

THE MEDIATING ROLE OF SAFETY CLIMATE PERCEPTION IN THE RELATIONSHIP BETWEEN QUALITY OF WORK LIFE LEVEL AND JOB SATISFACTION IN PUBLIC HEALTH SECTOR EMPLOYEES

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ABSTRACT

The importance of health sector workers in delivering effective and high-quality services within the healthcare sector is significant. Besides various job burdens, the challenging working conditions also negatively impact the job performance of health sector workers. The direct impact of these negatives on crucial factors such as job satisfaction and quality of life increases the importance of these factors.

This study aims to determine the effect of perceived safety climate on the levels of job satisfaction and quality of life, and the relationships among these parameters, by examining 500 health sector workers employed at a public hospital in Bakırköy, İstanbul, Türkiye. By identifying the socio-demographic variables of the sample, the study investigates the effect of perceived safety climate on these variables and their relationship with job satisfaction and quality of life at work.

The results showed a positive and very strong correlation between the total scores of the safety climate scale and job satisfaction scale ($r=0.766$, $p=0.001$) and between the total scores of the safety climate scale and quality of life scale ($r=0.769$, $p=0.000$). According to these results, an increase in participants' perceptions of safety climate directly affects their levels of job satisfaction and quality of life, with a directly proportional relationship between them. Mediation analysis using the Sobel test (Sobel Test Statistic=9.962; Std. Error=0.435; $p=0.001$) revealed that the safety climate plays a mediating role in the relationship between job satisfaction and quality of life.

In conclusion, it was determined that the safety climate affects health sector workers' levels of job satisfaction and quality of life in the healthcare sector and plays a mediating role in the relationship between these two scales.

KEYWORDS

Safety climate perception, job satisfaction, quality of work life, health sector workers.

INTRODUCTION

The efficient delivery of healthcare services is closely related to the role of healthcare professionals. However, heavy workload and stressful working conditions negatively affect job satisfaction and quality of life, leading to loss of motivation [1, 2]. In this profession where health sector workers face high risks and have no tolerance for making mistakes, stress and

anxiety cause decreases in job satisfaction and quality of life [3]. Safety climate plays a critical role in preventing these negativities and its effects on job satisfaction and quality of life in the healthcare sector are becoming increasingly [4, 5]. The main purpose of this study is to examine the effects of health care workers' perception of safety climate on job satisfaction and quality of work life. In addition, the mediating role of safety climate perception on this relationship was evaluated in a sample of health sector workers working in a public hospital in Bakırköy, İstanbul, Türkiye. In this context, the study aims to fill the gaps in the literature on the dynamics between these concepts in the health sector and to provide practical suggestions specific to the sector.

CONCEPTUAL FRAMEWORK AND LITERATURE REVIEW

1. SECURITY CLIMATE

Safety climate was defined by Zohar (1980) as the perception of organizational safety by employees, and Brown and Holmes (1986) defined it as the totality of perceptions and beliefs that individuals have about certain entities [6]. Safety climate is related to the perceptions developed against the risks in the work environment and increases continuity and productivity in the workplace with high business awareness and risk measures [7]. The literature emphasizes that safety climate is shaped by employees' beliefs and values about safety [8].

Health sector workers are defined as professionals who protect and improve the health of society [9]. The health services provided by these workers are directly related to both working and living conditions. Occupational risks encountered during the provision of health services vary depending on the nature of the work performed [10]. It has been reported that the risk factors to which health sector workers are exposed are categorized into five main groups: biological, physical, ergonomic, chemical and psychosocial [11]. In the report published by the American National Institute for Occupational Health and Safety (NIOSH), it was stated that there are 29 different physical, 25 chemical, 24 biological, 6 ergonomic and 10 psychosocial risk factors in hospitals [12]. It was also emphasized in the report that these risk factors differ in each health institution and that these factors vary depending on the units where health workers work [13].

In studies on occupational health and safety, it has been determined that health sector workers are the main group affected by occupational accidents and occupational diseases [14]. In studies on occupational health and safety of health sector workers in Turkey, it is seen that knowledge, awareness, perception and safety culture levels are at the forefront [15]. However, the limited number of studies on occupational health and safety of health sector workers increases the lack of information in this field. In particular, it is of great importance to close this gap in terms of evaluating the measures to be taken against occupational risks of health sector workers and taking the necessary measures. The effectiveness of OHS activities and employees' perceptions of these activities play a major role in preventing occupational accidents and occupational diseases. It has been reported that the knowledge and competence levels of health sector workers are important in terms of crisis management and that the perception of OHS competence is effective in identifying deficiencies during and after a crisis [10, 16].

2. QUALITY OF WORK LIFE

When the definitions of quality of work life are examined, it is seen that this concept develops under certain standards and the motivation level of employees plays an important role in the formation of these standards. In an organization with low motivated employees, the quality and efficiency of work decreases, indicating that the quality of work life is also low [17]. Therefore, it should be kept in mind that organizations aiming to improve the quality of work life should first ensure the morale and motivation of their employees [18]. Determining an organization's priorities for quality of work life constitutes the first step towards achieving the goals; these priorities include determining the quality of work and improving the quality of work life and motivation of employees [1].

Increasing quality of work life is possible by integrating elements such as motivation and personal experiences into work life [19]. The level of employees' quality of work life is related to the employment provided by the organization and the potential to meet personal needs; therefore, quality of work life is recognized as an important production element in the

health sector [20]. In the health sector, quality of work life is directly related to the physical and psychological conditions of employees and the quality and efficiency of health services [7]. Health sector workers are the key elements in this sector and their level of quality of work life affects the efficiency of the services they provide [21]. The importance of quality of work life in the health sector is higher than in other sectors because employees in this sector have to work selflessly and carefully to meet the health needs of people [22]. Considering that the factors that negatively affect the quality of work life of health sector workers may have irreparable consequences, it is of great importance to integrate these factors [23].

3. JOB SATISFACTION

The service provided within the scope of the health sector is a concept that includes the evaluation of parameters such as quality, effectiveness and efficiency together [24]. Data on the parameters of the service provided are more critical in the healthcare sector due to the inability to compensate for errors [25]. While errors in other sectors can be corrected with checkpoints, negative situations are of greater importance in healthcare services as these errors can directly affect people's lives [26]. Job satisfaction in healthcare organizations develops due to the fact that mistakes cannot be compensated. Mistakes negatively affect job satisfaction levels [27].

In recent years, it has been determined that changes in health policies have decreased job satisfaction in employees and negative changes in health policies have effects such as deterioration of working conditions, decrease in salaries, and increase in work intensity [28] [29] (In hospitals providing healthcare services, it has been stated that the number of employees varies depending on the characteristics of the organization and the satisfaction of patients depends on the compliance of hospital employees [30]. It has been found that low compliance can negatively affect the quality of patient care [31].

The relationship between job satisfaction and service quality has also been accepted as an important indicator in studies [32, 33]. Factors affecting job satisfaction levels include factors such as workload, relationships, job descriptions, and promotion opportunities [34]. The negative application of these factors reduces the quality of healthcare services and job satisfaction levels [35]. It is important for institutions to carry out monitoring and preventive activities to correct these negativities [36]. In order to increase the job satisfaction levels of health sector workers, it is emphasized that the working environment should be improved and the psychological health of employees should be prioritized [37]. Increasing research on the concept of job satisfaction has an impact on employees both physically and mentally [38]. Negative situations and stress factors can negatively affect organizations by causing job dissatisfaction [39], which can lead to a decrease in the productivity of organizations [40].

4. PERCEPTION OF SAFETY CLIMATE IN THE RELATIONSHIP BETWEEN JOB SATISFACTION AND QUALITY OF WORK LIFE

Preventing occupational accidents and occupational diseases is one of the most important goals of organizations today [41]. To achieve these goals, it is essential to comply with legal regulations and use Occupational Health and Safety Management Systems (OHSMS) [42]. The purpose of OHSMS is to identify hazards that may threaten the health and safety of employees, measure risk levels and strengthen control mechanisms by taking them under control [43]. A safe working environment positively affects work performance and contributes to the development of businesses [44]. Occupational health and safety are associated with job satisfaction and quality of work life levels; in this context, positive perceptions of safety climate help prevent accidents [45, 46]. Safety climate plays a critical role in determining the authority and responsibilities of organizational members and has an impact on job satisfaction and quality of work life [47]. An increase in employees' perception of safety climate positively affects job satisfaction and quality of life by increasing the quality of service provided by the organization [48].

The factors that make up the safety climate are shaped by organizations' safety management systems and employees' individual attitudes [49]. Safety climate has a direct relationship with job performance and quality of work life, and high job performance is associated with the importance given to safety climate [50, 51]. Moreover, supporting safety climate with a positive organizational climate increases job satisfaction and quality of work life [52]. As a result, positive perceptions of safety climate affect employees' job performance by increasing both job satisfaction and quality of work life and

positively affect the overall productivity of organizations [53]. These findings suggest that strengthening safety climate perceptions makes significant contributions to occupational health and safety and employee satisfaction.

MATERIALS AND METHODS

The increasing demand for health services necessitates the development of alternative approaches to improve employee performance. In this context, the importance of the human factor in the prevention of occupational accidents is emphasized, and understanding the effects of health care workers' behaviors in the organization on job satisfaction and quality of life emerges as a basic need. The aim of this study is to contribute to the scientific literature in these areas by examining the effect of safety perception on job satisfaction and quality of life and to prepare the ground for strategies to strengthen the safety climate in health organizations. The strong infrastructure provided by public hospitals and the inclusion of health managers' evaluations in this study provide a holistic perspective of the results obtained. In addition, the research findings are expected to serve as a model for future larger-scale studies.

This study was approved by the Istanbul Aydin University Social and Human Sciences Ethics Committee (Approval No: 2023/11, Date: 13 November 2023). The questionnaire used in this study was reviewed and deemed ethically appropriate by the committee. The study was conducted in accordance with accepted ethical standards.

The main hypothesis is that perceptions of safety climate have a statistically significant effect on these two parameters. In addition, how demographic characteristics such as gender, age, marital status and education affect the relationship between perceptions of safety climate and job satisfaction and quality of life were evaluated within the scope of sub-hypotheses.

HYPOTHESES

H1 The increase in the safety climate perceptions of public health employees has a statistically significant and positive effect on their job satisfaction levels.

H2 An increase in the perceptions of safety climate of health care employees in the public sector has a statistically significant and positive effect on their quality of work life levels.

H3 Safety climate perceptions play a mediating role in the relationship between job satisfaction and quality of work life in public health employees.

H4 There is a significant relationship between safety climate and job satisfaction and demographic characteristics of public health employees.

H4a There is a statistically significant relationship between safety climate and job satisfaction and gender.

H4b There is a statistically significant relationship between safety climate and job satisfaction and marital status.

H4c There is a statistically significant relationship between safety climate and job satisfaction and age.

H4d There is a statistically significant relationship between safety climate and job satisfaction and educational level.

H4e There is a statistically significant relationship between safety climate and job satisfaction and the unit of employment.

H5 There is a significant relationship between safety climate and quality of work life and demographic characteristics of public health employees.

H5a There is a statistically significant relationship between safety climate and quality of work life and gender.

H5b There is a statistically significant relationship between marital status and safety climate and quality of work life.

H5c There is a statistically significant relationship between safety climate and quality of work life and age.

H5d There is a statistically significant relationship between safety climate and quality of work life and educational level.

H5e There is a statistically significant relationship between safety climate and quality of work life and the unit of employment.

These hypotheses are formulated based on the assumption that safety climate is not only a technical component of occupational safety but also a key organizational factor influencing employees' psychosocial well-being and organizational outcomes. Testing these hypotheses allows for examining whether safety climate functions as a central mechanism linking organizational context to job satisfaction and quality of work life in healthcare settings.

The population of the study consists of physicians, nurses and other healthcare professionals working in a public hospital in Bakırköy, Istanbul. The sample size of the study is 500 people. The data were collected electronically through Google Forms and a link to the questionnaire was sent to the hospital employees and they were asked to respond, and the collected data were analyzed with IBM's SPSS Statistics (v27.0) statistical package program.

The questionnaire consisted of two parts. The first part included questions on the demographic and general characteristics of the participants (age, gender, educational status, professional seniority, etc.). The second part comprised three validated instruments: the quality of work life scale originally developed by Van Laar, Edwards and Easton (2007) and adapted into Turkish by Akar and Üstüner (2017); the quality of work life scale developed by Choudhry, Fang and Lingard (2009) and adapted into Turkish by Türen et al. (2014) [7], for which reliability and validity analyses were reported; and the job satisfaction scale developed by Brayfield and Rothe (1951), abbreviated by Judge, Locke, Durham and Kluger (1998), and adapted into Turkish by Başol and Çömlekçi (2020) [15]. The original development and Turkish adaptation details of these instruments are reported in references [7] and [15].

TABLE 1: NORMALITY ANALYSIS RESULTS FOR THE SCALES

<u>Scales</u>	Number of Expressions	Min	Max	Normality Test		p
				Skewness	Kurtosis	
Security Climate	14	14	70	-0,295	-0,476	0,075
Job satisfaction	5	5	25	-0,893	0,158	0,097
Quality of Work Life	23	30	115	0,073	-0,326	0,081

Prior to the main analyses, the distributional properties of the study variables were examined. As shown in Table 1, skewness and kurtosis values for all scales were within acceptable limits, and the One-Sample Kolmogorov–Smirnov test indicated no significant deviation from normality ($p > 0.05$ for all scales). Accordingly, the data were considered to be normally distributed and suitable for subsequent parametric analyses.

TABLE 2: RELIABILITY ANALYSIS RESULTS FOR THE SCALES

Scales	Cronbach's Alpha Values
Security Climate	
Management Perspective and Rules	0,941
Colleague and Safety Trainings	0,737
Job Satisfaction Scale	0,884
Quality of Work-Life Scale	
Job career satisfaction	0,870
General Well-Being	0,856
Controlling the Work	0,847
Working Conditions	0,849
Stress in Business Life	0,827
Family-Work Life Balance	0,812

As shown in Table 2, the reliability analyses indicated that all scales and subdimensions met the recommended criteria for internal consistency. KMO and Bartlett's tests for the safety climate, job satisfaction and quality of work life scales showed that the data groups were suitable for exploratory factor analysis (KMO values were 0.962; 0.820; 0.951, respectively). The factor loadings of all scales were found to be above acceptable limits and confirmed that they were compatible with their original structures. The reliability of the scales was ensured as Cronbach's Alpha values were greater than 0.70 for all three scales and all item-total correlations were above 0.20. The research was conducted in a way to ensure reliable

results, and the difference between the branches was analyzed with the Tukey-HSD Post-HOC test. Statistical significance level was accepted as $p < 0.05$.

FINDINGS

In this section of the study, the results of the analyzes related to the hypotheses in the study are presented.

1. PERCENTAGE DISTRIBUTION OF PARTICIPANTS' SOCIO-DEMOGRAPHIC CHARACTERISTICS

TABLE 3: FINDINGS ON DEMOGRAPHIC CHARACTERISTICS OF PARTICIPANTS

Socio-Demographic Characteristics of Participants		Frekans	Percentage (%)
Gender	Female	309	61,8
	Male	191	38,2
Age	25 years and below	14	2,8
	26-30 years old	148	29,6
	31-35 years old	228	45,6
	36-40 years and above	110	22,0
Marital Status	Married	215	43,0
	Single	245	49,0
	Widowed/Divorced	40	8,0
Education Status	High School	30	6,0
	Associate Degree	131	26,2
	Bachelor's degree	202	40,4
	Master's Degree and Above	137	27,4
Profession	Doctor (Specialist-Assistant)	81	16,2
	Nurse-Midwife	88	17,5
	Idari Personnel	86	17,1
	Security-Counseling	51	10,1
	Patient Care	27	5,4
	Secretaries	30	6,0
	Cleaning-Other Technical Staff	137	27,2
Working Unit	Emergency	77	15,4
	Intensive Care	65	13,0
	Operating Room	49	9,8
	Inpatient Service	40	8,0
	Outpatient Service	99	19,8
	Administrative Unit	99	19,8
	Security Advisor	47	9,4
	Other	24	4,8

Table 3 shows the socio-demographic information of the health workers who participated in the study. It was seen that 61.8% of the participants were female, 38.2% were male, 2.8% were 25 years old or younger, 29.6% were between 26-30 years old, 45.6% were between 31-35 years old and 22.0% were between 36-40 years old. Of the participants, 43.0% were married, 49.0% were single and 8.0% were widowed/divorced. When the educational status of the participants was examined, it was found that 6.0% were high school graduates, 26.2% associate's degree, 40.4% bachelor's degree, and 27.4% master's degree or higher. According to the choice of occupation, 16.2% of the participants were physicians, 17.5% were allied health personnel, 17.1% were administrative personnel, 10.1% were security-counseling, 5.4% were patient care personnel, 27.2% were cleaning-other technical personnel and 6% were secretaries. When the participants were analyzed according to the units they worked in, 15.4% were emergency, 13.0% intensive care, 9.8% operating room, 8% inpatient ward, 19.8% outpatient clinic, 19.8% administrative unit, 9.4% security consultant and 4.8% other.

2. CORRELATION ANALYSIS RESULTS

TABLE 4: THE RELATIONSHIP BETWEEN PARTICIPANTS' PERCEPTIONS OF SAFETY CLIMATE AND JOB SATISFACTION AND QUALITY OF WORK LIFE

	Safety Climate Scale (Total Score)	
	r	p
Job Satisfaction Scale (Total Score)	0,766	0,001*
Quality of Work Life Scale (Total Score)	0,769	0,000*

Pearson Correlation Analysis, r: correlation coefficient, * p<0.001.

As shown in Table 4, Pearson correlation analysis revealed a very strong and positive relationship between participants' perceptions of safety climate and their job satisfaction and quality of work life. It has been observed that there is a very strong and positive relationship between the total score values obtained by the participants in the Safety Climate Scale and the total score values obtained in the Job Satisfaction and Quality of Work Life Scales. In this context, Hypothesis 1 and Hypothesis 2, which were established as the main hypothesis of the study, were accepted.

3. REGRESSION ANALYSIS RESULTS

As shown in Table 5, the regression analyses indicate that job satisfaction is a significant predictor of both safety climate and quality of work life. Based on these results, safety climate was tested as a potential mediator in the relationship between job satisfaction and quality of work life using a hierarchical regression approach.

TABLE 5: RESULTS OF THE REGRESSION ANALYSIS BETWEEN VARIABLES

Independent Variable	Dependent Variable	Unstd . β	Std. Error	R	R ²	Adj. R ²	t	F	p
Job Satisfaction	Security Climate	2,178	0,082	0,76	0,58	0,586	26,58	706,99	0,000*
Job Satisfaction	Quality of Work Life	0,187	0,006	0,79	0,63	0,636	29,56	873,78	0,000*

Pearson Correlation Analysis, r: correlation coefficient, * p<0.001.

As shown in Table 6, the stepwise regression results indicate that safety climate partially mediates the relationship between job satisfaction and quality of work life.

TABLE 6: MEDIATION ANALYSIS RESULTS WITH STEPWISE REGRESSION TEST

Model	Variables	β_1	Stand. Coefficients		t value	p	Multiple Linear Correlation Statistics*	
			β_i	S.E.			Tolerance	VIF
	β_0 (Fixed)							
[1]								
Job satisfaction→ safety climate	Job satisfaction- Security climate	2,178	0,766	0,082	26,58	0,000*	1,000	1,000
	β_0 (Fixed)							
[2]								
Job satisfaction→ work life quality	Job satisfaction- Quality of work life	0,187	0,798	0,006	29,56	0,000*	1,000	1,000
	β_0 (Fixed)							
Including Intermediary Variable Issued Model Job satisfaction → quality of work life	Job satisfaction- Quality of work life	1,190	0,124	0,419	9,579	0,001*	0,363	2,755
	β_0 (Fixed)							
Safety climate	Safety climate - Quality of work life	0,289	0,029	0,435	9,962	0,001*	0,363	2,755

(*): Since VIF<10 or Tolerance>0.2, there is no multicollinearity problem in the model.

The findings indicate that a safety climate plays a mediating role in the relationship between job satisfaction and quality of work life and this mediation is partial. In this context, Hypothesis 3 is accepted.

4. COMPARISON OF PARTICIPANTS' PERCEPTION OF SAFETY CLIMATE, JOB SATISFACTION AND TOTAL SCORES OF QUALITY OF WORK LIFE ACCORDING TO DEMOGRAPHIC CHARACTERISTICS

TABLE 7: COMPARISON OF TOTAL SCALE SCORES BY GENDER (N=500)

Scales	Gender	Min.	Max.	Mean±SD	t	p
Security Climate	Female	21	65	48,15±9,10	-2,468	0,228
	Male	22	65	49,26±11,31		
Job Satisfaction	Female	7	22	14,47±3,38	-1,207	0,116
	Male	6	23	15,26±3,69		
Quality of Work Life	Female	35	100	70,19±13,87	-1,389	0,166
	Male	35	101	72,12±16,79		

As shown in Table 7, there were no statistically significant differences between male and female participants in terms of safety climate, job satisfaction, or quality of work life. As a result of the evaluation of safety climate according to gender, it was found that there was no statistically significant difference in attitudes towards safety climate, job satisfaction and quality of work life scales. Therefore, Hypothesis 4a and Hypothesis 5a are rejected.

TABLE 8: COMPARISON OF TOTAL SCALE SCORES ACCORDING TO MARITAL STATUS (N=500)

Scales	Marital Status	Min.	Max.	Mean±SD	F	p	Post-Hoc
Security Climate	Married	24	65	51,16±9,07	25,810	0,458	
	Single	21	65	45,49±9,84			
	Widowed/Divorced	35	65	53,30±9,83			
Job Satisfaction	Married	7	23	15,63±3,21	44,605	0,014*	3-2
	Single	6	22	13,51±3,35			
	Widowed/Divorced	11	22	17,90±2,68			
Quality of Work Life	Married	35	100	73,75±14,14	21,800	0,025*	2-1
	Single	35	101	66,92±14,46			3-1
	Widowed/Divorced	47	100	80,28±16,24			3-2

As shown in Table 8, marital status was not associated with differences in safety climate perceptions, but significant differences were observed for job satisfaction and quality of work life. When all the results are evaluated; since it is determined that there is no significant difference between the levels of safety climate and marital status, but there is a significant difference between job satisfaction and quality of work life, the part of Hypothesis 4b and Hypothesis 5b that includes attitudes towards the safety climate scale is rejected, while the parts related to job satisfaction and quality of work life are accepted. In this context, Hypothesis 4b and Hypothesis 5b are partially accepted.

TABLE 9: COMPARISON OF TOTAL SCALE SCORES BY GENDER (N=500)

Scales	Age	Min.	Max.	Mean±SD	F	p	Post-Hoc	
Security Climate	25 years and below	30	51	41,21±5,71	30,849	0,007*	3-2	
	26-30 years old	21	63	43,77±8,60				
	31-35 years old	22	67	49,42±10,05				4-1
	36-40 years and above	32	66	54,23±8,52				
Job Satisfaction	25 years and below	8	14	11,29±1,77	40,134	0,001*	4-1	
	26-30 years old	7	23	12,97±3,37				
	31-35 years old	6	21	15,08±3,22				4-2
	36-40 years and above	7	22	16,98±2,88				
Quality of Work Life	25 years and below	49	71	59,21±6,37	28,040	0,004*	4-1	
							4-2	

26-30 years old	35	99	63,91±14,68
31-35 years old	35	101	72,43±13,88
36-40 years and above	47	100	78,74±13,84

As shown in Table 9, age was significantly associated with differences in safety climate perceptions, job satisfaction, and quality of work life. After the analysis, it was determined that there was a statistically significant difference between the attitudes formed in the safety climate scale, job satisfaction and quality of work life scales depending on age and the age parameter. According to these results, Hypothesis 4c and Hypothesis 5c are accepted.

TABLE 10: COMPARISON OF THE TOTAL SCORES OF THE SCALES ACCORDING TO EDUCATION LEVEL (N=500)

Scales	Education Status	Min.	Max.	Mean±SD	F	p	Post-Hoc
Security Climate	High School	21	49	38,90±6,87	78,601	0,000*	3-1 4-1 4-2
	Associate Degree	22	65	43,02±8,93			
	Bachelor's degree	22	65	48,00±9,50			
	Master's Degree and Above	35	65	56,77±5,21			
Job Satisfaction	High School	7	19	11,87±2,56	64,976	0,039*	3-1 4-1 4-2
	Associate Degree	6	21	12,92±2,94			
	Bachelor's degree	6	22	14,53±3,36			
	Master's Degree and Above	7	23	17,52±2,50			
Quality of Work Life	High School	41	66	55,63±7,21	79,121	0,020*	3-1 3-2 3-4 4-1
	Associate Degree	36	98	61,69±12,65			
	Bachelor's degree	35	100	71,31±14,40			
	Master's Degree and Above	51	101	82,53±9,62			

As shown in Table 10, education level was significantly associated with differences in safety climate, job satisfaction, and quality of work life. According to the data obtained, a statistically significant difference was found between the safety climate, job satisfaction, quality of work life scales and educational status, and Hypothesis 4d and Hypothesis 5d were accepted.

TABLE 11: COMPARISON OF THE TOTAL SCORES OF THE SCALES ACCORDING TO THE UNIT OF EMPLOYMENT (N=500)

Scales	Working Unit	Min.	Max.	Mean±SD	F	p	Post-Hoc
Security Climate	Emergency	22	64	46,65±9,93	28,072	0,049*	
	Intensive Care	22	60	45,17±8,49			
	Operating Room	29	58	44,69±7,31			
	Inpatient Service	31	60	47,10±8,43			5-2
	Outpatient Service	23	65	53,63±8,56			5-3
	Administrative Unit	24	65	55,57±8,80			6-1
	Security Advisor	21	49	40,19±7,17			6-2
	Other	29	54	40,58±6,78			6-7
							6-8
	Job Satisfaction	Emergency	7	23			13,84±3,20
Intensive Care		6	20	13,74±2,73			
Operating Room		7	22	14,02±3,38			
Inpatient Service		8	20	13,68±3,11	5-8		
Outpatient Service		6	21	15,94±3,24	6-1		
Administrative Unit		7	22	17,14±3,35	6-2		
Security Advisor		8	18	12,55±2,65	6-3		
Other		8	22	13,63±4,07	6-4		
					6-7		
Quality of Work Life		Emergency	35	98	67,78±14,93	26,212	0,022*
	Intensive Care	38	100	66,63±11,31			
	Operating Room	48	99	68,37±11,80			
	Inpatient Service	48	91	69,95±12,59	5-3		
	Outpatient Service	42	101	75,66±12,97	5-4		
	Administrative Unit	35	100	82,59±14,22	6-1		
	Security Advisor	36	76	56,00±8,34	6-2		
	Other	41	96	61,13±14,68	6-7		
					6-8		

As shown in Table 11, the unit of employment was significantly associated with differences in safety climate, job satisfaction, and quality of work life. When all the results of the analyses were evaluated, a statistically significant difference was found between the unit of work and the scales of safety climate, job satisfaction and quality of work life, and Hypothesis 4e and Hypothesis 5e were accepted. Accordingly, according to the results of the analysis of the data obtained from the study, Hypothesis 4 and Hypothesis 5 were partially accepted due to the significant difference both within and between groups ($p < 0.05$).

DISCUSSION

Safety climate is a multidisciplinary concept that plays a critical role in reducing error rates and ensuring occupational health and safety [54]. Especially in healthcare organizations, the high work performance expected from employees and policies to increase occupational safety increase the importance of this concept [24]. In the literature, it is emphasized that safety climate positively affects job satisfaction and quality of work life in high-risk areas such as the healthcare sector [49]. In this study, which was conducted to determine the effect of safety climate perceptions on the relationship between job satisfaction and quality of work life levels of employees in a public hospital serving in Bakırköy, Istanbul; physicians, nurses and all other hospital employees were included and it was aimed to discuss the results in a general framework. The findings of the study are given and discussed below.

The study's hypotheses were developed based on the theoretical assumption that safety climate represents a contextual organizational resource that shapes employees' occupational well-being and work-related outcomes in healthcare settings. In line with this framework, H1 and H2 were tested using Pearson correlation analyses between safety climate and the two main outcome variables. The findings demonstrated very strong, positive, and statistically significant associations between safety climate and job satisfaction as well as between safety climate and quality of work life, supporting the proposition that stronger safety climate perceptions are aligned with improved employee-related outcomes. To evaluate the proposed mechanism underlying these relationships, H3 was tested using the hierarchical regression steps suggested by Baron and Kenny (1986) and the Sobel test. The mediation results indicated that safety climate functions as a partial mediator in the relationship between job satisfaction and quality of work life, suggesting that safety climate explains a meaningful portion of the pathway linking these constructs while the direct relationship remains significant. This pattern is consistent with organizational climate theories that conceptualize climate as a facilitating mechanism rather than a sole determinant of employee well-being. Finally, H4 (H4a–H4e) and H5 (H5a–H5e) were evaluated through group comparisons across socio-demographic characteristics (e.g., gender, marital status, age, education, and working unit). The results showed that demographic and unit-based differences were not uniform across all variables, indicating that perceptions of safety climate and associated outcomes may vary by subgroup and organizational context. Overall, the hypothesis-driven analytical structure provides coherent empirical support for the study's theoretical model by demonstrating: (i) strong direct relationships (H1–H2), (ii) a theoretically meaningful mediating mechanism (H3), and (iii) context-sensitive variability across employee groups (H4–H5).

It was determined that there was no significant difference between the safety climate, job satisfaction and quality of work life scales used in the study and gender. In this context, it is possible to say that the gender of the participants does not affect their attitudes towards safety climate, job satisfaction and quality of work life. In a study conducted to determine the perception of safety climate, it was observed that men and women received a similar score. Depending on their similar scores, it was determined that gender did not create a significant difference in perceptions of safety climate [55]. In another study examining the work-life relationship, it was found that women and men had the same average score range, and in this context, it was determined that quality of work life levels did not differ according to gender [56]. In another study in which work life and job satisfaction scales were applied together, it was reported that a similar attitude was formed in men and women working in the same environment, so no significant difference was observed between the scores [57]. The results of these studies are similar to the findings obtained in this study.

In this study, it was determined that the attitudes in safety climate, job satisfaction and quality of work life scales differed depending on the age variable. According to the results of the analysis, the difference in the perception of safety climate occurred between the group aged 25 and below and the group aged 36-40 and above. Similarly, job satisfaction and quality of work life differ between these groups. In addition, job satisfaction differed significantly between 26-30 and 31-35 age groups, and quality of work life differed significantly between 26-30 and 36-40 age groups. Ruotsalainen et al. (2020) [58] revealed that the adaptation provided by the personnel in the working environment varies with the age factor. Although the working environment and job description remained constant, it was observed that age increased the adaptation process and created a significant change in attitudes. The findings of the study support that age affects

attitudes towards safety climate, job satisfaction and quality of work life scales. In the literature, it is argued that the age factor does not affect the levels of safety climate and quality of work life [59]. However, some studies suggest that the age factor may be effective in job satisfaction levels and may create a difference on at least one scale.

It was determined that there was no significant difference between marital status and perceptions of security climate evaluated within the scope of the study. It is possible to say that the marital status of the participants does not affect their attitudes towards the security climate. It is seen that there are similar studies in the literature. For example, in a study conducted by Fathallah Mostafa et al. [60], it was determined that the answers given regarding the security climate scale were similar in married and single participants and therefore did not create a significant difference. This result obtained in the study is similar to the finding of the study. It was observed that there was a significant difference between attitudes towards job satisfaction scale and marital status. In a study conducted by Latimer et al. [61], it was found that single people experience more stress in business life than married people, and therefore their job satisfaction scores decreased significantly. In the study, the score of singles on the job satisfaction scale was lower than the other participants. This result obtained in the study is consistent with the findings of the studies in the literature. When the results related to quality of work life were evaluated, it was found that there was a significant difference between the marital status of the participants and their attitudes towards quality of work life. In the study conducted by Abdelrehim et al. [62], it was found that the quality of work life scale scores of married employees were higher than single employees.

It was determined that there was a significant difference between the attitudes towards safety climate, job satisfaction and quality of work life measured in the study and educational status. In this context, it is possible to say that the educational level of the participants affects the attitudes towards safety climate, job satisfaction and quality of work life scale. In a study conducted by Shen et al. [63], it was found that there was a significant difference between safety climate and educational status. In another study conducted by Golzad et al. [64], it was found that educational status has a direct effect on job satisfaction and quality of work life. All these results are similar to the findings of this study.

Within the scope of the research, it was determined that there was a significant difference between the unit of employment and safety climate, job satisfaction and quality of work life. There are different results on this issue in the literature. Shdaifat et al. [65] stated that while there was no significant difference in perceptions of safety climate, job satisfaction levels varied. The fact that security risks differ between units supports that attitudes towards security climate may vary [66]. These differences become more evident especially in units with high risk levels. Rashmi and Kataria [24] reported that job satisfaction and quality of work life perceptions of administrative unit employees were higher than inpatient ward and operating room employees, and this finding was in line with the study.

According to the results of Pearson correlation analysis, very strong, positive and significant relationships were found between safety climate and job satisfaction and quality of work life. Positive improvements in safety perceptions contribute to an increase in job satisfaction and quality of work life. Zabin et al. [67] reported similar positive relationships between safety climate and job satisfaction, and Mitterer and Mitterer [68] reported similar positive relationships between safety perception and quality of work life. These findings suggest that safety perception significantly affects attitudes towards job satisfaction and quality of work life.

The study tested whether safety climate plays a mediating role in the relationship between job satisfaction and quality of work life. As a result of the stepwise regression analysis, it was found that safety climate is a partial mediator, but it does not play a full mediating role since it is a direct relationship. While Smith et al. [69] stated that there is a significant relationship between job satisfaction and quality of work life without a mediating variable, Jin et al. [70] argued that quality of work life plays a mediating role in the effect of safety climate on job satisfaction. Qaralleh et al. [71] reported that safety climate fully mediates the relationship between job satisfaction and quality of work life. The results of these studies overlap with the findings of this study and show that safety climate is an effective mediating factor in the relationship between job satisfaction and quality of work life.

This study empirically tests the direct effects of safety climate perception on job satisfaction and quality of work life, as well as its mediating role in the relationship between these two constructs, thereby supporting and extending existing organizational climate and occupational well-being theories. The findings indicate that safety climate is a multidimensional construct that influences not only safety outcomes but also broader psychosocial and work-related outcomes. In this respect, the study provides empirical support for the applicability of these theoretical frameworks within the healthcare context and contributes to their contextual generalizability.

IMPLICATIONS FOR PRACTICE AND POLICY

The findings of this study indicate that safety climate plays a crucial role not only in occupational safety but also in shaping healthcare workers' job satisfaction and quality of work life. This suggests that healthcare managers should consider safety climate as a core component of organizational performance. Management practices that promote employee participation, open communication, and a non-punitive learning culture may strengthen safety perceptions within healthcare institutions.

From a policy perspective, occupational health and safety regulations should be viewed not merely as compliance requirements but as strategic tools to enhance workforce well-being and service quality. Institutional incentives, training programs, and leadership development initiatives aimed at improving safety climate may contribute to the sustainability and effectiveness of healthcare systems.

FUTURE RESEARCH DIRECTIONS

Future studies are encouraged to employ longitudinal designs to better assess the causal structure of the relationships identified in this study. Comparative research conducted in different regions and across various types of healthcare institutions (such as private, university, and training hospitals) would enhance the generalizability of the findings. Qualitative approaches could also be used to explore healthcare workers' perceptions of safety climate in greater depth. Finally, incorporating additional variables such as leadership style, perceived organizational support, and workload may provide a more comprehensive understanding of the mechanisms linking safety climate, job satisfaction, and quality of work life.

LIMITATIONS

The findings of this study should be interpreted in light of several methodological limitations. First, the cross-sectional design of the study does not allow for causal inferences regarding the relationships among safety climate perception, job satisfaction, and quality of work life. Second, although the sample size is adequate, the data were collected from a single public hospital, which may limit the generalizability of the results to other organizational or cultural contexts. Third, all data were obtained through self-reported questionnaires, which may introduce response biases such as social desirability and common method variance. Finally, although validated measurement instruments were used, unmeasured organizational and individual factors may also influence the observed relationships.

CONCLUSION

This study was planned to reveal whether the safety climate perception of public health employees plays a mediating role in the relationship between job satisfaction and quality of work life. Examining whether safety climate has any effect on the relationship between job satisfaction and quality of work life is very important for determining the deficiencies related to safety in working individuals [72]. In addition to the deficiencies evaluated within the scope of safety climate perception, the fact that possible dangers can be prevented makes the results of the study even more important. Preventing negative situations within the organization is an effective factor in establishing a safer working environment for the personnel [73]. The adequacy of the measures taken by the organization is an important parameter that positively affects the safety climate perception of employees [71]. In the study, this parameter was evaluated in health sector workers and it was found to be effective in the relationship between job satisfaction and quality of work life levels. In this context, it is possible to say that the importance of the measures and practices taken by the organization for areas deemed risky in the working environment has increased.

Employees' perceptions of safety climate, job satisfaction and quality of work life differ according to age and education level. Employees between the ages of 36-40 are more cooperative in fulfilling the task and following the rules, which positively affected the perception of safety and job satisfaction levels. Repeating training courses with up-to-date information will help to increase the perception of safety and improve job satisfaction and quality of life. It is important that occupational health and safety training continue continuously, especially since these factors are low in the group aged 25 and below. Employees with master's degree and higher education level show higher safety perception, job satisfaction and quality of life than others. Employees working in administrative units have higher perceptions of safety climate and their job stress is lower than in other units. This can be explained by the working conditions and wages of administrative units. Working conditions and management policies of the personnel working in other units should be reviewed. It will be important for the institution to reorganize its management policies in favor of health workers in terms of safety climate and job satisfaction. Safety climate requires taking measures specific to the working environment and personnel to improve job performance. These measures increase productivity by increasing harmony among employees. Organizations that want to increase job performance should maximize the safety climate in their work environment. Paying attention to this element is important for job performance.

By establishing a positive relationship between safety climate, job satisfaction and quality of work life, it shows that employees' perception of safety directly affects job performance. A high perception of safety improves employees' judgment and work discipline by increasing the safety of the work environment. This makes employees feel safer and increases their commitment to the organization. In this study, the effect of security measures within organizations on job performance was examined. Increasing these measures had a direct positive impact on employees' job performance and played an important role in ensuring discipline. Organizations that want to provide services with high work efficiency will increase service performance by integrating security measures into the working environment. Especially in hospitals where different disciplines work together, ensuring harmony will positively affect work performance.

By examining the impact of safety climate perception on job satisfaction and quality of work life, this study shows that it is applicable for future research in different organizations. The relationship between safety climate and job satisfaction and quality of work life is strong and positive, and at the same time, safety climate plays a partial mediating role in perceptions of job satisfaction and quality of work life. The study revealed that a safe work environment increases job satisfaction and quality of work life. The results of the study are in line with national and international research. In addition, the lack of studies on the role of safety climate in the relationship between job satisfaction and quality of work life increases the value of this study.

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