Work environment and psychosocial risk in a Technical Educational Institution in the Magdalena department (Colombian Caribbean).

Clima laboral y riesgo psicosocial en una Institución Educativa Técnica Departamental del Magdalena (Caribe Colombiano).

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Abstract

The work environment and psychosocial risk were characterized in a technical educational institution in the department of Magdalena (Colombian Caribbean). A non-experimental, cross-sectional, descriptive-correlational study was carried out with a census sampling of 60 potential participants; 51 teachers and administrators responded with informed consent. A Likert-type questionnaire (1–5) was applied, measuring work environment in four dimensions (control over work; teamwork/support; recognition/justice; leadership/communication) and psychosocial risk in two (job demands; job insecurity). Descriptive statistics and internal consistency (Cronbach's α) were estimated. The climate was overall favorable: control 4.05 (α=0.753), teamwork/support 3.68 (α=0.907), recognition/justice 3.48 (α=0.905), and leadership/communication 3.47 (α=0.949). Regarding psychosocial risk, demands averaged 2.97 (α=0.747) and insecurity 2.30 (α=0.882), with a high dispersion in the latter. The prevalence of incivility and harassment in the last three months was 15.7% and 11.8%, respectively. Better leadership/communication and greater recognition/fairness were associated with fewer demands (r≈−0.56 to −0.67) and greater control (r≈0.65). The institution presents protective resources, autonomy, and collegial support that cushion tension, but gaps persist in vertical communication, feedback, and procedural justice, along with demands that encroach on personal time. It is recommended to strengthen leadership and transparency practices, set limits on extracurricular work, redistribute workloads, and consolidate incivility and harassment prevention protocols with confidential reporting channels and psychosocial support. The findings offer a useful baseline for monitoring organizational interventions and future teacher mental health care.

Palabras clave: Organizational Climate; Psychosocial Factors; Teachers; Educational Institutions; Moral Harassment.

Resumen

Se caracterizo el clima laboral y el riesgo psicosocial en una institución educativa técnica departamental del Magdalena (Caribe colombiano). Estudio no experimental, transversal y descriptivo-correlacional con muestreo censal de 60 potenciales participantes; respondieron 51 docentes y directivos con consentimiento informado. Se aplicó cuestionario tipo Likert (1–5) que midió clima laboral en cuatro dimensiones (control sobre el trabajo; trabajo en equipo/apoyo; reconocimiento/justicia; liderazgo/comunicación) y riesgo psicosocial en dos (demandas laborales; inseguridad laboral). Se estimaron estadísticas descriptivas, consistencia interna (α de Cronbach). El clima fue globalmente favorable: control 4,05 (α=0,753), trabajo en equipo/apoyo 3,68 (α=0,907), reconocimiento/justicia 3,48 (α=0,905) y liderazgo/comunicación 3,47 (α=0,949). En riesgo psicosocial, demandas promedió 2,97 (α=0,747) e inseguridad 2,30 (α=0,882), con alta dispersión en esta última. Prevalencias de incivilidad y acoso en los últimos tres meses fueron 15,7% y 11,8%, respectivamente. Mejor liderazgo/comunicación y mayor reconocimiento/justicia se asociaron con menores demandas (r≈−0,56 a −0,67) y con mayor control (r≈0,65). La institución presenta recursos protectores autonomía y apoyo colegiado que amortiguan la tensión, pero persisten brechas en comunicación vertical, retroalimentación y justicia procedimental, junto con demandas que invaden el tiempo personal. Se recomienda fortalecer prácticas de liderazgo y transparencia, establecer límites al trabajo extraclase, redistribuir cargas y consolidar protocolos de prevención de incivilidad y acoso con canales confidenciales de reporte y apoyo psicosocial. Los hallazgos ofrecen una línea base útil para el seguimiento de intervenciones organizacionales y el cuidado de la salud mental docente futura.

Keywords: Clima Organizacional; Factores Psicosociales; Docentes; Instituciones Educativas; Acoso Moral.

Introduction

Work climate constitutes a cross-cutting determinant of teacher well-being and performance, integrating shared perceptions about leadership, recognition, communication, support, and organizational justice. In school contexts, these perceptions mediate the quality of pedagogical collaboration, motivation, and mental health, modulating exposure to and response to psychosocial risk factors. Recent literature emphasizes that climate is not a static attribute, but a relational and contextual phenomenon that is informed by consistent management practices and the availability of psychosocial resources (Jolly, Kong, & Kim, 2021; Adamović, 2023).

Contemporary theoretical frameworks, especially the Demand–Resources (DCR) model and the Demand–Control–Support (DCS) model, offer a robust explanatory architecture for studying job strain and its effects on education. The DCR proposes that demands (e.g., workload, emotional demands, multitasking) precipitate burnout and exhaustion, whereas resources (e.g., autonomy, social support, feedback, fairness) buffer these effects and enhance engagement (Bakker, 2023; Mazzetti et al., 2023). Complementarily, the DCS highlights the role of decisional latitude and support as antidotes to high demands, with robust evidence in occupational health (Larsson et al., 2019).

In schools, working conditions have changed due to the expansion of extracurricular tasks, pressure for results, and intensive interactions with families and students. Reviews of teachers indicate that the combination of high demands with insufficient resources is associated with greater burnout, lower satisfaction, and worse health indicators (Admiraal et al., 2023). In parallel, organizational justice and leadership styles are critical vectors of climate: transparent decisions, respectful treatment, and timely feedback promote psychological safety and performance, while their absence erodes trust (Adamović, 2023; Tummers, Bakker, Derks, & van der Lippe, 2021).

Work–family balance emerges as a key channel through which teaching demands impact health. Meta-analytic evidence converges in that work–family conflict is linked to higher levels of stress, fatigue, and discomfort, and lower levels of satisfaction and commitment (French, Dumani, Allen, & Shockley, 2017; Li, Zhang, Kwan, & Liu, 2022). In educational institutions, the permeability of schedules and the extension of work to home life intensify this conflict, especially when clear boundaries, equitable distribution of workloads, or emotional and case management support are lacking.

Likewise, incivil behaviors—expressions of disrespect, courtesy, or consideration—degrade the climate and open the door to more severe forms of mistreatment, with cumulative effects on well-being and productivity. Recent literature documents associations between incivility, increased conflict, and deterioration of psychosocial indicators; as a preventive measure, anti-incivility protocols, confidential reporting channels, and training in dignified treatment are recommended (Peng, 2023). These findings underscore the importance of maintaining the quality of interactions in school communities.

In the Colombian Caribbean, and particularly in departmental technical educational institutions, there is a persistent need for situated studies that describe the work climate and psychosocial risks from an integrated perspective, connecting JD-R/JDCS frameworks with justice and leadership. This study aims to characterize these dimensions in an institution in the department of Magdalena, estimate their internal consistency, and discuss their articulation with international evidence, with a view to guiding interventions for organizational improvement and the protection of teacher health (Bakker, 2023; Mazzetti et al., 2023; Larsson et al., 2019; Jolly et al., 2021; Adamović, 2023; Tummers et al., 2021; French et al., 2017; Li et al., 2022; Admiraal et al., 2023; Peng, 2023).

Methodology

This study used a non-experimental, cross-sectional, descriptive-correlational design, aimed at estimating the internal consistency of the applied scales and examining the relationship between dimensions of the work environment and psychosocial risk in a technical educational institution in the Magdalena department (Colombian Caribbean). The unit of analysis was teachers and administrators with an active link during the survey period. Self-administered five-point Likert-type questionnaires were chosen, following current good practices for the development and validation of instruments in social and health research (Hernández-Sampieri et al., 2018; DeVellis, 2017; Boateng et al., 2018).

The target population consisted of 60 people, and a census sampling approach was adopted, inviting the entire eligible population. A total of 51 participants responded with informed consent, ensuring high coverage and reducing the selection bias common in organizational surveys (Lohr, 2010; AAPOR, 2016). Teachers and administrators with at least three months' seniority were included; those who remained on external commission throughout the fieldwork or had prolonged disabilities that prevented them from responding were excluded. Participation was voluntary, with no incentives, and confidentiality and anonymity were guaranteed.

The work environment was assessed using a Likert-type instrument that grouped 30 items into four dimensions: control over work, teamwork and support, recognition and fairness, and leadership and communication; higher scores indicate a more favorable environment. Psychosocial risk was measured using subscales of job demands and job insecurity, also in Likert format, with higher scores directly interpreting greater exposure. Before substantive analysis, internal consistency by dimension and overall consistency was estimated using alpha, and recent recommendations on reliability interpretation and complementary alternatives such as omega were considered to support the internal validity of the measures (Tavakol & Dennick, 2011; McNeish, 2018; DeVellis, 2017).

Data collection was conducted during working hours, using a self-administered format on paper or digitally, depending on availability, with support from the research team to address operational questions without prompting responses. Record uniqueness was controlled, minimum response completeness was verified, and privacy was maintained to mitigate social desirability. A limited pilot test was previously conducted to refine wording and timing; the pilot cases were not included in the main analysis (Hernández-Sampieri et al., 2018; Boateng et al., 2018).

The analytical plan included the description of each dimension through means, standard deviations, minimums, and maximums; reliability was reported using alpha along with contemporary interpretation criteria. The assumptions were tested for skewness, kurtosis, and the Shapiro–Wilk normality test. Based on these, bivariate correlations between climate and risk dimensions were estimated (Pearson's coefficient when normality was supported or Spearman's coefficient otherwise), and linear regression models were explored to assess the joint contribution of climate resources to job demands and insecurity. Significance ($p < .05$, two-tailed), effect sizes, and confidence intervals were reported to facilitate substantive interpretation of the results (Razali & Wah, 2011; Lakens, 2013; James et al., 2021).

The study observed ethical considerations in accordance with the Declaration of Helsinki and Colombian regulations applicable to survey research in educational settings; informed consent was obtained, the collection of direct identifiers was avoided, and institutional approval was obtained for the application of instruments. Under these safeguards, the study is considered to be of minimal risk and provides useful evidence to guide actions to improve the work environment and prevent psychosocial risk in the context analyzed (World Medical Association, 2013).

Results and discussion

The analyzed sample consisted of N = 51 participants who provided their consent. Teaching positions predominated (47/51), with four teaching directors. Gender distribution was balanced (26 men, 25 women). The mean age was 47.0 ± 12.6 years; the median tenure at the institution was 2 years, and the median weekly workload was 24 hours. The majority worked in elementary, secondary, and middle school; the most common employment type was permanent, followed by temporary, with predominantly morning shifts.

Table 1.

Summary of dimensions of the work environment and psychosocial risk.

Dimension	Items (n)	Cronbach's α	Media (1–5)	OF	Min	Max
Control over work	4	0.753	4.05	0.78	1.50	5.00
Teamwork and support	8	0.907	3.68	0.80	1.12	5.00
Recognition and justice	9	0.905	3.48	0.81	1.22	5.00
Leadership and communication	9	0.949	3.47	0.97	1.00	5.00
Labor lawsuits	7	0.747	2.97	0.73	1.00	4.71
Job insecurity	3	0.882	2.30	1.40	1.00	5.00

Source: Own elaboration

In terms of work environment, mean scores ranged from moderate to favorable: Leadership and communication (3.47; α=0.949), Recognition and justice (3.48; α=0.905), Teamwork and support (3.68; α=0.907), and Control over work (4.05; α=0.753). Within the protective dimensions, the items with the lowest means were management decisions and communications, consultation prior to changes, and performance feedback (≈3.1–3.2). In terms of psychosocial risk, Job demands averaged 2.97 (α=0.747), with higher scores for taking work home that affects rest (≈3.39), emotional demands, and multitasking; Job insecurity averaged 2.30 (α=0.882), with high dispersion (SD=1.40).

For incivility and harassment incidents, the prevalence of disrespectful treatment in the past 3 months was 15.7%, and harassment (verbal/digital/physical) was 11.8%.

Correlations indicated that higher levels of leadership/communication and recognition/fairness were associated with lower demands (r≈−0.56 to −0.67) and higher control (r≈0.65).

The findings reveal a globally favorable work environment with strengths in control over work and teamwork/support, while areas for improvement are identified in leadership/communication and recognition/fairness, along with work demands that tend to overwhelm personal time. This pattern is consistent with recent theoretical frameworks and reviews (Demand-Control model and Demand-Resource model) that show how demands (e.g., pace, multitasking, emotional demands) are associated with strain and burnout, and how resources (e.g., control/autonomy, social support, fairness, recognition) buffer this effect and promote well-being and job performance (Bakker, 2023; Mazzetti et al., 2023).

High reported control (mean 4.05) constitutes a key resource. Contemporary reviews of the Demand-Control model and the Demand-Resource approach show that decisional autonomy/latitude reduces the likelihood of strain and facilitates active coping processes (learning and adjustment), while, in the JD-R framework, control/autonomy increases engagement and mitigates the negative effects of high demands. Furthermore, recent evidence indicates that social support and teamwork act as important resources associated with lower burnout and better health and performance outcomes. These relationships have been confirmed by meta-analyses and updated systematic reviews (Bakker, 2023; Larsson et al., 2019; Jolly et al., 2021).

Gaps in communication, feedback, and consultation (items ~3.1–3.2) point to deficits in leadership practices and problems of procedural organizational justice. Recent empirical literature documents that low perceptions of justice (procedural/interactional) and inadequate leadership styles are associated with lower satisfaction, higher stress, and less healthy work environments; current research also links leadership directly to the provision (or drain) of work resources, so reinforcing timely communication,

systematizing feedback, and ensuring participatory processes in the face of change should strengthen critical psychosocial resources for teacher performance (Adamović, 2023; Magnavita et al., 2022; Tummers et al., 2021).

Although the mean number of demands is moderate (2.97), the higher scores on taking work home, emotional demands, and multitasking are consistent with recent evidence showing that quantitative and emotional demands increase burnout and fatigue, especially when they invade personal time and generate work–family conflict. Recent meta-analyses and reviews document robust associations between work–family conflict and worse health outcomes, greater burnout, and lower job satisfaction. In educational contexts, recent studies show that extracurricular workloads and managing emotional demands (e.g., conflicts with families and students) increase teachers' psychological burden; therefore, clear policies regarding time limits, equitable task redistribution, and emotional and case support networks are recommended (French et al., 2017; Li et al., 2022; Admiraal et al., 2023).

Average job insecurity was low but highly variable (SD = 1.40), suggesting subgroups with distinct contractual perceptions. Recent studies show that imbalances in the effort-reward model are consistently associated with lower perceived health and higher risks of burnout (Kunz, Gusy, & Paulsen, 2019). Furthermore, low rewards and recognition have been identified as increasing the likelihood of exposure to negative behaviors such as workplace bullying (Notelaers, Van der Heijden, & Einarsen, 2019). This reinforces the logic that uncertainty and low predictability impair well-being, particularly when they coexist with limited rewards or insufficient recognition. In this sense, strengthening transparent criteria for allocating opportunities and communicating career paths and contractual stability can reduce these perceptions and their adverse effects.

The reported prevalence of disrespectful treatment (15.7%) and harassment (11.8%), although not in the majority, is critically relevant, as recent research confirms

that even modest levels of incivility have measurable effects on psychological well-being and performance (Shoorideh, Moosavi, & Ahmadi, 2021; Holm, Torkelson, & Backström, 2022). More recent systematic reviews and meta-analyses highlight that incivility is associated with a higher risk of conflict, a worse work environment, and lower productivity, and that it constitutes an antecedent of harassment dynamics (Peng, Li, & Wang, 2023; Notebaert, Heuven, & Hooftman, 2025). In this sense, anti-incivility and anti-harassment protocols, confidential reporting channels, training in dignified treatment, and early mediation strategies constitute priority interventions, which can also improve interpersonal justice and the psychological safety of the team.

Conclusion

The study shows a favorable work environment, sustained by autonomy and peer support. These resources enhance performance and mitigate the stress inherent in the school context. However, gaps in vertical communication, feedback, and consultation prior to organizational changes emerge. Demands are observed that encroach on personal time and intensify the emotional burden of teaching. Job insecurity appears heterogeneous and coexists with episodes of disrespectful treatment and bullying behaviors. These phenomena, although not dominant, are significant due to their impact on health, well-being, and coexistence. The findings support an improvement agenda focused on leadership and organizational justice with a preventative approach. It is advisable to establish formal and timely information channels, make criteria transparent, and consolidate formative feedback loops. In parallel, it is recommended to manage workloads through planning, equitable distribution, and limits on extracurricular work. It is key to promote shared responsibility among managers, protect rest periods, and coordinate tasks to reduce friction. For coexistence, strengthening psychological safety with policies against incivility and bullying is essential. Confidential reporting channels, training in dignified treatment, early mediation, and accessible psychosocial support are required. As a methodological limitation, the cross-sectional design and self-reporting

restrict causal inferences and increase the risk of bias. Future research should incorporate monitoring and evaluation of interventions to estimate sustained effects. In practical terms, the institution has solid foundations for consolidating a healthy, learning-oriented climate. Prioritizing improvements in leadership, communication, and workload management, aligned with psychosocial protocols, will enhance engagement and educational quality.

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