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The Impact of Organizational Climate on Innovative Behavior: The Mediating Role of Work Engagement

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Abstract Innovation is a vital resource that enables companies to gain and sustain a competitive advantage. As employee innovation is essential for fostering organizational innovation, interest in investigating the factors shaping innovative behavior has increased. In this regard, organizational climate plays a key role in innovative behavior by enhancing employees' motivation to engage in innovation. Moreover, employee engagement is a key factor that is expected to increase employees' innovative behavior. Given the significance of both organizational climate and innovative behavior, this study aims to examine the relationship between organizational climate and innovative behavior, as well as the mediating role of work engagement in this relationship. Accordingly, data were collected from reputable companies in new product development and innovation. The empirical results demonstrate that the organizational climate has a positive effect on innovative behavior and that work engagement mediates the relationship between organizational climate and innovative behavior. These results demonstrate the importance of work engagement in enhancing employees' innovative behaviors. The study found that when employees perceive supportive managerial behavior and intra-organizational harmony in their organizations, their work engagement increases, thereby facilitating the generation of innovative ideas and providing the necessary motivation to support these ideas. Drawing on the research findings and insights from the literature, this study proposes recommendations to foster innovative behavior and improve work engagement. Efforts should focus on increasing positive managerial behaviors, fostering a sense of cohesion within the organization, creating conditions that encourage employees to generate innovative ideas, and implementing initiatives to enhance employees' work engagement.

Keywords Organizational climate · Innovative behavior · Work engagement · Innovation.

Author Note This study was derived from the PhD thesis of Şebnem GÜVEN titled "The Role of Work Engagement Between The Relationship of Organizational Climate and Innovative Behavior" supervised by Ebru DOĞAN at Istanbul University, Institute of Social Sciences.

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The Impact of Organizational Climate on Innovative Behavior: The Mediating Role of Work Engagement

Organizations operate in a rapidly changing and competitive environment. Innovation is a critical factor for organizations to generate new ideas, improve existing processes, and maintain a competitive advantage. One of the key factors for success in a competitive environment is the presence of employees who exhibit innovative behavior, as well as an organizational climate that encourages such behavior. In this context, understanding the impact of organizational climate on innovative behavior and the relationships mediated by work engagement is of great importance.

This study approaches the concept of innovation within the context of "employees' innovative behavior", which occurs on an individual level. Employees' perceptions of organizational climate are considered one of the key determinants of their innovative behavior. Based on this perspective, the central premise of this study is the prediction that employees' perceptions of organizational climate will influence their innovative behavior. However, when employees are engaged, they take initiative, interact with others, and put considerable effort into their roles. Highly engaged employees eagerly seek, encourage, and implement creative and innovative ideas.

This study aims to provide theoretical perspectives on organizational climate, innovative behavior, and work engagement. By examining the relationships among these concepts, this study seeks to explore the effects of organizational climate on innovative behavior and the mediating role of work engagement, as well as to investigate their practical applications within organizations. When reviewing the literature, no study examined the variables addressed in this study together. This study contributes to the literature by comprehensively examining the relationships between organizational climate, innovative behavior, and work engagement.

Theoretical Framework

Although the concept of climate was first introduced by Lewin, Lippitt, and White (1939), it was comprehensively defined by Argyris in his 1958 article "Some Problems in Conceptualizing Organizational Climate: A Case Study of a Bank". In this study, Argyris examined group dynamics within a bank and articulated the concept of organizational climate (Argyris, 1958). Argyris defined climate as "formal organizational policies, employee needs, values, and personalities" (Kundu, 2007). He made three key observations regarding organizations and their climates: An organization's climate tends to remain stable if it continues to meet the needs of its members. Management can modify the climate by recruiting employees with different characteristics, as the climate will remain unchanged if employees with similar traits continue to be hired. Argyris described organizations as "a distinct level of analysis resulting from the interaction of individual, formal, informal, and cultural levels of analysis". He rejected the notion that organizations could be reduced to only the individual level of analysis, laying the groundwork for subsequent studies on levels of analysis (Argyris, 1958).

McGregor (1960) introduced a groundbreaking perspective in management science, arguing that climate is shaped by managerial assumptions and the relationships between managers and subordinates in his book "The Human Side of Enterprise" (Kundu, 2007). Schneider defined organizational climate as follows: "Climate perceptions are psychologically meaningful generalizations that people make about the practices and procedures of a system". A single system can generate multiple climates through its different practices and procedures (Schneider, 1975). Climate can also be described as "employees' shared perceptions of

organizational events, practices, and procedures" (Schneider & Reichers, 1983). Ekvall defined climate as "an organizational characteristic comprising the attitudes, feelings, and behaviors that characterize life within an organization and exist independently of members' perceptions and understanding" (Dzulkifli et al., 1994).

In summary, organizational climate can be defined as the prevailing characteristics of an organization that distinguish it from others, shape its identity, influence employee behavior, and are collectively perceived by its members.

Organizations must innovate to respond to evolving customer demands and to capitalize on markets, structures, and dynamics altered by technological advancements (Baregheh et al., 2009). Schumpeter, in his 1934 work "The Theory of Economic Development: An Inquiry into Profits, Capital, Credit, Interest, and the Business Cycle", described innovation as a "strategic stimulus for economic development". He identified innovation as "the commercial or industrial application of a new product, process, or production method; a new market or supply source; or a new form of business or financial organization". He emphasized that entrepreneurial innovative behavior disrupts market equilibrium and creates continual dynamism in the economy. Schumpeter characterized the innovation process as one of "creative destruction", where economic structures undergo fundamental transformation by destroying the old to make way for the new; he asserted that is the core of capitalism (Schumpeter, 1983).

Innovative behavior can be defined as seeking and implementing new solutions to solve problems or seizing opportunities. In today's rapidly changing world, innovative behavior provides businesses with a competitive edge, enabling them to adapt to shifting market conditions and customer demands. Innovative behavior involves individuals voluntarily applying new ideas, processes, and procedures to their work, departments, or organizations (Janssen, 2004). Examples include researching new technologies, suggesting alternative ways to achieve goals, implementing new ways of working, securing resources for new ideas, and bringing those ideas to life (Yuan & Woodman, 2010).

Janssen described the innovative behavior process in three stages (Janssen, 2000):

- Idea Generation: Individuals evaluate the current state or problem and develop solutions. Creativity and knowledge sharing are crucial at this stage.
- Idea Promotion: Employees seek support for their ideas by communicating with others and gaining allies.
- Idea Realization: Employees create a model that can be tested and implemented within a job role to bring the idea to fruition.

According to Solomon et al., one of the fundamental motivations for employees is the desire to develop their competencies, skills, and creativity. Employees strive not only to adapt to their environment but also to actively shape it, just as they are influenced by it. Therefore, it is crucial to foster an organizational climate that nurtures, rewards, and sustains the excitement, enthusiasm, and experimentation associated with innovative and entrepreneurial behavior (Solomon et al., 2004). The authors outlined the impact of organizational climate on employees' innovative behavior with the following key points: once an innovative climate is established and the company transitions beyond its incubation stage, management should sustain this atmosphere by motivating and rewarding individuals who continue to act innovatively. Providing employees who develop new products or services with greater freedom and empowerment to innovate further reinforces this climate. Management should encourage employees to leverage the expertise and insights of internal and external specialists to develop new ideas. To support this, participation in seminars, conferences, and internal trade fairs should be facilitated, promoting "networking" activities. Universities and other companies can serve as valuable external resources for generating new ideas. Management must tolerate failures. Discovering new products, processes, or approaches that work is a complex process often achieved through trial and error. Fostering, motivating, and rewarding innovative behavior is essential

for further organizational growth. Assigning additional responsibilities to employees exhibiting innovative behavior can serve as an incentive. Innovative companies recognize the importance of measuring outcomes and developing budgets to sustain innovation. Metrics should focus on the number of innovative ideas generated and implemented after achieving project milestones, as well as the contribution of these ideas to growth and profitability through new products and processes.

Among the dimensions of organizational climate influencing innovation, researchers have emphasized the role of superior support. Managers at all levels must explicitly communicate their approval and support for innovative changes within the organization. Another dimension tied to innovation-supporting climates is fairness, which is related to organizational justice. Reward and recognition mechanisms are essential for creating an environment that fosters innovation. Intrinsic motivation, driven by internal desires rather than external demands, enhances the likelihood of creative thinking and actions (Ahmed, 1998). Innovative efforts are closely linked to employee curiosity and independence. Therefore, creating an organizational environment where individuals experience a sense of intrinsic appreciation can enhance their motivation towards innovation (Montes et al., 2004).

One prominent study investigating the relationship between organizational climate and innovative behavior was conducted by Scott and Bruce (1994) in the R&D department of an American industrial firm. Their research found relationships between support for innovation, systematic problem-solving styles, managerial role expectations, and innovative behavior. Additionally, superior role expectations were found to influence employees' innovative behavior.

Another study by Montes et al. (2004), involving 80 companies in the financial sector, demonstrated that organizational climate is a significant explanatory variable in perceptions of support for innovation. Similarly, Shanker et al. (2017), in their research with 202 managers in Malaysia, found that an innovative organizational climate positively impacts innovative behavior.

Based on these studies, the following hypothesis is proposed:

H1: Organizational climate significantly affects innovative behavior.

Kahn (1990) defined work engagement as "the involvement of organizational members in their roles, whereby individuals express and commit themselves physically, emotionally, and cognitively to their work" (Kahn, 1990). Since the publication of Kahn's seminal article in 1990, the concept of engagement has gained popularity in the 2000s, partly due to changes in the business world. Employees are increasingly in need of psychological resources to adapt, grow, and sustain organizational survival. They were expected to adapt to organizational changes, demonstrate assertiveness in teamwork, communicate effectively within vertical networks, and take personal initiative (Schaufeli, 2012).

The next significant work after Kahn was conducted by Maslach and Leiter (1997), who argued that work engagement and burnout represent opposite ends of the same continuum. According to Maslach and Leiter, "engagement is characterized by energy, involvement, and efficacy, which are the direct opposites of the three burnout dimensions: exhaustion, cynicism, and lack of accomplishment". This view implies that individuals with high engagement will inevitably experience low burnout and vice versa (Schaufeli, 2013).

Schaufeli and colleagues, however, conceptualized work engagement as a distinct construction that was negatively correlated with burnout. They defined engagement as "a positive, fulfilling, work-related state of mind characterized by vigor, dedication, and absorption" (Schaufeli et al., 2002).

- "Vigor refers to high levels of energy and mental resilience while working, a willingness to invest effort in work, and persistence even in the face of difficulties".

- "Dedication involves being strongly involved in one's work, accompanied by a sense of significance, enthusiasm, inspiration, pride, and challenge".
- "Absorption is the state of being fully concentrated and happily engrossed in work, where time passes quickly, and it becomes challenging to detach from the task" (Schaufeli & Bakker, 2004).

The growing importance of engagement in the early 21st century is tied to two interconnected developments: the increasing significance of human capital and employees' psychological involvement in the workplace and the rising scientific interest in positive psychological states (Schaufeli, 2013). Work engagement is a motivational concept characterized by a positive, fulfilling, emotionally satisfying state of mind related to work that involves vigor, dedication, and absorption (Schaufeli & Bakker, 2004; Salanova et al., 2005). Engaged employees tend to be proactive, take initiative, collaborate effectively with others (Bakker et al., 2008), and invest energy in their work roles (Rich et al., 2010; Kahn, 1990). These behaviors are particularly important for innovative activities (Rich et al., 2010; Zhang & Bartol, 2010; Shalley et al., 2004; Amabile, 1988).

Organizational climate is recognized as one of the job resources that support engagement. Specifically, climates that satisfy employees' needs for progress, self-actualization, and task fulfilment are expected to enhance work engagement (Bakker & Demerouti, 2007).

Based on these insights, the following hypothesis is proposed:

H2: Organizational climate significantly affects work engagement.

Employees with high levels of work engagement tend to pursue challenges and become deeply immersed in their work (Salanova et al., 2005). They eagerly seek, promote, and implement new and creative ideas (De Spiegelaere et al., 2014; Chang et al., 2013). Work engagement may catalyze innovative behavior, potentially strengthening it. Empirical findings support the proposition that work engagement is a precursor to innovative behavior. For example, Song et al. (2012) found that work engagement affects employees' knowledge-creation practices, and Agarwal et al. (2012) demonstrated a positive relationship between work engagement and innovative behavior in their research (Kong & Li, 2018).

Based on these studies, the following hypothesis is proposed.

H3: Work engagement significantly affects innovative behavior.

Agarwal et al. (2012) analyzed managers in India's service sector and found that work engagement was positively correlated with innovative behavior, while negatively correlated with turnover intentions. Moreover, work engagement mediated the relationship between the leader-member exchange and innovative behavior.

Similarly, Agarwal (2014), in her study on managers, found that work engagement impacted employees' innovative behavior. Yean et al. (2016) investigated academics in Malaysian public universities and found a relationship between work engagement and innovative behavior. Academics with high work engagement were inclined to enhance their learning motivation, which, in turn, fostered innovative behavior. Learning goal orientation was identified as a significant mediator explaining the relationship between work engagement and innovative behavior.

Abun et al. (2021), examining faculty members in Malaysia, established that organizational climate was positively linked to work engagement. This finding highlights the necessity for managers to improve the organizational climate to enhance employees' engagement and group commitment. Decreased engagement may lead to lower productivity, reduced product quality, diminished profits, and failure to achieve organizational goals, ultimately undermining competitive advantage.

We have developed a unique model with an intermediary relationship. This mediating relationship was examined in addition to the fundamental relationship between the independent and dependent variables, leading to the development of the following hypothesis:

H4: Work engagement mediates the relationship between organizational climate and innovative behavior.

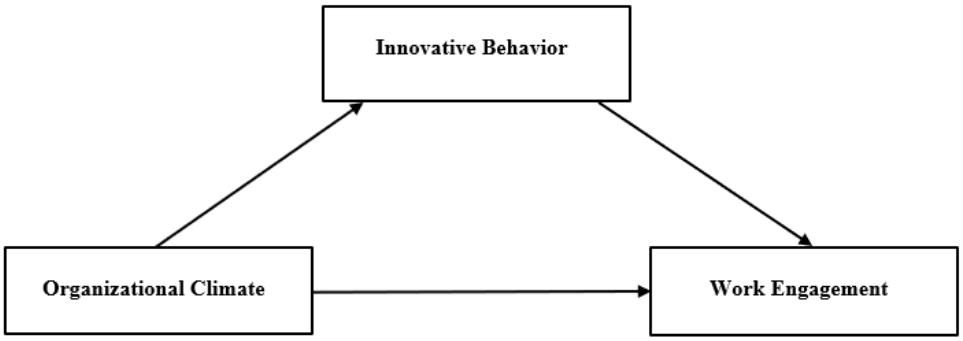
Methodology

This study aims to develop and test a suitable model to determine the mediating role of work engagement in the relationship between organizational climate and innovative behavior. Additionally, this study seeks to identify methods recommended to organizational management for establishing an organizational climate conducive to innovation and fostering work engagement, both of which are critical in promoting employees' innovative behaviors.

Figure 1 shows the model we intend to test.

Figure 1

Research Model



The research population consists of companies listed under the "New Product Development and Innovation" category in Capital Magazine's "Most Admired Companies" Survey 2022. 13 companies were included in the study, and survey responses were collected from departments such as information technologies, production technologies, R&D, business development, product development, and innovation. The data collection method used in this study is a survey. A total of 335 employees participated in the survey.

The data collection method used in this study was a survey. The scales used were translated into Turkish from their original languages for application in the study. The scale developed by Montes et al. was used to measure the organizational climate. Montes et al. (2004) conceptualized organizational climate across five dimensions: "support/sincerity, pressure, cohesion, intrinsic recognition, and impartiality". The support dimension consists of four items: pressure comprises three items, cohesion includes four items, intrinsic recognition is measured with two items, and impartiality also includes two items. To assess employees' levels of innovative behavior, the "Innovative Work Behavior (IWB)" scale developed by Janssen (2000) was utilized, which is structured as a unidimensional scale. Work engagement was measured using the "Utrecht Work Engagement Scale (UWES-9)", which evaluates three dimensions: "vigor, dedication, and absorption". The dimensions also consist of three items each.

This study was approved on ethical grounds by the Ethics Committee for Social and Human Sciences Research at Istanbul University (Decision dated 06/20/2022, No. 954307).

Research Findings

In this study, data were analyzed with SPSS and AMOS programs. The demographic characteristics of the participants are presented in Table 1.

Table 1

Demographic Characteristics of the Participants

Demographics		N	Percentage
Gender	Male	176	52.5
	Female	159	47.5
Age	21-31	83	24.8
	31-40	164	49.0
	41-50	83	24.8
	51-60	5	1.5
Education	Bachelor's degree	229	68.4
	Graduate degree	100	29.9
	Postgraduate	6	1.8
Length of employment	Less than 1 year	43	12.8
	1-3 years	108	32.2
	4-6 years	76	22.7
	7-9 years	66	19.7
	More than 10 years	42	12.5

Exploratory factor analysis (EFA) was conducted to evaluate the validity of the scales used in this study.

The analysis for the organizational climate (OC) scale revealed a three-factor structure, which explains 68.34% of the total variance (Table 2). Montes et al. (2004) originally conceptualized organizational climate across five dimensions: supervisor support, pressure, cohesion, intrinsic recognition, and impartiality. However, because of the EFA conducted in this study, the scale was found to have a three-dimensional structure. This deviation from the original structure is attributed to the context of the study in Turkey and the differences in the sample. Specifically, the dimensions of supervisor support, intrinsic recognition, and impartiality were combined under a single factor. This newly combined factor was renamed Positive Managerial Behavior (PMB) to better reflect its nature.

Table 2

Organizational Climate Scale Factor Structure and Reliability Coefficients

Factor	Item	Factor loads	Variance rate	Cronbach's Alpha
Positive Managerial Behavior	"My boss backs me up and lets me learn from my mistakes."	0.848	33.217	0.915
	"I can count on my boss to help me when I need it."	0.808		
	"My boss is quick to recognize good performance."	0.780		
	"My boss is easy to talk to about job-related problems."	0.778		
	"My boss uses me as an example of what to do."	0.748		
	"My boss is interested in me getting ahead in the company."	0.725		
	"My boss does not play favorites."	0.686		
	"If my boss terminates someone, the person probably deserved it."	0.667		
Cohesion	"People pitch in to help each other out."	0.833	20.239	0.883
	"People take a personal interest in one another."	0.826		
	"People tend to get along with each other."	0.823		
	"There is a lot of 'team spirit' among people."	0.780		
	"I have too much work and too little time to do it in."	0.830	14.886	0.791

Factor	Item	Factor loads	Variance rate	Cronbach's Alpha
Pressure	"I feel like I never have a day off."	0.822		
	"Too many employees at my level get 'burned out' by the demands of their jobs."	0.785		

KMO=0.907; Bartlett's Test (x2=2992.614; p <0.001)

In the EFA conducted for the innovative behavior (IB) scale, items 7 and 9 were found to load onto two different factors. Because having an item associated with more than one factor is not acceptable for factor analysis, and if the difference between the factor loadings is less than 0.1, the item should be removed. Consequently, items 7 and 9 were excluded from the scale. After these adjustments, a two-factor structure emerged. These two factors together explain 74.29% of the total variance (Table 3).

The IB scale, originally developed by Janssen (2000), is structured around three core dimensions: Idea generation, idea promotion, and idea realization. However, in this study, the EFA revealed a two-dimensional structure, diverging from the original scale. Like the organizational climate scale, this difference is attributed to the cultural and contextual differences arising from the study being conducted in Turkey and the characteristics of the sample.

Table 3

Innovative Behavior Scale Factor Structure and Reliability Coefficients

Factor	Item	Factor loads	Variance rate	Cronbach's Alpha
Idea generation	"Creating new ideas for difficult issues"	0.845	38.496	0.865
	"Searching out new working methods, techniques, or instruments"	0.840		
	"Generating original solutions for problems"	0.834		
	"Introducing innovative ideas into the work environment in a systematic way"	0.616		
Idea promotion	"Making important organizational members enthusiastic for innovative ideas"	0.888	35.787	0.842
	"Mobilizing support for innovative ideas"	0.821		
	"Getting approval for innovative ideas"	0.779		

KMO=0.859; Bartlett's Test (x^2=1278.502; p<0.001)

The exploratory factor analysis (EFA) for work engagement resulted in a two-factor structure. These two factors explain 74.26% of the total variance. In the original scale, work engagement consists of three dimensions: "vigor, dedication, and absorption". Each of these dimensions is measured by three items. However, in this study, Items related to vigor and dedication combined to form the first factor, and items under absorption constituted the second factor (Table 4).

Table 4

Work Engagement Scale Factor Structure and Reliability Coefficients

Factor	Item	Factor loads	Variance rate	Cronbach's Alpha
Vigor/ dedication	"At my work, I feel bursting with energy."	0.877	51.160	0.927
	"At my job, I feel strong and vigorous."	0.871		
	"I am enthusiastic about my job."	0.870		
	"When I get up in the morning, I feel like going to work."	0.852		

Factor	Item	Factor loads	Variance rate	Cronbach's Alpha
	"My job inspires me."	0.835		
	"I am proud of the work that I do."	0.669		
	"I feel happy when I am working intensely."	0.613		
Absorption	"I am immersed in my work."	0.900	23.097	0.787
	"I get carried away when I am working."	0.853		

KMO=0.874; Bartlett's Test (x^2=2118.776; p<0.001)

Confirmatory factor analysis (CFA) was performed in line with the factors formed as a result of EFA.

The CFA for the organizational climate scale, which was structured with 15 items across three factors, involved one modification process. The model fit indices were as follows:

- χ2/df=2.559
- GFI=0.918, NFI=0.928, IFI=0.955
- TLI=0.944, CFI=0.954
- RMSEA=0.068, SRMR=0.045

All indices were within acceptable ranges. Additionally, all path coefficients were significant (p<0.001), and standardized beta coefficients were above 0.667.

The CFA for the innovative work behavior scale, comprising 7 items across two factors, also involved a modification process. The model fit indices were:

- χ2/df=3.823
- GFI=0.965, NFI=0.964, IFI=0.974
- TLI=0.953, CFI=0.973
- RMSEA=0.072, SRMR=0.048

All model fit indices were within acceptable ranges. Path coefficients were significant (p<0.001), and standardized beta coefficients were above 0.710.

For the work engagement scale, with 9 items across two factors, one item's (A1) standardized path coefficient exceeded 1 (1.089). Since path coefficients should be between 0 and 1, A1 was excluded. Consequently, A2, the other item under the same factor, was also removed to maintain factor validity. As a result, a unidimensional structure consisting of 7 items was formed. Following three modifications, the model fit indices were as follows:

- χ2/df=2.282
- GFI=0.979, NFI=0.986, IFI=0.992
- TLI=0.985, CFI=0.992
- RMSEA=0.062, SRMR=0.018

All indices fell within acceptable ranges, and all path coefficients were significant (p<0.001) with standardized beta coefficients above 0.665.

"Structural equation modelling (SEM)" was used to test the proposed model and hypotheses. The first stage of the analysis investigated the direct effects between the independent variable (organizational climate), the dependent variable (innovative behavior), and the mediating variable (work engagement), including the total effect of organizational climate on innovative behavior. In the second stage, the mediating

role of work engagement in the relationship between organizational climate and innovative behavior was examined. The bootstrap method was used in this analysis so that new observation sets are created by resampling the original dataset, and statistical computations are performed using these new datasets. This approach corrects for biases and skewness in the distribution, leading to more reliable results.

Table 5 presents the fit indices of the model. All the obtained model fit indices fall within the acceptable range for a good fit.

Table 5

Fit Indices of the Model

Fit Indices	Good Fit	Acceptable Fit	Obtained Value
GFI	≥95	≥90	1.000
NFI	≥95	≥90	1.000
IFI	≥95	≥90	1.000
CFI	≥95	≥90	1.000
SRMR	≤0.05	≤0.08	0.000

According to Table 6, the direct effect of organizational climate on innovative behavior was significant. The organizational climate was found to have a positive effect on innovative behavior (β=0.516; p<0.001). Organizational climate explains 41% of the variation in innovative behavior (R^2=0.410).

Table 6

Direct and Total Effect Results of the Model

	β	SE	t	p	R^2
Direct effect					
OC– > IB	0.516	0.059	5.690	**<0.001**	0.410
WE– > IB	0.253	0.040	3.627	**<0.001**	0.480
OC– > WE	0.573	0.072	9.127	**<0.001**	0.329
Total effect					
OC – > IB	0.645	0.059	6.767	**<0.001**	0.416

OC: Organizational Climate, IB: Innovative Behavior, WE: Work Engagement.

When work engagement was included as a mediating variable, organizational climate was found to have a positive effect on work engagement (β=0.573; p<0.001). Work engagement was also found to have a positive effect on innovative behavior (β=0.253; p<0.001). When the total effect of organizational climate on innovative behavior was examined, the total effect (0.645) was greater than its direct effect (0.516). This indicates that the effect of organizational climate on innovative behavior occurred through work engagement as a mediator.

Therefore, Hypotheses H1, H2, and H3 are supported.

According to the indirect effect results of the model, the indirect effect of organizational climate on innovative behavior through work engagement was found to be significant (β=0.145; 95% GA [0.042-0.154]). When the lower and upper confidence intervals corresponding to the value of the indirect effect do not cover zero (0), the indirect effect is accepted as significant, and the mediation effect is assumed to occur (Table 7).

Table 7
Indirect Effect Results of the Model

Indirect effect	β	Confidence intervals		P
		Lower bound	Upper bound	
OC – >WE – > IB	0.145	0.042	0.154	0.005

Therefore, Hypothesis H4 is supported.

Discussion and Conclusion

Increasing competition, the globalization of businesses, and continuous changes in markets and technology are forcing companies to consider different methods and strategies to gain a competitive advantage. Innovation is seen as one of the key ways to achieve competitive advantage and organizational success by many businesses. It is well-known that when employees believe that innovative behaviors in their job roles and units will lead to improvements in performance or efficiency, the expected outcomes are positive. In recent years, companies have placed a greater emphasis on developing innovative capabilities, particularly in management, production processes, and product and service development, to gain a competitive advantage. Innovation is a powerful source for achieving competitive advantage.

Given the necessity for employees to be innovative to facilitate innovation activities at the organizational level, there is growing interest among researchers in the factors that influence employees' innovative behaviors and the conditions under which they are likely to exhibit them. When examining the relationship between innovative behavior and work engagement, employees' engagement is expected to increase their innovative behavior, which in turn will contribute to the organization's competitive advantage. Given that both elements are crucial for achieving organizational goals, it is important to analyze the organizational factors that influence employees' work engagement and innovative behavior.

This research was conducted in organizations listed as "Most Admired Companies in the Business World," identified through the opinions of professionals in the relevant sector, specifically in the category of new product development and innovation. The reason for selecting these organizations was that, due to their size, the organizational climate is more distinctly perceived, and the likelihood of employees exhibiting innovative behaviors is higher. Employees in these organizations demonstrated innovative behaviors, leading to innovative outputs, which were well-received by the managers in the relevant sectors.

Since it was considered more meaningful for the research to involve employees who had experienced the process of innovative behavior, the study was conducted in the information technology, production technology, R&D, business development, product development, and innovation departments of these organizations. A key finding of the study was the difference in the original structure of the organizational climate scale used by Montes et al., which was restructured into three dimensions, with one of the dimensions renamed as "positive managerial behavior". In recent years, there has been an increasing interest in positive organizational behavior, including concepts such as positive leadership and positive management.

An additional difference was that the scale used in the research was translated into Turkish from its original version, and it was noted that some of the items, after translation, were found to be very similar in meaning. After exploratory and confirmatory factor analyses, the scale was found to be unidimensional. Another scale used in the research was Janssen's (2000) innovation behavior scale, which was originally developed as a three-dimensional model but was used as a unidimensional scale in this study.

In this study, organizational climate was found to have a positive effect on innovative behavior. As positive managerial behaviors in organizational climate increase, so do idea generation and support for ideas. Additionally, as harmony within the organization increases, employees are more likely to support innovative

ideas. The research also revealed that organizational climate has a positive effect on work engagement. As positive managerial behaviors increase within the organization, work engagement also increases, while perceived pressure within the organization decreases work engagement, although the effect was observed to be minimal. Furthermore, an increase in work engagement was found to lead to increased innovative behavior. As employees' work engagement increases, so do their behaviors related to idea generation and support for ideas, which in turn leads to increased innovative outputs for the organization.

The analyses made in this study revealed that organizational climate influences innovative behavior through the mediation of work engagement. The mediating role of work engagement highlights the importance of work engagement in fostering employees' innovative behavior. The study found that when employees perceive supportive managerial behavior and organizational harmony within their organizations, their work engagement increases, which in turn provides the necessary motivation to generate innovative ideas and seek support for the ideas they produce.

The effects of the variables studied should be considered for application in various sectors and with different sample sizes. This would allow for comparing and testing the findings with other research results. In this context, the following suggestions may be offered to researchers interested in the topic: the variables in the research model can be explored in different sectors, comparative studies can be conducted between the manufacturing and service sectors, and while there have been limited studies focusing on binary variables such as organizational climate-innovative behavior, organizational climate-work engagement, and innovative behavior-work engagement, it may be worthwhile to focus on these individual relationships in a separate study. This would enable the generalization of the findings and fill gaps in the existing literature.

This study primarily aimed at testing theory-driven hypotheses; the findings offer important implications for managers. Based on the results of the study and considering the existing literature, the following suggestions can be made to managers for increasing innovative behavior and work engagement: increase perceived positive managerial behaviors in the organization, improve harmony within the organization, provide necessary conditions for employees to generate innovative ideas, and create organizational activities to enhance employees' work engagement.

Although this study offers valuable theoretical and practical insights, it is not without limitations that present opportunities for future research. First, the study is limited in terms of scope and application, and also faces constraints regarding cost and time. Second, the validity and reliability of the data collected through surveys are limited by the methodology used during data collection. Additionally, the study is confined to the responses provided by the employees who participated in the survey. Third, the data is limited to the companies involved in the research. Lastly, the variables studied may change over time, meaning that the findings reflect a specific period and may not be universally applicable across all timelines.

Despite these limitations, the findings of this study provide vital insights for theory, researchers, and organizations concerning innovative behavior, organizational climate, and work engagement.

Ethics Committee Approval	This study was approved on ethical grounds by the Ethics Committee for Social and Human Sciences Research at Istanbul University (Decision dated 06/20/2022, No. 954307).
Informed Consent	Informed consent was obtained from the participants.
Peer Review	Externally peer-reviewed.
Author Contributions	Conception/Design of study: Ş.G., E.D.; Data Acquisition: Ş.G., E.D.; Data Analysis/Interpretation: Ş.G., E.D.; Drafting Manuscript: Ş.G., E.D.; Critical Revision of Manuscript: Ş.G., E.D.; Final Approval and Accountability: Ş.G., E.D.
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