



The relationship of biomotor and somatotype of 8-14 years old students of delfan biomotor and somatotype of students

Poster Presentation

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Abstract

Introduction: Somatotype represents the morphological shape at certain ages, and the Somatotype is associated with cardiovascular and respiratory fitness. The present study aimed to compare the biomotor variables and somatotype students of Delfan.

Methods: The present study was a descriptive-comparative and field study. For this purpose, 150 non-athlete male students aged 8-14 years old, BMI $19.08 \pm 3.91 \text{ kg/m}^2$, participated in this study. According to the International Association for the Advancement of Body Metering guidelines, the selected variables of body measurement and body type were measured by Heath and Carter method, and the physiological components of VO₂max, anaerobic power, and explosive power were measured. Data were analyzed using one-way analysis of variance and Duncan's test using SPSS version 26 at the level of ($p \leq 0.05$).

Results: The VO₂max in the mesomorphic and ectomorphic groups was higher than endomorphic ($p=0/011$), but the difference between mesomorphic and ectomorphic groups was not significant, $p \geq 0.05$. Improvement of anaerobic function was observed in mesomorphic compared to endomorphic and ectomorphic $p=0/008$, but the difference between endomorphic and ectomorphic groups was not significant ($p \geq 0.05$). Explosive power performance in mesomorphic was better than endomorphic and ectomorphic groups ($p=0/012$), but the difference between endomorphic and ectomorphic groups was not significant ($p \geq 0.05$).

Conclusion: According to the findings, mesomorphic and ectomorphic are prone to sports whose energy source is the aerobic system, and mesomorphic are prone to explosive and anaerobic disciplines. Physical education teachers and coaches are advised to pay attention to the points during the process of talent identification and training of basic movements and advanced skills.

Keywords

Anaerobic; Biomotor; Maximum Oxygen Consumption; Somatotype

Reference:

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