

國小學童手部尺寸與握力關係之研究

蔡佩紋, 李開偉

工業管理學系

管理學院

kai@chu.edu.tw

摘要

This study investigated the effects of hand size on grip force for school children. A total of 114 subjects (61 males and 53 females) were recruited. A nested-factorial experiment was designed. The experimental factors included hand size and hand/arm posture force. The dependent variable was the maximum grip force. The results showed that the maximal grip strength for the subjects was 43.5kg on dominant hand with 180 degree posture. The minimal was 7 kg on non-dominant hand with 180 degree posture. There was no significant difference between males and females. The sixth graders had significantly higher values than the fifth graders on four grip measures. The results also showed that the grip strength was significantly ($p < 0.01$) associated with hand length, palm length, hand width, hand circumference, and the length of the tiger's mouth and all the fingers.

關鍵字：grip strength, hand size, school children, maximum volitional contraction