

一過性の有酸素運動が感情に与える影響
—運動条件および読書条件における経時変化の比較—

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**Effets of Acute Aerobic Exercise on Affective Responses :
Comparison of Change between Exercise Session and Session of Reading a Book**

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Abstract

This study examined the effects of a period of exercise and reading a book on psychological affects before, during and after each task. Sixteen subjects participated in this study. They are asked to report their psychological states in two separate conditions of counterbalanced design : (1) exercise on a cycle ergometer at 120 beat/min, and (2) reading a book quietly sitting on a cycle ergometer. Subjects rated Waseda Affect Scale of Exercise and Durable Activity (WASEDA ; Arai et al, 1999) before, during and after exercise or reading a book. They also answered to Feeling Scale (FS ; Rejeski, 1985) during and after exercise or reading a book. There was a warm-up interval until the subject's heart rate got to 120 beat/min in exercise protocol. Subjects then exercised for 20 minutes to keep their heart rate at 120 beat/minute. On the other hand, the control session consisted of reading a book on same ergometer for 20 minutes. As a result, exercise did produce a positive influence on psychological states. Especially, it was clear that positive engagement was enhanced during exercise, and increase in tranquility was seen after exercise. Finally, implications for a future research were discussed with respect to the studies that endeavor exercise-induced psychological effects.

Key words: acute aerobic exercise, psychological affect, Waseda Affect Scale of Exercise and Durable Activity (WASEDA) analysis