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Leadership-Proximal Climate and Job Satisfaction in Local Government: An HR-Oriented Diagnostic

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Abstract

This study examines whether overall organizational climate (OC) and its five dimensions are positively associated with job satisfaction (JS) in a municipal administration. We conducted a cross-sectional, non-experimental, correlational survey using validated Likert-type instruments for OC (26 items; five dimensions) and JS (14 items), applying distribution-aware, non-parametric analyses (Shapiro–Wilk, Spearman's ρ, two-sided *p*-values). The municipal workforce comprised N ≈ 143 employees (context frame); inferential estimates are reported for the OGAF analytic sub-sample (n = 35). OC was positively associated with JS. At the dimension level, communication and supervision aligned closely with JS, alongside self-realization; working conditions and job involvement showed positive but comparatively smaller associations. Findings translate into a decision-oriented lever map for HR in local government: institutionalize transparent two-way communication, develop coaching-oriented supervision, enhance job design for self-realization, and address salient working-condition gaps. Scope of inference is limited to the analytic sample reported. Future research should re-estimate the full frame and across units to improve generalizability.

Keywords: leadership; supervisory support; internal communication; organizational climate; job satisfaction; human resources; public administration; psychosocial factors

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1. Introduction

Organizational climate (OC) and job satisfaction (JS) are foundational psychosocial constructs in work organizations. OC synthesizes employees' shared perceptions of policies, communication patterns, supervisory practices, and working conditions; JS captures evaluative attitudes toward one's job shaped by intrinsic and extrinsic factors (Xia et al., 2024; Dong et al., 2024). In public administrations, where service quality depends on coordinated routines and trust in internal processes, adverse climate conditions can undermine motivation, heighten withdrawal intentions, and erode performance. Framing OC as a proximal psychosocial condition helps explain why relatively small managerial shifts—clearer

information flows, supportive supervision, and adequate resources—often yield measurable gains in morale and output (Matheis et al., 2024; Yu, 2024). The contemporary labor context strengthens the case for examining OC–JS in government settings. International workforce reports cited in this research indicate that a sizable proportion of employees are contemplating job changes, while social contagion around quitting ("quitfluencer" effects) can amplify dissatisfaction within units (Lei et al., 2024). Importantly, the same sources suggest that improving the organizational climate would lead a large share of workers to reconsider leaving, highlighting climate as a tractable lever for retention and well-being (Usanova, 2024). These signals place psychosocial factors at the center of occupational health strategies, particularly in service-intensive public organizations. The Peruvian context offers additional reasons for urgency (Carazas-Bruno et al., 2024; Maneen et al., 2025). Administrative data summarized in this research report that a substantial fraction of formal employment separations in 2022 were employee-initiated resignations (Ministry of Labor and Employment Promotion, 2022). While macroeconomic and institutional determinants matter, organizational-level drivers—communication quality, supervisory style, perceived fairness, and working conditions—are directly experienced by employees and can be modified within municipal management cycles. Positioning OC as a modifiable exposure, and JS as a salient attitudinal outcome linked to service quality and citizen experience, provides a pragmatic lens for occupational-health-oriented improvement (Lintanga & Rathakrishnan, 2024; Jeong, 2025).

Research gap and contribution. While OC–JS associations are well documented, dimension-level, HR-actionable diagnostics in emerging-economy municipal settings remain scarce. This study contributes by (i) quantifying which leadership-proximal facets (communication, supervision) align most with JS; (ii) reporting a transparent, distribution-aware analysis suitable for ordinal attitudinal measures; and (iii) translating estimates into a sequenced lever map for HR in local government.

Finally, on the outline of this document, the next section (Section 2) reviews the literature. Section 3 details design, participants, instruments, procedures, and analysis. Section 4 reports descriptive and inferential findings. Section 5 discusses implications. Section 6 concludes with contributions, limitations, and future research.

2. Literature Review

2.1. Background and Theoretical Basis

Conceptually, this research anchors OC and JS in widely used frameworks that fit public-sector realities. Prior studies across public-sector and service settings typically find a positive OC–JS link, with magnitudes varying by context, instruments, and statistics. Communication and supervision recurrently emerge as proximal drivers, alongside self-realization (Lintanga & Rathakrishnan, 2024). Municipal studies in Latin America report effects from small–moderate to strong, reflecting heterogeneity in formalization, resource constraints, and leadership routines. This pattern motivates dimension-level reporting to guide targeted, HR-oriented interventions in local government. Organizational climate (OC) is conceived as employees' shared perceptions of the policies, practices, and routines that shape the work environment—how communication occurs, how supervision is exercised, and how roles and resources are structured (Teetzen et al., 2023; Xia et al., 2024). In this perspective, organizations are social systems where climate operates as a proximal psychosocial condition that orients attitudes and behavior (Dong et al., 2024).

Job satisfaction (JS) is treated as an evaluative attitude toward one's job, integrating cognitive and affective appraisals about work characteristics and experiences (Xia et al., 2024). Following the two-factor tradition, JS reflects the joint effect of motivators (intrinsic aspects such as achievement, recognition, growth) and hygiene factors (extrinsic conditions

such as policies, supervision, pay, and working conditions). While the absence of hygiene factors produces dissatisfaction, their presence does not automatically generate satisfaction; instead, intrinsic conditions are primarily responsible for positive attitudes (Yu, 2024). In this research, JS is measured with a 14-item instrument structured around that intrinsic–extrinsic logic (Yu, 2024), which fits public-sector realities where supervisory quality, clarity of roles, and fairness of conditions weigh heavily on employees' appraisals.

Linking OC and JS. The theoretical bridge between OC and JS rests on an attitudinal mechanism: climates perceived as informationally clear (communication), supportive and fair (supervision), resource-adequate and safe (working conditions), and personally meaningful (self-realization, involvement) tend to satisfy both hygiene and motivator domains, thus elevating JS (Matheis et al., 2024; Yu, 2024; Xia et al., 2024). The theoretical premise is that climates perceived as supportive and fair facilitate the fulfillment of psychological needs (competence, relatedness, autonomy proxies) and reduce strain, thereby predisposing more favorable job attitudes (Xia et al., 2024; Dong et al., 2024).

Conversely, climates marked by ambiguity, authoritarian control, or resource deficits undermine need fulfillment and increase strain, fostering neutral or negative job attitudes (Dong et al., 2024). This logic implies dimension-specific pathways: for example, communication reduces uncertainty and fosters inclusion; supervision provides socioemotional support and justice cues; working conditions address comfort and safety; self-realization and involvement supply meaning and autonomy signals. Each pathway maps onto the intrinsic/extrinsic split in JS, yielding clear, testable hypotheses at both the global and dimensional levels (Matheis et al., 2024; Yu, 2024). Implications for measurement and analysis. Because OC and JS are assessed via multi-item Likert-type questionnaires that approximate ordinal structure, distributional checks and rank-based statistics are theoretically consistent with the constructs' attitudinal nature (Xia et al., 2024; Matheis et al., 2024). Interpreting associations, therefore, emphasizes practical significance alongside statistical significance, with attention to which OC dimensions—communication, supervision, working conditions, self-realization, involvement—exhibit the strongest alignment with JS. This theory-driven, dimension-level focus supports decision-oriented diagnosis in public organizations while remaining anchored in established organizational behavior frameworks (Teetzen et al., 2023; Dong et al., 2024).

2.2. Conceptual Framework of Variables and Dimensions

Organizational climate (OC) is defined as employees' shared perceptions of the policies, practices, and day-to-day routines that characterize their work setting—how information flows, how supervision is enacted, and how resources and roles are structured (Teetzen et al., 2023; Xia et al., 2024). Leadership-proximal climate facets (communication, supervision) and structural climate (working conditions) are posited to influence job satisfaction alongside intrinsic pathways (self-realization, job involvement). In this research, OC is operationalized across five interrelated dimensions—self-realization, job involvement, supervision, communication, and working conditions—that jointly capture relational (leadership style, information flows) and structural aspects (resources, ergonomics) of the work environment. JS is framed within the intrinsic–extrinsic tradition, integrating both meaning/growth and contextual conditions. This configuration clarifies dimension-specific pathways (e.g., informational clarity, socioemotional support, ergonomic adequacy) that theory predicts will align with job satisfaction in public-sector settings (Xia et al., 2024; Dong et al., 2024).

Conversely, ambiguity, authoritarian control, and resource deficits hinder need fulfillment and increase stress, which typically depresses positive attitudes and performance (Xia et al., 2024; Dong et al., 2024). Job satisfaction (JS) is an evaluative attitude toward one's

job that integrates cognitive appraisals (e.g., perceived fairness, role clarity) and affective reactions (e.g., pride, frustration) to work experiences (Xia et al., 2024). In this study, JS is conceptualized as a multidimensional construct shaped by both the content of the work and the surrounding context, consistent with established organizational behavior models (Xia et al., 2024; Dong et al., 2024). A contemporary two-factor framing distinguishing motivator and hygiene determinants of job satisfaction (Lee et al., 2022; Alrawahi et al., 2020; Hellín Gil et al., 2022). JS reflects an evaluative attitude shaped by intrinsic (meaning, growth, recognition) and extrinsic (policies, supervision, pay, conditions) experiences. While hygiene adequacy mitigates dissatisfaction, increases in intrinsic content more robustly elevate satisfaction; hence, climates that improve informational clarity and supervisory fairness can reinforce intrinsic appraisals by reducing strain and ambiguity.

This asymmetry explains why interventions that only adjust extrinsic conditions may reduce dissatisfaction without substantially increasing satisfaction, whereas enhancing intrinsic factors (e.g., skill use, recognition, autonomy) is more likely to elevate satisfaction (Yu, 2024; Xia et al., 2024). JS thus functions as a proximal outcome of employees' psychosocial experience at work. When organizational climate provides clear information, supportive and fair supervision, adequate resources and safe conditions, and opportunities for meaning and growth, workers are more likely to appraise their jobs favorably (Xia et al., 2024; Dong et al., 2024). Conversely, ambiguity, authoritarian oversight, and resource deficits tend to depress JS through strain and thwarted needs. This mechanism is aligned with the OC dimensions considered in this research (communication, supervision, working conditions, self-realization, job involvement) and clarifies why climate–satisfaction correlations are expected and which facets of climate are most consequential for attitudes. Guided by this framework, we posit the following testable hypotheses:

- Hypothesis 1 (H1): Overall work climate is positively associated with job satisfaction.
- Hypotheses 2a–2e (H2a–H2e): Each climate dimension—self-realization, job involvement, supervision, communication, working conditions—is positively associated with job satisfaction, with communication and supervision expected to show the largest associations given their leadership-proximal nature.

Table 1 shows the operationalization of variables applied in the present research.

Table 1. Operationalization of variables.

Variables	Operational Definition	Dimensions	Indicators	Measurement Scale
Variable 1 Organizational Climate	To measure the organizational climate within the Provincial Municipality of Cerro Pasco, a 26-item questionnaire was used.	Self-fulfillment	Opportunities for personal development Opportunities for professional development	(1) Never (2) Almost never (3) Sometimes (4) Almost always (5) Always
		Work involvement	Organizational values Worker commitment	
		Supervision	Guidance role Support role	
		Communication	Information flow Clarity of information	
		Working conditions	Material elements Psychosocial elements Economic factors	

Table 1. *Cont.*

Variables	Operational Definition	Dimensions	Indicators	Measurement Scale
Variable 2 Job satisfaction	To measure job satisfaction in the Provincial Municipality of Cerro de Pasco, a 14-item questionnaire was used	Expectations	Challenge of the job Compatibility between personality and job	(1) Never (2) Almost never (3) Sometimes (4) Almost always (5) Always
		Perceived value	Fair reward systems. Favorable working conditions Support from colleagues.	

3. Methods

3.1. Research Method and Design

The study design is cross-sectional, non-experimental, correlational (calendar year 2023); unit of analysis: employee. Participants are employees of the Provincial Municipality of Cerro de Pasco; particularly, the analytic base is the OGAF sub-sample (n = 35); the broader workforce (N ≈ 143) is noted only for context. Inclusion criteria for the sub-sample: active employment during fieldwork and complete questionnaire. The procedure was on-site, self-administered questionnaires were fulfilled during regular work hours; under anonymity and no intervention; with informed consent. The target population comprises the employees of the Provincial Municipality of Cerro de Pasco (Peru), understood as staff occupying administrative and operational roles within the local public administration during the year of observation (2023). In general terms, the municipal workforce comprises 143 employees. For this study we targeted the Office of the General Administration and Finance (OGAF). All 35 OGAF employees who met inclusion criteria were invited; 35 returned complete questionnaires (response rate 100%; complete cases n = 35). The organizational setting includes multiple internal units; for analytical transparency, one of these—General Administration and Finance Office (OGAF)—is explicitly identified in the statistical data that inform part of the inferential outputs. This delineation clarifies the organizational scope to which results are referred (Uhm & Yi, 2021; Pérez-Guerrero et al., 2024).

3.2. Instruments

The present study adopts an operationalization instrument, which synthesizes OC into five interrelated dimensions—self-realization, job involvement, supervision, communication, and working conditions—capturing both relational (e.g., leadership style, informational flows) and structural aspects (e.g., adequacy of resources, physical environment) based on contexts through Matheis et al. (2024).

OC is assessed with a multi-item Likert-type questionnaire (26 items) that yields dimension scores and an overall index (Matheis et al., 2024). Items are aggregated by dimension; higher scores indicate more favorable perceptions. Consistent with attitudinal measurement, distributions are treated as ordinal, and summary categories (e.g., low/medium/high) are used to profile the workforce. Reliability and content validity are supported in this research via expert review and internal consistency checks typical for psychosocial scales (Matheis et al., 2024; Xia et al., 2024). Because OC is a latent construct influenced by both relational (e.g., leadership, communication) and structural features (e.g., resources, conditions), analyzing dimension-specific patterns is essential: it clarifies which levers are most closely aligned with employee outcomes and thereby offers a decision-oriented map for improvement (Matheis et al., 2024; Teetzen et al., 2023).

JS is assessed with a 14-item instrument grounded in the intrinsic–extrinsic structure (Yu, 2024), capturing both overall satisfaction and facet-level appraisals. Items are rated on

Likert-type scales and summarized into global and subscale indicators. Given the ordinal character typical of attitudinal measures, analyses rely on distribution-aware methods and, where useful for managerial interpretation, categorize scores into low/medium/high levels (Xia et al., 2024; Yu, 2024). In line with the instrument used here, intrinsic satisfaction reflects perceived opportunities for self-realization, recognition, and growth; extrinsic satisfaction reflects policies, supervision, pay, security, and working conditions (Yu, 2024; Xia et al., 2024). This partition facilitates diagnosis: if extrinsic satisfaction is comparatively weaker, interventions should prioritize communication quality, supervisory fairness/support, and resource/conditions; if intrinsic satisfaction lags, job design and recognition routines become primary levers. In summary, JS is treated as a theory-consistent, multidimensional attitude that integrates intrinsic meaning and extrinsic conditions of work. Its conceptual linkage to organizational climate provides a clear, decision-oriented bridge: by targeting specific climate dimensions, managers can influence both intrinsic and extrinsic facets of JS, thereby advancing employee well-being and performance (Yu, 2024; Xia et al., 2024; Dong et al., 2024).

The study employed a standardized survey administered under natural work conditions, with self-administered questionnaires and assurances of informed consent, confidentiality, and restricted data use. Fieldwork procedures followed social-research guidance to minimize measurement bias and protect participants' rights (Uhm & Yi, 2021; Pérez-Guerrero et al., 2024). Two validated, Likert-type instruments were used:

- Organizational Climate (OC)—26 items, adapted from Matheis et al. (2024), yielding an overall score and five dimensions: self-realization, job involvement, supervision, communication, and working conditions. Items reflect shared perceptions of policies, practices, leadership style, information flows, and material/ergonomic conditions (Teetzen et al., 2023; Xia et al., 2024; Dong et al., 2024). Response options are ordinal; higher scores indicate more favorable climate perceptions. Dimension scores and an overall index are computed by summation/averaging and classified into low/medium/high following the operational rules adopted in this research.
- Job Satisfaction (JS)—14 items, grounded in a contemporary two-factor perspective (Lee et al., 2022; Alrawahi et al., 2020; Hellín Gil et al., 2022), distinguishing intrinsic (motivator) from extrinsic (hygiene) components. The scale captures global satisfaction and facet-level appraisals (achievement, recognition, growth, supervision, policies, working conditions), with higher scores indicating more favorable job evaluations (Yu, 2024; Xia et al., 2024). Classification into low/medium/high follows the study's cut-points for managerial interpretation.

See Appendix A (Tables A1 and A2) for full item matrices. The internal reliability of the instruments used in this research was obtained by applying Cronbach's alpha coefficient of internal consistency, given by the formula:

$$\alpha = \frac{k}{k-1} \cdot \left(1 - \frac{\sum_{i=1}^{k} s_i^2}{s_T^2}\right)$$

where

k: number of items
$\sum_{i=1}^{k} s_i^2$: sum of item variances
s_T^2: variance of the total (summed) score.

Internal consistency was assessed with Cronbach's α; estimates indicated acceptable-to-good reliability (OC: $\alpha = 0.816$; JS: $\alpha = 0.814$). Content validity was supported by expert review. Questionnaires were delivered on-site during the observation period, without experimental manipulation. Items use Likert-type response formats; dimension and total

scores are computed per instrument manuals/adaptations and then categorized. Given the ordinal nature of indicators, subsequent analysis relies on distribution-aware statistics, but the data-collection step itself remains purely observational and standardized (Matheis et al., 2024; Yu, 2024; Uhm & Yi, 2021).

Responses were screened for completeness, checked for out-of-range values, and anonymized. Item scores from both instruments were coded per their keys (Likert-type, ordinal). Addressing this question requires instruments and analyses that respect the ordinal nature of the scales and the distributional properties of the data, thereby supporting valid inference for decision-making (Matheis et al., 2024; Yu, 2024). We apply a listwise deletion when item-missing $\leq$5%; and a single imputation (median within dimension) if >5% in any scale; sensitivity checks showed unchanged inferences. Regarding reliability, Cronbach's α global and by dimensions. In reference to diagnostics and associations, Shapiro–Wilk is applied for normality; and Spearman's ρ (two-tailed, $\alpha = 0.05$). The software used is IBM SPSS v27; R 4.x (Hmisc). For the classification, low/medium/high thresholds are used only for descriptive interpretation; inferential claims rely on continuous indices.

On missing-data handling, multiple imputation was not implemented given the small sample (n = 35) and the instability of ordinal multi-item imputations under high parameter-to-case ratios. Primary analyses used available-case correlations of scale indices; as a sensitivity check, significance decisions and the rank order of effects were unchanged under listwise deletion. A formal table of missingness (pattern and %) is acknowledged as absent in this version and planned for the full-population study. For correlations and normality tests, analyses were run on available cases; single imputation was used only to render descriptive summaries.

Given the ordinal structure and non-normal distributions, the OC–JS relationship was estimated with Spearman's rho (two-tailed, $\alpha = 0.05$) (Uhm & Yi, 2021; Habibzadeh & Farrokhi, 2024). Consistent with the source results, the overall association is positive and significant ($\rho = 0.627$; $p < 0.001$), and dimension-level correlations are likewise significant: self-realization ($\rho = 0.647$), job involvement ($\rho = 0.396$; $p = 0.018$), supervision ($\rho = 0.527$), communication ($\rho = 0.624$), and working conditions ($\rho = 0.469$). To preserve traceability with the original materials, descriptive statistics and inferential tests are aligned with the OGAF sub-sample (n = 35); municipality-wide generalization requires full-frame re-estimation (see next section). If full-frame data ($N \approx 143$) are later available, re-estimation may shift magnitudes but not the theoretical pattern. Data handling and preliminary summaries were carried out in Microsoft Excel (2019); inferential analyses used IBM SPSS Statistics (v27), adhering to the procedures above (Habibzadeh & Farrokhi, 2024; Uhm & Yi, 2021). In reference to limitations regarding covariates, no demographic covariates (e.g., gender, age, tenure) were collected; therefore, subgroup analyses are not reported. Effect directions and magnitudes are read in light of the constructs' psychosocial meaning and the ordinal scales employed, emphasizing practical significance for decision-making (e.g., communication/supervision as proximal levers) alongside statistical criteria (Matheis et al., 2024; Yu, 2024; Xia et al., 2024). Regarding the analytical approach, Associations were estimated with Spearman's ρ and two-sided p-values from the large-sample test for ρ. Confidence intervals were not computed, therefore we report point estimates and p-values only. In reference to participant flow, the eligible staff in the OGAF unit (Cerro de Pasco) were 35; 35 were invited; 35 completed the instruments; and 35 were included in the analyses. We use N for the study frame/population and n for the analytic sample. Where counts are approximate, we write $N \approx 143$. Unless stated otherwise, reported tests use n = 35. For available-case analyses, the effective n may vary across specific tests; fixed n = 35 reflects the analytic cohort.

4. Results

Demographic variables (gender, age, tenure) were not collected—this is a study limitation. However, we characterize the sample by job roles within the OGAF unit. The 35 participants were distributed across administrative roles (heads, administrative technicians, assistants, accounting and revenue positions) as listed in the OGAF staffing data (see Appendix A, Table A3).

4.1. Description of Results and Normality Test

Descriptive profiles correspond to the OGAF sub-sample (n = 35) used in the statistical tables below; inferential results (normality tests and correlations) likewise refer to n = 35, and every table reports its exact N to avoid denominator mixing. Overall, climate levels are predominantly low and job satisfaction medium, with communication and supervision as salient deficits (Tables 2–10).

Regarding Table 2 (OC overall), most employees fall in low climate levels (57.1%), with only 8.6% high:

Table 2. Organizational climate in the Provincial Municipality of Cerro de Pasco, 2023.

Level	Category	Frequency (n)	Percent (%)
Low	From 38 to 89	20	57.14
Medium	From 90 to 141	12	34.29
High	From 142 to 190	3	8.57
Total		35	100.00%

Note: OGAF sub-sample (n = 35). Percentages computed within unit. IBM SPSS v27.

As shown in Table 2, organizational climate is predominantly unfavorable in the OGAF unit: 57.1% of employees fall in the low climate category, 34.3% in the medium category, and only 8.6% in the high category. This distribution indicates that more than half of the staff perceive the work environment as weak in terms of policies, routines, and leadership practices, while a very small minority experience a clearly positive climate. In practical terms, this baseline suggests that HR and management must treat climate as a priority area for intervention rather than an isolated problem affecting only a few employees.

Regarding Table 3, self-realization is predominantly low (62.9%), suggesting limited growth/recognition signals:

Table 3. Self-realization in the Provincial Municipality of Cerro de Pasco, 2023.

Level	Category	Frequency (n)	Percent (%)
Low	From 7 to 16	22	62.86
Medium	From 17 to 26	9	25.71
High	From 27 to 35	4	11.43
Total		35	100.00%

Note: OGAF sub-sample (n = 35). Percentages computed within unit. IBM SPSS v27.

Table 3 shows that self-realization is mainly rated as low (62.9%), with only 25.7% of employees in the medium category and 11.4% in the high category. This pattern suggests that most staff do not perceive sufficient opportunities for learning, advancement, or recognition of achievements. From an HR perspective, the climate around growth and professional development is weak: employees are not consistently receiving signals that their contributions are valued or that the organization invests in their long-term development. Such a profile can undermine motivation and reduce the likelihood of sustained engagement with organizational goals.

Regarding Table 4, job involvement shows a spread, with 45.7% low and 17.1% high:

Table 4. Job involvement in the Provincial Municipality of Cerro de Pasco, 2023.

Level	Category	Frequency (n)	Percent (%)
Low	From 6 to 14	16	45.71
Medium	From 15 to 23	13	37.14
High	From 24 to 30	6	17.14
Total		35	100.00%

Note: OGAF sub-sample (n = 35). Percentages computed within unit. IBM SPSS v27.

In Table 4, job involvement is more dispersed: 45.7% of employees report low involvement, 37.1% medium, and 17.1% high. This indicates that almost half of the staff feel weakly identified with their work and the organization, while a smaller group shows strong commitment. The presence of a sizeable medium segment suggests some room for strengthening identification through clear values, role clarity, and participation in decision-making. However, the relatively high proportion of low involvement underlines a risk for disengagement, which can manifest in reduced initiative, lower discretionary effort, and higher turnover intentions.

Regarding Table 5, supervision is mostly low (60.0%), pointing to fairness/feedback gaps:

Table 5. Supervision in the Provincial Municipality of Cerro de Pasco, 2023.

Level	Category	Frequency (n)	Percent (%)
Low	From 9 to 21	21	60.00
Medium	From 22 to 34	11	31.43
High	From 35 to 45	3	8.57
Total		35	100.00%

Note: OGAF sub-sample (n = 35). Percentages computed within unit. IBM SPSS v27.

Table 5 indicates that perceptions of supervision are mostly unfavorable: 60.0% of employees rate supervision as low, 31.4% as medium, and only 8.6% as high. This distribution points to important gaps in how guidance, feedback, and support are experienced in daily work. When most staff do not perceive supervision as fair, supportive, or development-oriented, it is likely that evaluation processes, feedback routines, and role clarification are not functioning as intended. For HR and managers, this highlights supervision as a central lever: improving supervisory practices could directly improve both climate and job satisfaction.

Regarding Table 6, communication skews low (57.1%), indicating informational ambiguity:

Table 6. Communication in the Provincial Municipality of Cerro de Pasco, 2023.

Level	Category	Frequency (n)	Percent (%)
Low	From 8 to 19	20	57.14
Medium	From 20 to 31	11	31.43
High	From 32 to 40	4	11.43
Total		35	100.00%

Note: OGAF sub-sample (n = 35). Percentages computed within unit. IBM SPSS v27.

As reported in Table 6, communication is also skewed toward unfavorable levels: 57.1% of employees are in the low category, 31.4% in the medium category, and 11.4% in the high category. This suggests that information flows are often perceived as insufficient, unclear, or unevenly distributed across the unit. Limited communication channels and

ambiguous messages can increase uncertainty and weaken employees' sense of inclusion in organizational processes. Addressing these gaps—through regular briefings, clearer protocols, and two-way communication mechanisms—would directly target one of the most critical leadership-proximal dimensions of organizational climate.

Regarding Table 7, working conditions center on medium (54.3%), with only 5.7% high:

Table 7. Working conditions in the Provincial Municipality of Cerro de Pasco, 2023.

Level	Category	Frequency (n)	Percent (%)
Low	From 8 to 19	14	40.00
Medium	From 20 to 31	19	54.29
High	From 32 to 40	2	5.71
Total		35	100.00%

Note: OGAF sub-sample (n = 35). Percentages computed within unit. IBM SPSS v27.

Table 7 shows a more balanced profile for working conditions: 40.0% of employees report low levels, 54.3% medium, and 5.7% high. This means that just over half of the staff perceive conditions (resources, ergonomics, safety, and related factors) as acceptable but not optimal, while a substantial minority experience them as clearly deficient. Only a very small group reports high-quality working conditions. From a practical standpoint, this suggests that targeted improvements in infrastructure, equipment, and job security could shift a large "medium" group toward more favorable perceptions, while at the same time reducing the discomfort experienced by the low group.

For job satisfaction (JS), the overall level is medium for 48.57%, low for 42.86%, and high for 8.57% (Table 8). Decomposing JS into facets, intrinsic satisfaction concentrates at medium (54.29%, with 31.43% low and 14.29% high; Table 9), whereas extrinsic satisfaction is predominantly low (65.71%, 22.86% medium, 11.43% high; Table 10). This pattern suggests comparatively stronger perceptions around meaning/growth than around contextual conditions and supervisory/policy factors—consistent with the instrument's intrinsic–extrinsic structure (Yu, 2024; Xia et al., 2024).

Regarding Table 8, overall JS is mostly medium (48.6%), with 42.9% low:

Table 8. Job satisfaction in the Provincial Municipality of Cerro de Pasco, 2023.

Level	Category	Frequency (n)	Percent (%)
Low	From 14 to 33	15	42.86
Medium	From 34 to 53	17	48.57
High	From 54 to 70	3	8.57
Total		35	100.00%

Note: OGAF sub-sample (n = 35). Percentages computed within unit. IBM SPSS v27.

Table 8 indicates that overall job satisfaction is concentrated in the medium category (48.6%), followed by a sizable low group (42.9%) and a small high group (8.6%). Thus, almost half of the employees are neither clearly satisfied nor clearly dissatisfied, while a similar proportion evaluates their job negatively. This mixed profile suggests that, although the workforce is not uniformly dissatisfied, there is no strong core of highly satisfied employees either. For management, this underscores the need to reinforce the factors that sustain medium satisfaction and to address the sources of dissatisfaction before they translate into withdrawal, absenteeism, or turnover.

Regarding Table 9, Intrinsic JS concentrates at medium (54.3%):

Table 9. Satisfaction with intrinsic factors in the Provincial Municipality of Cerro de Pasco, 2023.

Level	Category	Frequency (n)	Percent (%)
Low	From 8 to 19	11	31.43
Medium	From 20 to 31	19	54.29
High	From 32 to 40	5	14.29
Total		35	100.00%

Note: OGAF sub-sample (n = 35). Percentages computed within unit. IBM SPSS v27.

As shown in Table 9, intrinsic satisfaction—linked to meaning, growth, and alignment between job and personal characteristics—is predominantly medium (54.3%), with 31.4% of employees in the low category and 14.3% in the high category. This suggests that many staff members perceive some degree of challenge, recognition, and skill utilization in their work, but these experiences are not strong or consistent enough to generate high satisfaction for most employees. The existence of a non-trivial low group indicates that, for a subset of workers, the content of their work does not provide sufficient autonomy, recognition, or personal fit, which can erode long-term motivation.

Regarding Table 10, extrinsic JS is predominantly low (65.7%), consistent with policy/condition frictions:

Table 10. Satisfaction with extrinsic factors in the Provincial Municipality of Cerro de Pasco, 2023.

Level	Category	Frequency (n)	Percent (%)
Low	From 6 to 14	23	65.71
Medium	From 15 to 23	8	22.86
High	From 24 to 30	4	11.43
Total		35	100.00%

Note: OGAF sub-sample (n = 35). Percentages computed within unit. IBM SPSS v27.

Table 10 reveals a more problematic pattern for extrinsic satisfaction: 65.7% of employees fall into the low category, 22.9% into the medium category, and only 11.4% into the high category. This reflects widespread dissatisfaction with contextual and hygiene factors such as pay, stability, physical conditions, and relationships with colleagues and supervisors. When extrinsic satisfaction is low for the majority, overall job satisfaction is likely to be constrained even if intrinsic aspects are acceptable. This asymmetry between intrinsic (mostly medium) and extrinsic (mostly low) satisfaction helps explain the overall profile observed in Table 8 and points to policies, working conditions, and supervisory practices as priority targets for HR action.

Prior to inferential testing, Shapiro–Wilk was applied (appropriate for $n \leq 50$). Results indicate non-normal distributions: OC ($W = 0.909$, $p = 0.007$) and JS ($W = 0.926$, $p = 0.021$), hence rejection of normality at $\alpha = 0.05$ (Table 11). In line with the ordinal nature of the scales and these diagnostics, subsequent analyses employ non-parametric procedures, specifically Spearman's rho for association testing (de Raadt et al., 2021).

Table 11. Shapiro–Wilk Normality Tests.

Variable	Shapiro–Wilk W	*p*-Value	n	Decision ($\alpha = 0.05$)
Organizational Climate (overall)	0.909	0.007	35	Non-normal
Job Satisfaction (overall)	0.926	0.021	35	Non-normal

Note: OGAF sub-sample (n = 35). Non-normal distributions justify non-parametric inference.

Conforming to these diagnostics, the general and specific hypothesis tests (to be reported in the next section) will use Spearman's rho with two-tailed significance and $\alpha = 0.05$, maintaining exact N in every caption and avoiding denominator mixing across text and tables (de Raadt et al., 2021; Yu, 2024).

4.2. General Hypothesis Test

Hypotheses are: (i) H0: There is no direct, statistically significant relationship between overall organizational climate (OC) and overall job satisfaction (JS); (ii) H1: There is a direct, statistically significant relationship between OC and JS. Because the indicators derive from Likert-type questionnaires and distributional diagnostics reject normality for both variables (Shapiro–Wilk: $p < 0.05$), association was estimated using Spearman's rho (two-tailed, $\alpha = 0.05$). This non-parametric coefficient captures monotonic association and is consistent with the ordinal/attitudinal nature of OC and JS as operationalized here (Matheis et al., 2024; Habibzadeh & Farrokhi, 2024). The analysis yields a positive and statistically significant correlation between OC and JS: $\rho = 0.627$; $p < 0.001$. This estimate indicates a moderate-to-strong monotonic relationship: higher (more favorable) perceptions of organizational climate tend to align with higher job satisfaction across respondents. The result is displayed in Table 12 (OC–JS, Spearman's rho). Overall OC shows a positive association with JS; the estimate indicates a practically meaningful monotonic link.

Table 12. Spearman's correlation: OC (overall) and JS (overall).

Variable Pair	Spearman's Rho (ρ)	Two-Tailed *p*-Value	n
Organizational Climate (overall) vs. Job Satisfaction (overall)	0.627	<0.001	35

Note: OGAF sub-sample (n = 35). Spearman's ρ; two-tailed $\alpha = 0.05$.

Substantively, the finding supports the theoretical mechanism whereby clearer information flows, supportive and fair supervision, and adequate working conditions (OC features) co-vary with more favorable evaluative appraisals of the job (JS). This is coherent with the motivator–hygiene logic (intrinsic/extrinsic) and with the five-dimension structure of OC applied in this research, which together predict that climates perceived as supportive and meaningful reduce strain and enable satisfaction (Xia et al., 2024; Dong et al., 2024). The use of Spearman's rho responds to (i) the ordinal scale properties of both constructs and (ii) non-normal distributions. The rank-based approach is less sensitive to outliers and scale non-linearity than Pearson's r in this context, aligning the test with measurement theory for psychosocial questionnaires (Uhm & Yi, 2021; Habibzadeh & Farrokhi, 2024). Given the cross-sectional design, results are associational rather than causal; nevertheless, the magnitude and significance of ρ provide decision-relevant evidence for managerial action. The general test is reported succinctly (ρ, *p*, N), with effect-size language tied to decision-making (e.g., the association is large enough to justify prioritizing OC levers). Because dimension-level tests may reveal heterogeneity—some OC facets aligning more strongly with JS than others—managers can sequence interventions toward the facets with the highest correlations (communication, supervision, self-realization, working conditions), as detailed in the next subsection on specific hypotheses (Matheis et al., 2024; Yu, 2024; Xia et al., 2024).

4.3. Specific Hypothesis Tests

Hypotheses (dimension-level) are as follows:

- Hypothesis 2a (H2a): Self-realization is directly and significantly associated with job satisfaction (JS).

- Hypothesis 2b (H2b): Job involvement is directly and significantly associated with JS.
- Hypothesis 2c (H2c): Supervision is directly and significantly associated with JS.
- Hypothesis 2d (H2d): Communication is directly and significantly associated with JS.
- Hypothesis 2e (H2e): Working conditions are directly and significantly associated with JS.

Consistent with the ordinal nature of the scales and non-normal distributions, associations were estimated using Spearman's rho (two-tailed, $\alpha = 0.05$), which captures monotonic relationships robustly for Likert-type data (Uhm & Yi, 2021; Habibzadeh & Farrokhi, 2024).

All five dimensions show positive, statistically significant correlations with JS (see Tables 13–17):

- Self-realization → JS: $\rho = 0.647$; $p < 0.001$. This is the strongest association. Interpreted substantively, when work affords meaning, growth, and personal accomplishment, employees report higher JS—consistent with the motivator pathway (Yu, 2024; Matheis et al., 2024; Xia et al., 2024).
- Communication → JS: $\rho = 0.624$; $p < 0.001$. Clear, timely, and open information flows align closely with higher JS, reflecting reduced ambiguity and stronger inclusion signals—classic climate-to-attitude mechanism (Matheis et al., 2024; Xia et al., 2024).
- Supervision → JS: $\rho = 0.527$; $p < 0.001$. Supportive, fair, and feedback-oriented leadership relates moderately to JS, consistent with supervisory justice and socioemotional support effects (Xia et al., 2024; Dong et al., 2024).
- Working conditions → JS: $\rho = 0.469$; $p < 0.01$. Adequate resources, ergonomics, and safety show a moderate, positive link with JS, mapping onto the hygiene side of the two-factor view (Yu, 2024; Xia et al., 2024).
- Job involvement → JS: $\rho = 0.396$; $p = 0.018$. Although weaker, this association remains significant: stronger psychological identification with one's tasks relates to higher JS, plausibly mediated by meaning and role clarity (Matheis et al., 2024; Yu, 2024). For instance, self-realization exhibits the strongest alignment with JS, consistent with intrinsic pathways (Table 13), and communication aligns closely with JS, consistent with reduced ambiguity and inclusion effects (Table 16).

Table 13. Spearman's correlation: Self-realization and Job Satisfaction.

Dimension	Spearman's Rho (ρ)	Two-Tailed *p*-Value	n
Self-realization	0.647	<0.001	35

Note: OGAF sub-sample (n = 35). Two-tailed significance.

As shown in Table 13, self-realization is strongly and positively associated with overall job satisfaction ($\rho = 0.647$, $p < 0.001$). Employees who perceive greater opportunities for personal growth, learning, and fulfillment in their work are also those who report higher satisfaction levels. This strong and statistically significant association indicates that intrinsic aspects of the job are a central source of satisfaction in the OGAF unit. In practical terms, strengthening development opportunities and recognition mechanisms is likely to have a direct and substantial impact on how employees evaluate their jobs.

Table 14. Spearman's correlation: Job Involvement and Job Satisfaction.

Dimension	Spearman's Rho (ρ)	Two-Tailed *p*-Value	n
Job Involvement	0.396	0.018	35

Note: OGAF sub-sample (n = 35). Two-tailed significance.

Table 14 shows a moderate and positive association between job involvement and job satisfaction (ρ = 0.396, p = 0.018). Employees who feel more psychologically involved in their work and who identify more strongly with their roles tend to be more satisfied, but the strength of this relationship is less pronounced than for self-realization. This suggests that, while involvement matters, it is not the only or dominant driver of satisfaction in this context. From a managerial perspective, initiatives that foster identification with organizational goals can improve satisfaction, but they should be combined with measures that address other, more influential dimensions.

Table 15. Spearman's correlation: Supervision and Job Satisfaction.

Dimension	Spearman's Rho (ρ)	Two-Tailed p-Value	n
Supervision	0.527	<0.001	35

Note: OGAF sub-sample (n = 35). Two-tailed significance.

As reported in Table 15, supervision is moderately to strongly and positively related to job satisfaction (ρ = 0.527, $p < 0.001$). Employees who perceive their supervisors as fair, supportive, and clear in their guidance are more likely to express higher satisfaction with their jobs. This result highlights the central role of supervisory practices in shaping employees' overall evaluations of their work experience. Improving feedback quality, clarity of expectations, and supportive leadership behaviors can therefore be expected to have a meaningful impact on satisfaction levels in the OGAF unit.

Table 16. Spearman's correlation: Communication and Job Satisfaction.

Dimension	Spearman's Rho (ρ)	Two-Tailed p-Value	n
Communication	0.624	<0.001	35

Note: OGAF sub-sample (n = 35). Two-tailed significance.

Table 16 indicates a strong and positive association between communication and job satisfaction (ρ = 0.624, $p < 0.001$). When employees perceive that information is timely, clear, and transparent, their reported satisfaction with the job is substantially higher. The magnitude and significance of this relationship place communication among the most influential climate dimensions linked to satisfaction in this study. In operational terms, strengthening formal and informal communication channels, clarifying messages, and enabling two-way communication should be seen as strategic levers for improving job satisfaction.

Table 17. Spearman's correlation: Working Conditions and Job Satisfaction.

Dimension	Spearman's Rho (ρ)	Two-Tailed p-Value	n
Working Conditions	0.469	<0.01	35

Note: OGAF sub-sample (n = 35). Two-tailed significance.

As shown in Table 17, working conditions display a moderate and positive relationship with job satisfaction (ρ = 0.469, $p < 0.01$). Employees who evaluate physical, ergonomic, and contextual aspects of their work environment more favorably tend also to report higher satisfaction. Although this association is slightly weaker than those observed for self-realization and communication, it remains statistically significant and practically relevant. Targeted improvements in infrastructure, equipment, and job security can therefore contribute to raising satisfaction levels, especially for employees who currently experience deficient working conditions.

The rank order of effects (Self-realization $\gtrsim$ Communication > Supervision > Working conditions > Job involvement) is theoretically coherent: intrinsic levers (meaning/growth) and informational clarity emerge as the most proximal drivers of satisfaction, while supervision and conditions contribute through support and hygiene mechanisms (Yu, 2024; Matheis et al., 2024; Xia et al., 2024). Practically, this ordering suggests intervention sequencing: prioritize self-realization (job design, recognition, skill use) and communication (transparent routines, two-way channels), then consolidate supervision (coaching, fairness) and conditions (resources, safety). Involvement merits attention as a complementary lever.

5. Discussion

5.1. Interpretation and Comparison with Prior Studies

The overall OC–JS association observed here ($\rho = 0.627$; $p < 0.001$) falls within the moderate-to-strong range commonly reported internationally and nationally. It is lower than effects documented in some institutional settings—e.g., a very strong correlation in a Peruvian municipal sample (Díaz Guerrero, 2021, $\rho = 0.938$)—but higher than estimates in other local-government contexts such as San Martín (Amasifuen et al., 2023, $\rho = 0.373$) or José Sabogal (Cotrina & Marín, 2022, $\rho = 0.282$; $p = 0.047$). It also contrasts with a null finding reported in different settings, underscoring how sector, measurement choices, and organizational maturity condition effect magnitudes (Carrillo-Carreño & Bolívar-León, 2023; Govea & Zúñiga, 2020). Two patterns reconcile these discrepancies. First, contextual heterogeneity: municipal administrations vary in managerial routines, resource constraints, and citizen-facing pressures, which plausibly amplify or dampen climate–attitude linkages. Settings emphasizing transparent communication and supportive supervision tend to report larger effects (Carrillo-Carreño & Bolívar-León, 2023; Liu et al., 2024). Conversely, highly formalized or hierarchical environments—e.g., military—may register weaker or non-significant associations if discretion and two-way voice are limited (Teetzen et al., 2023). Second, measurement heterogeneity: studies differ in instruments (OC dimensions, JS facets), scaling (Likert options, cut-points), and statistics (Pearson vs. Spearman). As shown here, distribution-aware choices (Shapiro–Wilk; Spearman) align with ordinal attitudinal data and may yield more conservative but robust estimates relative to Pearson-based reports (Cotrina & Marín, 2022; Amasifuen et al., 2023). Dimension-level results are also broadly consistent with prior evidence. The strongest correlate of JS here is self-realization ($\rho = 0.647$), closely followed by communication ($\rho = 0.624$), with supervision ($\rho = 0.527$) and working conditions ($\rho = 0.469$) in the moderate range, and job involvement significant but weaker ($\rho = 0.396$; $p = 0.018$). Studies that disaggregate OC frequently highlight communication and leadership/supervision as proximal drivers of satisfaction, alongside facets linked to meaning and growth—a profile that mirrors the motivator–hygiene logic used to structure JS (Liu et al., 2024; Carrillo-Carreño & Bolívar-León, 2023; Benites Guevara, 2022). Where extrinsic satisfaction lags (policies, conditions), the literature typically observes attenuated overall JS despite acceptable intrinsic appraisals—again consistent with our descriptive split (Yu, 2024). Taken together, the present estimates neither overstate nor understate the OC–JS connection relative to comparable work: they converge with municipal studies reporting meaningful, decision-relevant associations (Amasifuen et al., 2023; Benites Guevara, 2022), while falling below exceptional high points (Díaz Guerrero, 2021) and above lower-bound or null cases (Cotrina & Marín, 2022; Teetzen et al., 2023). This positioning strengthens confidence in the actionability of findings: prioritizing communication routines and coaching-oriented supervision, while reinforcing job design for self-realization and addressing salient working-conditions gaps, is aligned with patterns repeatedly observed across contexts. By retaining a dimension-focused lens, the study also contributes the practical detail that organizations often need to sequence

interventions, beginning with the facets most tightly aligned with satisfaction and then consolidating broader climate improvements (Matheis et al., 2024; Dong et al., 2024). Finally, regarding the value-added beyond replication, by reporting dimension-level effects and translating the leadership-proximal facets (communication, supervision) into a prioritized HR lever map, the study moves beyond confirmation and offers decision-oriented guidance for public managers in a resource-constrained municipality.

5.2. Practical Implications for HR and Local Government

Operationally, municipal governments face resource constraints, procedural complexity, and fluctuating citizen demand. Under such conditions, climate-sensitive practices—transparent communication routines, coaching-oriented supervision, role design that enables self-realization, and fair/adequate working conditions—are both feasible and consequential. By articulating OC as a psychosocial determinant and JS as a key marker of employee well-being, this research motivates a diagnostic that is not merely descriptive but decision-oriented: it identifies which climate dimensions are most closely aligned with satisfaction in this setting and, therefore, where managerial attention is likely to have the greatest impact. In sum, the focus on OC–JS is relevant because it connects immediately actionable organizational levers to occupational health and service outcomes in local government (Dong et al., 2024; Lei et al., 2024).

The study set out to (i) determine the overall association between organizational climate (OC) and job satisfaction (JS) and (ii) examine which OC dimensions are most closely aligned with JS. Both aims are met. First, the general hypothesis is supported by a moderate-to-strong, positive correlation ($\rho = 0.627$; $p < 0.001$), indicating that more favorable climate perceptions co-occur with higher job satisfaction. This pattern is theoretically coherent: clearer information flows, supportive and fair supervision, and adequate working conditions are proximal psychosocial conditions that shape evaluative job attitudes (Dong et al., 2024; Matheis et al., 2024). Second, the dimension-level tests clarify priorities. The strongest links with JS are self-realization ($\rho = 0.647$) and communication ($\rho = 0.624$), followed by supervision ($\rho = 0.527$) and working conditions ($\rho = 0.469$), with job involvement significant but comparatively weaker ($\rho = 0.396$; $p = 0.018$). This rank order is consistent with the motivator–hygiene logic: intrinsic features of work (opportunities for growth, achievement, recognition) and the informational environment (clarity, timeliness, openness) are especially consequential for satisfaction; supervision and material conditions operate through justice/support and hygiene pathways; involvement adds incremental variance but may be contingent on role clarity and resource sufficiency (Yu, 2024; Matheis et al., 2024). Descriptive profiles provide important context for interpreting these associations. The prevalence of low OC alongside medium JS suggests that targeted improvements in communication routines and coaching-oriented supervision could yield practical gains without requiring structural overhauls. The facet breakdown of JS—comparatively stronger intrinsic than extrinsic satisfaction—converges with the dimensional findings: employees perceive some meaning and growth potential, but policy/condition frictions and supervisory practices likely dampen overall evaluations (Yu, 2024; Xia et al., 2024). This points to a tractable sequence for action: (1) institutionalize transparent, two-way communication; (2) strengthen supervisory fairness, feedback, and recognition; (3) adjust role design to reinforce self-realization; and (4) remedy salient condition gaps (Matheis et al., 2024; Xia et al., 2024). Methodologically, the analytical choices align with measurement properties. Shapiro–Wilk rejects normality for OC and JS, justifying rank-based inference via Spearman's rho, which is appropriate for Likert-type, ordinal indicators and robust to non-linearity (Uhm & Yi, 2021; Habibzadeh & Farrokhi, 2024). Captions make explicit that all estimates refer to OGAF (n = 35), avoiding denominator mixing. This transparency

avoids denominator mixing and frames conclusions at the correct level of generality. From a management standpoint, the effect sizes are decision-relevant. They support prioritizing communication and self-realization as first-line psychosocial levers, closely followed by supervision and working conditions. Embedding these levers into routine cycles (information protocols, supervisory training, job redesign, ergonomic/resource adjustments) is consistent with public-sector feasibility and with the attitudinal mechanisms identified in organizational behavior (Dong et al., 2024; Matheis et al., 2024). In sum, the results substantiate the objectives and offer a clear, theoretically grounded roadmap for improving employee well-being and performance through targeted climate interventions.

5.3. Limitations and Future Research

In reference to construct validation, we did not run EFA/CFA on the OC/JS instruments. With n = 35, common rules of thumb for CFA (≥5–10 cases per free parameter) are violated, and polychoric models often converge unreliably. We treated the instruments as previously validated and restricted analyses to reliability and correlations. A polychoric EFA/CFA with McDonald's ω is planned for the complete population. In terms of multivariable adjustment, no covariates (e.g., tenure, age, role) were collected, so adjusted models cannot be estimated. To address construct overlap in future work, we will include rank-based partial correlations among OC dimensions and ordinal regression of JS on OC with pseudo-R^2 and diagnostics. Regarding other limitations, first, the design is cross-sectional and non-experimental, so estimates are associational and cannot establish temporal precedence or causality (Uhm & Yi, 2021; Pérez-Guerrero et al., 2024). Second, measurement relies on self-reports with Likert-type items; although standardized and reliable, this raises risks of common-method variance and social-desirability bias typical of attitudinal surveys (Xia et al., 2024; Dong et al., 2024). Third, the distributional properties of the composites (non-normality by Shapiro–Wilk) required rank-based inference; while methodologically consistent, non-parametric tests provide fewer modeling options and limit comparability with Pearson-based studies (Habibzadeh & Farrokhi, 2024; Uhm & Yi, 2021). Fourth, descriptive profiles and inferential tests both refer to the OGAF analytic sub-sample (n = 35); therefore, generalization beyond OGAF is limited. This preserves traceability with available outputs but constrains generalization of inferential results beyond that sub-unit. Fifth, construct validation rests on content validity (expert judgment) and internal consistency; no factorial validation (e.g., CFA) is reported here, which would strengthen evidence of dimensional structure for Organizational Climate (Matheis et al., 2024) and Job Satisfaction (Yu, 2024). On the future research: (i) Longitudinal and quasi-experimental designs. Implement repeated measurements (pre/post) around managerial actions (e.g., communication protocols, supervisory training) to assess change over time and approximate causal leverage (Uhm & Yi, 2021; Pérez-Guerrero et al., 2024). (ii) Full-frame inference. Re-estimate normality and Spearman correlations with the complete workforce (N ≈ 143) to align inferential denominators with descriptive coverage and to obtain more stable effect sizes (Habibzadeh & Farrokhi, 2024). (iii) Construct validation. Apply CFA/SEM to confirm the five-dimension structure of Organizational Climate (self-realization, job involvement, supervision, communication, working conditions) and the intrinsic/extrinsic structure of Job Satisfaction, and to model latent associations with measurement error controlled (Matheis et al., 2024; Yu, 2024). (iv) Method variance controls. Combine multi-source data (e.g., supervisor ratings, administrative indicators) and procedural remedies (anonymity assurances, item reordering) to mitigate common-method bias; where feasible, include objective HR outcomes (turnover, absenteeism) for triangulation (Xia et al., 2024; Dong et al., 2024). (v) Multi-site replication. Compare units within the municipality and across municipalities to test contextual moderation (resource constraints, formalization, leadership practices) and to improve external validity. (vi) Heterogeneity and sequencing. Given the observed rank-order

of associations (self-realization $\gtrsim$ communication > supervision > working conditions > involvement), evaluate which combinations of levers produce the largest gains in satisfaction; factorial or stepped-wedge rollouts could inform intervention sequencing (Habibzadeh & Farrokhi, 2024; Xia et al., 2024). (vii) Finer outcomes. Extend analysis to facet-level satisfaction and well-being indicators (e.g., stress, engagement) to clarify mechanisms through which climate operates (Yu, 2024; Xia et al., 2024). Confidence intervals and bootstrap uncertainty quantification are not reported since it is not possible to re-run the original analysis pipeline. Given the observed effect sizes and consistent *p*-values across sensitivity checks, we consider the qualitative conclusions robust; nonetheless, we acknowledge that CI reporting would improve transparency and will add it in the follow-up study.

6. Conclusions

As a reminder of the scope statement, inferential claims pertain to the OGAF analytic sub-sample (n = 35); municipality-wide generalizations require full-frame re-estimation. This study substantiates a direct, statistically significant association between organizational climate (OC) and job satisfaction (JS) in a local-government workforce ($\rho = 0.627$; $p < 0.001$). In attitudinal terms, more favorable perceptions of the work environment—how information flows, how supervision is enacted, and how resources and roles are structured—co-occur with higher job satisfaction, aligning with established organizational-behavior theory and the motivator–hygiene perspective (Matheis et al., 2024; Dong et al., 2024). Given the measurement properties (Likert-type, ordinal) and non-normal distributions, the use of rank-based inference is methodologically consistent and supports the robustness of the association (Uhm & Yi, 2021; Habibzadeh & Farrokhi, 2024). The actionable sequence emerging from these results is:

(1) institutionalize transparent, two-way communication routines;
(2) develop coaching-oriented supervision (fairness, feedback, recognition);
(3) redesign roles to enable self-realization (skill use, autonomy, achievement); and
(4) address salient working-conditions gaps (resources, ergonomics, safety).

This sequencing targets first the facets most tightly aligned with JS while consolidating structural supports—an approach consistent with decision-oriented diagnostics in public organizations (Matheis et al., 2024; Yu, 2024). The magnitudes observed fit within the moderate-to-strong range reported in comparable municipal and service settings—above some local-government estimates and below exceptional high points—reinforcing their decision relevance. All descriptive and inferential results refer to the OGAF analytic sub-sample (n = 35); table captions state the sample base. Methodological limits (cross-sectional design; ordinal self-reports) and avenues for future research (full-frame inference; multi-unit replications; linkages to HR outcomes) are presented in the subsequent subsection on limitations and recommendations (Uhm & Yi, 2021; Habibzadeh & Farrokhi, 2024). In sum, the present findings are decision-relevant but bounded by design, method, and coverage. Advancing the agenda calls for longitudinal/quasi-experimental evidence, full-frame or multi-site inference, and stronger construct validation, thereby consolidating a practical, theory-consistent roadmap for improving employee well-being through targeted organizational-climate interventions.

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Informed Consent Statement: Participation was voluntary and anonymous; written informed consent was obtained from all participants prior to data collection.

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Abbreviations

The following abbreviations are used in this manuscript:

OC	Organizational Climate
JS	Job Satisfaction
OGAF	General Administration and Finance Office
n	Sample size
N	Frame/Population size
W	Shapiro–Wilk statistic
SPSS	IBM SPSS Statistics (Version 27)

Appendix A

Table A1. Instrument construction matrix: Variable 1: Organizational climate.

Dimensions	Indicators	Items
Self-fulfillment	Opportunities for personal development	1. The activities we work on allow us to learn and develop. 2. The company promotes staff development.
	Opportunities for professional development	3. There are opportunities for advancement within the institution. 4. High levels of performance are valued. 5. Supervisors express recognition for achievements. 6. The generation of creative or innovative ideas is encouraged. 7. Achievements at work are recognized.
Work involvement	Organizational values	8. In the office, things are done better every day. 9. There is a clear definition of the institution's vision, mission, and values.
	Employee commitment	10. Employees feel committed to the success of the organization. 11. Each employee ensures their own levels of achievement at work. 12. Each employee considers themselves a key factor in the organization's success. 13. Working for the organization is a source of pride for the staff.

Table A1. *Cont.*

Dimensions	Indicators	Items
Supervision	Guidance role	14. The evaluation that is carried out helps to improve the task. 15. The necessary training is provided to perform the job. 16. The responsibilities of the position are clearly defined. 17. A system is in place for monitoring and controlling activities. 18. There are rules and procedures to guide the work. 19. The company's objectives are clearly defined. 20. Work is carried out according to established methods or plans.
	Support role	21. The supervisor provides support to overcome obstacles that arise. 22. There is fair treatment within the company.
Communication	Information flow	23. In my office, information flows smoothly. 24. There is a harmonious relationship within the work groups. 25. There are sufficient channels of communication. 26. Interaction with senior management is possible.

Table A2. Instrument construction matrix: Variable 2: Job satisfaction.

Dimensions	Indicators	Items
Intrinsic or motivational factors	Work challenge	1. I have freedom and independence to perform my duties. 2. I receive recognition for a job well done. 3. I feel that the tasks I perform are important to the functioning of the company. 4. I feel that I have a good chance of being promoted within the company.
	Personality-job compatibility.	5. The position I hold allows me to use my skills. 6. The duties I perform are in line with my personality. 7. My work schedule allows me to devote time to other activities that I enjoy. 8. The company takes into account the ideas for improvement that I propose and/or implement.
Extrinsic or hygiene factors	Fair reward systems	9. The salary I receive is consistent with the work I do. 10. The salary I receive allows me to cover my basic needs.
	Favorable working conditions	11. The physical conditions of the job are optimal for the performance of my duties. 12. I feel that I have job stability.
	Support from colleagues	13. The relationship I have with my superiors is optimal. 14. The relationship I have with colleagues at the same level as me is excellent.

Table A3. General Administration and Finance Office Staff.

Position	Number
Head	1
Secretary III	1
Administrative Technician	3
Manager	1
Administrative technician	3
Collector II	1
Administrative Assistant	1
Manager	1
Accountant II	1

Table A3. *Cont.*

Position	Number
Administrative Technician	2
Manager	1
Administrative technician	2
Administrative assistant	2
Administrative Specialist I	1
Administrative Technician I	1
Administrative Technician	1
Head	1
Administrative Specialist	1
Administrative Assistant	2
Administrative Technician	3
Administrative technician	3
Administrative assistant	2
Total	35

References

Alrawahi, S., Sellgren, S. F., Altouby, S., Alwahaibi, N., & Brommels, M. (2020). The application of Herzberg's two-factor theory of motivation to job satisfaction in clinical laboratories in Omani hospitals. *Heliyon*, *6*(9), e04829. [CrossRef]

Amasifuen, L., Cárdenas, J., & Troya, D. (2023). Climate and job satisfaction in State organization. *Gestionar: Revista de Empresa y Gobierno*, *3*(1), 89–102. [CrossRef]

Benites Guevara, E. (2022). *Clima organizacional y satisfacción laboral en la Municipalidad Provincial de Cutervo, 2022* [Master thesis, Universidad César Vallejo]. Institutional Repository. Available online: https://hdl.handle.net/20.500.12692/80532 (accessed on 3 November 2024).

Carazas-Bruno, I., Martínez-Aronés, S., Millones-Liza, D., & Villar-Guevara, M. (2024). Assessment of psychosocial risks in workers in the health sector: Evidence in the Peruvian population. *Academic Journal of Interdisciplinary Studies*, *13*(3), 373. [CrossRef]

Carrillo-Carreño, K. S., & Bolívar-León, R. (2023). Organizational climate and job satisfaction in the Vicerrectoria de Investigación y Extensión (VIE) of a public university in Colombia. *Aibi Revista de Investigación, Administración e Ingeniería*, *11*(1), 8–19. [CrossRef]

Cotrina, G., & Marín, R. (2022). *Relación entre el clima organizacional y la satisfacción laboral en los colaboradores de la Municipalidad Distrital de José Sabogal en el año 2021* [Master thesis, Universidad Privada del Norte]. Available online: https://hdl.handle.net/11537/29489 (accessed on 3 November 2024).

de Raadt, A., Warrens, M. J., Bosker, R. J., & Kiers, H. A. L. (2021). A comparison of reliability coefficients for ordinal rating scales. *Journal of Classification*, *38*, 519–543. [CrossRef]

Díaz Guerrero, Y. G. (2021). *Clima organizacional y la satisfacción laboral en la Municipalidad Provincial de Recuay, 2021* [Master thesis, Universidad César Vallejo]. Institutional Repository. Available online: https://hdl.handle.net/20.500.12692/86066 (accessed on 3 November 2024).

Dong, R. K., Li, X., & Hernan, R. (2024). Psychological safety and psychosocial safety climate in workplace: A bibliometric analysis and systematic review towards a research agenda. *Journal of Safety Research*, *91*, 1–19. [CrossRef] [PubMed]

Govea, K., & Zúñiga, D. (2020). Clima organizacional como factor en la satisfacción laboral de una empresa de servicios. *Investigación & Negocios*, *13*(21), 59–67. [CrossRef]

Habibzadeh, F., & Farrokhi, M. (2024). Data distribution: Normal or abnormal? *Journal of Korean Medical Science*, *39*, e35. [CrossRef]

Hellín Gil, M. F., Ruiz Hernández, J. A., Ibáñez-López, F. J., Seva Llor, A. M., Roldán Valcárcel, M. D., Mikla, M., & López Montesinos, M. J. (2022). Relationship between job satisfaction and workload of nurses in adult inpatient units. *International Journal of Environmental Research and Public Health*, *19*(18), 11701. [CrossRef]

Jeong, J. (2025). Influence of transactional leadership, transformational leadership, and leader feedback on reward Fairness, organization citizenship behavior, and job satisfaction. *Review of Public Personnel Administration*, 0734371X251332316. [CrossRef]

Lee, B., Lee, C., Choi, I., & Kim, J. (2022). Analyzing determinants of job satisfaction based on two-factor theory. *Sustainability*, *14*(19), 12557. [CrossRef]

Lei, Y., Pan, F., & Guo, Q. (2024). A longitudinal analysis of the reciprocal relationship between teacher job satisfaction, workplace climate, and turnover intention. *Acta Psychologica*, *251*, 104559. [CrossRef] [PubMed]

Lintanga, A., & Rathakrishnan, B. (2024). The impact of psychosocial safety climate on public sector job satisfaction: The moderating role of organizational climate. *BMC Psychology*, *12*, 38. [CrossRef]

Liu, Y., Yan, L., & Zhang, J. (2024). Effects of organizational climate on employee job satisfaction and psychological well-being: The role of technological influence in Chinese higher education. *BMC Psychology*, *12*, 536. [CrossRef]

Maneen, S., Botha, N., Amoadu, M., & Ansah, E. (2025). Psychosocial work factors influencing health, safety, well-being and productivity of waste collectors in developing countries: A scoping review. *BMC Psychology*, *13*, 885. [CrossRef]

Matheis, T. K., de Campos, S. A. P., Vieira, K. M., Lehnhart, E. d. R., & Estivalete, V. d. F. B. (2024). Organizational climate scale for public service: Development and validation. *Administrative Sciences*, *14*(5), 90. [CrossRef]

Ministry of Labor and Employment Promotion. (2022). *Annual employment report 2022. Lima, Perú*. Available online: https://www.gob.pe/institucion/mtpe/informes-publicaciones/4718705-informe-anual-del-empleo-2022 (accessed on 3 November 2024).

Pérez-Guerrero, E. E., Guillén-Medina, M. R., Márquez-Sandoval, F., Vera-Cruz, J. M., Gallegos-Arreola, M. P., Rico-Méndez, M. A., Aguilar-Velázquez, J. A., & Gutiérrez-Hurtado, I. A. (2024). Methodological and statistical considerations for cross-sectional, case–control, and cohort studies. *Journal of Clinical Medicine*, *13*(14), 4005. [CrossRef]

Teetzen, F., Klug, K., Steinmetz, H., & Gregersen, S. (2023). Organizational health climate as a precondition for health-oriented leadership: Expanding the link between leadership and employee well-being. *Frontiers in Psychology*, *14*, 1181599. [CrossRef] [PubMed]

Uhm, T., & Yi, S. (2021). A comparison of normality testing methods by empirical power and distribution of *p*-values. *Communications in Statistics—Simulation and Computation*, *52*(9), 4445–4458. [CrossRef]

Usanova, K. (2024). Talent turnover and the contagion effect. *Human Resource Development International*, *27*(4), 458–480. [CrossRef]

Xia, W., Fan, Y., Bai, J., Zhang, Q., & Wen, Y. (2024). The relationship between organizational climate and job satisfaction of kindergarten teachers: A chain mediation model of occupational stress and emotional labor. *Frontiers in Psychology*, *15*, 1373892. [CrossRef] [PubMed]

Yu, J. (2024). Enhancing employee job satisfaction through organizational climate and employee happiness at work: A mediated–moderated model. *BMC Psychology*, *12*, 744. [CrossRef] [PubMed]

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