# The Effect of Sociodemographic Characteristics and Organizational Culture of Nurses on Colleague Solidarity\*

## Hemşirelerin Sosyodemografik Özelliklerinin ve Örgüt Kültürünün Meslektaş Dayanışmasına Etkisi

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#### Abstract

Aim: The aim of the study was to reveal the effect of sociodemographic characteristics of nurses and organizational culture on colleague solidarity.

**Method:** This descriptive study was conducted between December 2016 and December 2017 on 343 nurses who had been working in four hospitals in Istanbul province for at least one year and who agreed to participate in the study. Data were collected with a data collection tool consisting of three parts: "Sociodemographic Questionnaire", "Denison Organizational Culture Scale" and "Colleague Solidarity in Nurses Scale". In data analysis, descriptive analyses, Pearson correlation analysis and multiple regression analysis (backward method) were used.

Results: It was determined that the nurses had a good level of collegial solidarity, and their level of organizational culture was above average. It was determined that there was a moderate and positive relationship between the Denison Organizational Culture total scores of the nurses and the total score of Colleague Solidarity in Nurses, emotional solidarity, academic solidarity and negative thoughts about solidarity sub-dimension scores, and the relationship was statistically highly significant (r= 0.36, p<0.001). In the regression analysis, the variables affecting the total score of collegial solidarity in nurses were as follows: the involvement sub-dimension of Denison Organizational Culture Scale, institution type (p<0.001), working time in the profession and working unit (p<0.05). Four variables explained the change (variance) of the total score of colleague solidarity in nurses by 20%.

**Conclusion:** Since ensuring collegiality among nurses will positively affect nurse and patient outcomes, it may be useful for nurse managers to adopt organizational culture practices that support collegiality and to develop strategies that support the attitude of collegiality among nurses.

Keywords: Organizational culture, colleague solidarity, nurse, nursing.



Amaç: Çalışma, hemşirelerin sosyodemografik özelliklerinin ve örgüt kültürünün meslektaş dayanışmasına etkisini ortaya koymak amacıyla yapılmıştır.

Yöntem: Bu tanımlayıcı çalışma, Aralık 2016- Aralık 2017 tarihleri arasında, İstanbul ili sınırları içinde yer alan dört hastanede, en az bir yıldır çalışan ve araştırmaya katılmayı kabul eden 343 hemşire üzerinde yapılmıştır. Veriler, "Sosyodemografik Soru Formu", "Denison Örgüt Kültürü Ölçeği" ve "Hemşirelerde Meslektaş Dayanışması Ölçeği" olmak üzere üç bölümden oluşan veri toplama aracı ile toplanmıştır. Veri analizinde, tanımlayıcı analizler, Pearson korelasyon analizi ve çoklu regresyon analizi (backward yöntemi) kullanılmıştır.

**Bulgular:** Hemşirelerin meslektaş dayanışmasının iyi düzeyde olduğu, örgüt kültürü düzeylerinin ise ortalamanın üzerinde olduğu belirlenmiştir. Hemşirelerin Denison Örgüt Kültürü toplam puanları ile Hemşirelerde Meslektaş Dayanışması toplam puanı, duygusal dayanışma, akademik dayanışma ve dayanışma ile ilgili olumsuz düşünceler alt boyut puanları arasında orta düzeyde ve pozitif yönde bir ilişki olduğu, ilişkinin istatistiksel olarak çok ileri düzeyde anlamlı olduğu belirlenmiştir (r= 0,36, p<0,001). Yapılan regresyon analizinde hemşirelerde meslektaş dayanışma toplam puanına etkili olan değişkenler; Denison Örgüt Kültürü Ölçeği katılım alt

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boyut puanı, kurum türü (p<0,001), meslekte çalışma süresi ve çalışma birimi (p<0,05) şeklindedir. Dört değişkenin hemşirelerde meslektaş dayanışma toplam puanına ait değişimi (varyansı) %20 oranında açıklamaktadır.

**Sonuç:** Hemşireler arasında meslektaş dayanışmasının sağlanması hemşire ve hasta sonuçlarını olumlu etkileyeceği için yönetici hemşirelerin meslektaş dayanışmasını destekleyici örgüt kültürü uygulamalarını benimsemeleri ve hemşireler arasında meslektaş dayanışması tutumunu destekleyici stratejileri geliştirmesi yararlı olabilir.

Anahtar Sözcükler: Örgüt kültürü, meslektaş dayanışması, hemşire, hemşirelik.

#### Introduction

Nurses are key in delivering effective, high-quality healthcare (Alhakami and Baker, 2018). In healthcare institutions, nurses are the professionals who spend the most time with patients and who need the most support, cooperation, assistance, and solidarity within the healthcare team (Kılıç and Altuntaş, 2019). The main purpose of collegiality, a unique situation between members of a formally organized professional work group, is to advance some high-level goals within the profession. Collegiality is characterized by non-hierarchical relationships, group integrity, interpersonal exchange, professional and social interpersonal exchange, coordination, and cooperation in decision-making and implementation (Hansen, 1995).

Colleague solidarity is defined as "the support of colleagues for each other and the sharing of professional knowledge, techniques and skills" (Çoban, 2005). Uslusoy and Alpar (2013a) described the concept of colleague solidarity as a three-dimensional attitude including that emotional solidarity, academic solidarity, and negative opinions about solidarity. Collegial solidarity, which is an important issue for nurses, in the literature, the effects of colleague solidarity on different variables such as job performance, job satisfaction, motivation, organizational commitment, organizational climate, intention to stay at work, passion for work, etc. have been investigated and positive effects on these concepts have been found (Göktepe et al., 2020; Kılıç and Altuntaş, 2019; Li et al., 2018, Wang, 2023, Yeşilyurt et al., 2023). Nurses have been found to be unhappy, dissatisfied, alienated from work, providing poor quality services, exhausted, inefficient individuals, and want to leave their jobs in work environments where there is no solidarity among colleagues (Uslusoy and Gürdoğan, 2019). In Adib Hagbaghery et al 2004, unsatisfied needs, heavy workload and lack of time were identified as the main barriers to nurses' unity and solidarity. According to Kılıç and Altuntaş's (2019) study, the relationship between collegial solidarity among nurses has a positive effect on organizational climate was established and it was found that collegial solidarity among nurses has a positive effect on organizational commitment, teamwork, supportive climate, stress, negative interaction, human relations, job satisfaction, hierarchy, communication and innovative climate.

One of the factors affecting colleague solidarity is the organizational culture of the institution. It is important that the organizational culture is strong in achieving organizational goals. In organizations with a strong organizational culture, employees work to achieve common goals and objectives (Hogan and Coote, 2014). Organizational culture, which is recognized as one of the important factors affecting hospital performance, is of great importance to both hospital managers and nurse managers and nurses (Kantek, 2014). In the literature, there are not enough studies in which colleague solidarity and organizational culture in nurses are studied together. This study aims to determine the effect of nurses' socio-demographic characteristics and organizational culture on collegial solidarity, which will help nurse managers to develop strategies to take initiatives to increase collegial solidarity among nurses.

#### Method

Aim: This descriptive study aims to examine the effect of sociodemographic characteristics of nurses and organizational culture on collegial solidarity.

**Participants:** This study was conducted between December 2016 and December 2017 on nurses working in four hospitals, including a state education and research hospital, a state university hospital, a foundation university hospital, and a private hospital in Istanbul who volunteered to participate in the study. The population of the study consisted of a total of 1255 nurses working in four hospitals for at least one year, determined by purposive sampling method (Polit and Beck, 2012). The sample consisted of 550 nurses who agreed to participate in the study. The study was completed with 343 nurses who completed the questionnaire completely. In the post hoc power analysis performed with the G\*Power (3.1.9.2) program, the power was found to be 100%, indicating that the study sample size is adequate.



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**Data Collection Tools:** A questionnaire form consisting of three parts, "Sociodemographic Characteristics Questionnaire", "Denison Organizational Culture Scale" and "Colleague Solidarity Scale for Nurses" was used.

Sociodemographic Characteristics Questionnaire: This section consists of 16 questions prepared by the researchers on socio-demographic characteristics defining the individual and occupational characteristics of the nurses.

Denison Organizational Culture Scale: The scale was developed by Denison and Mishra in 1995 to measure organizational culture (Denison & Mishra, 1995). The original scale consists of four basic dimensions and these basic dimensions consist of three sub-dimensions. The main dimensions are "involvement", "consistency", "adaptability", mission" and the subdimensions are empowerment, team orientation, capability development, creating change, customer focus, organizational learning, strategic direction and intent, goals and objectives and vision. The scale consists of sixty items (1=strongly disagree, 2=disagree, 3=undecided, 4=agree, 5=strongly agree) and is graded on a five-point Likert scale. The score to be obtained from the scale varies between 60-186. The scale was adapted into Turkish by Yahyaqil (2004). Denison Organizational Culture Scale (DOCS), which Yahyaqil conducted the validity and reliability of the scale in Turkish, consists of 36 questions, four basic and 12 sub-conceptual dimensions. These are involvement", "consistency", "total", "mission" In addition, there are three sub-dimensions within each core dimension. The scoring of the Denison Organizational Culture Scale is based on a 5-point Likert scale (1=strongly disagree, 5=strongly agree). Items 4, 12, 18, 24, 30, 34 in the scale are negative items and are scored in reverse. In the evaluation of the scale, the total scores obtained from the four basic conceptual dimensions gives the result of organizational culture and the total score varies between 36-180. The overall Cronbach's Alpha coefficient of the scale is 0.89. The Cronbach's Alpha of the involvement sub-dimension is 0.67, the consistency dimension is 0.76, the adaptability dimension is 0.61 and the mission dimension is 0.82 (Yahyaqil, 2004). In this study, the Cronbach's Alpha reliability coefficient of the Denison Organizational Culture Scale was found to be 0.94 for the whole scale, 0.87 for the involvement sub-dimension, 0.80 for the consistency sub-dimension, 0.82 for the adaptability sub-dimension, and 0.84 for the mission sub-dimension.

Colleague Solidarity of Nurses' Scale (CSNS): The scale was developed by Uslusoy and Alpar (2013a). The Colleague Solidarity of Nurses' Scale (CSNS), which is used to measure the solidarity among nurses, is a five-point Likert-type scale and consists of 23 questions. The five-point scale was determined as (5=always, 1=never). Items 2, 3, 6, 19 and 23 in the scale were reversed. The sub-dimensions of the scale are "emotional solidarity", "academic solidarity" and " negative opinions about solidarity". In the emotional solidarity sub-dimension, there are items about the emotional friendship relations that colleagues show towards each other (items 5, 7, 8, 11, 12, 14, 15, 16, 18); in the academic solidarity sub-dimension, there are items about the solidarity sub-dimension, there are items about negative expressions about solidarity behavior (items 2, 3, 6, 19, 23). The highest score that can be obtained from the scale is 115 and the lowest score is 23. The higher the score obtained from the scale, the more solidarity nurses show with their colleagues. The overall Cronbach Alpha coefficient of the scale is 0.80. The Cronbach's Alpha of the emotional solidarity sub-dimension is 0.80, academic solidarity is 0.78, and negative opinions about solidarity is 0.63 (Uslusoy and Alpar, 2013a). In this study, Cronbach's Alpha reliability coefficient of the CSNS was found to be 0.92 for the total scale, 0.90 for emotional solidarity, 0.87 for academic solidarity, and 0.77 for negative opinions about solidarity among the sub-dimensions.

**Data Collection:** After obtaining ethics committee approval for the study, the necessary institutional approvals were obtained from the hospitals. After interviewing the directors/managers of nursing services in the hospitals and obtaining information about the number of nurses working in the departments, nurses who had been working in the hospitals in the research sample for at least one year and who agreed to participate in the study were informed about the study. The researcher distributed the data collection forms by hand and collected them back within a week. The data collection form takes about 15-20 minutes to complete.

**Data Analysis:** Statistical analysis of the data was performed using SPSS 24.0 (Statistical Package for the Social Sciences). The suitability of the numerical variables for normal distribution was assessed using Skewness and kurtosis values and the Kolmogorov-Smirnow test. As the skewness and kurtosis values were within the range of ±2, the distribution of the data was considered normal. Descriptive statistics were used to evaluate the data, and included counts, percentages, means and standard deviations. Internal consistency coefficients (Cronbach's alpha) were calculated to test the reliability of the measures obtained from the scales and sub-dimensions used in the study. Multiple regression analysis (backward method) was performed to evaluate the effect of the independent variables that were found to have an effect on the total score of collegial solidarity of nurses.

The correlation between tenure status and type of institution was r: .95, which is a very high level of correlation (p<.001). In the regression analyses, since the tolerance value due to high autocorrelation between institution and tenure status was found to be low at .094 (VIF: 10.68), the institution variable, which had the strongest relationship with the dependent variable, was left in the model and tenure status was excluded from the regression model in all analyses.



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Ethical Considerations: Permission to use the Colleague Solidarity of Nurses' Scale was obtained from Esin Çetinkaya Uslusoy, who developed the scale, and permission to use the Denison Organizational Culture Scale was obtained by e-mail from Mehmet Yahyagil, who conducted the Turkish validity and reliability of the scale. Ethical approval for this research was obtained from relevant University Social Sciences Research Ethics Committee (Decision No. 2016. 226.IRB3.145). A written request to conduct the research was submitted to the relevant institutions and written approval was obtained. After the participating nurses were informed about the study, their consent was obtained.

#### **Results**

The socio-demographic (individual and occupational) characteristics of the nurses who participated in the study are shown in Table 1.

Table 1. Sociodemographic and occupational characteristics of nurses (N:343)

Characteristics	n	%	Characteristics	n	%
Gender			Length of experience in the profession		
Female	293	85.4	≤ 2 years	128	37.3
Male	50	14.6	3-5 years	96	28.0
Age			6 -10 years	66	19.2
18-24	126	36.7	≥ 11 years	53	15.5
25-29	128	37.3	Length of service in current hospital		
30-34	45	13.1	≤ 2 years	177	51.6
≥ 35	44	12.8	3-5 years	79	23.0
Education background			6 -10 years	64	18.7
High school	88	25.7	≥ 11 years	23	6.7
Bachelor's degree	191	55.7	Length of service in current unit		
Master's degree	64	18.7	≤ 2 years	212	61.8
Marital Status			3-5 years	78	22.7
Single	242	70.6	6 -10 years	37	10.8
Married	101	29.4	≥ 11 years	16	4.7
Having Children			Work unit		
No	261	76.1	Internal medicine unit	82	23.9
Yes	82	23.9	Surgical unit	97	28.3
Family type of upbringing			Intensive care unit	87	25.4
Nuclear family	280	81.6	Operating theatre/emergency unit	35	10.2
Extended family	63	18.4	Management/training department	42	12.2
Type of institution			Position		
Government Hospitals	72	21.0	Staff nurse	301	87.6
University Hospital	110	32.1	Educator and/or nurse manager	42	12.2
Private Hospital	161	46.9	Type of work schedules		
Tenure status			Alternate shifts (day and night)	263	76.7
Tenure in the public hospital	45	13.1	Day shift	80	23.3
Contracted in the public hospital	27	7.9			
Tenured at the university hospital	69	20.1			
Contracted at the university hospital	41	12.0			
Contracted in a Private Hospital	161	46.9			

When the distribution of the socio-demographic characteristics of the nurses was examined, it was found that 85.4% were female, 37.3% were aged between 25 and 29 years, 55.7% were graduates, 70.6% were single, 76.1% had no children and 81.6% were raised in a nuclear family.





It was found that 21% of the nurses worked in a government hospital, 32.1%, 37.3% of the nurses had worked in the profession for two years or less, 51.61% of the nurses had worked in the institution for two years or less, 28.3% of nurses worked in surgical units, 87.6% worked as bedside nurses, 76.7% worked day/night shifts, 34.7% worked more than 48 hours, 56.3% were satisfied with the unit they worked in and 74.1% chose the profession.

Table 2. Descriptive statistics for Denison Organizational Culture Scale (N:343)

Scale and su	ubscale	Minimum-maximum score (1-5 point)	Mean (SD)	
Denison Org	anizational Culture Scale (Total)	1.75-4.83	3.33 (0.58)	
	1. Involvement	1.33-5.00	3.41 (0.70)	
	Empowerment	1.00-5.00	3.44 (0.82)	
	Team Orientation	1.33-5.00	3.40 (0.75)	
	Capability Development	1.00-5.00	3.39 (0.87)	
	2. Consistency	1.00-4.67	3.25 (0.65)	
	Core Values	1.00-5.00	3.38 (0.76)	
	Agreement	1.00-5.00	3.26 (0.86)	
Subscale	Coordination and Integration	1.00-5.00	3.09 (0.65)	
Subscale	3. Adaptability	1.22-5.00	3.32 (0.64)	
	Creating Change	1.33-5.00	3.30 (0.79)	
	Customer Focus	1.00-5.00	3.44 (0.74)	
	Organizational Learning	1.00-5.00	3.23 (0.80)	
	4. Mission	1.00-4.89	3.34 (0.66)	
	Strategic Direction and Intent	1.00-5.00	3.42 (0.78)	
	Goals and Objectives	1.00-5.00	3.35 (0.81)	
	Vision	1.00-5.00	3.23 (0.67)	

The total score obtained by the nurses from the Denison Organizational Culture Scale was 3.33 (SD=0.58), and in the subdimensions of the scale, involvement was 3.41 (SD=0.70), mission was 3.34 (SD=0.66), adaptability was 3.32 (SD=0.64 and consistency was 3.25 (SD=.65) from the highest to the lowest (Table 2).

Table 3. Descriptive statistics for Colleague Solidarity of Nurses' Scale (N:343)

Scale and Su	ıb dimension	Minimum-maximum score	Mean (SD)	
Colleague So	olidarity of Nurses' Scale (Total)	40-115	97.01 (12.78)	
	Emotional solidarity	16-45	38.93 (5.52)	
Sub dimension	Academic solidarity	18-45	37.83 (5.52)	
difficition	Negative opinions about solidarity	6-25	20.26 (3.97)	

It was found that the nurses' mean overall score on the CSNS was 97.01 (SD=12.78), the mean score on the emotional solidarity sub-dimension was 38.93 (SD=5.52), the mean score on the academic solidarity sub-dimension was 37.83 (SD=5.52), and the mean score on the negative opinions of solidarity sub-dimension was 20.26 (SD=3.97) (Table 3).



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Table 4. Correlation between Denison Organizational Culture Scale and Colleague Solidarity of Nurses' Scale (N:343)

		0	CNC	Sub dimension						
		CSNS Total		Emotional solidarity		Academic solidarity		Negative opinions about solidarity		
		r	р	r	р	r	р	r	р	
DOCS (Tota	l)	0.36 < 0.001 0.33		0.33	<0.001	0.32	<0.001	0.26	<0.001	
Sub scale	1.Involvement	0.36	< 0.001	0.35	<0.001	0.34	< 0.001	0.19	< 0.001	
	2.Consistency	0.33	< 0.001	0.30	<0.001	0.29	< 0.001	0.25	< 0.001	
	3.Adaptability	0.26	< 0.001	0.22	<0.001	0.22	< 0.001	0.25	< 0.001	
	4. Mission	0.32	<0.001	0.30	<0.001	0.26	< 0.001	0.24	< 0.001	

CSNS: Colleague Solidarity of Nurses' Scale

It was determined that there was a moderate and positive relationship between the Denison Organizational Culture total scores of the nurses and the total score of CSNS, emotional solidarity, academic solidarity and negative thoughts about solidarity sub-dimension scores, and the relationship was statistically highly significant (r= 0.36, p<0.001) (Table 4).

Tablo 5. Factors associated with nurses' colleague Solidarity

Independent variables			В	SE	(0)		_	95% Confidence Interval	
		Ь	SE	(β)		р -	Lower limit	Upper limit	
(constant)		61.10	4.09		14.930	<0.001	53.05	69.15	
Involve	ement		5.26	0.91	0.29	5.789	< 0.001	3.47	7.05
Type of	f institution		5.80	1.59	0.19	3.653	< 0.001	2.68	8.92
Length of experience in the profession		4.14	1.87	0.12	2.217	0.027*	0.47	7.80	
Work unit		1.12	.52	.52 .12 2.144 0.033* .09			2.16		
R: .46	Adjusted R <sup>2</sup> : .20	F: 22.240	p: .000	Durbin Watson: 1.974					

According to the results of the t-test for the significance of the regression coefficients, the variables that were found to be significantly effective according to the standardized regression coefficient and that had an effect on the total score of collegial solidarity among nurses from the most important/effective to the least important/effective were the following: involvement sub-dimension score of the Denison Organizational Culture Scale, type of institution (p<0.001), working time in the profession and working unit (p<0.05). It can be seen that four variables explain 20% of the change (variance) in the total score of collegial solidarity among nurses (Table.5). An increase of 1 point in the Denison Organizational Culture Scale involvement sub-dimension scores leads to an increase of 5.26 points in the total score for collegial solidarity. The total score of collegial solidarity of nurses working in university hospitals and private hospitals increases by 5.80 points compared to those working in public hospitals, and the total score of CSNS working more than 10 years in the profession increases by 4.14 points compared to those working 10 years or less. When the units in which nurses work are categorized as surgical unit, intensive care unit, medical unit, special area (operating room and emergency) and management/education, the total score for collegial solidarity increases by 1.12 points in each group (Table 5).

#### **Discussion**

This study, conducted in four hospitals, examined the socio-demographic and occupational characteristics of nurses and the effect of organizational culture on collegial solidarity. It was found that the variables influencing the total score of collegial solidarity among nurses were the involvement sub-dimension score, type of institution, working hours in the profession and the work unit.

In this study, a 1-point increase in nurses' Denison Organizational Culture Scale involvement sub-dimension scores leads to a 5.26-point increase in their total colleague solidarity score (Table 5). No studies in literature examine the relationship between colleague solidarity and organizational culture. However, in the study of Kılıç and Altuntaş (2019) which examined the effect of colleague solidarity on organizational climate among nurses, it was found that there was a positive, weak but highly significant relationship between colleague solidarity and organizational climate, colleague solidarity particularly affected organizational commitment, teamwork, supportive climate, human relations and job satisfaction, although at a

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low level. In the study by Cramm et al. (2012) on solidarity between nurses, managers and other professionals in long-term care settings; organizational characteristics that increase solidarity were reported as high levels of formal and informal information exchange, less hierarchical authority, decentralization and transformational leadership styles. It can be said that organizational culture components such as empowerment, teamwork, capacity development, reconciliation, coordination and organizational learning, which are included in the concepts of organizational culture, have a positive effect on nurses' attitudes towards collegial solidarity.

In this study, the type of institution affected the collegiality of nurses, with the total collegiality score of those working in university hospitals and private hospitals increasing by 5.80 points compared to those working in government hospitals (Table 5). While no study was found in the literature to support this finding, contrary to this finding, the study conducted by Uslusoy and Alpar (2013b) found no difference in the collegiality of nurses according to the type of institution. The reason why nurses working in private and university hospitals showed more collegialities may be related to the institutional culture of the hospitals in which the study was conducted.

In this study, it was found that the length of professional experience affected the collegial solidarity of nurses; the total collegial solidarity scores of nurses who had worked more than 10 years in the profession increased by 4.14 points compared to those who had worked 10 years or less 8 (Table 5). Similar to this study, it has been reported in the literature that the collegial solidarity scores of nurses with more working years are higher than others (Avcı et al. 2022, Uslusoy and Gürdoğan, 2019). However, contrary to this study, Uslusoy and Alpar (2013b) reported that the working year of the nurses did not affect the CSNS total scores, while in Şantaş et al.'s (2023) study, the perception of colleague solidarity was higher among nurses with less than five years of working experience. In this study, the fact that nurses' professional experience increases with years of work may lead nurses to show more collegial solidarity due to the increase in nurses' professional knowledge and skills.

When the units where nurses work are listed as surgical unit, intensive care unit, internal unit, special area (operating room and emergency) and management/education, the total collegiality score increases by 1.12 points in each group (Table 5). In the study conducted by Uslusoy et al. (2016), it was found that nurses working in internal wards have more collegial attitudes. Since the patient /case method is used as the basis of the patient care delivery system in ICUs, nurses may have shown less collegiality because they mostly deal with their own patients during their working hours. It can be suggested that the fact that nurses working in operating rooms and emergency services scored higher on collegiality than nurses working in other units may be a result of the nursing functions and patient care in this unit making teamwork more necessary. The higher collegiality scores of nurses working in management and education units compared to other units may be due to the fact that the nature of the work of nurses working in these units requires close solidarity with management and education nurses, and their attitudes towards collegiality may be higher than those of other groups. The results of this study can be interpreted as the fact that collegiality may differ between units for reasons such as the patient profile of the units where the nurses work, the care delivery systems, the functioning of the unit and differences in nurses' job descriptions.

**Limitations of the Study:** The data of this study is limited to the opinions of the nurses who agreed to participate in the study. In addition, this study was conducted before the Covid-19 pandemic and pandemic may have led to changes in nurses' views on collegial solidarity.

#### **Conclusions and Recommendations**

The results obtained from this study reveal the effect of socio-demographic characteristics and the organizational culture of nurses on collegiality and guide nurse managers in developing collegiality among nurses in their institutions/units. It was found that the participation sub-dimension of the Denison Organizational Culture Scale, type of institution, length of experience in the profession, and the unit in which the nurse works influence collegiality among nurses. In line with these findings, it may be beneficial for nurse managers to adopt organizational culture practices that support collegiality, to focus on practices aimed at a participative work environment and organizational culture, and to develop strategies that support collegiality among nurses at the institution and unit level, taking into account the differences between units. In addition, it is recommended that other factors that influence nurses' collegiality, in terms of their impact on patient, nurse, and institutional outcomes, be investigated more comprehensively in different institutions and samples, both qualitatively and quantitatively.



Örgüt kültürü ve meslektas dayanışması

**Author Contribution:** The authors confirm contribution to the paper as follows; study conception and design: ÜST, NG; data collection: ÜST; analysis and interpretation of results: ÜST, NG; draft manuscript preparation: ÜST, NG. All authors reviewed the results and approved the final version of the manuscript.

Ethics Committee Approval: Koç University Social Sciences Research Ethics Committee approval was obtained (Date: 28.12.2016 - Number: 2016.226.IRB3.145).

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#### References

Adib Hagbaghery, M., Salsali, M. & Ahmadi, F. (2004). A qualitative study of Iranian nurses' understanding and experiences of professional power. *Human Resources for Health*, *2*, 1-14. https://doi.org/10.1186/1478-4491-2-9

Alhakami, I. Y. & Baker, O. G. (2018). Exploring the factors influencing nurse's work motivation. *Iris Journal of Nursing & Care*, 1(1), 1–12. https://doi.org/10.33552/IJNC.2018.01.000503

Avcı, S., Temiz, E. N., Doğan, M. & Köprülü, M. H. (2022). Covid-19 salgınında bir üniversite hastanesinde çalışan hemşirelerin meslektaş dayanışması. *Journal on Mathematic, Engineering and Natural Sciences*, 6(22), 581-601.

Cramm, J. M., Strating, M. M. & Nieboer, A. P. (2013). The influence of organizational characteristics on employee solidarity in the long-term care sector. *Journal of Advanced Nursing*, 69(3), 526-534. https://doi.org/10.1111/j.1365-2648.2012.06027.x

Çoban, A. E. (2005). Psikolojik danışmanlar için meslektaş dayanışması. Mersin Üniversitesi Eğitim Fakültesi Dergisi, 1(1), 167-174.

Denison, D. & Mishra, A. (1995). Toward a theory of organizational culture and effectiveness. *Organization Science*, 6(2), 204-223. https://doi.org/10.1287/orsc.6.2.204

Göktepe, N., Yalçın, B., Türkmen, E., Dirican, Ü. & Aydın, M. (2020). The relationship between nurses' work-related variables, colleague solidarity and job motivation. *Jornal of Nursing Management*, *28*, 514–521. https://doi.org/10.1111/jonm.12949

Hansen, H. E. (1995). A model for collegiality among staff nurses in acute care. The Journal of Nursing Administration, 25(12), 11–20. https://doi.org/10.1097/00005 110-19951 2000-00004

Hogan, S. J. & Coote, L. V. (2014). Organizational culture, innovation, and performance: A test of Schein's model. *Journal of Business Research*, 67(8), 1609-1621. https://doi.org/10.1016/j.jbusres.2013.09.007

Kantek, F. (2014). Örgüt kültürü. Ü. Tatar Baykal ve E. Ercan Türkmen (editör), Hemşirelik hizmetleri yönetimi (pp. 679- 696).İstanbul, Türkiye: Akademi Kitabevi.

Kılıç, E. & Altuntaş, S. (2019). The effect of collegial solidarity among nurses on the organizational climate. *International Nursing Review*, 66(3), 356-365. https://doi.org/10.1111/inr.12509

Li, H., Pang, X. L. & Xie, L. T. (2018). The effects of colleague solidarity and affective commitment on nurses' intent to stay. *TMR Integrative Nursing*, 2(2), 94-101. https://doi.org/10.12032/TMRIN20180619

Polit, D. F. & Beck, C.T. (2012). Nursing research: Generating and assessing evidence for nursing practice (9th edition). Philadelphia, USA: Lippincott, Williams & Wilkins.

Şantaş, G., Şantaş, F. & Kaya, M. (2023). Meslektaş dayanışması ve iş motivasyonu: hemşirelere yönelik bir alan araştırması. *Ankara Hacı Bayram Veli Üniversitesi İktisadi ve İdari Bilimler Fakültesi Dergisi, 25*(3), 933-954. https://doi.org/10.26745/ahbvuibfd.1261442

Uslusoy, E. Ç. & Gürdoğan, E. P. (2019). Hemşirelerde empatik eğilim meslektaş dayanışmasını etkiliyor mu? *Adnan Menderes Üniversitesi Sağlık Bilimleri Fakültesi Dergisi*, 3(1), 19-29.

Uslusoy, E. C. & Alpar, S. E. (2013a). Developing scale for colleague solidarity among nurses in Turkey. *International Journal of Nursing Practice*, 19(1), 101-107. https://doi.org/10.1111/ijn.12000



Örgüt kültürü ve meslektaş dayanışması

Uslusoy, E. Ç. & Alpar, Ş. E. (2013b). Hemşirelerde meslektaş dayanışması ve iş doyumu ile ilişkisi. İ.Ü. Florence Nightingale Hemşirelik Dergisi, 21, 154-63.

Uslusoy, E. Ç., Gürdoğan, E. P. & Kurt, D. (2016). Hemşirelerde mesleki benlik saygısı ve meslektaş dayanışması. Süleyman Demirel Üniversitesi Sağlık Bilimleri Dergisi, 7(1), 29-35.

Wang, J., Liu, S., Qu, X., He, X., Zhang, L., Guo, K. & Zhu, X. (2023). Nurses' colleague solidarity and job performance: Mediating effect of positive emotion and turnover intention. *Safety and Health at Work, 14*(3), 309-316. https://doi.org/10.1016/j.shaw.2023.06.001

Yahyagil, M. (2004). Denison Örgüt Kültürü Ölçme Aracının geçerlik ve güvenirlik çalışması: Ampirik bir uygulama. İ.Ü. İşletme İktisadı Enstitüsü Yönetim Dergisi, 47, 53-57.

Yeşilyurt, T., Göktepe, N., Türkmen, E. & Yalçın, B. (2023). The relationship between nurses' ındividual, work-related variables, colleague solidarity, and work engagement: A cross-sectional study. *Journal of Nursology*, 26(4), 246-252. https://doi.org/10.5152/JANHS.2023.23547