

# **Unlocking Creativity: Exploring the Impact of Organizational Climate on Employee Innovation in Public Institutions**

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## **Abstract**

This article aimed to evaluate the influence of organizational climate on the creativity at work of employees of a Pakistani public institution. Three scales evaluating the two sub-study dimensions were administered to a random sample of 103 National institutes' employees. The results show that the study subjects positively perceive the organizational climate. They also offered a high degree of creativity in performing their work tasks. Positive and significant regression coefficients were established between the organizational climate's characteristics and the employees' creative potential. Finally, four of the six organizational climate dimensions positively influenced creativity at work.

**Keywords:** organizational climate, creativity at work, creative potential, workload, autonomy.

## **Introduction**

Studies in human resources management have shown that an organization's sustainability and growth depend on internal and external factors. Raies (2023) asserts, in this regard, that the effects of external factors significantly influence the survival and profitability of organizations compared to internal factors. In the list of external factors, the work

environment seems to be the most decisive for the organization's survival and the well-being of employees (Rafique and Mehmood 2022). Its perception by workers, commonly called organizational climate, also turns out to be a determinant of the effectiveness of both organizations and employees. A solid organizational performance manifests its effects on the organization (Bashir, Butt et al. 2023). At the employee level, its products generally affect the commitment, satisfaction, performance, and creativity of workers. (Hyland, Islam et al. 2023).

Studies have shown, concerning the relationship between organizational climate and employee engagement that employees are increasingly involved in an environment conducive to their development, that is to say, one that allows them to evolve and progress following their objectives (Butt, Waseem et al. 2013). The more favorable the organizational climate, the stronger the employee commitment (Rafique, Mahmood et al. 2022, Bengono 2023).

The same conclusions were drawn in terms of job satisfaction and organizational climate. Muhirwa, Shen, et al. (2023) revealed that a positive perception of the corporate environment positively influences job satisfaction. Along the same lines, Raies (2023) concluded that a positive organizational environment would also predict solid work performance. Regarding the relationship between the corporate environment and creativity, it has been shown that creativity is an essential resource for the survival and prosperity of an organization (Rafique, Rehman et al. 2017). Hyland Islam et al. (2023) affirms, on this subject, that the sustainability of organizations in a complex environmental context depends on their ability to create and innovate to overcome specific challenges (Rafique and Mehmood 2022, Ongo Nkoa and Song 2023).

The success of an organization is conditioned mainly by its ability to innovate. Thus, the organization is, more than ever, called upon to be creative and innovative to meet the needs of its customers and remain competitive in the market (Abonyo 2023). The need for creativity in an organization is also justified by its impact on professional performance. Studies in this context have shown that innovation allows for higher individual performance and increases the organization's productivity. In this context, it is not surprising that the organizational climate influences creativity because productivity in an organization is highly dependent on the corporate environment (Balemba 2023).

Two types of research have been carried out to specify the meaning of this influence. The first relates to the relationship to be established between the creative work climate and the expression of organizational creativity. The second proposes to specify the relationship between the components of the corporate environment and organizational innovation. From the conclusions of the first type of research, it has been shown that a creative work climate is a guarantee for the expression of organizational creativity (Raies 2023).

In this context, Shearer, Nava et al.(2023) concludes that the creative organizational climate is often a factor that largely influences the company's creativity and capacity for innovation. In the same vein, an intra-group creative climate (marked by cohesion and conviviality between members, good collaboration, and cooperation in the sharing of information) positively impacts the creative performance of the organization (Abonyo 2023, Balemba 2023, Ongo Nkoa and Song 2023, Raies 2023).

The second type of study recognized that certain aspects of the organizational climate positively influenced creativity while others impacted it negatively. The scientific literature insists on the influence of three work environment characteristics on creativity, management, workload, and professional support (Irengé, Bushenyula et al. 2023). Moreover, it has been

shown that a democratic and participatory mode of control is favorable to creativity, while an autocratic manner strongly inhibits it (Kala Kamdjoug 2023).

Irengé, Bushenyula et al. (2023) states that professional support, having a stimulating job, and autonomy in one's professional activity favor the expression of creativity in an organization. Alongside these three characteristics, some studies have highlighted the significant role of work incentives and autonomy on employees' creativity at work. In the Democratic Republic of Congo (DRC), studies linking the organizational climate and ingenuity are rare. This is why we propose to verify the meaning of the relationship between the corporate environment and creativity by taking as a framework of study the National Institute of Professional Preparation, INPP, in the acronym (Simbeko, Nguézet et al. 2023).

## **Methodological framework**

### ***1.1. Study participants***

The population of the study comprises all the trainers working in the various services of the technical division of the Provincial Directorate of the National Institute of Professional Preparation, the total number of which amounts to 286 subjects. From this population, a simple random sample of 103 trainers was randomly drawn. This sample varies according to three socio-demographic variables, sex, age, and seniority at work (Hyland, Islam et al. 2023).

Concerning sex, the sample comprises 88 men against 15 women. In terms of age, there are 56 subjects aged 25-34, 31 aged 35-44, 13 aged 45-54, and 3 subjects aged 55-64. Finally, regarding seniority, the sample comprises 83 issues with 0-9 years of seniority, 16 with 10-19 years, and 4 with 20-29 years.

### ***1.2. Data collection instruments***

Data were collected using a self-administered questionnaire consisting of three scales. This is adapted from Parker et al. of Jones and James' Organizational Climate Questionnaire, (Raies 2023) Creative Potential Scale, and the Employee Creativity Scale of Tierney (Edeh, Zayed et al. 2023).

To allow the subjects to express their position, the authors provided a five-foot Likert scale that ranges from "Strongly disagree" to "Strongly agree" for the rankings of creativity at work. The organizational climate questionnaire underwent an adaptation consisting of the iteration of certain sub-dimensions unrelated to our work. Of the 15 cents dimensions of the questionnaire, we kept only three dimensions whose previous studies have demonstrated links with creativity (autonomy, workload, and organizational support) We then added items assessing management style and work incentives. The two aspects of the management mode were designed by us, drawing inspiration from the work of Likert. The dimension of work incentives was taken from the abridged version of Roy's work climate questionnaire. To express their point of view, the subjects are asked to say if they disagree (T.D.), disagree (D), agree (A), and agree (TA.) with the different statements of the scales. To test the metrological quality of these scales, we used Cronbach's alpha coefficient. This coefficient makes it possible to assess the internal homogeneity of the scale and indirectly provides information on its validity.

The different values of Cronbach's alpha obtained at the organizational climate level (autonomy: .71; workload: .72; corporate support: .70; autocratic management mode: .71; democratic management mode: .73; work incentives) are above the acceptability threshold (.74). The same observation was made for creativity at work (creative potential: .76 and

creativity at work: .72). These results allow us to conclude that the different items of the scales of organizational climate and creativity at work indeed evaluate the various dimensions of these two constructs.

## Results of the study

### 2.1. Overall results

The following tables present the results of our study globally, taking into account specific statistical indices of central tendency and dispersion. These results are shown in two tables according to the research themes.

**Table 1:** Overall presentation of the results related to the organizational climate (N=103)

Statistical indices	Or	LW	OB	AM	DM	IW
Average (M)	2.73	1.81	3.07	2.85	3.01	3.18
Variance (p <sup>2</sup> )	0.41	0.43	0.39	0.24	0.59	0.42

#### Legend

M: Aut: Autonomy, LW: Load at Work, OB: Organizational Behaviour, AM: Autocratic Management, DM.: Democratic Management, IW : incentive to work.

To facilitate the interpretation of the study's results, we have used an interpretation scale that makes it possible to situate the means of the subjects at the different dimensions of the study. This scale includes the following four levels: (1) 1-1.4: very negative perception or very low creativity; (2) 1.5-2.4: negative perception or low creativity; (3) 2.5-3.4: positive perception or vital creativity and (4) 3.5-4: very positive perception or powerful creativity.

Reading Table 1 indicates that the average scores of the subjects of the study on the different dimensions of the organizational climate (autonomy, workload, administrative support, autocratic management mode, democratic management mode, work incentive) are respectively: 2.83; 1.91; 3.17; 2.95; 3.11 and 3.08. Two observations can be made by situating these averages on the interpretation scale. The first finding relates to the average workload, which is in the range of 1.5-2.4.

The conclusion from this observation is that the workload at the INPP Provincial Directorate is balanced and considers the workers' specific capacities. Thus, the workloads do not permanently put our study subjects under stress. Indeed, although the statements of this dimension are presented in affirmative form, their interpretation must be reversed because they evoke negative situations. Thus, the 1.5-2.4 corresponds to a positive or balanced perception of workload (Shearer, Nava et al. 2023).

The second observation indicates that the average scores for autonomy, organizational support, autocratic management, democratic management and work incentive are 2.5-3.4, corresponding to a positive perception. In other words, the study's subjects believe they have autonomy in carrying out tasks at work. The same issues also state that they benefit from the organization's support in case of problems. They still claim to enjoy a democratic mode of management in alternation because, at another time, it is authoritarian. As if to say, professional situations require a participatory management style as much as the context requires more firmness, all for achieving organizational objectives (Kirk, Green et al.).

Based on the averages of these two management modes, it can be deduced that the laissez-faire management mode does not apply to the Provincial Directorate of the INPP. From all the above, we can conclude that the work environment at the National Institute of Professional Preparation, and in all its dimensions, is perceived positively by the employees.

**Table 2:** *Presentation of the overall results relating to creativity (N=103)*

Statistical indices	Creative Potential	Creativity at work
Average (M)	3.29	3.02
Variance (p <sup>2</sup> )	0.14	0.20

From reading Table 2, the averages for creative potential and creativity at work are respectively 3.29 and 3.02. By situating these averages in the interpretation scale, they are all in the range of 2.5-3.4, corresponding to a strong creative potential and a strong use of creativity in their daily professional tasks. In other words, the study subjects have great creative potential, and all resort to creativity in solving the problems they encounter in their professional activities (Glazer, Shirrell et al. 2023).

## 2.2. Analysis of the linear regression between organizational climate and creative potential

After meeting this test's prerequisites, we used simple linear regression to determine the relationship between creative potential and organizational climate.

**Table 3:** *Linear regression between creative potential (dependent variable) and organizational climate (independent variable)*

		Creative potential				
Dimensions of Climate Organizational		Non-standardized coefficients		Standardized coefficients	t	Say
		B	Error standard	Beta		
1	Autonomy	0.21	0.06	0.18	3.66	0.00**
2	Workload	0.16	0.05	0.09	3.16	0.002**
3	Organizational Behaviour	0.17	0.05	0.36	3.07	0.003**
4	Autocratic management	0.17	0.08	0.15	2.05	0.04*
5	Democratic Management	0.15	0.05	0.14	3.17	0.002**
6	work Incentive	0.26	0.06	0.24	4.18	0.00**

F= 8.23 (p< 0.01), R<sup>2</sup> adjusted= 0.34; \* p < .05; \*\* p < .01;

From the results recorded in Table 3, the regression coefficients between all the dimensions of the organizational climate and the creative potential are significant. Thus, the different sizes of organizational climate explain 34% (adjusted R<sup>2</sup>) of the observed variance in creative potential. The order of importance of the influence of the dimensions of the organizational environment on the creative potential is as follows: (1) organizational support ( $\beta = 0.36$ ,  $p < 0.01$ ), (2) incentives to work ( $\beta = 0.24$ ,  $p < 0.01$ ), (3) autonomy ( $\beta = 0.18$ ,  $p < 0.01$ ), (4) autocratic management ( $\beta = 0.15$ ,  $p < 0.05$ ), (5) democratic management ( $\beta = 0.14$ ,  $p < 0.01$ ) and (6) workload ( $\beta = 0.09$ ,  $p < 0.05$ ).

### 2.3. Linear regression analysis between organizational climate and creativity at work

**Table 4:** Linear regression between creativity at work (dependent variable) and corporate environment (independent variable)

Creativity at work						
Dimensions of organizational climate	Coefficients non standardized		Standardized coefficients	t	Sig.	
	B	Error standard	Beta			
1	Autonomy	0.07	0.05	0.07	1.32	0.19
2	Workload	0.02	0.05	-0.02	0.49	0.63
3	Organizational Behaviour	0.16	0.05	0.17	3.19	0.002**
4	Autocratic Management	0.35	0.08	0.34	4.53	0.00**
5	Democratic Management	0.15	0.04	0.16	3.47	0.001**
6	Work Incentive	0.20	0.06	0.21	3.47	0.001**

F= 14.39 ( $p < 0.01$ ). R<sup>2</sup> adjusted= 0.47; \*  $p < .05$ ; \*\*  $p < .01$

Reading Table 4 indicates that only four dimensions of the organizational climate (organizational support, democratic management, autocratic management, and work incentives) significantly influence creativity, explaining 47% of the variance of the latter (adjusted R<sup>2</sup>). The order of importance of influence is as follows: (1) autocratic management ( $\beta = 0.34$ ,  $p < 0.01$ ), (2) work incentives ( $\beta = 0.21$ ,  $p < 0.01$ ), (3) organizational support ( $\beta = 0.17$ ,  $p < 0.01$ ) and (4) democratic management ( $\beta = 0.16$ ,  $p < 0.01$ ). Autonomy at work and workload did not influence creativity (Cirhigiri 2023). Assuming you want to test the direct effect of organizational climate dimensions on creative potential and creativity at work, we can propose the following model: Organizational Climate (OC) as a latent variable with six indicators (dimensions): Autonomy (A), Workload (WL), Organizational Behaviour (OB), Autocratic Management (AM), Democratic Management (DM), and Work Incentives (WI).

Creative Potential (CP) as an outcome latent variable. Creativity at Work (CW) as an outcome latent variable.

Model:

OC -> CP

OC -> CW

Here is a step-by-step guide to performing SEM using a statistical software package like AMOS and SPSS, assuming you can access raw data: Import the raw data file into the software. Define the measurement model by specifying the latent variables (OC, CP, and CW) and their indicators. Use A, WL, OB, AM, DM, and WI as indicators for OC. For CP and CW, use the observed variables in the dataset. Specify the structural model by connecting the latent variables according to the hypothesized relationships: OC -> CP and OC -> CW.

Estimate the model parameters (factor loadings, regression coefficients, etc.) using maximum likelihood estimation or another appropriate method. Assess the model fit using fit indices such as chi-square, CFI, TLI, RMSEA, and SRMR. A good model fit is indicated by a non-significant chi-square ( $p > .05$ ), CFI and TLI  $> 0.95$ , RMSEA  $< 0.06$ , and SRMR  $< 0.08$ .

#### **2.4. Discussion of results**

The results of the study indicate that the different dimensions of the organizational climate (autonomy, workload, administrative support, authoritarian management, democratic management, and work incentives) are perceived positively by the subjects of the study. In other words, study subjects felt they had work autonomy and organizational support. They also believe that the most dominant management mode is sometimes democratic and sometimes autocratic. They claim to receive messages from the hierarchy encouraging them to work and benefit from a balanced workload (Mitonga-Monga, Mokhethi et al. 2023).

This positive perception of the organizational climate by the subjects of the study may be due to the efforts made by the managers of the Institute to improve working conditions. These efforts, having brought about changes in daily working conditions, are, in turn, modifying employees' perception of their organization (Elbel and O'Reilly 2023).

Concerning creativity, the results indicate that the Institute's employees have a strong creative potential and use their creativity in daily professional activities. We can, therefore, conclude that creativity is a support of great utility in solving the problems of the employees of the National Institute of Technical Preparation. This intense use of creative potential can be justified by the technical nature of this vocational training institution (Nyembwe, Ogundiran et al. 2023).

In addition to the technical character, the intense creativity at work of the subjects of the study can be justified by the relatively good working conditions of this Institute. Moreover, Byamungu and Mulungula (2023) showed that poor working conditions negatively influenced employees' creativity at the Universities of Kinshasa. Conversely, we can assume that good working conditions positively affect creativity at work.

Thus, the subjects of the study being trainers in the technical professions, face daily difficulties in initiating learners to professional practice. These technical difficulties to be solved force them to put their brains in boiling using their creativity (Elbel and O'Reilly 2023). This intense creativity at work would undoubtedly lead to high organizational productivity. It

would even be one of the explanatory factors of the positive reputation of the Institute in terms of vocational training for young people and adults (Muhirwa, Shen et al. 2023).

By considering the relationship between the organizational climate and creative potential, we see that all the dimensions of the environment significantly influence the creative potential of the Institute's employees, up to 34%. The influence of autonomy at work on creative potential is quite logical because studies by Simonton have shown that independence is one of the personality traits characterizing creative individuals. Indeed, Ireng, Bushenyula et al. (2023) states that creative individuals are marked by freedom of mind and a high need for autonomy. It is also for this reason that it is recommended in the techniques of creative problem-solving in an organization to use a non-directive method, that is to say, a plan that does not propose diagrams to the advance and which leaves the latitude to the subjects to choose the scheme to follow.

The influence of workload on creative potential also seems logical to us. Our results agree with those of (Larsson 2023), where it was found that creativity and innovation are more stimulated in an organization where the workload of employees is balanced.

The impact of organizational support on creative potential seems normal to us. It confirms the results of the study by (Kirk, Green et al.) where it was found that administrative support is favorable to the expression of creativity in an organization. These results are justified by the fact that the word of the innovation requires a minimum of organizational support. In this regard, studies have identified even weak administrative support as a barrier to creativity.

Our results have shown that democratic management also influences the creative potential of the subjects of our study. These results go hand in hand with those of Glazer, Shirrell et al. (2023), where it was found that the democratic and participatory mode of management is favorable to creativity. The influence of autocratic leadership on creativity calls into question the conclusion of the study by Glazer, Shirrell et al. (2023), where it was found that the classic mode strongly inhibits creativity. Our results with the influence of the incentive to work on the potential creative comfort, where it was found that having a stimulating job is favorable to the expression of creativity in an organization. Overall, our results are consistent with those of Nyembwe, Ogundiran et al. (2023), where it was found that the organizational climate was a factor that largely influenced the company's creativity and innovation capacity (Cirhigiri 2023). The relationship between organizational climate and creativity at work indicates that only four dimensions of organizational climate (administrative support, democratic management, autocratic management, and work incentives) explain 47% of the variance of creativity at work... These results go hand in hand with those of study, where these dimensions were identified as essential factors in the innovation of employees in organizations (Mitonga-Monga, Mokhethi et al. 2023).

## **Conclusion**

This study aimed to determine the impact of the organizational climate on the creativity at work of the employees of a Pakistani public institution. To do this, three scales evaluating the two constructs of the study were administered to a simple random sample of 103 trainers public institutions were taken. The study's results indicate positive and significant regression coefficients between organizational climate and creative potential. Organizational climate explains 34% of the variance in creative potential. Four of the six dimensions of environment explain 47% of the variance in creativity at work. From these results, it seems essential to us to suggest to the various organizations to clean up their organizational climate because an



excellent corporate environment has a positive impact on creativity at work, which, moreover, is an essential resource for strong individual and organizational performance.

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