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Executive leadership training to improve the organizational climate among teachers in educational institutions in Trujillo

Capacitación en liderazgo directivo para la mejora del clima organizacional en docentes de instituciones educativas de Trujillo

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Abstract

The research analyzes the effect of an administrative leadership training program on the work environment at a school in Trujillo. A pre-experimental design was used with a group of 30 teachers, applying a 50-item questionnaire before and after the intervention. The results showed improvements in the overall work environment: the low level decreased from 10% to 0%, the medium level increased from 60% to 66.7%, and the high level increased from 30% to 33.3%. In specific components, institutional behavior increased from 26.7% to 40%, institutional organization from 33.3% to 40%, and administrative management from 23.3% to 26.7%. Overall, the leadership program had a favorable impact on the work environment, with the greatest impact on behavior and organization, although there was less progress in the area of management. It can be concluded that strengthening management skills is key to promoting healthy working relationships and a school climate that fosters quality education.

Keywords: work environment, education, administrative leadership.

Resumen

La investigación analiza el efecto de un programa de formación en liderazgo administrativo sobre el ambiente laboral en un colegio de Trujillo. Se empleó un diseño preexperimental con un grupo de 30 docentes, aplicándose un cuestionario de 50 ítems antes y después de la intervención. Los resultados evidenciaron mejoras en el

ambiente laboral general: el nivel bajo se redujo de 10% a 0%, el nivel medio aumentó de 60% a 66.7% y el nivel alto pasó de 30% a 33.3%. En los componentes específicos, la conducta institucional incrementó su nivel superior de 26.7% a 40%, la organización institucional de 33.3% a 40% y la dirección administrativa de 23.3% a 26.7%. En conjunto, el programa de liderazgo mejoró de manera favorable el ambiente laboral, con mayor impacto en la conducta y la organización, aunque la dimensión de dirección presentó un avance menor. Se concluye que fortalecer las habilidades directivas es clave para promover relaciones laborales saludables y un clima escolar que favorezca una educación de calidad.

Palabras clave: ambiente laboral, educación, liderazgo administrativo.

Introduction

In the past decade, the work environment has solidified its position as a pivotal element in corporate strategies, demonstrating a significant influence on job effectiveness and satisfaction. Studies such as those conducted by Nguyen (2021) have shown that a positive workplace climate substantially contributes to team motivation and productivity. Furthermore, the role of leadership in the administrative functions of educational institutions has gained crucial importance, emerging as a determining factor for fostering a positive and motivating educational environment.

Leadership is understood as a dynamic and ever-evolving concept, which accounts for the existence of multiple approaches and definitions. According to Soto et al. (2020), it is defined as the ability to influence a group to collectively achieve predetermined goals. It is emphasized that leading involves achieving results and influencing others through collaboration, motivating the team toward specific objectives. Moreover, leadership encompasses the set of actions executed by a leader to impact both individual and group performance. It is important to highlight that various currents agree that the influence of leadership is grounded in strong values. Thus, effective leadership is characterized by the positive outcomes stemming from the relationship established between the leader and their team, which is crucial for the success or failure in achieving objectives.

As leaders assume authority and responsibility, they begin to work towards institutional objectives. Vela et al. (2020) identify different leadership approaches: the classical approach, associated with decision-making and grounded in behavioral theories; transactional leadership, based on the exchange of benefits; transformational leadership, aimed at motivating collaborators through the adoption of responsibilities and commitment to the institutional vision; and organic leadership, characterized by cooperation without rigid hierarchical structures. Additionally, there is the laissez-faire style, in which the leader adopts a minimal role in decision-making, delegating much of the responsibility to the team.

According to De la Torre et al. (2019), there are two additional perspectives: autocratic leadership, where the leader centralizes decision-making, and servant leadership, which is based on ethical influence and prioritizes responding to the team's needs.

This study revisits the key facets of directive leadership proposed by Al Gabri (2018), including vision, interest, learning capacity, commitment, skills, sincerity, self-awareness, ambition, enthusiasm, and leadership. Each of these facets will be explained in detail.

Leadership is essential in every organization, particularly in the educational sector. Leithwood et al. (2020) define it as the ability to influence and support others to commit to achieving institutional objectives. This process involves the development of specific qualities and competencies. Day and Sammons (2016) emphasize the importance of genuine interest in others, manifested through empathy, respect, encouragement, and support, which strengthens the workplace climate. Similarly, Senge (2006) underscores the relevance of a clear vision that inspires and guides collective action. Fullan (2014) argues that a good leader must engage in continuous learning, fostering ongoing professional development for their team.

Hargreaves and Fullan (2012) stress that leaders must possess skills to make decisions, achieve goals, resolve problems, and manage change. Avolio and Gardner (2005) assert that commitment, sincerity, and ambition represent central characteristics of authentic leadership. Goleman et al. (2013) indicate that self-awareness enables leaders to guide others effectively, while Bass and Riggio (2006) highlight enthusiasm as a critical factor in transformational leadership.

In the educational field, Leithwood and Sun (2022) demonstrate that effective leadership not only enhances organizational productivity but also improves academic outcomes. This pedagogical leadership entails managing change and motivating educational stakeholders towards meaningful educational goals. Jansen et al. (2023) argue that the quality of directive leadership is closely linked to improvements in pedagogical practices and student academic performance.

Organizational climate is understood as the subjective interpretation that members of an organization form about their work environment, shaped by their experiences and sociocultural context. Rivera and Rincón (2019) describe it as the individual perception of internal processes and structures. Pedraza (2020) conceives it as a complex interaction between personal and organizational characteristics that directly affects satisfaction and performance. Sotelo and Figueroa (2022) define it as shared perceptions regarding the work environment, relationships, and the norms that influence it. Rahmat et al. (2023) emphasize its role in motivation, commitment, and productivity. In summary, the workplace climate shapes how a group experiences its working environment, directly influencing institutional dynamics and performance.

Studies indicate that an administrative approach focused on educational needs enhances the quality of pedagogical practices and outcomes (Smith & Lindsay, 2022). Therefore, leadership that effectively manages these aspects is essential for promoting educational environments conducive to well-being and holistic development.

UNESCO (2020) highlights that educational leaders in Latin America are key agents in educational transformation, emphasizing the necessity for them to act with conviction, knowledge, competencies, and leadership to drive institutional development.

The central question guiding this research is: **To what extent does training in directive leadership improve the organizational climate in educational institutions in Trujillo?**

The general objective is to determine whether the implementation of directive leadership training enhances the organizational climate in these institutions. The specific objectives are:

1. To determine whether training in directive leadership improves organizational behavior.
2. To determine whether training in directive leadership enhances organizational structure.
3. To determine whether training in directive leadership improves management style in educational institutions in Trujillo.

Methodology

This research employs an applied and quantitative approach, developed under the hypothetical-deductive method, to analyze how training in directive leadership influences the organizational climate of an educational institution in Trujillo. This type of study aims to provide practical solutions to real-world problems through the application of theories and the collection of data that allow for the scientific verification of hypotheses. As Kerlinger (1986) states, applied research is oriented towards utilizing theoretical knowledge to improve reality, while Babbie (2016) asserts that the quantitative approach facilitates the objective observation of phenomena through statistical analysis.

The study utilizes a pre-experimental design, which involves evaluating a single group of teachers before and after a training intervention. According to White and Sabarwal (2014), this design, while limited in establishing causal relationships with full certainty, is useful when time or resource constraints preclude working with control groups. In this case, the design allows for the assessment of the impact of directive leadership training on perceptions of workplace climate.

The primary variables are directive leadership training and organizational climate. The former is conceived as a planned strategy to enhance management competencies, collaboration among teachers, and professional motivation. Organizational climate is understood as staff perceptions regarding the work environment, institutional structure, and the prevailing leadership style within the organization.

The population consists of 30 teachers from primary and secondary levels at a public educational institution in Trujillo. Given the small size, data collection involves all participants through a non-probability convenience sampling method, which is a common practice in educational studies with accessible samples (Johnson & Christensen, 2014). Active teachers of both genders are included, while those on leave or who choose not to participate are excluded from the study.

Data collection employs two instruments: (a) an observation guide to assess the development of the training, and (b) a 50-item Likert-type questionnaire to measure the organizational climate. Both instruments were validated by expert judgment using Aiken's V coefficient, achieving values close to 1.000, confirming their high relevance and clarity (Aiken, 1985). The reliability of the questionnaire was determined using Cronbach's alpha coefficient, which reached a value of 0.978, reflecting excellent internal consistency.

The procedure included obtaining institutional authorization, administering a pre-test, executing a leadership training program lasting eight weeks, and subsequently administering a post-test. The statistical analysis was conducted in three phases: (a) descriptive analysis using frequency tables and charts; (b) normality

assessment via the Shapiro-Wilk test; and (c) inferential analysis utilizing the Wilcoxon signed-rank test to compare results before and after the intervention.

In summary, the study is grounded in a rigorous and reliable methodological process that enables the empirical evidence of a positive relationship between directive leadership training and improvements in organizational climate. The results underscore the importance of enhancing educational management capabilities as a means to foster more collaborative, motivating, and efficient work environments within Peruvian educational institutions.

Results and discussion

Table 1.

Initial and final organizational climate assessments in an educational institution at the conclusion of the experiment

Levels	Organizational climate			
	Initial test		Final test	
	n	%	n	%
Low	3	10.0	0	0
Medium	18	60.0	20	66.7
High	9	30.0	10	33.3
Total	30	100.0	30	100.0

Note: Authors' own elaboration

Interpretation

At the conclusion of the experiment, the findings indicate that at the onset of the program's implementation, the average performance of participants was at 60%. However, after completing the training, this level was redistributed with 66.7% at the medium performance level and 33.3% at the high-performance level. These results demonstrate that the training had a positive and significant effect on the participants' performance, reflecting not only an enhancement of their skills and competencies but also an increased level of satisfaction with the organizational environment. This suggests that initiatives aimed at directive leadership promote a more positive and committed perception of the work environment.

Regarding the analysis of central tendencies, both the mode and the median indicate a medium level of job satisfaction. The mode corresponds to the most frequent value in the distribution, while the median represents the central value of the same. Collectively, these indicators reveal that the majority of employees are moderately satisfied with the organizational climate.

Table 2

Organizational climate according to dimensions in initial and final tests

Levels	Organizational climate											
	Organizational behavior				Organizational structure				Leadership style			
	In. Test		Fi. Test		In. Test		Fi. Test		In. Test		Fi. Test	
	n	%	n	%	n	%	n	%	n	%	n	Pos
Low	2	6.7	0	0	2	6.7	0	0	7	23.3	0	0
Medium	20	66.7	18	60.0	18	60.0	18	60.0	16	53.3	22	73.3
High	8	26.7	12	40.0	10	33.3	12	40.0	7	23.3	8	26.7
Total	30	100.0	30	100.0	30	100.0	30	100.0	30	100.0	30	100.0

Note: Authors' own elaboration

A comparison of the sub-variables during the experimental process revealed significant changes between the initial and final stages. In organizational behavior, the high level increased from 26.7% to 40%. For organizational structure, this level rose from 33.3% to 40%. Although the increase in the high level for leadership style was more moderate (from 23.3% to 26.6%), the medium level exhibited substantial variation, shifting from 53.3% to 73.3%. Overall, the most significant effects were observed in the medium levels across all dimensions. Based on this, it can be asserted that the experiment generated a positive impact on participants' perceptions regarding the evaluated organizational dimensions.

Inferential results

General hypothesis

- **Null hypothesis (H_0):** Directive leadership training does not significantly improve the organizational climate in educational institutions in Trujillo**.**
- **Alternative hypothesis (H_1):** Directive leadership training significantly improves the organizational climate in educational institutions in Trujillo.

Table 1
Wilcoxon Test

Test Statistic

	$V\ clim_{post} - V\ clim_{pre}$
Z	-2,449[b]
Asymptotic Sig. (two-tailed)	,014

Note: Authors' own elaboration (2025)

The results allow for the rejection of the null hypothesis and acceptance of the alternative hypothesis, concluding that directive leadership training significantly improves the organizational climate.

Hypothesis test using Friedman test

The Friedman test was employed to compare three or more related conditions within the same group.

- **H_0:** Md_behavior = Md_structure = Md_style
  (No significant differences between dimensions).
- **H_1:** At least one of the medians differs significantly.

Table 2
Wilcoxon test for dimensions of organizational climate

Test Statistics

N	**30**
Chi- square	6,933
df	2
Asymptotic Sig.	,031

Note: Authors' own elaboration (2025)

The results indicate significant differences, leading to the rejection of H_0 and the acceptance of H_1. Therefore, the training had a differentiated impact on the dimensions of organizational climate.

Table 3
Post hoc hypothesis testing after Friedman test

Test Statistic

	Organizational structure - Organizational behavior	Leadership style - Organizational behavior	Leadership style - Organizational structure
Z	-,816[b]	-2,309[b]	-1,732[b]

Asymptotic Sig. (two-tailed)	,414	,021	,083

Note: Authors' own elaboration (2025)

Decisions based on dimension comparisons

1. Organizational structure vs. Organizational behavior
   Sig. = 0.414 > 0.05 → H_0 accepted.
   No significant differences; both dimensions contributed similarly to the organizational climate.
2. Leadership style vs. Organizational behavior
   Sig. = 0.021 < 0.05 → H_0 rejected and H_1 accepted.
   Significant differences exist; the contribution of leadership style differs from that of organizational behavior.
3. Organizational structure vs. Leadership style
   Sig. = 0.083 > 0.05 → H_0 accepted.
   No significant differences between both dimensions regarding the organizational climate.

Predictive model:

Ordinal regression is employed when the dependent variable is ordinal, meaning it has categories that can be ranked in some way (e.g., low, medium, and high).

Model fit information

Model	Model adjustment criteria	Likelihood ratio tests		
	Log-Likelihood -2	Chi-square	Degrees of freedo (df)	Sig.
Intercept only	33,218			
Final	3,215	30,003	4	,000

The predictive model is: y = 33,218 + 3,21 x
Where:
x= the experiment (program in application)
y= the variable in the experiment

Pseudo R-Squared	
Cox and Snell	,632
Nagelkerke	,772
McFadden	,586

Interpretation

The pseudo R^2 of Nagelkerke at 0.772 indicates that the model explains 77.2% of the variability in the improvement of the organizational climate.

Test of communalities

KMO and Bartlett's Test		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy		,692
Bartlett's Test of Sphericity	**Approx. Chi-Square**	43,042
	df	3
	Sig.	,000

Additionally, the Bartlett's Test of Sphericity was significant (Sig. = 0.000 < 0.05), confirming that there are relevant differences among the dimensions.

Communalities

	Initial	Extraction
Organizational behavior	1,000	,856
Organizational structure	1,000	,817
Leadership style	1,000	,683

Method of extraction: principal component analysis.

The percentage contributions of the experiment were as follows:

- Organizational behavior: 85,6%
- Organizational structure: 81,7%
- Leadership style: 68,3%

These results indicate that behavioral performance had the greatest impact on improving the work environment, followed by organizational structure. While there was a moderate contribution from leadership style, its influence was less substantial compared to the other dimensions. Consequently, it is recommended to prioritize strategies aimed at strengthening both behavioral and organizational structures to promote a more positive and productive work environment.

Conclusions

Based on the general objective, it can be concluded that training in directive leadership significantly improves the organizational climate in educational institutions in Trujillo. Results indicate that the low level of organizational climate, which initially represented 10%, was completely eliminated (0%). Furthermore, the medium level increased from 60% to 66.7%, and the high level rose from 30% to 33.3%. These changes, validated by the non-parametric Wilcoxon test (Z = -2.449, p = 0.014), demonstrate a significant positive impact on teachers' perceptions of their work environment.

Regarding the first specific objective, it was concluded that directive leadership training significantly contributed to the improvement of behavioral performance. The low level decreased from 6.7% to 0%, while the high level increased from 26.7% to 40%. Although the medium level slightly decreased from 66.7% to 60%, this change reflects that a greater number of teachers reached higher levels of organizational performance, indicating a consolidation in adopting favorable work behaviors.

Concerning the second specific objective, it was confirmed that the training positively impacted organizational structure. The low level decreased from 6.7% to 0%, and the high level increased from 33.3% to 40%, while the medium level remained stable at 60%. These results indicate improvements in role clarity, process organization, and internal coordination. However, the stability of the medium level suggests the need to implement complementary strategies aimed at developing more advanced structural competencies, including strengthening administrative management and efficient use of technological resources.

Finally, with respect to the third specific objective, it can be concluded that directive leadership training significantly affected leadership style. The low level decreased from 23.3% to 0%, while the medium level increased from 53.3% to 73.3%. While the high level showed a moderate increase (from 23.3% to 26.7%), these results highlight improvements in aspects such as communication, participative decision-making, and pedagogical support. However, there remains a need to enhance strategic leadership skills, particularly in areas such as conflict management, institutional planning, and sustained professional motivation.

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