem-solving skills should be investigated, as these skills may influence factors such as nurses' job satisfaction and collaboration. In addition, nurses should be motivated to participate in workshops to improve their counseling and problem-solving skills. It is suggested to improve the working conditions of nurses, increase the number of employees in the clinic to allocate sufficient time for patients, and include courses on innovative thinking, counseling and problem-solving skills into the university education curriculum of nurses. In addition, it is recommended to conduct follow-up studies in different cultures with larger samples on the subject. In future studies, examining the relationship between nurses' skills and various mediating variables would be valuable for uncovering new associations. Counseling and problem-solving skills should be investigated, as they may influence factors such as nurses' job satisfaction and collaboration.

Ethics Committee Approval

Before starting the study, approval was taken from the Non-interventional Research Ethics Committee (08.12.2023-E.87038) was obtained from a university, and institutional permission (E-35694300-044-232011717) was obtained from the Provincial Health Directorate of the city where the study was conducted. The study was conducted in accordance with the principles outlined in the Declaration of Helsinki. Prior to data collection, participants were verbally informed about the purpose and procedures of the study.

They were assured of their right to withdraw at any time without any consequences. Nurses who agreed to participate confirmed their voluntary participation, and both written and verbal informed consent were obtained from all participants.

Informed Consent

Informed consent and signatures for participation in the study were obtained from volunteer nurses participating in the study.

Author Contributions

Design And Planning: Mehmet Hayrullah Öztürk and Serap Parlar Kılıç. Conceptualization: Mehmet Hayrullah Öztürk and Serap Parlar Kılıç. Data collection: Mehmet Hayrullah Öztürk. Data analysis: Mehmet Hayrullah Öztürk and Serap Parlar Kılıç. Study supervision: Mehmet Hayrullah Öztürk and Serap Parlar Kılıç. Writing – original draft: Mehmet Hayrullah Öztürk and Serap Parlar Kılıç. Writing – review & editing: Mehmet Hayrullah Öztürk and Serap Parlar Kılıç. Methodology: Mehmet Hayrullah Öztürk and Serap Parlar Kılıç. Software: Mehmet Hayrullah Öztürk and Serap Parlar Kılıç. Resources: Mehmet Hayrullah Öztürk. Supervision: Serap Parlar Kılıç

Acknowledgments

We thank all nurses who participated voluntarily in this study.

Financial Disclosure

No person/organization is supporting this study financially.

Peer-review

Externally peer-reviewed.

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