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14 th Years

# 2025, 14 (2), 725-744 | Research Article

# Does Social Climate in the Hospital Affect Nurses' Loneliness?

## Eray Ekin Sezgin 1

#### Abstract

Loneliness is a widespread emotion across the world and is something that many people experience at some point in their lives. Loneliness in the workplace is often caused by employees' inability to form strong bonds with their coworkers or managers. Loneliness can both reduce individual performance and negatively affect the overall workplace atmosphere. In particular, an important element of understanding employees' workplace loneliness is to consider the interaction between employees and their environment, especially the social systems in which these employees are embedded. In recent years, it has been increasingly studied by researchers and practitioners as it has serious negative effects at both individual and organizational levels. This study is based on a comprehensive framework that includes the social exchange approach, the human relations approach and the need to belong approach in order to comprehend the phenomenon of workplace loneliness and the factors affecting this phenomenon. This descriptive and cross-sectional study was conducted on 194 nurses selected through convenience sampling. Data were collected using a structured questionnaire and data analysis was carried out using the original SPSS-26 package program. Multiple regression analyses were conducted to test the hypotheses. The research data were collected with the "Social Climate Scale" and "Workplace Loneliness Scale". As a result of the study, it was found that nurses' perception of social climate was above average and workplace loneliness level was below average. In addition, in the current study, it was determined that social climate has a significant negative effect on workplace loneliness. As a result of the correlation analysis, it was determined that there was a negative and significant relationship between nurses' perceptions of in-group communication and professional cooperation and their workplace loneliness levels. This study makes a unique and significant contribution to the organizational behavior literature by revealing the link between interpersonal harmony, organizational support, in-group communication, work ethics, professional cooperation and non-work relationships and workplace loneliness.

**Keywords**: Social Climate, Workplace Loneliness, Social Exchange Approach, Human Relations Approach, Need to Belong

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14 th Years

# 2025, 14 (2), 725-744 | Araştırma Makalesi

# Hastanedeki Sosyal İklim Hemşirelerin Yalnızlığını Etkiler Mi?

## Eray Ekin Sezgin 1

#### Öz

Yalnızlık, dünya genelinde yaygın bir duygu olup, birçok insanın yaşamının bir noktasında deneyimlediği bir durumdur. İşyerinde yalnızlık ise genellikle çalışanların iş arkadaşlarıyla ya da yöneticileriyle güçlü bağlar kuramaması nedeniyle meydana gelir. Yalnızlık, hem bireysel performansı düşürebilir hem de genel işyeri atmosferini olumsuz etkileyebilir. Özellikle çalışanların işyeri valnızlıklarını anlamanın önemli bir unsuru, çalısanlar ile çevreleri arasındaki etkilesimi, özellikle bu calısanların yer aldığı sosyal sistemleri göz önünde bulundurmaktır. Son yıllarda, hem bireysel hem de örgütsel düzeyde ciddi olumsuz etkileri olduğu için araştırmacılar ve uygulayıcılar tarafından giderek daha fazla incelenmektedir. Bu çalışma, işyeri yalnızlığı olgusunu ve bu olguyu etkileyen faktörleri kavrayabilmek maksadıyla sosyal mübadele yaklaşımı, insan ilişkileri yaklaşımı ve ait olma ihtiyacı yaklaşımını içeren kapsamlı bir çerçeveye dayanmaktadır. Tanımlayıcı ve kesitsel tipteki bu çalışma, kolayda örnekleme yoluyla secilen 194 hemsire üzerinde yürütülmüstür. Veriler, yapılandırılmıs bir anket kullanılarak toplanmıs ve veri analizi orijinal SPSS-26 paket programı kullanılarak gerceklestirilmistir. Hipotezleri test etmek icin coklu regresyon analizleri yapılmıstır. Arastırma verileri, "Sosyal İklim Ölçeği" ve "İşyeri Yalnızlığı Ölçeği" ile toplanmıştır. Çalışma sonucunda, hemşirelerin sosyal iklim algısı ortalamanın üzerinde ve işyeri yalnızlık düzeyi ortalamanın altında olduğu bulgulanmıştır. Ayrıca çalışmada, sosyal iklimin işyeri yalnızlığı üzerinde negatif yönde anlamlı bir etkisinin olduğu tespit edilmiştir. Yapılan korelasyon analizinin neticesinde, hemşirelerin grup içi iletişim ve mesleki işbirliği algıları ile işyeri yalnızlık düzeyleri arasında negatif yönde ve anlamlı bir ilişki olduğu belirlenmiştir. Bu çalışma, kişiler arası uyum, örgütsel destek, grup içi iletişim, iş etiği, mesleki işbirliği ve iş dışı ilişkiler ile işyeri yalnızlığı arasındaki bağlantıyı ortaya çıkararak örgütsel davranış literatürüne özgün ve kayda değer bir katkı sağlamaktadır.

Anahtar Kelimeler: Sosyal İklim, İşyeri Yalnızlığı, Sosyal Mübadele Yaklaşımı, İnsan İlişkileri Yaklaşımı, Ait Olma İhtiyacı

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#### Introduction

Loneliness is a universal emotion that is commonly experienced all over the world (Amarat et al., 2019, p. 554). Loneliness has been conceptualized as a distressing experience resulting from insufficient satisfaction of personal and social needs (Icekson et al., 2021, p. 2). In recent years, loneliness has attracted increasing attention of researchers and experts due to its high prevalence (Bryan et al., 2023, p. 557) and the negative effects it creates at individual and organizational levels (Chen et al., 2022, p. 1463; Firoz & Chaudhary, 2022, p. 1221; Mohapatra et al., 2023, p. 3).

Loneliness in the workplace is often caused by employees' inability to form strong bonds with coworkers or managers (Alper Ay, 2015, p. 1119), and in competitive business environments, employees may experience a negative sense of loneliness when deprived of real social ties (Firoz & Chaudhary, 2022, p. 1221). Workplace loneliness is felt in many different sectors such as education (Einav et al., 2024; Orhan, 2023; Ugurlu & Kaplan, 2021), hospitality (Jung et al., 2022; Özel & İnak, 2021) and manufacturing (Firoz & Chaudhary, 2022). The health sector is no exception; on the contrary, it is an important issue that employees in this sector, especially nurses, do not experience loneliness at work (Arslan et al., 2020; Peplau, 1955; Wood et al., 2022). Because the longer an employee is in a negative social environment and exposed to destructive interpersonal relationships, the greater the feeling of loneliness (Ernst & Cacioppo, 1998, p. 6). Loneliness in the workplace can negatively affect employees' work performance and reduce their productivity (Azeem et al., 2024, p. 863; Uslu, 2021, p. 19). In addition, it is known that individuals who experience loneliness for a long time have an increased risk of developing chronic health problems such as heart diseases and hypertension (Petitte et al., 2015, p. 113). Therefore, the mental and physical health of nurses is of great importance not only for their own well-being but also for the effective functioning of the health system and quality patient care (Wood et al., 2022, p. 1). A supportive working environment for nurses not only improves their general health but also contributes to more efficient patient care.

Although research on loneliness in the workplace has begun to make progress, it is usually addressed at the individual level. However, loneliness is not only limited to an employee's feelings and behaviors towards others (Jones & Hebb, 2003, p. 46); it is also shaped by the feelings and attitudes of other employees towards him/her (Heinrich & Gullone, 2006, p. 702). Therefore, it should be kept in mind that the perception of loneliness in the workplace is evaluated within a social climate beyond being an individual experience. Strong and healthy workplace relationships can help nurses add meaning to their work and help them lead a more emotionally satisfying life and energize their lives (Kocak & Yener, 2019, p. 938).

Although loneliness is a universal phenomenon, research on workplace loneliness is limited and scientists have called for more studies in this field (Anand & Mishra, 2021, p. 2143; Firoz & Chaudhary, 2022, p. 1222). As stated by Erdil and Ertosun (2011, p. 505), studies on workplace loneliness have generally emphasized personal characteristics, while the impact of the workplace on loneliness has been largely neglected. Therefore, to gain a comprehensive understanding of the underlying causes of loneliness, it is essential for organizations to consider not only individual characteristics but also the social and organizational environment that contributes to the emergence or persistence of

loneliness. In the light of this information, this study, based on the social exchange approach, human relations approach and the need to belong approach, aims to investigate the effect of social climate on nurses' loneliness The current study makes important contributions to the literature. First of all, we offer a new perspective on individual workplace loneliness (Ozcelik & Barsade, 2018; Peng et al., 2017) from a social climate perspective. Similarly, this study responds to recent calls to examine the effects of social systems on loneliness (Erdil & Ertosun, 2011, p. 521). Second, we enrich the research by grounding it in the overarching framework of the social exchange approach, the human relations approach and the need to belong approach in order to understand the phenomenon of workplace loneliness and the factors affecting this phenomenon. Finally, there is no study that examines the effect of interpersonal harmony, organizational support, in-group communication, work ethics, professional cooperation and non-work relationships, which are sub-dimensions of social climate, on workplace loneliness in the health sector. The findings of this study may provide important information for assessing the quality of relationships among employees and may be a useful tool for hospital managers to develop practical solutions.

## 1. Theoretical Foundations and Hypotheses Development

An important element of understanding employees' workplace loneliness is to consider the interaction between employees and their environment, especially the social systems in which these employees participate (Wright, 2005, p. 2). This study draws on a comprehensive framework including the social exchange approach (Blau, 1975), the need to belong approach (Baumeister & Leary, 1995) and the human relations approach (Cook & Whitmeyer, 1992) to understand the phenomenon of workplace loneliness and the factors that influence it. The following discussion outlines the process by which practices in organizations shape the development of social climate, which in turn can influence employee loneliness.

Blau (1975) stated that group formation, adaptation, integration, opposition, conflict and dissolution are part of the social exchange processes. According to social exchange theorists, in human relations, individuals exchange information, material or symbolic elements in the social environment that they form personally or in cooperation. In this environment shaped by social relations, people often exhibit behaviors to achieve results or to restrict their relationships (Cook & Whitmeyer, 1992, p. 110). Social climate in organizations can be defined as a structure shaped by the processes within the organization and the interactions between employees. This concept encompasses an understanding that includes the level of cohesion, grouping, solidarity and the effects of work outside of work (Eren-Bana & Bekaroglu, 2017, p.486). Lewin et al. (1939) discussed employees' perceptions of climate in the context of predicting individual and organizational level outcomes and emphasized the importance of taking into account the factors in the social environment in order to accurately interpret employees' behaviors and perceptions. Social climate is characterized by interpersonal harmony within an organization, organizational support, in-group communication, work ethics, professional cooperation, and non-work relationships (Eren-Bana & Bekaroglu, 2017, p. 490). Baumeister and Leary (1995, p. 497) stated that individuals tend to establish and maintain permanent, positive and important interpersonal relationships at least at a certain level. The need to belong is a comprehensive concept and can manifest itself in all areas of human life. This basic need is considered as an important factor that directs human

motivation and behavior (Firoz & Chaudhary, 2022, p. 1224). The need to belong and the effort to meet this need assume a protective role to prevent the individual's feeling of loneliness (Yaşar, 2007, p. 249). Employees who are lonely in the workplace as a result of inadequate social interactions lack a sense of belonging. However, instead of seeking social connections, lonely individuals often remain passive, feeling shy and anxious about establishing and developing new relationships due to their poor social skills (Firoz & Chaudhary, 2021, p. 1225). In a social climate where the need to belong is strong, behaviors performed with strong social skills are generally expected to lead to relational satisfaction. On the other hand, in a climate where the need to belong is weak, it is argued in this study that unsatisfying, change-based relationships may emerge and lead to loneliness depending on the individual's assessment of the situation.

## 1.1. Interpersonal Harmony and Workplace Loneliness

Loneliness occurs as a result of maladaptive interpersonal relationships. The development of healthy social relationships is critical for the effective functioning of an organizational climate. In many cases, interpersonal harmony within the organization offers friendships that may not be found outside (Wright, 2009, p. 24). Experiencing loneliness in the workplace can cause employees to perceive themselves in a negative way (Lam & Lau, 2012, p. 4266). According to Peplau and Perlman (1982, p. 3-4), loneliness is a disturbing feeling that arises due to deficiencies in an individual's social relationships. The feeling of loneliness manifests itself in situations where interpersonal harmony does not meet social needs, is insufficient to satisfy personal needs, and social rewards are reduced (Schmitt & Kurdek, 1985, p. 485). Hamamci and Duy's (2007, p. 121) study reveals that loneliness is associated with scientific distortions in interpersonal relationships, social expressiveness related to social skills and perfectionist attitudes. The experience of lack of cohesion and fear in the workplace leads to a negative social climate. It is also suggested that working without a sense of community contributes to feelings of loneliness by inhibiting the development of quality relationships (Wright, 2009, p.25). Based on these findings, it is suggested that social climate has a negative impact on interpersonal harmony.

H<sub>1a</sub>: Interpersonal harmony has a negative effect on workplace loneliness.

#### 1.2. Organizational Support and Workplace Loneliness

Perceived support in an organizational context is defined as the assistance provided by an organization that helps employees cope with their emotional well-being and negative emotions at work (Ahsan & ul Haq, 2021, p. 149). When employees feel a lack of support, they have negative feelings towards their organization and this may increase the feeling of loneliness (Aselage & Eisenberger, 2003, p. 505). According to Wright (2005, p. 17-18), lack of adequate support from managers in organizations may lead to increased feelings of loneliness in employees. In this study, an inverse relationship was observed between coworker and manager support and workplace loneliness. Stoica et al. (2014), in their study on healthcare workers, found that employees who do not receive support from managers experience higher levels of loneliness. Similarly, Tian et al. (2023) reported a negative relationship between organizational support and workplace loneliness. Apparently, it has been observed that the well-established role of managers in the workplace can affect employees' feelings of loneliness. Intensive search for support in the workplace is considered as one of the important reasons for feeling lonely (Tutar &

Erdem, 2021, p. 105; Zhou, 2018, p. 1011). In this context, low perceived support by employees in the organization is associated with feelings of loneliness and it is argued that this relationship involves more complex dynamics beyond a simple linear relationship.

H<sub>1b</sub>: Organizational support has a negative effect on workplace loneliness.

## 1.3. In-Group Communication and Workplace Loneliness

One of the factors shaping social climate is the strength of relationships between groups and the interactions around these relationships. Mirkin and Middleton (2014, p. 232) state that this dynamic plays an important role in social climate. Lack of healthy communication in the workplace leads to a feeling of loneliness among employees (Uslu, 2021, p. 38). Çobanoğlu (2019, p. 110) states that loneliness mainly arises from communication inadequacies.

In the disciplines of communication and psychology, it has been suggested that the problem of loneliness may be partly related to communication (Zakahi & Duran, 1985, p. 50). In Zakahi and Duran's (1985, p. 50) study, loneliness was associated with communication anxiety and communicative competence, while Segrin's (1993) findings show that although loneliness is linked to interpersonal inadequacies, it exhibits a positive relationship with social sensitivity, which is the ability to understand and interpret the verbal communication of others. Reinking and Bell (1991), in a study conducted in a public service organization, aimed to examine how individuals' loneliness levels, career status and communication competencies interacted. In the study, it was hypothesized that individuals at the bottom of the organizational hierarchy were more likely to experience loneliness. The study also examined whether the observed negative relationship between organizational level and loneliness could be attributed to the higher communication skills typically found among individuals in upper-level positions. However, the findings revealed that even after controlling for communication competence, loneliness remained more prevalent among participants occupying lower hierarchical positions within the organization. The authors explained this with the fact that achieving organizational success may be a higher priority for some individuals than being close to others. This finding suggests that the relationships between loneliness and career status are shaped not only by individuals' communication skills, but also by professional goals and position within the organization. Amarat et al.'s (2019) study showed that strong communication and managerial support between nurses and other healthcare professionals are effective in reducing nurses' negative feelings such as loneliness. Accordingly, loneliness can be considered as a reflection of the deterioration in the quality of communication within the group. Therefore, studies on loneliness can shed light on communication problems in the organization and at the same time indicate the existence of a negative social climate.

H<sub>1c</sub>: In-group communication has a negative effect on workplace loneliness.

## 1.4. Work Ethics and Workplace Loneliness

Work ethics is a concept that encompasses the right behaviors exhibited in business processes, rules of conduct to be followed in special situations, standards and working principles to guide employees (Appelbaum et al., 2005, p. 43). Although ethical values are generally seen as an abstract and soft subject, deficiencies in the perception of these values

in business life can lead to undesirable results (Bektaş & Köseoğlu, 2008, p.155). Kayıkci and Ozyildirim (2019, p. 1510), in their research examining the reasons for the feeling of loneliness felt by provincial education inspectors working in Antalya Provincial Directorate of National Education in their individual and organizational activities, showed that ignoring ethical values is one of these reasons. In addition, another study in the literature reveals that the feeling of loneliness is related to unethical behaviors (as cited in Gentina et al., 2018, p. 104). Unethical behaviors of organizational employees can often be associated with negative emotions. In this context, workplace loneliness is likely to be negatively affected when work ethics are weak. That is, neglecting ethical values may cause employees to experience loneliness.

H<sub>1d</sub>: Work ethics has a negative effect on workplace loneliness.

### 1.5. Professional Cooperation and Workplace Loneliness

The social exchange approach enables the development of trusting and productive relationships between employees (Babin et al., 2021, p. 3). Cooperation between employees, interactions with other departments and the functioning within these units constitute the main components of the social climate (Dietz, 2000, p. 146). Loneliness can weaken employees' sense of obligation to their employers and colleagues, leading to turnover and lower relationships with coworkers (Babin et al., 2021, p. 2). In addition, instead of maintaining their social awareness, lonely individuals tend to pay more attention to negative cues rather than focusing on positive social cues (Babin et al., 2021, p. 3). In their study, Tezer and Arkar (2013) observed that when loneliness increases, the tendency to cooperate is also low. Patel et al. (2019, p. 476) emphasized the importance of cooperation to combat loneliness. These theoretical considerations and related empirical research point to the existence of a potential relationship between workplace loneliness and professional collaboration.

H<sub>1e</sub>: Professional cooperation has a negative effect on workplace loneliness.

#### 1.6. Non-work Relationships and Workplace Loneliness

There are multiple variables that affect the level of loneliness of the individual, and one of them is non-work relationships. Loneliness emerges as a result of the interaction between the individual and the systems around him/her (Danış et al., 2017, p. 10). This interaction can lead to a feeling of loneliness in relationships outside of work due to negative conditions in the workplace (Çobanoğlu, 2019, p. 109). Workplace loneliness in organizations is defined as a state of loneliness arising from the individual's interactions with his/her social environment (Cindiloğlu et al., 2017). Kaplan (2011, p. 32) considered workplace loneliness as a situation affected by environmental and personal characteristics and stated that experimental research should be conducted to understand whether loneliness in the workplace is caused by environmental or personal factors. However, he also emphasizes that such a determination is not psychologically and ethically appropriate. In the existing literature, it is seen that workplace loneliness is accepted as a situation affected by both individual and organizational factors (Bryan et al., 2023, p. 557; Ernst & Cacioppo, 1998, p. 3). Weiss (1973), on the other hand, considered loneliness as a normal state and argued that non-work relationships play a more important role in the formation of loneliness than other factors. Therefore, it is estimated

that non-work relationships are an important source for hypothesizing and dealing with the negative consequences of workplace loneliness.

H<sub>1</sub>f: Non-work relationships have a negative effect on workplace loneliness.

Based on the theoretical understanding of the hypotheses mentioned above, the conceptual model presented in Figure 1 was developed.

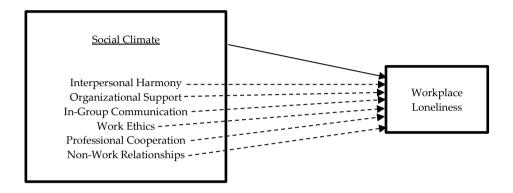


Figure 1. Conceptual Model

#### 2. Methods

## 2.1. Design and Sampling

The aim of this study is to make inferences based on the relationships between variables determined by statistical analysis. Accordingly, a correlational-causal research design was used. In addition, this study is a cross-sectional design as the data collection process is carried out through questionnaires over a certain period of time.

Nurses were selected as the sampling unit in the study. The study was conducted in a university hospital with a capacity of 1100 beds in Elazığ province of Turkey where 784 nurses work. The data obtained through face-to-face interviews were collected from units selected by convenience sampling technique. The inclusion criterion was that all participants had to have worked in their current department for at least six months. A total of 264 questionnaires were distributed to nurses, of which 194 were retrieved and used for analysis. The response rate was 0.73. Accordingly, 194 nurses constituted the research population. Tabachnick and Fidell (2007) emphasized that in order to obtain high loadings, a large sample is not necessary and a sample size of around 150 is sufficient. In addition, Preacher and MacCallum (2002, p. 153) suggested that a sample size between 100 and 250 may be sufficient. It is seen that the sample size reached in the study is within this range and in this case, it has the power to represent the universe.

#### 2.2. Data Collection Tools

The survey included demographic questions regarding the participant's age, gender, marital status, level of education, length of service in the current hospital, and professional experience, and two measurement tools.

The Social Climate Scale developed by Eren-Bana and Bekaroğlu (2017) consists of 26 items and is 7-point Likert-type. The scale has a total of six sub-dimensions including "Interpersonal Harmony", "Organizational Support", "In-Group Communication", "Work Ethics", "Professional Cooperation" and "Non-work Relations". High scores indicate that nurses have high levels of social climate.

The Workplace Loneliness Scale, originally developed by Wright et al. (2006), comprises 16 items and is structured as a 5-point Likert-type scale. The Turkish adaptation of the scale was conducted by Doğan et al. (2009). While the original scale includes two sub-dimensions—"Emotional Deprivation" and "Social Companionship"—a unidimensional structure emerged in the current study. Higher scores on the scale indicate greater levels of workplace loneliness experienced by nurses.

#### 2.3. Data Analysis

In this study, participants' demographic characteristics were summarized using frequency and percentage distributions, while the mean and standard deviation values of the scales and their sub-dimensions were calculated. To assess the relationship between social climate and workplace loneliness, Pearson correlation analysis was employed, and multiple regression analysis was conducted to examine the predictive effects of the social climate sub-dimensions on workplace loneliness. The construct validity of the measurement instruments was tested through factor analysis, and their internal consistency was evaluated using Cronbach's Alpha coefficients. All statistical analyses were carried out using the licensed version of SPSS 26.0 software.

#### 3. Results

## 3.1. Demographic Characteristics

According to the results regarding the demographic characteristics of the nurses, 93.8% of the nurses were female (182 females) and 6.2% were male (12 males). When the distributions according to age groups were analyzed, it was seen that employees between the ages of 26-35 had the highest share with 70 people and 36.1%, while 23 people between the ages of 18-25 had the lowest share with 11.8%. 42.8% of the nurses were single and 57.2% were married. When education levels were evaluated; 66 university graduates ranked first with a share of 34%. The proportion of those who have been working in the same hospital for 4 years or less has the highest share with 44.3% (86 people). Those who have been working for 10 years or more have the highest share with 40.7% (79 people) (see Table 1).

Variables	Groups	n	%
Gender	Male	12	6.2
	Woman	182	93.8
Marital Status	Married	111	57.2
	Single	83	42.8
	18-25 years	23	11.8
Age	26-35 years	70	36.1
	36-45 years	64	33.0
	46 and above	37	19.1
	High Scholl	29	14.9

**Tablo 1. Demographic Characteristics of Participants** 

<b>Education Level</b>	Associate Degree	65	33.5
	License	66	34.0
	Postgraduate	34	17.6
	4 years and below	49	25.3
Professional	5-9 years	66	34.0
Experience	10 years and above	79	40.7
Length of Service in	4 years and below	86	44.3
the Current Hospital	5-9 years	71	36.6
	10 years and above	37	19.1
Total	•	194	100

## 3.2. Explanatory Factor Analysis and Reliability Analysis

The following table shows the factor analyses, Cronbach's Alpha coefficients and some descriptive statistics of the variables used in the research. Bartlett's test and KMO values revealed that factor analysis was appropriate for both scales and the sample size was sufficient (KMO>0.50; Bartlett's Test; p<0.001). According to the factor analysis results, the social climate scale consists of 6 factors and explains 60.199% of the total variance, while the workplace loneliness scale consists of a single factor and explains 51.133% of the total variance. Cronbach's Alpha coefficients of the social climate and workplace loneliness scales were calculated as 0.770 and 0.933, respectively. Kilic (2016) states that Cronbach's Alpha value above 0.70 is the lower limit for the reliability of the scales, and it is understood that the Cronbach's Alpha values obtained for the variables are within acceptable limits. When the arithmetic mean values were analyzed, a medium value was found for the general social climate on a Likert-type scale (Mean =4.08). "In-group communication" was determined as the sub-dimension with the highest mean (mean =4.58), while the 'professional cooperation' sub-dimension had the lowest mean (mean =3.49). The mean value of the nurses' perception of workplace loneliness was found to be at a low level with a mean value of 1.71.

Tablo 2. . Explanatory Factor Analysis and Reliability

Dimensions/Scales	Number Core Explained Cronbac		Cronbach's	Mean	S.D.	
	of Items	Values	Variance %	Alpha		
Interpersonal	7	4.340	16.692	0.750	4.56	0.53
Harmony (IH)						
Organizational	7	2.880	11.076	0.802	3.83	0.70
Support (OS)						
In-Group	4	2.570	9.883	0.688	4.58	0.46
Communication						
(IGC)						
Work Ethics (WE)	4	2.210	8.499	0.689	3.73	0.54
Professional	2	1.921	7.390	0.673	3.49	0.66
Cooperation (PC)						
Non-Work	2	1.731	6.659	0.731	3.62	0.70
Relationships						
(NWR)						
Social Climate (SC)	26	-	60.199	0.770	4.08	0.33
Workplace	16	-	51.133	0.933	1.71	0.60
Loneliness (WL)						

Kaiser-Meyer-Olkin (KMO) = 0.645; Bartlett's Test:  $\chi$ 2= 2535.91; p<0,001 (Social Climate) Kaiser-Meyer-Olkin (KMO) = 0.933; Bartlett's Test:  $\chi$ 2= 1893.24; p<0,001 (Workplace Loneliness)

# 3.3. Confirmatory Factor Analysis

Table 3 presents the findings of the confirmatory factor analysis conducted for the Social Climate Scale and Workplace Loneliness Scale using AMOS software. The analysis was conducted to test the construct validity of both scales and the fit of the model to the data was evaluated through various goodness of fit indices.

Indexes Excellent Social Climate Acceptable Value Workplace Ranges Ranges Loneliness  $\chi 2/df$  $0 \le \chi 2/\mathrm{df} \le 3$  $3 < \chi 2/df \le 5$ 1.267 1.921 **CFI** 0.97≤CFI≤1.00 0.95≤CFI≤0.97 .974 .965 **GFI**  $0.95 \le GFI \le 1.00$  $0.90 \le GFI < 0.95$ .914 .917 **AGFI**  $0.90 \le AGFI \le 1.00$  $0.85 \le AGFI < 0.90$ .881 .865 TLI 0.95≤TLI≤1.00 0.90≤TLI≤0.95 .967 .952 IFI 0.95≤NFI≤1.00 0.90≤ NFI≤0.95 .975 .966 RMSEA 0.00≤RMSEA≤0.05 0.05≤RMSEA≤0.08 .037 .069

Tablo 3. Validity Analysis

Kaynak: Hooper et al., 2008; Schermelleh-Engel et al., 2003

According to Table 3, the goodness-of-fit indices for both variables fall within the range of excellent and acceptable fit levels. The results of the confirmatory factor analysis indicate that the data satisfy the required assumptions and validity criteria, demonstrating that the measurement models are statistically appropriate for further analysis.

## 3.4. Correlation Analysis

Correlation analysis was applied to reveal the relationship between nurses' perceptions of social climate and workplace loneliness. According to the values in Table 4, it was found that there was a significant, negative and low (r=-.145, p<0.05) relationship between social climate and workplace loneliness, a negative and significant (r=-.411, p<0.05) relationship between in-group communication and workplace loneliness, and a negative and significant (r=-.164, p<0.05) relationship between professional cooperation and workplace loneliness.

Ölçek	1	2	3	4	5	6	7	8
1. IH	-							
2. OS	.333*	-						
3. IGC	.56	.038*	-					
4. WE	.043	.144*	.015	-				
5. PC	.068	.208*	.013	.097	-			
6. NWR	.030	.154*	.076	.093	.505*	-		
7. SC	.642*	.808*	.206*	.346*	.415*	.338*	-	
8. WL	.095	047	411*	131	164*	070	145*	-

Tablo 4. Correlation Coefficients for Relationships between Variables

\*p<0,01

#### 3.5. Hypothesis Testing

Simple and multiple regression analyses were performed to examine the effect of social climate and its sub-dimensions on workplace loneliness. The results of the simple linear regression analysis indicated that the overall model was statistically significant (p= .000, p<.05). Specifically, social climate was found to have a significant negative effect on workplace loneliness ( $\beta$ =-.145, p<.05, F=4.121), suggesting that more positive perceptions of the social climate are associated with lower levels of loneliness in the workplace. Accordingly, nurses' perceptions of workplace loneliness can only explain their perceptions of social climate, which is the independent variable in the model, by 2.1% (see Table 5).

Tablo 5. The Effect of Social Climate on Workplace Loneliness

Dependent Variable	Independent Variable	В	Std. Error	β	t	p
Workplace Loneliness	Social Climate	267	.131	145	-2.030	.044

F=4.121

 $R^2 = .021$ 

Adjusted R2=.016

Std. Error of the Estimate= .060

The results of the multiple regression analysis revealed that the overall model was statistically significant, with a p-value of .000, indicating significance at the p < .05 level. According to the results of the analysis, organizational support ( $\beta$  = -.066, p>0.05), work ethics ( $\beta$  = -.107, p>0.05), professional cooperation ( $\beta$  = -.139, p>0.05) and extra-work relationships ( $\beta$  = -.011, p>0.05) have no significant effect on workplace loneliness. According to these results, hypotheses H<sub>2</sub>, H<sub>4</sub>, H<sub>5</sub> and H<sub>6</sub> are rejected. Interpersonal cohesion has a significant and positive effect on workplace loneliness ( $\beta$  = .146, p<0.05) and intragroup communication has a significant and negative effect on workplace loneliness ( $\beta$  = -,422, p<0.05). According to the results obtained, it can be said that hypotheses H<sub>1</sub> and H<sub>3</sub> are accepted. R<sup>2</sup> value shows how much of the changes in the dependent variable are explained by the independent variables. In this context, it is concluded that 20% of the change in the workplace loneliness variable depends on the independent variables. This shows that the independent variables explain a significant portion of the effect on workplace loneliness (see Table 6).

Tablo 6. The Effect of Social Climate Sub-Dimensions on Workplace Loneliness

Dependent Variable	Independent Variable	В	Std. Error	β	t	p
Workplace	IH	.165	.078	.146	2.124	.035
Loneliness	OS	057	.061	066	939	.349
	IGC	550	.084	422	-6.526	.000
	WE	119	.073	107	-1.633	.104
	PC	127	.069	139	-1.835	.068
	NWR	010	.064	011	151	.880

```
F= 49.212
R<sup>2</sup>= .228
Adjusted R<sup>2</sup>= .203
Std. Error of the Estimate= .054
p=000
```

#### Discussion and Conclusion

The nursing profession can bring psychological challenges as well as physical risks (Gómez-Salgado et al., 2019, p. 1). In order to sustain this profession, not only superficial rewards such as financial gain or job security are not enough, but a more in-depth support system is needed (Malloy et al., 2015, p.7). Socializing in a healthy communication environment is a basic need for employees. Factors such as interpersonal harmony, organizational support, in-group communication, work ethics, professional cooperation and non-work relations play a decisive role in the formation of social climate. However, when these factors are not provided at the expected level, individuals may perceive loneliness. This study builds on the social exchange approach, human relations approach and the overarching framework of the need to belong to improve our understanding of the effects of social climate on nurses' loneliness.

The data obtained proves the accuracy of some of my hypotheses and these findings strongly support our hypotheses. First, our results revealed that interpersonal harmony has a negative effect on workplace loneliness (H<sub>1a</sub>). This finding extends research investigating the antecedents of workplace loneliness, which found that loneliness is negatively related to social skills and perfectionist attitudes (Hamamci & Duy, 2007, p. 129; Wright, 2009). The current study contributes to this area of research by emphasizing the important but often overlooked impact of interpersonal adjustment on workplace loneliness. Second, our results revealed that in-group communication has a negative effect on workplace loneliness (H<sub>1c</sub>). It can be said that nurses with strong in-group communication have lower levels of loneliness. This result is consistent with the evidence presented by Uslu (2021) and Amarat et al. (2019) showing that establishing good communication between groups can help reduce negative emotions such as loneliness. In this context, given that increased workplace loneliness is an indicator of deteriorating ingroup communication, our study contributes to this research area by examining how strengthened intergroup communication can reduce workplace loneliness levels.

Our findings offer several implications from both theoretical and practical perspectives. Firstly, loneliness research has primarily concentrated on individuals' personal experiences, often overlooking the reality that many individuals report greater feelings of loneliness in the workplace than in their private lives (Lam & Lau, 2012, p. 4265). Although recent studies have begun to explore the antecedents of workplace loneliness (Chen et al., 2022; Wright & Silard, 2021), the majority of this research has remained narrowly focused on the characteristics of targeted individuals. By shifting the focus to the organizational context and conceptualizing loneliness within the framework of social climate, the present study offers a valuable contribution to the evolving literature on workplace loneliness. Second, this study integrates the social exchange approach, the human relations approach, and the need to belong theory into a single framework in useful and novel ways to meaningfully enhance understanding of the expression of loneliness in the workplace. Third, managers should create a culture of friendship,

especially targeting young and single employees who do not have a circle of friends. Fourth, identifying the causes of loneliness in hospitals enables measures to address the challenges nurses face. Also, educating nurses on coping with loneliness and developing strategies can be an important step. Finally, good communication and managerial support can be effective in reducing nurses' negative feelings such as loneliness.

The findings of this study provide valuable insights for both researchers and practitioners; however, several recommendations should be considered to enable a more comprehensive interpretation of the results within a broader context. Firstly, the fact that the study was conducted in a single university hospital limits the generalizability of the findings to other healthcare institutions. Therefore, future studies should be expanded to include various types of hospitals in different regions, taking into account socio-cultural differences, which would contribute to producing more comprehensive results. In particular, comparative studies in public and private healthcare settings may reveal how perceptions of workplace loneliness and social climate vary across organizational cultures.

Moreover, the cross-sectional design of this study limits the ability to draw causal inferences between variables. Future research should consider utilizing longitudinal, quasi-experimental, or experimental designs to better investigate causal relationships and to examine theoretical constructs more comprehensively. Such designs would also play a critical role in tracking changes in variables over time and assessing the effectiveness of intervention programs.

Another important limitation is the use of convenience sampling, which reduces the representativeness of the sample. For this reason, future research should adopt probabilistic sampling methods to increase the scientific validity and reliability of the findings. Furthermore, since concepts such as loneliness and social climate are inherently subjective, integrating qualitative methods into the research process would offer a deeper understanding of these phenomena. In particular, semi-structured interviews or focus group discussions can provide rich contextual insights to complement quantitative findings and guide practitioners in developing more effective strategies.

This study not only presents the current situation but also offers a solid foundation for the development of intervention policies aimed at strengthening the social climate and reducing workplace loneliness. It is recommended that researchers build upon this foundation through multidimensional and methodologically robust studies, while practitioners should take concrete steps to create psychosocially supportive work environments.

In conclusion, the social climate of a hospital is a key factor for the effective delivery of health care services and the successful fulfillment of the hospital's mission. A healthy and supportive social climate enables nurses to avoid negative feelings such as loneliness and encourages them to collaborate, build strong social bonds and develop healthy relationships with colleagues. This, in turn, prevents nurses from feeling lonely, leading to a more productive, motivated and psychologically healthy work environment.

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Elik beyali	yaranaman tum çanşınaların kaynakçada benirindiği beyan olundi.
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Çıkar Çatışması	Çıkar çatışması beyan edilmemiştir.
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Peer-Review	Double anonymized - Two External
Ethical Statement	* It is declared that scientific and ethical principles have been followed while carrying out and writing this study and that all the sources used have been properly cited.
Plagiarism Checks	Yes - Ithenticate
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