COMPARATIVE STUDY OF PHYSICAL FITNESS INDEXES OF MENTAL HANDICAPPED INDIVIDUALS.

J.F. BARROS & T.L. BARROS NETO, Faculdade de Educação Física, UNB & CEMAFE – Universidade Federal de São Paulo

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The purpose of our study was to compare various indices of physical fitness of mentally handicapped patients regarding somatic, cardiorespiratory, and neuromotor variables, 108 individuals with a light to moderate mental handicap were studied (ages ranging from 10 to 36 years of (age), and all of them perform different modalities of regular physical activity: 74 male subjects were divided into the following categories: light (n = 37) and moderate (n = 37) mental handicap. The female subjects were also divided into the same classification: light (n = 18) and moderate (n = 16) mental handicap. All were patients enrolled at the APAE (Associação de Pais e Amigos dos Excepcionais – Association of Parents and Friends of Exceptional People) at their respective units: Vila Marina, Itaim and Brooklin of the city São Paulo, SP. Data collection was performed in a single phase. All patients were compared regarding the following variables: 1) maximum oxygen consumption (VO_2 max); 2) anthropometrics measures of weight, height, cutaneous folds and relative body fat ; 3) flexibility, utilizing a sit and reach test; 4) vertical jump; 5) speed-50 meters sprint test and 6) agility during a shuttle run test. When comparing light mentally handicapped patients with the moderate ones, lower percentages of body fat (p = 0.0148), higher VO2 max (p = 0.0001), greater vertical leap (p = 0.0001), higher speed (o = 0.0001), and greater agility (p = 0.0001) were observed, with no significant difference in terms of flexibility between the two groups. These performance differences were evident in both sexes. The results obtained also showed that active mentally handicapped individuals maintain a percentage of body fat below the obesity indices established for the general population. Concerning fitness standards for normal individuals, our group presented lower VO_2 max values and sprinting speed, but greater flexibility and higher vertical leap scores. These results emphasize the importance of physical activity for handicapped individuals and the need to develop programs respecting the characteristics of these patients.