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ORIGINAL ARTICLE

Organizational Climate and its Connection to Job Performance in a Mining Company. The Case of Shougang

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ABSTRACT

The aim of this paper is to determine the relation between organizational climate and worker performance in Shougang Hierro Perú, Marcona, 2019-2021. This research is correlational and has a non-experimental design. The population consisted of 150 workers, and a sample of 120 individuals was considered. The instrument chosen for measuring the independent variable, organizational climate, was a 40-item questionnaire; on the other hand, the dependent variable, job performance, was measured through the performance evaluation sheet used by the company. The statistical *software* IBM SPSS 25.0 was used for the analysis. The general hypothesis was accepted and had a correlation value of 0.953, meaning a very high positive correlation and determining that there is a highly significant relation between organizational climate and the workers' job performance. It can be concluded that a good organizational climate helps achieve a better worker performance. In addition, the relevant correlations leading to an improvement in the mining company's organizational climate have been identified.

Keywords: Organizational climate; job performance; microenvironments.

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INTRODUCTION

Human capital is a determining factor for companies to achieve their goals. A company's success or failure is closely related to the performance of its work team. Ensuring that the personnel makes the organizations' objectives and goals their own is a difficult task. When it is accomplished, the achievements in terms of productivity are substantial.

According to Shein (1988):

> Organization is the planned coordination of activities for a group of people to ensure that an explicit and shared objective or purpose is achieved by means of work and function division, and through a hierarchy of authority and responsibility. (p. 14)

The increasingly competitive market demands human teams to operate at top performance, making the entire machinery move forward and helping the company remain in the market. Hence, it is necessary to conduct performance evaluations; this makes it possible for the company to walk with its eyes open, knowing how it is developing as a human group and what individual and collective improvement opportunities there are.

According to Werther and Davis (2000), "performance evaluation constitutes the process whereby an employee's global performance is estimated. It is an essential function that, in one way or another, is usually performed in every modern organization" (p. 302).

The result of a performance evaluation, together with its respective *feedback*, allows workers to overcome gaps and allows organizations to address improvement opportunities for an improved employee performance. This is when organizational climate becomes crucial.

Brunet (1987) believes that:

> Organizational climate evidences the organization's characteristics, much in the same way as an individual's characteristics constitute their personality. When an individual becomes part of an organization, there is an almost natural relationship between them. Therefore, there is interdependence whereby the organizational climate influences the individual, and the individual influences the generation of a particular climate. (pp. 12-13)

Companies consider human capital to be important for achieving organizational goals. For this reason, organizations are interested in achieving a better employee performance and translating this into a medium-term and long-term improvement in productivity.

The aim of this paper is to find the correlation between Organizational climate and employee performance by means of this research. This has a greater impact on productive activities; for this reason, the analysis of results is extremely valuable for the production department. Even though there is an organizational climate that defines a company, it is also possible to develop microenvironments allowing employees to reach operational performance. These microenvironments do not require organizations to change radically, but they do require the section or department to change its organizational climate.

METHOD

Vara (2012) indicates that:

> This is correlational survey-based research. It is correlational because it measures the extent of the relationship between two or more concepts or variables. It has a partial explanatory value when fewer variables are correlated. It is survey-based because it generally uses surveys to describe the characteristics of a population. (p. 253)

This study is non-experimental, cross-sectional and correlational. It is correlational because its objective is to determine the relationship between organizational climate and job performance. It is non-experimental because "it is research conducted without deliberately manipulating variables. In other words, it's a study where independent variables are purposely made to vary in order to see their impact on other variables" (Hernández *et al.*, 2014, p. 152). It is cross-sectional because its purpose is to "describe variables and analyze their in-

fluence and relationship at a given moment. It is like taking a photograph of some ongoing event" (Hernández *et al.* 2014, p. 154).

The population consisted of 150 employees and a sample of 120 workers was used. Convenience sampling was used because the study was aimed at a specific population. The dependent and independent variable dimensions were selected from the theoretical framework available, considering those that would apply to the company being studied or which would be important for the sample.

For the analysis, the following dimensions were considered for the independent variable (organizational climate):

- Leadership
- Flexibility and innovation
- Trust
- Consideration
- Interest in new workers
- Organizational structure
- Reward
- Organizational clarity
- Conflict and cooperation
- Recognition and feedback

Meanwhile, the following dimensions were considered for the dependent variable (job performance):

- Resource use
- Quality
- Timeliness
- Responsibility
- Workload amount
- Institutional commitment
- Interpersonal relationships
- Initiative
- Reliability
- Collaboration

The instruments used were: a 40-item survey focusing on the organizational climate dimensions, and a 10-item performance evaluation sheet from the company focusing on job performance. The survey was used for the independent variable, organizational climate, whereas the performance evaluation was used for the dependent variable, job performance.

RESULTS

The study results were the following: Table 1 determined the reliability of the research instruments through Cronbach's alpha, resulting in 0.951 for the organizational climate survey and 0.946 for the job performance evaluation. It can therefore be concluded that both instruments have high reliability.

Table 2 shows the Kolmorogov-Smirnov normality test to determine the method to be used for the correlation.

Table 1
Cronbach's alpha applied to organizational climate and job performance results.

Reliability Statistics			
Variable	**Cronbach's alpha**	**Cronbach's alpha based on standardized elements**	**No. elements**
Organizational climate	0.951	0.951	40
Job performance	0.945	0.946	10

Note. Prepared by the author, 2023.

Table 2
Normality Test

	Kolmogórov-Smirnov		
	Statistic	***df***	***Sig.***
Organizational climate	*0.081*	*120*	*0.054*
Job performance	*0.091*	*120*	*0.016*

Note. Prepared by the author, 2023.

The Kolmogórov-Smirnov test resulted in a significance value of 0.054 for organizational climate, and a significance value of 0.016 for job performance. These results indicate that organizational climate has normal data due to the result of 0.054, which is higher than 0.05. Conversely, job performance shows non-normal data due to the result of 0.016, which is lower than 0.05.

These results involve a normal and a non-normal variable for the organizational climate/job performance pairing; thus, both variables will be considered to be non-normal. For this reason, it is necessary to perform validation through Spearman's coefficient, used for nonparametric or non-normal distribution cases. *IBM* SPSS 25.0 was used for statistical analysis, which helped obtain the relationships between the dependent and independent variables and their dimensions.

Table 3 shows the Spearman's rho correlation for the general hypothesis.

Table 3 shows that the correlation between the main variables, organizational climate and job performance, amounts to 0.953. This means that there is very high positive correlation between both variables. Significance value is 0.000, which guarantees its veracity and rejects the null hypothesis. "H0: Organizational climate is not significantly related to the employees' job performance". Therefore, the alternative hypothesis is accepted as true: "Organizational climate is significantly related to the employees' job performance".

Analysis of Dimensions

To perform a more exhaustive analysis, the dimensions of both dependent and independent variables were addressed. To this end, the dimensions of both variables were subjected to correlation. Table 4 shows that, in all cases, the relations between dimensions are maintained, varying from a high to very high positive correlation and a high level of significance.

By analyzing the highest correlation coefficients among the dependent and independent variable dimensions, each independent variable dimension is associated to those dependent variable dimensions that is has a higher correlation with. This is the way in which an action plan can be created for the improvement of certain organizational climate dimensions, and to clarify which performance dimensions will be improved. For instance, based on the results obtained in Table 4, to improve commitment (organizational climate dimension), consideration (job performance dimension) needs to improve. In Tables 4 and 5, the highest correlations between the variable dimensions are given in grey. These are not the only dimensions that can be correlated between the dependent and independent variables, but the ones that show the highest correlation values.

A thorough analysis of dimension correlations can adequately identify which dimensions may have a more significant impact on the improvement of the company's organizational climate, using the employees' views as a reference.

DISCUSSION

This research was motivated by the need faced by the Operations department of Shougang mining company to help achieve its workers' maximum job performance in order to ensure the highest productivity possible by identifying the organizational climate factors that ensure the achievement of this goal.

Table 3
Spearman's rho correlation, general hypothesis

Correlations				
			Organizational climate	**Job performance**
Spearman's rho	Organizational climate	Coeff. Corr	1.000	0.953**
		Sig. (two-tailed)		0.000
		N	120	120
	Job performance	Corr. Coef.	0.953**	1.000
		Sig. (two-tailed)	0.000	
		N	120	120

Note. ** Correlation is significant at 0.01 (two-tailed). Prepared by the author, 2023.

Table 4
Spearman's rho correlation between dependent and independent variable dimensions for the first five variables

Correlations of first five variables' dimensions							
			ResUse	**Qual**	**Time**	**Resp**	**Wload**
Spearman's rho	Lead	Corr. Coef.	0.813**	0.508**	0.617**	0.457**	0.508**
		Sig. (two-tailed)	0.000	0.000	0.000	0.000	0.000
	Flex&Innov	Corr. Coef.	0.525**	0.450**	0.657**	0.323**	0.450**
		Sig. (two-tailed)	0.000	0.000	0.000	0.000	0.000
	Trust	Corr. Coef.	0.570**	0.495**	0.927**	0.471**	0.495**
		Sig. (two-tailed)	0.000	0.000	0.000	0.000	0.000
	Cons	Corr. Coef.	0.510**	0.702**	0.543**	0.684**	0.702**
		Sig. (two-tailed)	0.000	0.000	0.000	0.000	0.000
	IntInNew	Corr. Coef.	0.382**	0.611**	0.641**	0.514**	0.611**
		Sig. (two-tailed)	0.000	0.000	0.000	0.000	0.000
	OrgStr	Corr. Coef.	0.490**	0.477**	0.655**	0.418**	0.477**
		Sig. (two-tailed)	0.000	0.000	0.000	0.000	0.000
	Rwrd	Corr. Coef.	0.268**	0.516**	0.319**	0.331**	0.516**
		Sig. (two-tailed)	0.003	0.000	0.000	0.000	0.000
	OrgClar	Corr. Coef.	0.511**	0.537**	0.737**	0.374**	0.537**
		Sig. (two-tailed)	0.000	0.000	0.000	0.000	0.000
	ConfCoop	Corr. Coef.	0.382**	0.322**	0.682**	0.284**	0.322**
		Sig. (two-tailed)	0.000	0.000	0.000	0.002	0.000
	RecgFdbk	Corr. Coef.	0.550**	0.935**	0.453**	0.483**	0.935**
		Sig. (two-tailed)	0.000	0.000	0.000	0.000	0.000

Note: ** Correlation is significant at the 0.01 level (two-tailed). Prepared by the author using *IBM* SPSS, 2023.

Table 5
Spearman's rho correlation between dependent and independent variable dimensions for the last five variables

Correlations of last five variables' dimensions								
			Commt	**IntpRel**	**Init**	**Reliab**	**Collab**	**JobPerf**
Spearman's rho	Lead	Corr. Coef.	0.478**	0.596**	0.531**	0.557**	0.739**	0.722**
		Sig. (two-tailed)	0.000	0.000	0.000	0.000	0.000	0.000
	Flex&Innov	Corr. Coef.	0.401**	0.661**	0.416**	0.522**	0.602**	0.630**
		Sig. (two-tailed)	0.000	0.000	0.000	0.000	0.000	0.000
	Trust	Corr. Coef.	0.531**	0.814**	0.571**	0.643**	0.771**	0.788**
		Sig. (two-tailed)	0.000	0.000	0.000	0.000	0.000	0.000
	Cons	Corr. Coef.	0.832**	0.633**	0.794**	0.746**	0.740**	0.852**
		Sig. (two-tailed)	0.000	0.000	0.000	0.000	0.000	0.000
	IntInNew	Corr. Coef.	0.718**	0.740**	0.780**	0.865**	0.665**	0.809**
		Sig. (two-tailed)	0.000	0.000	0.000	0.000	0.000	0.000
	OrgStr	Corr. Coef.	0.601**	0.784**	0.590**	0.678**	0.632**	0.715**
		Sig. (two-tailed)	0.000	0.000	0.000	0.000	0.000	0.000
	Rwrd	Corr. Coef.	0.753**	0.372**	0.680**	0.537**	0.490**	0.593**
		Sig. (two-tailed)	0.000	0.000	0.000	0.000	0.000	0.000
	OrgClar	Corr. Coef.	0.614**	0.781**	0.651**	0.665**	0.693**	0.757**
		Sig. (two-tailed)	0.000	0.000	0.000	0.000	0.000	0.000
	ConfCoop	Corr. Coef.	0.338**	0.734**	0.378**	0.438**	0.623**	0.552**
		Sig. (two-tailed)	0.000	0.000	0.000	0.000	0.000	0.000
	RecgFdbk	Corr. Coef.	0.790**	0.556**	0.795**	0.817**	0.720**	0.867**
		Sig. (two-tailed)	0.000	0.000	0.000	0.000	0.000	0.000

Note. ** Correlation is significant at the 0.01 level (two-tailed). Prepared by the author using *IBM* SPSS, based on the data from the organizational climate and job performance surveys applied to employees.

Ruiz (2021) described a negative organizational climate scenario directly affecting employee performance. Thus, he carried out an organizational climate evaluation. Feedback from employees helped him understand the workers' expectations from the organization.

Similarly, Collas (2019) showed a scenario in which employees do not display adequate performance, evidencing accumulated work and apathy. The author performs an organizational climate analysis to determine how it is related to job performance, evidencing the importance of the physical and social environments, as well as the relationship between attitudes and employee performance.

Pastrana (2017) identified the need for improving employee performance while downplaying the importance of Organizational climate factors such as communication, motivation, trust, and participation. The author concluded that, the better organizational climate, the better employee performance.

Palacios (2019) demonstrated that there is a very high positive correlation between Organizational climate and employee performance, paying special attention to self-actualization and commitment to work as dimensions of job performance.

In his research, Santamaría (2020) focuses on searching for the best job performance for employees starting from certain changes in the organizational climate that facilitate this. At the end of this research, the author evidences that communication—as a dimension of Organizational climate—directly influences employee performance, which in turn leads to productive improvements for the company.

These background studies make it possible to foresee a result for this research. However, the value of research work falls on the analysis of data which is unique and valid only for the organization being investigate. During the research, a positive and very high correlation between both organizational climate and job performance was noted.

The value of this research lies in the fact that dimension-based analysis does not necessarily show the same trend. The leadership and resource use dimensions show a very high significant correlation, which largely depends on the line managers or supervisors that the employees report to. When they show stronger leadership, they promote an environment in which all the organization's resources are put at the employees' disposal. The stronger the leadership, the better resource use in the company. Regarding dimension flexibility and innovation, it was noted that it does not affect the correlation of the main variables because it has a medium value in all performance dimensions.

Another result determined was the correlation between dimensions trust and timeliness, which can be explained as follows: if there is an organizational climate where employees note that there is trust in their work, this will result in timely compliance with the activity. Consideration is one of the most important dimensions of organizational climate. The results show a very high positive correlation between consideration and institutional commitment, which means that workers who feel that they are more highly considered by the organization will show greater commitment to it by performing at their best.

Interest in new workers is a dimension that shows a very high positive correlation with employee reliability. This means that, the greater the interest in new workers, the greater credibility and trust regarding information management and duty performance. Dimension interpersonal relationships has its highest correlation with dimension interpersonal relationships, although its value is not very high. This means that a better organizational structure improves interpersonal relationships, but does not constitute a determining factor in this improvement.

Dimension reward has its highest correlation with dimension institutional commitment; this correlation is positive and high. This means that, the greater the reward, the higher institutional commitment, but the latter does not constitute a determining factor in the former's increase. This is a key result because these dimensions had been expected to show a very high correlation, given that reward can often condition the degree of commitment. This does not happen in the organization. Dimension

organizational clarity shows its highest correlation with dimension interpersonal relationships; this is a high positive correlation, but the latter does not constitute a determining factor for the former. Dimension conflict and cooperation shows its highest correlation with dimension interpersonal relationships; this is a high positive correlation, but the latter does not constitute a determining factor for the former.

Among the research results, it can be noted that dimension recognition and feedback has a very high direct correlation with quality and quantity. This evidences that, in an organizational climate where the workers' achievements are recognized and they receive continuous feedback on their improvement opportunities, the quality of their work will improve and they will be able to improve the activities they perform.

Finally, the results indicate that several dimensions of the independent variable (organizational climate) such as leadership, trust, interest in new workers, organizational structure and organizational clarity show a high positive correlation with the dependent variable (job performance) but do not constitute determining factors affecting it.

The results evidence that, out of the ten dimensions of organizational climate, the two which have the strongest correlation with job performance are consideration and recognition and feedback. Both show a very high positive correlation with job performance.

As Halpin and Crofts (1963) state, consideration is related to the support and trust given to workers by management. It is the demonstration of respect, kindness and attention given to another individual.

With regard to recognition and feedback, according to Maslow (1943):

> Emotionally, it is indispensable for every individual to feel appreciated, respected, to have some prestige and stand out within their social group. This need also includes self-respect and self-worth before others. By nature, human beings need to be important. (p. 14)

CONCLUSIONS

- It can be concluded that there is a significant, very high and positive relationship between variables organizational climate and job performance. This confirms that employee development is crucial for the survival of an organization.
- It can be concluded that an analysis of the dimensions from the dependent and independent variables (job performance and organizational climate, respectively) can lead to an introspection to identify the strongest correlation of one dependent variable dimension in relation to the other independent variable dimensions.
- It can be concluded that the data obtained in this research is unique and is valid for the organization being studied. On many occasions, a forecast can be made regarding the correlations being studied by using the theoretical framework and the existing literature. The added value lies in the analysis that can be made of the information and how it can be used for the benefit of the organization.
- For Shougang workers, consideration and feedback are the two organizational climate dimensions that show the highest correlation with job performance. For this reason, these organizational climate dimensions should be specially addressed because changes in them will lead to a better organizational climate and, therefore, better job performance from workers.

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Competing interests

The author declares that there is no conflict of interest.

Authors' Contribution

Juan José Mallma Chuquillanqui (lead author): Conceptualization, data curation, formal analysis, research, methodology, project administration, validation, visualization, writing (original, revision and edition).