

Effects of aerobic exercise on physical activity and cardiovascular fitness among students in UniKL RCMP

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ABSTRACT

Introduction: In the modern era, many individuals lead sedentary lifestyles, often spending considerable time on video games and remaining inactive during leisure periods. This makes it challenging to implement significant lifestyle changes. **Objective:** To determine the effect of power walking combined with short jogging on heart rate (HR), blood pressure (BP), and quality of life (QOL) among students at UniKL RCMP. **Materials and Method:** This experimental study involved students from UniKL RCMP, primarily healthy young individuals. Participants completed consent forms before the study and the WHOQOL-Bref questionnaire at the beginning and end. The experimental group (15 participants) engaged in both fast walking and jogging, while the control group (15 participants) only performed fast walking. **Results:** In the experimental group, there were significant differences in systolic blood pressure (SBP) ($p = 0.013$), HR ($p = 0.000$), social connections (SC) ($p = 0.000$), domain 1 (D1) ($p = 0.000$), and domain 2 (D2) ($p = 0.000$). However, diastolic blood pressure (DBP) ($p = 0.073$), domain 3 (D3) ($p = 0.137$), and domain 4 (D4) ($p = 0.170$) did not show significant differences. In the control group, there were no significant differences in SBP ($p = 0.055$), DBP ($p = 0.844$), D3 ($p = 0.339$), and D4 ($p = 0.083$), but there were significant differences in HR ($p = 0.001$), SC ($p = 0.000$), D1 ($p = 0.003$), and D2 ($p = 0.000$). **Conclusion:** Combining power walking with short jogging significantly improved participants' cardiorespiratory fitness, physical activity, and overall quality of life compared to power walking alone.