

HEALTH-RELATED PHYSICAL FITNESS NORMS FOR KASETSART UNIVERSITY STUDENTS

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ABSTRACT

Lack of population-specific reference values for Kasetsart University (KU) student is a limitation in the assessment of physical fitness that shown all KU students in good health. This study sought to construct the health-related physical fitness norms for KU students using the Progressive Aerobic Cardiovascular Endurance Run (PACER) Test, Modified Sit-and-Reach (MSR) Test, Back Scratch (BS) Test, 60 seconds Sit-Up (SUP) Test and Body Mass Index (BMI). The subjects consisted of 3,929 (1,310 male and 2,301 female) KU students whose ages ranged between 18–22 years old and registered in physical education activity course for the second semester in academic year 2013. The subjects were recruited through KU students in Bangkaen Campus using purposive selection technique. The PACER Test was used to assess Cardio respiratory endurance and the SUP Test was used to assess Abdominal muscular strength and endurance. Flexibility of lower back, Hamstring and upper shoulder were assessed by the MSR and the BS Test. In the same time, BMI was used to assess body composition. All components are the important physical fitness in healthy. Data were analyzed by using descriptive statistics of Mean, Standard Deviation and Raw Score. The health-related physical fitness norms were divided into 3 levels; excellent, good and poor and the only BMI norm was divided into fat, suitable and thin. The study results found the means of all fitness test scores of participants significantly different between genders ($p < 0.05$), while age scores were no significant difference. This study constructed the health-related physical fitness normative data according to age and gender that using the PACER Test, 60 seconds Sit-Up Test, Modified Sit and Reach Test, Back Scratch Test and Body Mass Index for healthy KU students. In general, male students had better physical fitness than female students but the only Deltoid muscular flexibility in female students better than male ones. However, the health-related physical fitness norms for KU students was pretty low compare to the standard norm such as the norms of the Cooper Institute, the norm of the Sport Authority of Thailand. Therefore, the institute should promote physical activity and exercise for KU students to develop their physical fitness in the future. However, this health-related physical fitness for KU students show the level of fitness that student can compare their fitness with norms and understand their fitness suddenly. Results will stimulate all KU students to improve physical fitness and health. It can be conclude that this health-related physical fitness norm was practical to stimulate students to improve health and fitness of all KU students.

Keyword: Physical Fitness Norms, Kasetsart University Students

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