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The effect of a European-based exercise program upon the health-related physical fitness of individuals with intellectual disabilities: The alive and kicking perspective

The present study examined the effect of the European-Based 'Alive and Kicking' exercise program on the health-related physical fitness of individuals with (Experimental Group: EG) and without (Control Group: CG) (Intellectual Disability: ID). The Self-Determination Theory: SDT, guided both the 6-month preparatory phase and the 9-month exercise program, which was conducted in five separate European countries (Cyprus, France, Greece, Portugal and Spain). The total sample (n = 200, 54% males and 46% females) comprised of 168 individuals with ID (age: 26.54 years, + 7.78) and 32 individuals without ID (age: 25.81 years, + 8.73) respectively. The statistical analyses revealed that the ID group's performance (EG) improved significantly in a range of health-related physical fitness variables (sit & reach, pushups, sit ups, long jump, ½ mile walk/ run). In turn, the participants from the CG improved mainly in muscular endurance (sit ups and pushups). The results are discussed in accordance with SDT and the dairies kept from the staff involved (coaches and psychologists) during the 9-month intervention. The present findings, although subjective to certain limitations, are encouraging, given the large-scale, real-world nature of the research design, and provide evidence supporting the integration of theoretical strategies enhancing motivation into traditional coaching programs for individuals with ID.

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Anthropometric characteristics and somatotype of professional soccer players by position

The anthropometric characteristics are decisive for an optimal physical level and, therefore, a good level in the game; and they can be different depending on the game position.

The aim of this study was to identify the physical characteristics, body composition and somatotype of professional soccer players and to verify differences according to their playing positions: goalkeepers, defenders, forwards and midfielders.

The measurements were performed on 57 male players of a soccer team of the Spanish Football League One. Twenty seven anthropometric variables were measured (height and body weight, four bone breadths, eleven girths and ten skinfolds) and the Bioelectrical Impedance Analysis was also performed. The percentage of body fat has been determined from 11 different equations.

Goalkeepers showed the highest weight  $(80.2 \pm 3.2 \text{ kg})$ , supraespinal  $(10.5 \pm 3.8 \text{ mm})$  and abdominal  $(15.6 \pm 3.5 \text{ mm})$  skinfolds than others positions. In relation to body fat percentages, similar results were obtained from the equations of Jackson-Pollock (from 3 and 7 skinfolds), Carter, Withers, and Heyward and Stolarczyk (mean value  $7.8 \pm 1.5\%$ ). Higher results were obtained from the other equations applied. Differences among positions were also found concerning body composition; goalkeepers showed the highest body fat percentage  $(9.4 \pm 1.4\%)$ . Mean somatotype was also different among positions; goalkeepers and forwards presented a balanced mesomorph somatotype while defenders and midfielders showed an ecto-mesomorph one.

The differences in morphological characteristics according to the team position were notice only in goalkeepers, especially regarding their weight, abdominal and supraespinale skinfolds and the percentage of fat tissue.