

data ($\chi^2(526) = 1019.23$, RMSEA = .054, NNFI = .87, and CFI = .89). However, higher order analyses shown that a model with two correlated second-order factors (physical health and general mental health) did not provide a satisfactory fit to the data ($\chi^2(552) = 1633.20$, RMSEA = .078, NNFI = .73, and CFI = .75). Finally, a third-order factor (health), including a third second-order factor (general well-being), represented a reasonable fit to the data ($\chi^2(526) = 1116.58$, RMSEA = .057, NNFI = .86, and CFI = .87).

Conclusions: Results of the study confirmed the multidimensional and hierarchical structure of the SF-36. Further research is needed with this questionnaire in order to determine the construct validity of its proposed hierarchical 8-factor structure.

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MOTOR COORDINATION AS DETERMINANT OF PHYSICAL ACTIVITY IN CHILDREN: A 4-YEAR FOLLOW-UP (6 TO 10 YEARS OF AGE)

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The purpose of this study was to analyze the association between several variables related to children's physical activity (PA), and to test a structural equation model (SEM) where motor coordination (MC) is proposed as predicting children's PA.

Methods :285 children from Azores, Portugal, were evaluated every year, from 6 to 10 years of age, in several characteristics: somatic growth (weight, height, skinfolds), PA (Godin and Sheppard questionnaire), MC (KTK), and physical fitness (PF) (Fitnessgram). A stepwise multiple regression was used to identify the variables at 6 years of age that showed to be associated with PA at 10 years of age. Two structural equation model (SEM), having MC as predictor of PA, were also tested. In the first model, MC has an influence both on PA in same year and in the subsequent years of evaluation; while in the second model, MC has an influence on PA only on the following years of evaluation. Only MC was retained as a significant predictor in the regression model ($F(1, 247) = 40.03$, $p < 0.001$, explaining 14.4% of the variance ($R=0.38$). There was no significant improvement when comparing the second with the first SEM (qui squared dif (χ^2) = 20.667, $p < 0.05$). Fit indices values were similar for both models. First SEM: qui squared (χ^2) = 592.290, $p < 0.001$; RMSEA = 0.113, SRMR = 0.073, CFI = 0.803; second SEM: qui squared (χ^2) = 571.623, $p < 0.001$; RMSEA = 0.117, SRMR = 0.075, CFI = 0.801. In conclusion, the regression equation model showed that, of all tested variables, MC was the only correlated with children's PA. Despite the fact that SEM fit indices were only moderate, it seems that MC plays an important role in children's PA level.

DIFFERENCES IN CORONARY HEART DISEASE RISK FACTORS ACCORDING TO PHYSICAL ACTIVITY LEVEL IN YOUNG ADULTS

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The purpose of the present study was to determine differences in coronary heart disease risk factors according to physical activity level in young adults. A total of 188 volunteer university students (female:98, male:90) participated in this study. For the determination of coronary heart disease risk factors subjects' body mass index (BMI), body fat percentage (Fat %), systolic (SBP) and diastolic (DBP) blood pressures, total cholesterol (TC), triglyceride (TG), low-density lipoprotein cholesterol (LDL-C) and high-density lipoprotein cholesterol levels were determined. Physical Activity Assessment Questionnaire (PAAQ) was used for the determination of physical activity levels and subjects were divided into two groups as highly active and moderately active based on the median values of the PAAQ (MET/week). Results indicated that for the whole group and for female and male university student separately significant differences were only observed in physical activity levels (total group: $t=18.301$, $p=0.000$; females: $t=12.519$, $p=0.000$; males: $t=13.676$, $p=0.000$) however no significant differences were determined in BMI, Fat %, SBP, DBP, TC, TG, LDL-C and HDL-C. As a conclusion present results suggest that coronary heart disease risk factors were not affected by physical activity levels in young adults.

CLIMACTERIC SYMPTOMS, OBESITY AND SARCOPENIA IN POSTMENOPAUSAL WOMEN

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The aim of this study was to investigate the effect of obesity and sarcopenia in climacteric symptoms in postmenopausal women.

One hundred twenty eighth healthy postmenopausal women (ages, 41 to 77 yrs; BMI, 16 to 44 kg/m²; SMI, 24 to 41 %) participated in this investigation. Skeletal muscle mass (SMM) and weight (W) were evaluated by tetrapolar bioimpedance being the first expressed as skeletal muscle mass index (SMI = skeletal muscle mass/body mass \times 100). The subjects were considered to have a normal SMI if their SMI was higher than one standard deviation above the sex-specific mean for young adults (aged 18–39). The height (H) is measured in anthropometric position and BMI is derived by $BMI=W/H^2$. The cut-off point to obesity using BMI was 25.5 kg/m² and based on the combination of sarcopenia and obesity subjects were further classified into three groups: nonobese/nonsarcopenic (n=42), obese/nonsarcopenic (n=71) and obese/sarcopenic (n=15). Greene Climacteric Scale was used to assess climacteric symptoms (psychological, somatic, vasomotor, loss of sexual interest and total of these symptoms). The nonparametric testes Kruskal-Wallis and Mann-Whitney, with Bonferroni correction, were employed to compare groups.

The mean values of total sample were: 8.06(\pm 5.50) for psychological symptoms, 4.63(\pm 3.07) for somatic symptoms, 1.33(\pm 1.48) for vasomotor symptoms, 1.18(\pm 1.13) for loss of sexual interest and 15.20(\pm 9.27) for total of these symptoms.

Main results demonstrated differences among three groups in somatic symptoms ($p=0.02$) and total Greene Climacteric score ($p=0.03$). Higher levels were obtained by obese/nonsarcopenic than nonobese/ nonsarcopenic group in somatic symptoms (4.99 \pm 3.02 versus 3.52 \pm 2.39, $p=0.01$) and total score (16.59 \pm 9.63 versus 12.05 \pm 7.42, $p=0.01$). We didn't find any other significant differences, however the nonobese/nonsarcopenic group ($p>0.05$) showed lower scores for loss of sexual interest (0.90 \pm 0.96), psychological (6.62 \pm 4.36) and