

## **Organizational climate in public organizations: A systematic review**

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### **ABSTRACT**

Organizational climate consists of employees' interpretations of different organizational factors. Employee behavior and productivity are influenced by the climate. Therefore, organizational climate research is a powerful tool for people management. In this sense, this research aims to investigate the organizational climate measurement instruments used in scientific research carried out in public bodies, the dimensions analyzed, the related variables, as well as the main results found in the studies. To this end, a systematic review of the literature found in the Scopus and Web of Science databases was carried out. The results showed a diversity of tools used to assess the organizational climate, and the researcher is responsible for choosing the most appropriate instrument for the organizational environment under analysis.

**Keywords:** Public administration, Organizational climate, Organizational climate diagnosis, Climate of public organizations.

### **INTRODUCTION**

Organizational climate studies began in the 1960s, when Forehand and Gilmer, Pelz and Andrews, and Litwin and Stringer began research in the United States, inspired by McClelland's studies (Mattos, 2019).

The definition of the construct is complex, as there is a diversity of concepts found in the literature. According to Luz (2003), climate is the psychological atmosphere that surrounds a company's relationship with its employees at a given time, and reflects the mood or degree of satisfaction of a company's employees. From Ferreira's (2016) point of view, organizational climate consists of employees' perceptions of various organizational factors. According to López (2021), organizational climate refers to the work environment and the way in which this environment can impact on the behaviour of the members of an organization.

Diagnosing the organizational climate is an important tool to help managers understand human behavior in organizations. To carry out this diagnosis, organizational climate surveys are carried out with the company's employees. The climate survey is like a thermometer that assesses how employees perceive work-related factors such as relationships with colleagues, benefits, remuneration and other dimensions (Souza, 2014).

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The information obtained from organizational climate surveys can help managers draw up policies aimed at employee satisfaction and increasing organizational efficiency and effectiveness. The creation of climates aimed at meeting personal needs and, at the same time, institutional needs, will have significant effects on the motivation and satisfaction of individuals, improving performance in tasks and the achievement of the organization's objectives (Santos, 2021).

A systematic literature review is a type of research that follows specific protocols. In this way, it presents the bibliographic databases consulted with the respective search strategies employed, processes for selecting scientific articles, with their inclusion and exclusion criteria and analysis (Galvão; Ricarte, 2020). Given the limited number of studies on organizational climate in the Brazilian public sector, it is important to carry out a systematic review to analyse how research in this area has been developed in national and international public bodies.

This systematic review will investigate the organizational climate measurement instruments used in scientific research carried out in public organizations, the dimensions that these instruments analyzed, the variables that were related to organizational climate and the results found. In order to gather this information, the following research questions will be addressed: 1 - Which Organizational Climate measurement instruments were used in the surveys? 2 - Which dimensions of Organizational Climate were analyzed? 3 - If Organizational Climate is related to other variables, which ones were used? 4 - What were the main results found? Understanding these aspects can help in the planning of organizational climate studies in public bodies.

Therefore, the contribution of this study is twofold. Firstly, by providing a comprehensive overview of current theories and studies on the subject of Organizational Climate. Secondly, by contributing to the development of empirical research into organizational climate in public bodies, as well as scientific studies in the area, by presenting information on the methodology used, as well as the results, limitations and research gaps found. The results of this study could help managers and researchers in the area to define climate research instruments or support the development of original climate scales.

This article is divided into 6 parts: Introduction, Objective, Methodological Procedures, Results and Discussion, Limitations and Future Research and Conclusions.

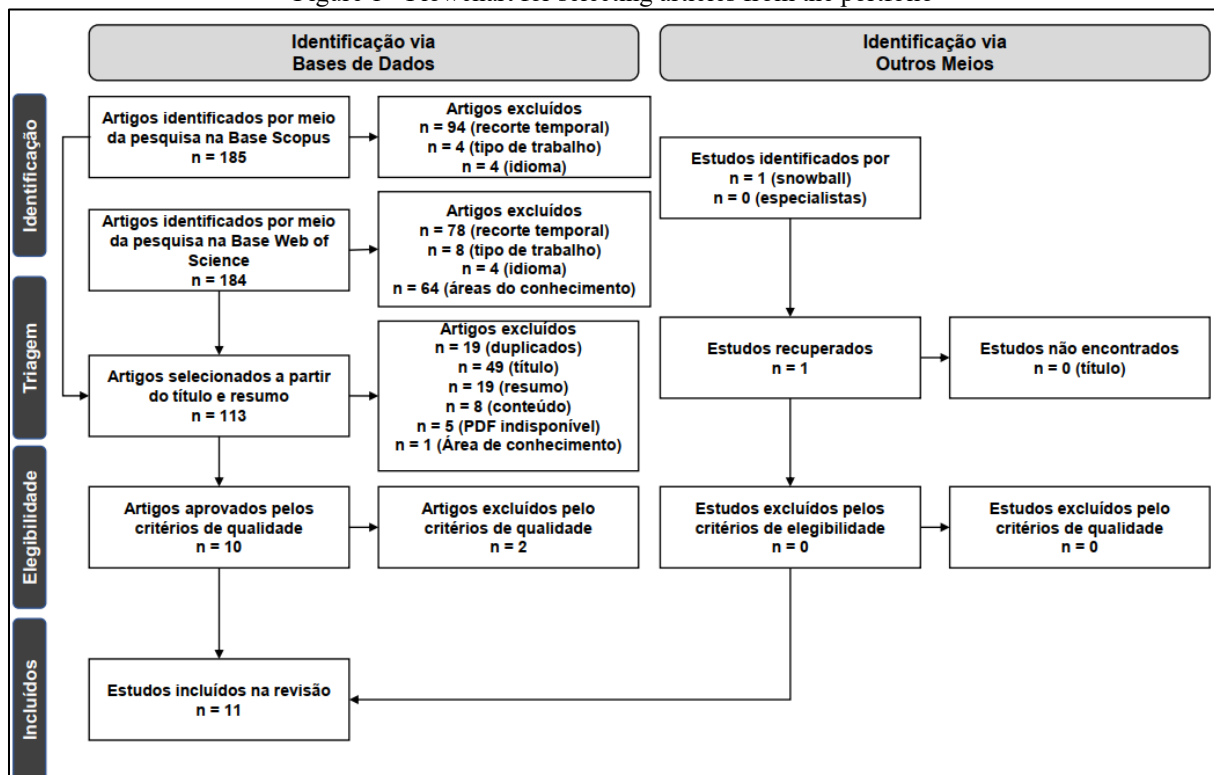
## **OBJECTIVE**

To investigate the organizational climate measurement instruments used in scientific research carried out in public organizations, the dimensions that these instruments analyzed, the variables that were related to the organizational climate and the results found.

## METHODOLOGICAL PROCEDURES

The systematic literature review was conducted using the structure proposed in the Parsifal virtual environment (2023) which includes steps for selecting research questions, selecting databases and article sources, choosing search terms, applying practical screening criteria, applying methodological screening criteria, conducting the review and synthesizing the results. The indexed databases used were Scopus and Web of Science. The search covered the period from January 2018 to April 2023 and was limited to academic articles published in English, Spanish and Portuguese. The search terms were applied to abstracts, keywords and titles, and only journal articles were considered. The search *string* used was: ("employees" OR "public servants" OR "worker") AND ("corporate climate" OR "corporate environment" OR "organizational climate" OR "organizational psychology") AND ("academy" OR "college" OR "government agency" OR "institution" OR "public administration" OR "public organization" OR "university") AND ("analysis" OR "measurement" OR "report" OR "survey"). The search resulted in 113 articles which, after applying the eligibility and quality criteria, were reduced to 10 articles. Figure 1 shows all the stages of article evaluation and the quantities excluded in each one. The references in the selected articles were also reviewed manually to identify other relevant publications in a process known as *snowballing*. Thus, one more article was included which also passed the quality criteria.

Figure 1 - Flowchart for selecting articles from the portfolio



Source: Authors

## RESULTS AND DISCUSSION

### PORTFOLIO

The amount of previously classified articles was submitted to qualification with the aim of selecting which articles could answer important questions for the research through four elaborate questions about Organizational Climate: Is the article widely cited? Is the theoretical framework robust and qualified? Did the study use an instrument to measure Organizational Climate? Are there any gaps / opportunities for research?

At the end of the qualification stage, 11 articles were selected which obtained a final score above the cut-off mark (1.9 points). These articles were listed and their information tabulated. Table 1 shows a sample of which articles exceeded the cut-off score, how many times they were cited in the indexed databases and what the purpose of this text is for the research and how it can add knowledge.

Table 1 Results of article qualification

Article	Quotes			Score	Objective
	(Scopus)	(WoS)	(Google)		
Chiavone, F.B.T <i>et al.</i> (2021)	1	18	1	2,0	Measuring the organizational climate of the ward staff in the intensive care unit of a university hospital in northeastern Brazil.
Dinibutun, S.R. <i>et al.</i> (2020)	6	-	22	3,5	To examine the effect of organizational climate on burnout among teachers at public and private universities.
Huang, S. <i>et al.</i> (2022)	0	-	4	2,0	To investigate and analyze the organizational climate of Chinese university libraries in order to provide references for library management decision-making.
Moslehpour, M. <i>et al.</i> (2018)	29	-	127	2,5	To investigate the missing link between leadership style and job satisfaction among public sector employees in Mongolia.
Pecino, V. <i>et al.</i> (2019)	25	-	76		To analyze the relationship between organizational climate, role stress, burnout and job satisfaction in civil servants.
Seyyedmoharrami, I. <i>et al.</i> (2019)	6	-	30	4,0	To investigate the organizational climate at a university of medical sciences together with organizational commitment and professional burnout among the university's teaching staff.
Silva, R.R. <i>et al.</i> (2021)	1	-	5	2,5	To point out the variables that affect the organizational climate, as well as the satisfaction of public servants belonging to the group studied (work teams in the public management of the government of Minas Gerais).
Souza, Rocha and Mazzo (2018)	1	-	2	2,0	Assess the organizational climate of a public hospital in the state of São Paulo and its relationship with the occurrence of accidents at work involving sharps among nursing professionals.
Trus M. <i>et al.</i> (2019)	17	-	50	3,5	To analyze the connections between organizational culture and climate and

Article	Quotes			Score	Objective
	(Scopus)	(WoS)	(Google)		
					work-related empowerment, and also to present profiles of culture and climate at team and organizational level in seven Lithuanian hospitals.
Vidak, M. <i>et al.</i> (2023)	-	-	-	2,5	To explore how staff and students perceive the organizational climate and its consequences in the university environment.
Yamassaque R.T. <i>et al.</i> (2021)	1	-	-	2,0	To relate the professional satisfaction of the nursing team and the organizational climate in a University Hospital.

Source: Prepared by the authors

## ORGANIZATIONAL CLIMATE MEASUREMENT INSTRUMENTS

The analysis of the instruments used to measure Organizational Climate shows that the studies used different instruments, which is why they will be dealt with individually. The vast majority of the factors were assessed by the interviewees using a Likert scale.

The authors Chiavone *et al.* (2021) opted to apply sociodemographic questionnaires and the Organizational Climate Assessment Scale (CLIMOR). The questionnaire consists of 32 items and is evaluated using a Likert-type scale with answers ranging from 1 (totally disagree) to 5 (totally agree).

Dinibutun *et al.* (2020) applied questions on Organizational Climate adapted from the scales developed by Rogg *et al.* (2001), Koys and DeCotiis (1991) and Eberhardt and Shani (1984). The items were measured on a 5-point Likert scale.

Huang *et al.* (2022) developed a scale to assess the organizational climate of libraries with Chinese characteristics using the Grounded Theory method.

Pecino *et al.* (2019) used a shortened version of the First Organizational Climate/Culture Unified Search 93 (FOCUS-93) questionnaire by Van Muijen *et al.* The version consisted of 12 items and used a 7-point Likert scale ranging from 1 (strongly disagree) to 7 (strongly agree).

Seyyedmoharrami *et al.* (2019) applied Sussmaan and Deep's (1989) questionnaire to assess organizational climate, which contains 20 descriptive words and is scored on a Likert scale from strongly agree to strongly disagree.

Silva *et al.* (2021) put together a questionnaire based on the work done by Mol *et al.* (2010) in a study of the State Secretariat for Administration and Human Resources of Rio Grande do Norte.

Souza, Rocha and Mazzo (2018) used the validated and adapted version of the Safety Attitudes Questionnaire (SAQ), by Sexton *et al.* (2006), carried out by Carvalho (2011) and called the Safety Attitudes Questionnaire (QAS).



To measure organizational culture and climate, Trus et al. (2018) used the Organizational Social Context (OSC) instrument developed by Glisson & James, 2002. To assess the dimensions of culture and organizational climate, a five-point Likert scale was used, ranging from 1 (not at all) to 5 (very high).

Vidak et al. (2023) opted for an approach of semi-structured qualitative interviews conducted with final year students and staff of the Faculty of Medicine and the Faculty of Letters and Social Sciences at the University of Split, Croatia.

Yamassake, et al. (2021) used the Organizational Climate Scale for Healthcare Organizations (ECOOS) developed and validated by Menezes et al. (2009) to measure the organizational climate in a University Hospital.

## DIMENSIONS OF THE ORGANIZATIONAL CLIMATE

The instruments used in the studies covered various dimensions to investigate the organizational climate, depending on the objective of each study. The dimensions mentioned were: communication, integration and satisfaction, professional development and benefits, ergonomics, working conditions and decision-making process, managerial competence, balanced workload, clarity of task, cohesion among co-workers, ethics and participation, climate for fair management, climate for innovation, climate for personal support, job satisfaction, interpersonal harmony and sense of responsibility, support, goals, innovation and rules, clarity and agreement of purpose, clarity and agreement of roles, satisfaction with rewards, satisfaction and agreement on procedures and effectiveness of communication, structure and physical environment; cooperation and reciprocity in the work environment, participation in decisions, recognition of merit, identification with the institution, controls, functional autonomy, conflicts, remuneration and opportunity and perspective in the institution.

The Organizational Climate Assessment Scale applied by Chiavone et al. (2021) assessed the following factors: communication, integration and satisfaction, professional development and benefits, ergonomics, working conditions and decision-making process.

Dinibutun et al. (2020) investigated the following dimensions: managerial competence, balanced workload, task clarity, cohesion among coworkers, ethics and participation.

Huang et al. (2022) analyzed six categories: climate for fair management, climate for innovation, climate for personal support, job satisfaction, interpersonal harmony and sense of responsibility.

The questionnaire used by Pecino et al. (2019) analyzed the dimensions: support, goals, innovation and rules.

The sub-scales of the questionnaire applied by Seyyedmoharrami et al. (2019) include clarity and agreement of purpose, clarity and agreement of roles, satisfaction with rewards, satisfaction and agreement on procedures and effectiveness of communication.



Silva, et al. (2021) identified the following dimensions: structure and physical environment; cooperation and reciprocity in the work environment; participation in decisions; recognition of merit; identification with the institution; controls; functional autonomy; conflicts; remuneration and opportunity and perspective in the institution.

The Safety Attitudes Questionnaire (QAS) applied by Souza, Rocha and Mazzo (2018) has six domains: Teamwork Climate, Safety Climate, Job Satisfaction, Perception of Stress, Perception of Management and Working Conditions.

The Organizational Social Context instrument used by Trus et al. (2018) analyzed the organizational climate under three dimensions: engagement, functionality and stress. It also assessed culture under the dimensions of proficiency, rigidity and resistance. For both analyses, a five-point Likert scale was used, ranging from 1 (not at all) to 5 (very much).

From the data obtained by Viđak et al. (2023), three main themes stood out: different perceptions and understanding of organizational climate, institutional problems arising from organizational climate, and the organizational effect of personal relationships and behaviors.

The Organizational Climate Scale for Healthcare Organizations (ECOOS) used by Yamassake, et al. (2021) consists of seven dimensions: Leadership, Professional Development, Relationships and Team Spirit, Community Relations, Job Security, Strategy and Remuneration.

## RELATIONSHIP BETWEEN ORGANIZATIONAL CLIMATE AND OTHER VARIABLES

The studies analyzed related the organizational climate to the following variables: ethical leadership, productive work attitudes, burnout, job satisfaction, role stress, organizational commitment, professional burnout, accidents at work, empowerment, and the role of servant leadership.

Dinibutun et al. (2020) examined the effect of organizational climate on burnout among teachers at public and private universities. The results indicated that all dimensions of the organizational climate have a negative influence on teachers' emotional exhaustion.

Moslehpour et al. (2018) investigated the mediating role of organizational climate and work style on the leadership style and job satisfaction of public sector employees in Mongolia.

Pecino et al. (2019) analyzed the relationship between organizational climate, role stress, burnout and job satisfaction in civil servants.

Seyyedmoharrami et al. (2019) studied the relationship between organizational climate, organizational commitment and professional burnout in the teaching staff of a university of medical sciences.



Souza, Rocha and Mazzo (2018) assessed the organizational climate of a public hospital in the state of São Paulo in order to analyze its relationship with the occurrence of accidents at work involving sharps among nursing staff. The results showed no direct relationship between the two variables.

The study conducted by Trus et al. (2019) analyzed the connections between organizational culture and climate and the work-related empowerment of nursing managers in seven Lithuanian hospitals.

Yamassake, et al. (2021) related the job satisfaction of the nursing team with the organizational climate of the University Hospital of the University of São Paulo.

## MAIN RESULTS

Chiavone et al. (2021) concluded that the perception of the organizational climate by the nursing staff of the Intensive Care Unit investigated was low and represented by factors such as: communication, integration and satisfaction; professional development and benefits and the decision-making process. The professional development and benefits factor was considered the lowest.

For Moslehpour, et al. (2018), the results show that organizational climate and work style fully mediate the relationship between leadership style and job satisfaction.

The findings by Dinibutun et al. (2020) showed that the managerial competence and participation dimensions of the organizational climate significantly and negatively influence the level of emotional exhaustion of teacher burnout. The communication and attitudes of managers as well as their behavior towards employees is vital to providing a positive Organizational Climate.

For Huang et al. (2022), the results showed low job satisfaction among university librarians in China, with management weaknesses mainly concentrated in the areas of climate for management fairness and climate for personal support. Although the climate for innovation has begun to be valued by library leaders, it lacks effective policies and support systems. On the other hand, interpersonal harmony and employees' sense of responsibility performed well.

The results found by Pecino et al. (2019) stated that climate is significantly and negatively linked to role stress and that climate significantly and positively influenced job satisfaction. Climate also had a significant and negative influence on burnout.

Seyyedmoharrami et al. (2019) concluded that there is a significant and direct relationship between climate and employee commitment, so that an increase in organizational climate increases organizational commitment. In relation to burnout, there was an inverse relationship with the organizational commitment score. Thus, the higher the organizational commitment, the lower the burnout rate.

The results presented by Silva et al. (2021) indicate that cooperation and reciprocity in the work environment, participation in decisions and recognition of merit (despite the positive evaluation) were not





as well evaluated. The structure and physical environment and functional autonomy were considered positive. Identification with the institution was rated moderately.

The results found by Trus et al. (2018) suggest that nurse managers feel empowered structurally and psychologically when the organizational culture and organizational climate of the workplace are appropriate.

Vidák et al. (2023) found that organizational climate has significant consequences for academic organizations, with early career researchers being more susceptible to the consequences of negative organizational climate. While institutional leadership has a strong influence on organizational climate and can affect work and job satisfaction, personal morality is the most important factor in everyday and ethical decision-making.

According to Yamassake et al. (2021), the results proved the correlation between organizational climate and job satisfaction, so that the higher the organizational climate score, the higher the job satisfaction score. In addition, individual characteristics alter the worker's perception of satisfaction.

## **LIMITATIONS AND FUTURE RESEARCH**

The study found three limitations. The first is that this study was limited to organizational climate surveys carried out in public bodies. Therefore, depending on the purpose, surveys carried out exclusively in private organizations could be evaluated in future research. The second is that the studies were conducted in organizations working in different areas of public management and located in countries with different cultures. Although this research can guide future studies, the particularities of the internal and external environment of each organization to be studied must always be taken into account. Finally, the third limitation was the fact that most of the studies selected used structured questionnaires for quantitative research, with the exception of the study carried out by Vidák (2023). This makes it difficult to formulate proposals to improve the organizational climate at the institution surveyed. Future research could therefore employ semi-structured interviews, using open-ended questions to gain a deeper understanding of the interviewees' perceptions.

## **CONCLUSIONS**

This research presented a survey of up-to-date studies on the subject of organizational climate to serve as a source of information for organizations and researchers who intend to carry out research with this focus. It is hoped that the work will contribute to the definition of research strategies and empirical studies, helping in the definition or construction of measurement instruments and in the definition of dimensions and variables to be researched.



Based on the literature review, it was possible to verify the influence of the organizational climate on employee commitment and job satisfaction. Various instruments were used to measure the climate in the studies, each consisting of different dimensions. In view of this, the researcher will have to choose the one that best suits the organizational environment being researched, and may also make adaptations or construct an original climate scale. There is also the option of using semi-structured interviews to delve deeper into the climate. Future studies could focus on surveys carried out exclusively in Brazilian public bodies.



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