Physical activity patterns of school adolescents: Validity, reliability and percentiles proposal for evaluation [Patrones de actividad física de adolescentes escolares: Validez, confiabilidad y propuesta de percentiles para su evaluación]

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Introduction: Regular physical activity (PA) during childhood and adolescence is important for the prevention of non-communicable diseases and their risk factors. Objectives: To validate a questionnaire that measures PA patterns, to verify its reliability, compare the levels of PA aligned with chronological and biological age, and develop percentile curves to assess PA levels, depending on biological maturation. Subjects and Method: Descriptive cross-sectional study was performed on a non-probabilistic quota sample of 3,176 Chilean adolescents (1685 males and 1491 females), with a mean age range from 10.0 to 18.9 years. An analysis was performed on, weight, standing and sitting height. The biological age through the years of peak growth rate and chronological age in years was determined. Body Mass Index was calculated and a survey of PA was applied. The LMS method was used to develop percentiles. Results: The values for the confirmatory analysis showed saturations between 0.517 and 0.653. The value of adequacy of Kaiser-Meyer-Olkin (KMO) was 0.879 and with 70.8% of the variance explained. The Cronbach alpha values ranged from 0.81 to 0.86. There were PA differences between the genders when aligned by chronological age. There were no differences when aligned by biological age. Percentiles are proposed to classify the PA of adolescents of both genders according to biological age and sex.

Maturation

Percentiles

Physical activity

Questionnaire

Reliability

Validity

adolescent

adult

age

Article

body height

body weight

child

cross-sectional study

female

human

male

physical activity

questionnaire

reliability

validity