ABSTRACT

The Study of Using Gamoskey Chairs and Ergonomic Computer Desks in Occupational Fatigue Reduction of Students’ Computer Users

Students of Baturraden Junior High School 2 have certain habit in using computers, such as sitting in static posture and continuously for a long period, and using unergonomic chairs and desks. Accordingly, there are increased pressure to bearing spinal cord (discus), oppressed blood vessel, reduction in oxygen transfer to muscles, obstructed metabolism process, increasing lactic acid, and as a sign of initial fatigues (Ramandhani, 2003); awareness, attention, concentration, coordination, power and ability of computers users decline (Seitomo Wignjosoebroto, 1995).

The use of Gamoskey chairs and ergonomic computer desks is designed to apply ergonomic design which focuses on the chairs and computer desks design. It started with searching the shape/model, considering anthropometric data and the ability and physical limitation of students’ users. Therefore, the design result will fit the job to the man which satisfy the users (Mustafa B Pulat, 1992), as well as reduce occupational fatigue risks.

This study uses experimental quasi research, Same Subject design (Treatment By Subject), test of Anova Same Subject and Compare Means (Paired t test). The result shows that average body sizes of Gamoskey chairs and computer desks have different reduction of 24, 19424 > from tall and short body sizes chairs. The comparison of the selected Gamoskey chairs and ergonomic computer desks has different reduction of 12, 13918 > from the former computer chairs and desks.

The design of Gamoskey chairs and ergonomic computer desks is of special computer chairs and desks for Junior High School Students.

Keyword: Computer desks, Ergonomic design, Occupational fatigue