

Ergonomics and Employee Productivity

The World's Most Ergonomic Task Chair is useless if it's not used.

Once upon a time a team of engineers, designers, procurement experts and consultants were brought together to create The World's Most Ergonomic Task Chair. Every possible ergonomic function that could enhance productivity was incorporated, cost was no object. After months of labor and testing they presented their creation to the busy CEO to try. Each week extensive metrics were taken from both the chair and CEO.

After one year all of the data was analyzed with a surprising result: The World's Most Ergonomic Task Chair had provided no productivity benefit to the CEO.

The frustrated team met for a post-mortem. No one could figure out why the chair had had no impact. Finally the CEO's assistant spoke up: "She only sits in her office an average of 38 minutes a day."

The moral of the story is that even The World's Most Ergonomic Task Chair is useless if it's not used.

Ergonomics Affect Productivity

It makes sense that comfortable chairs lead to better productivity. Chairs that are not adjustable can cause sore backs and contribute to carpal tunnel syndrome. A study coordinated by Health and Work Outcomes, an independent health research and consulting company, found that individuals who received office ergonomic training and sat in a highly adjustable chair increased average productivity by 17.8 percent after a year.¹

Ergonomic functions include: ¹

- Lumbar support
- Swivel and tilt controls
- Arm adjustability
- Back height adjustments
- Seat height adjustments
- Seat depth adjustments
- Headrest

Although not an ergonomic benefit, weight capacity and fabric selection can also affect employee productivity as anyone who has sat on an unstable or scratchy upholstered chair knows.

A 2009 study discovered that a comfortable and ergonomic office design motivates employees and substantially increases performance.

As the primary tool in the office environment, the personal computer (PC) has enormous impact on organizational output. It is the focal point of office work today, directing most tasks. Traditional routine breaks from prolonged sitting attributable to retrieving files, referencing information, faxing, copying and inter-office communicating are today routinely performed while seated at the workstation. Consequently, the principal source of productivity in the modern office is the human seated in front of a PC, resulting in a large percentage of employees' workdays spent sitting in one basic posture.

Posture Fatigue

Sitting for prolonged periods while performing repetitive tasks is known to be problematic. Injuries associated with various Cumulative Trauma Disorders (CTDs) caused by computer use have been clearly documented. However, the problem of fatigue from prolonged static postures has had less exposure.

Prolonged static posture induces static muscle exertion, which inhibits blood flow and causes muscle fatigue. This buildup of fatigue minimizes overall effectiveness through reduced work output and excessive work breaks; the latter resulting from the need for movement to increase the rate of blood flow.

To take advantage of new automated technologies, today's organizations must address static muscle fatigue in addition to resolving the strains and injuries that result from constant computer use. To ignore either problem is to undermine the vast outlays in new technologies implemented for the purpose of improving productivity.

By enhancing the efficiency (and sense of well-being) of the employee sitting in front of the PC, we improve individual and organizational productivity.ⁱⁱⁱ

In Conclusion

It's hard to be productive when you're physically uncomfortable. Anything that makes your employees uncomfortable, including chairs, desks, workstations, lighting, temperature and noise levels can affect productivity. A 2009 study discovered that a comfortable and ergonomic office design motivates employees and substantially increases performance. Before buying new chairs or changing the lighting, ask the employees for input. New chairs won't help the situation if the employees don't think they're any better than the old chairs.^{iv}

References

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ⁱⁱ Lifehacker, "How to Ergonomically Optimize Your Workspace", <http://lifehacker.com/5755870/how-to-ergonomically-optimize-your-workspace>, accessed 01/06/14

ⁱⁱⁱ The Effect of Ergonomic Worktools on Productivity In Today's Automated Workstation Design, Dr. Marvin J. Dainoff, Center For Ergonomic Research, Miami University, Oxford, Ohio, [http://www.health2work.be/downloads/1230487015Onderzoek%20Zit-sta%20werkplekken%20\(Engelstalig\).pdf](http://www.health2work.be/downloads/1230487015Onderzoek%20Zit-sta%20werkplekken%20(Engelstalig).pdf), accessed 01/06/14

^{iv} Journal of Public Affairs, "Administration and Management Impact of Office Design on Employees' Productivity: A Case study of Banking Organizations of Abbottabad, Pakistan" Amina Hameed and Shehla Amjad, http://www.scientificjournals.org/journals2009/j_of_public_affairs1_2009.htm

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