

## **WORK ENVIRONMENT EFFECT ON THE EMPLOYEE PRODUCTIVITY IN AP TRANSCO – A STUDY**

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### **ABSTRACT**

Human resource management is giving top priority for the employees, as the success of any organization depends on its employees. The present study focused on the working environment impact on the employee productivity. The study has considered the AP Transco as a sample organization. The study has bifurcated the working environment in two segments i.e., Physical and Social environment. The study measured the relationship of working environment parameters – Physical and Social environment factors are having the moderately significant relationship with the employee productivity. The study examined the impact of work environment factors with the structural equation model and the result states that both the Physical and Social are having the impact on the AP Transco employee productivity. This paper is useful to the AP Transco management, HR executives, research scholar and academicians.

**Keywords:** AP Transco, Drinking Water, Hygiene, Environment, Employee productivity, Physical, Social factors.

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### **INTRODUCTION**

The working environment plays an important role in the productivity of employees. The working environment has an immense impact on either the negative results or the positive results of the productivity of employees. International organizations are discussing the rights of employees worldwide. Most people spend 50% of their lives indoors, affecting their mental health, behaviour, capacity and productivity. Better performance and productivity are expected to result in a better working environment. Better physical office conditions can eventually improve the productivity of workers. Various researchers has shown that the loss of productivity of workers has been affected by factors such as frustration, turmoil in the workplace and the physical environment.

In the 1990s, due to changes in the various factors, including the social environment, IT and flexible organizational methods of working processes, the working environment has changed. The desire to work and the results of its productivity must be increased if employees are physically and emotionally fit. In addition, a healthy working atmosphere tends to minimize the number of workers missing and improve the productivity of employees, which can increase the efficiency of the workplace.

In 2007, as stated by the Economic and Social Council, global economic growth increasingly fails to create new and better opportunities that could contribute to poverty reduction. While economic growth is strong and sustained in many developing countries, unemployment is rising, a large part of the workforce is working below the poverty level of wages, and the majority of non-farm jobs are in the informal economy. It is odd that, in recent years, the emphasis has shifted from a particular interest in economic development to an increased concern for improving the quality of work. The productivity of employees also depends on how ready and open employees are to perform their work themselves. He also said that by keeping workers available and ready to do their job, this would also improve the morale of employees, which contributes to profitability.

Employers must be aware of the work performed by workers in order to achieve the purpose or objective of the company. Employers can monitor and assist their workers in increasing their productivity by performing work or operating on a scheduled basis. In addition, a compensation scheme based on the efficiency of workers will be put in place. This

encourages workers to perform their duties more effectively. There are many factors that influence the quality of work efficiency. Factors include a safe working atmosphere, facilities, productive jobs, expectations of success and product reviews, compensation for good or poor processes, normal work, expertise, skills and attitudes.

## REVIEW OF LITERATURE

**Emmanuel Majekodunmi Ajala (2012):** The research looked at the health and productivity impact of working conditions in parastatals in Ondo, Nigeria. Two research concerns are raised to facilitate research. The findings have shown that the characteristics of the workplace and the effective network of contacts at the workplace have an impact on the health and well-being of the worker. Industrial social workers have been advised to campaign for management in order to create a favourable atmosphere for working people and effective contact networks that attract, retain or encourage their workforce to live healthily, increase their productivity and ensure the survival of virile employees and enthusiastic employers.

**Sameer Kumar et al (2013):** The thermal power plants are the primary source of electricity generation for every developing nation. It is also known that a thermal plant emits large quantities of mercury and produces massive amounts of fly-ash affecting the natural ecosystem. This thermal plant has a significant impact on soil, air and various social effects. Such plants are very water-consuming, too. Because of these issues, an effective environmental impact assessment is needed before the project starts, which is not done wisely in our country. Specific measures to reduce emissions from thermal power plants are discussed in conjunction with other emerging technologies.

**Anil P Sarode, Manisha Shirsath (2014):** The paper addresses a number of work environment factors that influence the efficiency of employees and discusses the consistency of lighting, noise, colours and air. Main physical factors in the organization, furniture and appliances are also discussed. Four factors that influence employee efficiency in the working atmosphere are: light, noise, colour and air quality. These two variables can not be dealt with separately because they are interconnected. When the company needs to be more efficient because many workers spend most of their time producing activities in the organization, the work atmosphere is of great importance.

**Christopher Mathews, I. K. Khann (2016):** The main aim of this research is to find out about the work carried out in relation to the working environment and productivity. The quality and quantity of work performed by employees is affected by the workplace, while poor environmental conditions can contribute to a lack of efficiency and increased satisfaction. The aim of this research is to recognize factors in the workplace that may have an impact on the efficiency of workers, such as lighting, noise, colour, air quality and improper furniture. Research supports the argument that various factors are responsible for improving the efficiency of the workplace in the working world. The aim of this work is to identify the elements that influence the level of performance of manufacturing workers in India. The findings of this study will show that the workplace has a significant impact on the level of success of manufacturing workers in India.

**Bhavya Patil, Deepak G Kulkarni (2017):** The paper examines the workplace and its impact on the performance of employees. The working environment plays an important role in the success and motivation of employees. And the working environment of the organization may have a positive or negative impact. The results have been calculated by excellence. The paper includes factors related to the workplace, such as the physical environment and social environmental factors, which affect the efficiency of employees. After the report, it became clear that workers would remain committed to the working climate of the organization. This has helped to understand the steps taken to change the working environment and improve the efficiency of employees.

### OBJECTIVES OF THE STUDY

1. To analyse the relationship between AP Transco's working environment and Employees' productivity.
2. Estimate the effect of the working environment on the productivity of employees in AP Transco

### HYPOTHESIS OF THE STUDY

The hypotheses are based on the existing literature relating the work environment effect on the employee productivity both from empirical and secondary research view point. The Hypothesis for the current research has been arrived from the research objectives. The objectives of the current study intern have been drawn from the research gaps which were an aftermath of the literature review done.

Hypothesis have been framed on the variables taken from the research gaps and have been encased specifically with respect to the work environment effect on the employee productivity in AP TRANSCO.

**Null Hypothesis:** There is no significant relationship between the Work Environment and the employee productivity in AP TRANSCO.

**Null Hypothesis:** There is no significant effect of work environment on the employee productivity in AP TRANSCO.

### RESEARCH METHODOLOGY:

The study has considered the A.P. Transco employees to collect the primary data. The study applied the following statistical tools for the framed objectives.

**Questionnaire:** The study has framed the questionnaire with the likert scale structured questions. The opinions have been taken from the AP Transco employees from multiple designations.

**Bivariate Correlation:** The study has applied the bivariate correlation to measure the work environment with the employee productivity of A.P Transco.

**Structural Equation Model:** The study has considered the SEM to know the impact of working environment on the Employee productivity. The SEM will be applied to measure the multiple independent variables impact on dependent variable.

### TABULATION OF DATA ANALYSIS

**Objective1: To analyse the relationship between AP Transco's working environment and Employees' productivity.**

The study applied the bivariate correlation to measure relation between the working environment and employee productivity. The following is the hypothesis has been framed.

**H0:** There is no significant relationship between the Work Environment and the employee productivity in AP Transco.

**H1:** There is a

significant relationship between the Work Environment and the employee productivity in AP Transco.

**Table-1: Relationship between AP Transco Physical Working Environment and Employees Productivity**

Physical Environment	Lighting	Hygiene	Office design	Ventilation	Drinking Water	Rest room	Personal Storage
Pearson Correlation	Pearson Correlation	Pearson Correlation	Pearson Correlation	Pearson Correlation	Pearson Correlation	Pearson Correlation	Pearson Correlation
1	0.432	-0.172	0.351	0.452	0.361	0.107	0.543
0	0.001	0.026	0.01	0.045	0.042	0.043	0.006

80	80	80	80	80	80	80	80
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\*. Correlation is significant at the 0.05 level (2-tailed).

*Source: Primary Data*

The above table -1 analysed the relationship between physical working environment and employee's productivity of AP Transco. The result indicates that Personal Storage (0.543) has a highest and positive relationship with employee productivity. Whereas other physical environment factors Lighting (0.432) and Ventilation (0.452) had played a major role in employee productivity and shown a positive relationship. While Office Design (0.351), Drinking Water (0.361) and Rest Room (0.107) are the physical working environment factors which are having positive relationship with employee productivity. Hygiene is the only physical environment factor which has the negative relationship with the employee productivity in AP Transco.

**Table-2: Relationship between AP Transco Social Working Environment and Employees Productivity**

Social Environment	Team Work	Safety	Uniformity	Punctuality	Promotional opportunities	Recognition	Communication	Supportive behaviours
1	0.441	-0.157	0.514	0.665	0.294	0.569	0.136	0.43
0.0146	0.015	0.014	0.003	0.043	0.008	0.042	0.028	0.011
80	80	80	80	80	80	80	80	80

\*. Correlation is significant at the 0.05 level (2-tailed).

*Source: Primary Data*

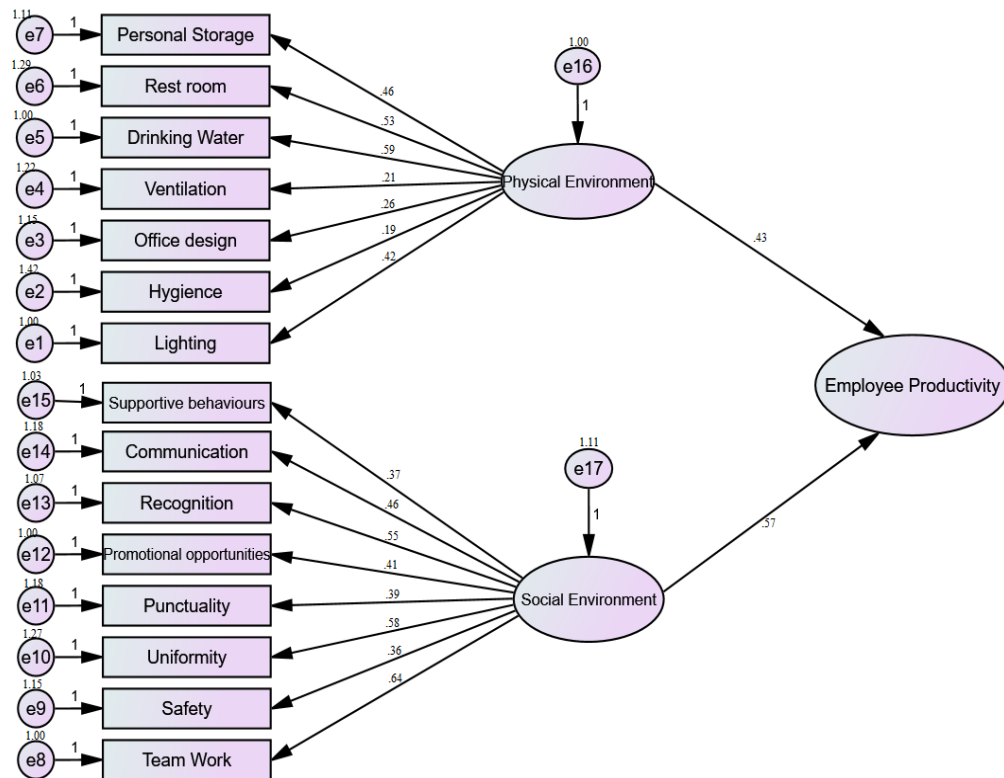
The table -2 depicts the relationship between the social working environment and the employee productivity of AP Transco employees. The analysis resulted that Punctuality (0.665) Recognition (0.569) and Uniformity (0.514) has shown the positive relationship and also plays a major role in employee productivity. While other social working environment factors namely Team Work (0.441), Promotional Opportunities (0.294), Communication (0.136) and Supportive Behaviour (0.430) has the positive relationship with the employee productivity. Safety (-0.157) has the negative relationship with the employee productivity. Hence, the null hypothesis has been rejected and accepted the alternative hypothesis. Therefore, it indicates that working environment factors are having the significant relation with the employee productivity.

**Objective 2: Estimate the effect of the working environment on the productivity of employees in AP Transco**

The study examined the impact of impact of working environment factors on the employee productivity. The study framed the following hypothesis and applied the statistical method of structural equation model

**H0:** There is no significant effect of work environment on the employee productivity in AP Transco.

**H1:** There is no significant effect of work environment on the employee productivity in AP Transco.



Source: Primary Data

**Table- 3: Effect of the Working Environment on the Productivity of Employees**

Independent variables		Dependent Variable	Estimate	S.E.	C.R.	P
Lighting	<-----	Physical Environment	0.412	0.137	3.007299	0.033
Hygiene	<-----	Physical Environment	0.193	0.096	2.010417	0.041
Office design	<-----	Physical Environment	0.257	0.086	2.988372	0.039
Ventilation	<-----	Physical Environment	0.208	0.077	2.701299	0.042
Drinking Water	<-----	Physical Environment	0.593	0.256	2.316406	0.009
Rest room	<-----	Physical Environment	0.527	0.223	2.363229	0.011
Personal Storage	<-----	Physical Environment	0.468	0.214	2.186916	0.031
Team Work	<-----	Social Environment	0.638	0.302	2.112583	0.003
Safety	<-----	Social Environment	0.356	0.141	2.524823	0.038
Uniformity	<-----	Social Environment	0.576	0.214	2.691589	***
Punctuality	<-----	Social Environment	0.382	0.187	2.042781	0.016
Promotional opportunities	<-----	Social Environment	0.413	0.162	2.549383	0.022
Recognition	<-----	Social Environment	0.552	0.241	2.290456	0.041
Communication	<-----	Social Environment	0.463	0.231	2.004329	0.026
Supportive behaviour	<-----	Social Environment	0.368	0.133	2.766917	0.014

Source: Primary Data

The table -3 illustrates the effect of working environment on the productivity of the employee. In terms of Physical Working Environment, Drinking Water and Rest Room has shows more effect on the employee productivity in AP Transco with its respective estimated values as 0.593 ad 0.527. Whereas Lighting (0.412), Personal Storage (0.468) and Office

Design (0.257) has a significant and moderate influence on the employee productivity. While Hygiene (0.193) and Ventilation (0.208) has low effect on the employee productivity in terms of physical working environment. In regards with Social Working Environment, Team Work (0.638), Uniformity (0.576) and Recognition (0.552) has a high influence on the productivity of the employee. The social environment factors which has also shown a significant role in employee productivity are Promotional Opportunities (0.413) and Communication (0.463). Safety, Punctuality and Supportive Behaviour has less influence on the productivity of the employees of AP Transco in terms of social working environment. Hence, the null hypothesis has been rejected and accepted the alternative hypothesis. Therefore, it indicates that working environment factors are having the significant impact on the employee productivity.

#### **FINDINGS OF THE STUDY:**

1. The study examined the relationship of AP Transco employee working environment with the employee productivity by applying the bivariate correlation. The result indicates that Personal storage (0.543) and Ventilation (0.452) are having the moderate relationship with the Physical Environment.
2. The study examined AP Transco employee working environment parameters with the employee productivity. The result indicates that Hygiene (-0.172) is having the negative relationship with the employee productivity.
3. The study measured the AP Transco employee social working environment with the employee productivity. The bivariate correlation indicates that Punctuality (0.665) and Recognition (0.569) are observed to be having the significant relation with the employee productivity.
4. It has been found that Safety (-0.157) is having the negative relationship with the AP Transco employee productivity.
5. The study examined the impact of employee working environment on the employee productivity in AP Transco. The study applied the SEM and the result indicates with the coefficient that Drinking Water (0.593) and followed by the Rest Room (0.527) are having the higher impact on the Physical Environment. The Hygiene (0.193) is having the lower impact on the Physical environment of AP Transco.
6. The study observed that the Team work (0.638) and followed by the Uniformity (0.576) are having the significant impact on the social environment factor of AP Transco.
7. It has been found that parameter – Safety (0.356) and Supporting Behaviour (0.368) are having the lowest impact on the AP Transco Social Environment.

#### **CONCLUSION OF THE STUDY:**

The study has been emphasizes on the working environment impact on the employee productivity in AP Transco organization. The study has considered the convenient sampling methodology to determine the sampling size. The study has framed the questionnaire and collected the information from the employees. The study has framed the two objectives and tested the hypotheses. The study measured the relationship of working environment factors – Physical environment and Social environment are having the significant relationship with the AP Transco employee productivity. The statistical method of SEM has been applied to know the impact of working environment parameters on the employee productivity. The study result indicates that social environment and physical environment are having the significant impact on the AP Transco employees' production activity. Hence, there is a need to do further research in this area by focusing on the Human Resource practices impact on the employee productivity of AP Transco organization.

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