

Moderating the Effect of Work Environment via Organizational Commitment: A Study on Motivation and Its Impact on Employee Performance

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Abstract. The purpose of this paper is to explore the relationship of motivation and employee performance by having work environment and the organization commitment as mediating and moderating respectively. The research was conducted at a private engineering college in Tamil Nadu. Based on the stratified sampling formulation, there are up to 307 employees in the sample. The research assumption was tested using models of structural equations (Smart PLS 4). The study found that employee motivation and job performance are both positive and important. Organizational commitment as a mediating variable to explain the impact of workplace motivation on employee performance.

Keywords: Motivation, Employee Performance, Work Environment, Organizational Commitment

1. Introduction

1.1. Study Background

An educational institution must constantly monitor its employees to determine whether they are working well in order to be able to improve performance more effectively and efficiently for achieving their work targets. Employee performance is crucial for supporting and assisting each employee in achieving their work target. The institution's leadership values each employee's ability to improve their performance in an effective and efficient manner. Each time an employee performs to the best of their abilities, skills, and drive, they will be given an award. On the other side, management is essential to the creation, execution, and oversight of institutions. In this situation, management must be a vital player in efforts to control and boost employee performance. Employers must pay close attention to the accomplishments of their employees in order to motivate them to work energetically and responsibly for their tasks and to help the firm reach its set goals. (Lina, 2014).

1.2. Statement of the Problem

The hardest and most obvious quality in a worker is motivation on the part of the employer. Any firm may find it challenging to keep personnel in an increasing variety of conditions due

to the competitiveness of today's labor market and limited opportunities. Additionally, there is no evidence of advancement. Employee turnover causes a significant loss of knowledge, skill, and aptitude, which has a negative effect on customer needs as well as financial costs and business expenses. Managers with excellent motivating abilities help the company increase employee retention. Additionally, employees feel overworked and less commitments. We conducted our research in a few South Tamil Nadu Private Engineering College districts to get more accurate results.

1.3. Research Questions

Research is the methodical investigation and evaluation of materials and sources to ascertain facts and draw unique conclusions.

- How do motivational factors influence employee performance?
- How do organizational commitment and the working environment impact the link between employee performance and job motivation?

1.4. Study Objective

The study's major objective was to pinpoint the several crucial factors that motivated employees and affected how well they performed at work. This investigation's major purpose is:

- Investigate motivational conditions at a private engineering institution in the southern district of Tamil Nadu.
- Examine the causes and impacts of motivation on employee performance.
- Examine the relationship between employee motivation and performance by ensuring that organizational engagement and the work environment serve as mediators and facilitators, respectively.

1.5. Development of Hypothesis:

H1: Employee performance is significantly impacted by motivation.

H2: The organization's dedication is significantly impacted by motivation.

H3: Employee performance is significantly impacted by the work environment.

H4: Employee performance is significantly impacted by organizational commitment.

H5: Organizational commitment mediating the effect of the casual relationship between motivations on employee performance.

H6: The relationship between motivation and job performance are stronger with effect of work environment.

1.6. Conceptual Framework:

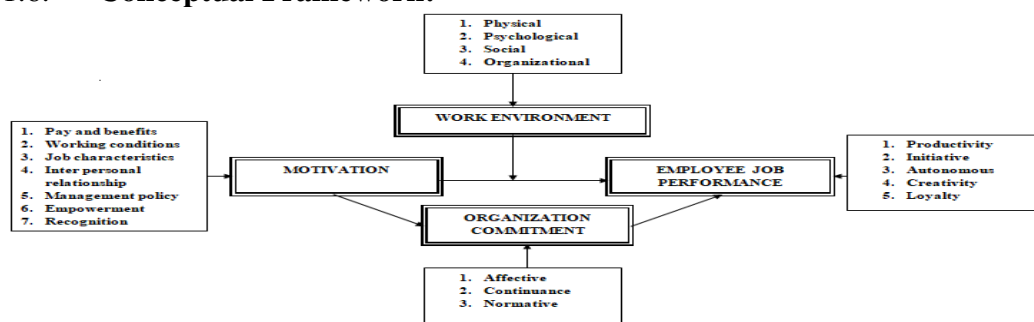


Figure 1: Relationship of variable investigated

1.7. **Scope of Research:**

Research has been done at South Tamil Nadu Private Engineering College, one of the country's leading academic institutions. We looked at eight districts with a total of 307 employees. The survey was conducted by employees with varying levels of experience. The majority of the research was carried out in the southern district. We gathered data from respondents at the end of the narrative survey. There are many educational areas in India where such research can be easily conducted and the results used to their advantage. It would also enhance staff-to-senior management interactions.

2. **Review of literature:**

2.1. **Work Motivation:**

One of the most important components of workers' preventative actions is employee motivation (Sultana, 2021; Geemale, Goodenough, 2021). Employee motivation is defined as an impetus that propels individuals to fulfill particular goals and objectives (Shahazadi, 2014). If workers are motivated, high levels of productivity, effectiveness, and quality can result in future success and advancement (Hitika.,et al.,2020). Similar to this, according to Vydrova (2018), a company's performance and growth are essential to achieving its goals if it is to succeed. Hill (2018) and Good enough (2021) both conducted studies to support this assertion. Strongly motivated people enjoy their jobs, whereas employees with weak motivation are lazy and more likely to violate organizational standards through disciplinary actions, a lack of drive at work, and job dissatisfaction. Strongly motivated people also enjoy their jobs. Geemale lists direction, intensity, and perseverance as the three essential elements of an incentive. (Bratu, 2018) claimed that in order to motivate all employees in the best possible way, businesses must improve their lives by encouraging social interaction and modeling human behavior in the workplace (Han, 2021).

2.2. **Work Environment:**

Researchers stated that allowing employees to work from home fosters a more adaptive work environment since they have the freedom to determine their work hours and working circumstances (Baltes et al., 1999). Because they can personalize their working space to reflect their preferences and needs, they can do so (Gajendran & Harrison, 2007). Overall, the working environment consists of all the abilities, actions, and other key factors that are present and/or may compete with, as well as employee activities and outcomes (Kohun, 2002). The technology environment, individual environment, and organizational climate are the three main sub-environments that make up the working environment, according to Opperman (2002). The term "technology environment" describes a variety of physical and technical elements, including tools, equipment, and facilities. The human environment includes coworkers, people who people relate to, teams and job groups, engagement-related subjects, leadership, and management. This environment is designed to encourage indirect contact at work, strengthening the capacity for information sharing and idea exchange. Opperman emphasizes that workplace culture affects the nature of the job, especially the level of accomplishment of employees. According to Awan and Tahir's (2015) study on employees of Pakistani banks and insurance companies, the workplace environment has a positive and significant impact on employee motivation. Darachart (2019) discovered in his research of college employees that the workplace has a positive and significant impact on motivation.

2.3. **Organizational Commitment:**

Research on organizational commitment began in the 1960s (Soltani and Hajikarimi, 2016). The term engagement describes the propensity of social activists to strive and demonstrate commitment to the social system and emotional attachment to members of the organization, regardless of the usefulness of the relationship (Abdul Rashid et al., 2003). Engagement is characterised as a sense of ownership and is dependent on an organisation, according to Matthew and Zazhak (1990). (Zarei et al., 2012). Organizational commitment is actually understood to be the adherence of employees to their values as well as their loyalty to the organization's goals (Yeh, 2014). The extent to which a person identifies with and engages in a certain organisation is another definition of organisational involvement (Top et al., 2015). A person's willingness to perform work outside of their normal responsibilities might be used to gauge their level of participation (Mckenna, 2006). Employees may actually have a sense of belonging when they "are supported by others, encouraged and developed, and put to work" in an organisation, which results in organisational commitment (Spell et al., 2014). Because of their loyalty to the group, they see it as their representation and want to join (Porter et al., 1974).

2.4. **Employee performance:**

Employee performance is inextricably linked to the outcomes of their employment within an organization or company. Quality, quantity, and timeliness of work results are all important, but performance monitoring within an organization is crucial for employee development. A demonstration of an employee's performance evaluation form is essentially what a performance review is (Irfansyah, 2020). In the Majalengka Regency Education Office, employee performance is significantly influenced by the Head of Office's capacity to motivate staff members to perform their jobs well. Motivating people is one of management's core objectives. The department head's ability to put motivational concepts into practice will determine whether the above-mentioned motivational implementation is successful. Performance is related to elements of quantity, quality, productivity, timeliness, and effectiveness, whereas work motivation in this study consists of the concepts of involvement, communication, recognition, delegated authority, and reciprocity (Hasibuan, 2006). According to Joseph (2015), strong motivation can increase commitment and performance, whereas strong performance can raise organizational effectiveness and increase job satisfaction (Karyono, 2016). This study will look at how employee performance is impacted by motivation.

3. **Research Methodologies:**

3.1. **Research plan:**

A study plan is a set of guidelines for data collection and analysis that combines relevance for research goals with the method's economics. The study was conceived as a descriptive questionnaire. The descriptive survey was designed to collect detailed information and information describing the phenomena in existence. A survey questionnaire was prepared using the results of a literature research and hand-delivered to the employees who would receive it. The impacted workers provided answers to the queries. Participating staff completed and returned the questions. A descriptive survey was utilized to analyze the results after employing questionnaires to assess how organizational boards affected worker motivation and performance.

3.2. Target Demographic

A population is defined as any case that meets specific sets of specifications, analytical units or relevant data. Teachers with various levels of expertise were recruited from the target population in eight districts in South Tamil Nadu for this study. In total, 307 professors were selected and sent the questionnaire. Primary evidence was collected based on their answers. The information was then examined to paint a complete picture of the influence of the work environment as a mediator and organizational commitment as a moderator for employee performance at different stages of the target demographic.

3.3. Design Size and Sampling

A sample of roughly 307 individuals from the target demographic was chosen based on their level of experience. The population is divided into groups (in this example, based on experience), based on criteria that may affect the effect of motivation, using the stratified random sample approach. In stratified sampling, strata (groups) are identified by shared qualities or characteristics among the individuals.

3.4. Data collecting (a) analysis methods:

A self-reported descriptive questionnaire was used to obtain the primary data prior to analysis. This questionnaire helps in many ways. Professors were sent study questions by WhatsApp, by mail, and links, along with instructions for completing the survey. Moreover, the low cost of completion makes it a profitable way to survey huge areas.

SPSS (statistical software for sociologists) and SMART PLS 4 were employed. SPSS is a data management and statistical analytics application with an extensive range of data processing capabilities. This is an electronic database for survey results. The information is kept in a table that resembles a Microsoft Excel spreadsheet. The SMART PLS4 analysis of the structural model study is divided into two parts: Examining Measuring Instruments and Structural Models Measuring models, on the other hand, show how the latent and measured variables are related.

4. Results:

4.1. Demographic profile of the respondent:

Prior to assessing the data, the following pie charts present background information on personnel at various levels. Our expectation is that it will help us understand the scope of our research. We find that of the 307 people we interviewed 47% were women and 53% were men (Figure 1). We can see that 15% people we studied are over the age of 31-45 years, 16% of the age of below 25 years, 19% of the people are over the age of above 46 years, and 50% are over the age of 26-30 years (figure 1). We can see that of the 307 people we performed research on, 41% are postgraduates, 41% are PhD graduates and 3% are others (figure 1).

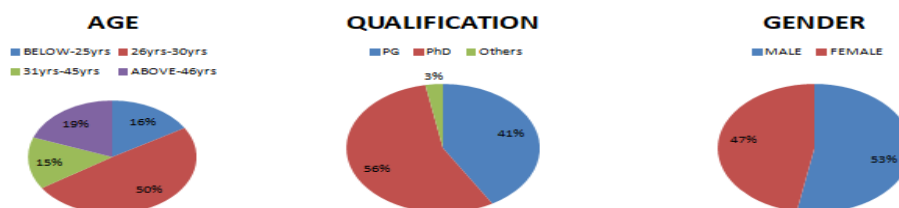


Figure 2: demographic profile of the respondents

4.2. Assessment of Measurement Model:

4.2.1. Reflective outer model:

Reliability of Individual item: The results show that each item has an indication dependability better than 0.50 and an outer loading greater than 0.708. According to Hair et al. (2014), an indicator's outer loading should be higher than 0.708 because $(0.708)^2$ squared equals 0.50, and 0.70 is typically seen as being close enough to 0.708 to be acceptable.

Reliability of the Indicator (loading): Once the number of outside loading items is squared, the indication dependability for the outer loading is more than 0.50.

Composite Reliability (CR): A threshold value over 0.70 indicates that the structures' composite reliability is sufficient for each latent variable.

Average Variance Extracted (AVE): The AVE values are all found to be higher than the permissible cutoff of 0.5, demonstrating convergence validity.

Table 1: Reflective Outer Model Results Summary :

Construct	Item	Loading	AVE	CR
Employee Performance			0.605	0.884
Productivity	EP1	0.697		
Initiative	EP2	0.812		
Autonomous	EP3	0.805		
Creativity	EP4	0.815		
Loyalty	EP5	0.755		
Organization commitment			0.845	0.942
Affective	OC1	0.934		
Continuance	OC2	0.911		
Normative	OC3	0.912		
Work Environment			0.559	0.830
Physical	WE1	0.885		
Psychological	WE2	0.874		
Social	WE3	0.636		
Organizational	WE4	0.535		
Work Motivation			0.645	0.925
Pay and benefits	WM1	0.463		
Working conditions	WM2	0.843		
Job characteristics	WM3	0.879		
Inter personal relationship	WM4	0.865		
Management policy	WM5	0.884		
Empowerment	WM6	0.851		
Recognition	WM7	0.748		

4.2.2. Cross loading:

It is possible to evaluate the discriminating validity by looking at the cross-loads of indicators. A connected construction's outer load from an indication should be greater than all of its other responsibilities (Hair et al, 2014). Using a discriminating validity report and the PLS algorithm, the researcher developed a smart PLS.

Table 2: Cross Loading of Latent Variable

	EP	OC	WE	WM
EP1	0.697	0.773	0.327	0.526
EP2	0.812	0.651	0.56	0.638
EP3	0.805	0.536	0.541	0.472
EP4	0.815	0.449	0.593	0.503
EP5	0.755	0.405	0.639	0.510
OC1	0.710	0.934	0.385	0.585
OC2	0.621	0.911	0.33	0.532
OC3	0.688	0.912	0.356	0.595
WE1	0.669	0.411	0.885	0.518
WE2	0.635	0.446	0.874	0.562
WE3	0.306	0.053	0.636	0.372
WE4	0.234	-0.015	0.535	0.278
WM1	0.36	0.133	0.492	0.463
WM2	0.547	0.511	0.529	0.843
WM3	0.59	0.572	0.433	0.879
WM4	0.545	0.448	0.491	0.865
WM5	0.575	0.578	0.462	0.884
WM6	0.63	0.661	0.518	0.851
WM7	0.572	0.416	0.535	0.748

The study of the previous table shows that the external load of the indicator on the associated construction is bigger than all of its loads on other constructions combined. Theoretically, this indicates that the model meets the Chin (1998) requirement for discriminant validity.

4.2.3. Fornell and larcker criterion: variable correlation

The square root of the latent variable Employee performance (EP) AVE, which has the value 0.605 (according to Table 3), is 0.778. The correlation values in the EP column are lower than this number (0.734, 0.381 and 0.687). We also find that WE, OC, and WM are hidden variables. The results imply that discriminant validity is a well-known concept.

Table 3: Fornell and larcker criterion: variable correlation

	EP	OC	WE	WM
EP	0.778			
OC	0.734	0.919		
WE	0.381	0.389	0.748	
WM	0.687	0.622	0.601	0.803

4.2.4. Hetrotrait- Monotrait Ratio (HTMT):

Table (4) demonstrates that discriminant validity is valid for this study because all HTMT values are below the required cut-off values of 0.85 according to Kline (2011) and 0.90 according to Gold and Arvind Malhotra (2001). In conclusion, the measures' convergent and discriminatory validity was developed.

Table 4: Hetrotrait- Monotrait Ratio (HTMT)

	EP	OC	WE	WM
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EP				
OC	0.829			
WE	0.763	0.368		
WM	0.785	0.658	0.726	-----

4.3. Assessment of Structural Model:

4.3.1. Path coefficient : hypothesis testing:

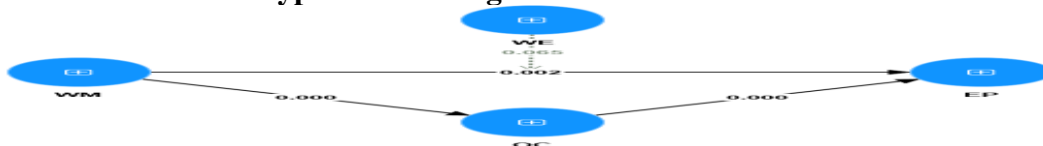


Figure 2 depicts how organizational commitment and the business environment affect employee motivation and job performance. Except for motivation, endogenous variables have a favorable and considerable direct impact. There is a significant beneficial association between organizational commitment, work environment, and employee job performance, according to the values derived through bootstrapping. According to the study's findings, employee work performance and motivation have a direct impact on organizational commitment, which leads to acceptance.

Table 5: Direct Path Analysis

	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (O/stdev)	P values
OC -> EP	0.505	0.498	0.049	10.343	0.000
WE -> EP	0.407	0.408	0.046	8.885	0.000
WM -> EP	0.15	0.153	0.048	3.093	0.002
WM -> OC	0.622	0.619	0.055	11.22	0.000

4.3.2. R-Square:

The suggested model exhibits strong predictive relevance for all endogenous variables, according to the table above (see row 7). For endogenous structures, R2 values of 0.75, 0.50, or 0.25 are regarded as significant, moderate, and low, respectively (Hair et al., 2014).

Table 6: R-square

	R-square	R-square adjusted	Results
EP	0.735	0.732	Strong
OC	0.387	0.385	Moderate

4.3.3. Effect size f²:

The effect size f² can be used to assess the contribution of the extrinsic component to the R2 value of the intrinsic latent variable. According to Cohen (1988) and Hair et al. (2014) extrinsic structures reflect intrinsic reflected in the gender structure.

Table 7: f-square

Effect size f ²	Performance	
	f ²	results
Organization Commitment	0.568	Large effect

Work Environment	0.398	Large effect
Work Motivation	0.038	Small effect

4.3.4. Mediation Analysis:

To assess the role of organizational commitment in mediating the link between motivation and employee performance, a mediation study was performed. According to the findings (see table 2), the combination of employee job performance and motivation had a statistically significant overall effect. When the organization's mediating variable commitment is incorporated, the impact of motivation and employee performance becomes more substantial.

Table 8: Mediation Analysis

	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (O/STDEV)	P values
WM->OC-> EP	0.314	0.309	0.045	6.918	0

4.3.5. Moderation Analysis:

To test the moderating effect of the variable work environment, a cross-group analysis was performed. The difference in the smart- partial least square structural model trajectory coefficient for the different categories of respondents in the sample was examined using the procedures proposed by Keil et al (2000). The results show that there is a difference in the strength of the relationship's coefficient (Table 6). The results support hypothesis H6 that work environment does not affect the relationship between employee motivation and performance (t-statistic > 1.848 and p-value 0.065).

Table 9: Moderation Analysis

	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (O/STDEV)	P values
WE x WM -> EP	0.042	0.039	0.022	1.848	0.065

5. Discussion and Conclusion:

Through organizational commitment and the work environment acting as mediation and moderating variable, respectively, the study looked at the relationship between employee motivation and job performance. According to the survey, organizational dedication comes in second place when it comes to predicting workplace success. But according to the study's findings, an organization's commitment is a crucial link between employee motivation and job performance, whereas the work environment is unaffected by employee performance or motivation. The study also indicated that organizational commitment and motivation had a significant impact on employee work performance.

5.1. Managerial Involvement

The results of this survey show that middle managers believe that organizational motivation, job performance and engagement are well managed. The education industry needs to focus on how to achieve organizational engagement and increase faculty engagement.

5.2. Methodological

The study made use of the SMART Partial Least Squares (PLS) analytical method and the smart-PLS-4 software. Utilizing two-stage analytical techniques, the researcher evaluated the structural model and measurement model (measure validity and reliability) (hypothesis testing)

5.3. Future Scope of Research

There will no doubt be opportunities for motivating research in the future. The research carried out in the field of education. There are other areas, like manufacturing, sales, and business, and if we could improve the performance in those areas, our country would certainly grow. According to the study, motivation has a major impact on employee performance; so, learning more effective ways to apply positive strategies from these studies may certainly aid in the improvement of our economic sectors.

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