

##C441247 : MAJOR PHYSICAL EDUCATION

KEY WORD: RELATIONSHIP / PHYSICAL FITNESS / ACADEMIC ACHIEVEMENT

SIRIPORN KULSIRICHAI : THE RELATIONSHIP BETWEEN PHYSICAL FITNESS AND ACADEMIC ACHIEVEMENT OF SECONDARY SCHOOL STUDENTS IN VAJIRAVUDH COLLEGE AND KING'S COLLEGE. THESIS ADVISOR : ASSO.PROF. PRAPAT LAXANAPHISUTH, 72 PP. ISBN 974-582-485-2

The purpose of this research was to investigate the multiple correlation between physical fitness scores and academic achievement scores of students at the secondary education level in Vajiravudh College and King's College.

The results indicated that :

1. Scores of physical fitness, in the areas of flexibility, abdominal strength-endurance, body composition, upper body strength-endurance and aerobic capacity, correlated with the academic achievement scores as follows:

1.1 Physical fitness scores of body composition, upper body strength-endurance, aerobic capacity and abdominal strength-endurance significantly correlated with the academic achievement scores at .05 level ($r = .129, -.080, .058, .056$), respectively.

1.2 Physical fitness scores of flexibility did not correlate with the academic achievement scores ($r = -.021$).

2. The multiple correlation coefficients between scores of physical fitness in the areas of body composition (X_3), upper body strength-endurance (X_4), abdominal strength-endurance (X_2), and aerobic capacity (X_5) and the academic achievement scores (Y) were significantly correlated at .05 level ($R = .1909$).

3. The regression equations for predicting the criterion or the academic achievement (Y) with the predictors or each areas of physical fitness (X), in raw-scores and the standard-scores models by stepwise multiple regression were as follows.

From raw-scores

$$\hat{Y} = 1.6401 + .0095X_3 - .0099X_4 + .0067X_2 + .0063X_5$$

From standard-scores

$$\hat{Z}_Y = .1259Z_{X_3} - .1314Z_{X_4} + .0891Z_{X_2} + .0840Z_{X_5}$$