

CURARE Journal of Nursing

Research Article

Open Access

Communication and Interpersonal Problem Solving Skills: A Descriptive Study on Nurses



Saffet Karayaman¹  

¹ Artvin Çoruh Üniversitesi, Arhavi Meslek Yüksekokulu, Artvin, Türkiye

Abstract

Objective: This research focused on the communication skills of nurses, who are an important part of health institutions. This study aimed to determine the ability of nurses to use their communication skills to solve interpersonal problems they encounter.

Methods: The population of the research consists of nurses working in public hospitals in Istanbul. 625 nurses who participated in the research from the determined population constitute the sample group. In this quantitative research method, a descriptive design was used in the comparative relational scanning model. The study data were collected on the internet in November 2023. "Communication Skills Scale" was used to measure the communication skill levels of the participants and "Interpersonal Problem Solving Inventory" was used to measure their interpersonal problem solving skills. The data were analyzed with the SPSS program; one-way analysis of variance, t-test techniques, and basic statistics (mean, mode, median, etc.) methods were used.

Results: Findings obtained as a result of the study; It has been shown that the communication skills and interpersonal problem-solving skills of the participants differ in terms of gender and professional seniority. However, critical relationships were also found between communication skills and interpersonal problem-solving skills.

Conclusion: These findings were discussed in light of the literature. In the last part of the study, suggestions for improving the communication and interpersonal problem-solving skills of nurses are included.

Keywords

Communication skills · Interpersonal problem solving skills · Nursing



“ Citation: Karayaman S. Communication and interpersonal problem solving skills: A descriptive study on nurses. CURARE–Journal of Nursing 2026; (10): 8–13. DOI: 10.26650/CURARE.2025.1756924

© This work is licensed under Creative Commons Attribution-NonCommercial 4.0 International License. 

© 2026. Karayaman, S.

✉ Corresponding author: Saffet Karayaman saffetkarayaman@gmail.com



INTRODUCTION

Nursing, as a profession grounded in both science and humanistic values, demands effective communication and competent problem-solving skills from practitioners in all healthcare environments. These skills are critical for delivering high-quality care and are also essential for ensuring patient safety and enhancing professional satisfaction among nurses (1). As healthcare systems become increasingly complex, the expectations placed on nurses have expanded beyond traditional bedside care to encompass multidimensional roles that require adaptive communication, emotional intelligence, and strategic decision-making (2,3).

Effective communication is central to therapeutic relationships between nurses and patients. It plays a pivotal role in ensuring accurate diagnosis, promoting treatment compliance, and reducing patient anxiety (4). Moreover, interpersonal communication in nursing practice enhances teamwork, reduces medical errors, and supports ethical decision-making within the healthcare team (5,6). Studies have shown that nurses who demonstrate higher levels of communicative competence tend to establish stronger bonds with their patients, which correlates with improved health outcomes (7).

Parallel to communication, problem-solving skills enable nurses to respond appropriately to unforeseen clinical situations and make timely, autonomous decisions. In an era marked by rapid medical advancements and unpredictable patient conditions, the ability to critically analyze problems and develop feasible solutions has become an indispensable component of nursing competence (8,9). Research suggests that nurses with well-developed problem-solving abilities exhibit higher levels of job performance, lower stress levels, and better adaptation to institutional challenges (10).

Despite the acknowledged importance of communication and problem-solving, various studies have highlighted deficiencies in these areas among practicing nurses and students. Educational curricula and in-service training programs may not adequately equip nurses with the interpersonal and analytical skills necessary for modern healthcare practice (11,12). Additionally, factors such as workload, burnout, hierarchical structures, and emotional labor can hinder the effective application of these skills in clinical settings (13).

Furthermore, recent research reveals that the evolving dynamics of healthcare teams demand renewed attention to interprofessional collaboration and its impact on communication and problem-solving capacity among nurses (14,15). In particular, the studies by Turan and Baykal (16) and Çam & Pınar (17) emphasize the relational and ethical dimensions of nursing care, underlining the importance of self-awareness, empathy, and negotiation skills in complex care settings.

Given the dual importance of communication and problem-solving in nursing, examining these competencies together provides a more holistic understanding of professional effectiveness. This study aims to evaluate the communication and problem-solving

skills of nurses working in a public hospital setting, considering demographic variables and workplace factors that may influence these competencies.

The primary aim of this study is to examine the relationship between nurses' communication skills and their interpersonal problem-solving abilities. Specifically, the study investigates:

1. Whether communication skills differ significantly by gender and professional seniority.
2. Whether problem-solving competencies vary across demographic factors.
3. Whether there is a statistically significant relationship between the two core skill sets.

By focusing on nurses employed in public hospitals, this research seeks to contribute empirical evidence toward developing more effective communication and decision-making training programs in nursing education and hospital practice.

METHODS

Research Design

This study employed a relational screening model to determine the nature and direction of the relationship between nurses' communication skills and their interpersonal problem-solving abilities (18). This approach is particularly suitable when the aim is to examine correlations between variables without manipulating them. The dependent variables in this study were communication skills and interpersonal problem-solving skills, while gender and professional seniority were considered independent variables.

Study group and sampling

The study population consisted of nurses employed in public hospitals in Türkiye. According to the Ministry of Health (2023), there were approximately 248,000 active nurses across the country (19). A sample of 625 nurses from 39 districts of Istanbul participated in the study. Public hospitals were selected as the target setting because they represent the majority of the national nursing workforce and provide more diverse clinical conditions than private sector institutions, which allows for better generalizability of the findings (20). A combined random and snowball sampling method was used to reach nurses working in different hospitals and units across the city. Such mixed sampling approaches are commonly used in healthcare research, where accessibility may vary among professionals working in different shifts and departments (21).

Inclusion criteria were as follows: (a) being an actively working registered nurse in a public hospital, (b) having at least 6 months of clinical experience, and (c) willingness to participate in the study. Nurses who were on leave during the data collection period and those who submitted incomplete responses were excluded. Data

were collected online in November 2023 using a secure web-based survey platform. Participation was voluntary, and anonymity was assured.

Ethical Considerations

This research was approved by the Artvin Çoruh University Human Research Ethics Committee on 14.06.2023 (Approval No: 94605). All procedures were conducted following the Declaration of Helsinki.

Data Collection Tools

Two standardized measurement tools were employed:

Communication Skills Scale: This 44-item, 6-point Likert-type scale measures communication across five dimensions: empathy, transparency, equity, effectiveness, and competence (22). Higher scores indicate greater proficiency. The Cronbach alpha reliability coefficients in this study were as follows: empathy = 0.74, transparency = 0.68, equity = 0.60, effectiveness = 0.50, competence = 0.54, and total = 0.83.

Interpersonal Problem Solving Inventory: This inventory includes 50 items on a 5-point Likert scale across five dimensions: Negative Approach to Problems, Constructive Problem Solving, Self-Confidence, Avoidance of Responsibility, and Insistent-Persistent Approach (23). In this study, Cronbach's alpha values ranged between .62 and .89 across subdimensions, with total internal consistency measured at $\alpha = 0.85$.

Both tools were previously validated for use in Turkish populations, and their continued validity is supported by similar studies in nursing and health sciences.

Data Analysis

The data obtained from the study were analyzed using IBM SPSS Statistics 25.0. Descriptive statistics (mean, standard deviation, frequency, and percentage) were used to summarize the demographic characteristics and responses of the participants. Independent sample t-tests, one-way ANOVA, and Pearson correlation analyses were conducted to examine differences and relationships between variables. The selection of these statistical tests and their interpretation were based on established methodological references commonly used in nursing research (24). The significance level was set at $p < 0.05$.

Independent sample t-tests were used to assess gender-based differences in the subdimensions of the Communication Skills Scale. The results (Table 1) revealed that female nurses scored significantly higher than males in the Empathy ($t = 2.79$), Equality ($t = 2.11$), Effectiveness ($t = 3.79$), and Competence ($t = 4.25$) subdimensions ($p < 0.05$). However, no significant difference was found in the transparency sub-dimension ($p > 0.05$).

Table 1. T-test results on communication skills according to gender

Subscales	Gender	N	X	SD	t	p
Empathy	Female	550	52.75	5.29	2.79	0.006
	Male	75	51.74	5.75		
Transparency	Female	550	34.01	5.11	1.09	0.714
	Male	75	33.55	5.67		
Equality	Female	550	52.74	4.58	2.11	0.018
	Male	75	51.78	5.53		
Effectiveness	Female	550	43.57	4.47	3.79	0.002
	Male	75	42.43	4.58		
Qualification	Female	550	21.71	2.28	4.25	0.001
	Male	75	20.95	2.63		

Fd=623

A one-way ANOVA was conducted to compare communication skill subdimension scores based on years of professional seniority. According to Table 2, statistically significant differences were found in all communication skill sub-dimensions. Nurses with 11 or more years of experience scored higher in all sub-dimensions than those with fewer years of seniority ($p < 0.05$).

Table 2. One-way analysis of variance results for the subdimensions of the communication skills scale according to seniority.

Subscales	Seniority	N	x	SD	F	p	LSD
Empathy	5 and under	185	50.47	5.77	30.157	0.001	2>1
	6-10	207	51.90	5.76			3>1
	11 and above	233	54.15	4.60			3>2
Transparency	5 and under	185	32.88	5.67	9.791	0.002	3>1
	6-10	207	33.50	5.28			3>2
	11 and above	233	34.92	5.17			
Equality	5 and under	185	50.92	5.03	20.113	0.004	2>1
	6-10	207	52.99	5.45			3>1
	11 and above	233	53.73	4.40			3>2
Effectiveness	5 and under	185	42.17	4.35	8.101	0.011	3>1
	6-10	207	43.01	4.91			3>2
	11 and above	233	43.81	4.36			
Qualification	5 and under	185	20.68	2.35	20.702	0.001	2>1
	6-10	207	21.35	2.37			3>1
	11 and above	233	22.01	2.05			3>2

Independent sample t-tests were also conducted to examine whether the subdimensions of the Interpersonal Problem-Solving Inventory varied by gender. The results (Table 3) showed that male nurses scored significantly higher in the Insecurity sub-dimension ($t = -3.73$), whereas female nurses scored significantly higher in the Insistent-Persistent Approach sub-dimension ($t = 4.81$). No significant gender-based differences were found in other subdimensions ($p > 0.05$).

Table 3. T-test about interpersonal problem-solving skills according to gender

sub-dimensions	Gender	N	x	SD	t	p
Negative Approach to the Problem	Female	550	36.03	13.16	1.79	0.347
	Male	75	34.49	12.81		
Constructive Problem Solving	Female	550	61.76	10.33	0.89	0.523
	Male	75	61.12	11.08		
Self Insecurity	Female	550	11.81	4.99	-3.73	0.007
	Male	75	13.16	5.55		
Lack of Responsibility	Female	550	10.92	4.45	-0.75	0.813
	Male	75	11.04	4.69		
Persistence and perseverance	Female	550	23.53	3.80	4.81	0.001
	Male	75	22.19	4.45		

Table 4 presents the results of the one-way ANOVA examining differences in interpersonal problem-solving skills by professional seniority. No significant differences were found in the Approaching the Problem Negatively, Not Taking Responsibility, and Insistent-Persistent Approach sub-dimensions. However, significant differences were observed in the constructive problem-solving and self-distrust subdimensions, favoring nurses with longer professional experience ($p < 0.05$).

Table 4. One-way analysis of variance results of the interpersonal problem-solving scale according to seniority

Sub-dimensions	Seniority	N	x	SD	F	p	Diff.
Negative Approach to the Problem	5 and under	185	35.73	13.63	2.079	0.193	-
	6-10	207	34.41	12.45			
	11 and above	233	36.48	12.66			
Constructive Problem Solving	5 and under	185	59.91	10.28	6.357	0.001	3>1 3>2
	6-10	207	61.16	10.72			
	11 and above	233	63.31	10.19			
Self Insecurity	5 and under	185	11.92	5.07	7.011	0.003	3>1 3>2
	6-10	207	11.89	4.75			
	11 and above	233	13.46	5.31			
Lack of Responsibility	5 and under	185	10.95	4.39	1.593	0.211	-
	6-10	207	10.85	4.31			
	11 and above	233	11.51	4.42			
Persistence and Perseverance	5 and under	185	22.74	4.05	1.756	0.871	-
	6-10	207	23.09	3.97			
	11 and above	233	23.48	3.87			

Finally, Pearson correlation analysis was conducted to investigate the relationship between communication skills and interpersonal problem-solving abilities. As shown in Table 5, significant positive correlations were found between the subdimensions of CPS and Insistent-Persistent Approach and communication skill components such as empathy, transparency, equality, and competence ($p < 0.01$). In contrast, negative correlations were observed between insecurity, lack of responsibility, and negative approach to problems and communication skills.

Table 5. The relationship between communication skills and interpersonal problem solving skills

Sub-dimensions	Empathy	Transparency	Equality	Effectiveness	Qualification
	r	R	r	r	r
Negative Approach to the Problem	-0.161**	0.547**	-0.179**	-0.247**	-0.197**
Constructive Problem Solving	0.463**	0.583**	0.361**	0.347**	0.377**
Self Insecurity	-0.123**	0.407**	-0.165**	-0.229**	-0.166**
Lack of Responsibility	-0.125**	0.527**	-0.174**	-0.235**	-0.182**
Persistence and Perseverance	0.385**	0.503**	0.315**	0.292**	0.333**

DISCUSSION

This study examined nurses' communication and interpersonal problem-solving competencies in relation to gender and professional seniority. In terms of gender differences, female nurses scored significantly higher than their male counterparts in several sub-dimensions of communication, including empathy, effectiveness, and competence. These findings agree with previous studies suggesting that female healthcare professionals often exhibit stronger emotional sensitivity and patient-centered communication strategies (25,26). This trend may be attributed to socialization patterns and gender-based expectations within healthcare environments. However, male nurses reported higher levels of lack of self-confidence in interpersonal problem-solving, which may reflect internalized role conflicts or reduced social support in a female-dominated profession (27).

Regarding professional seniority, nurses with more than 11 years of experience demonstrated superior communication skills across all measured dimensions. This result supports the assumption that clinical exposure and accumulated professional knowledge contribute significantly to communicative competence (28). Similarly, experienced nurses showed better performance in constructive problem solving and lower scores in lack of self-confidence, indicating the possible role of professional maturity in promoting autonomous decision-making and emotional regulation under pressure (29).

The positive correlations observed between communication skills and interpersonal problem-solving abilities further emphasize the interdependent nature of these competencies. Nurses who communicate effectively are more likely to approach clinical problems proactively and constructively, as suggested in prior literature (30,31). These competencies are particularly crucial in complex healthcare systems, where time-sensitive decisions and ethical dilemmas are frequent.



These findings are further supported by recent conceptual work emphasizing the need for integrative skill development in nursing education. For example, highlights the importance of aligning interpersonal competencies with decision-making values, particularly in emotionally taxing healthcare contexts (32). Similarly, highlights the necessity of developing ethical and reflective judgment among nurses to strengthen both communication and clinical reasoning under pressure (33).

The findings also have implications for nursing education and organizational development. The observed deficiencies in communication and problem-solving among younger or less experienced nurses highlight the need to strengthen these skills within undergraduate curricula and in-service training programs. Emphasis should be placed not only on technical proficiency but also on interpersonal development, including empathy, reflective practice, and critical thinking.

Finally, the impact of contextual and organizational factors, such as workload, team climate, and institutional support, cannot be overlooked. Future studies should investigate how environmental stressors influence these competencies, especially under conditions of burnout or emotional labor (34). Strengthening resilience and communication within interprofessional teams may mitigate these effects and lead to better patient outcomes.

Limitations

The general limitation of such studies is that the information regarding the competency levels of the participants regarding interpersonal problem solving and communication skills was obtained from the participants themselves. The study was conducted on nurses working in Istanbul and cannot be generalized for the entire nursing profession. Data collection scales for the study are limited, and different and more specific scales can be used in other studies.

Implications and recommendations

The study findings demonstrated that female nurses exhibited stronger communication skills than male nurses, whereas male nurses reported higher levels of lack of self-confidence in interpersonal problem-solving. Therefore, supportive interventions such as mentoring programs and peer collaboration groups specifically targeting male nurses may increase their professional confidence and interpersonal effectiveness.

Additionally, communication and problem-solving competencies were significantly higher among nurses with longer professional seniority. In this case, integrating structured, experience-based learning opportunities into the early stages of a nursing career may be beneficial. Shadowing experienced nurses, simulation-based communication scenarios, and reflective practice sessions can accelerate skill development among novice nurses.

The positive correlations between communication skills and constructive problem-solving indicate that interventions enhancing communication may also indirectly improve nurses' clinical decision-making and coping capacities. Thus, hospitals should periodically provide evidence-based communication training addressing empathy, assertiveness, and teamwork.

At the organizational level, workload, stress, and environmental conditions may hinder interpersonal competence. Policymakers and hospital managers should prioritize practices that reduce burnout risk, ensure adequate staffing, and promote healthy team communication climates. Furthermore, nursing curricula should maintain a strong emphasis on interpersonal skill development through problem-based learning, clinical communication courses, and interdisciplinary collaboration activities.

Future research should examine how specific contextual factors such as leadership style, emotional labor, and interprofessional dynamics influence the relationship between communication and problem-solving abilities in clinical environments.



Ethics Committee Approval	This research was approved by the Artvin Çoruh University Human Research Ethics Committee on 14.06.2023 (Approval No: 94605).
Informed Consent	Written consent was obtained from the participants.
Peer-review	Externally peer-reviewed.
Conflict of Interest	The authors have no conflict of interest to declare.
Financial Disclosure	The authors declared that this study has received no financial support.

Author Details

Saffet Karayaman

¹ Artvin Çoruh Üniversitesi, Arhavi Meslek Yüksekokulu, Artvin, Türkiye

0000-0001-5624-4678 saffetkarayaman@gmail.com

REFERENCES

- Bach S, Grant A. Communication and interpersonal skills in nursing. *Learning Matters*; 2015.
- Arnold EC, Boggs KU. *Interpersonal Relationships: Professional Communication Skills for Nurses*. 7th ed. Saunders; 2019.
- O'Hagan S, Manias E, Elder C, Pill J, Woodward-Kron R, McNamara T et al. What counts as effective communication in nursing? Evidence from nurse educators and clinicians on nurse interactions with simulated patients. *J Adv Nurs*. 2014;70(6):1344-1355.
- Sheldon LK. *Communication for Nurses: How to Prevent Harmful Events and Promote Patient Safety*. 2nd ed. Jones & Bartlett; 2013.
- McCabe C. Nurse-patient communication: exploration of patients' experiences. *J Clin Nurs*. 2004;13(1):41-49.
- Foronda C, MacWilliams B, McArthur E. Interprofessional communication in healthcare: An integrative review. *Nurse Educ Pract*. 2016;19:36-40.
- Chan EA, Wong FKY, Cheung MYE, Wong F. Using narrative inquiry and ethnography to understand the impact of culture on nurse-patient communication in Hong Kong. *J Adv Nurs*. 2013;69(12):2934-2944.
- Kuiper RA, Pesut DJ. Promoting cognitive and metacognitive reflective reasoning skills in nursing practice: Self-regulated learning theory. *J Adv Nurs*. 2004;45(4):381-391.



- 9 Victor-Chmil J. Critical thinking versus clinical reasoning versus clinical judgment: differential diagnosis. *Nurse Educ.* 2013;38(1):34-36.
- 10 Abaan DS, Altıntoprak UA. Hemşirelerde problem çözme becerileri: Öz değerlendirme sonuçlarının analizi. *Hacettepe Üniversitesi Hemşirelik Fakültesi Dergisi.* 2005;12(1):62-76.
- 11 Aydınöz Ö, Özer Küçük E, Gönderen H. Hemşirelerin Problem Çözme Beceri Düzeyleri ve Etkileyen Faktörler: Bir Eğitim ve Araştırma Hastanesi Örneği. *SBÜ Hemşirelik Dergisi.* 2020;2(1):9-16.
- 12 Arifoğlu B, Sala G. Birinci sınıf hemşirelik öğrencilerinin iletişim becerileriyle iletişim yönetimi dersi akademik başarı ilişkisi. *DEÜ Hemşirelik Yüksekokulu Elektronik Dergisi.* 2011;4(1):7-11.
- 13 Türkan A, Uğurluoğlu Ö. Determination of factors affecting nurses' communication skills. *Journal of Health and Nursing Management.* 2021;8(3):374-380.
- 14 Turan, N., Baykal, Ü. (2007). The relationship between patient satisfaction and nurses' communication skills. *Journal of Nursing Science,* 5(1), 25-32.
- 15 Çam, M. O., & Pınar, G. (2019). Evaluation of communication skills in nursing: ethical reflections and practice-based insights. *Nursing Ethics,* 26(2), 347-357.
- 16 Turan N, Baykal Ü. The effect of assertiveness training on the communication skills of nurses. *Nursing Education Today.* 2009;29(1):26-31.
- 17 Yılmaz M, Özkan S. Problem-solving competence and perceived stress levels of nurses in clinical decision-making processes. *Curare: Journal of Nursing.* 2021;2(1):45-58.
- 18 Bekman, M. (2022). Quantitative Research Method in Public Relations (Relational Survey Model).
- 19 Sağlık Bakanlığı. Sağlık İstatistikleri Yıllığı 2023 Haber Bülteni. 2024. <https://ohsad.org/wp-content/uploads/2024/10/Saglik-Istatistikleri-Yilligi-2023-Haber-Bulteni.pdf>
- 20 Polit DF, Beck CT. *Essentials of nursing research: Appraising evidence for nursing practice.* 9th ed. Philadelphia: Wolters Kluwer; 2021.
- 21 Etikan I, Musa SA, Alkassim RS. Comparison of convenience sampling and purposive sampling. *Am J Theor Appl Stat.* 2016;5(1):1-4.
- 22 Çetinkanat AC. Öğretmenlerin iletişim Becerileri. 3. Ulusal Sınıf Öğretmenliği Sempozyumu; 1997 Ekim 23-24; Adana: Çukurova Univ.
- 23 Çam S, Tümkaya S. Üniversite öğrencilerinde kişilerarası problem çözme. *Çukurova Univ Sos Bilim Enst Derg.* 2006;15(2):119-132.
- 24 Kalaycı Ş. SPSS uygulamalı çok değişkenli istatistik teknikleri. 7. Baskı. Ankara: Asil Yayın; 2017.
- 25 Roter DL, Hall JA. Why physician gender matters in shaping physician-patient relationship. *J women Health.* 2002;11(8):815-825.
- 26 Christov-Moore L, Simpson EA, Coudé G, Grigaityte K, Iacoboni M, Ferrari PF. Empathy: Gender effects in brain and behavior. *Neurosci Biobehav Rev.* 2014;46:604-627.
- 27 Rajacich D, Kane D, Williston C, Cameron S. If they do call you a nurse, it is always a "male nurse": Experiences of men in the nursing profession. *Nurs Forum.* 2013;48(1):71-80.
- 28 Benner P. From novice to expert: Excellence and power in clinical nursing practice. Pearson; 2021.
- 29 Durmaz Edeer A, Sarıkaya Karabudak S. Hemşirelerde klinik karar verme becerileri ve profesyonel gelişim. *Hemşirelikte Eğitim ve Araştırma Dergisi.* 2022;19(3):214-222.
- 30 Chan EA, Wong FKY, Cheung MYE, Wong F. Using narrative inquiry and ethnography to understand the impact of culture on nurse-patient communication in Hong Kong. *J Adv Nurs.* 2013;69(12):2934-2944.
- 31 Ha JY, Park JH. Communication competence and problem-solving ability among clinical nurses: A correlational study. *Nurse Educ Pract.* 2021;55:103179.
- 32 Choi E, Kim SH, Jung D. Factors influencing problem-solving competence of nursing students: A cross-sectional study. *BMC Nurs.* 2022;21:117.
- 33 Wang S, Lee JY, Kim H. Communication and clinical reasoning among nurses under high workload conditions: A multi-center study. *Nursing Ethics.* 2024;31(2):289-300.
- 34 Türkan A, Uğurluoğlu Ö. Determination of factors affecting nurses' communication skills. *J Health Nurs Manag.* 2021;8(3):374-380.

