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Gestión directiva y desempeño docente en organizaciones educativas del norte de México

*School leadership and teacher performance in educational organizations in
northern Mexico*

*Gestão diretiva e desempenho docente em organizações educacionais do
norte do México*

Manuel Ortega-Muñoz

Universidad Pedagógica de Durango, México

drmanuelortega@hotmail.com

<https://orcid.org/0000-0003-2087-5501>

Etelvina Méndez-Carrasco

Secretaría de Educación del Estado de Durango, México

ethel.supervisora@gmail.com

<https://orcid.org/0000-0001-5131-8068>

Sergio Ochoa-Jiménez*

Instituto Tecnológico de Sonora, México

sergio.ochoa@itson.edu.mx

<https://orcid.org/0000-0003-1848-3760>

Zaret Jazmín Hernández-Soto

Secretaría de Educación del Estado de Durango, México

hernandezsotozaret@gmail.com

<https://orcid.org/0000-0002-5369-9228>

*Autor de correspondencia

Resumen

Para que el desempeño docente sea acorde a los estándares de calidad educativa, es de suma relevancia la gestión de quienes dirigen las escuelas. Es por ello que en esta investigación se estableció como objetivo identificar la relación entre la administración por parte del Director de su institución educativa denominada Gestión Directiva que se abrevia en este trabajo como GD y la práctica eficiente del profesor en su labor, conceptualizado como Desempeño Docente, de aquí en adelante DD, en las escuelas primarias del subsistema educativo federal en un sector del norte de México. Para ello, se aplicó un instrumento de 57 ítems a 26 directores y 293 docentes con una escala Likert de cinco niveles. Los datos recabados se analizaron con apoyo de IBM SPSS Statistics (Versión 26), de manera particular calculando el coeficiente de Rho de Spearman (1904), con un resultado de 0.635 que indica una correlación positiva, significativa y alta. Por lo tanto, se puede afirmar que existe una relación entre la GD y el DD en las escuelas estudiadas. Lo anterior constata la evidencia previa y aporta de forma empírica a la explicación de la relación entre la gestión y el desempeño, en el ámbito educativo, desde el enfoque organizacional, sin embargo, es recomendable ampliar la discusión teórica y abordar nuevos caminos de investigación al respecto.

Palabras clave: administración, calidad, educación básica, liderazgo, rendimiento.

Abstract

For teaching performance to align with educational quality standards, the management of school leaders is of utmost importance. Therefore, this research aimed to identify the relationship between the administration carried out by the principal of an educational institution—referred to in this study as School Leadership (hereafter SL)—and the teacher's efficient practice in their role, conceptualized as Teacher Performance (hereafter TP), in primary schools within the federal educational subsystem in a sector of northern Mexico. A 57-item, five-point Likert scale instrument was administered to 26 principals and 293 teachers. The collected data were analyzed using IBM SPSS Statistics (Version 26), specifically by calculating Spearman's Rho coefficient (1904), which yielded a result of 0.635, indicating a high, significant, and positive correlation. Therefore, it can be affirmed that there is a relationship between SL and TP in the schools studied. This confirms previous empirical findings and provides a significant contribution to explaining

the relationship between management and performance in the educational field from an organizational perspective. However, further theoretical discussion is recommended and explore new research avenues on the subject.

Keywords: administration, quality, elementary education, leadership, performance.

Resumo

Para que o desempenho docente esteja de acordo com os padrões de qualidade educacional, a gestão dos líderes escolares é de extrema importância. Por isso, esta pesquisa teve como objetivo identificar a relação entre a administração realizada pelo diretor de uma instituição de ensino—denominada Gestão Diretiva (GD)—e a prática eficiente do professor em seu trabalho, conceituada como Desempenho Docente (DD), em escolas primárias do subsistema educacional federal em uma região do norte do México. Para isso, um instrumento de 57 itens com escala Likert de cinco pontos foi aplicado a 26 diretores e 293 docentes. Os dados coletados foram analisados com o apoio do IBM SPSS Statistics (Versão 26), calculando especificamente o coeficiente Rho de Spearman (1904), que apresentou um resultado de 0,635, indicando uma correlação positiva, significativa e alta. Assim, pode-se afirmar que existe uma relação entre GD e DD nas escolas estudadas. Esse achado confirma evidências empíricas anteriores e proporciona uma contribuição significativa para a compreensão da relação entre gestão e desempenho no campo educacional sob uma perspectiva organizacional. Entretanto, recomenda-se ampliar a discussão teórica e explorar novas abordagens de pesquisa sobre o tema.

Palavras-chave: administração, qualidade, educação básica, liderança, desempenho.

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Introduction

Educational organizations are viewed as dynamic systems highly receptive to internal and environmental changes (Arboleda, 2015). To build collaborative, flexible, and innovative organizational environments that foster educational innovation and enhance teacher performance (TP), the role of the leader is crucial (Ojeda, 2014).

School leadership (SL) must assume leadership roles in responding to administrative demands without ignoring the culture of the educational organization or its environment (Antúnez, 1998). Furthermore, it must motivate its members to achieve

educational outcomes, as failure to do so can have detrimental consequences that could even lead to educational failure (Baeza, 2018).

Referring to the Finnish case, the United Nations International Children's Emergency Fund [Unicef] (2018) mentions the success story of the Finnish education system, highlighting the fundamental role of SL. This could be explained by the influence that the management system has on teacher performance (Herrera and Tobón, 2017), which in turn impacts student success (Atencio et al., 2020).

There are mainly two management problems: teachers want the principal to be from their own community and a leader is needed who instructs, but management consumes most of their time (Rallis and Highsmith, 1986). The latter generates a debate, since the importance of the management skills of principals in relation to educational leadership skills is recognized. In such a way that the principals themselves perceive themselves as strong in educational leadership, but with weaknesses in school management. This requires a learning process, which varies depending on the profiles of the person who occupies the position (Sebastian et al., 2019).

In educational management, diversity is viewed negatively and is even considered a source of difficulties, especially in regions or geographic areas where immigrant students are part of the academic community. In fact, principals consider that it is not their responsibility as educational managers to ensure management based on assimilation and compensation, and they focus primarily on bureaucratic leadership in academic management rather than on social cohesion (Gómez-Hurtado et al., 2018). This is confirmed by the study conducted in Chile on leadership competencies, whose findings show a predominance of administrative management over instructional management (Sepulveda and Aparicio Molina, 2019).

School management faces many challenges, exacerbated by low family participation and engagement and low teacher motivation. However, several factors contribute to the management team's satisfaction, including the school community's recognition of the work done and the results achieved, aspects that encourage the team to continue their management work (Boff and Zulianelo, 2021).

Thus, optimal school development can be achieved if principals place greater emphasis on strategic planning, supporting and comprehensive roles and less emphasis on joint decision-making, as this has no impact on school improvement, although some schools of thought find it very effective (Hoque et al., 2011).

Furthermore, individual aspects of managers such as: acquired training, previous experiences, motivation, perception of student success and personal values, influence the vision of contextual variables (cliente and school environment) that contribute to the identification of needs and activities related to school success goals (Kamyap, 2022) .

Undeniably, SL plays an essential role in education. It is recognized as such in the Mexican education system. Although publications on this topic have been published in the sector, they have placed greater emphasis on education and pedagogy. Therefore, a methodological and conceptual approach is proposed from an organizational perspective. Therefore, this work seeks to determine the relationship between SL and TP in Primary Education Sector No. 24 in the city of Durango, Durango, Mexico.

Management. The management function plays a relevant role in the development of the school, since actions are planned and executed with an overall vision (Araiza et al., 2014), which includes planning, managing resources, implementing improvements, monitoring and finally evaluating (Aguilera, 2011), as well as directing academic activities, which must be in line with the external needs and the environment in which the schools are immersed (Mazzilli et al. , 2016).

School management focuses on getting members of an academic community to carry out a series of activities to generate the necessary conditions in which students learn (Loera, 2003). Not only that, but it also covers administrative activities, such as resource management, including personnel administration, which allows for the management of various problematic contexts (Casassus, 2000).

To successfully achieve the above, it depends on how those in charge of administration perform, and they must combine various skills (Nieves, 2015), in such a way that the school becomes vulnerable when the director does not assume or fails to fulfill his responsibilities, or, even when his performance has been good, he leaves the institution, without first consolidating a work team that provides continuity to what has been established (Barber and Mourshed , 2007).

Educational authorities must guarantee conditions in which teachers develop possibilities of access to learning for all students, especially and to a large extent for those who live in areas and communities with the greatest lag (Secretariat of Public Education [SEP], 2020), as well as participate actively and directly in the current dynamics of changes in educational processes, placing the organization at the center of learning (Ministry of Education, 2014).

To achieve this, we must have managers in education who assume an active and comprehensive role, with academic vision and administrative preparation, which is a great challenge, especially in private education that receives government subsidies, such is the case of Chile, where administrators hire directors directly, which does not generate that they meet a profile according to the needs (Weinstein and Muñoz, 2014) .

The perception of school administrators about management processes focuses on assuming that they need to have a good school climate, to have the ability to generate solutions, use technology, be empathetic and act democratically, while observing that the least important thing is that the director must have a vision of his own school (Oznacar et al., 2018) .

In relation to the use of technology, especially the use of social networks, as a tool for expeditious communication, mainly in moments that require a quick response and immediate attention to an inconvenience or problem, there is a low degree of use of media such as WhatsApp, Twitter, Facebook and Instagram, by middle school principals (Alanezi, 2021) , which limits the exercise of their function .

Efficient, fair, and balanced management of financial resources has been one of the main goals of educational policy aimed at achieving school quality. Achieving this depends largely on the importance principals assume in their role in financial management. In developing countries, findings reveal inefficiencies and shortcomings in this regard (Myende et al., 2020) .

Thus, not only is there poor financial management, but accountability mechanisms are also inefficient, so it is recommended to generate a regulatory and procedural framework that forces school principals to assume responsibility for their financial management practices (Dwangu and Mahlangu, 2021) .

Novice principals are perceived as ill-equipped to lead and manage schools in the early years of their appointment. They are perceived as lacking experience in curriculum management, personnel management, school finances, stakeholder relations, and legislative interpretation, leading to the conclusion that newly appointed principals should receive training before assuming their new positions (Sepuru and Mohlakwana, 2020) .

Although training does not guarantee the expected effect, such is the case of directors of Jewish complementary religious schools graduated from various academic training programs, who stated that they did not feel prepared to perform essential tasks,

such as working with lay leaders, managing human resources and planning budgets, after completing their training programs (Vaisben, 2018) .

Teacher performance. TP focuses on monitoring teaching activity with universal standards (Moriña et al ., 2013). However, it goes far beyond establishing certain criteria and indicators and monitoring their measurement; it is something more complex; the entire educational process must be considered, in which diverse contexts converge, the teacher's own role, their manifestations, and, of course, the environment (Vergara, 2005).

Sosa (2017) states that it corresponds to all the actions carried out by the teacher, in his or her teaching activity, related to his or her main role, whose priority indicator is his or her results, aimed at and closely linked to meeting the learning objectives of his or her students and, in general, of the educational level to which he or she belongs. The above considers three substantial interrelated elements: teacher, student, and context (Montenegro, 2003).

One of the reasons attributed to the poor educational results in public schools is the poor leadership of principals, which can be remedied with training programs that will allow the development of effective leadership practices (Naidoo, 2019) . Training in school management allows principals to develop certain skills aimed at generating motivation of the teaching staff and students, improving the school climate, promoting community participation and the professional development of teachers (Khan et al., 2011) , in such a way that the principals themselves perceive themselves as capable of efficiently managing the work team, such confidence and competence allowed them to face the challenge generated by the COVID pandemic and do so successfully (Taun et al., 2022) .

On the other hand, Schmelkes (2013) states that the greater the knowledge of the factors that influence TP, the greater the possibility of improving it. Furthermore, never before in the history of this activity have such drastic changes occurred in all areas in recent years. These changes are external to the system (Poggi, 2006) and therefore difficult to control. Not only that, but they must be responded to affirmatively.

Management and teaching performance. Studies have been carried out on SL in educational institutions related to other variables, in various countries, and different educational levels, such as: institutional improvement processes Ballesteros (2012), teacher motivation and commitment (Sagredo and Castelló, 2019), learning climate and interpersonal relationships (Hernández, 2021) , organizational climate and coexistence (López et al., 2019) and performance. Precisely on the latter, previous studies allow us to

affirm the existence of a positive and significant relationship between SL and TP, at a level: very low (Chamilco and Moreno, 2021); moderate (Pérez, 2016; Quispe, 2020); high (Cabrera, 2019; Salinas, 2021) and very high (Castillo Cedrón, 2019; Chávez and Olivos, 2019; Iparraguirre, 2020; Solórzano, 2020).

Principals' skills (supervision, communication, interpersonal relationships, training and development, and decision-making) positively influence teachers' classroom management (Francis and Oluwatoyin, 2019) . In the particular case of female principals, it was evident that experience has a positive impact on school improvement, staff development, and interpersonal relationships with the academic community; their democratic and participatory leadership style stands out (Coronel et al., 2012) .

However, there may be differences regarding this relationship, since managers may claim to fulfill managerial functions correctly, however, teachers, for the most part, think the opposite, and consider that such management is not entirely effective and efficient, since there is no communion work where they can motivate, supervised, guided, planned and executed learning projects based on the needs and interests of all those who make up the academic community (Mujica, 2019). Furthermore, in the study by Kauts et al. (2021) , they found that there is no significant difference in the institutional effectiveness of schools in relation to the age of the directors, nor with their years of experience. The previous theoretical and empirical elements allow us to formulate the following hypothesis:

H1: There is a positive and significant relationship between school leadership (SL) and teacher performance (TP) in primary schools of Educational Sector No. 24 of the federalized system, located in the city of Durango, Mexico.

Materials and methods

This study is framed within the post-positivist paradigm , whose vision of reality recognizes its existence, although it cannot be fully captured due to the limitations of our senses and research tools. Furthermore, it is not possible to cover all aspects related to a given phenomenon (Flores, 2004).

The deductive method is used. According to Popper (1967), scientific research does not begin with observation, but with the identification of problems, the formulation of hypotheses, and their subsequent testing. If the results contradict the hypothesis, the theory is considered falsified; otherwise, its validity is examined and it is provisionally accepted.

This work has a quantitative approach with a correlational scope. According to Creswell (2009), a quantitative study describes the behavior of a person, a group of people, or a specific phenomenon through the use of numbers and their mathematical and/or statistical analysis.

The study was conducted in 26 primary schools (19 morning and 7 afternoon) belonging to Sector No. 24 of the federalized system of the state of Durango, Mexico. Together, these institutions house a total population of 345 people (26 principals and 319 teachers). The decision was made to include the entire population in the study, obtaining a response rate of 89%, resulting in 309 valid questionnaires: 26 answered by principals (8.4%) and 283 by teachers (91.6%). According to gender, 116 males (37.5%) and 193 females (62%) participated, demonstrating a predominance of females. Regarding age, participants were distributed into three age groups: 20 to 30 years (49 people, 16%), 31 to 40 years (105 people, 34%), and 40 years or older (155 people, 50%), with the latter having the highest concentration.

The number of years of employment was distributed across three categories: 1 to 10 years (105 people, 34%), 11 to 20 years (95 people, 31%), and 21 years or more (109 people, 36%). This last group constitutes the largest group, although slightly different from participants with less seniority. Academic staff held a bachelor's degree (66%), followed by a master's degree (27%), and, to a lesser extent, a teacher training program (4%), with a minimum of a doctorate (3%).

To collect data, a self-administered questionnaire was sent to participants via a digital link. This instrument was developed based on the work of Pérez (2016) and Castillo (2019). The first consists of 33 items, and the second 45. From both, 27 items were selected to assess management performance and 30 for teaching performance, making a total of 57 statements distributed across seven dimensions: four for the first variable and three for the second.

The integrated document was culturally adapted, mainly through wording adjustments since it was applied in different countries and some of the terms used are different, for example: in annual planning it is called Institutional Plan and in our country PEMC, to cite an example. The response options are composed of alternatives on a Likert-type scale, with five levels: Never (0), Almost never (1), Sometimes (2), Almost always (3) and Always (4).

A pilot application was conducted with 30 people (six managers and 24 teachers from other study areas) who were not part of the final sample. The objective was to evaluate the instrument's performance. As a result, a Cronbach's alpha of 0.942 was obtained, which translates into a very good level of reliability of the instrument.

The instrument was administered to the entire population, which were processed using IBM SPSS version 26 software. A Cronbach's alpha of 0.973 was obtained. Frequency distribution tables and graphs were generated, and the Kolmogorov test was subsequently performed. Smirnov, with values that reject the null hypothesis for both variables, suggesting that the data do not exhibit normal behavior. Based on this, nonparametric analyses were performed using Spearman's Rho coefficient to calculate the correlation between variables, allowing the findings to be compared with the initial hypothesis.

Results

The main objective of this study is to determine the relationship between the previously described variables. Before doing so, it is essential to conduct a descriptive analysis to identify their level of compliance and highlight their most relevant aspects.

Descriptive analysis of the variables

Regarding the management variable, the difference between the mean values for each item is minimal. However, the indicators with the highest and lowest values stand out. The highest values correspond to indicators directly linked to institutional and school management, particularly those that assess how the principal: recognizes education as a fundamental right of children and adolescents (3.45), assumes his or her role as a key agent in the transformation and improvement of the institution (3.45), complies with the internal regulations and the Continuous School Improvement Program (3.43), and forms working committees in his or her educational institution (3.42). In contrast, the items with the lowest scores are related to pedagogical management, specifically in aspects such as: educational guidance for the comprehensive development of students (2.64), defining the teaching style in the institution (2.88), developing plans and programs to achieve institutional objectives (2.94), and providing guidance on the approaches to the subjects in the Curriculum and Program (3.03).

Table 1 shows the behavior of the items mentioned above, as well as in general all those that make up the variable SL, with their respective arithmetic mean.

Table 1. Average of each of the items in the school leadership variable

Item	Average
Institutional Management	
Rules and improvement programs	3.43
Manuals	3.10
Working committees	3.42
Leads the construction of the PEMC	3.23
Take advantage of individual skills	3.19
Use of time and space.	3.29
Pedagogical Management	
Educational guidance	2.64
Evaluation criteria	3.35
Promotes innovation	3.12
Define the teaching style	2.88
Pedagogical approach and teaching strategies	3.12
Institutional plans and programs	2.94
Intervenes in lesson plans	3.03
Administrative Management	
Improvement processes	3.03
Proper financial management	3.30
Balanced time in teaching and administration	3.23
Efficient and transparent administration	3.37
Relationship with supervisors and compliance with regulations	3.39
Organization and operation according to standards and resources	3.33
School Management	
Education as a fundamental right	3.45
Identify your institutional role	3.45
Culture of Recognition	3.18
Promotes teacher training.	3.28
Encourage everyone's participation	3.35
Promotes co-responsibility	3.34
Average value per variable	
3.23	

Source: own elaboration

The mean of the variable school leadership is 3.23, which indicates a level higher than the arithmetic mean which can be interpreted that the SL in the study organizations is acceptable. In order to convert this value into a percentage and this in turn into a qualitative expression, the maximum value of the scale (4) is taken as a base, which corresponds to 100%, by taking the average of 3.23 and making the proportional conversion, 81% is obtained. To obtain a qualitative assessment of the level of SL exercised, a scale was constructed with the following values: 0 to 20% the management is very bad, from 21 to

40% it is bad, from 41 to 60% regular, from 60 to 80% it is good and from 81 to 100% it is very good. Considering the values established in the scale and the average that is had in the result transformed into a percentage (81%), it is concluded that the level of SL functioning of the analyzed schools is very good .

When observing the results of the items of the variable teaching performance, similarly values are observed that do not exceed the unit of difference between them, however, some stand out for their higher and lower values. Satisfaction appears with the highest values, since teachers express enjoying being teachers (3.75) and feeling satisfied when doing their job (3.68). In relation to the profile, two groups of responses can be considered. The highest values within this dimension are focused on internal issues in the classroom in the teaching-learning process, such as: promotes a welcoming environment where students freely express their emotions, ideas and affection in a respectful manner (3.66), recognizes student achievements and encourages them to continue advancing in their learning (3.67), provides spaces where students interact with each other avoiding discrimination between them (3.66) and in the event of a conflict in the classroom, promotes reflection among students on their actions and seeks restorative actions (3.72).

Meanwhile, the items with the lowest scores are those in which the teacher must interact with other actors in the process, especially the family and fellow teachers: promotes spaces for reflection such as meetings and days for parents where they can exchange experiences (2.75), participates in the design, review and updating of management documents (2.78), designs and executes innovation projects with their peers (2.87) and shares the PEMC with the families of the students (2.30). Table 2 shows the mean values of the previous indicators, as well as in general those that make up the TP variable.

Table 2. Mean of each of the items in the teaching performance variable

Item	Average
Competencies	
Identify different learning styles	3.46
Strategies according to styles	3.36
Mastery over his/her work	3.31
Coherence between institutional and classroom design	3.28
Flexible spaces	3.39
Evaluation instruments	3.31
Profile	
An atmosphere of openness, trust and respect	3.66
Active and general participation of students	3.52
Achievement and encouragement	3.67
Promotes respect and non-discrimination	3.66
Conflict resolution	3.72
Classroom equipped for its purpose	3.63
Planned sessions	3.35
Reflection on unforeseen events and difficulties	3.40
Collaborative learning in real-life situations	3.50
Communicate learning objectives	3.21
Check results	3.18
Evaluation and improvement actions	3.27
Spaces for exchanging experiences	2.75
Management documents	2.78
Communication with families for improvement	3.39
Innovative projects together	2.87
Share the PEMC.	2.30
Satisfaction	
Always look for ways to improve your work at school and in the classroom.	3.59
He feels satisfaction in doing his job.	3.68
Contributes with peers to develop their socio-emotional strengths.	3.18
Recognizes your socio-emotional strengths that help with your performance	3.34
Enjoy being a teacher.	3.75
Knows how to manage emotions in the face of conflicts.	3.23
Average value per variable	3.36

Source: own elaboration

The mean of the variable is 3.36, higher than the arithmetic mean, so it can be stated that the TP in educational organizations is acceptable. In order to convert this value into a percentage and this in turn into a qualitative expression, the maximum value of the scale (4) is taken as a base, which corresponds to 100%. By taking the mean of 3.36 and making the proportional conversion, 84% is obtained. To obtain a qualitative assessment of the level of TP, a scale was constructed with the following values: 0 to 20% very bad; 21 to 40% bad; 41 to 60% regular; 60 to 80% good; and 81 to 100% very good. Considering the values

established in the scale and the mean obtained, transformed into a percentage (84%), it is concluded that the level of TP of the academics of the analyzed schools is very good.

The relationship of the study variables

A normality test was performed, which identified that the distribution of variables did not conform to a normal distribution. Therefore, Spearman's nonparametric rho test was used to identify correlation. This test yielded the values in Table 3.

Table 3. Correlation between the study variables

			School Leadership	Teaching Performance
Spearman's Rho	School Leadership	Correlation coefficient	1,000	.635**
		Sig.(bilateral)		.000
	Teaching Performance	Correlation coefficient	.635**	1,000
		Sig.(bilateral)	.000	
		N	309	309

Source: own elaboration.

** The correlation is significant at the 0.01 level (two-tailed).

An analysis of Table 3 reveals a significant correlation between school leadership (SL) and teacher performance (TP) in schools in Educational Sector No. 24. The relationship is positive and high, with a correlation coefficient of 0.635 and a significance level of less than 0.01. Therefore, the hypothesis stated is accepted: There is a positive and significant relationship between DM and TP in primary schools in Educational Sector No. 24 of the federalized system, located in the city of Durango, Durango, Mexico.

Discussion

It is extremely important to highlight that the people who carry out the SL must possess a series of skills necessary for their position, which determine the scope of the established goals and the achievement of the proposed results. (Nieves, 2015). This was confirmed by the present work when finding that there is a relationship between SL and TP, which show levels classified as very good, that is, in all areas of management, composed of institutional, pedagogical, administrative and school management, the directors not only

comply, but do so very well, which was endorsed by the directors themselves, but above all by the majority of the teachers . In relation to performance, competencies, profile and teacher satisfaction, both directors and teachers endorse that it is very good.

The relationship described above fully coincides with the study by Cabrera (2019) with a high correlation of 0.753 and with that of Salinas (2021) whose Rho value is 0.752, in both cases at a high level, like the results of this study. The following studies found a positive and significant relationship, reaching a very high level: Castillo (2019) with a correlation coefficient of .891, Chávez and Olivos (2019) with Spearman's correlation (Rho = 0.877), Solórzano (2020) with a Rho = 0.846 and Iparraguirre (2020) with Spearman's Rho of 0.832. The coincidences continue, although to a lesser extent, in the levels of correlation in the cases of Pérez (2016) with a moderate positive correlation of 0.541, Quispe (2020) reached the level of 0.576 and finally Chamilco and Moreno (2021) with a Rho = 0.173, considered very low, the lowest of all the studies. However, in all cases a positive and significant correlation is evident.

It can be highlighted that since there is a high positive statistically significant correlation between SL and TP, it shows that the school leadership in the educational institutions studied has a direct influence on the performance of the teachers. Thus, there must undoubtedly be a shared commitment among school stakeholders to promote the achievement of institutional objectives, which will not be possible without the leading role of both managers and teaching staff. In this sense, in relation to teaching performance, there is a need to strengthen and improve interaction with other actors in the process, especially the family and fellow teachers, through interaction, communication and shared responsibility with parents, where spaces are generated for the exchange of experiences, reflections and tasks to be developed, which can be done throughout the school year, both collectively and individually in informational meeting spaces, civic, academic and cultural activities in which the entire educational community participates. Likewise , it is necessary to strengthen collegial and collaborative work with fellow teachers and directors of the institution, by actively participating in the meetings of the School Technical Council to best define the relevant actions that will lead them to the achievement of school goals and objectives.

In relation to the practical implications of the results of the variable SL, the work carried out by the director at the institutional and school level in terms of attention to educational regulations is recognized, but the need to strengthen eminently pedagogical

aspects is identified, such as guidance to teachers to support and strengthen the teaching process, that is, to assume in practice a more active role in terms of responsibility in the achievement of student learning, being able to be in the classroom to diagnose the teaching and learning processes and to be able to make proposals for actions, materials, processes or activities for improvement, in addition, an area of opportunity was identified in the design of actions to promote the achievement of institutional objectives and guide the work in the different subjects, here the ideal strategy is collaborative work, identified from the work with school supervisions to the meetings of the School Technical Council every month within the school, which fosters collective commitment to joint work and the fulfillment of common goals and objectives .

Conclusions

The main contribution of the study is the possibility of affirming that school leadership is directly and positively related to teacher performance. In concrete terms, this finding confirms previous results that demonstrate the needs arising from the external environment in which institutions are located . It reiterates the importance of principals developing competencies to generate autonomous, innovative teachers and significantly promote peer-to-peer work ; essential elements for this globalized world, in order to achieve a binomial between committed principals and teachers actively engaged in the development of a comprehensive educational project, encompassing its development, implementation, evaluation, and monitoring.

These conclusions presented allow us to affirm that the research hypothesis raised is not rejected, because it is stated that **there is a relationship between SL and TP** in primary schools of Educational Sector No. 24. A strength of this study is that it was applied to all the directors of Educational Sector No. 24. In addition, out of a total of 309 teachers, 293 responded to the instrument, which represents 94% participation , thereby obtaining a representative sample that allows strengthening the findings in the institutions analyzed.

Future lines of research

It is practically advisable for school management to implement a plan for monitoring and supporting teachers, to encourage collaborative work on improvement and development projects, and to motivate the school community to participate. For further studies, it is important to strengthen the organizational approach to the study of educational



institutions. It is also important to increase studies that incorporate these variables studied, as well as other variables of interest, such as communication, decision-making, work environment, and organizational performance . It would also be interesting to analyze possible moderating variables that influence the relationship between school leadership and teacher performance in educational institutions. Among which could be found : teacher experience, motivation, leadership, working conditions, among others.

Likewise, future studies on the variables "School Leadership and Teacher Performance" should focus on qualitative or mixed studies to gain greater depth in the analysis and results of the potential relationship between the variables, as well as conducting longitudinal studies to examine how the relationship between school leadership and teacher performance may vary over time. Finally , future research could expand the study to include subjects from other educational levels, other states in Mexico, or even other countries. This could also allow for a comparison of the results based on different sociodemographic characteristics, not only location but also gender, age, years of service, and job functions.

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References

- Aguilera, A. (2011). *La Función Directiva en Secundarias Públicas. Matices de una tarea compleja*. Instituto Nacional para la Evaluación de la Educación. <https://www.inee.edu.mx/wp-content/uploads/2019/01/P1C143.pdf>
- Alanezi, A. (2021). Using social networks in school crisis management: evidence from middle school principals in Kuwait. *Education*, 49(8), 935–944. doi: <https://doi.org/10.1080/03004279.2020.1817964>
- Antúnez, S. (1998). *Claves para la organización de centros escolares*. Horsori. <https://cafge.files.wordpress.com/2014/11/8antunez-serafin-cap8-innovacion-y-cambio-en-los-centros-escolares.pdf>
- Araiza, S., Magaña, R. y Carrillo, L. (2014). Evaluación por estándares de la gestión directiva en secundaria. *Revista Iberoamericana de Educación*, 64(2014), 99-113. <https://rieoei.org/historico/documentos/rie64a06.pdf>
- Arboleda, A. M., y Alonso. J. C. (2015). El aroma al evaluar el involucramiento del consumidor con un producto y su percepción de calidad. *Estudios Gerenciales*, 31(137), 403-410. <https://doi.org/10.1016/j.estger.2015.07.003>
- Atencio, E., Ramírez, L., y Zappa, Y. (2020). Neuroliderazgo como estrategia para el fortalecimiento de la gestión directiva en instituciones educativas. *Revista Actualidades Investigativas en Educación*, 20(1), 1-29. <https://www.scielo.sa.cr/pdf/aie/v20n1/1409-4703-aie-20-01-416.pdf>
- Baeza, P. (2018). Diversidad y diferenciación en la oferta de programas de doctorado en Chile. *Revista Calidad en la Educación*, 47, 179-214. <http://dx.doi.org/10.31619/caledu.n47.34>
- Ballesteros, H., Escallón, B., y Penagos, W. (2012). *Caracterización de las prácticas de gestión directiva en el Instituto San Bernardo de la Salle y su relación con los procesos de mejoramiento institucional*[Tesis maestría. Pontificia Universidad Javeriana] <https://doi.org/10.11144/Javeriana.10554.12316>
- Barber, M & Mourshed, M. (2007). *Cómo hicieron los sistemas educativos con mejor desempeño del mundo para alcanzar sus objetivos*. McKinsey & Company. <https://eduteka.icesi.edu.co/articulos/InformeMcKensey>
- Boff, D. S., & Zulianelo, I. (2021). Desafios na gestão escolar: narrativas de diretores e coordenadores pedagógicos de escolas públicas. *Revista on Line de Política e Gestão Educacional*, 25 (3), 2163–2177. <https://doi.org/10.22633/rpge.v25i3.14249>

- Cabrera, E. (2019). *Gestión directiva, tipos de motivación y desempeño de los docentes de Secundaria de las instituciones educativas públicas del distrito de Parcona–Ica, año 2017* [Tesis maestría. Universidad Nacional de Educación Enrique Guzmán y Valle]. <http://repositorio.une.edu.pe/handle/20.500.14039/5189>
- Casassus, J. (2000). *Problemas de la gestión educativa en América Latina: o la tensión entre los paradigmas de tipo A y del tipo B*. UNESCO. <https://gc.scalahed.com/recursos/files/r161r/w20971w/L1.pdf>
- Castillo, F. (2019). *Gestión directiva y desempeño docente en la institución educativa Antenor Orrego Espinoza–Laredo 2019* [Tesis maestría. Universidad César Vallejo]. <https://hdl.handle.net/20.500.12692/37225>
- Chamilco, F., y Moreno, B. (2021). *La gestión directiva y su relación con el desempeño docente en la IE N° 88240 “paz y amistad”, Nuevo Chimbote- 2019*[Tesis maestría. Universidad católica de Trujillo Benedicto XVI]. <https://repositorio.uct.edu.pe/xmlui/handle/123456789/1125>
- Chávez, M., y Olivos, M. (2019). *Gestión educativa y desempeño docente, en la institución educativa “Modelo” Trujillo, 2018*[Tesis maestría. Universidad católica de Trujillo Benedicto XVI]. <https://repositorio.uct.edu.pe/xmlui/handle/123456789/584>
- Creswell, J. W. (2009). *Research Desig: Qualitative, Qualitative, and Mixed Methads Approaches*, Sage Publication.
- Coronel, J., Carrasco, M., y Moreno, E. (2012). Overcoming Obstacles and Problems: a Multicase Study of Women Principals, Leadership Policies and Management for School. *Revista de Educación*, 357(24), 537–559. doi: <https://doi.org/10.4438/1988-592X-RE-2011-357-072>
- Dwangu, A. M., & Mahlangu, V. P. (2021). Accountability in the financial management practices of school principals. *International Journal of Educational Management*, 35(7), 1504–1524. doi: <https://doi.org/10.1108/IJEM-06-2021-0243>
- Flores, M. (2004). Implicaciones de los paradigmas de investigación en la práctica educativa. *Revista Digital Universitaria*, 5(1), 2-9. <https://www.revista.unam.mx/vol.5/num1/art1/portada.htm>
- Francis, O. B., & Oluwatoyin, F. C. (2019). Principals Personnel Characteristic Skills: a Predictor of Teachers’ Classroom Management in Ekiti State Secondary Schools. *International Journal of Educational Leadership and Management*, 7(1), 72-103. doi: <https://doi.org/10.17583/ijelm.2019.3573>

- Gómez-Hurtado, I., González-Falcón, I., y Coronel, J. M. (2018). Perceptions of secondary school principals on management of cultural diversity in Spain. The challenge of educational leadership. *Educational Management Administration & Leadership*, 46(3), 441–456. doi: <https://doi.org/10.1177/1741143216670651>
- Hernández Ramos, E. J. (2021). Relación entre el clima de aprendizaje en la institución educativa y la gestión directiva. *Mérito - Revista de Educación*, 3(8), 76–91. doi: <https://doi.org/10.33996/merito.v3i8.591>
- Hoque, K. E., Alam, G. M., & Ghani, M. F. A. (2011). Principals' roles under school based management that influence school improvement. *The New Educational Review*, 23(1), 311–324. https://www.researchgate.net/publication/289894349_Principals'_Roles_under_School_Based_Management_that_Influence_School_Improvement
- IBM Corp. (2019). *IBM SPSS Statistics for Windows (Version 26.0) [Computer software]*. IBM Corp.
- Iparraguirre, J. (2020). *La Gestión Directiva y el Desempeño Docente en la Institución educativa N° 30009–Virgen de Guadalupe de la provincia de Huancayo en Junin-2019* [Tesis maestría. Universidad Nacional de Educación Enrique Guzmán Valle]. <http://repositorio.une.edu.pe/handle/20.500.14039/4220>
- Kamyap, R. V. (2022). L'apport de la construction de sens dans l'application de la gestion axée sur les résultats par des directions d'école au Québec. *Canadian Journal of Educational Administration and Policy*, 199, 103–116. doi: <https://doi.org/10.7202/1091096ar>
- Kauts, D. S., Kauts, A., & Dang, S. (2021). Study of Instructional Management and Institutional Effectiveness in Relation to Age and Experience of School Principals. *MIER Journal of Educational Studies Trends and Practices*, 11(2), 329–342. doi: <https://doi.org/10.52634/mier/2021/v11/i2/2029>
- Khan, M. F., Ahmad, S., & Ali, I. (2011). The impact of school management trainings and principals attitude on students learning outcomes. *African Journal of Business Management*, 5(7), 2668–2678. <https://academicjournals.org/journal/AJBM/article-full-text-pdf/A412F2829130>
- Loera, A. (2003). *Planeación estratégica y política educativa*. Documento de trabajo. SEP.
- López, E., García, L., y Martínez, J. (2019). La gestión directiva como potenciadora de la mejora del clima organizacional y la convivencia en las instituciones de educación

- media superior. *RIDE Revista Iberoamericana Para la Investigación y el Desarrollo Educativo*, 9(18), 792 - 812. doi: <https://doi.org/10.23913/ride.v9i18.471>
- Mazzilli D.M., Hernández, L. y De La Hoz S.I. (2016). Procedimiento para Desarrollar la Competencia Matemática Resolución de Problemas. *Escenarios*, 14 (2), 103-119. doi: <http://dx.doi.org/10.15665/esc.v14i2.935>
- Ministerio de Educación (2014). *Marco del buen desempeño del directivo*. MINEDU. http://www.minedu.gob.pe/n/xtras/marco_buen_desempeno_directivo.pdf
- Myende, P. E., Bhengu, T. T., & Kunene, I. S. (2020). School financial management development programme for Eswatini principals: Lessons, challenges and implications. *South African Journal of Education*, 40(4), 1–11. doi: <https://doi.org/10.15700/saje.v40n4a2041>
- Montenegro, I. (2003). *Evaluación del desempeño docente, fundamentos, modelos e instrumentos*. Cooperativa editorial del Magisterio. <https://isbn.cloud/9789582007416/evaluacion-del-desempeno-docente-fundamentos-modelos-e-instrumentos/>
- Moriña, A., López, R., Melero, N., Cortés, M., y Molina, V. (2013). El profesorado en la universidad ante el alumnado con discapacidad: ¿Tendiendo puentes o levantando muros? *Revista de docencia universitaria*, 11(3), 425-444. doi: <https://doi.org/10.4995/redu.2013.5537>
- Mujica, S. (2021). Gestión gerencial del directivo y su influencia en el desempeño docente. *Scientiarium*, 1(1), 152-171. <https://investigacionuft.net.ve/revista/index.php/scientiarium/article/view/361>
- Naidoo, P. (2019). Perceptions of teachers and school management teams of the leadership roles of public school principals. *South African Journal of Education*, 39(2), 1–14. doi: <https://doi.org/10.15700/saje.v39n2a1534>
- Nieves, L. (2015). La Gestión Educativa para el Desarrollo de la Dimensión Pedagógica – Curricular. *Investigación y Formación Pedagógica*, 1 (1), 24 – 48. doi: <https://revistas.upel.edu.ve/index.php/revinvformpedag/article/view/969>
- Ojeda, J. F. (2014). Clima organizacional en instituciones de educación primaria. *CICAG*, 11 (2), 3-26. <http://ojs.urbe.edu/index.php/cicag/article/view/1480/1443>
- Oznacar, B., Kizil, N., & Yilmaz, N. (2018). Evaluating The Views of Directors In Primary Schools Regarding Their Management Process. *Modern Journal of Language Teaching Methods*, 8(11), 750-759. <https://mjltm.org/article-1-331-en.pdf>

- Pérez, C. (2016). *La gestión directiva y su relación con el desempeño docente en las Instituciones Educativas de la Red Brisas del Chinchipe de Puerto Huallape del distrito de Santa Rosa de la provincia de Jaén*[Tesis maestría. Universidad Nacional de Cajamarca]. <http://hdl.handle.net/20.500.14074/1268>
- Poggi, M. (2006). *Prólogo*. En Tenti, E. *El oficio docente: vocación, trabajo y profesión en el siglo XXI*. Siglo XXI. <https://docplayer.es/13772437-El-oficio-docente-vocacion-trabajo-y-profesion-en-el-siglo-xxi-compilado-por-emilio-tenti-fanfani.html>
- Popper, K. R. (1967). *El desarrollo del conocimiento científico. Conjeturas y refutaciones*. Paidós.
- Quispe, M. (2020). La gestión pedagógica en la mejora del desempeño docente. *Investigación valdizana*, 14(1), 7-14. doi: <https://doi.org/10.33554/riv.14.1.601>
- Rallis, S. F., & Highsmith, M. C. (1986). The Myth of the “Great Principal”: Questions of School Management and Instructional Leadership. *Phi Delta Kappa International*, 68(4), 300–304. <https://www.jstor.org/stable/20403340>
- Sagredo, E., y Castelló, A. (2019). Gestión directiva y clima organizacional en la educación de personas adultas en Chile. *Actualidades Investigativas en Educación*, 19(2), 1-23. <https://www.scielo.sa.cr/pdf/aie/v19n2/1409-4703-aie-19-02-1.pdf>
- Salinas, J. (2021). *Gestión directiva, marco de buen desempeño del directivo y compromisos de gestión escolar en EBR de la RED 05 DREC, 2020*[Tesis doctorado. Universidad César Vallejo]. <https://hdl.handle.net/20.500.12692/59521>
- Schmelkes, S. (2013). Educación para un México Intercultural. *Sinéctica revista electrónica de educación*, (40), 1-12. <https://www.redalyc.org/pdf/998/99827467007.pdf>
- Sebastian, J., Allensworth, E., Wiedermann, W., Hochbein, C., & Cunningham, M. (2019). Principal Leadership and School Performance: An Examination of Instructional Leadership and Organizational Management. *Leadership and Policy in Schools*, 18(4), 591–613. doi: <https://doi.org/10.1080/15700763.2018.1513151>
- Secretaría de Educación Pública [SEP]. (2020). Marco para la excelencia en la enseñanza y la gestión en Educación Básica. SEP. https://cife.edu.mx/recursos/wp-content/uploads/2019/10/perfil_docente-20-21.pdf
- Sepulveda, F., y Aparicio Molina, C. (2019). Habilidades de liderazgo instruccional de directores y sus equipos de gestión de escuelas de la región del Biobío, Chile:

- fortalezas y desafíos. *Revista de Investigación Educativa*, 37(2), 487–503. doi: <https://doi.org/10.6018/rie.37.2.329861>
- Sepuru, M. G., & Mohlakwana, M. A. (2020). The perspectives of beginner principals on their new roles in school leadership and management: A South African case study. *South African Journal of Education*, 40(2), 1–11. doi: <https://doi.org/10.15700/saje.v40n2a1755>
- Solórzano, G. (2020). *Gestión directiva y el desempeño docente en la unidad educativa, Monseñor Juan María Riera, Guayaquil, 2020*[Tesis maestría. Universidad César Vallejo]. <https://hdl.handle.net/20.500.12692/61638>
- Sosa, G. (2017). *La gestión educativa en el marco del buen desempeño docente de las IE de Puente Piedra*[Tesis maestría. Universidad Inca Garcilaso de la Vega]. <http://repositorio.uigv.edu.pe/handle/20.500.11818/1171>
- Spearman, C. (1904). *The proof and measurement of association between two things*. The American Journal of Psychology, 15(1), 72-101. <https://doi.org/10.2307/1412159>
- Taun, K., Zagalaz-Sánchez, M. L., & Chacón-Cuberos, R. (2022). Management Skills and Styles of School Principals during the COVID-19 Pandemic. *Education Sciences*, 12(11), 794. doi: <https://doi.org/10.3390/educsci12110794>
- United Nations International Children's Emergency Fund [Unicef] (2018). Un mundo listo para aprender. Dar prioridad a la educación de calidad en la primaria infancia. Unicef para cada niño. Perú. <https://www.unicef.org/media/57916/file/Un-mundo-preparado-para-aprender-documento-informativo.pdf>
- Vaisben, E. (2018). Ready to Lead? A Look into Jewish Religious School Principal Leadership and Management Training. *Journal of Jewish Education*, 84(1), 79–106. doi: <https://doi.org/10.1080/15244113.2018.1418108>
- Vergara, M. (2005). Significados de la práctica docente que tienen los profesores en educación primaria. *Revista Iberoamericana sobre Calidad Educativa y Cambio en la Educación*, 3 (1), 685-697. <https://www.redalyc.org/pdf/551/55130165.pdf>
- Weinstein, J., & Muñoz, G. (2014). When duties are not enough: principal leadership and public or private school management in Chile 1. *School Effectiveness and School Improvement*, 25(4), 651–670. doi: <https://doi.org/10.1080/09243453.2013.792850>

Contribution Role	Author(s)
Conceptualization	Manuel Ortega-Muñoz
Methodology	Manuel Ortega-Muñoz
Software	Manuel Ortega-Muñoz
Validation	Etelvina Méndez-Carrasco
Formal Analysis	Etelvina Méndez-Carrasco
Investigation	Etelvina Méndez-Carrasco
Resources	Etelvina Méndez-Carrasco
Data curation	Zaret Jasmine Hernandez-Soto
Writing - Preparing the original draft	Manuel Ortega- Muñoz (Same) Etelvina Méndez Carrasco (Same)
Writing - Review and Editing	Sergio Ochoa-Jiménez (Major) Zaret Jasmine Hernandez Soto (Support)
Display	Zaret Jasmine Hernandez-Soto
Supervision	Sergio Ochoa-Jiménez
Project Management	Sergio Ochoa-Jiménez
Acquisition of funds	Sergio Ochoa-Jiménez