

CARDIOVASCULAR FITNESS INFLUENCES SELF-CONCEPT DURING THE ADOLESCENCE

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I. Introduction

Self-concept is one of the most researched constructs within the framework of educational psychology, psychology of the personality, and social psychology. Self-concept can be defined as the perception that an individual has of him or herself, with contents that are both descriptive, as well as evaluative¹. In the field of sport and exercise, physical self-concept is also considered playing a considerable role in sports performance². The present study aims to investigate the relationship between sports practice, cardiovascular fitness and physical self-concept in adolescents.

II. Method

Two groups of participants (n=75) were selected on the basis of their sports training habit from the school and the sport context. Participants performed the Leger Multi-stage fitness test and two questionnaires. First, a Spanish adapted version of the Physical Self-Perception Profile (PSPP) that measures the physical self-perception of college students. Next, and in order to assess general levels of physical activity, participants completed the Physical Activity Questionnaire for Adolescents (PAQ-A). In addition, a brief anthropometric assessment was conducted to obtain their body mass index.

III. Results

Statistical analysis: Two-tailed t-tests for independent samples were used to compare the two groups.

Cardiovascular fitness: The analysis on the VO^2_{max} values revealed a main effect of sports practice, $F(1,73)=11.07$, $p<.001$, and a main effect of Sex, $F(1,71)=4.00$, $p<.001$, with larger values for the athletes than for the non-athletes group and for males than for females participants.

Physical Self-Perception Profile: The analysis of 5 constructs of the questionnaire (PA: physical ability, C: physical condition, S: strength, AP: physical appearance, PSC: physical self-concept and GSC: general self-concept) showed a main effect of sports practice [PA, $F(1,73)=5.08$; C, $F(1,73)=5.23$; S, $F(1,73)=3.81$; AP, $F(1,73)=3.52$; PSC, $F(1,73)=3.29$; GSC, $F(1,73)=3.58$, $p<.001$ for all constructs], with greater values for the athletes than non-athletes and for males than for females participants.

PAQ-A and BMI: The analysis revealed marginal differences between groups concerning PAQ-A $F(1,73)=2.59$, $p<.05$, and no significant differences in BMI, $F(1,73)=0.06$, $p=.95$

IV. Conclusion

Today's lifestyle promotes sedentary activities in children and adolescents. Crucially, the present study, together with previous research^{3,4} point to the important role of fitness level and sport practice on the self-concept of the adolescents. This should encourage public health systems administrators to implement policies aimed to increase adherence to sport practices in and out of school during this important period of life.

V. References:

1. Harter, S. (1999). *The construction of the self: a developmental perspective*. Nueva York: Guilford Press.
2. Carraro, A.; Scarpa, S.; Ventura, L. (2010). Relationships between physical self-concept and physical fitness in Italian adolescents. *Perceptual and Motor Skills*, 110 (2), pp. 522-530.
3. Contreras, O. R.; Fernández, J. G.; García, L. M.; Palou, P.; Ponseti, J. (2010). El autoconcepto físico y su relación con la práctica deportiva en estudiantes adolescentes. *Revista de Psicología del Deporte*, 19 (1) pp. 23-39.
4. Dunton, G. F.; Schneider, M.; Graham, D. J.; Cooper, D. M. (2006). Physical activity, fitness, and physical self-concept in adolescent females. *Pediatric Exercise Science*, 18 (2) pp. 240-251.

Keywords: PHYSICAL SELF-CONCEPT; CARDIOVASCULAR FITNESS; SPORTS PRACTICE.