Impact of Work Environment on Performance of Employees in Manufacturing Sector in India: Literature Review

Christopher Mathews¹, I. K. Khann²

¹ M. Tech. Student, Department of Mechanical Engineering, Takshshila Group of Institutions, Jabalpur MP India,
²Advisor, Takshshila Group of Institutions, Jabalpur MP India

Abstract: It has been observed that the workplace environment affects the performance of employees. Employees are more than the most important asset for an organization, they play pivotal role in current operational performance and future competitive advantage. Employees spend major part of their life in the organization within which they work. The main objective of this work is to find out the work done in respect of relationship between workplace environment and productivity. The quality and quantity of work generated by employees are influenced by the work environment while poor environmental conditions can cause inefficient worker productivity as well as reduce their job satisfaction. The work will attempt to describe some elements of the workplace environment that can impact on employee productivity like lighting, noise, color, air quality and unsuitable furniture. Investigations support that various factors in the workplace environment are responsible for the enhancement of employee’s productivity. The purpose of this work is to identify the elements, which can affect the performance level of employees in the manufacturing sector in India. This work is expected to show that work environment have great impact on the performance level of employees of manufacturing sector in India.

Keywords: Workplace environment, Employees, Performance, Productivity, Manufacturing sector

1. Introduction

1.1 Background

Factors of workplace environment play an important role towards the employees’ performance. The factors of workplace environment give an immense impact to the employees’, either towards the negative outcomes or the positive outcomes (Chandrasekar, 2001).

Employees’ performance is the most important dependent variables in an industrial and organizational psychology. Some main application need to be applied as to improve the employees’ performance (Borman, 2004).

The physical aspects of a workplace environment can have a direct impact on the productivity, health and safety, comfort, concentration, job satisfaction and morale of the people within it. Important factors in the work environment that should be considered include building design and age, workplace layout, workstation set-up, furniture and equipment design and quality, space, temperature, ventilation, lighting, noise, vibration, radiation, air quality. (Dr. Anil P Sarode, Manisha Shirsath, (IJSR) Volume 3 Issue 11, November 2014).

Employee Productivity may be defined as the efficiency level of Employees productions or output performing in a job. (Junaida ismail 2010),

The key factors that affect employee’s productivity and performance fall into two categories:
- Those that are driven by procedures, protocols and management requirements (managerial / social environment).
- The factors that arise from physical conditions, workshop or industry design (workplace environment).

The focus of this work is workplace environment.

Better outcomes and increased productivity is assumed to be the result of better workplace environment. Better physical environment of workshop will boost the employees and ultimately improve their productivity.

1.2 Objective

The main objective of this work is to find out the relationship between workshop design and productivity. This work is expected to indicate that workshop design is very vital in term of increasing employee’s productivity. Comfortable and ergonomic workshop design motivates the employees and increases their performance substantially.

A few factors that have been unanimously identified by almost previous researches to have influence on the efficiency and productivity of employees are -
- Furniture Design
- Lighting
1.3 Problem Statement

The simple premise behind the movement towards better working environments is that comfortable people are more productive. Comfort, however, is one of those catching words that is easy to use and hard to define. People are comfortable when they feel comfortable, which is a state of mind dependent on both physical sensations and emotional states. Creating effective personal environments must account for both these elements together with the constraints of cost and technology.

It is felt in general that improving the workplace environment increases productivity. There are a number of interacting factors which effect productivity including light, temperature, noise, hygiene, furniture, as well as social issues. It is much higher cost to maintain and operate the building; hence spending money on improving the workplace environment may be the most cost effective way of improving productivity.

1.4 Research Objectives

According to this study, researchers have divided the objectives into two categories namely, main objective and sub objectives of this study. This research study is aimed to fulfill following research objectives.

a) Primary objectives
   - To identify the relationship between workplace environment and employee performance of manufacturing sector in India.
   - To find out the key factors in the employee’s workplace environment that impact greatly on their level of performance.

b) Secondary objectives
   - To find new suggestions, recommendations and ideas to change the workplace environment and improving employee performance.
   - To absorb dynamic knowledge about the workplace environment
   - To make recommendations for future researches

1.5 Significance of the study

The Significance of the study is divided into following points
   - Manufacturing sector plays a great importance in any country’s GDP. From this point of view, this study has great importance.
   - One of the reasons behind product failure in market is the performance level of our employees in manufacturing sector.
   - In India most of the industries do not give importance to workshop design; this study will give them ample reasons to consider workshop design as an important factor in increasing their employee’s productivity.
   - The aim of this work is to see how important is the work environment of workshop and how it influences the work environment among the co-workers and their self-rated health. Their individual perception of the work environment is also going to be compared with the level of the work performance.

2. Literature Review

Some researchers discovered that these elements affected both the psychological and physiological welfare of the workers, causing such conditions as eyestrain, fatigue, headache, back pain, and nausea (Quible 1996). It is important to solve these problems; otherwise it will place the organization in bad situation as many people in the workshop may become sick due to inadequate workshop conditions. The most important dependent variable is the employees’ performance (Borman, 2004). According to Sinha(2001), employees’ performance is depending on the willingness and also the openness of the employees themselves on doing their job. The majority found that there were several elements known to contribute both positively and negatively to productivity.

A. Neal, M.A. Griffin, P.M. Hart, (2000)

The current study examined the effects of general organizational climate on safety climate and safety performance. As expected, general organizational climate exerted a significant impact on safety climate, and safety climate in turn was related to self-report of compliance with safety regulations and procedures as well as participation in safety-related activities within the workplace. The effect of general organizational climate on safety performance was mediated by safety climate, while the effect of safety climate on safety performance was partially mediated by safety knowledge and motivation

A.K. Srivastava January 2008

The study examined the effect of two constituents of work environment (i.e. physical and psychosocial) on employees’ job satisfaction and performance, and organizational effectiveness in a sample of 360 technical supervisors and operating core personnel. The analyses revealed that participants who perceived their work environment as to be adequate and favorable scored comparatively higher on the measures of job satisfaction, performance, and perceived organizational effectiveness. The two constituents of work environment were also found causing significant variance in employees’ job behaviour and their perception of organizational effectiveness. Regression analyses revealed that among the various components of work environment, working condition, welfare provisions, interpersonal relations, and trust and support predominantly contribute to employees’ job behaviour and organizational effectiveness. The results also specified that psycho-social environment in work-place exert more impact on employees’ job behaviour...
and organizational effectiveness than the physical environment does.

**Dr. K. Chandrasekar** January 2011
The workplace environment impacts employee morale, productivity and engagement - both positively and negatively. The work place environment in a majority of industry is unsafe and unhealthy. These includes poorly designed workstations, unsuitable furniture, lack of ventilation, inappropriate lighting, excessive noise, insufficient safety measures in fire emergencies and lack of personal protective equipment. People working in such environment are prone to occupational disease and it impacts on employee’s performance. Thus productivity is decreased due to the workplace environment. It is the quality of the employee’s workplace environment that most impacts on their level of motivation and subsequent performance. How well they engage with the organization, especially with their immediate environment, influences to a great extent their error rate, level of innovation and collaboration with other employees, absenteeism and ultimately, how long they stay in the job. Creating a work environment in which employees are productive is essential to increased profits for your organization, corporation or small business. The relationship between work, the workplace and the tools of work, workplace becomes an integral part of work itself. The management that dictate how, exactly, to maximize employee productivity center around two major areas of focus: personal motivation and the infrastructure of the work environment.

**M. Panimalar & K. Kannan** January 2013.
The study attempts to investigate on “An Employee Perception towards Effectiveness and Impact of Environment Management System” is the process of system of procedures, training, and methods to monitor an organization’s impact on the environment and evaluate ways to minimize negative impacts on the environment.

This study was conducted at the Tamilnadu textile processing mill society Ltd, Erode The environment management system brings the environment clean and protective, it helps organizations take a proactive rather than reactive approach to environmental programs and address impacts that may not be regulated, such as energy use or use of resources.

This research design used in this study is descriptive. The sample size is taken for the study is 100 respondents in Tamilnadu Textile Processing Mill, Erode. The needed data were collected as both primary and secondary data. The primary data is collected from structured questionnaire which are following in the open end, closed end, like scale and the numerical scale. The major findings of the study is based on the analysis and the highly effectiveness of the environment management system and it helps to reduce the environmental impact.

In this analyze suggested that implementing new technology to save the working cost in order to use the new technology to give on the job training. The recycling will reduce the EMS impact. Finally, it is concluded that it will help to improve the employees working environment and create the awareness about the environment management system and also it increases the profit and the environment clean.

**Nina Munira Naharuddin & Mohammad Sadegi** April, 2013
This study aims to investigate the effect of workplace environment’s factors towards employees’ performance. Data was collected through the survey method; total 139 employees participated from three main workplace of Miyazu (M) Sdn. Bhd. Based on the findings it shows that only supervisor support is not significant towards the employees’ performance. Meanwhile, job aid and physical workplace environment are having a significant relationship towards the employees’ performance. Employees’ performance level is dependent on the quality of the employees’ factors workplace environment which are the job aid, supervisor support and also the physical workplace environment. The three factors determine on how the employees’ get engaged or attached to the organization. By conducting this project, the researcher could be able to identify the factors that could contribute to workplace environment that affect employees’ performance. Therefore, the main purpose of this research is to investigate and to get a clearer picture on the factors that affect employees’ performance from three different working places at Miyazu Malaysia Sdn. Bhd. The places of Miyazu Malaysia Sdn. Bhd. Include the Miyazu’s Head Quarters, Miyazu’s Stamping Plant and Miyazu’s tooling plant.

**R.S Weerarathna & I. A. P. H Geeganage** August-2014
Employees are more than the most important asset, they play pivotal role in current operational performance and future competitive advantage. Employees spend their major part of their life in the organization within which they work. When people join, they bring with them the unique values and behaviors’ that they have experienced. While every aspect of managing people in organizations is important, when they are all combined, they make up the organizational culture—perhaps the major determinant of effectiveness and performance. An effective organizational culture can be recognized as one factor that always seems to be associated with successful companies. There is a dramatic increase in the business and organizations in Sri Lanka, after the post war period. Organisations should be aware about their culture, in order to survive successfully in turbulent business environment. Organisational culture values varied significantly among the firms. The variation in cultural values had a significant effect on employee performance. Therefore the purpose of this study was to investigate relationship between organizational culture and employee performance in apparel sector in Sri Lanka. The independent variable is organizational culture and the dependent variable is employee performance. This study has been completed with an empirical survey which was thoroughly conducted using a self administered questionnaire and the sample consisted of employees in apparel sector. Questionnaire consisted to three parts and which were sent directly to the target segment. This study was associated with hypothesis testing and it was co relational. Since the current study setting can be referred as a field study where the study has done in non-contrived setting with minimizing interference of the researches.
The quality and quantity of work generated by employees are influenced by the work environment while poor environmental conditions can cause inefficient worker productivity as well as reduce their job satisfaction. This paper describes some elements of the work environment that can impact on employee productivity and addresses lighting, noise, color, and air quality. Furniture and equipment as the key physical factors in the organization are discussed as well. Four factors of the work environment under which it has impact on employee productivity that are: lighting, noise, color, and air quality. All of these factors cannot be treated separately, as they connect with each other. The work environment plays a very important role if the organization would like to maintain better productivity as many employees spend most of their time on generating activities in the organization.

3. Conclusion

For any industry, employees are very important assets. One of the reasons of recognition of industry is employees. Many employees spend most of the time on generating activities in the workshop. Thus the workshop environment plays a very important role if the industry would like to maintain better productivity. There are four factors of workshop environment which has impact on employee productivity that are: lighting, noise, temperature and furniture. An adequate lighting system, noise, furniture, as well as temperature can impact employees both physically and psychologically, and some health problems that may occur are headaches, as a result of poor lighting system and undesirable noise, respiratory problems as a consequence of poor air quality, fatigue as a result of inappropriate furniture, and so forth. In the long term, these problems will impact the financial well being of the organization.

In addition, in order to maintain employee’s productivity, administrative office managers should organize the workshop environment based on ergonomically sound workshop in which all of the environmental aspects can be appropriate for employee.

References