산소가 집중력/기억력에 미치는 영향
(The effects of oxygen on concentration and memory)

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ABSTRACT

The purpose of this study was to evaluate the differences in the concentration and memory when the lower density of oxygen (19%) and higher density of oxygen (28±2%) were supplied. Thirty subjects (each fifteen male and female) participated in this experiment. Subjects performed concentration and memory task that used a computer simulation on the two conditions (19% of oxygen and 28±2 % of oxygen), then the reaction time, the rate of error, the percentage of correct answers and subjective rating were tested. As a result of concentration test, the rate of error showed significant increase ($p<0.05$) on the lower density of oxygen (19%) and the reaction time did not show significant difference. As a result of memory test, the percentage of correct answers showed significant increase ($p<0.05$) on the higher density of oxygen (28±2%) and the reaction time of the higher density of oxygen was more taken than lower density of oxygen ($p<0.05$). The higher density of oxygen had an effect affirmative on concentration and memory in the result of subjective ratings also. The supply of the higher density of oxygen (28±2%) had an effect on the concentration and memory task.

Keywords : Oxygen, Concentration, Memory