



## TOWARD A COMPREHENSIVE ASSESSMENT OF WORK CLIMATE: SCALE DEVELOPMENT AND VALIDATION ACROSS SECTORS

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### ABSTRACT

**Purpose-** The purpose of this study is to develop a "Work Climate Scale" that can determine the key characteristics of the work climate in organizations operating across various sectors and to provide a valid and reliable measurement tool grounded in scientific methodology. Recognizing the need for a standardized instrument that can capture the perceptions of employees regarding managerial practices, communication, and workplace flexibility, the study aims to contribute to the literature on organizational behavior and climate assessment.

**Methodology-** The research was conducted using data collected from three distinct sample groups representing the Service, Health, and Technology/Information sectors. An initial pool of 22 items was generated and structured in a 5-point Likert format. The dataset obtained from the participants was analyzed using statistical software. Both Exploratory Factor Analysis (EFA) and Confirmatory Factor Analysis (CFA) were employed to examine the construct validity of the scale. In addition, internal consistency and reliability coefficients were calculated to assess the psychometric robustness of the instrument.

**Findings-** The analysis revealed that the "Work Climate Scale" possesses a clear two-factor structure consisting of 11 items. These two sub-dimensions were identified as "Management and Communication" and "Work Environment and Flexibility." The results of reliability analyses demonstrated that the scale exhibits high internal consistency and strong construct validity, indicating that it accurately measures the intended dimensions of organizational work climate.

**Conclusion-** In conclusion, the "Work Climate Scale" developed within this study is a psychometrically sound, valid, and reliable tool suitable for assessing work climate across diverse organizational contexts. It is expected that the two-dimensional structure of the scale will make a meaningful contribution to future empirical research by providing a comprehensive understanding of how management practices, communication, and flexibility shape employees' perceptions of their work environment.

**Keywords:** Work climate, management and communication, work environment and flexibility, scale, validation

**JEL Codes:** M10, M19

### 1. INTRODUCTION

In today's dynamic business world, the sustainable success of businesses depends not only on material resources but also on the effective management of human capital. To achieve their strategic goals, businesses should focus on factors that affect employee motivation, satisfaction, productivity, and similar elements. The concepts of organizational climate and work climate, which play a decisive role in the development and increase of these factors within the organization, have recently come to the fore and gained importance (Subramani et al., 2016; Shanker et al., 2017).

Organizational climate refers to the general atmosphere of the work environment, encompassing elements such as a company's culture, values, norms, and leadership style. This atmosphere is perceived directly or indirectly by employees and influences their motivation, as well as their attitudes and behaviors within the organization. Therefore, organizational climate is one of the fundamental components of the working environment and has a decisive impact on the success of the enterprise (Raja et al., 2019; Siregar & Evanita, 2020). While organizational climate represents the general atmosphere and environment within the organization, the work climate, a sub-dimension of organizational climate, includes the characteristics perceived directly or indirectly by individuals as part of this general atmosphere (Viđak, 2023). These perceptions can directly affect employees' motivation, job satisfaction levels, and behaviors. Thus, the work climate is a critical factor influencing individual satisfaction, commitment, and performance within an organization (Bernsen et al., 2009; Jyoti, 2013; Li et al., 2016). A good work climate within the organization increases employees' commitment to their work. As satisfaction increases, employees'

motivation and consequently their performance also rise. This, in turn, affects the overall success of the organization. A comfortable and supportive working environment encourages employees to share their ideas and develop new ones, increasing their commitment to the organization and reducing turnover rates. This ensures that the organization continuously has talented and experienced employees, enhancing its capacity for innovation and creativity. Additionally, a good work climate promotes open communication. Employees share their ideas more freely and collaborate to solve problems (Slemp et al., 2018; Wu & Li, 2019; Megawaty et al., 2022). Consequently, for managers within the organization, the work climate is of great importance as it directly impacts the success of the organization. Creating a positive work climate increases employee satisfaction, enhances productivity, and secures the long-term success of the organization. Therefore, it is crucial for managers to prioritize the work climate to strengthen and sustain their organizations. In this context, understanding and managing the work climate is a critical requirement for the success of modern enterprises (Khazei et al., 2020; Lozano-Lozano et al., 2021).

Numerous theoretical and practical studies have been conducted to create a good work climate in organizations, identify factors influencing the work climate, develop an ideal work climate within organizations, ensure its sustainability, and discuss the work climate variable (Permarupan et al., 2013; Li et al., 2016; Thanh, 2018; Vivilaki et al., 2019; Lozano-Lozano et al., 2021; Li et al., 2023). However, the work climate is a complex phenomenon shaped by the interaction of many different factors. The complexity and multifaceted nature of the work climate make research and applications in this field challenging. To overcome these challenges, it is necessary first to establish a measurable structure for the work climate within organizations.

This article aims to develop a "Work climate Scale" that can be used to understand and improve the work climate, addressing the shortcomings of previously developed scales. With this scale, the goal is to identify various factors affecting the work climate and provide guidance for organizations to improve their work climate. Additionally, this article will examine the antecedents and consequences of the work climate and discuss its importance for organizations. Ultimately, this article aims to contribute to organizations by providing an in-depth understanding of the work climate, enabling them to create a healthier and more productive working environment.

## 2. CONCEPTUAL FRAMEWORK

### 2.1. The Concept of Work Climate as a Subset of Organizational Climate

Organizational climate refers to the general nature of the environment perceived and experienced by employees within an organization. This environment consists of a series of factors, including social norms, values, communication styles, leadership approaches, levels of collaboration, reward systems, and ways of doing work (Neal et al., 2000; Jones et al., 2019; Candra, 2023). It is based on the shared perceptions and experiences of employees and affects their sense of belonging, motivation levels, job satisfaction, and performance. Organizational climate is typically defined based on specific characteristics or dimensions. These dimensions can include open communication, trust, rewards and recognition, supportive leadership, collaboration, innovation, participation, and fairness (He et al., 2015; Santana and Pérez-Rico, 2023; Suryana, 2023). It is usually shaped by policies and practices determined by management and top leadership. Therefore, it reflects the strategies created by management. The organizational climate emerges from the sum of these elements, encompassing the entire organization and shaping the overall behavior of the organization (Delft, 2010; Berberoglu, 2018; Supardi, 2023). The general atmosphere created by the organizational climate determines the work climate and shapes employees' daily work experiences. While the organizational climate encompasses the whole and the general, the work climate is considered a subset of the organizational climate, with a narrower focus, such as ethical climate, innovation climate, and trust climate. The work climate is a set of measurable characteristics defining the working environment within a smaller-scale group, such as a specific work unit, division, or department (Hicklenton et al., 2019; Attia et al., 2020; Altuntas et al., 2021).

This concept expresses the dynamics, interactions, and shared norms of smaller-scale groups. Since the work climate is part of the organizational climate, it often focuses on similar dimensions; however, it particularly emphasizes elements such as intra-unit relationships, leadership styles, collaboration, and communication. For example, the management style of a leader within a work unit can have a direct impact on intra-unit collaboration and performance (Abubakr et al., 2013; Orsini et al., 2020).

### 2.2. Theories Affecting the Concept of Work Climate

The work climate is a crucial factor that determines the quality of the work environment experienced by employees. The concept of the work climate can be associated with various theoretical approaches in disciplines such as organizational behavior theory and organizational psychology. Some frequently used theoretical frameworks to explain the work climate are as follows (Lewin et al., 1939; Lewin, 1951; Forehand and Von Haller, 1964; Halpin, 1966; Likert, 1967; Schneider and Bartlett, 1970):

**Organizational Commitment Theory:** The work climate is closely related to the organizational commitment theory developed by researchers such as Elton Mayo, Kurt Lewin, Douglas McGregor, and Frederick Herzberg. This theory suggests that the

level of commitment employees feel towards the organization is influenced by factors such as the atmosphere, leadership style, job satisfaction, and perceptions of fairness. Therefore, the work climate is a critical element affecting levels of organizational commitment.

**Job Satisfaction Theory:** The job satisfaction theory, developed by scientists such as Abraham Maslow and Frederick Herzberg, posits that the satisfaction employees derive from their jobs is related to various job characteristics, work relationships, and the work environment. In this theory, the work climate is considered an important component of the work environment. A positive work climate can help employees derive more satisfaction from their jobs, leading to higher levels of job satisfaction.

**Organizational Justice Theory:** Developed by researchers like Adams, Lawler, and Folger, the organizational justice theory examines the perceptions of fairness that influence employees' behaviors within the organization. This theory suggests that perceptions of fairness in the workplace are significantly influenced by the work climate. Ensuring organizational justice can contribute to creating a positive work climate.

**Leadership Theories:** The work climate is also related to leadership theories. Specifically, leadership styles such as transformational leadership, developed by Burns, and participative leadership, developed by Kurt Lewin and Bernard M. Bass, can contribute to the creation and maintenance of a positive work climate. The management styles and communication skills of leaders are among the important factors determining the work climate.

These theoretical frameworks provide a significant foundation for understanding and managing the work climate. Additionally, these theoretical approaches can be utilized in the processes of measuring, evaluating, and improving the work climate.

### 2.3. Characteristics of Work Climate and its Importance for Organizations

The work climate encompasses all aspects of the work environment within an organization and is the sum of measurable elements that shape the atmosphere experienced by employees. This atmosphere is influenced by various factors, ranging from the quality of relationships within the organization to communication styles, leadership forms, and the fair distribution of workloads (Ahyat et al., 2023; Neimeijer et al., 2024). As a part of the organizational climate, the work climate results from the perception and interpretation of these elements by employees. Therefore, the work climate is a critical factor affecting employees' attitudes toward their jobs, their motivation, job satisfaction, and consequently, their performance.

A healthy work climate promotes collaboration, supports innovation, reduces workplace stress, and fosters the personal and professional development of employees. Additionally, the work climate emerges as a significant determinant in metrics such as turnover rates, absenteeism, and job dissatisfaction. In summary, the work climate should be regarded as a fundamental element that impacts not only the short-term performance of organizations but also their long-term success (Rosander and Salin, 2023; Zahlquist et al., 2023). Therefore, managing and improving the work climate should become a strategic priority for organizations.

To establish a positive work climate in the workplace, the following can be done (Aydin and Çilesiz, 2022; Kosydar-Bochenek et al., 2023; Arina et al., 2023):

**Open and Effective Communication:** This is the foundation of a healthy working environment. Interactions, idea exchanges, and collaboration among employees and with their managers positively influence the work climate.

**Performance Evaluation and Recognition:** Evaluating employees' performance, rewarding their achievements, and recognizing their successes make them feel valued and increase their motivation.

**Work-Life Balance:** Flexible working conditions that allow employees to balance their work and personal lives enhance their happiness and productivity.

**Employee Commitment:** A healthy work climate fosters employees' commitment and loyalty to the organization, reducing turnover rates and retaining talented employees.

**Promotion of Collaboration and Innovation:** A good work climate encourages collaboration and the sharing of different ideas, fostering innovation and creativity, thereby increasing the organization's competitive advantage.

## 3. METHOD AND FINDINGS

### 3.1. Problem of the Study and Ethics Committee Approval

In the modern world, work life has gone beyond merely providing a means of livelihood and has become a significant factor in shaping individuals' identities and self-perceptions. In this context, the atmosphere and feelings created by the work environment have a critical impact on employees' motivation, productivity, and overall well-being. This atmosphere and these feelings are generally defined by the concept known as the "work climate" (Crespell and Hansen, 2008; Amro et al., 2018; Alberto et al., 2019). The work climate is a measurable phenomenon created by the combination of factors such as the atmosphere experienced by employees, relationships, values, and management style within an organization. The work

climate affects employees' attitudes toward their jobs, job commitment, motivation, satisfaction, and performance. Therefore, for organizations to be successful and achieve sustainable competitive advantage, it is essential to support and develop a positive work climate (Hadian, 2018; Hafee et al., 2019).

When developing a scale to measure the work climate, it is important to take examples from different sectors to ensure the scale's overall validity and reliability. In this study, a "Work climate Scale" is intended to be developed based on scientifically valid and reliable methods to measure the work climate in businesses/institutions operating in sectors where the work climate is considered important, namely the Service, Health, and Technology/Information sectors.

Before starting the research, the necessary compliance/approval certificate was obtained from the Toros University Scientific Research and Publication Ethics Committee to determine the ethical appropriateness of the study (Reference Number: 23.03.2023/42).

### 3.2. Sample and Scale Development

To determine the necessary items for measuring the work climate, a team of 30 people was initially established. This team was composed of competent academicians in organizational behavior and experienced institutional managers in this field. Based on the team's views, the characteristics to measure the work climate variable were identified. During the identification of these characteristics, the individuals' perceptions within the organization regarding the work climate were taken into account. The attributes that could explain this variable were articulated in clear and comprehensible terms. The views based on the experiences of all team members were collected, leading to the creation of a draft form with 22 items.

The draft form of 22 items was then evaluated by four expert academicians in the field. In light of these evaluations, the form was revised, and the "Draft Work climate Scale Form," consisting of the following 14 items, was developed as given in Table 1.

**Table 1: Work Climate Scale - Draft**

1.	My managers provide the necessary support when I need it.
2.	Communication within the work unit is open and effective.
3.	<i>Feedback processes are functional and constructive for employees. *</i>
4.	Teamwork and collaboration are encouraged within the work unit.
5.	<i>There is a perception of reliability and respect within the work unit. *</i>
6.	Justice and equality are valued and implemented within the work unit.
7.	Ethical behaviors are encouraged and evaluated within the work unit.
8.	Measures for occupational safety and health have been taken.
9.	The physical work environment is arranged in a comfortable and safe manner.
10.	There is psychological safety and a supportive environment within the work unit.
11.	Flexible working conditions contribute to work-life balance.
12.	The level of motivation and commitment is high.
13.	Achievements are rewarded and appreciated within the work unit.
14.	<i>Performance evaluations are conducted fairly. *</i>

\* As a result of subsequent analysis, these items were removed from the scale.

### 3.3. Data Collection and Statistical Analysis

The survey form used in the study is divided into three sections. The first section provides an introductory note to inform participants about the study. The second section consists of four questions addressing demographic variables, including age, gender, marital status, and the institution where the participant works. The third section contains the finalized "Work Climate Scale," which includes fourteen statements. Participants responded using a 5-point Likert scale, with options ranging from 1 ("Strongly Disagree") to 5 ("Strongly Agree").

Since the data was collected electronically, several measures were implemented to ensure data security. These measures included the use of strong and unique passwords, firewalls, and up-to-date antivirus software, granting data access only to the authors, and regularly updating software and operating systems.

A data analysis program was used for the analysis of the collected data. Descriptive statistics were first calculated for the demographic characteristics of the participants. Then, validity and reliability analyses of the Work climate Scale were conducted. The analyses concluded with criterion-related validity analyses.

### 3.4. Universe and Sample

To enhance the generalizability of the study's findings, it was planned to conduct the research on three different sample groups. The first sample group consisted of individuals from the Service Sector. This sector includes businesses that operate across a wide range of activities and rely heavily on human resources, with employees often interacting directly with customers. It was thought that this would allow for a broad testing of the work climate scale.

The second sample group was from the Health Sector. Employees in the health sector are typically in constant interaction with patients, patients' families, and colleagues. It was considered that these intense human relationships significantly impact employees' work experiences and could be a crucial factor in determining the work climate. Thus, the health sector was chosen as the second sample group.

The third sample group consists of the Information and Communication Technology (ICT) Sector, which includes businesses operating in areas such as software development, information technology, internet services, and consultancy. Employees in this sector usually work in creative and innovative jobs and require flexible working environments. Additionally, job-related values and attitudes play a significant role among employees in this sector. Therefore, reflecting the experiences of employees in the technology sector in the work climate scale could enhance the comprehensiveness and validity of the scale.

The survey forms were distributed to participants using the convenience sampling method, and data were collected between September 1, 2023, and March 30, 2024. Information regarding the sample groups is as follows:

The study's first sample group consists of a total of 427 employees working in businesses operating in the service sector in Mersin, including 265 males (62.1%) and 162 females (37.9%). Among them, 298 are married (69.7%), while 129 are single (30.3%). The participants' average age in the service sector in Mersin is 34.45 years, with an average work experience of 12.6 years.

The study's second sample group includes a total of 401 personnel working in the healthcare sector in the Mersin region, comprising 264 females (65.6%) and 137 males (33.9%). Among them, 256 are married (63.8%), while 145 are single (36.2%). The participants' average age in the healthcare sector is 35.05 years, with an average work experience of 11.97 years.

The third sample group consists of a total of 453 employees working in the Information and Communication Technology (ICT) Sector in Mersin, including 273 males (60.3%) and 180 females (39.7%). Among them, 252 are married (55.6%), while 201 are single (44.4%). The participants' average age in the Information and Communication Technology (ICT) sector is 32.81 years, with an average work experience of 7.99 years.

### 3.5. Analysis of the Validity of the Measurement Tool

Structural validity analyses were conducted to determine the extent to which the scale serves its purpose and measures the intended attributes (Westen & Rosenthal, 2003). In this context, exploratory and then confirmatory factor analyses were performed (Ercan ve Kan, 2004; Gürbüz & Şahin, 2018).

#### 3.5.1. Exploratory Factor Analysis

To determine whether the data from both the first and second sample groups are suitable for exploratory factor analysis (EFA), the Kaiser-Meyer-Olkin (KMO) test and Bartlett's sphericity test were conducted initially (Kaiser, 1974; Hair et al., 2010). Based on the results, the KMO coefficient for the first sample group was determined to be 0.886, while Bartlett's Test of Sphericity produced a chi-square value of 4856.8 ( $p < .001$ ). In the second sample group, the KMO coefficient was 0.879, with Bartlett's Test of Sphericity resulting in a chi-square value of 5947.1 ( $p < .001$ ). These findings suggest that the dataset is appropriate for conducting Exploratory Factor Analysis (EFA). Additionally, these results indicate that the data set follows a normal distribution (Büyüköztürk, 2016; Çalışkan, 2022).

For the EFA, the extraction method employed was principal component analysis, while the varimax rotation method was utilized. Table 2 presents the factor loadings, eigenvalues, and explained variances derived from the EFA.

The initial exploratory factor analysis (EFA) was conducted with the 14 items of the Work Climate Scale (Table 2). The analysis revealed that the scale converged into two factors with eigenvalues greater than 1, explaining a total variance of 70.57%. A correlation matrix was constructed, and the determinant was found to be 0.001. All items showed factor loadings above 0.32 except for item WCL3 ("Feedback processes are functional and constructive for employees."), which had a factor loading of 0.196. As a general rule, factor loadings above 0.32 are considered acceptable, and factor loadings above 0.5 are desirable (Meydan & Şeşen, 2011; Ocak, 2020; Çalışkan, 2021). Hence, at this stage, item 3 was excluded from the scale. The remaining items exhibited factor loadings exceeding 0.6, signifying robust associations with the factors.

During the subsequent phase of the study, data from the healthcare sector personnel, the second sample group, were analyzed. A new EFA was conducted with the 13 remaining items of the scale. The analysis revealed two factors with eigenvalues greater than 1, explaining a total variance of 81.77%. However, items WCL5 ("There is a perception of reliability

and respect within the work unit.") and WCL13 ("Performance evaluations are conducted fairly.") had factor loadings below the desired threshold of 0.32 (Meyers et al., 2005; Kalayci, 2006), at 0.284 and 0.228, respectively. Hence, items 5 and 13 were eliminated from the scale. After this step, the Work Climate Scale was finalized with eleven items and two dimensions. Moreover, all items exhibited factor loadings above 0.65, indicating a satisfactory level of analysis (Meydan ve Şeşen, 2011; Kartal & Bardakçı, 2018).

During this phase, a naming process was employed to designate the two sub-dimensions derived from the EFA: The first dimension, comprising 6 items, was termed "Management and Communication," whereas the second dimension, consisting of 5 items, was labeled "Work Environment and Flexibility."

**Table 2: Exploratory Factor Analysis Results**

Dimensions					
Sample 1 (Service Sector)			Sample 2 (Health Institutions)		
	1.Factor	2.Factor		1.Factor	2.Factor
Eigen value	6.142	2.32	Eigen value	6.198	3.615
Explained Variance	51.18	19.39	Explained Variance	51.65	30.12
Item Code	Factor Loadings		Item Code	Factor Loadings	
WCL6	.937		WCL4	.951	
WCL4	.936		WCL1	.947	
WCL1	.915		WCL6	.945	
WCL8	.914		WCL2	.918	
WCL7	.906		WCL8	.917	
WCL5	.905		WCL7	.888	
WCL2	.899		WCL5	-.284	
WCL11		.802	WCL10		.900
WCL14		.759	WCL14		.887
WCL10		.692	WCL12		.877
WCL9		.675	WCL9		.863
WCL12		.672	WCL11		.853
WCL13		.663	WCL13		-.228
WCL3		.196			
Total Variance Explained		70.57%	Total Variance Explained		81.77%

At this stage, an analysis of discriminant validity was performed to ensure that the dimensions within the measurement instruments are individually valid and distinct from one another. Discriminant validity refers to the degree to which one dimension in a scale is different from another dimension (Carver & Glass, 1976; Fornell & Larcker, 1981). Table 3 presents the correlation coefficients between the dimensions of the Job Satisfaction Scale. For the dimensions to be significantly distinct, the correlation coefficients should be less than 0.85 (Farrell & Rudd, 2009; Schweizer, 2014). The results of the analysis indicated that the differentiation between the dimensions was at an appropriate level.

At this juncture, a discriminant validity analysis was conducted to ensure the individual validity and distinctiveness of the dimensions within the measurement instruments. Discriminant validity refers to the extent to which one dimension in a scale differs from another dimension (Carver & Glass, 1976; Ab Hamid et al., 2017). Table 3 displays the correlation coefficients between the dimensions of the Work Climate Scale. To be significantly distinct, the correlation coefficients should be below 0.85 (Fornell & Larcker, 1981; Schweizer, 2014; Cheung & Wang, 2017; Gürbüz & Şahin, 2018). The analysis results revealed that the differentiation between the dimensions was at an acceptable level.

**Table 3: Work Climate Scale Discriminant Validity Analysis**

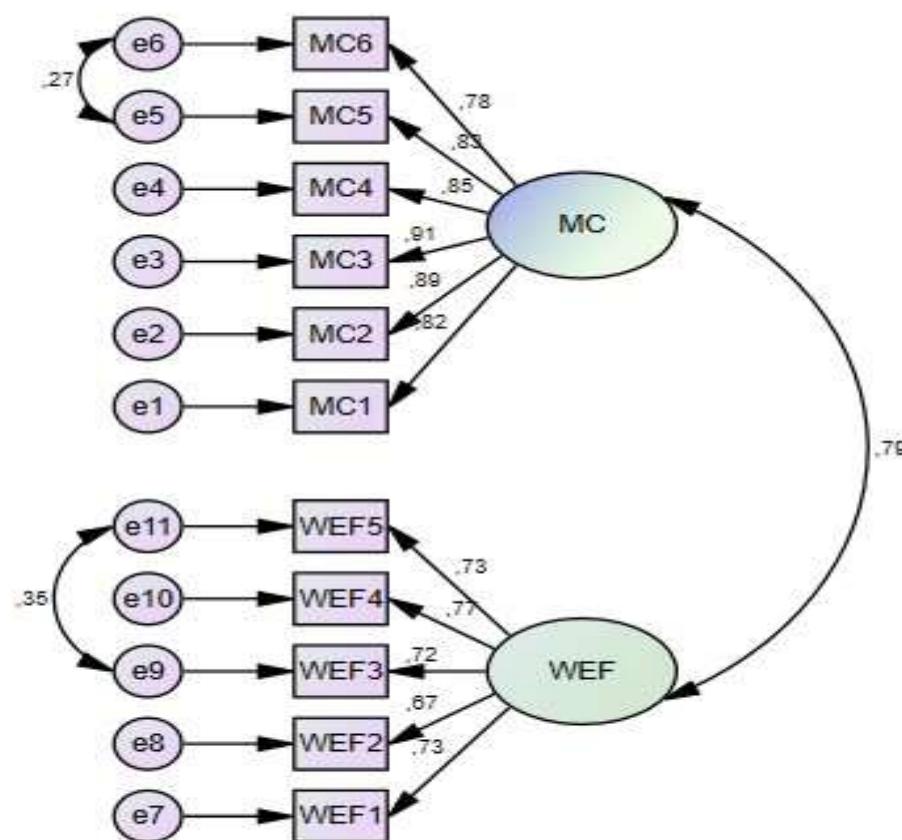
Work Climate Scale	Sample 1 (Service Sector)		Sample 2 (Health Institutions)	
	Management and Communication	Work Environment and Flexibility	Management and Communication	Work Environment and Flexibility
Management and Communication	1.00	.722**		
Work Environment and Flexibility			.654**	1.00

\*\*p<0.001.

### 3.5.2. Confirmatory Factor Analysis

The analysis performed aimed to retest and affirm the structure of a measurement instrument grounded in a robust theoretical framework, which has been previously developed, repeatedly used, and widely accepted in the literature, using a dataset obtained from a different sample is called Confirmatory Factor Analysis (CFA) (Byrne, 1994; Schermelleh-Engel et al., 2003; Hooper et al., 2008; Kline, 2011). CFA was applied to test the structural validity of the "Work Climate Scale" developed with CFA in two distinct sample groups comprising personnel working in the service sector and those working in the health sector in Mersin, as well as in a different third sample group such as the Information and Communication Technology (ICT) Sector. The obtained results are presented in Table 4. For model fit in CFA, AGFI, GFI, CFI, and NFI values are anticipated to be 0.90 or above, and the RMSEA value is anticipated to be less than 0.10 (Hooper et al., 2008; Çalışkan, 2022). It was found that the goodness-of-fit values (AGFI, GFI, CFI, and NFI) in CFA indicated "good fit," and the RMSEA value indicated "acceptable fit" (Hu & Bentler, 1999; Schumacker & Lomax, 2004; Hooper et al., 2008; Kline et al., 2015; Ocak, 2020). This finding demonstrates that the structure proposed based on CFA results was confirmed by DFA for two different samples. Consequently, the developed Work Climate Scale has been statistically validated and found to be significant. The model derived from CFA is depicted in Figure 1 and detailed in Table 4.

Figure 1: CFA Structure of the Scale



CMIN/df:3,117; AGFI: .924; GFI: .953; NFI: .965; CFI: .976; IFI: .976; TLI: .968; RMSEA: .068

**Table 4: Information and Communication Technology (ICT) Sector CFA Results**

Work Climate Scale	X <sup>2</sup>	df	X <sup>2</sup> /df	RMSEA	NFI	GFI	AGFI	CFI
Acceptable Fit			≤5df	≤0.10	≥0.90	≥0.90	≥0.85	≥0.95
Good Fit			≤3df	≤0.05	≥0.95	≥0.95	≥0.90	≥0.97
Sample 3 Second Level CFA	127.8	41	3.117	.068	.97	.95	.92	.98

\* n= 503, p<0.001.

### 3.5.3. Criterion Validity

Criterion-related validity is a validity technique used to examine the relationship of a scale with another external criterion (Büyüköztürk, 2016; Çalışkan, 2022). In this context, data collected from a third sample were utilized, where job satisfaction scale was used as a criterion variable, and its correlation with work climate was examined. Job satisfaction was chosen as the criterion variable for criterion-related validity because the relationship between job satisfaction and work climate has been frequently discussed in previous research, and a positive work climate is generally associated with high job satisfaction. Therefore, job satisfaction measurements were considered as a suitable external criterion to evaluate the validity of the work climate scale (Wantoro et al., 2020; Noer et al., 2021; Ahyat et al., 2023; Natarini et al., 2023).

A scale developed by Çalışkan and Korooglu (2022) was used to measure employees' job satisfaction. The scale encompasses a total of 13 items, including items such as "I am content with the attitude and conduct of my managers towards me." Çalışkan and Korooglu (2022) reported the Cronbach's Alpha value of the scale as .895.

The relations among the Work Climate Scale (WCL) and the Job Satisfaction Scale (JS) were examined, with the findings outlined in Table 5.

**Table 5: Criterion Validity**

Sample 3 n=453			
Variables	Sample Mean	Sample standard deviation	JS
WCL Scale	3.91	1.17	.69**
JS Scale	4.11	1.32	1

\*\* p< .01

As per the analysis, positive and statistically significant relationships were identified between work climate and job satisfaction.

### 3.6. Reliability Analysis

In the final section of the research, evidence regarding the reliability of the "Work Climate Scale" has been gathered. For this purpose, internal consistency reliability, a method determining the consistency among all items within a scale, was employed (Ab Hamid et al., 2017; Hair et al., 2019; Pekkan & Çalışkan, 2020). To measure the internal consistency of the Work Climate Scale, data collected from three sample groups were subjected to Cronbach's alpha test, and the results are presented in Table 6. According to the obtained results, it can be observed that evidence regarding the internal consistency of the scale has been provided, indicating high reliability of the scale.

**Table 6: Work Climate Scale Internal Consistency Results**

Variables	Number of Items	Cronbach's $\alpha$		
		Service	Health	ICT
Work Climate	11	.883	.914	.934
Management and Communication	6	.821	.901	.940
Work Environment and Flexibility	5	.916	.936	.854

## 4. DISCUSSION AND CONCLUSION

A positive work climate offers numerous benefits for both employees and organizations: For employees, a positive work climate translates into higher motivation, increased productivity, reduced stress, and greater job satisfaction. Employees feel more engaged in a work environment where they feel valued and supported, fostering loyalty and commitment to the organization. A positive work climate enhances employee productivity and performance; employees work more motivated and focused. Furthermore, it preserves employees' physical and psychological well-being by reducing job stress and burnout,

providing a healthier and safer work environment. For organizations, a positive work climate leads to lower turnover rates, higher employee loyalty, improved collaboration, and increased productivity. These benefits contribute to both short-term and long-term organizational success, positively impacting not only employee well-being but also overall organizational performance and competitiveness. Consequently, establishing a positive work climate within an organization has become a significant concern.

In this study, both qualitative and quantitative research methods were employed to identify, explore, conceptualize, measure, and determine individuals' perceptions of the work climate within the organization. Characteristics of the work climate among personnel in different sectors—Service, Health, and Information and Communication Technologies (ICT)—were identified, and a 14-item "Work Climate Scale Draft Form" was developed to measure these identified characteristics. Surveys containing the draft form were distributed to personnel in the mentioned sectors, and the collected data were subsequently analyzed.

At the outset, Exploratory Factor Analysis (EFA) was carried out to gather evidence concerning the structural validity of the scale. The initial sample group comprised individuals from the service sector, whereas the second sample group comprised individuals from the health sector. EFA outcomes for both sample groups unveiled a two-factor structure with eigenvalues surpassing 1. Consequently, a scale comprising two dimensions and 11 items was derived. Subsequently, Confirmatory Factor Analysis (CFA) was performed to confirm the two-factor structure obtained through EFA in a different sector. The results of CFA validated the two-factor structure of the scale, designated as "Management and Communication" and "Work Environment and Flexibility."

Following the structural validation, criterion-related validity was examined by investigating the correlation between work climate and job satisfaction, considering job satisfaction as a criterion variable. The rationale for selecting job satisfaction was the perceived influence of work climate on individuals' job satisfaction perceptions within the organization. Positive and statistically significant associations between work climate and job satisfaction were identified through correlation analyses conducted with data from the second and third sample groups, offering support for criterion validity.

The results obtained in this study demonstrate that the Work Climate Scale is a valid measurement tool. To obtain evidence regarding the reliability of the scale, Cronbach's alpha test was administered to three different sample groups. Internal consistency reliability was examined for both the overall Work Climate variable and its two subscales, "Management and Communication" and "Work Environment and Flexibility," confirming the high reliability of the scale.

Due to the significantly high internal consistency values observed for the subscales "Management and Communication" and "Work Environment and Flexibility," the Work Climate Scale can be utilized either as a whole or by separately considering these two dimensions. The developed scale, comprising fewer items compared to other scales in the literature, offers ease of use. Organizations can benefit from this scale to enhance their work climate and capitalize on the resulting improvements in employee well-being and overall organizational performance. Moreover, the scale's applicability extends beyond the service, health, and ICT sectors to encompass all sectors in both public and private domains.

The absence of a scale tested for validity and reliability across such diverse sample groups in the literature underscores the significance of the Work Climate Scale in filling a crucial gap for businesses and organizations across all sectors. Additionally, both domestic and numerous foreign sources were consulted during scale development, enhancing its universal representativeness and applicability across different countries and cultures.

Moreover, through expert researchers conducting one-on-one interviews and a subset of employees from the health and industrial sectors, it was confirmed that the Work Climate Scale is a comprehensible and applicable tool, enabling participants to articulate their perceptions of the work climate phenomenon clearly.

With its two-dimensional structure encompassing "Management and Communication" and "Work Environment and Flexibility," the Work Climate Scale is expected to address a significant need in determining and measuring the work climate variable in future research endeavors. Further investigations applying the scale to diverse samples and exploring its interaction with various variables in subsequent studies will enhance the robustness of the findings concerning the scale's reliability and validity obtained in this study.

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## Appendix: WORK CLIMATE SCALE

	WORK CLIMATE SCALE ITEMS	STRONGLY DISAGREE	DISAGREE	NEITHER AGREE NOR DISAGREE	AGREE	STRONGLY AGREE
<b>First Dimension: Management and Communication</b>						
1	My managers provide the necessary support when I need it.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2	Communication within the work unit is open and effective.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3	Teamwork and collaboration are encouraged within the work unit.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4	Justice and equality are valued and implemented within the work unit.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5	Ethical behaviors are encouraged and evaluated within the work unit.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6	Measures for occupational safety and health have been taken.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
<b>Second Dimension: Work Environment and Flexibility</b>						
1	The physical work environment is arranged in a comfortable and safe manner.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2	There is psychological safety and a supportive environment within the work unit.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3	Flexible working conditions contribute to work-life balance.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4	The level of motivation and commitment is high.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5	Achievements are rewarded and appreciated within the work unit.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>