Evaluation of computer workers’ usage of posture adjustments of an ergonomic office chair

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Abstract

Today there is a large amount of knowledge about appropriate ergonomics postures during office computer work. The market offers a large selection of ergonomic office chairs with numerous possibilities of adjustments for wide-ranged sitting postures. Problems arise when a chair has too many settings with different designs and functionality. It is often difficult to understand how the various settings should be adjusted for optimal individual postures.

The objective of this study was to find out how different adjustments of an ergonomic office chair were perceived, interpreted and handled by office computer workers. 84 people from two companies participated during a period of five weeks. 48 of these got a new ergonomic office chair, while the others kept their ordinary chair. Among the 48 users, 28 received an oral introduction/training about ergonomic features of the chair. Subjective data were collected each week in questionnaires and later statistically analysed.

The results showed that the understanding increased significantly regarding how to adjust the chair when oral introduction/training was given. Also adjustments were significantly used more frequently in this group, especially the rocking function. However, when comfortable settings were found the users seldom adjusted the chair again. Sitting height was most often adjusted, followed by seat back angulation. The positions of the neck support and armrests were seldom changed. Few users understood that the length of the seat cushion was changeable.

To conclude, when delivering office chairs it is important to introduce people on how to adjust the chair to accomplish appropriate sitting postures. Essential is that the chair is adjusted several times a day and that the rocking function is used to achieve posture changes. Instructive information material also need to be developed, explaining how optimal sitting postures can be found by adjusting the settings in a correct order of priority.