
“Review of Ergonomics practices in difference Sectors”

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Abstract: Today working environment and Employee is the Key aspects of any organization. Employee health and well-being will enable employers to build up a more productive workforce. The purpose of this paper is to review the findings of research papers of various authors to develop the factors that impact employee and Ergonomics in a work environment. This study examines the following factors: Work Environment, Work Posture, Office design, Productivity, Employee Health, and Ergonomics Furniture. There are no one fixed practices which show the importance and significance of the influence of all these above broad points because different organizations lay different emphasis on these pointers depending upon their suitability impacting Employee Ergonomics. Based on understanding of the papers reviewed by researcher, suggestions are drawn which give a complete view on the various practices that organizations should adopt to keep the Organizational Ergonomics.

Keywords: Ergonomics, Office design, Employee health, Work environment, Work place injury

I. INTRODUCTION

The goal of ergonomics is to ensure a good fit between the workers and their job, thereby maximizing worker's comfort, safety and health, productivity and efficiency. Derived from the Greek words 'ergon', which means 'work' and 'nomos', which means 'laws', ergonomics literally means the laws of the work (Sluchak, 1992). The term initially introduced into the literature by the Polish natural scientist Jastrzebowski in 1857 (Bridger, 2003). Later, the term ergonomics was independently reinvented and formally established by Murrell in 1949 (Edholm and Murrell, 1974). Ergonomics activities and researches in Industrial Developing Countries (IDCs) mainly began during the early 1960s (Banerjee, 1962). However some work has been carried out earlier. For example, Sen, one of the founders of ergonomics in India, reported ergonomics work at a cotton textile mill in West Bengal as early as 1953 (Sen, 1984)

Ergonomics, a multidisciplinary area that unites knowledge from the areas of

medicine, psychology, engineering and anthropology, stems from the Second WorldWar (1939-1945).The weapons industry was the first to benefit from the series of systematized knowledge, which was later greatly explored after the war by civil society production systems (Iida, 1990). As landmarks in the institutional development of ergonomics, specialized literature cites (Dul and Weerdmeester, 2004; Denis et al., 2008; Iida, 1990)

Ergonomics Means:

International Ergonomics Association (IEA):

“Ergonomics (or human factors) is the scientific discipline concerned with the understanding of interactions among humans and other elements of a system, and the profession that applies theory, principles, data and methods to design in order to optimize human well-being and overall system performance.”

This description implies that ergonomics has both a social goal (well being) and an economic goal (total system performance), that ergonomics considers both physical

and psychological human aspects, and that ergonomics is looking for design solutions in both the technical and the organizational environment.

Major Contribution in Ergonomics Practices By:-

- OSHA:- Occupational Safety and Health Administration
- HF&E:- Human factors and ergonomics
- HSE: - Health and Safety Executive
- Chartered Institute of human factor

In this review paper researcher study about the various Organizational Ergonomics practices that help employee well-being and productivity in the organization. Today employee ergonomics practices are the highest primacy of organizations due to increasing health problem of the employee.

II. OBJECTIVE

Objective of this review paper is to identify the best practices adopted by various Sectors across industries about Employee Ergonomics Practices.

III. LITERATURE REVIEW

Organizational Ergonomics Practices for employee followed by the different Sectors across industries. Following are the different research paper reviewed by researcher

This paper provides a brief review and gives some insights into how efficiencies and Patient Safety can be improved through human factors and ergonomics. It is my hope that you all will find inspiration, theory that can be developed or built upon, and make contributions to sustain and enable growth for future human factors and ergonomics related research in healthcare and various other domains.

Author: Vincent G. Duffy(July 2009)

This study aims to evaluate the ergonomics and its stress relating issues in Banking sector in Gujarat. It was an

attempt to investigate potential interactions between physical and psychosocial risk factors in the workplace in banking sector that may lead to stress because of ergonomics. The findings of this study show that office design is very vital in terms of increasing employees' productivity. Comfortable and ergonomic office design motivates the employees and increases their performance substantially.

Revati C. Deshpande, Assistant Professor
(March 4 2013)

This study has assessed the impact of office ergonomics on the performance of GNPC employees operating from the Petroleum House in Tema. The results from the study confirm that office ergonomics deficiencies at the Petroleum House are impacting negatively on the performance of the employee. The findings of the study, which identifies substantial office ergonomic lapses such as inadequate office illumination, use of un-ergonomic furniture, appreciable noise levels and pockets of safety hazards, it is obvious that GNPC is yet to leverage on its workplace environment as a means of motivating and enhancing the performance of its employees.

Asante Kingsley (September 2012)

The study is emphasized on employees' views on nature of job, work environment and their present work postures at work. It interprets that employees of puducherry manufacturing concerns are provided with best working environment but they also confront with works involving vibrations and static sitting postures for longer duration. It reveals that employees are moderately satisfied with the Present ergonomics at their workplace. The research reveals that employees confront turbulent problems of wrist pain, back pain and other health disorders due to static postures and repetitive and frequent bodily movements.

The research has suggested various ways to improve workplace ergonomics of Indian Manufacturing Sectors

Charbel Jose Chiappetta Jabbour (2011)

This article attempts to provide an overview of ergonomics in the military training for people working in other areas of manpower, personnel, and instructional research, and also offers further wellbeing consideration to human resources by revealing the impact that ergonomics via ergonomic training can have on the military organization. The development of combat techniques, ergonomics should be given more importance because it explores the problem of ensuring an action environment corresponding physically and mentally to the human body, leading to maintain and develop abilities of combat military personnel and to carry out the tasks entrusted, that allow individual, under normal effort or request, to meet any objectives

Opincă Mihai (2013)

This research paper on Ergonomics in Schools has focused on micro-ergonomics issues such as mismatch between student body sizes and their desks and chairs, the weight of schoolbags and the prevalence of musculoskeletal disorders amongst school students. Very little of this has been turned into practice. Although advances in this context are being made by the International Ergonomics (IEA) Technical Committee (TC) on Ergonomics for Children in Educational Environments (ECEE), the UK Ergonomics Society Special Interest Group on Ergonomics for Schools and the New Zealand Ergonomics Society Ergonomics/Human factors in Education (EHFIE) Special Interest Group, there has been less focus on macro-ergonomics issues such as learning environments, ergonomics pedagogy and curriculum content/structure
Legg, Stephen (2008)

IV Discussion

Ergonomics is best practices to apply in any kind of Industry. It is not restricted one particular sector or industry. Ergonomics practices are highly impact on Employee health and productivity in any kind of organization.

- i) In health care sector or hospitals after adopting ergonomics practices in the patient's health care finding better result. In hospital sector finding relation Human factor and ergonomics.
- ii) Banking sector ergonomics practices impacted on performance of their employees as well as on health of the employees. Now a days banking sector begins to use ergonomically norms while making office furniture and seating arrangement for employees. Research proved that ergonomics practices increase employees productivity. Office designed by ergonomically suggestions motivates the employees and increases the performance of employees.
- iii) Ergonomics in manufacturing companies is also playing vital role in production. As we discussed about other sectors that by implementing office ergonomics production rates are increasing. In this sector it is observed that if office ergonomics is not implemented the productivity decreases. It is also observed that lapses in office ergonomics turned into increasing workplace injuries.

- iv) This all happens because of inadequate working environment. Ergonomic is also implemented in military training also. People working in other areas of military such as manpower, and other various areas. Ergonomics should be given more importance because it explores the problem of ensuring an action environment corresponding physically and mentally to the human body.

- v) Ergonomics practices have to be implementing in School for children health wellbeing.

V. CONCLUSION

Through This review research paper researcher observe that different type of sectors implemented different types of organizational practices. If organizations want endure in this race world so they have follow the Ergonomics practices and make their work force healthier and happier.

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