



Transformational leadership in educational contexts: impact on teachers' occupational health and perspectives from international evidence

Liderazgo transformacional en contextos educativos: impacto en la salud laboral docente y perspectivas desde la evidencia internacional

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ABSTRACT

Transformational leadership is central to educational management research, yet its link to teachers' occupational health remains insufficiently defined. The objective of this study was to analyze the international evidence on transformational leadership in school settings and its relationship with teachers' occupational well-being. A narrative review with an integrative approach was conducted using academic literature published up to 2024 in international databases. The results show consistent associations between transformational leadership and positive organizational variables, particularly job satisfaction and organizational commitment. However, the evidence connecting this leadership style to specific indicators of occupational health, such as stress and burnout, is limited and shows indirect effects mediated by psychological and contextual factors. The predominance of cross-sectional studies and the scarcity of longitudinal designs restrict the causal interpretation of the findings. The review suggests that transformational leadership should be analyzed as part of complex organizational systems where educational policies, working conditions, and institutional dynamics interact. Integrating educational leadership and occupational health emerges as a priority area for future research.

Keywords: transformational leadership; educational leadership; teacher occupational health; teacher occupational well-being; teacher work stress.

RESUMEN

El liderazgo transformacional ocupa un lugar central en la investigación sobre gestión educativa, aunque su vínculo con la salud laboral docente permanece insuficientemente delimitado. El objetivo de este estudio fue analizar la evidencia internacional sobre liderazgo transformacional en contextos escolares y su relación con el bienestar ocupacional del profesorado. Se realizó una revisión narrativa con enfoque integrador a partir de literatura académica publicada hasta 2024 en bases de datos internacionales. Los resultados muestran asociaciones consistentes entre liderazgo transformacional y variables organizacionales positivas, en particular satisfacción laboral y compromiso institucional. Sin embargo, la evidencia que conecta este estilo de liderazgo con indicadores específicos de salud laboral, como estrés y desgaste profesional, resulta limitada y presenta efectos indirectos mediados por factores psicológicos y contextuales. La predominancia de estudios transversales y la escasez de diseños longitudinales restringen la interpretación causal de los hallazgos. La revisión sugiere que el liderazgo transformacional debe analizarse como parte de sistemas organizacionales complejos donde intervienen políticas educativas, condiciones laborales y dinámicas institucionales. Integrar liderazgo educativo y salud ocupacional emerge como una línea prioritaria para investigación futura.

Palabras clave: liderazgo transformacional; liderazgo educativo; salud laboral docente; bienestar ocupacional docente; estrés laboral docente.

INTRODUCTION

Leadership has been classically defined as a set of personality qualities and capabilities oriented toward guiding and coordinating other individuals through interpersonal influence and communication processes aimed at achieving goals.(1,2) This early notion, collected in the Dictionary of Behavioral Sciences,(3) anticipates the relevance of leadership as an organizational phenomenon. Currently, leadership constitutes a central concept for explaining labor and institutional dynamics and, when analyzed as formal leadership, is usually linked to direction, administration, and management, considered basic managerial competencies.(4) From this perspective, leadership is not limited to a hierarchical function, but rather is configured as a relational process that affects structure, organizational climate, and collective performance.(5)

In the educational field, leadership practices have undergone significant transformations in recent decades, largely associated with educational policy reforms that promote greater institutional autonomy and, simultaneously, increase responsibility for school outcomes (6,7). This scenario has shifted attention from traditional administrative models toward approaches that consider the school as a complex organization, where leadership influences not only academic management but also the well-being of teaching staff (8,9). However, the study of educational leadership faces a persistent difficulty: most research reports practices considered successful, while comparative studies remain limited. Various authors have pointed out the need to develop new theoretical and methodological approaches that allow understanding school leadership from more integrative scientific frameworks, avoiding disciplinary fragmentation among administrative, sociological, and pedagogical approaches (10,11).

Within contemporary theories, transformational leadership has achieved a dominant position in the international literature.(12) Derived from Burns's proposal,(13) subsequently developed by Avolio and Bass,(14) this model describes a leadership style characterized by idealized influence, inspirational motivation, intellectual stimulation, and individualized consideration. Its application to the educational field has emphasized the leader's ability to build shared visions, generate high expectations, promote creativity in problem solving, and provide support for the professional and personal development of workers.(15,16) Despite its widespread dissemination, transformational leadership has received criticism related to its theoretical falsifiability and to the tendency of being adopted as a theory imported from the business field without sufficient adjustments to educational specificities.(17) These tensions have given rise to debates about its relevance and about the need to integrate it with other conceptual frameworks specific to educational administration.(18)

International reviews agree that the relationship between leadership styles and organizational variables continues to be an expanding field.(19) In particular, empirical evidence has begun to explore the connection between leadership and occupational health, including occupational stress, professional burnout, and job satisfaction.(20,21) Recent meta-analyses suggest that leadership behaviors are associated with stress levels of both leaders and subordinates, and that positive leadership styles could buffer certain psychosocial risks.(22,23) However, the available results are still heterogeneous and, in many cases, derive from non-educational contexts, which limits their direct transfer to schools. In the school setting, most research remains focused on indicators of institutional effectiveness, academic performance, and job satisfaction, while teacher health as a specific dimension remains insufficiently explored.

This gap is relevant when considering that teaching is a profession exposed to multiple psychosocial risk factors, including work overload, emotional demands, administrative pressure, and role ambiguity.(24,25) From contemporary occupational health models, work organization and leadership style are recognized as structural determinants that can aggravate or mitigate these risks. Consequently, analyzing transformational leadership from a teacher occupational health perspective implies shifting the focus from mere institutional effectiveness toward the human sustainability of the educational system.

Recent literature indicates that transformational leadership may be associated with favorable emotional states in teachers, better pedagogical practices, and working conditions perceived as more positive.(26,27,28) However, the magnitude of its association with health variables, such as stress and burnout, has been reported as slight and poorly documented. This discrepancy between the theoretical popularity of the model and the robustness of the empirical evidence suggests the need for critical reviews that integrate international findings, identify contradictions, and more precisely delimit its scope in educational contexts.

Within this framework, this article aims to analyze the available international evidence on transformational leadership in education and its impact on teacher occupational health, identifying trends, gaps, and future research perspectives. An integrative approach is adopted that con-

siders the school as a work organization, recognizing that teacher well-being depends not only on individual factors but also on organizational structures, educational policies, and management practices. Based on this review, the aim is to contribute to the discussion on healthy educational leadership and to the construction of theoretical frameworks that articulate school management and occupational health.

METHODS

The present study was developed as a narrative review with an integrative approach to analyze international evidence on transformational leadership in educational contexts and its relationship with teacher occupational health. This type of review allows the articulation of findings from different research traditions, integrating empirical studies, theoretical reviews, and meta-analyses to identify trends, contradictions, and gaps in the literature. The choice of this approach reflects the conceptual and methodological heterogeneity of the field, in which research from organizational psychology, educational administration, and occupational health converges.

Search strategy

The literature search was conducted in international academic databases that index scientific production in education, psychology, and social sciences. The main sources consulted were Scopus, Web of Science, ProQuest, ERIC, and PsycINFO, with Google Scholar used as a complementary source for gray literature and relevant doctoral dissertations. The search period spanned from the initial developments of the transformational leadership model to 2024, the date on which the literature collection was completed.

Keyword combinations in Spanish and English related to the study axes were used: “transformational leadership”, “school leadership”, “educational leadership”, “teacher occupational health”, “teacher stress”, “teacher burnout”, “teacher well-being”, “transformational leadership”, “teacher occupational health”, “teacher stress”, and “educational leadership”. The terms were combined using Boolean operators to increase search sensitivity and avoid excluding relevant studies.

Selection Criteria

Studies meeting any of the following criteria were included: empirical research analyzing transformational leadership in educational contexts; studies linking leadership styles with occupational health, occupational stress, or psychological well-being variables; systematic reviews or meta-analyses on transformational leadership; and theoretical analyses discussing the applicability of the model in education. Publications in peer-reviewed journals were prioritized, although widely cited academic documents influential in shaping the field were also incorporated.

Studies focused exclusively on business leadership without explicit transfer to the educational field, investigations lacking sufficient methodological description, and works whose thematic relevance was marginal relative to the article’s objective were excluded. No geographic restrictions were applied, in order to capture the diversity of cultural contexts in which transformational leadership has been studied.

Analysis Procedure

The selected studies were organized through a thematic analysis aimed at identifying recurring patterns in the literature. The information was classified into analytical categories constructed inductively from the reviewed corpus: conceptual evolution of transformational leadership, empirical evidence on leadership and occupational health, applications of the model in educational systems, theoretical and methodological contradictions, and research gaps. This organization allowed comparison of results from different national contexts and educational levels, avoiding a fragmented reading of the findings.

The analytical process prioritized the triangulation of sources, contrasting empirical studies with meta-analytic reviews and theoretical discussions. The aim was to identify convergences, discrepancies, and recurrent methodological limitations, with special attention to the magnitude of the reported effects and the presence of mediating or moderating variables. This strategy made it possible to construct an interpretive synthesis that is not limited to describing isolated results, but instead examines the consistency of the available body of evidence.

RESULTS

In a review of educational leadership, the authors state that it is necessary to continue generating proposals; it is recognized that much remains to be learned about leadership styles and their association with variables to develop school contexts.(29) According to the model of Avolio et al. (30), the components of transformational leadership are: (1) Idealized influence or Charisma, (2) Inspirational motivation, (3) Intellectual stimulation, (4) Individualized Consideration, (5) Psychological tolerance. The characteristics that distinguish transactional leadership are: (1) Contingent reward (2)

Studies reported at both the international and national levels demonstrate the need for further investigation into occupational health, leadership as a competence, and schools as healthy organizations. A meta-analysis conducted by Harms et al.(31) aimed to explore the relationship between three leadership constructs (transformational leadership, leader-member exchange, and abusive supervision), stress, and mental exhaustion. The researchers sought to explain the relationship between leadership styles and occupational stress and to determine how leadership styles influence occupational stress. The results supported the idea that leadership behaviors are affected by whether or not leaders experience stress. In turn, positive and negative leader behaviors and the relationships they develop with subordinates significantly determine stress outcomes in subordinates. Transformational leadership was found to be the most effective according to the meta-analytic review conducted by the authors. The need for future research concerning the boundary conditions of these relationships is highlighted, and the evidence presented generates new directions for leadership development training programs. The authors recommend that the results obtained lead to better working conditions for directors (leaders) and followers and improve the ability to develop better leaders, while also highlighting how inconclusive the studies are for shedding light on the topic they set out to address (31).

In a study of five platoons of the Spanish army ($n = 243$) that examined an exploratory model to evaluate the relationship between transformational leadership and group potency and to analyze the mediating role of group identification and group cohesion, 98% were men and 2% women, with a mean age of 26.1 years ($SD\ 5.1$). A positive and direct relationship was found between transformational leadership and group potency ($\beta = .37$, $p < .01$), explaining a proportion of variance (R^2) of .1. The proposed theoretical model suggests that military leaders at the most basic levels, through a transformational leadership style, influence group potency by developing group identification and group cohesion in the team (32).

In a study conducted in Somalia that aimed to analyze the impact of transactional, transformational, and laissez-faire leadership styles on job satisfaction among basic secondary school teachers ($n = 210$), participants were predominantly aged 26–35 years (71%), the most frequent educational level was a master's degree (90.5%), and 86.2% were men. Logistic regression analysis suggested three significant models: the laissez-faire style explained 47% of the variance in teacher satisfaction, the transactional style explained 15%, and the transformational leadership style explained 14% of the dependent variable (33). Thus, laissez-faire was the style that generated the most job satisfaction in this sample from Somalia.

In a study that aimed to examine the effect of transformational leadership on work stress among senior managers in Kenya, ($n = 162$) with the 40 to 49 age group predominating (38%) and mostly men (69%), based on a linear regression model, the results show ($R^2 = .253$) that 25.3% of the variance in work stress is explained by transformational leadership. The transformational leadership dimensions of modeling the way and inspiring a shared vision were key determinants in reducing work stress, while the dimensions of challenging the process, enabling others to act, and encouraging the heart did not influence work stress. Modeling the way had a positive effect on work stress, as did inspiring a shared vision. Work stress negatively influenced senior managers in commercial state-owned enterprises in Kenya.(34) This research was not conducted specifically in the school context, but it confirms that transformational leadership is the most suitable for reducing psychosocial risk factors and work stress; it is used due to the scarcity of studies in the educational area, and these results are transferred to school systems, taking into account the school as one organization and respecting its peculiarities.

According to a review conducted in Nigeria, the authors aimed to propose that outstanding principles and styles of educational leadership be adopted as a means to improve school management in Nigeria, given that currently no indicators of educational progress are identified after decades of training in public school administration. It is highlighted that most of the proposed principles are based on transformational criteria and declare, among them, that the educational leader should generate healthy and empowering spaces in schools.(35)

According to a systematic review on school leadership in Singapore, specific qualities, styles, and roles of principals are highlighted. Two fundamental trends are observed. The former relates to the acquisition and development of traits and skills necessary for effective leadership, including motivation skills and social skills, as well as the combination of leadership styles. Prospective school leaders in Singapore receive extensive training before taking the principalship. There is consensus regarding the styles to be used in the educational community. The latter trend found in this study is that various roles of school leaders are regarded as important, and that principals play an active role in facilitating leadership. The participation of principals in leadership development is a central component of leadership effectiveness in the Singapore school system.(36)

In national primary schools in the district of Kinta Selatan, Perak, Malaysia, according to a study that aimed to determine the level of transformational leadership practices of principals in their schools ($n = 275$). The results showed that the transformational leadership practices perceived by teachers are at a moderate level, with a mean of 2.59 (SD 0.62) on a Likert scale from 0 to 5, and there is a significant relationship between the level of transformational leadership and job satisfaction, ($R = 0.138$, $p < 0.05$) in primary school teachers. The importance of transformational leadership is highlighted and supported by previous studies by Holline (2007). It is suggested to implement transformational practices and that this affects the educational system in Malaysia.(37)

A study conducted in Turkey on the effect of leadership styles of basic education principals on teachers and job satisfaction determined that there is an increase in the effect of each of the leadership behaviors (authentic, ethical, and transformational) on leader effectiveness and on teachers' job satisfaction. The logistic regression performed showed that leaders who had authentic traits, ethical leadership, and transformational leadership considerably increased the level of leader effectiveness. When analyzing the Beta coefficients, the relative contribution of each of the independent variables was demonstrated, and it was confirmed that ethical leadership was the strongest predictor of leader effectiveness, together with transformational leadership. It is shown that transactional leadership affects job satisfaction positively. In particular, the contingent reward dimension of transactional leadership affects job satisfaction in a positive manner (38). This determines that in Turkey, transformational leadership, together with ethical leadership, and one dimension of transactional leadership, is effective.

In a review on school leadership in Latin America,(39) it was reported that school systems tend to show a new mixed form, developed by private providers such as universities, foundations, etc., and by public providers belonging to ministries of education, state universities, etc. These institutions are generally not specialized in leadership and management, except in the Dominican Republic. Restrictions are evident for developing quality school leader training from public policies, since there are neither adequate parameters nor the capacity to follow ongoing training programs. There is also an absence of actions to promote leadership in the medium and long term, except in Chile.

Another important point regarding the context is that, except for Argentina, the school systems studied differentiate salaries between teachers and principals. This difference shows great variability, for example, from 16% in Mexico to 200% above the national minimum basic salary for some principals in Chile.

According to this report, conducting a comparative analysis is complex given the contextual differences. Although the evidence available in these school systems is not systematic, it is apparent that becoming a principal is attractive to many teachers, which determines the need for further approaches to the topic of leadership as a competency, due to its importance for the development of school systems. This report does not address teacher health as a priority, nor studies concerning psychosocial risk factors and teacher occupational stress.

Research on transformational leadership, according to the systematic review conducted by Cruz-Ortiz et al.(40), shows that organizational structures need leaders to motivate workers, but considering work teams as a whole. The most relevant reported result is that current research has mostly addressed the antecedents of transformational leadership, its possible effects, and outcomes at the level of workers and the organization. Intervening variables (mediating and moderating) are identified in the leadership process, but few studies suggest designing intervention lines aimed at optimizing transformational leadership. It is recommended that longitudinal studies be conducted, as they are currently infrequent, as well as multilevel analyses of the transformational leadership process because it is multicausal and affects all levels from an organizational point of view.(40)

In a study conducted by Sun,(41) in which he systematized meta-analyses, after a search in the ProQuest online database covering the main journals and indexes on topics such as public management, management in different business sectors, sociology, and psychology, new information on the topic was collected for the period from 2005 to 2016. American approaches predominate,

although studies conducted in Australia, Canada, China, Cyprus, Israel, Jordan, Kenya, Turkey, and the United Kingdom were found. Added to this review were unpublished evidence/dissertations produced by experts such as Sun and Leithwood,(29) on the topic of school transformational leadership. As a relevant finding of this research, it is stated that transformational leadership is the one with the greatest number of empirical studies conducted and has the greatest influence on policies for fostering school leadership. It has an impact on organizational and individual outcome variables, on management practices, and on students' academic performance. The author takes into account the convention for evaluating the magnitude of effect sizes established by Cohen,(42) in which a large relationship is ≥ 50 , moderate means ≤ 50 and ≥ 30 , and small is defined as ≤ 30 and ≥ 10 . Taking this classification into account, it was found that the relationships between leadership and health variables are scarce, with only one study referenced involving the variables job stress and burnout, in which the relationship is significant but small (≤ 30 and ≥ 10).

The most relevant results of the research showed that school transformational leadership has a large relationship with teachers' emotional states and teaching practices. It also impacts favorable working conditions. It determined that the main dimensions that influence successful school transformational leadership are related to modeling the way, which implies fostering a shared vision, consensual goals, and generating high performance expectations. Another dimension that gained relevance is that of empowering people, which implies the intellectual stimulation of teachers. It was also reported in this study as a finding that the most current conceptualizations are placing more emphasis on strengthening the school organizational culture through transformational school leadership practices such as the creation of collaborative structures and the strengthening of a school culture. The important role of management through transactional leadership is also highlighted, where it is emphasized that there is a dependence between transactional and transformational behaviors, in which both styles are combined. Through this study, it was confirmed that there is scarce evidence on the antecedents of this leadership, so more global research is needed to explain the factors that account for this leadership style. It was proposed that studies be conducted that include mediating and moderating variables, and that more complex statistical modeling be used, such as structural equation models.(41)

Regarding Mexico, due to the country's current situation, existing empirical evidence and the collectivist tendency of Mexican society allow predicting that transformational leadership should be the most frequent and effective, followed by transactional and then passive-avoidant. This assertion was justified through one study aimed at identifying, using the leadership model of Avolio et al.,(30) which leadership styles are exercised by federal officials in the centralized public administration of Mexico ($n = 1433$). The hierarchical pattern expected in the relationship between leadership styles and performance indicators was the augmentative effect of transformational style over transactional and the prominence of transformational at the highest hierarchical levels.(43)

In a recent study in primary schools in Mexico, which aimed to determine the influence of leadership subscales on burnout subscales of teaching and administrative staff from three Escuelas Normales in the State of Mexico ($n = 100$), transformational leadership significantly influenced satisfaction ($\beta = 0.61$) and is also related to extra effort ($\beta = 0.58$). Transactional leadership had a significant direct influence on satisfaction ($\beta = 0.35$). Transactional leadership had an inverse influence on reduced personal accomplishment, while laissez-faire had a positive influence. The theoretical and empirical findings from previous studies were reaffirmed, such as significant direct correlations between the leadership subscales (transformational, transactional, and outcome variables), and all of them inverse with laissez-faire. Likewise, significant direct correlations among all burnout subscales. These results allow understanding of the need for teachers to agree upon their work commitment with the principals, and for principals to develop leadership that can directly influence satisfaction and extra effort of their staff in order to be more competent in their management functions.(44)

It is worth highlighting that studies from this perspective are scarce and in demand, making it necessary to determine how leadership, from a competency-based approach of the school principal in Mexico, influences the reduction of psychosocial risks and work stress. A stance focused on disease prevention is adopted, based on the WHO model on healthy work environments, which understands leadership as an under-explored variable, as well as its effects on the psychosocial risk factors that may occur in schools and on the work stress perceived by Mexican teachers. More frequently, leadership styles tend to be associated with variables such as school effectiveness, management, administration, job satisfaction, group cohesion, and burnout.

Thematic Analysis

Transformational leadership and teacher work well-being

The literature review indicates that the presence of behaviors associated with transformational leadership is generally linked to positively perceived indicators of the teaching work environment, especially in job satisfaction and well-being. Some recent quantitative studies report significant associations between transformational leadership and job satisfaction, pointing to strong correlations between leadership dimensions and levels of satisfaction perceived by teachers in higher education or basic education institutions. This positive relationship has been observed both in self-report instruments and in robust correlational analyses, suggesting empirical consistency across diverse educational contexts.

Consistent with these findings, internationally relevant studies have explored the interaction between transformational leadership and occupational well-being among early-career teachers. For example, research based on educational panels has found that transformational leadership is associated with higher levels of job satisfaction and lower levels of emotional exhaustion, even when controlling for prior indicators of health and well-being. In these studies, satisfaction and emotional regulation emerge as relevant psychosocial resources that teachers report as linked to leadership practices oriented toward motivation and individualized support.

Transformational leadership and teacher job stress

The relationship between transformational leadership and teacher occupational stress has been examined in a growing body of research. Some studies conducted in school settings indicate that this leadership style may reduce aspects of teacher role stress, partly by strengthening affective commitment and job satisfaction as mediators. In these models, transformational leadership is proposed to attenuate the perception of conflicting or ambiguous role demands, exerting a buffering effect on occupational stress. This trend is evident in research using conservation of resources theoretical frameworks, in which leadership behaviors are understood as contextual resources that facilitate the management of complex work demands.

Local studies also support this view. In research conducted in basic education schools in Latin American contexts, a negative relationship has been observed between transformational leadership and teachers' perception of work stress, which has been interpreted as indicating that management styles focused on support, shared vision, and motivation can reduce the perception of psychosocial risks associated with teaching work.

Mediating mechanisms: engagement, satisfaction, and psychological resources

Beyond bivariate associations, the literature has examined mechanisms that mediate the impact of transformational leadership on teachers' occupational health. Variables such as affective commitment and job satisfaction have consistently emerged as mediators in the relationship between leadership and occupational well-being. Several studies suggest that the positive influence of transformational leadership on teacher well-being does not operate directly but is instead channeled through the development of internal psychological resources, such as emotional engagement with the institution and the perception of personal fulfillment at work.

In addition to these classic resources, recent research has introduced professional resilience as an additional mediator. Resilience is associated with both job satisfaction and teachers' ability to cope with daily challenges, and it has been observed that leadership styles emphasizing support, motivation, and individualized consideration can strengthen this dimension. Although these studies do not always focus strictly on occupational health, the findings regarding resilience and satisfaction provide a useful interpretive framework for understanding how leadership can influence psychosocial conditions that, in turn, affect teachers' general health.

Methodological limitations and contextual variation

Despite these findings, the review reveals important methodological limitations in the field. Many studies report significant associations between transformational leadership and positive organizational variables, but few studies use longitudinal designs capable of establishing causal directionality. Likewise, most available studies are cross-sectional and rely on self-report measures, which limits the generalizability of the conclusions.

In addition, contextual variation is evident in the results. For example, some studies indicate that the strength of the associations between transformational leadership and teacher well-being may depend on contextual factors such as the school environment, socioeconomic conditions,

and current educational policies. This suggests that the relationships between leadership and occupational health are not uniform and may be moderated by situational and cultural variables that warrant further research.

Gaps in the International Evidence

Finally, the synthesis of the international literature reveals significant conceptual and empirical gaps. First, there is a scarcity of studies that directly address clinical indicators of teacher mental health, such as chronic stress, diagnosable burnout symptoms, or occupational anxiety disorders. Second, most research analyzes intermediate variables such as satisfaction and commitment, but few studies directly incorporate standardized occupational health measures. Third, leadership interventions specifically designed to promote teacher occupational health have received limited attention, which hinders the practical translation of theoretical findings into effective intervention strategies.

DISCUSSION

The reviewed evidence confirms that transformational leadership has become among the most influential theoretical frameworks in the study of educational leadership over the last few decades. Its adoption in the school setting has not been a simple conceptual transfer from organizational psychology but rather a process of progressive reinterpretation that links it to institutional culture, pedagogical dynamics, and interpersonal relationships within schools. However, the reviewed literature shows that its theoretical predominance does not always correspond to sufficiently robust empirical evidence regarding teacher occupational health.

The results indicate a consistent tendency to associate transformational leadership with positive organizational indicators, including job satisfaction, institutional commitment, and perceived support (45,46). These associations suggest that leader behaviors may function as psychosocial resources within the school environment, contributing to teachers' emotional regulation and their perception of control over work demands. From this perspective, leadership does not act solely as an administrative factor but rather as a contextual variable that participates in shaping the psychosocial climate of the school organization.

However, when the discussion shifts toward more specific occupational health variables, the available evidence is more limited and heterogeneous. Studies linking transformational leadership with teacher occupational stress tend to report modest and in some cases indirect effects, mediated by variables such as job satisfaction or affective commitment (47,48). This mediation suggests that leadership does not by itself eliminate the structural sources of stress, but rather modulates the way in which teachers interpret and cope with work demands. Consequently, the relationship between leadership and teacher health cannot be understood as linear or deterministic, but rather as part of a broader organizational system in which political, administrative, and cultural factors intervene.

A recurring tension in the reviewed literature is the coexistence of results favorable to transformational leadership with studies showing contextually variable effects (49). In certain educational settings, different leadership styles or combinations of transformational and transactional practices have shown equally positive associations with satisfaction and effectiveness indicators. This variability suggests that transformational leadership does not operate as a universal formula, but rather as a repertoire of practices whose effectiveness depends on institutional characteristics, the social capital of the school, and the specific working conditions of the teaching staff.

The theoretical discussion also reveals that much of the research has focused on broad organizational effects, while teacher health has remained in the background. Although the literature recognizes teachers' exposure to elevated psychosocial risks, the systematic integration between educational leadership and occupational health is still incipient (50). Most studies analyze intermediate variables such as satisfaction or commitment, but few employ clinical indicators or comprehensive occupational health models. This absence limits the possibility of establishing solid connections between leadership and prevention of occupational disease in educational contexts.

Another relevant aspect is the predominance of cross-sectional designs based on self-report. This methodological pattern introduces limitations for interpreting causal directionality. It is not possible to determine clearly whether transformational leadership improves occupational health or whether healthier work environments favor positive perceptions of leadership. The lack of longitudinal studies and multilevel models prevents capturing the dynamic nature of school leadership, which is built in continuous interaction among actors, institutional policies, and structural conditions.

From an applied perspective, the findings invite a reconsideration of school leader training beyond administrative effectiveness. If leadership influences teacher well-being, then the preparation of educational leaders should explicitly incorporate competencies related to organizational health, collective emotional management, and prevention of psychosocial risks. However, the reviewed evidence shows that leadership training programs tend to focus on academic outcomes and institutional management, leaving the health dimension of teaching work in the background.

The discussion also suggests that transformational leadership should not be interpreted as a substitute for adequate labor policies. A favorable leadership style can buffer tensions, but it does not compensate for adverse structural conditions such as work overload, precariousness, or normative ambiguity. Therefore, healthy leadership needs to be articulated with educational policies that recognize teacher health as a component of the school system and not as an individual worker's issue.

In terms of the research agenda, the literature points to the need for studies that integrate mediating and moderating variables, complex statistical models, and longitudinal approaches. It is especially pertinent to move toward research that combines psychological, organizational, and clinical indicators, allowing the real impact of leadership on teacher health to be evaluated. Likewise, comparative studies between educational systems are required to distinguish which components of leadership are culturally transferable and which respond to local conditions.

CONCLUSIONS

The analysis of international evidence allows us to affirm that transformational leadership occupies a central place in the contemporary discussion on educational management, but its relationship with teacher occupational health is still in a phase of theoretical and empirical consolidation. The review conducted shows that this leadership style is consistently associated with positive organizational variables, especially job satisfaction, institutional commitment, and perception of support, which suggests that it may act as a relevant psychosocial resource within the school environment. However, when attention is specifically directed to occupational health indicators, the available evidence is less conclusive and shows moderate or small effect sizes.

This finding invites us to qualify the idea that transformational leadership by itself constitutes a solution to teacher health problems. The reviewed studies suggest that its influence operates mainly through mediating mechanisms related to the subjective experience of work, rather than through the direct elimination of structural risk factors. Consequently, teacher occupational health cannot be interpreted as an exclusive result of leadership style, but rather as a complex construction involving organizational conditions, educational policies, and characteristics of the sociocultural context.

Among the main contributions of this article is to situate educational leadership within the framework of occupational health, shifting the focus from institutional effectiveness toward the human sustainability of teaching work. This perspective allows us to understand that the school is not only a space for academic production, but also a work environment that can foster or deteriorate the psychological well-being of those who comprise it. Integrating leadership and occupational health broadens the field of analysis and opens the possibility of designing preventive strategies that recognize the organizational dimension of teacher stress.

The review also highlights a significant methodological gap. Cross-sectional studies based on self-report predominate, while longitudinal research capable of capturing dynamic processes is scarce. This limitation restricts the understanding of leadership as an evolving phenomenon and makes it difficult to establish causal relationships between leadership practices and teacher health. In this regard, the future agenda requires multilevel approaches that integrate psychological, organizational, and clinical indicators, as well as statistical models that allow analyzing complex relationships among mediating and moderating variables.

From an applied perspective, the findings suggest that the training of school leaders should explicitly incorporate the dimension of occupational health. Educational management cannot be separated from the institutional responsibility to protect the well-being of teachers. Leadership oriented toward the creation of healthy work environments could contribute to reducing psychosocial risks, provided that it is articulated with coherent educational policies and adequate working conditions.

Available evidence indicates that transformational leadership represents a valuable interpretive pathway for understanding the interaction between school leadership and teacher well-being, although its effects on occupational health require greater empirical precision. The consolidation

of this field will depend on research that integrates interdisciplinary approaches and recognizes that teacher health is a structural component of educational quality.

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