

HYPERBARIC O2

340 Channing Way, Suite 344
San Rafael, CA 94903
(800) 635-4334 - (415) 927-0749
Email: bonesr4us@aol.com

THE EFFECTS OF MILD HYPERBARIA ON THE PERFORMANCE OF A REACTION TIME TEST AND PROFILE OF MOOD STATES

Denise L. Smith, Scott Burrows, and Patricia C. Fehling
Skidmore College, Saratoga Springs, NY, USA

Changes in the barometric pressure, associated with changing weather patterns, may be related to how people feel and how they perform. The purpose of this study was to examine the effects of mild hyperbaria on the profile of the mood states and a reaction time test among males (N=5) and females (n=8) college students. This study utilized a repeated measures, single-blinded design in which subjects were exposed to both to both a normobaric (770 mmHg) and a mild Hyperbaric (790 mmHg) conditions for a two hours in a portable, inflatable Hyperbaric chamber (Hyperbaric Industries; Pressurecizer 1.2). The two trials were performed during the same time of day and were separated by 24 or 48 hours. During exposure, subjects completed a reaction time test and a profile of mood states questionnaire at the start of the protocol and every 30 minutes during the test for 5 trials. There were no significant differences in the correct responses to the reaction time test between the two conditions. However, subjects performed significantly faster ($p < .05$) for the false alarms and misses under the hyperbaric condition. State of anger, state tension, and state fatigue were all significantly lower in the hyperbaric condition compared to the normobaric condition. In conclusion, mild hyperbaric affected profile of mood states as well as reaction time. This study suggests that mild Hyperbaric may affect an individuals mood state and reaction time, and thereby alter workers productivity. This possibility warrants further investigation.

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