

## Occupational Therapy's Role with **Ergonomics**

The word *ergonomics* can be found in a variety of literature—everything from marketing campaigns for the latest gadget to the vast information provided in the Occupational Safety and Health Administration's program guidelines for specific industries. According to the International Ergonomics Association (n.d.), "ergonomics promotes a holistic approach in which considerations of physical, cognitive, social, organizational, environmental, and other relevant factors are taken into account." To practitioners, these words resonate with many basic tenets of the occupational therapy profession.

### **The Role of Occupational Therapy in Ergonomics**

Optimizing function of an individual or group of individuals by *adapting* the environment in which the person(s) must interact is fundamental to every occupational therapy practitioner. Specific to ergonomics, the skills and knowledge of occupational therapy practitioners in anatomy, physiology, and activity analysis make them highly qualified to work in the area of ergonomics, often within an interdisciplinary team. For individuals as well as groups of people whose ability to perform their various life roles (e.g., worker) is affected by illness or injury, or the threat thereof, the occupational therapy practitioner is well equipped to facilitate the successful return to optimal function through the use of education, intervention, and adaptation.

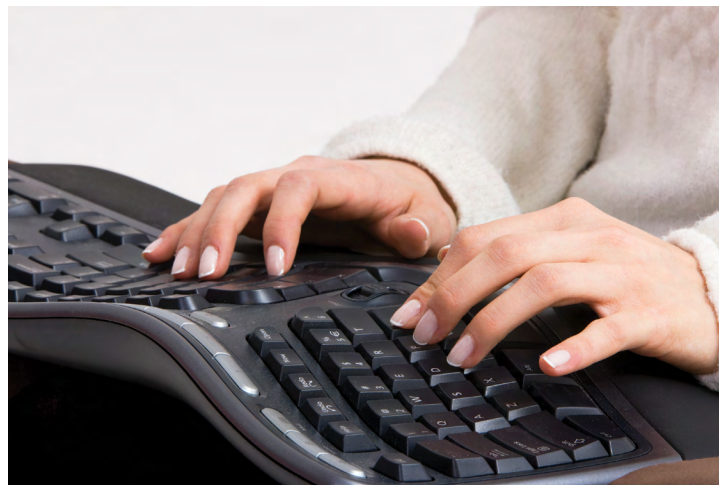
### **Benefits of Occupational Therapy in Ergonomics**

Using the fundamental skill of activity analysis, or job analysis in this context, the occupational therapist considers the physical, cognitive, and psychosocial elements at play, and makes recommendations to optimize function. In the work setting, occupational therapy practitioners evaluate, create, and adapt or modify changes in the way people perform daily activities. Occupational therapy practitioners who specialize in ergonomics may be involved with any of the following:

- Conducting assessments and developing interventions for individual workers, or providing health promotion and injury prevention education programs for groups of workers. Examples include providing visual aids and shadow boards for an individual with limited organizational skills following a traumatic brain injury, and providing in-services on how to do common tasks in ergonomically safe ways.
- Designing and modifying workplace tools, equipment, and behaviors to prevent injury. Examples include recommending moving heavy bags by sliding them onto work surfaces of equal heights rather than lifting them, and customizing keyboard set ups for each worker.
- Consulting with employers and insurance companies on developing programs to reduce workers' compensation costs (e.g., strategies to address the needs of aging workers; identifying injury risk factors and strategies to reduce risk exposure for specific job categories or populations in the workplace) and promote workplace wellness.



Occupational therapy practitioners also address potential barriers to implementing ergonomics recommendations. To be effective, these recommendations have to go beyond being technically correct—they also need to be embraced by the people who would benefit from them. Worker involvement and employer support are essential for successful implementation. Barriers may include workers feeling singled out or forgetting to use the recommendations, perceptions of increased time for task completion while adjusting to new modifications, potential unexpected costs, or not seeing the value of the recommendations. Occupational therapy practitioners understand how to effectively facilitate behavior change and can work with all stakeholders to implement changes. They may also develop outcome measures to evaluate the effectiveness of ergonomics interventions and identify necessary program changes over time. Addressing the physical, psychosocial, and even cultural aspects of ergonomics recommendations helps ensure adoption of changes and long-term success.



### Where to Find Occupational Therapy Practitioners Specializing in Ergonomics

Occupational therapy practitioners working in ergonomics may be employed by or contracted to employers, insurance companies, medical facilities, case management companies, consulting firms, and engineering firms, or they may be self-employed.

#### Summary

Occupational therapy practitioners have a distinct value in the area of ergonomics based on understanding the complex and dynamic interactions of the person, the task (i.e., job), and the context and environment (e.g., culture and personality, and where the task occurs). The occupational therapy practitioner may work alone or within an interprofessional team, which may include workers, union representatives, safety teams and safety professionals, human resources managers, maintenance craftsmen, engineers, ergonomists, and medical personnel. The occupational therapy practitioner specializing in ergonomics has the necessary skills to facilitate improved function of individuals interacting within a complex system of relationships and environmental factors in the home, workplace, and public areas.

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#### Reference

International Ergonomics Association. (n.d.). Definition. Retrieved from <http://www.iea.cc/whats/index.html>

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Occupational therapy enables people of all ages live life to its fullest by helping them to promote health, make lifestyle or environmental changes, and prevent—or live better with—injury, illness, or disability. By looking at the whole picture—a client's psychological, physical, emotional, and social make-up—occupational therapy assists people to achieve their goals, function at the highest possible level, maintain or rebuild their independence, and participate in the everyday activities of life.