



Exploring innovation in healthcare: the mediating role of safety perception between organizational climate and innovative work behavior

Elif Işık Demirarslan^a, Osman Yalap^{b,*}, Mukaddes Dağ^c

^a Department of Occupational Health and Safety at the Faculty of Health Sciences Artvin Coruh University, Turkey

^b Health Sciences Faculty, Department of Emergency and Disaster Management, Artvin Coruh University, Turkey

^c Artvin State Hospital, Artvin, Turkey

ARTICLE INFO

Keywords:

Organizational climate
Innovative work behavior
Safety Perception
Mediating Effect

ABSTRACT

A more suitable organizational climate needs to be created for healthcare workers to be able to exhibit innovative work behaviors. Employees who meet their professional and work requirements in a safe workplace in peace will be able to exhibit more innovative behaviors. In this context, this study investigates the impact of healthcare personnel's perceptions of organizational climate in public hospitals on their innovative work behaviors. Furthermore, it seeks to determine whether perceptions of safety indirectly influence this relationship. The study used convenience sampling and a survey method to collect data from 202 healthcare workers employed in Artvin Province, Türkiye. The results of the analysis revealed, that perceptions of organizational climate positively and significantly influence innovative work behaviors ($p = 0.529$, 95 % CI [0.425, 0.685]). A notable finding of the study is that perceptions of organizational climate exert a significant and substantial indirect effect on innovative work behaviors ($p = 0.184$, 95 % CI [0.055, 0.2966]) through safety perceptions.

1. Introduction

The healthcare sector has a distinct structure that prioritizes human and public health, setting it apart from other service industries. Due to the complex relationships among stakeholders and various external influences, the budget allocated to healthcare services is relatively high. The primary objectives of the healthcare sector include protecting human health, treating diseases, and improving overall public well-being (Akar & Arıkan, 2023).

Healthcare services encompass a diverse range of institutions, including hospitals, clinics, pharmacies, laboratories, health insurance companies, and other healthcare organizations. Professionals in this field—such as doctors, nurses, pharmacists, therapists, and technicians—engage in various areas, including patient care, healthcare service delivery, disease prevention, and health management (Cohen et al., 2014; Kumar et al., 2019; Sungur, 2021; Tuncar & Canbaz, 2022). The job performance of healthcare workers depends not only on their individual competencies but also on the characteristics of the organizational environment in which they operate.

Organizational climate is a fundamental factor that shapes employees' perceptions of their workplace and encompasses various components such as workplace relationships, leadership style,

communication methods, reward systems, and safety perceptions (Schneider et al., 2013; Brown & Leigh, 1996). Studies have shown that a positive organizational climate directly influences employees' motivation, job satisfaction, and performance (Patterson et al., 2005; Kava et al., 2019). The significance of organizational climate is particularly pronounced in the healthcare sector, where employees' perceptions of their work environment are closely linked to patient safety, teamwork, and innovative work behaviors (Zarei et al., 2016; Pousette et al., 2017). A study by Berberoğlu (2018) found that a positive perception of organizational climate enhances healthcare workers' commitment to their profession while reducing burnout levels.

The impact of organizational climate on employees' innovative work behaviors has gained increasing attention in academic literature in recent years. Innovative work behavior refers to the process by which employees generate new ideas, implement them, and refine work processes to improve service quality and efficiency (Janssen, 2000; De Jong & Den Hartog, 2017). However, fostering innovative work behavior requires an organizational environment that supports and encourages employees (Shanker et al., 2017). Research has shown that workplaces that promote open communication, provide managerial support, and ensure a fair reward system exhibit higher levels of innovative work behavior among employees (Turgut & Beğenirbaş, 2013).

* Corresponding author.

E-mail addresses: elif_syo@artvin.edu.tr (E.I. Demirarslan), osman.yalap@artvin.edu.tr (O. Yalap), mukaddesdag08@gmail.com (M. Dağ).

<https://doi.org/10.1016/j.ssci.2025.106943>

Received 3 January 2025; Received in revised form 2 June 2025; Accepted 2 July 2025

Available online 9 July 2025

0925-7535/© 2025 Elsevier Ltd. All rights are reserved, including those for text and data mining, AI training, and similar technologies.

Organizational climate comprises various dimensions, each influencing employees' workplace attitudes in different ways. James and Jones (1974) argued that organizational climate should be examined through specific dimensions, highlighting the importance of bonding, justice, innovation, and safety. Among these, employees' perceptions of safety are particularly crucial in the healthcare sector.

The relationship between safety perception and organizational climate is a critical issue in the healthcare sector. A study conducted by Smith-Crowe et al. (2003) found that employees' perceptions of workplace safety significantly influence their innovative work behaviors. Similarly, research by Gyekye and Salminen (2010) demonstrated that safe working conditions support employees' creative thinking processes, enabling them to develop and express more innovative ideas. Xu et al. (2022) further emphasized that safety perception is one of the key factors enhancing innovative work behaviors.

The effects of organizational climate on employees' attitudes and behaviors have been examined through various theoretical perspectives. In particular, models explaining the relationship between safety perception and innovative work behaviors suggest that psychological safety and a supportive work environment facilitate innovation (Edmondson, 1999; Carmeli et al., 2010). In the healthcare sector, employees' ability to feel secure in their work environment directly influences their willingness to take risks, generate new ideas, and implement innovative practices (Baer & Frese, 2003).

This study provides a framework for understanding the impact of organizational climate on employees' innovative work behaviors and the role of safety perception in this process.

1.1. Conceptual framework

Organizational climate refers to the overall atmosphere within a workplace and how employees perceive and experience this environment (Berberoğlu, 2018). It encompasses various elements, including workplace relationships, communication styles, leadership approaches, collaboration, fairness, kindness, and openness. These components significantly shape employees' perceptions, attitudes, and behaviors toward their workplace (Brown & Leigh, 1996). Research highlights that organizational climate plays a crucial role in enhancing employee motivation, job satisfaction, commitment, and performance (Doğantekin & Sari, 2016; Erol & Kunt, 2018; Örgen et al., 2020; Sein Myint et al., 2021). Furthermore, it has been emphasized that organizational climate influences collaboration, professional development, and overall performance (Suliman & Harethi, 2013; Tutar & Altınöz, 2010; Örgen et al., 2020). A well-established organizational climate fosters a positive work atmosphere, which in turn enhances employee productivity (Guo, 2018; Sun et al., 2020).

Innovative work behavior encompasses generating new ideas, developing original thoughts, advocating for these ideas, implementing them, and maintaining motivation throughout these processes (Sari et al., 2021). This concept includes all stages, from idea generation to its promotion and execution (Shanker et al., 2017). In the literature, it is often defined as employees' active efforts in processes such as developing products or services, implementing ideas, and introducing new problem-solving techniques within an organization to create added value (De Jong & Den Hartog, 2017; Janssen, 2000).

Turgut and Beğenirbaş (2013) described innovative work behavior as the creation and application of ideas that benefit the organization and the identification and resolution of problems. Similarly, Dyer and colleagues (2011) identified innovative behavior as a process involving observation, questioning, experimentation, and integration. Professional experience has been noted to enhance innovative work behavior, which spans stages such as idea generation, implementation, teamwork, problem-solving, and production focus (Tuna & Işık Demirarslan, 2023; Ceylan, 2013).

Innovative work behavior is vital for the sustainability and growth of organizations. Innovative employees not only contribute to their

workplaces but also foster an environment where colleagues feel safer, freer, and more successful (Sezgin & Uçar, 2021).

Occupational Health and Safety (OHS) is a critical corporate process focused on safeguarding employees' physical, mental, and social well-being, ensuring a safe working environment, and preventing work-related injuries and illnesses (Indrayani & Kusumojanto, 2020). Research highlights that OHS plays a vital role in promoting safe and healthy workplace conditions (Kubasinski & Slawinska, 2021). To achieve this, institutions must integrate health promotion activities into OHS practices through managerial involvement, employee training, and systematic program evaluation (Biswas et al., 2021). Effective implementation of occupational health and safety regulations is essential for improving safety performance (Umar et al., 2018). Moreover, occupational health and safety training equips employees with the necessary skills and knowledge for adhering to safe work practices (Sarican et al., 2023). Sectoral studies underscore the importance of laws, standards, and programs in fostering safer work environments (Dendup & Occupational, 2018). The adoption of comprehensive OHS systems has been shown to enhance employee performance, contributing to improved organizational outcomes. This highlights the necessity of integrating occupational health and safety into broader corporate strategies (Abu Nawwas et al., 2017). Additionally, Corporate Social Responsibility (CSR) initiatives have been recognized for their role in supporting and strengthening health and safety practices within organizations (Kubasinski & Slawinska, 2021). In conclusion, OHS not only protects employee well-being but also prevents workplace accidents, thereby contributing to organizational sustainability and success.

From a theoretical perspective, this study is grounded in Social Exchange Theory (SET) (Blau, 1964), which suggests that relationships within organizations are based on reciprocal exchanges between employees and their work environments. When employees perceive a safe and supportive organizational climate, they are more likely to reciprocate through positive behaviors, such as engaging in innovative work activities (Cropanzano & Mitchell, 2005). In this context, safety perception functions as a psychological resource, signaling to employees that the organization values their well-being, thus fostering mutual trust and intrinsic motivation for innovation (Rhoades & Eisenberger, 2002). This theoretical lens provides a robust foundation for understanding how organizational climate indirectly affects innovative behavior through safety perception.

1.2. Relationships between variables and the structural model of the research

In organizations that provide health services directly or indirectly, various organizational conditions and work processes significantly influence employee performance (Aiken et al., 2002; Schnelle et al., 2004). Delivering quality healthcare services requires the establishment of a conducive working atmosphere and the implementation of policies and practices that ensure employees operate in safe and supportive environments. Studies indicate that many healthcare organizations have developed an organizational climate that motivates employees and enhances their performance (Scott et al., 2003). Therefore, creating an organizational climate that fosters safety and motivation is critical for the successful execution of corporate activities in healthcare organizations.

Research also highlights that transparent communication channels, fair decision-making processes, and inclusive practices, such as employee consultation during decision-making, positively impact employees' innovative work behaviors (Yu et al., 2022; Ahmed et al., 2019; Önhon, 2019; Shanker et al., 2017; Rabia et al., 2010). For instance, Rabia and colleagues (2010) in a study involving 320 managers in the fast food sector, demonstrated that a positive organizational climate significantly enhances innovative work behaviors. Similarly, Yu and colleagues (2013) found that organizational climate is positively associated with organizational and employee innovation in the finance

sector across Asian countries. In a study conducted in Turkey, Önhon (2019) observed that an innovative organizational climate in the information and communication technologies sector positively affects employees' innovative behaviors. Based on these findings, the following hypothesis has been developed:

H₁: There is a positive relationship between organizational climate and innovative work behaviors.

Since the 1980 s, research in organizational behavior and employee psychology has emphasized the identification of organizational environments that ensure occupational health and safety (Zohar, 1980). The values, policies, and strategies organizations associate with occupational health and safety, along with employees' perceptions, attitudes, and behaviors toward these elements, significantly influence the development of a safe organizational climate (Zohar, 2000; Cooper & Phillips, 2004; Gyekye & Salminen, 2010).

Studies conducted across various sectors, including health, tourism, education, and mining, have demonstrated a positive relationship between perceptions of occupational health and safety and the organizational climate (DeJoy et al., 2004; Dodsworth et al., 2007; Stackhouse & Turner, 2019). Safe work environments not only enhance employee motivation but also positively contribute to organizational performance. These motivational factors foster adherence to organizational rules, norms, and policies, facilitating the establishment of a supportive organizational climate.

Smith-Crowe and colleagues' (2003) study on employees in the nuclear waste industry in the United States highlights the critical role of safety perceptions and organizational climate in sectors with stringent occupational safety requirements. Using data collected from 133 employees, the study revealed a significant positive relationship between perceptions of organizational climate and occupational safety. These findings underscore the importance of cultivating a safety-focused organizational climate, which is essential for both employee well-being and the effectiveness of business processes.

Organizational climate has been shown to significantly influence employees' perceptions of workplace safety. A supportive and fair organizational climate can foster psychological security, reduce perceived threats, and enhance trust in leadership (Zohar, 1980; Cooper & Phillips, 2004). In the healthcare sector, this relationship is particularly salient due to the high-risk nature of the work environment. Employees who perceive their organization as supportive and well-structured tend to report stronger perceptions of occupational safety (Gyekye & Salminen, 2010). Moreover, numerous theoretical frameworks support the idea that a positive organizational climate enhances employees' perception of safety. According to Social Exchange Theory (Blau, 1964, p. 91), employees reciprocate perceived organizational fairness and support with trust-based attitudes, which include heightened safety awareness. Within this context, Perceived Organizational Support (POS) plays a critical role, as demonstrated by Eisenberger et al. (1986, p. 501), who found that employees who feel valued by their organization tend to perceive the work environment as more predictable and secure, leading to increased safety perception.

Additionally, Edmondson's (1999, p. 354) model of psychological safety further supports this relationship by asserting that a supportive and respectful climate reduces interpersonal fear and enhances openness, which correlates with a higher perception of both emotional and physical safety. In fact, Kahn (1990, p. 708) emphasized that psychological meaningfulness and safety are central to engagement in proactive behaviors, including those related to safety practices.

Empirical evidence corroborates this conceptual link. For example, Zohar (2000, p. 590) demonstrated that employees working under supervisors who foster a just and innovative climate report significantly stronger safety perceptions and lower accident rates. Similarly, Hofmann and Morgeson (1999, p. 289) empirically showed that safety-related behavior is mediated by employees' perception of organizational support and leader-member exchange, reflecting climate-driven

trust. Therefore, it is theoretically and empirically justified to posit that a supportive organizational climate enhances employees' safety perception.

Based on this theoretical foundation, we propose the following hypothesis:

H₂: There is a positive relationship between organizational climate and safety perception.

Organizational climate is a significant precursor to innovative work behaviors, as employees require a supportive work environment to engage in such behaviors. Research highlights that occupational safety is another critical factor that facilitates employees' participation in innovative activities. For instance, Shanker et al. (2017) identified a positive relationship between employees' perceptions safety, innovative work behaviors, as well as organizational performance. Similarly, Xu et al. (2022) demonstrated that organizational climate positively influences innovative work behaviors, with employees' perceptions of psychological and motivational safety mediating this relationship. Building on these findings, the following hypothesis has been developed, and the structural model of the research has been designed:

H₃: Safety perception plays a mediating role in the effect of organizational climate on innovative work behaviors.

Accordingly, the conceptual model and the hypothesized relationships among the variables are presented in Fig. 1.

2. Method

To test the research hypotheses and structural model, a quantitative research method was employed with a large sample size. A total of 161 valid responses were obtained and included in the analysis. A total of 161 participants were included in the final analysis. Of these, 92 participants completed the survey in person via printed paper forms, while 69 participants responded through an online survey created with Google Forms. The online questionnaire was distributed via internal organizational channels such as WhatsApp and email lists. To ensure data integrity, the online form was restricted to one response per IP/device, and two attention-check questions were embedded in the scale (e.g., "Please select 'Agree' for this item"). Responses that failed both attention checks were excluded from the final dataset. Although the sample may not be considered "large" in absolute terms, it satisfies the minimum criteria for conducting mediation analysis and confirmatory factor analysis (Hair et al., 2019). According to Cohen (1992), a sample size of over 150 is sufficient to detect medium-sized effects ($f^2 = 0.15$) at 95 % confidence and 80 % power in multiple regression-based models. Therefore, the current sample is deemed statistically adequate for the purposes of this study. The collected data underwent various analyses, including outlier detection, normality assessment, descriptive statistics, correlation analysis, confirmatory factor analysis, and internal consistency analysis, to ensure the structural validity and reliability of the scales.

The hypotheses and structural model were evaluated using the simple mediation analysis method proposed by Hayes (2013, 2018). The study adhered to ethical guidelines throughout the research process. Ethical approval was obtained from the Scientific Research and Publication Ethics Committee of Artvin Çoruh University (approval date: 05.04.2022, approval number: 45402). Additionally, written permissions were secured from the Artvin Provincial Health Directorate and Artvin State Hospital. Prior to data collection, all participants were informed about the purpose of the study, their right to withdraw at any time, and their confidentiality was guaranteed. Informed verbal consent was obtained in full accordance with the procedures approved by the university's Ethics Committee (Approval No: 45402).

The data were collected using self-administered questionnaires. A majority of the participants completed the surveys face-to-face in paper format, while a smaller portion participated online via secure links

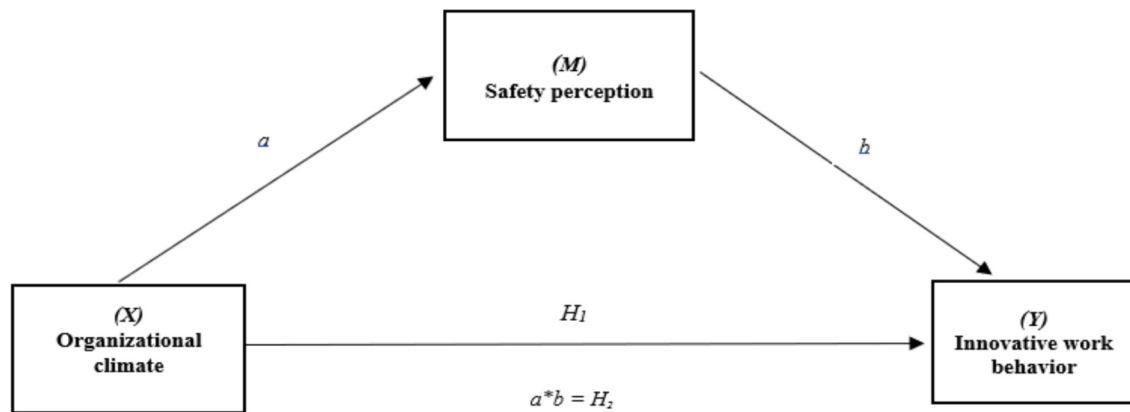


Fig. 1. Theoretical model of research.

shared through institutional social media channels, in cases where in-person access was not feasible. All participants were native Turkish speakers, and no language-related concerns were present throughout the data collection process.

2.1. Population and sample

The study population of the research consists of employees of a public hospital operating in Artvin province. It was determined that there are 202 employees in the hospital and this number represents the target of population. Due to time and cost constraints, the convenience sampling method was employed, and data were collected through both face-to-face interactions and online platforms, including social media. For participants who could not be reached in person, the same standardized questionnaire was distributed online through a secure survey link shared via institutional WhatsApp and internal communication groups. The online survey included identical instructions and structure as the face-to-face version, ensuring consistency and standardization across data collection modes. Initially, 185 out of 202 employees voluntarily completed the survey. However, during the data screening process, 24 responses were excluded due to issues such as missing data, extreme values identified through z-scores, and deviations from normality. Consequently, 161 valid responses were retained for analysis. This final sample size was deemed sufficient to meet statistical power requirements for the proposed analyses. This sample size was determined to meet the minimum threshold required to represent the population within a 95 % confidence interval (Gürbüz & Şahin, 2018).

The average age of the participants was 32.5 years, with 43 % (n = 69) falling within the 18–27 age range. Women constituted 74.5 % (n = 120) of the sample, while 56.5 % (n = 91) were single. In terms of education level, 14.3 % (n = 23) were high school graduates, and 43.5 % (n = 70) held a bachelor's degree. Regarding professional experience in the healthcare sector, 31.7 % (n = 51) of participants had 1–5 years of experience, while 18 % (n = 29) had 6–10 years of experience.

2.2. Data collection tools

To test the research hypotheses, a comprehensive literature review was conducted to identify appropriate measurement tools for the variables. Based on this review, a questionnaire was designed to include both open-ended and closed-ended questions aimed at capturing the selected scales and the demographic characteristics of the participants (e.g., gender, age, marital status).

All scales included in the questionnaire were structured using a 5-point Likert-type rating scale, adhering to their original formats. Participants rated their perceptions of the variables on a scale ranging from “1-Strongly disagree” to “5-Strongly agree.” Structural validity and reliability analyses were performed on the scales by the researchers to

ensure their suitability for the study.

2.2.1. Organizational climate scale (OCS)

The “Organizational Climate Scale,” developed by Bock et al. (2005), was used to measure participants' perceptions of the organizational climate in their workplace. The scale consists of 10 items distributed across three dimensions: bonding (4 items), innovation (3 items), and justice (3 items). In its original form, the Cronbach's Alpha reliability coefficients were reported as 0.89 for bonding, 0.87 for innovation, and 0.87 for justice, indicating high internal consistency.

Validity and reliability studies conducted in Turkey (Solmaz, 2016; Korkmaz & Bağcı, 2020) have confirmed that the scale is culturally appropriate and serves as a reliable measurement tool in Turkish settings. As a result of the reliability analysis, the Cronbach alpha reliability coefficient of the organizational climate scale was found to be 0.91, 0.86, 0.93 for bonding, justice, and innovation, respectively.

2.2.2. Innovative work behavior scale (IWBS)

The “Innovative Behavior Measure,” developed by Scott and Bruce (1994), was used to assess participants' innovative work behaviors. This one-dimensional scale consists of six items and is based on Kanter's (1988) study, which examined the stages of innovative behavior in organizations. In its original form, the reliability coefficient (Cronbach's Alpha) was reported as 0.89, indicating high internal consistency.

The Turkish adaptation of the scale was conducted by Akkoç (2012). The adapted version does not include any reverse-coded items, and the Cronbach's Alpha reliability coefficient for the Turkish form was calculated as 0.82, confirming its reliability for use in Turkish contexts.

2.2.3. Safety perception scale (SPS)

The “Safety Perception Scale,” developed by Gyekye and Salminen (2005), was used to assess healthcare workers' perceptions of occupational health and safety. This scale is a shortened version of the original form created by Hayes et al. (1998), which consisted of 50 items. The single-dimensional scale includes 10 items and evaluates occupational health and safety practices from a management perspective.

In the original version of the scale, the Cronbach's Alpha reliability coefficient was reported as 0.94, indicating excellent internal consistency. The Turkish adaptation of the scale was conducted by Tanış and Turunç (2017), who also reported a Cronbach's Alpha coefficient of 0.94 for the Turkish version, confirming its reliability for use in Turkish contexts.

The Safety Perception Scale used in this study (Gyekye & Salminen, 2005) evaluates employees' perceptions of occupational safety and management's attention to workplace hazards. It does not measure physical safety or external threats. Thus, the scale captures the safety dimension rather than safety. Although the Turkish adaptation refers to the construct as “safety perception,” the original scale (Gyekye &

Salminen, 2005) measures employees' perceptions of occupational safety. In this study, we interpret and utilize the scale in line with its original conceptual definition, i.e., safety perception.

2.3. Statistical preliminary analyses and common method variance

The research data were analyzed using SPSS 22 (Statistical Package for the Social Sciences) and LISREL (Linear Structural Relations) software packages. Before conducting advanced analyses to test the hypotheses and describe the participants' demographic characteristics, several preliminary analyses were applied to the dataset.

The 161 data points, outlier analysis was performed, and z-values were calculated as follows: ± 3.2 for the organizational climate scale, ± 3.9 for the innovative work behaviors scale, and ± 3.6 for the safety perception scale (Çokluk et al., 2018). As there were no reverse-coded items in the dataset, skewness and kurtosis values were examined during the normality analysis. The results indicated values within the acceptable range of ± 1.5 for the organizational climate scale, ± 2 for the innovative work behaviors scale, and ± 1.7 for the safety perception scale. These findings confirm that the data follow a normal distribution (George & Mallery, 2009).

Upon completion of all preliminary analyses, the dataset of 161 healthcare workers was deemed suitable for advanced statistical analyses and was included in further testing.

In the measurement model developed within the scope of the research, the presence of common method variance was examined. Common method variance refers to the systematic error variance arising from similarities in the person, method, and time used in measurement, which can create biased relationships between the variables being measured (Richardson et al., 2009).

To detect this variance, Harman's single-factor test was applied. According to Podsakoff et al. (2003), when a single factor explains less than 50 % of the total variance in the measurement model, the common method variance is considered low. In this study, the single-factor test revealed that a single factor accounted for 39.8 % of the total variance. This result indicates that common method variance in the measurement model is limited, and there is no significant systematic error among the variables.

2.4. Findings

2.4.1. Results on the construct validity of measurement tools

Within the scope of this research, the construct validity of all measurement tools was evaluated using Confirmatory Factor Analysis (CFA). The primary objective of CFA is to examine the relationships between observed variables and latent constructs within a measurement model, aiming to explain the covariances among the observed variables. During the analysis, the observed and latent variables were assessed simultaneously, and error terms were addressed to refine the model. Additionally, the goodness-of-fit indices were calculated to evaluate the adequacy of the model. CFA was utilized as a critical methodological approach to confirm the validity and reliability of the measurement tools employed in this study. On the other hand, CFA applied for construct validity is particularly recommended for measurement models where relationships and error terms have been previously defined, variables have been categorized into factor groups, and the observed variables are systematically assigned to specific latent factors (Orçan, 2018; Kline, 2011; Büyüköztürk, 2002).

The construct validity of the measurement tools used in the study was tested using first-order multi-factor Confirmatory Factor Analysis (CFA) performed with the LISREL statistical package. First-order multi-factor CFA was chosen to ensure that the measurement models fit the dataset in alignment with their original structures (Gürbüz & Şahin, 2018).

In the analyses, commonly accepted goodness-of-fit indices from the literature were used to evaluate the model fit, including chi-square/

degrees of freedom (X^2/df), SRMR, RMSEA, CFI, and GFI (Kline, 2019; Schumacher & Lomax, 2010). The goodness-of-fit indices obtained for construct validity, along with the threshold values widely accepted in the literature, are summarized in Table 1 (Polatçı & Baygın, 2022; Çokluk et al., 2018; Meydan & Şeşen, 2015).

Upon examining the findings in Table 1, it is evident that the construct validity of all measurement tools used in the research has been established. During the construct validity phase, first-order multi-factor Confirmatory Factor Analysis (CFA) was performed for all scales, confirming their validity. The item factor loadings across all scales were observed to exceed 0.50 and were statistically significant, while error variances were low (Gürbüz, 2019). To achieve the necessary goodness-of-fit values, a two-stage modification process was applied exclusively to the safety perception scale. Goodness-of-fit indices meeting statistical significance criteria were achieved during these stages without the removal of any items. In summary, the measurement tools were implemented in their original forms for this study. The organizational climate scale comprised 10 items across three dimensions; the innovative work behaviors scale included 6 items as a one-dimensional scale; and the safety perception scale consisted of 10 items as a one-dimensional scale. The competing CFA models were tested to assess the dimensional structure of the Organizational Climate Scale. Both a single-factor model (1F) and a three-factor model (3F) were evaluated. The fit indices for the single-factor model ($\chi^2/sd = 1.68$, SRMR = 0.042, RMSEA = 0.069, CFI = 0.92, GFI = 0.89) were slightly better than the three-factor model ($\chi^2/sd = 1.96$, SRMR = 0.068, RMSEA = 0.073, CFI = 0.91, GFI = 0.85). While the Organizational Climate construct was originally conceptualized as multidimensional, the single-factor model was retained in the structural model to align with the theoretical focus of this study, which centers on the overall perception of climate rather than the individual dimensions. This approach is supported in the SEM literature when the aim is to analyze a global latent construct (Hair et al., 2019; Kline, 2016). Additionally, The Organizational Climate Scale was originally developed as a three-dimensional construct comprising bonding, innovation, and justice. Accordingly, a three-factor CFA model was conducted to assess the construct validity, and all reported fit indices in this study reflect this multidimensional structure. However, in line with the theoretical aim and scope of this research, the construct was treated as a unified latent variable representing employees' overall perception of organizational climate. Since the study did not aim to examine the differential effects of the subdimensions, further analyses and the proposed mediation model were based on the total score of the scale.

2.4.2. Results of Inter-Variable relationships and reliability analysis

The study utilized Pearson correlation analysis to investigate the relationships between the variables in the structural model. Correlation coefficients (r) were classified as follows: 0–0.30 indicates a weak

Table 1
Goodness of fit values for confirmatory factor analysis results.

Measuring Tools	X^2/sd	SRMR	RMSEA	CFI	GFI
Organizational climate 1F (OC)	1.68**	0.042**0.0	0.069*	0.92*	0.89*
Organizational climate 3F (OC)	1.96**	0.068*	0.073*	0.91*	0.85*
Innovative work behavior (IWB)	1.98**	0.059*	0.051*	0.95**	0.88*
Safety Perception (SP)	1.66**	0.041**	0.045**	0.94*	0.94*
Perfect fit **	< 3	≤ 0.05	$0 \leq x \leq 0.05$	$0.95 \leq x \leq 1$	$0.95 \leq x \leq 1$
Acceptable fit *	$\leq 4-5$	$0.05 \leq x \leq 0.10$	$0.06 \leq x \leq 0.10$	$0.90 \leq x \leq 0.94$	$0.85 \leq x \leq 0.94$

Note: 1F= One factor; 3F= Three factor; Acceptable (*) and perfect fit (**) indices are indicated (Polatçı & Baygın, 2022; Çokluk et al., 2018; Meydan & Şeşen, 2015).

relationship, 0.31–0.70 a moderate relationship, and 0.71–1 a strong relationship (Gürbüz & Şahin, 2018). Furthermore, potential multicollinearity issues among the independent variables (organizational climate, innovative work behaviors, and perception of occupational health and safety) were assessed using Tolerance and Variance Inflation Factor (VIF) values. The Durbin-Watson statistic was also calculated to examine the presence of autocorrelation among the error terms (Kalaycı, 2006; Kline, 2019).

Following the construct validity analysis of the measurement tools, their internal consistency reliability was evaluated. In this context, Cronbach's alpha (α) and Composite Reliability (CR) values were calculated for both the sub-dimensions and the overall scales. Reliability coefficients above 0.70 were interpreted as evidence of the measurement tools' reliability (Hair et al., 2011; Kline, 2019). The detailed results of these analyses are presented in Table 2.

According to the overall averages presented in Table 2, the organizational climate variable scored at a moderate level ($M = 3.40$, $SD = 0.827$). Similarly, innovative work behaviors ($M = 3.63$, $SD = 0.802$) and safety perception ($M = 3.42$, $SD = 0.824$) Similarly, innovative to be moderate.

The Pearson correlation analysis results revealed positive and statistically significant relationships among all variables in the structural model at the $p < 0.01$ level. A moderate positive correlation was observed between organizational climate and innovative work behaviors ($r = 0.546$, $p < 0.01$). Additionally, a strong positive correlation was identified between organizational climate and perceptions safety ($r = 0.638$, $p < 0.01$). A moderate positive correlation was also found between innovative work behaviors and perceptions safety ($r = 0.525$, $p < 0.01$). These findings suggest that an improved organizational climate and higher perceptions safety positively influence innovative work behaviors.

Furthermore, internal consistency analyses (Cronbach's alpha coefficients) and composite reliability (CR coefficients) demonstrated that all variables exceeded the reliability thresholds. These results confirm that the measurement tools used in the study have adequate construct reliability.

2.5. Testing research hypotheses and mediation analysis findings

In line with the hypotheses in the research's structural model, the mediating role of safety perceptions in the effect of healthcare workers' perceptions of organizational climate on innovative work behaviors was examined. For this purpose, the "Simple Mediation Analysis" (Model 4) proposed by Hayes (2013, 2018) was utilized. The analysis was conducted using the Process Macro extension within the IBM SPSS statistical software package. The detailed findings from the analysis are presented in Table 3.

According to the findings in Table 3, the analysis conducted to test H1 revealed that healthcare workers' perceptions of organizational climate have a positive and statistically significant effect on innovative work behaviors ($b = 0.529$, $p < 0.001$). This result suggests that an increase in perceptions of organizational climate leads to a corresponding increase in innovative work behaviors. Thus, the H1 hypothesis is supported.

For the H2 hypothesis, the analysis showed that participants' perceptions of organizational climate positively influence their safety

Table 3

Results from the mediation model (Model 4).

Independent and mediator variables	Mediator variable		Dependent variable	
	M (SP)	Se	Y (IWB)	Se
<i>X (OC)</i>	<i>a</i>	0.636*	<i>c'</i>	0.529*
<i>M (SP)</i>	—	—	<i>b</i>	0.290*
<i>Constant</i>	<i>i_M</i>	1.4678	<i>i_Y</i>	1.833*
	<i>R</i> ²	0.350	<i>R</i> ²	0.297
	<i>F</i> (1; 159)	= 109.2787;	<i>F</i> (2; 158)	= 42.6408;
	<i>p</i> < 0.001		<i>p</i> < 0.001	
<i>Indirect Effect</i>	<i>a.b</i> = 0.184*; 95 % CI [0.0555 – 0.2966]			

Note: $n = 161$; X (OC) = Organizational climate; M (SP) = Safety Perception; Y (IWB) = Innovative work behavior; Se = Standard error; b represents unstandardized regression coefficients with ordinary least squares (OLS) regression method. * $p < 0.001$. The mediation model was re-estimated by controlling for demographic variables including gender, age, marital status, education level, and professional experience. The inclusion of these covariates did not substantially alter the direct or indirect effects. Detailed coefficients are available upon request.

perceptions ($b = 0.636$, $p < 0.001$), and that, furthermore, safety perceptions positively affect innovative work behaviors ($b = 0.290$, $p < 0.001$). These findings confirm that the H2 hypothesis is also supported.

Furthermore, it was observed that safety perceptions play a statistically significant mediating role in the relationship between organizational climate perceptions and innovative work behaviors ($b = 0.184$, $p < 0.001$). The explained variance ratio for this mediating effect in the structural model was calculated as 30.0 % ($R^2 = 0.297$, $p < 0.001$). These findings confirm that the H3 hypothesis is also supported. As a robustness check, we re-estimated the mediation model including demographic variables (gender, age, marital status, education level, and professional experience) as covariates. The results revealed that none of these variables significantly influenced the hypothesized paths (all p -values > 0.10), with the exception of professional experience, which showed a minor effect on safety perception ($B = 0.22$, $SE = 0.10$, $p = 0.039$). However, the overall mediation structure remained statistically significant and substantively stable. The inclusion of control variables resulted in a negligible change in explained variance ($\Delta R^2 < 0.04$), confirming the robustness of the model.

The findings in Table 3 were calculated using a 95 % confidence interval and the 5,000-resampling bootstrap technique (Hayes, 2018). According to the resampling results, the indirect effect of participants' perceptions of organizational climate on innovative work behaviors did not include zero ($b = 0.184$; 95 % Boot CI: Lower = 0.0555, Upper = 0.2966).

This result confirms that perceptions of organizational climate have a statistically significant indirect effect on innovative work behaviors through safety perceptions. The final structural model of the research, presented in Fig. 2, summarizes all the findings obtained.

3. Discussion

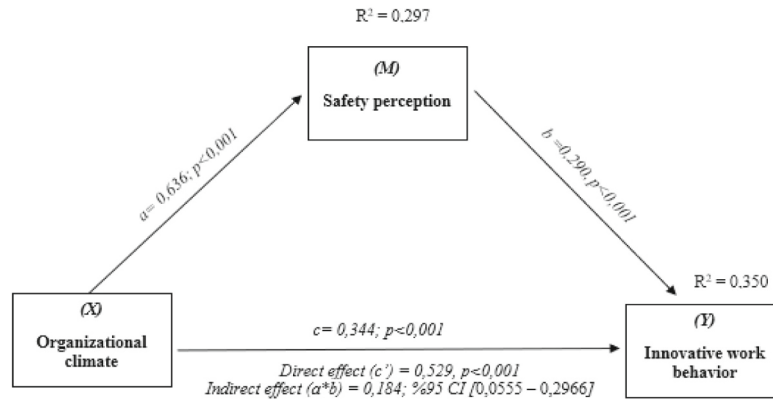
This study examines the relationships between organizational climate, safety perception, and innovative work behavior in the healthcare sector, evaluating how these variables interact. The findings

Table 2

Correlation values and internal reliability analysis results for variables.

	$\bar{X}$	SD	Skewness	Kurtosis	1	2	Cronbach's alpha (α)	Composite Reliability (CR)
1- Organizational climate (OC)	3.40	0.827	−0.369	0.259	—		0.920	0.79
2- Innovative work behavior (IWB)	3.63	0.802	−0.169	−0.498	0.546**	—	0.896	0.75
3- Safety Perception (SP)	3.42	0.824	0.365	0.697	0.638**	0.525**	0.926	0.81

Note: ** $p < 0.01$; $\bar{X}$: Mean, SD= Standard deviation; Skewness and kurtosis values were within the acceptable range (± 1), indicating normal distribution of the variables (George & Mallery, 2010).



Note: Non-standardized beta coefficients (b) were reported. R^2 values show the explained variance.

Fig. 2. Final structural model of the research.

indicate that organizational climate significantly influences both employees' safety perceptions and their innovative work behaviors. Additionally, safety perception plays a mediating role in the relationship between organizational climate and innovative work behavior. These results align with the existing literature, which highlights how organizational climate shapes employees' perception of the work environment and how this perception integrates with innovation and safety.

The findings confirm that the relationships between organizational climate, safety perception, and innovative work behavior are statistically significant. As presented in Table 2, the mean scores of organizational climate ($\bar{X} = 3.40$, $SD = 0.827$), innovative work behavior ($\bar{X} = 3.63$, $SD = 0.802$), and safety perception ($\bar{X} = 3.42$, $SD = 0.824$) suggest that these variables are perceived at moderate levels by healthcare employees. These findings indicate that while employees perceive the organizational climate and safety positively, these perceptions are not at an optimal level.

Previous studies suggest that employees' perceptions of organizational climate are shaped by factors such as workload, managerial support, and psychological safety in the workplace (Patterson et al., 2005; Schneider et al., 2013). The moderate level of organizational climate perception observed in this study may suggest that current managerial practices in the healthcare sector are not fully perceived as supportive by employees.

The positive and significant correlation between organizational climate and innovative work behavior ($r = 0.546$, $p < 0.01$) highlights the role of a strong organizational climate in fostering employees' innovative work behaviors. Prior research also emphasizes that organizational climate is a key factor in promoting employees' creative thinking processes and innovative actions (Janssen, 2000; De Jong & Den Hartog, 2017). For healthcare employees, innovation is not only a key aspect of individual performance but also a critical determinant of patient safety and service quality (Cohen et al., 2014). Therefore, enhancing organizational climate could be a crucial strategy to encourage innovative work behaviors among healthcare employees.

This study further confirms a strong and significant correlation between organizational climate and safety perception ($r = 0.638$, $p < 0.01$). This result suggests that a positive perception of organizational climate is associated with a heightened sense of safety among healthcare employees. Safety culture, as a fundamental component of organizational climate, enhances employees' confidence in the workplace and increases their awareness of occupational hazards (Smith-Crowe et al., 2003; Gyekye & Salminen, 2010). In the healthcare sector, safety perception encompasses not only physical safety but also psychological

safety and organizational support. Edmondson (1999) suggests that employees who feel psychologically safe in their workplace are more likely to take risks and demonstrate innovative work behaviors. Consistently, the findings of this study indicate that a higher safety perception significantly enhances innovative work behaviors ($r = 0.525$, $p < 0.01$). Enhancing organizational support and safety can foster an environment conducive to innovation among healthcare employees.

Table 3 demonstrates the effect of organizational climate on employees' innovative work behaviors, showing a significant direct positive effect ($b = 0.529$, $p < 0.001$). Similarly, Bozkurt and Ercan (2022) emphasize that perceived organizational support significantly impacts employees' innovative work behaviors and that organizational support is a fundamental element in facilitating the implementation of innovative ideas. Additionally, Ögeve and Sütlü (2018) identify a positive relationship between organizational climate and organizational commitment among healthcare employees, noting that this relationship fosters innovative behaviors. In this regard, the findings of this study support the argument that a positive perception of organizational climate encourages employees' engagement in innovative behaviors.

The study further confirms a significant positive effect of organizational climate on safety perception ($b = 0.636$, $p < 0.001$, Table 3). Safety perception enhances employees' psychological safety, allowing them to develop innovative work behaviors (Edmondson, 1999; Xu et al., 2022). Employees with a high sense of safety are more likely to propose creative solutions without fear of failure (Smith-Crowe et al., 2003; Gyekye & Salminen, 2010).

Furthermore, Table 3 presents the mediation analysis findings, demonstrating that safety perception mediates the relationship between organizational climate and innovative work behavior ($b = 0.184$, $p < 0.001$). This finding is consistent with prior research suggesting that safety perception enhances employees' innovative work behaviors (Tuna & Işık Demirarslan, 2023; Yoon, 2024). The current study's findings highlight that safety perception serves as a crucial mechanism linking organizational climate to innovative work behaviors.

Since this study was conducted within the healthcare sector, its findings provide industry-specific insights. The healthcare industry is a high-risk sector where error tolerance is low, and effective risk management is essential. Employees' safety perceptions are directly related to patient safety, and strengthening these perceptions through organizational climate can facilitate the adoption of innovative practices (Pousette et al., 2017). Berberoğlu (2018) found that a positive organizational climate in healthcare institutions enhances employees' commitment while reducing burnout levels. Similarly, organizations

with a strong safety culture benefit from greater employee participation in innovative processes (Tuna & Işık Demirarslan, 2023).

The findings of this study have significant implications for healthcare management. First, hospital administrators should foster a strong organizational climate that reinforces employees' perception of support. Open communication and supportive leadership can enhance employees' innovative work behaviors (Turgut & Beğenirbaş, 2013). Additionally, strengthening occupational health and safety practices can encourage employees to take risks and engage more actively in innovation.

These findings are in line with prior literature showing that organizational climate promotes safety perception and, in turn, innovative work behavior (e.g., Zohar, 2000; Lu & Yang, 2011). However, not all studies align with these findings. For example, Zhang et al. (2019) found that in certain rigid, safety-oriented work cultures, innovation can be stifled due to excessive risk aversion. Similarly, Mearns et al. (2003) reported variability in the relationship between organizational climate and safety perception, depending on the organizational level and industry context. These inconsistencies may stem from cultural, methodological, or sectoral differences, and highlight the importance of contextualizing safety research within specific occupational environments.

This study has certain limitations. First, the sample comprises only healthcare employees, potentially limiting the generalizability of the findings to other sectors. Future research can explore similar relationships in different industries through comparative analyses. Second, this study employs a cross-sectional design, limiting its ability to assess long-term effects. Longitudinal studies can provide deeper insights into the sustained impact of organizational climate. Finally, self-reported data may introduce social desirability bias. Future studies incorporating observational or experimental designs may enhance the robustness of findings.

In conclusion, this study highlights the impact of organizational climate on innovative work behaviors through the mediating role of safety perception in the healthcare sector. The findings suggest that a positive organizational climate enhances innovative work behaviors and that safety perception serves as a key mechanism in this process. From a healthcare management perspective, creating a strong organizational climate and reinforcing workplace safety measures are critical for fostering innovation among employees.

4. Limitations and Future Directions

Despite its contributions, this study is not without limitations. First, data were collected using a self-reported questionnaire at a single point in time, which may lead to common method variance and social desirability bias. Second, while the survey design and items were identical, the use of both face-to-face and online data collection methods may have introduced minor contextual differences. Lastly, the study was conducted in a single province in Türkiye, which may limit the generalizability of the findings. Future research could address these limitations by incorporating longitudinal or multi-source data, and by expanding the sample to include diverse regions or sectors.

5. Conclusion and Suggestion

This study examines how organizational climate influences innovative work behaviors through safety perception in the healthcare sector. The findings indicate that a positive organizational climate and a strong sense of workplace safety enhance employees' motivation and innovative work behaviors.

Healthcare institutions are advised to improve leadership and communication processes to strengthen employees' safety perception and increase organizational support. Regular training sessions and audits should be conducted to enhance workplace safety, and a secure environment should be provided where employees feel comfortable

sharing their ideas to foster innovative work behaviors.

Future research can conduct comparative analyses by examining the relationship between organizational climate, safety perception, and innovative work behavior across different healthcare institutions and professional groups. Longitudinal studies would be beneficial in understanding the long-term effects of organizational climate.

Funding

This research received no external funding.

CRediT authorship contribution statement

Elif Işık Demirarslan: Formal analysis, Project administration, Conceptualization. **Osman Yalap:** Validation, Methodology, Software, Formal analysis. **Mukaddes Dağ:** Conceptualization.

Declaration of competing interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

Acknowledgements

The authors would like to thank the editorial team and reviewers for their constructive feedback throughout the review process.

References

- Abu Nawwas, Osama Mohammad, Ariff, Tengku Mohammad, Algillat, Mahmoud, M., Latif, & A., A. Z. (2017). Could Occupational Safety and Health Systems Improve Employees' Performance in Arab Nations? *The International Journal of Social Sciences and Humanities Invention*, 4(7). Doi: 10.18535/ijsshi/v4i8.15.
- Aiken, L., Clarke, S., Sloane, D., 2002. Hospital staffing, organization, and quality of care: Cross-national findings. *International Journal of Quality in Health Care* 14 (1), 5–13.
- Akar, Y., Arıkan, C., 2023. Sağlık Hizmetlerinde Talebi Etkileyen Faktörler. *Ashd* 21 (1), 1–21.
- Akkoç, İ., 2012. Gelişim kültürü ve etik iklimin yenilikçiliğe etkisinde dağıtım adaletinin rolü. *Uluslararası Alanya İşletme Fakültesi Dergisi* 4 (3), 45–60.
- Blau, P.M., 1964. *Exchange and power in social life*. Wiley, p. 91.
- Berberoglu, A., 2018. Impact of organizational climate on organizational commitment and perceived organizational performance: Empirical evidence from public hospitals. *BMC Health Serv. Res.* 18 (1), 1–9. <https://doi.org/10.1186/s12913-018-3149-z>.
- Biswas, A., Begum, M., Van Eerd, D., Smith, P.M., Gignac, M.A.M., 2021. Organizational Perspectives on how to Successfully Integrate Health Promotion Activities into Occupational Health and Safety. *J. Occup. Environ. Med.* 63 (4), 270–284. <https://doi.org/10.1097/JOM.0000000000002087>.
- Brown, S.P., Leigh, T.W., 1996. A new look at psychological climate and its relationship to job involvement, effort, and performance. *J. Appl. Psychol.* 81 (4), 358–368. <https://doi.org/10.1037/0021-9010.81.4.358>.
- Bozkurt, Ö., Ercan, A., 2022. Çalışanların yenilikçi iş davranışlarında ve işten ayrılma niyetlerinde örgütsel destek algısının etkisi: İmalat sanayi üzerine bir araştırma. *İstanbul Ticaret Üniversitesi Sosyal Bilimler Dergisi* 21 (43), 269–290. <https://10.46928/iticusbe.1059273>.
- Büyükoztürk, Ş., 2002. Faktör analizi: Temel kavramlar ve ölçek geliştirmede kullanımı. *Kuram Ve Uygulamada Eğitim Yöntemleri* 32, 470–483.
- Ceylan, C., 2013. Algılanan bağlılık tabanlı insan kaynakları sisteminin algılanan gelişim kültürü ve yenilikçi iş davranışına etkisi “İş, Güç.”. *Endüstri İlişkileri Ve İnsan Kaynakları Dergisi* 15 (1), 41–58.
- Cohen, D., Huynh, T., Sebold, A., Harvey, J., Neudorf, C., Brown, A., 2014. The population health approach: a qualitative study of conceptual and operational definitions for leaders in Canadian healthcare. *SAGE Open Medicine* 2, 1–11. <https://doi.org/10.1177/2050312114522618>.
- Cooper, M.D., Phillips, R.A., 2004. Exploratory analysis of the safety climate and safety behavior relationship. *J. Saf. Res.* 35 (5), 497–512. <https://doi.org/10.1016/j.jsr.2004.08.004>.
- De Jong, J.P.J., Den Hartog, D.N., 2017. How leaders influence employees' innovative behavior. *Eur. J. Innov. Manag.* 10 (1), 41–64.
- DeJoy, D.M., Schaffer, B.S., Wilson, M.G., Vandenberg, R.J., Butts, M.M., 2004. Creating safer workplaces: Assessing the determinants and role of safety climate. *J. Saf. Res.* 35 (1), 81–90. <https://doi.org/10.1016/j.jsr.2003.09.018>.
- Dendup, P., & Occupational, M. (2018). Occupational health and safety assessment of the industries in bhutan: a three years' trend analysis. *Epidemiology international*, 3(2), 10–16. <https://doi.org/10.24321/2455.7048.201810>.

- Doğantekin, A., Sarı, Y., 2016. A research on relationship between organizational ethical climate and organizational cynicism in accommodation establishments. *Journal of Business Research - Turk* 8 (3), 222. <https://doi.org/10.20491/isarder.2016.198>.
- Dodsworth, M., Connelly, K.E., Ellett, C.J., Sharratt, P., 2007. Organizational climate metrics as safety, health, and environment performance indicators and an aid to relative risk ranking within industry. *Process Saf. Environ. Prot.* 85 (1), 59–69. <https://doi.org/10.1205/psep06006>.
- Edmondson, A., 1999. Psychological safety and learning behavior in work teams. *Adm. Sci. Q.* 44 (2), 350–383. <https://doi.org/10.2307/2666999>.
- Eisenberger, R., Huntington, R., Hutchison, S., Sowa, D., 1986. Perceived organizational support. *J. Appl. Psychol.* 71 (3), 500–507. <https://doi.org/10.1037/0021-9010.71.3.500>.
- Erol, E., Kunt, M., 2018. The relationship between organizational climate and perceptions of organizational politics in educational faculties. *Pamukkale Üniversitesi Eğitim Fakültesi Dergisi* 2018 (43), 15–29.
- George, D., Mallery, M., 2009. *SPSS for Windows step by step: a simple guide and reference*, (9th ed.). Pearson.
- George, D., Mallery, P., 2010. *SPSS for Windows step by step: a simple guide and reference*, 17.0 update, (10th ed.). Allyn & Bacon.
- Guo, H., 2018. The Formation of highly-cooperative organizational climate considering impacts of organizational commitment and team cohesion. *Advances in Economics, Business and Management Research* 58 (1), 431–434. <https://doi.org/10.2991/isbcd-18.2018.86>.
- Gürbüz, S., & Şahin, F. (2018). *Sosyal bilimlerde araştırma yöntemleri*. Seçkin yayıncılık.
- Gürbüz, S. (2019). *Amos ile yapısal eşitlik modellemesi*. Seçkin yayıncılık.
- Gyekye, S.A., Salminen, S., 2005. Are “good soldiers” safety conscious? An examination of the relationship between organizational citizenship behaviours and perception of workplace safety. *Social Behaviour and Personality: an International Journal* 33 (8), 805–820. <https://doi.org/10.2224/sbp.2005.33.8.805>.
- Hofmann, D.A., Morgeson, F.P., 1999. Safety-related behavior as a social exchange: the role of perceived organizational support and leader-member exchange. *J. Appl. Psychol.* 84 (2), 286–296. <https://doi.org/10.1037/0021-9010.84.2.286>.
- Indrayani, I., Kusumojanto, D.D., 2020. An occupational safety and health management system to minimize work accidents. *JBMI (Jurnal Bisnis, Manajemen, Dan Informatika)* 17 (2), 162–166. <https://doi.org/10.26487/jbmi.v17i2.11186>.
- Janssen, O., 2000. Job demands, perceptions of effort-reward fairness and innovative work behavior. *J. Occup. Organ. Psychol.* 73, 287–302. <https://doi.org/10.1348/096317900167038>.
- Kahn, W.A., 1990. Psychological conditions of personal engagement and disengagement at work. *Acad. Manag. J.* 33 (4), 692–724. <https://doi.org/10.2307/256287>.
- Kanter, R. M. (1988). *When a thousand flowers bloom: Structural, collective, and social conditions for innovation in organizations*. In B. M. Staw & L. L. Cummings (Eds.), *Research in organizational behavior*, 10(1), 169–211. Greenwich, CT: JAI Press.
- Kava, C.M., Parker, E.A., Baquero, B., Curry, S.J., Gilbert, P.A., Sauder, M., Sewell, D.K., 2019. Associations between organizational culture, workplace health climate, and employee smoking at smaller workplaces. *Tob. Use Insights* 12, 1179173X1983584. <https://doi.org/10.1177/1179173X19835842>.
- Kline, R.B., 2011. *Principles and practice of structural equation modeling*, (3rd ed.). Guilford Press.
- Korkmaz, H., Bağcı, Z., 2020. Örgüt ikliminin iş tatmini üzerindeki etkisi: Banka çalışanları üzerinde bir araştırma. *Pamukkale Üniversitesi İşletme Araştırmaları Dergisi* 7 (2), 1–11.
- Kubasinski, S., & Slawinska, M. (2021). Research on corporate social responsibility (CRS) in terms of work safety. *European research studies journal*, XXIV(Special Issue 5), 626–636. Doi: 10.35808/ersj/2755.
- Kumar, R., Bhattacharya, S., Sharma, N., Thiagarajan, A., 2019. Cultural competence in family practice and primary care setting. *Journal of Family Medicine and Primary Care* 8 (1), 1. https://doi.org/10.4103/jfmpc.jfmpc_393_18.
- Mearns, K., Whitaker, S.M., Flin, R., 2003. Safety climate, safety management practice and safety performance in offshore environments. *Saf. Sci.* 41 (8), 641–680. [https://doi.org/10.1016/S0925-7535\(02\)00011-5](https://doi.org/10.1016/S0925-7535(02)00011-5).
- Orçan, F., 2018. Açıklayıcı ve doğrulayıcı faktör analizi: ilk hangisi kullanılmalı. *Eğitimde Ve Psikolojide Ölçme Ve Değerlendirme Dergisi* 9 (4), 413–421. <https://doi.org/10.21031/epod.394323>.
- Önhon, Ö., 2019. The relationship between organizational climate for innovation and employees' innovative work behavior: ICT sector in Turkey. *Vezetéstudomány-Budapest Management Review* 50 (11), 53–64. <https://doi.org/10.14267/VEZTUD.2019.11.04>.
- Örgeç, C., Sütlü, E., 2018. The servant leadership perceptions' effects on organizational climate and organizational commitment of health workers: an example of a public hospital. *Health Care Academician Journal* 5 (1), 47–53.
- Örgeç, C., Topal, B., Şahin, H., 2020. İşgörevlerin demografik özelliklerinin örgütsel iklim algısına etkisinin istatistik analizi: Süreyya paşa göğüs hastalıkları hastanesi örneği. *European Journal of Science and Technology* 19 (1), 165–175. <https://doi.org/10.31590/ejosat.709785>.
- Podsakoff, P.M., MacKenzie, S.B., Lee, J.Y., Podsakoff, N.P., 2003. Common method biases in behavioral research: a critical review of the literature and recommended remedies. *J. Appl. Psychol.* 88 (5), 879–903. <https://doi.org/10.1037/0021-9010.88.5.879>.
- Polatçı, S., Baygın, E., 2022. Psikolojik sermayenin tükenmişlik üzerindeki etkisinde öz-şekfatın aracılık rolü. *Anadolu Üniversitesi İktisadi Ve İdari Bilimler Fakültesi Dergisi* 23 (4), 243–275. <https://doi.org/10.53443/anadoluibfd.1159941>.
- Poussette, A., Larsman, P., Eklöf, M., Törner, M., 2017. The relationship between patient safety climate and occupational safety climate in healthcare – a multi-level investigation. *J. Saf. Res.* 61, 187–198. <https://doi.org/10.1016/j.jsr.2017.02.020>.
- Rabia, I., Tahir, S., Afsheen, F., 2010. Organizational climate as a predictor of innovative work behavior. *Afr. J. Bus. Manag.* 4 (15), 3337–3343.
- Richardson, H.A., Simmering, M.J., Sturman, M.C., 2009. A tale of three perspectives: Examining post hoc statistical techniques for detection and correction of common method variance. *Organ. Res. Methods* 12 (4), 762–800. <https://doi.org/10.1177/1094428109332834>.
- Sarı, D. K., Yudiarto, A., & Sinambela, F. C. (2021). Work engagement and innovative work behavior: Meta-Analysis study. *Proceedings of the international conference on psychological studies (ICPSYCHE 2020)*, 530(Icpsyche 2020), 359–366. Doi: 10.2991/assehr.k.210423.053.
- Sarıcan, S.Y., Fırlarlar, A., Eyidoğan, F., 2023. Investigation of the efficiency of occupational health and safety education of agriculture department students in vocational high schools. *Selcuk Journal of Agricultural and Food Sciences* 37, 1–11. <https://doi.org/10.15316/sjafs.2023.001>.
- Schnelle, J., Simmons, S., Harrington, C., 2004. Relationship of nursing home staffing to quality of care. *Health Serv. Res.* 39 (2), 225–250. <https://doi.org/10.1111/j.1475-6773.2004.00225.x>.
- Scott, S.G., Bruce, R.A., 1994. Determinants of innovative behavior: a path model of individual innovation in the workplace. *Acad. Manag. J.* 37 (3), 580–607. <https://doi.org/10.5465/256701>.
- Scott, T., Mannion, R., Davies, H., 2003. Implementing culture change in health care: Theory and practice. *Int. J. Qual. Health Care* 15 (2), 111–118. <https://doi.org/10.1093/intqhc/mzg021>.
- Sein Myint, N.N., Kunaviktikul, W., Stark, A., 2021. A contemporary understanding of organizational climate in healthcare setting: a concept analysis. *Nurs. Forum* 56 (1), 172–180. <https://doi.org/10.1111/nuf.12513>.
- Sezgin, O.B., Uçar, Z., 2021. Psikolojik sözleşme ihlali ile yenilikçi iş davranışı ilişkisinde örgütsel sinizim rolü. *Yönetim Bilimleri Dergisi* 19 (39), 225–248. <https://doi.org/10.35408/comuybd.752766>.
- Shanker, R., Bhanugopan, R., Van Der Heijden, B.I.J.M., Farrell, M., 2017. Organizational climate for innovation and organizational performance : the mediating effect of innovative work behavior. *J. Vocat. Behav.* 100, 67–77. <https://doi.org/10.1016/j.jvb.2017.02.004>.
- Smith-Crowe, K., Burke, M.J., Landis, R.S., 2003. Organizational climate as a moderator of safety knowledge–safety performance relationships. *J. Organ. Behav.* 24 (7), 861–876. <https://doi.org/10.1002/job.217>.
- Solmaz, H. (2016). *Örgüt ikliminin girişimcilik yönelimi üzerine etkisi ve öğrenme yöneliminin rolü: Savunma sanayiinde bir araştırma* (Unpublished doctoral dissertation). Eskişehir Osmangazi University, Institute of Social Sciences.
- Suliman, A., Harethi, B.A., 2013. Perceived work climate and employee performance in public safety organizations in the UAE. *Transforming Government: People, Process and Policy* 7 (3), 410–424. <https://doi.org/10.1108/TG-03-2012-0001>.
- Sun, N., Wei, L., Shi, S., Jiao, D., Song, R., Ma, L., Wang, H., Wang, C., Wang, Z., You, Y., 2020. A qualitative study on the psychological experience of caregivers of COVID-19 patients. *Am. J. Infect. Control* 48 (6), 592–598.
- Sungur, C., 2021. Sağlık sistemlerinin sınıflandırılması ve performans analizi üzerine kavramsal bir inceleme. *Kahramanmaraş Sütçü İmam Üniversitesi Sosyal Bilimler Dergisi* 18 (3). <https://doi.org/10.33437/ksusb.956240>.
- Stackhouse, N., Turner, R., 2019. How do organizational practices relate to perceived system safety effectiveness? Perceptions of safety climate and co-worker commitment to safety as workplace safety signals. *J. Saf. Res.* 70, 59–69. <https://doi.org/10.1016/j.jsr.2019.04.002>.
- Tuna, H., Işık Demirarslan, E., 2023. Proaktif kişiliğin yenilikçi iş davranışına etkisi: iş güvenliği uzmanlarına yönelik bir uygulama. *Ohs Academy* 6 (1), 14–21. <https://doi.org/10.38213/ohsacademy.1244436>.
- Tuncar, A., Canbaz, H., 2022. Sağlık sektöründe çalışan 65 farklı meslek grubunun ‘Temel iş sağlığı ve güvenliği’ konusundaki bilgi düzeylerinin değerlendirilmesi. *STED / Sürekli Tıp Eğitimi Dergisi* 31 (6), 2. <https://doi.org/10.17942/sted.1115692>.
- Turgut, E., Beğenirbaş, M., 2013. Çalışanların yenilikçi davranışları üzerinde sosyal sermaye ve yenilikçi iklimin rolü: Sağlık sektöründe bir araştırma. *Kara Harp Okulu Bilim Dergisi* 23 (2), 101–124.
- Tutar, H., Altınöz, M., 2010. Örgütsel iklimin işgören performansı üzerine etkisi: ostim imalat işletmeleri çalışanları üzerine bir araştırma. *Ankara Üniversitesi SBF Dergisi* 65 (2), 196–218. <https://doi.org/10.1501/sbfder.00000002162>.
- Umar, T., Egbu, C., Wamuziri, S., Honnurvali, M.S., 2018. Briefing: Occupational safety and health regulations in Oman. *Proceedings of Institution of Civil Engineers: Management, Procurement and Law* 171 (3), 93–99. <https://doi.org/10.1680/jmapl.18.00007>.
- Yoon, M.-S., 2024. Organizational member attitudes according to workplace type of dental hygienist. *Journal of Dental Hygiene Science* 24 (1), 29–36. <https://doi.org/10.17135/jdhs.2024.24.1.29>.
- Zarei, E., Khakzad, N., Reniers, G., Akbari, R., 2016. On the relationship between safety climate and occupational burnout in healthcare organizations. *Saf. Sci.* 89, 1–10. <https://doi.org/10.1016/j.ssci.2016.05.011>.
- Zhang, H., Zhang, J., Luo, Y., 2019. Risk-averse safety culture and its influence on innovation: evidence from high-reliability organizations. *J. Saf. Res.* 70, 145–153. <https://doi.org/10.1016/j.jsr.2019.07.002>.
- Zohar, D., 2000. A group-level model of safety climate: Testing the effect of group climate on microaccidents in manufacturing jobs. *J. Appl. Psychol.* 85 (4), 587–596. <https://doi.org/10.1037/0021-9010.85.4.587>.

between noise and blood pressure, work accidents, and female employees. Her ORCID is: 0000-0002-2998-159X.

Osman Yalap works at Department of Emergency and Disaster Management, Artvin Coruh University, Türkiye. He completed his undergraduate degree in tourism at Akdeniz University, Türkiye. He worked in hotel management for many years. He also completed his master's and doctoral degrees at Tokat Gaziosmanpaşa University, Türkiye. His research areas are employee behavior and attitudes, research methods and mixed method research.

He is the corresponding author and can be contacted at osman.yalap@artvin.edu.tr. His ORCID is: 0000-0003-1058-2457.

Mukaddes Dağ completed her education in Public Administration in 2007 and in Health Administration in 2022. She obtained her master's degree in health Institutions Management in 2013. She works in the Project Unit at Artvin State Hospital. She has conducted studies on health service quality among employees, occupational health, mobbing, and rational drug use among university students. Her ORCID is: 0009-0004-3306-6329.