

國中學生人體尺寸與靜態肌力關係之研究

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摘要

This study investigates the relationship between male junior high school students' body size and their isometric muscular strength. The data collected from 99 male students of 12, 13 and 14 yrs old. Their 17 body dimensions and four static muscular strengths were measured. The age was found a significant factor affecting the isometric strengths. Multiple comparisons among age groups results indicate that the 13 and 14 yrs old groups had significantly ($p < 0.05$) higher isometric arm strength than that of the 12 yrs old. For isometric shoulder strength, the 14 yrs old group was significantly higher than those of the 12 and 13 yrs groups. The 13 yrs old group was significantly higher than that of the 12 yrs old group. Four regression models were developed to predicting the isometric muscular strengths using the anthropometric data. The R^2 of these models ranged from 0.44 to 0.59.

關鍵字 : anthropometry, Body dimension, static muscular strength, junior high students