

# **ORIGINAL RESEARCH PAPER**

## Management

# TO STUDY THE EFFECT OF OFFICE FURNITURE ON EMPLOYEES PRODUCTIVITY

**KEY WORDS:** environment, furniture, perceived satisfaction, correlate, Design, Built environment

# Dr.Gurkirpal Singh

Head of Department, IKG Punjab Technical University, Jalandhar

RSTRACT

India is currently experiencing an economic recession, and in this economic climate it is more important than ever for organizations to retain highly productive employees and ensure that the work environment is conducive to high levels of individual performance. People who are actively involved in the work force will spend a large proportion of their lives in their place of work. It is important that the physical aspect of the workplace and its impact on organizational productivity is studied. A total of 660 employees from various offices of Chandigarh were recruited as sample. The age range of the sample was between 25 to 60 years. Results indicate that employees productivity is positively correlated with satisfaction with furniture in Indian population. Furniture is another important concern in designing an appropriate office that managers must pay attention to increase employees' productivity.

#### Introduction

Productivity is an important factor in every organization. Profit and loss depend to a large extent on productivity of the employees. Productivity is defined in simple words as a ratio of the output quantity to the quantity of inputs. Furniture is defined as the movable, generally functional, articles that equip a room, house (Collins English Dictionary, 2003). Workplace furniture helps the organization tremendously in increasing its productivity, and at the same time taking care of the employees' health (Bailyn, et al., 2003). If all factors surrounding an employee are ergonomically correct, then the employee will be comfortable and remain motivated to give the best (Larsson and Gard, 2003). El-Zeiny (2013) studied the interior design of workplace and performance relationship. They reported that ergonomics of office furniture has great importance because an employee has to work with them all the time that he is on office, and if they are neither comfortable nor user friendly, their working style and efficiency will get hamper considerably.

Over the years number of studies has been carried out to study the relationship between office furniture and employees productivity in west (Winkel and Jorgensen, 1986; Francis and Dressel, 1990; Larsson and Gard, 2003; Schriefer, 2005; Bridger, 2008; Kingsley, 2012). In India this is a new area of research. The physical aspects of the work environment do not always receive as much attention as the managerial and interpersonal aspects. There is a need to find out the relationship of office furniture on employees productivity.

#### Methodology Sample

A total of 660 employees from various offices of Chandigarh were recruited as sample. The age range of the sample was between 25 to 60 years. The employees who were working for the last three years in a particular organization were considered for inclusion in this study. The minimum educational qualification of the selected subjects was graduation.

#### Questionnaire

The data collection instrument for this study was a structured questionnaire developed by the researcher with the help of experts. The questionnaire is adapted and modified version of already existing scales of occupants' satisfaction with indoor environment quality (IEQ) components of other buildings by different researchers. The questionnaire items were developed to reflect the satisfaction/ comfort/productivity components of the office environment. The questionnaire for the study contained 44 total items pertaining to employees' general demographics and satisfaction with thermal, acoustic, and lighting conditions

### **DATA ANALYSIS**

For result findings and in-depth analysis of the different components of office environment on the productivity of the office employees, statistical techniques of correlation has been used. SPSS 16 software as research tool for data analysis was used for this research.

# RESULTS AND DISCUSSION Table 1: Descriptive Statistics

Variables	Mean	Std. Deviation	Respondents (N)
Productivity	3.6114	.73930	660
Furniture	3.1307	.71568	660

Table 2: Coefficients of Correlations between Productivity and Element of Office Design

Sr. No.	Variable	(r)
1	Furniture	.167**

#### \*\* Significant at .01 levels

It is clear that employees productivity is positively correlated with satisfaction with furniture in Indian population. The obtained findings are consistent with earlier research. (Brill, Margulis & Konar, 1984; Sullivan, 1990; Francis and Dressel, 1990; Dainoff, 1990; Gahramani, 1992; Nerhood and Thompson, 1994; Lu and Aghazadeh, 1994; Wilson, 2000; Freeman, 2010; Mahmoud, 2013; Sarit and Mishra, 2015). Burke (2000) theorized that furniture is another important concern in designing an appropriate office that managers must pay attention at such as adjustable office furniture for desks and chairs, which can support the employees' productivity and generate well performance by the employees who have to work full time without any obstacles. The office furniture is an important part of the office environment, which plays a decisive role on the quality of the office environment. In today's office environment a worker is required to do office work with the office furniture (desk and chair) for at least six to eight hours per day. Sitting for eight hours a day in office with uncomfortable furniture is likely not only to cause physical fatigue, but also to have negative psychological effects. Modern office furniture must be designed to reflect the "human-centered" design values. It must also focus on improving working conditions and office efficiency. The applications of ergonomics knowledge, study human and office furniture as a whole, to create not only be able to ensure the environment fit for the characteristics of the physical body, but to make people work in scientific, healthy and reasonable way, and appreciate the fun of work in the efficient way. So it is imperative that we pay utmost attention to our indoor environment to achieve optimal level of effective productivity.

## References

(Collins English Dictionary, 2003).

- Bailyn, L., Fletcher, J.K., and Kolb, D., (2003), "Unexpected Connections: Considering Employees' Personal Lives Can Revitalize Your Business," From. http://books.google.co.za/books?hl=en&ir=&id=az\_ucjtgrsgc&oi=fnd&pg=pa37 5&dq==hqgihptq4isihloqioszjv\_e\_a8#v=onepage&q&f=false, Accessed on 29 March, 2012.
- Larsson, A., and Gard, G., (2003), "How Can the Rehabilitation Planning Process at the Workplace Be Improved? A Qualitative Study from Employers' Perspective," Journal of Occupational Rehabilitation, 13(3), pp. 169-181.
- El-Zeiny, R. M. (2013). Interior Design of Workplace and Performance Relationship: Private Sector Corporations in Egypt. Asian Journal of environment-Behaviour Studies, 4(11), 49-63.
- Winkel, J., and Jorgensen, K., (1986), "Evaluation of Foot Swelling and Lower-Limb

- Temperatures in Relation to Leg Activity during Long-term Seated Office Work," Ergonomics, 29, pp. 313-328
- Francis, J., and Dressel, D.L., (1990), "Workspace Influence on Worker Performance and Satisfaction: an Experimental Field Study," Promoting Health and Productivity in the Computerized Office: Models of Successful Ergonomic Interventions, S.L. Sauter, M.J. Dainoff and M.J. Smith, eds., Taylor & Francis, London, pp. 3-16.
- Schriefer, A.E., (2005), "Workplace Strategy: What it is and Why You Should Care" From http://www.emeraldinsight.com/doi/pdfplus /10.1108/ 146300 105106 31081. Assessed on 16 February, 2013).
- Bridger, R., (2008), Introduction to Ergonomics, Taylor & Francis, New York, USA. Kingsley, A., (2012), The Impact of Office Ergonomics on Employee Performance: A Case Study of the Ghana National Petroleum Corporation (GNPC), A Thesis submitted to the Institute Of Distance Learning, Kwame Nkrumah University of Science and Technology in partial fulfillment of the requirements for the degree of Common wealth Executive Masters of Business Administration.
- Brill, M., Margulis, S., and Konar, E., (1984), "Using Office Design to Increase Productivity. Buffalo," The Buffalo Organization for Social and Technological Innovation (BOSTI), Workplace Design and Productivity, Inc, New York.
- Sullivan, C., (1990), "Employee Comfort, Satisfaction and Productivity: Recent efforts at Aetna," Promoting Health and Productivity in the Computerized Office, 10 P. Souter, G.H Darnoff, and J.B. Smith, eds, Taylor and Francis, London.
- Dainoff, M.J., (1990), "Ergonomic Improvements in VDT Workstations: Health and Performance Effects," In Promoting Health and Productivity in the Computerized Office: Models of Successful Ergonomic Interventions, S.L. Sauter, M.J. Dainhoff, M.J. Smith., eds., Taylor & Francis, London, pp 49–67.
  Gahramani, B., (1992), "Significant Improvements from Providing Ergonomically
- Designed Furniture to AT&T Corporate Managers," Advances in Industrial
- Ergonomics and Safety IV, S. Kumar, eds, Taylor & Francis, London, pp. 455-462. Nerhood, H.L., and Thompson, S.W., (1994), "Adjustable Sit-stand Workstations in the Office," Proceedings of the Human Factors and Ergonomics Society 38th Annual Meeting, Human Factors and Ergonomics Society, Santa Monica, CA, pp. 668-672
- Lu, H., and Aghazadeh, F., (1994), "The Perceived Discomfort and Musculoskeletal Complaints Associated with Varying Positions of VDT and Keyboard," Advances in Industrial Ergonomics and Safety VI, F. Aghazadeh, ed., Taylor & Francis, London,
- 15 Wilson, R.W., (2000), "Fundamentals of Ergonomics in Theory and Practice," Applied Ergonomics, 31(6), pp. 557–567. Freeman, R.E., (2010), Strategic Management: A Stakeholder Approach.
- Cambridge University Press, Cambridge, UK.
  Mahmoud Ali El-Zeiny, R., (2013), "Interior Design of Workplace and Performance
  Relationship: Private Sector Corporations in Egypt," Asian Journal Of Environment-17.
- Behaviour Studies, 4 (11), pp. 49-61.
  Sarit, S.P., and Mishra, P., (2015), "Ergonomics and Its Impact on Workplace Productivity with Special Reference to Employees of Various Sectors in Mumbai," 18. The International Journal of Business & Management, 3(4), pp. 28-37. Burke, A., (2000), "The Challenge of Seating Selection," Ergonomic Supplement,
- 19. 69(4), pp. 70-72

www.worldwidejournals.com