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The Influence of Work Environment on Employee Performance: The Mediating Role of Job Satisfaction

Harendra K.C[1], Purna Man Shrestha[2]
[1,2]Mid-West University, Birendranagar, Surkhet, Nepal

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ABSTRACT

Employees are the cornerstone of the organization. This research explores the relationship between the work environment and employee performance within cooperative societies in Nepal's Karnali Province, specifically examining the mediating role of job satisfaction. Using a quantitative research design, data were collected from 404 cooperative employees via convenience sampling. The conceptual framework, grounded in Social Exchange Theory and Job Demands-Resources Theory, was analyzed using Partial Least Squares Structural Equation Modeling (PLS-SEM) in SmartPLS 4.1.1.6. The empirical results reveal a significant positive correlation between the workplace environment and employee performance. Furthermore, the work environment was found to be a strong predictor of job satisfaction. The analysis confirms that job satisfaction serves as a partial mediator; essentially, a supportive physical, psychological, and social environment drives productivity both directly and indirectly by fostering higher satisfaction levels among personnel. These insights provide actionable guidance for cooperative managers and HR practitioners, highlighting cultivating a favorable work climate as a strategic lever for organizational success. By investigating a relatively overlooked regional and sector-specific context, this study addresses a notable gap in the empirical literature concerning the Nepalese cooperative industry and contributes to the broader understanding of organizational behavior in developing nations.

Corresponding Author:

Harendra K.C
Graduate School of Management, Mid-West University, Birendranagar, Surkhet, Nepal
Email: kcharendra39@gmail.com

1. INTRODUCTION

Employee performance remains a central determinant of organizational productivity, competitiveness, and long-term sustainability across diverse industries and economic contexts [3]. Over the past two decades, a substantial body of literature in organizational behavior and human resource management has sought to identify the antecedents, mechanisms, and boundary conditions that shape how employees perform

their roles. Understanding these determinants is particularly critical for organizations operating in resource-constrained settings, where performance improvements can yield disproportionately large developmental outcomes.

Among the various antecedents of employee performance, the work environment encompassing physical conditions (workspace design, lighting, ventilation, and noise levels), psychological dimensions (autonomy, role clarity, and perceived organizational support), and social factors (supervisory relationships, team dynamics, and organizational culture) has emerged as a consistently significant predictor [2]. A supportive, well-structured work environment provides employees with the resources, motivation, and conducive conditions necessary to fulfill their responsibilities effectively. Conversely, unfavorable working conditions have been associated with diminished motivation, reduced productivity, increased absenteeism, and elevated turnover intentions [33]. Theoretical frameworks, including the Job Demands-Resources (JD-R) Model and Social Exchange Theory (SET), provide robust explanations for these relationships, positing that organizational investments in environmental quality generate reciprocal employee engagement and enhanced performance outcomes.

However, the existing empirical landscape reveals notable imbalances and gaps. The vast majority of studies examining work environment–employee performance relationships have been conducted in formal corporate sectors, including banking, manufacturing, telecommunications, and public administration within developed or urbanized economies [9], [10]. For instance, Chandrasekar [9] demonstrated that physical workplace factors significantly influenced productivity in public sector organizations within a developed-country context, yet the study neither considered attitudinal mediators such as job satisfaction nor extended its scope beyond formal public institutions. Similarly, Leblebici [10] found that behavioral workplace dimensions exerted greater influence on productivity than physical dimensions in Turkish private organizations, but the study did not employ an integrated mediation framework nor examine organizations in economically disadvantaged settings. While research from developing countries exists, such as the work of Raziq and Maulabakhsh [7], who reported a strong positive relationship between working environment and job satisfaction in Pakistan's banking, education, and telecommunication sectors, these studies have remained confined to urban formal-sector organizations and have not investigated performance outcomes through mediating mechanisms or explored cooperative organizational contexts.

This sectoral and geographic concentration has left cooperative organizations operating under fundamentally different governance structures, ownership models, resource constraints, and organizational objectives largely unexamined. Cooperative organizations constitute a vital institutional form in developing economies, particularly in rural and marginalized regions where they serve as primary vehicles for financial inclusion, agricultural support, and local employment generation [21]. Despite their socioeconomic significance, organizational behavior research within cooperatives remains nascent. Devkota, Paudel, and Bhandari [21] examined the socioeconomic impact of cooperatives in rural Nepal, but their analysis focused exclusively on external community-level development outcomes rather than on internal organizational dynamics, employee

attitudes, or workplace practices. This gap is consequential because the distinctive operational characteristics of cooperatives, including participatory governance, limited financial resources, voluntarism, and community embeddedness, may produce workplace dynamics and environment–performance pathways that differ substantively from those documented in profit-driven corporate organizations.

Nepal, a landlocked South Asian nation characterized by pronounced geographic, economic, and institutional diversity, offers a particularly instructive context for investigating these understudied relationships. Within Nepal, Karnali Province, the largest yet least developed of the country's seven provinces, confronts acute challenges including geographic isolation, inadequate infrastructure, limited economic opportunities, and constrained institutional capacity [8]. Cooperative organizations play a disproportionately important role in Karnali Province's socioeconomic fabric, often serving as the sole formal organizational presence in remote communities. Nevertheless, despite this significance, no empirical study has examined organizational behavior, employee attitudes, or performance determinants within cooperatives operating in this region. Research on employee performance in Nepal has been largely restricted to the banking sector in urban areas; for example, Shrestha [29] identified work environment, compensation, and leadership style as key predictors of employee performance in Nepalese commercial banks but did not extend the investigation to cooperative organizations, rural settings, or economically marginalized provinces such as Karnali. This represents a critical Nepal-specific gap in the cooperative sector, as previous research on Nepalese cooperatives has predominantly addressed governance structures, financial performance, and community-level socioeconomic impacts rather than intra-organizational behavioral outcomes, including employee job satisfaction and individual performance.

Job satisfaction, defined as the evaluative judgment employees make regarding the extent to which their work fulfills their needs, expectations, and values, occupies a theoretically pivotal position in the work environment–employee performance relationship [27]. Employees who experience higher levels of job satisfaction tend to exhibit greater organizational commitment, heightened engagement, and superior task performance. Theoretically, the JD-R Model suggests that a resourceful work environment enhances job satisfaction by meeting employees' psychological needs, which in turn translates into improved performance outcomes. Social Exchange Theory further posits that when employees perceive their organization as providing a favorable work environment, they reciprocate through positive attitudes (satisfaction) and enhanced effort (performance). Despite these theoretical expectations, empirical investigations of job satisfaction as a mediating mechanism in the work environment–performance relationship remain scarce, particularly in non-corporate organizational settings and when employing advanced analytical techniques capable of capturing indirect effects. Most prior studies have relied on simple regression analyses or bivariate correlational designs, which are methodologically insufficient for rigorously testing mediating pathways.

Synthesizing the foregoing discussion, four interrelated research gaps emerge from the existing literature. First, a sectoral gap exists in which cooperative organizations, with their unique governance, ownership, and resource characteristics, have been largely

excluded from work-environment and employee-performance research. Second, a contextual and geographic gap persists, as empirical investigations in geographically isolated and economically marginalized regions of developing countries remain exceptionally rare, with Karnali Province representing a virtually unstudied organizational context. Third, a methodological and mediational gap is evident in the limited application of advanced analytical techniques such as Partial Least Squares Structural Equation Modeling (PLS-SEM) to empirically test the mediating role of job satisfaction in the work environment–performance relationship. Fourth, a Nepal-specific gap in the cooperative sector underscores the lack of research on organizational behavior, employee attitudes, workplace conditions, and individual performance.

The present study addresses these gaps by examining the relationship between work environment and employee performance, with job satisfaction as a mediating variable, in cooperative organizations of Karnali Province, Nepal. Specifically, the study pursues the following objectives:

a. To examine the direct effect of the work environment on employee performance in cooperative organizations of Karnali Province.
b. To assess the effect of the work environment on job satisfaction among employees of cooperative organizations.
c. To evaluate the effect of job satisfaction on employee performance in the study context.
d. To test the mediating effect of job satisfaction on the relationship between work environment and employee performance.

This study contributes to the literature in several important ways. First, it is among the earliest empirical investigations to examine the nexus among work environment, job satisfaction, and employee performance within cooperative organizations in one of Nepal's most economically disadvantaged regions. Second, by situating the research in Karnali Province, the study extends organizational behavior scholarship to a contextually unique and previously unexamined setting characterized by geographic remoteness, resource scarcity, and institutional fragility. Third, the application of PLS-SEM to model direct and indirect (mediated) effects represents a methodological advancement over the regression-based and correlational approaches that have dominated prior research in comparable contexts. Fourth, integrating multiple theoretical lenses, specifically the JD-R Model and Social Exchange Theory, provides a more comprehensive and nuanced theoretical foundation than single-theory approaches prevalent in the existing literature. The findings carry practical implications for cooperative managers, policymakers, and development practitioners seeking to enhance organizational effectiveness and employee well-being in marginalized regions.

Literature Review and Development of Hypothesis

According to [5], the Social Exchange Theory (SET) serves as a basis for conceptualizing employee-organization relationships. According to SET, social behavior is a product of an exchange process that seeks to maximize benefits and minimize costs. The same applies in organizational settings, where employees, when given good conditions

such as a good working environment, give back in terms of increased performance and commitment [13].

According to the theory, employees who feel their organization is supportive will feel an obligation to reciprocate positively. A favorable working environment is an indicator of organizational investment in employees, which results in job satisfaction and performance as a way of repaying that investment. It is this kind of exchange relationship that provides the foundation for understanding how work environment factors affect employee attitudes and behaviors.

Similarly, [3] has created another theoretical approach that may help analyze the impact of the work environment, the Job Demands-Resources (JD-R) theory. According to the theory, job characteristics can be classified into demands and resources. Job demands are physical, psychological, social, or organizational factors that require sustained effort, whereas job resources are factors that facilitate the attainment of work goals, reduce demands, and promote personal growth.

The JD-R theory states that the work environment is a major job resource that helps to mitigate the adverse impact of job demands and is beneficial to employee well-being and performance [4]. Employees are also more motivated and engaged when environmental conditions are sufficient, resulting in better performance outcomes. Job satisfaction is an outcome of adequate resources, which is a motivational factor that drives performance.

Relationship Between Work Environment and Employee Performance

Empirical studies have shown a positive correlation between the working environment and employee performance. According to [9], other organizations with comfortable, dynamic working environments have increased employee productivity. On the same note, [33] found that the work environment is a major determinant of employee performance in Pakistani organizations across sectors.

Similarly, [2] examined how the work environment affects employee performance in Jordanian universities and found that physical environmental variables, such as workspace quality and furniture, were strong predictors of performance. Likewise, [20] has furthered this paper by considering various environmental dimensions and validating their overall effects on employee productivity and engagement.

Research has also highlighted the significance of the work environment in resource-constrained settings in developing countries. Furthermore, [23] found that Pakistani banking employees' performance was highly dependent on environmental factors, suggesting that organizations should invest in workplace enhancement despite limited resources.

HA1: There is a positive and significant impact of the work environment on employee performance.

Relationship Between Work Environment and Job Satisfaction.

Extensive empirical data have supported the association between workplace and job satisfaction. Likewise, [33] found that the work environment strongly predicts job

satisfaction, and employees working in favorable environments report higher levels of job satisfaction. The research found that environmental factors that address employees' basic needs make them satisfied with their work.

In the same vein, [20] found that the physical work environment positively affects job satisfaction in Malaysian higher education institutions. The paper highlights that well-furnished, comfortable work environments lead to positive job attitudes among employees. Likewise, [1] affirmed the strong connection between the job environment and job satisfaction in Ghanaian organizations, a connection that can be generalized to African countries.

HA2: Job satisfaction is positively and significantly affected by the work environment.

Relationship Between Job Satisfaction and Employee Performance

The relationship between job satisfaction and employee performance is one of the most researched in organizational behavior [26]. The meta-analytic evidence indicates a moderate positive relationship between the constructs, which indicates that satisfied employees are likely to perform better.

A meta-analysis conducted by [26] to determine the satisfaction-performance relationship showed a mean correlation of 0.30, which was significant. The authors proposed that the relationship could be stronger in some situations, namely when employees are more autonomous in their jobs or when performance is assessed more holistically.

A recent study has confirmed this connection across different contexts and cultures. According to [14], job satisfaction has a positive impact on employee performance in Serbian organizations, and [25] demonstrated this in Nigerian educational institutions. All these studies contribute to the theoretical suggestion that satisfied employees exhibit high performance.

HA3: Job satisfaction affects the performance of employees positively and significantly.

Job Satisfaction plays a mediating role between Work Environment and Employee Performance.

Several studies have examined how job satisfaction mediates the relationship between organizational factors and employee performance. In addition, [10] found that organizational climate and employee performance partially mediate job satisfaction, with environmental perceptions affecting performance through job satisfaction.

Similarly, [32] demonstrated that job satisfaction mediated the effects of leadership, the working environment, and employee performance in Indonesian organizations. Their results showed that the work environment has a direct and an indirect impact on performance through job satisfaction. Likewise, [1] reported evidence for the mediating role of job satisfaction in Ghana.

Motivational processes can explain the mediation process. An environment that meets employees' needs and expectations will lead to increased job satisfaction. Happy workers, in turn, are more encouraged to put effort into their work, which leads to improved performance results [4].

HA4: There is a mediation effect of job satisfaction on the relationship between job environment and employee performance.

Conceptual Framework

Based on the theoretical background and literature review, the proposed research suggests a conceptual model to explore the interrelationships among the work environment, job satisfaction, and employee performance. The framework is based on Social Exchange Theory and Job Demands-Resources Theory.

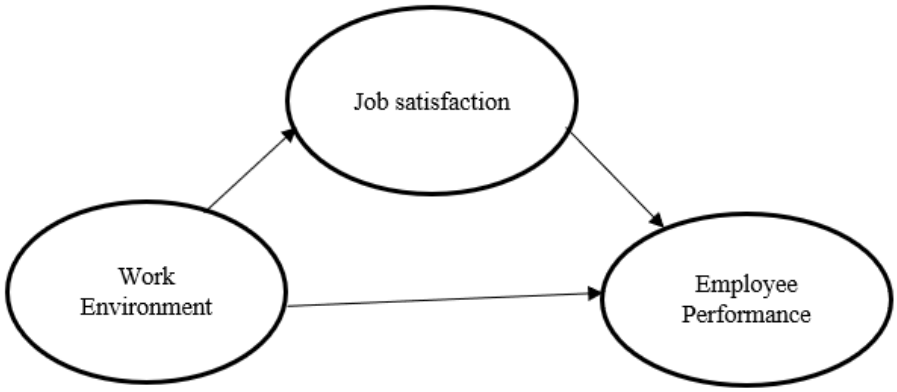

Figure 1: Conceptual Framework

2. METHOD

Research Design

A quantitative cross-sectional research design was used in this study to analyze the relationships among work environment, job satisfaction, and employee performance. It was positivist, the hypotheses were formulated based on theory and tested on a deductive approach.

Study Area and Context

The research was conducted in Karnali Province, the largest of Nepal's seven provinces in terms of area, yet the least populated and developed. The province comprises 10 districts and faces major development challenges, including a lack of infrastructure, geographic remoteness, and low human development indicators.

Population and Sample

The employees of cooperative organizations in Karnali Province were the target population. The population size was unknown because no comprehensive sampling frame was used, and the cooperatives were not centralized across the entire province. Cooperative workers were both permanent and contract employees who worked across various departments, including administration, accounting, loan services, and field operations.

As the population was not known, the sample size was determined using the formula recommended by [11] to determine the sample size in a population that was not known:

$$n = \frac{Z^2.p.q}{e^2}$$

Where:

Z = 1.96 (for 95% confidence level)

p = 0.5 (assumed proportion)

q = 1 - p = 0.5

e = 0.05 (margin of error)

$n = \frac{1.96^2.(0.5).(0.5)}{0.05^2} = 384.16$ or 385

The study, however, involved 404 respondents to account for potential incomplete responses and increase the statistical power.

Sampling Technique

Convenience sampling was used as the data collection method due to practical constraints in the study setting. This was required due to the geographic distribution of cooperatives across the Karnali Province, which was inaccessible due to terrain, infrastructure constraints, and resource constraints. Respondent sampling was based on cooperatives accessible to the research team across the Karnali Province's different districts.

Data Collection Instrument

The questionnaire was intended to collect information on the research variables. The questionnaire was divided into four sections: demographic information, work environment, job satisfaction, and employee performance. The measures were all on a five-point Likert scale of 1 (strongly disagree) to 5 (strongly agree). To ensure linguistic equivalence and cultural appropriateness, the questionnaire was first drafted in English and back-translated into Nepali using the back-translation method.

Measurement Scales

Work Environment Scale: It was an adapted version of the Physical Work Environment Scale and Psychosocial Work Environment Scale, and was used to measure work environment. The scale comprised 12 items across four dimensions: physical working conditions (3 items), workplace safety (3 items), organizational support (3 items), and interpersonal relationships (3 items). Some of the sample items were: My workplace is well-lit and well-ventilated (physical conditions), I feel safe at my workplace (safety), my organization makes resources available to do my job (organizational support), and I get along well with my workmates (interpersonal relationships).

Job Satisfaction Scale: An adapted version of the Minnesota Satisfaction Questionnaire (MSQ) short form was used to measure job satisfaction. The scale contained 10 items evaluating intrinsic satisfaction (5) and extrinsic satisfaction (5). Sample items included: I am satisfied with the opportunity to use my abilities (intrinsic) and with my salary and benefits (extrinsic).

Employee Performance Scale: A self-reported performance scale based on the Individual Work Performance Questionnaire (IWPQ) was used to measure employee performance. The scale had 8 items aimed at evaluating task performance (4 items) and contextual performance (4 items). The sample items included whether I fulfill my assigned tasks effectively (task performance) and whether I assist co-workers with work-related difficulties (contextual performance).

Pilot Testing and Reliability Assessment

The pilot test was conducted before the actual data collection, using 40 employees of cooperative organizations in other provinces (not in the final sample), to assess the clarity, understandability, and psychometric quality of the instrument. Based on the pilot test results, slight wording changes were made to clarify the items, especially the Nepali one.

The alpha coefficients were determined using Cronbach's alpha on the pilot data to measure internal consistency reliability. The pilot test data revealed acceptable reliability: work environment (a = 0.84), job satisfaction (a = 0.87), and employee performance (a = 0.81), all of which exceeded the recommended value of 0.70.

Data Collection Procedure

Data collection was conducted over three months, from February to April 2024. The research team visited cooperative organizations in Karnali Province and distributed questionnaires to willing employees. The management of every cooperative organization was asked to grant permission before data collection.

Participants were informed of the study's purpose verbally and in writing through an information sheet. The participants were told that it was voluntary, that they could drop out at any time without reprisal, and that all answers would be confidential and anonymous. All participants had provided informed consent before completing the questionnaire. The respondents were allowed to complete the questionnaire immediately in the presence of the researchers or at their convenience and submit it within one week.

Ethical Considerations

Prior to data collection, ethical approval for this study was obtained from [Name of Institutional Review Board/Ethics Committee]. The research was conducted in accordance with ethical principles, including voluntary consent, informed consent, confidentiality, anonymity, and the right to withdraw. None of the personally identifiable information was used in the questionnaires, and all data was stored in a secure environment in password-protected electronic files accessible only to the research team. The participants were told that the research results would be used solely for research purposes and that no personal answers would be provided to cooperative management or other parties.

Data Analysis

The data analysis was conducted using Partial Least Squares Structural Equation Modeling (PLS-SEM) with SmartPLS 4.0. The choice of PLS-SEM, rather than

covariance-based SEM (CB-SEM) was due to the following reasons: (a) the predictive orientation of the study, which aims at explaining the variance in the dependent variable; (b) the presence of a mediating variable that needs to be analyzed as a path; (c) the non-probability sampling methodology; and (d) the exploratory nature of the research in a poorly studied environment [19].

3. RESULTS AND DISCUSSION

3.1. Results

Data analysis was performed by means of Partial Least Squares Structural Equation Modeling (PLS-SEM) with SmartPLS version 4.1.1.6. The reason for selecting PLS-SEM was that it was an exploratory study, the sample size was sufficient to meet minimum requirements, and the data had minimal deviations from normality [18]. A total of 5,000 resamples were used to bootstrap the results and determine whether the path coefficients and mediation effects were significant. The analytical approach led to strong estimations and sound hypothesis testing.

Table 1. Demographic Profile of the Respondents

Categories		Frequency	Percent
Gender	Male	257	63.6
	Female	147	36.4
Age	18-25	83	20.5
	26-33	185	45.8
	34-41	116	28.7
	42 and above	20	5.0
Marital Status	Married	293	72.5
	Unmarried	101	25.0
	Divorce	10	2.5
Caste Status	Brahman	155	38.4
	Chettri	180	44.6
	Janajati	52	12.9
	Dalit	17	4.2
Educational Qualification	Upto+2	40	9.9
	Bachelor	159	39.4
	Masters	205	50.7

Table 1 gives the demographic profile of 404 respondents in Nepal. The sample is also male-dominated (63.6 percent) with a heavy skew towards married people (72.5 percent). The 26-33 years category is the highest with 45.8 percent, followed by the 34-41 years category with 28.7 percent, making the respondents almost three-quarters (74.5 percent) in the 26-41 age bracket. Regarding caste, Chettris (44.6 percent) and Brahmans (38.4 percent) are significantly overrepresented (83 percent) compared with the Janajati and Dalit groups, at 12.9 percent and 4.2 percent, respectively. The level of education is

very high, with more than half having a Master's degree (50.7 percent) and the other half having a Bachelor's degree, leaving only 9.9 percent with an education up to the +2 level.

To sum up, the respondents are an extremely educated, married, male, and upper-caste (Chettri Brahman) group in Nepalese society, which is highly concentrated in the best working-age group of 26-41 years. This profile evidently represents an urban, professional, and relatively privileged group of people rather than the overall population of Nepal.

Measurement Model

SmartPLS was used to evaluate the measurement model by investigating convergent and discriminant validity. Convergent validity was established based on factor loadings ranging from 0.539 to 0.861 (Table 2), and the results indicated sufficient correlations between the indicators and their respective constructs. Internal consistency was also checked because the Cronbach's Alpha and Composite Reliability values were higher than the 0.70 mark in all constructs, and the Average Variance Extracted was greater than the 0.50 standard in all latent variables. All these results meet the reliability and validity requirements proposed by [18], indicating that the measurement model is sound and can be further analyzed structurally.

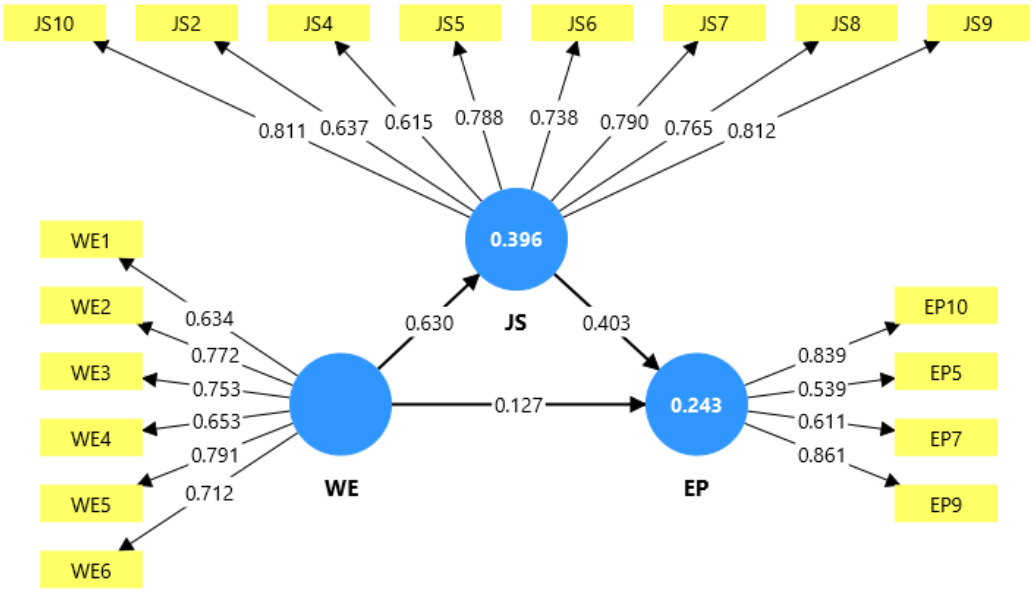

Figure 2. Correlations between individual indicators and their respective constructs

Table 2 presents the quality assessment of the measurement models for three constructs: engagement with the Platform (EP), Job Satisfaction (JS), and Work Engagement (WE). The Job Satisfaction construct exhibits high levels of internal consistency and reliability, with Cronbach's alpha of 0.886, composite (rho_a) of 0.891, rho_c of 0.910, and AVE of 0.559; factor loadings range from 0.615 to 0.812, and VIFs range from 1.508 to 2.614 (well below the critical value of 5). There is also good reliability in Work Engagement (Cronbach's alpha = 0.815, rho_a = 0.827, rho_c = 0.866, AVE = 0.521) and factor loading of 0.634-0.791, and VIFs of lower than 1.815, which is not multicollinearity. Meanwhile, there is acceptable reliability (Cronbach's alpha = 0.715,

rho_a = 0.801, rho_c = 0.811) and convergent validity (AVE = 0.527) with only four items involved in engagement with the Platform, where item EP5 loads comparatively low (0.539). On the whole, all constructs are at recommended levels of reliability (>0.7), convergent validity (>0.5), and discriminant validity (no excessive multicollinearity), and the measurement model is valid.

Table 2. Factor Loadings, Cronbach's Alpha, Composite Reliabilities, VIF, and Average Variance Extracted

Items	Factor Loading	VIF	Cronbach's alpha	Composite reliability (rho_a)	Composite reliability (rho_c)	Average variance extracted (AVE)
EP10	0.839	1.587	0.715	0.801	0.811	0.527
EP5	0.539	1.268				
EP7	0.611	1.295				
EP9	0.861	1.630				
JS10	0.811	2.549	0.886	0.891	0.910	0.559
JS2	0.637	1.606				
JS4	0.615	1.508				
JS5	0.788	2.475				
JS6	0.738	1.807				
JS7	0.790	1.973				
JS8	0.765	2.264				
JS9	0.812	2.614				
WE1	0.634	1.393	0.815	0.827	0.866	0.521
WE2	0.772	1.815				
WE3	0.753	1.792				
WE4	0.653	1.443				
WE5	0.791	1.651				
WE6	0.712	1.514				

Table 3. Heterotrait-monotrait ratio (HTMT) – Matrix

Construct	EP	JS	WE
EP			
JS	0.539		
WE	0.429	0.719	

Table 3 presents the Heterotrait-Monotrait ratio (HTMT) matrix used to evaluate the discriminant validity of the three latent constructs. Engagement with the Platform (EP) to Job Satisfaction (JS) yields a value of 0.539; Engagement with the Platform (EP) to Work Engagement (WE) yields a value of 0.429; and Job Satisfaction (JS) to Work Engagement (WE) yields a value of 0.719. All values are well below the conservative

cutoff of 0.85 and the more lenient cutoff of 0.90, indicating discriminant validity. Job Satisfaction and Work Engagement (0.719) have the highest correlation, which is understandable given their conceptual closeness; however, it is still far lower than those that would suggest distinctiveness. Therefore, the three constructs are empirically distinct, demonstrating that they quantify the aspects of the theoretical framework.

Table 4. *R-Square*

Construct	R-square	R-square adjusted
EP	0.243	0.240
JS	0.396	0.395

Table 4 indicates the explanatory power of the structural model of the two endogenous constructs. The engagement with the Platform (EP) is significant, with an R-square of 0.243 (adjusted 0.240) indicating that the predictors in the model explain about 24% of its variance, which is a moderate effect size. Job Satisfaction (JS) has a much higher R-squared of 0.396 (adjusted 0.395), indicating that almost 40 percent of the variance is explained by the antecedent variables, which is a high level of predictive accuracy. The fact that R-square and adjusted R-square are not significantly different in both cases proves that the model is not overfitted and it has excellent generalizability.

Structural Model

The PLS algorithm was used to examine the structural model in SmartPLS version 4.1.1.6, and the path coefficients are depicted in Figure 3. The main aim of the inner model test was to assess the size and strength of the hypothesized relationship between the constructs and the model's predictive power, as measured by R^2. To do this, a bootstrapping method was used to provide t-values to test the statistical significance of each path coefficient and the variance accounted for in the endogenous constructs.

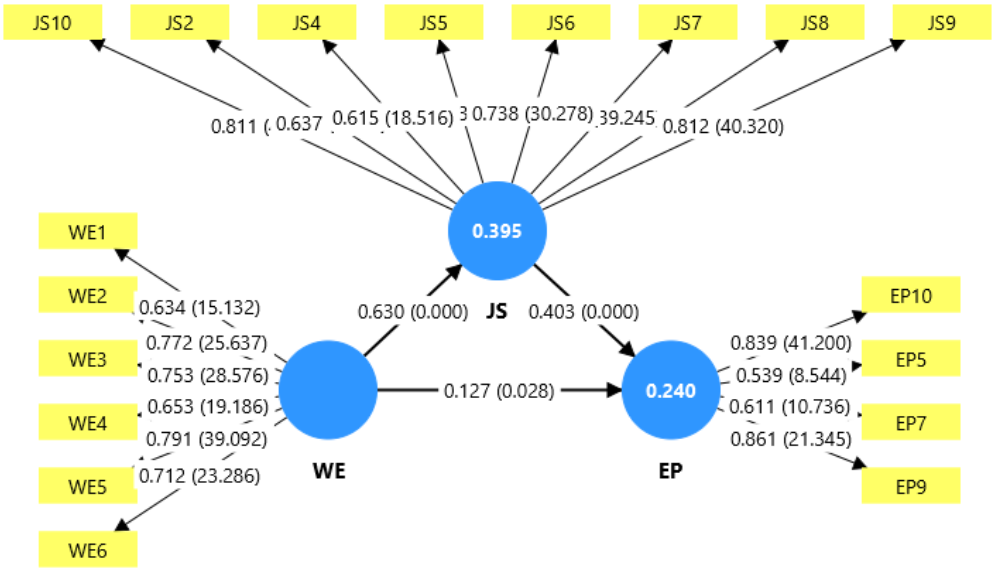

Figure 3. Structural Model

Table 5. Path coefficient (Direct effect)

Construct	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (|O/STDEV|)	P values
JS -> EP	0.403	0.411	0.048	8.404	0.000
WE -> EP	0.127	0.124	0.058	2.196	0.028
WE -> JS	0.630	0.635	0.029	21.874	0.000

Table 5 presents the direct path coefficients of the structural model and the corresponding significance tests. Job satisfaction (JS) has a significant and very strong positive impact on the engagement with the Platform (EP) ($\beta = 0.403$, $t = 8.404$, $p < 0.001$). Work engagement (WE) demonstrates a significantly stronger effect on job satisfaction ($\beta = 0.630$, $t = 21.874$, $p = 0.001$) and becomes the most influential factor of job satisfaction. In the meantime, the direct effect of work engagement on platform engagement is positive and statistically significant, but comparatively smaller ($\beta = 0.127$, $t = 2.196$, $p = 0.028$). None of the paths is insignificant, and the path between WE and JS has the largest coefficient and t-value, which means that it is the most significant relationship in the model.

Table 6. *Specific Indirect Effect*

Construct	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (|O/STDEV|)	P values
WE -> JS -> EP	0.254	0.261	0.032	8.022	0.000

The particular indirect effect reported in Table 6 is from work engagement (WE) to job satisfaction (JS) to engagement with the Platform (EP). The mediation is large and very meaningful ($\beta = 0.254$, $t = 8.022$, $p < 0.001$), showing that a significant part of the overall effect of work engagement on platform engagement is mediated by its strong effect on job satisfaction. This indirect effect (0.254), in fact, is more than twice the size of the direct effect of WE on EP (0.127), which firmly confirms that job satisfaction is a potent mediating variable in the model and the paramount influence of the feeling of being satisfied at work on the translation of high work engagement into increased involvement with the Platform.

Table 7. *F-Square*

Construct	EP	JS	WE
EP			
JS	0.130		
WE	0.013	0.657	

Table 7 presents the f-squared effect sizes for the individual predictors in the structural model. The effect of work engagement (WE) on job satisfaction is very large (f^2

= 0.657), indicating its hegemonic role as the source of JS. Job satisfaction, in turn, has a medium impact on use of the Platform (f^2 = 0.130), whereas the direct impact of work engagement on EP is extremely small (f^2 = 0.013). These values make it very clear that WE has a strong influence on employee satisfaction in the workplace, and that job satisfaction is the main mechanism by which work engagement eventually leads to platform engagement, with a small direct impact from WE itself.

Table 8. Summary of Hypothesis Testing

Construct	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (|O/STDEV|)	P values	Decision
JS -> EP	0.403	0.411	0.048	8.404	0.000	Supported
WE -> EP	0.127	0.124	0.058	2.196	0.028	Supported
WE -> JS	0.630	0.635	0.029	21.874	0.000	Supported
WE -> JS -> EP	0.254	0.261	0.032	8.022	0.000	Supported

The results in Table 8 summarize the hypothesis testing results of the structural model. Each of the 4 suggested relationships was empirically supported. H_{A1} is supported, as the direct impact of job satisfaction on platform engagement is positive and significant ($\beta = 0.403$, $p < 0.001$). The direct relationship between work engagement and platform engagement is positive and strong, albeit weaker ($\beta = 0.127$, $p = 0.028$), which corroborates H_{A2}. The most significant interaction in the model is between work engagement and job satisfaction ($\beta = 0.630$, $p < 0.001$), which substantiates H_{A3}. Lastly, the medium effect of work engagement on platform engagement via job satisfaction is significant ($\beta = 0.254$, $p = 0.001$), supporting HA4 and providing partial mediation.

In conclusion, the model is fully justified: work engagement is a strong motivator of job satisfaction, which, in turn, is the key to employees' active involvement in the Platform. Companies that want to increase platform usage must thus focus more on programs that increase engagement at work and, more so, on daily job satisfaction, as the latter serves as a conduit between motivated and engaged employees and excited platform users.

3.2. Discussion

The study examined how the work environment influences employees' performance in cooperative organizations in Karnali Province, Nepal, and the mediating effect of job satisfaction.

The study showed a direct and significant positive impact of work environment on employee performance (b = 0.127, p = 0.028) and proved hypothesis HA1. This shows that better performance results from increased physical, psychological, and social workplace factors. This observation is consistent with [9], who reported that dynamic working environments positively affect productivity, and with [33], who also found the work environment to be one of the determinants of performance across sectors. Likewise, [2]

found that workspace and furniture quality were significant predictors of performance in Jordanian universities, which is similar to the current results.

HA2 was supported, as the strongest correlation was found between the work environment and job satisfaction ($b = 0.630$, $p < 0.001$). The significant effect size ($f2 = 0.657$) indicates that the work environment is a leading determinant of job satisfaction. This finding is consistent with [20], who also found positive job attitudes toward comfortable, well-equipped workplaces, and with [1], who also found strong relations in Ghanaian organizations.

HA3 was affirmed by the significant positive relationship between job satisfaction and worker performance ($b = 0.403$, $p < 0.001$). This confirms the set organizational behavior hypothesis that satisfied employees are more productive. The findings are consistent with the meta-analytical results of [26], which show strong positive correlations among these variables. In Nigeria, recent cross-cultural research, such as [14] and [25], also attests to job satisfaction as a key antecedent of high performance.

Most importantly, the study established that job satisfaction mediates the relationship between the work environment and employee performance ($b = 0.254$, $p < 0.001$), supporting HA4. It shows that favorable environments do not merely have a direct effect on performance but also significantly improve employees' work perceptions. This observation aligns with [10] and [32], who indicated that employee satisfaction is driven by the level of environmental perceptions that lead to performance. The mediation process highlights a motivational process in which sufficient environmental resources can increase employee well-being and involvement, thereby leading to improved performance.

This research contributes greatly to the theory by expanding SET and JD-R to the context of the developing-country cooperative sector. The results confirm the original assumption of SET that organizational investment in positive working environments would be repaid by increased employee effort and performance. Nonetheless, the research goes beyond SET to show how this reciprocity mechanism works considerably via psychological channels- in this case, job satisfaction- and not direct behavioral reactions. This two-pathway (direct and mediation through satisfaction) is an enhancement of SET in that it highlights both emotions and cognitive processes that mediate exchange relationships, even in resource-constrained environments.

In the JD-R framework, the study builds on the theory by empirically demonstrating that the work environment is a key job resource in collaborative organizations in developing economies. Although JD-R theory has been widely tested in the context of Western organizations, this research paper demonstrates that it can also be applied to non-profit, member-owned cooperatives in one of Nepal's most underprivileged areas. The positive relationship between environment and satisfaction ($b = 0.630$) indicates that, despite resource-inadequate contexts, environmental resources serve as the primary motivational factors that meet employees' needs and expectations. In addition, the partial mediation result adds to the JD-R theory by defining satisfaction as an important motivational process through which job resources are converted into performance outcomes, thereby further narrowing the motivational path of the theory.

The identified positive relationships are directionally consistent with research on developed economies [9, 33] and other developing countries [1, 14, 25], but the magnitudes and mechanisms are also important contextual differences. The relationship between work environment and work satisfaction in the study (b = 0.630, f2 = 0.657) seems to be significantly higher than the generally reported relationship in the West, which indicates that environmental conditions can be significantly overemphasized in the psychological role in the context of the resource-limited environment, where even basic workplace facilities cannot be assumed.

This result contrasts with the context of developed countries, where baseline work-environment standards tend to be higher, which may lead to ceiling effects that weaken the environment-satisfaction relationship. Even small environmental enhancements can be more psychologically salient and appreciated by employees in Karnali Province, where the lack of infrastructure and widespread geographical isolation are common [8]. This context-dependency implies that the marginal utility of investments in the work environment can be greater in developing areas, thereby advancing theoretical models of organizational behavior.

Also, the partial (as opposed to complete) mediation of job satisfaction implies that direct environment-performance links are still effective, perhaps, due to pragmatic advantages of improved physical conditions (lighting, equipment, safety) to task performance, not mediated by satisfaction. This two-way process can be stronger in developing situations where physical conditions of work more directly limit the performance of the task.

This study makes contributions to the literature on organizational behavior in several ways. First, it offers empirical evidence from Nepal on the cooperative sector, which is scarce and fills a large geographical and organizational gap in the literature, which is primarily based on for-profit organizations in developed economies. Second, it confirms that the nominal relationships of the existing organizational behavior model (environment-satisfaction-performance) generalize across extremely different economic and cultural settings, reinforcing the nomological network of these constructs. Third, the study contradicts the view that psychological mediators are material concerns in emerging economies by showing that satisfaction-mediation also occurs in low-resource environments. Fourth, the results indicate that theoretical models developed in wealthy settings require reallocation of magnitudes and salience when used in resource-limited settings, thereby promoting more context-relevant theory generation.

This study paves the way for cooperative sector research. The collaborative literature has primarily emphasized governance, member participation, and financial performance, but little has been done on the dynamics of employee-level organizational behavior. This study will demonstrate that the theories of human resource management and organizational behavior can be applied equally in cooperative organizations, not only in traditional businesses. The results disprove the belief that the democratic structure and social mission of cooperative organizations are certain to guarantee employee satisfaction and performance, and that concrete investment in the work environment remains essential.

Moreover, through the development of such relationships in cooperatives serving economically disadvantaged groups in Karnali Province, the research indicates that organizational effectiveness principles can be applied even in mission-based, community-oriented organizations. This is specifically significant considering the role of cooperatives in developing areas. The study offers practical guidance to cooperation managers and development agencies to emphasize workplace quality in addition to conventional cooperative issues, such as services to members and financial viability. In the context of cooperatives operating in difficult settings, strategic environmental investments may yield multiplicative benefits, improving employee outcomes and the organization's ability to benefit members and communities.

The results are particularly important for Nepal's least developed region, the Karnali Province. In this region, cooperative organizations are vital to financial inclusion and socioeconomic development. The study reveals that workplace investments are strategic needs rather than luxuries, even in resource-strained settings. To cooperative managers, such findings reveal that by establishing good physical and social conditions, such as proper furnishing, social support, and minimization of stressors on the employee, the productivity of an organization can be significantly enhanced by offering increased satisfaction to employees. By taking these factors into account, cooperatives will be able to improve overall performance and strengthen their developmental contributions to the underserved region.

4. CONCLUSION

The study has shown that job satisfaction, as a mediator, is important for improving employee performance in Karnali Province cooperatives, both directly and indirectly, through the work environment. The indirect route is significantly more potent, which shows that environmental investments can only be successfully made when employees have positive attitudes towards them.

Theoretical Contribution

The research paper applies Social Exchange Theory and Job Demands-Resources theory to marginalized, developing-economy contexts, thereby filling vital gaps in the cooperative sector organizational behavior literature in the South Asian setting.

Practical Implications

Cooperative managers are advised to implement comprehensive workplace-enhancing approaches, including physical infrastructure, social support, and mental health initiatives, to achieve the greatest performance benefits.

Policy Implications

Policy makers are advised to establish collaborative workplace guidelines, recognizing that the quality of the work environment is a direct determinant of the cooperative sector's contribution to financial inclusion and regional socioeconomic growth.

Limitations and Future Research

The convenience sampling and cross-sectional study design lead to a lack of generalizability and causal inference. Future studies should use a longitudinal design and consider other mediators, such as leadership styles and organizational culture.

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