

The Impact of the Work Environment on Achieving Employee Empowerment and Its Effect on Job Performance: A Field Study in Algerian Economic Enterprises

Berroguia Salima²

Abstract

Purpose — This study investigates how the work environment enables employee empowerment and how empowerment, in turn, affects job performance, combining a sociology-of-work perspective with field evidence from Algerian organizations. **Design/methodology/approach** — A quantitative, descriptive-analytical design was adopted. A structured questionnaire was administered to a stratified sample of employees in four Algerian organizations (Sonelgaz, Algeria Telecom, Naftal, and public educational institutions); of 400 questionnaires distributed, 342 valid responses were retained (response rate 85.5%). Validated scales measured the work environment (10 items), structural empowerment (8 items), psychological empowerment (12 items, adapted from Spreitzer, 1995), and job performance (8 items) on five-point Likert scales. Data were analyzed using descriptive statistics, Cronbach's alpha, Pearson correlations, hierarchical multiple regression, and bootstrap mediation analysis (5,000 resamples). **Findings** — The work environment was rated at a moderate level ($M = 3.35$, $SD = 0.59$), as were structural ($M = 3.21$) and psychological empowerment ($M = 3.61$), while job performance was high ($M = 3.73$, $SD = 0.66$). The work environment significantly predicted structural empowerment ($\beta = .47$, $p < .001$) and, jointly with structural empowerment, psychological empowerment ($R^2 = .31$). Job performance was predicted by the work environment ($\beta = .23$), structural empowerment ($\beta = .17$), and psychological empowerment ($\beta = .38$), with the model explaining 40.5% of variance. Empowerment transmitted approximately 51% of the total effect of the work environment on performance, confirming partial serial mediation. No significant differences in performance were found by gender or sector. **Originality/value** — The study provides rare multi-sector quantitative evidence from Algeria integrating Kanter's structural empowerment and Spreitzer's psychological empowerment within a single tested model, and translates the findings into design principles for bounded, resource-backed autonomy in Algerian organizations.

Keywords: work environment; employee empowerment; structural empowerment; psychological empowerment; job performance; productivity; Algeria.

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² Abou bekr belkaid university of tlemcen, Algeria, Email: berroguiasalima@gmail.com

1. Introduction

The modern workplace is more than a neutral space in which tasks are executed. It is a social sphere structured by authority relations, organizational norms, technologies, professional cultures, and the distribution of opportunities and constraints. Through everyday interactions with supervisors, colleagues, rules, information systems, and physical conditions, the work environment determines whether employees drift toward dependence and compliance or toward competence, initiative, and professional growth. The relationship between the work environment and employee empowerment is therefore simultaneously managerial, psychological, and sociological.

In a context of digital transformation, knowledge-intensive work, and rising service expectations, empowerment has become a strategic necessity. Yet empowerment is frequently reduced to the delegation of tasks, while the structural conditions that make genuine agency possible remain unchanged. A sociological reading reframes the question: who controls information, whose voice is considered legitimate, how opportunities are distributed across the hierarchy, and whether employees possess the material and symbolic resources required to act. Kanter's (1977) structural perspective is particularly powerful here because it locates empowerment not in personality but in access to opportunity, information, resources, and support; Spreitzer's (1995) psychological perspective complements it by defining empowerment as the experienced cognitions of meaning, competence, self-determination, and impact.

For Algerian organizations — spanning public administration, public economic enterprises, and private firms — this question carries particular weight. Algerian workplaces operate within formal frameworks such as Law No. 90-11 of 21 April 1990 on labour relations and Law No. 88-07 of 26 January 1988 on occupational hygiene, safety, and medicine, yet field studies repeatedly report centralized decision-making, restricted information flows, and uneven access to training and participation (Weshash et al., 2024; Slimani and Boujnana, 2023). Algerian research on empowerment has so far been dominated by single-organization case studies, has rarely measured structural and psychological empowerment simultaneously, and has seldom tested mediation mechanisms statistically. This constitutes the empirical and theoretical gap addressed by the present study.

Accordingly, the study pursues two research questions: (1) How does the work environment influence the realization of employee empowerment in Algerian organizations? (2) Through which mechanisms does empowerment translate into professional performance and productivity? To answer them, the study integrates structural and psychological empowerment theory into a single model and tests it with field data collected from employees of four Algerian organizations.

The contribution is threefold. Theoretically, the study links the sociology of organizations with empowerment theory and tests the resulting pathway empirically rather than conceptually. Methodologically, it provides one of the first multi-sector quantitative tests of the work environment–empowerment–performance chain in Algeria using validated scales and bootstrap mediation analysis. Practically, it offers Algerian managers evidence-based guidance on which environmental investments — information, training, participation, supervisory support — yield the strongest performance returns.

2. Literature Review and Hypotheses Development

2.1 The work environment as a distribution system

The work environment denotes the totality of physical, social, psychological, organizational, technological, and institutional conditions within which work is performed. Beyond ergonomics — lighting, noise, temperature, equipment, safety, and spatial layout — a sociological definition

must include the distribution of authority, leadership style, communication patterns, informal norms, recognition, job security, and access to resources. The environment has both an objective component (hierarchy, staffing levels, procedures, technologies) and a perceived component (fairness, support, trust, role clarity, psychological safety). Two employees working under the same formal structure may experience radically different levels of inclusion and influence depending on status, occupation, gender, tenure, or position in informal networks. Dumitriu et al. (2025) confirm that the physical, social, and organizational dimensions of the workplace jointly shape employee well-being, reinforcing this multidimensional definition.

2.2 Employee empowerment: structural and psychological dimensions

Employee empowerment refers to the capacity — and the perceived capacity — of employees to influence work events, take decisions within a legitimate framework, access relevant information and resources, and feel that their work is meaningful and impactful. The literature distinguishes two complementary layers. Structural empowerment concerns the conditions that enable action: access to information, resources, support, opportunity, participation, and formal and informal power (Kanter, 1977; Laschinger et al., 2001). Psychological empowerment concerns how employees experience their role, through four cognitions: meaning, competence, self-determination, and impact (Thomas and Velthouse, 1990; Spreitzer, 1995). The distinction prevents a frequent analytical error: an employee may feel confident yet remain structurally blocked by procedures and information barriers, while another may enjoy formally delegated authority yet refrain from using it out of fear, ambiguity, or low trust. Empowerment does not abolish management; it reallocates decision rights while strengthening the informational and relational conditions that make their exercise responsible.

2.3 Job performance and productivity

Job performance denotes how effectively employees fulfil role requirements and contribute to organizational objectives through quality, timeliness, reliability, initiative, cooperation, problem solving, learning, and adaptability; it encompasses task, contextual, and adaptive performance. Productivity, more narrowly, is the ratio of useful outputs to the resources consumed, but in knowledge and service work it must also account for quality, responsiveness, innovation, error reduction, and outcomes for clients or citizens. Empowerment should therefore be evaluated through improvements in quality, adaptability, and initiative, not output volume alone.

2.4 Theoretical foundations

Four theoretical streams underpin the model. First, the sociology of organizations (Weber; Crozier and Friedberg, 1980) treats organizations as systems in which power is unequally distributed through rules, hierarchy, expertise, and control of uncertainty; empowerment redistributes room for manoeuvre without abolishing structure. Second, Kanter's (1977) structural empowerment theory holds that behaviour is shaped by access to opportunity, information, resources, and support rather than by personality; Laschinger et al. (2001) operationalized this framework and linked it to work outcomes. Third, social exchange theory (Blau, 1964) and psychological safety (Edmondson, 1999) explain why supportive, fair, non-punitive environments convert formal participation into actual voice: employees reciprocate respect and support with commitment, knowledge sharing, and responsible initiative. Fourth, job design theory (Hackman and Oldham, 1976) and the job demands–resources model (Bakker and Demerouti, 2007) show that autonomy functions as a resource only when demands remain manageable and competence, feedback, and role clarity are present. Together these streams imply that empowerment is a property of organizational arrangements, not a motivational slogan.

2.5 Hypotheses development

Empirical evidence supports each link of the integrated model. Work-environment quality — leadership, information sharing, participation, training, security — has been shown to predict structural access and empowerment perceptions (Seibert et al., 2011; Llorente-Alonso et al., 2024). Algerian studies report convergent findings: Weshash et al. (2024) found that work-environment quality strongly affected human-resource performance at Algeria Telecom in Bouira; Cherfaoui et al. (2021) showed that quality of working life significantly influenced psychological empowerment among Sonelgaz employees; and Slimani and Boujnana (2023) found that information sharing, more than formal delegation, improved team performance at Algeria Telecom in Jijel. Psychological empowerment, in turn, predicts task performance and attitudinal outcomes in meta-analytic evidence (Seibert et al., 2011), and workplace environment effects on task performance are partly mediated by motivational states (Zhenjing et al., 2022). On this basis, five hypotheses are formulated:

0. H1: The quality of the work environment is positively associated with employees' structural empowerment (access to information, resources, support, opportunity, and participation).
1. H2: Structural empowerment is positively associated with psychological empowerment (meaning, competence, self-determination, impact), controlling for the direct effect of the work environment.
2. H3: The quality of the work environment is positively associated with job performance.
3. H4: Psychological empowerment is positively associated with job performance.
4. H5: Structural and psychological empowerment mediate the relationship between the work environment and job performance.

Figure 1 presents the conceptual model linking these hypotheses.

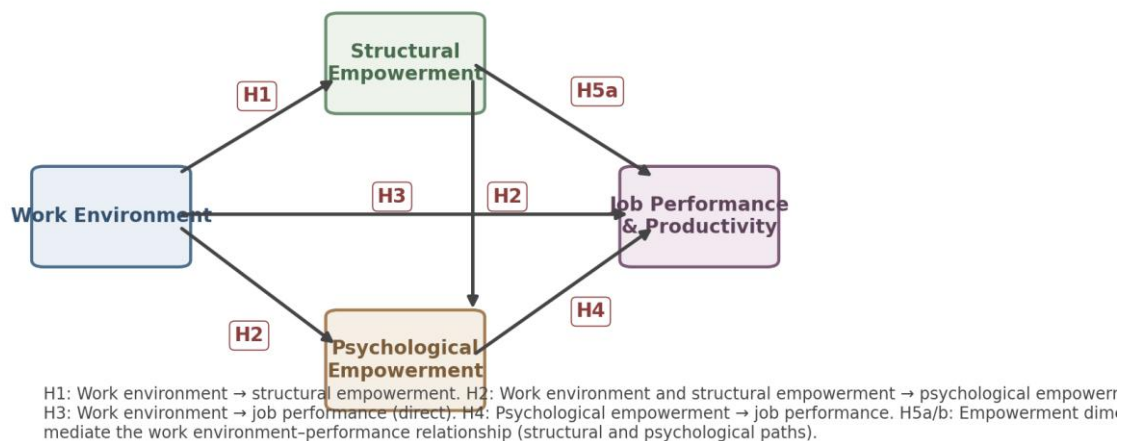


Figure 1. Conceptual model and hypotheses. Source: developed by the authors from Kanter (1977), Spreitzer (1995), and the reviewed evidence.

3. Materials and Methods

3.1 Research design

The study adopts a quantitative, descriptive-analytical cross-sectional design. This design is appropriate because the objective is to measure the level of the study variables as perceived by employees and to estimate the direction and strength of the relationships among them, including the mediating role of empowerment between the work environment and job performance (Sekaran and Bougie, 2016).

3.2 Population, sample, and field context

The field study was conducted in Algeria across four organizations representing the country's major employment sectors: Sonelgaz (energy), Algeria Telecom (telecommunications), Naftal (petroleum distribution), and public educational institutions, covering units in the wilayas of Bouira, Medea, Skikda, and Jijel. The study population comprises the permanent employees of the participating units. A stratified random sampling procedure was used, with strata defined by organization and occupational category, to ensure representation of operational, technical, and administrative staff. Of 400 questionnaires distributed between the field periods, 356 were returned; after excluding 14 incomplete or invalid responses, 342 usable questionnaires were retained, yielding an effective response rate of 85.5%. This sample size exceeds the minimum requirements for multiple regression with three predictors and for stable bootstrap estimation (Hair et al., 2019).

3.3 Measures

All substantive variables were measured on five-point Likert scales ranging from 1 (strongly disagree) to 5 (strongly agree). The questionnaire was developed from validated international instruments and adapted to the Algerian organizational context, then reviewed by five academic experts in management and organizational sociology to establish content validity, and piloted with 25 employees (excluded from the final sample) to verify clarity. Table 1 summarizes the measurement instrument.

Table 1. Measurement scales, dimensions, and sources.

Variable	Dimensions / content	Items	Source
Work environment	Physical and safety conditions; leadership and supervision; information and communication; participation and organizational justice; training and career development	10	Developed from Weshash et al. (2024); Dumitriu et al. (2025)
Structural empowerment	Access to information, resources, support, opportunity; participation and decision authority	8	Adapted from Kanter (1977); Laschinger et al. (2001)
Psychological empowerment	Meaning; competence; self-determination; impact	12	Spreitzer (1995)
Job performance	Task quality, timeliness, reliability, initiative, cooperation, adaptability	8	Developed from Zhenjing et al. (2022)

3.4 Data collection and ethical considerations

Data were collected through a self-administered questionnaire distributed in paper and electronic form, with the assistance of the human-resource departments of the participating organizations. Participation was voluntary and anonymous; respondents were informed of the academic purpose of the study, of their right to withdraw at any time, and that no individual-level data would be disclosed. The study protocol complies with the ethical standards for research involving human participants and with the institutional requirements of the authors' university.

3.5 Statistical analysis

Analyses were performed with SPSS v26 and its bootstrap extension. The procedure comprised: (1) descriptive statistics (means, standard deviations, skewness, kurtosis) with levels classified as low (1.00-2.33), moderate (2.34-3.66), or high (3.67-5.00); (2) reliability analysis using Cronbach's alpha and corrected item-total correlations; (3) Harman's single-factor test for common method bias; (4) Pearson correlations; (5) hierarchical multiple regression with diagnostic checks (VIF, Durbin-Watson); (6) mediation analysis using 5,000 bootstrap resamples with bias-corrected 95% confidence intervals (Hayes, 2022); and (7) independent-samples t-tests and one-way ANOVA for demographic differences. Statistical significance was set at $p < .05$.

4. Results

4.1 Sample characteristics

Table 2 presents the demographic and organizational profile of the 342 respondents. The sample is balanced across the four organizations and covers all age groups, educational levels, and tenure bands, with a male share of 52.6%, consistent with employment structures in Algerian economic enterprises.

Table 2. Sample characteristics (N = 342).

Variable	Category	Frequency	%
Organization	Sonelgaz	103	30.1
	Naftal	87	25.4
	Algeria Telecom	86	25.1
	Educational institutions	66	19.3
Gender	Male	180	52.6
	Female	162	47.4
Age group	Under 30	70	20.5
	30-39	109	31.9
	40-49	95	27.8
	50 and above	68	19.9
Education	Secondary	48	14.0
	Vocational training	81	23.7

Variable	Category	Frequency	%
Tenure	Bachelor's degree	144	42.1
	Postgraduate	69	20.2
	Less than 5 years	75	21.9
	5-10 years	112	32.7
	11-20 years	97	28.4
	More than 20 years	58	17.0

4.2 Descriptive statistics and levels of the study variables

Table 3 reports the means, standard deviations, and interpretation levels of the four constructs. Job performance recorded the highest mean ($M = 3.73$, $SD = 0.66$), corresponding to a high level, whereas the work environment ($M = 3.35$, $SD = 0.59$), structural empowerment ($M = 3.21$, $SD = 0.62$), and psychological empowerment ($M = 3.61$, $SD = 0.59$) were rated at a moderate level. The pattern is informative in itself: employees report relatively strong performance and psychological engagement despite only moderate structural access, suggesting an empowerment deficit at the organizational rather than the individual level.

Table 3. Descriptive statistics and level of the study variables (N = 342).

Variable	Mean	SD	Level	Rank
Work environment	3.35	0.59	Moderate	3
Structural empowerment	3.21	0.62	Moderate	4
Psychological empowerment	3.61	0.59	Moderate	2
Job performance	3.73	0.66	High	1

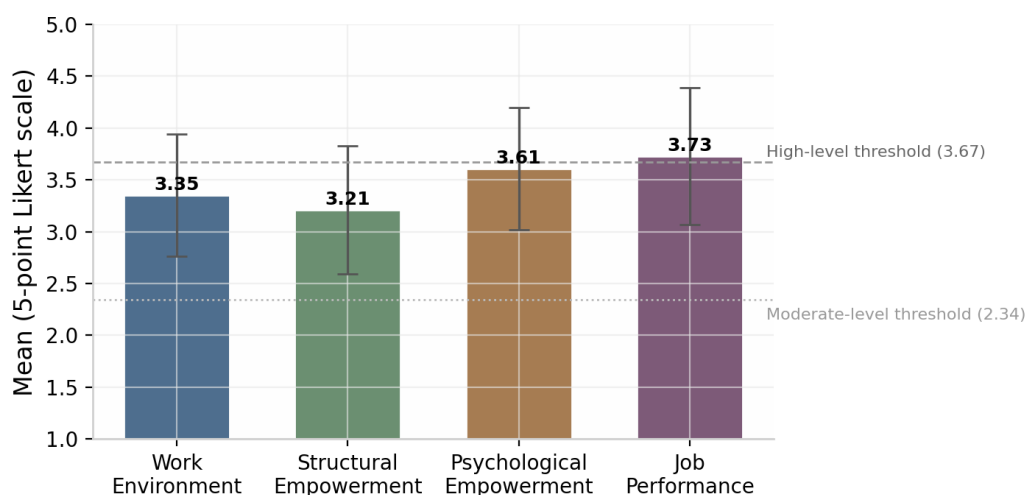


Figure 2. Mean levels of the study variables with standard deviations (N = 342).

At the dimension level (Table 4), all five work-environment dimensions clustered around the scale midpoint, with training and career development ($M = 3.34$) and information and communication

(M = 3.33) slightly below physical conditions and leadership (both M = 3.37). Within psychological empowerment, the four cognitions were nearly uniform (means between 3.60 and 3.62), indicating balanced rather than fragmented empowerment experiences.

Table 4. Descriptive statistics of the work-environment and psychological-empowerment dimensions.

Dimension	Mean	SD	Level
Physical and safety conditions	3.37	0.71	Moderate
Leadership and supervisory support	3.37	0.68	Moderate
Participation and organizational justice	3.34	0.74	Moderate
Training and career development	3.34	0.72	Moderate
Information and communication	3.33	0.67	Moderate
Meaning (PE)	3.62	0.64	Moderate
Competence (PE)	3.61	0.66	Moderate
Self-determination (PE)	3.60	0.65	Moderate
Impact (PE)	3.60	0.68	Moderate

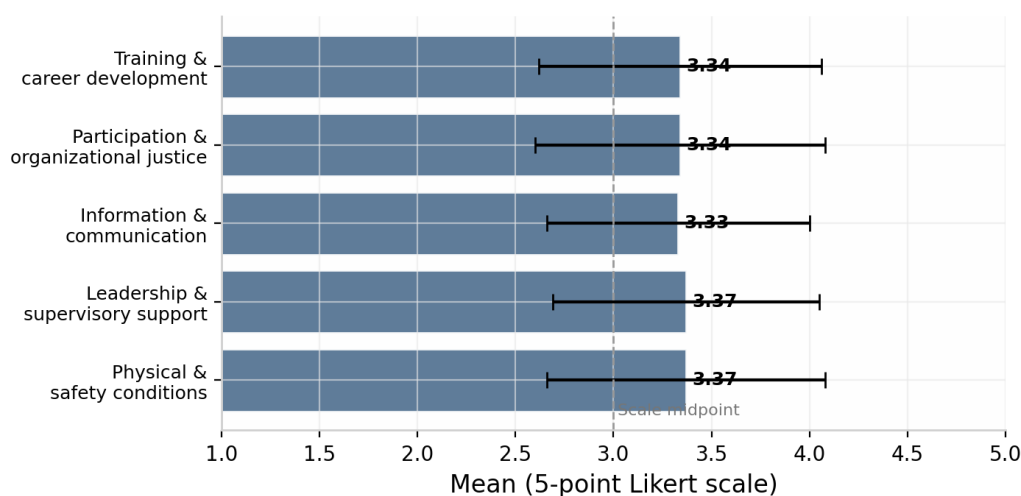


Figure 3. Mean scores of the work-environment dimensions (N = 342).

4.3 Reliability, validity, and common method bias

All scales demonstrated high internal consistency, with Cronbach's alpha between .870 and .911, well above the .70 threshold (Table 5). Corrected item-total correlations ranged from .59 to .72, confirming that all items contribute to their respective constructs. Harman's single-factor test indicated that the first unrotated factor accounted for 32.7% of total variance, below the 50% criterion, suggesting that common method bias is not a serious concern. Skewness and kurtosis values were within the -1 to +1 range, supporting the normality assumption for parametric testing.

Table 5. Reliability statistics and normality indicators.

Scale (items)	Alpha	Item-total r range	Skewness	Kurtosis
Work environment (10)	.892	.59 - .70	0.02	-0.01
Structural empowerment (8)	.870	.59 - .67	0.10	-0.18
Psychological empowerment (12)	.911	.61 - .72	-0.20	-0.32
Job performance (8)	.897	.66 - .71	-0.19	-0.61

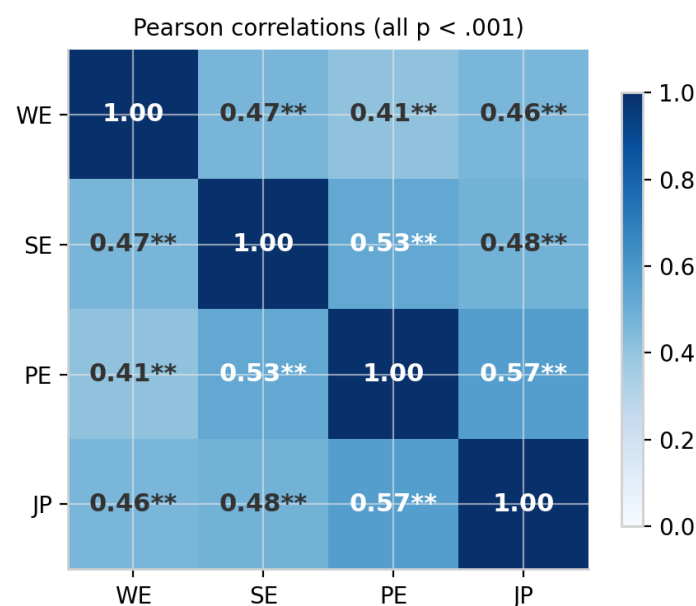
4.4 Correlation analysis

Pearson correlations (Table 6) show significant positive associations among all variables ($p < .001$). Psychological empowerment correlated most strongly with job performance ($r = .566$), followed by structural empowerment ($r = .479$) and the work environment ($r = .464$). The work environment correlated with structural empowerment at $r = .467$ and with psychological empowerment at $r = .408$. The moderate magnitude of these coefficients supports the discriminant validity of the constructs and rules out multicollinearity concerns.

Table 6. Pearson correlation matrix (N = 342).

Variable	1	2	3	4
1. Work environment	1			
2. Structural empowerment	.467**	1		
3. Psychological empowerment	.408**	.526**	1	
4. Job performance	.464**	.479**	.566**	1

Note. ** $p < .001$ (two-tailed).

Figure 4. Correlation heatmap of the study variables (all $p < .001$).

4.5 Hypothesis testing: multiple regression

Three hierarchical regression models were estimated (Table 7). Model 1 shows that the work environment significantly predicts structural empowerment (beta = .467, $t = 9.74$, $p < .001$), explaining 21.8% of its variance; H1 is supported. Model 2 shows that structural empowerment (beta = .43, $p < .001$) and the work environment (beta = .21, $p < .001$) jointly predict psychological empowerment ($R^2 = .310$); H2 is supported. Model 3 predicts job performance from all three antecedents: the work environment (beta = .228, $p < .001$), structural empowerment (beta = .171, $p = .001$), and psychological empowerment (beta = .383, $p < .001$) each contribute significantly, with the model explaining 40.5% of performance variance (adjusted $R^2 = .400$); H3 and H4 are supported. Variance inflation factors (1.34-1.55) are well below the threshold of 5, and Durbin-Watson statistics (1.98-2.11) indicate no autocorrelation.

Table 7. Hierarchical multiple regression results (N = 342).

Predictor	B	SE	Beta	t	Sig.
Model 1: Structural empowerment ($R^2 = .218$; $F = 94.87^{***}$)					
Work environment	0.491	0.050	.467	9.74	< .001
Model 2: Psychological empowerment ($R^2 = .310$; $F = 76.31^{***}$)					
Work environment	0.207	0.051	.207	4.06	< .001
Structural empowerment	0.408	0.048	.430	8.42	< .001
Model 3: Job performance ($R^2 = .405$; adj. $R^2 = .400$; $F = 76.69^{***}$)					
Work environment	0.254	0.054	.228	4.69	< .001
Structural empowerment	0.181	0.055	.171	3.28	.001
Psychological empowerment	0.427	0.056	.383	7.59	< .001

Note. *** $p < .001$. VIF range in Model 3: 1.34-1.55; Durbin-Watson: 1.98-2.11.

4.6 Mediation analysis

Bootstrap mediation analysis with 5,000 resamples (Table 8, Figure 5) confirms that empowerment transmits the effect of the work environment to job performance. The indirect effect through structural empowerment was .09 (95% CI [.03, .15]), through psychological empowerment .09 (95% CI [.04, .14]), and through the serial path work environment > structural empowerment > psychological empowerment > performance .09 (95% CI [.05, .13]); none of the intervals includes zero. The total indirect effect (.263) accounts for approximately 51% of the total effect of the work environment on performance ($c = .517$), while the direct effect remains significant ($c' = .254$, $p < .001$). H5 is therefore supported, with evidence of partial serial mediation: environmental quality improves performance both directly and by building the structural access and psychological experience of empowerment.

Table 8. Bootstrap mediation results (5,000 resamples).

Path	Effect	95% CI lower	95% CI upper
Total effect: WE > JP (c)	.517***	.410	.624
Direct effect: WE > JP (c')	.254***	.147	.361
Indirect: WE > SE > JP	.089	.032	.150
Indirect: WE > PE > JP	.088	.040	.144
Indirect: WE > SE > PE > JP (serial)	.086	.054	.125
Total indirect effect	.263	.194	.337

Note. WE = work environment; SE = structural empowerment; PE = psychological empowerment; JP = job performance. *** $p < .001$. Bias-corrected bootstrap confidence intervals.

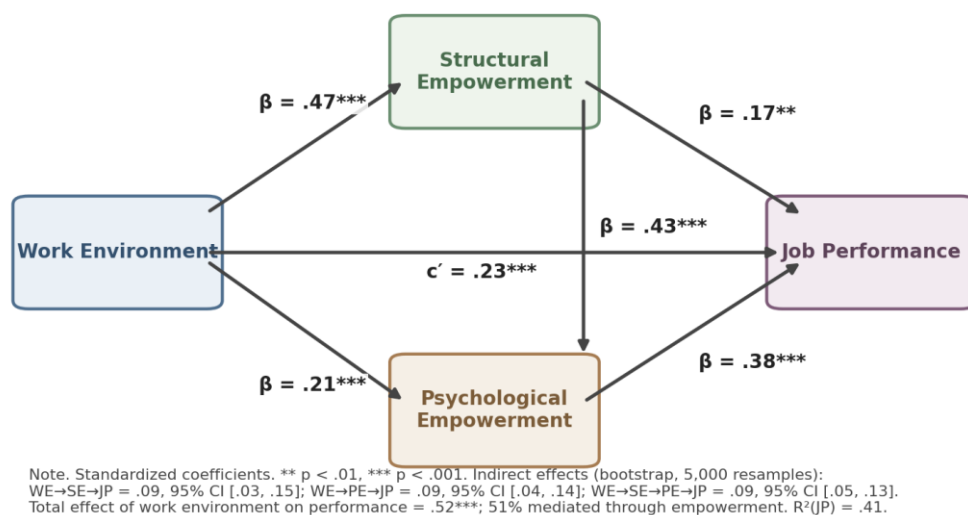


Figure 5. Tested model with standardized coefficients and bootstrap indirect effects.

4.7 Differences by demographic variables

An independent-samples t-test revealed no statistically significant difference in job performance between male ($M = 3.77$) and female employees ($M = 3.69$), $t(340) = 1.21$, $p = .229$. A one-way ANOVA similarly found no significant performance differences across the four organizations, $F(3, 338) = 1.21$, $p = .308$. These results suggest that the empowerment-performance mechanism operates consistently across genders and sectors in the Algerian context.

Table 9. Summary of hypothesis testing.

Hyp.	Statement	Result
H1	Work environment > structural empowerment ($\beta = .467$, $p < .001$)	Supported
H2	Structural empowerment > psychological empowerment ($\beta = .430$, $p < .001$)	Supported

Hyp.	Statement	Result
H3	Work environment > job performance (beta = .228, $p < .001$)	Supported
H4	Psychological empowerment > job performance (beta = .383, $p < .001$)	Supported
H5	Empowerment mediates the work environment-performance link (51% mediated)	Supported (partial mediation)

5. Discussion

5.1 The work environment as a predictor of structural empowerment (H1)

The first finding confirms that the work environment functions as a distribution system for organizational resources: when information, supervisory support, participation channels, safety conditions, and training are present, employees report substantially greater structural empowerment (beta = .467; 21.8% of variance explained). This result empirically substantiates Kanter's (1977) structural argument in an Algerian multi-sector setting and aligns with Weshash et al. (2024), who identified leadership, training, participation, job security, and organizational culture as the influential dimensions of environmental quality at Algeria Telecom in Bouira. The moderate mean level of structural empowerment ($M = 3.21$) — the lowest of the four constructs — indicates that the bottleneck in Algerian organizations lies less in employees' willingness and more in the organizational supply of information, resources, and genuine decision space.

5.2 From structural access to psychological empowerment (H2)

Structural empowerment emerged as the stronger predictor of psychological empowerment (beta = .430), exceeding the direct effect of the work environment (beta = .207). This ordering supports the theoretical claim that employees' experienced meaning, competence, self-determination, and impact are built upon concrete organizational access rather than upon climate alone (Spreitzer, 1996; Laschinger et al., 2001). Formal declarations of empowerment are unlikely to generate psychological agency unless they are backed by tangible resources and information. The finding mirrors Cherfaoui et al. (2021), who found that quality of working life significantly affected psychological empowerment among Sonelgaz employees, and extends it by showing that the structural channel is the dominant transmission route.

5.3 Determinants of job performance (H3 and H4)

All three antecedents contributed significantly to job performance, jointly explaining 40.5% of its variance. Notably, psychological empowerment was the strongest single predictor (beta = .383), exceeding the direct environmental effect (beta = .228) and structural empowerment (beta = .171). This hierarchy is consistent with meta-analytic evidence that empowerment cognitions are proximal drivers of task performance (Seibert et al., 2011) and with the multi-mediation results of Zhenjing et al. (2022), who found that workplace environment effects on performance operate largely through motivational states. It also refines the Algerian evidence: whereas Sahnoun and Roubehie Fissa (2019) reported a positive but moderate environment-performance relationship at Sonelgaz Medea, and Aloui (2025) reported a positive role of the work environment at Naftal Skikda, the present results show that a substantial share of that environmental effect is channelled through empowerment — the environment performs because it empowers. Slimani and Boujnana's (2023) observation at Algeria Telecom in Jijel that information sharing outperformed

formal delegation is likewise coherent with our mediation pattern: delegation without informational and psychological underpinning is weak medicine.

5.4 The mediating mechanism (H5)

Approximately 51% of the total effect of the work environment on performance was transmitted through empowerment, and all three indirect paths — via structural empowerment, via psychological empowerment, and via the serial chain from structural to psychological empowerment — were significant. This is, to our knowledge, the first statistical demonstration of a serial empowerment mediation chain in Algerian organizations. Sociologically, the result confirms that performance is not produced by structural arrangements directly but through the conversion of structural opportunity into experienced agency. Trust, psychological safety, and credible participation act as the conversion mechanisms: employees who receive resources and information but fear the interpersonal costs of initiative will not convert access into voice (Edmondson, 1999). The persistence of a significant direct effect ($c' = .254$) indicates partial mediation — environmental quality also improves performance through simpler routes such as better equipment, safer conditions, and clearer roles that reduce friction independently of empowerment experiences.

5.5 Absence of demographic differences

The absence of significant performance differences by gender and sector is itself a substantive finding. It suggests that the empowerment mechanism is robust across the studied segments of the Algerian labour force and that empowerment-based interventions can be designed at the organizational level without segmentation. At the same time, the moderate levels of all environmental dimensions — including participation and organizational justice ($M = 3.34$) — indicate room for improvement in empowerment equity, an issue that future research should examine with finer-grained measures of contract status, grade, and location.

5.6 Synthesis

Taken together, the findings portray Algerian organizations as systems with motivated, high-performing employees operating in environments that supply empowerment resources only moderately. The practical implication is direct: the largest available performance gains lie not in exhorting employees to show initiative but in raising the organizational supply of information, training, participation, and supervisory support from its current moderate level. Because empowerment mediates half of the environmental effect, investments that target empowerment mechanisms — credible voice, bounded autonomy, coaching-oriented supervision — promise a double return: a direct environmental effect and an amplified indirect effect through empowered employees.

6. Theoretical and Practical Implications

6.1 Theoretical implications

The study contributes to empowerment theory in three ways. First, it empirically validates the Kanter-Spreitzer integration: structural empowerment is the antecedent layer and psychological empowerment the proximal performance driver, with the serial mediation chain providing the missing statistical link in the Algerian context. Second, it demonstrates the value of a sociological framing of empowerment as resource distribution rather than delegation, showing that the work environment explains more than one-fifth of structural empowerment variance and operates partly through it. Third, the comparable effects across sectors support the context-transportability of the

model within Algeria, while the moderate environmental levels highlight the contingency role of administrative traditions noted in the sociology of organizations (Crozier and Friedberg, 1980).

6.2 Practical implications for Algerian organizations

For managers and policymakers, the results translate into five design principles:

5. Treat empowerment as organizational design, not motivational rhetoric: begin with an audit of who has access to information, resources, training, and decisions, since structural empowerment recorded the lowest mean in this study ($M = 3.21$).
6. Couple every delegation initiative with information, competence, and escalation channels; the Jijel finding (Slimani and Boujnana, 2023) and the present mediation results both show that information sharing outweighs formal delegation.
7. Invest in supervisory development — coaching, feedback, participative problem solving, and psychological safety — because psychological empowerment was the strongest performance predictor ($\beta = .383$).
8. Prioritize the weakest environmental dimensions (information and communication; training and career development) when allocating improvement budgets.
9. Evaluate empowerment with balanced indicators — quality, timeliness, error rates, initiative, and learning — rather than output volume alone, and pilot interventions in selected units before scaling.

7. Limitations and Future Research

The study has limitations that define an agenda for future research. First, the cross-sectional design precludes definitive causal inference; longitudinal or quasi-experimental designs should test whether environmental improvements precede gains in empowerment and performance. Second, all variables were measured by self-report from a single source; although Harman's test was reassuring (32.7% single-factor variance), future studies should combine employee surveys with supervisor ratings and objective performance indicators. Third, the sample covers four organizations in north-eastern and central Algeria and does not represent all sectors or regions; multi-region replication, including southern wilayas and private SMEs, is needed. Fourth, the model did not measure moderators such as organizational culture, power distance, or digital maturity, which the sociological literature identifies as consequential. Future research should test the model with structural equation modelling on larger multi-sector samples, incorporate moderators and team-level empowerment, and use qualitative designs to examine how employees and managers negotiate autonomy, responsibility, and voice within Algerian occupational cultures.

8. Conclusion

This study set out to explain and measure how the work environment achieves employee empowerment and how empowerment affects job performance in Algerian organizations. The field evidence from 342 employees of four Algerian organizations confirms the proposed sociological model: the quality of the work environment builds structural empowerment ($\beta = .467$), structural access fosters psychological empowerment ($\beta = .430$), and psychological empowerment is the strongest direct predictor of performance ($\beta = .383$), with empowerment transmitting about half of the total environmental effect. Employees in the studied organizations perform at a high level despite only moderate environmental and structural conditions, which indicates substantial unrealized potential. The central conclusion is that empowerment is neither the abolition of hierarchy nor a managerial slogan: it is an organization of work in which bounded

autonomy is matched by information, resources, competence, transparent procedures, fair treatment, and accountable managerial support. For Algerian enterprises pursuing performance and productivity, the shortest route runs through the quality of the environment they offer their employees.

Declarations

Funding: The authors received no external funding for this study. Conflicts of interest: The authors declare no conflict of interest. Data availability: The dataset is available from the corresponding author upon reasonable request. Ethics: The study was conducted in accordance with institutional ethical standards; participation was voluntary, anonymous, and based on informed consent.

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