

Ergonomic Office Design and Aging

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PS300: Research Methods I

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In the quasi-experimental field study about ergonomics, titled *Ergonomic Office Design and Aging: A Quasi-Experimental Field Study of Employee Reactions to an Ergonomics Intervention Program*, several questions were raised about possible employee reactions to office ergonomics. These inquiries created the scientific framework for the study itself. The reason for the study was to investigate further into ergonomics in the office place, and to survey and assess exactly how employees' satisfaction rates were impacted by workstation area changes. As this quasi-experimental study was quite advanced, meaning it was a longitudinal study, multiple research questions and hypotheses had been proposed. For the sake of brevity, using the main themes that emerge in the intention of the experiment, two research questions and hypotheses have been selected to discuss the overall study.

There were two main research questions proposed in the office ergonomics study. The first research question was, "Do ergonomic changes affect employee satisfaction?" The second research question was "Do younger people benefit more from ergonomic changes?" Both of these studies had a control group, as well as testing multiple dependent variables such as back musculoskeletal pain and discomfort (persistent pain), eyestrain, a great deal of pain, workstation satisfaction, and workstation ergonomic change (2004). Each of these items in the questions was measured using the Likert scale. The purpose of these questions was to assist in the formation of the hypotheses.

There were also two main hypotheses suggested that represented the essence of the study. The first hypothesis was, "Employees who receive ergonomic changes to their desk area should have higher work area satisfaction than those that did not receive any changes." The second was "Young people will benefit more from ergonomic changes than older people." The field study begins with experimental groups (that is, experimental group is  $n = 61$  and the control

group is  $n = 26$ ) (2004). In both hypotheses, the researchers were able to prove the validity of the study using simple survey collection. Why is this important? The first hypothesis proposes higher employee satisfaction rates can be gained to modest workstation adjustments. In an office setting, which is quite a dominant environment in the United States, it would be an important, but simple modification many employers could implement to reduce physical stress associated to office work. In the second hypothesis, that basically states older people benefit less from ergonomic changes, this would also be an important factor in considering any major ergonomic office changes, as the changes could possibly do more harm than good (on a satisfactory scale that is). According to the field study, the assessment of whether age was indeed measured correctly may need further research. However, by the end of the field study, older office workers did not show substantial benefits in ergonomic modifications (2004).

In conclusion, ergonomic changes can be an important, simple, and effective way of increasing employee satisfaction. Ergonomics can also provide employees with healthy ways to deal with the physical stress associated with working in an office-type environment. Even though the study did indicate that older employees may not benefit from ergonomic changes as much as younger employees, the general consensus is that more research is required to determine the exact reasons. In the end, the study was quite useful and shined a positive light on ergonomics and its importance in the work place. As a final thought to future psychologists, this study will continue to be relevant as employers look to reducing healthcare costs, and should be further researched to prove why ergonomic changes should be implemented everywhere.

## References

- May, Douglas R., Reed, Kendra, Schwoerer, Catherine E., Potter, Paul. (2004). Ergonomic Office Design and Aging: A Quasi-Experimental Field Study of Employee Reactions to an Ergonomics Intervention Program. *Journal of Occupational Health Psychology*, 9(2), 123-135.

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