

ABSTRAK

Rendahnya aktivitas dipengaruhi oleh kurangnya motivasi terhadap latihan fisik. Diperlukan upaya intervensi yang dapat meningkatkan motivasi dalam aktivitas fisik tanpa menimbulkan beban fisiologis berlebihan. Penelitian ini bertujuan menganalisis pengaruh intervensi audio tilawah Al-Qur'an dan aktivitas *virtual cycling* selama aktivitas *ergocycle* terhadap beban kerja fisiologis berdasarkan *Cardiovascular Load* (%CVL) serta kondisi afektif menggunakan *Brunel Mood Scale* (BRUMS). Metode yang digunakan adalah eksperimen dengan rancangan acak kelompok faktorial (RAKF) *within-subject*, di mana setiap partisipan menerima seluruh perlakuan. Beban kerja awal disesuaikan dari 65% denyut jantung maksimal, sedangkan evaluasi dilakukan menggunakan %CVL. Kondisi afektif dianalisis melalui enam dimensi BRUMS, yaitu *tension*, *depression*, *anger*, *vigour*, *fatigue*, dan *confusion*. Analisis data %CVL menggunakan uji ANOVA dan *post hoc* Tukey HSD, sedangkan data BRUMS dianalisis menggunakan uji normalitas, *paired sample t-test*, dan uji *Wilcoxon*. Hasil penelitian menunjukkan bahwa faktor *virtual cycling* berpengaruh terhadap %CVL ($p = 0,047$), sedangkan faktor tilawah Al-Qur'an tidak berpengaruh ($p = 0,089$). Perlakuan A₂B₂ (mujawwad dengan rute *virtual* hutan) direkomendasikan sebagai model latihan *ergocycle* yang efektif berdasarkan nilai %CVL terendah dan perubahan *Total Mood Disturbance* ΔTMD terkecil pada kedua kelompok gender.

Kata Kunci : Aktivitas Fisik, *Ergocycle*, *Cardiovascular Load*, *Brunel Mood Scale*, *Education Research*, *Higher Education Institutions*.

ABSTRACT

The lack of physical activity is influenced by reduced motivation to engage in physical exercise. Therefore, intervention efforts are needed to enhance motivation in physical activity without causing excessive physiological workload. This study aimed to analyze the effects of an audio intervention using Qur'anic recitation and virtual cycling activities during ergocycle exercise on physiological workload (Cardiovascular Load [%CVL]) and affective condition (Brunel Mood Scale [BRUMS]). The method used was an experimental study with a within-subject factorial randomized block design, in which each participant received all treatments. The initial workload was set at 65% of the maximum heart rate, and the evaluation was conducted using %CVL. Affective condition was analyzed using the six BRUMS dimensions: tension, depression, anger, vigor, fatigue, and confusion. The %CVL data were analyzed using ANOVA and Tukey HSD post hoc tests, while the BRUMS data were analyzed using normality tests, paired sample t-tests, and Wilcoxon tests. The results showed that the virtual cycling factor significantly affected %CVL ($p = 0.047$), whereas the Qur'anic recitation factor did not ($p = 0.089$). Treatment A₂B₂ (mujawwad recitation with a virtual forest route) is recommended as an effective ergocycle exercise model, based on the lowest %CVL and the smallest change in Total Mood Disturbance (Δ TMD) in both gender groups.

Keywords: *Physical Activity, Ergocycle, Cardiovascular Load, Brunel Mood Scale, Education Research, Higher Education Institutions.*