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Ergonomics Principles and Using IT as a Remedy for Probable Work Related Injuries in Construction Projects by Mojtaba Valinejad Shoubi, Azin Shakiba Barough, Amin Rasouljavaheri

Summary of the Article

The article entitled “ Ergonomics Principles and Using IT as a Remedy for Probable Work Related Injuries in Construction Projects” which was written by Shoubi, Barough and Rasouljavaheri presented relevant issues pertaining to evaluating Musculoskeletal Disorders (MSDs) which were deemed particularly predominant in the construction industry. An initial overview of MSDs, also revealed to be known as Cumulative Trauma Disorders (CTDs) were provided through the disclosure of information on the work-related problem from previous related literatures. Thus, the relevance of ergonomics program, described as a program which looks into methods, processes, and techniques to design the job more efficiently and effectively to perfectly fit the requirements and natural capabilities of the workers; instead of the other way around , was more comprehensively discussed.

The identified aim of the authors for writing the paper was explicitly noted as conducting a more in-depth investigation of relevant factors that could be contributory to work-related injuries; and to determine appropriate design of an ergonomics program which would address work-related injuries.

The origin and encompassing facets relating to ergonomics were expounded; including various definitions and scope of the term in physical, cognitive and organizational categories. Likewise, the importance of applying ergonomics in work settings were also presented. The authors particularly established how work-related injuries lead to increase in costs, in terms of absenteeism and

decline in productivity, the need for hospitalization and treatment, as well as in addressing compensation claims . Thus, the advantages of ergonomics were explicitly noted to include minimizing discomforts or pain; lowering tendencies for absenteeism; significantly increasing levels of productivity; improving morale; and reducing work-related costs . The risk factors associated with ergonomics, which was classified into seven categories, were likewise enumerated and comprehensively explained. These factors include: forceful strains, static and awkward posture, vibration, repetition, duration, exertion of excessive pressure on the nerve or soft tissue, and being subjected to extreme temperature . In addition, the types of ergonomic injuries and proposed solutions for preventing these injuries were presented. Finally, the key elements of a successful ergonomic program, the pillars of ergonomics design, and the examples of ergonomics risks with appropriate remedies were effectively discussed. Conclusion

The article was related to the concepts discussed in class particularly in the areas of ergonomic considerations ; Anthropometry and Workplace Design; and the information contained in the discussion regarding the Introduction to Ergonomics. In the introduction to ergonomics, for instance, the definition, goal and scope of ergonomics were discussed which corroborates information presented in the article. Likewise, MSDs and CTDs were likewise presented. It was also commendable that the risk factors, including repetitive motion, forceful exertions, and posture have been equally validated. Thus, the information learned from the article to address the identified risk factors are relevant to the topic of safety and loss control through emphasizing the need to design an effective ergonomics program which

would assist in applying remedies to address them . The control measures were also noted in the course lessons (Introduction to Ergonomics; Anthropometry and Workplace Design) and enhances students' understanding for the need to address these risk factors to avoid injuries and to prevent incidences of costly effects for the employers .

The implications for the information presented include applying the most effective ergonomics program that would anticipate and effectively address the risks for work-related injuries. Thus, one agrees with the author that addressing work-related safety issues need to be a collaborative and participative effort for all stakeholders at work.

Works Cited

" Anthropometry and Workplace Design." PowerPoint Presentation. 2013. Print.

" Ergonomic Considerations: Manual Material Handling." PowerPoint Presentation. 2013. Print.

" Introduction to Ergonomics." PowerPoint Presentation. 2013. Print.

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