

International Congress on Sport Sciences &Interdisciplinary research / semi-virtual



11\_12 Nov.

2021

## Effect of Exercise Type on Physical Self-Concept of Students 8-9 Years Old

Poster Presentation

1Azadeh Sharifi-far; 2Farhad Ghadiri; 2Saeed Arsham\*

1M.Sc. in Motor Behavior, Kharazmi University of Tehran, Tehran, Iran

2Assistant Professor in Motor Behavior, Department of Motor behavior, Faculty of Physical Education and Sports Sciences, Kharazmi University, Tehran, Iran(saeedarsham@yahoo.com)

## Abstract

Introduction: This study aimed to study the effect of exercise on children's physical self-concept.

Methods: Therefore, 43 male students aged 8 to 9 years who did not have experience in participating in exercise methods were selected and randomly divided into two groups of resistance and aerobic training. Participants performed their specific exercises for six weeks, three sessions per week, and 60 minutes per session. A physical self-descriptive questionnaire (PSDQ) was applied to collect data.

Results: The results of a mixed analysis of variance to examine the effects of the within-group with the Greenhouse–Geisser correction showed that the time factor is significant for the scores of overall self-concept and physical appearance component of self-concept (P=0.000). Although the general self-concept of both groups improved after exercise, no significant difference was observed between the two groups (P=0.942). Also, the difference between self-concept related to the physical appearance of the two groups was significant (P=0.000), and comparing the trend of changes from pre-test to post-test showed that physical appearance scores decreased in the aerobic group and increased in the resistant group. For the physical ability component of self-concept, the main effect of time was significant (P=0.000), and both groups progressed after exercise. But there was no significant difference between aerobic and resistant groups (P=0.374).

Also, the results paired t-test were significant for each group in general self-concept, the physical appearance, and the physical ability components of self-concept.

Conclusion: In general, the results of this study showed that six weeks of training in both resistant and aerobic groups is associated with a significant increase in the physical ability and physical appearance components of self-concept (P<0.05), and the rate of progress is the same in both groups (P>0.05). While using these exercises to improve and enhance psychological factors in children and adolescents, it is suggested to investigate the effects of other exercise methods in future studies.

## Keywords

Aerobic exercise; Children; Physical self-concept; Physical activity; resistance training

## **Reference:**

1.Leah E. Robinson., et al., (2015). Motor Competence and its Effect on Positive Developmental Trajectories of Health. . Sports Med., publish online: 23 July. DOI 10.1007/s40279-015-0351-6.

2.Lindwall, M., & Lindgren, E. C. (2005). The effects of a 6-month exercise intervention programme on physical self-perceptions and social physique anxiety in non-physically active adolescent Swedish girls. Psychology of Sport and Exercise, 6 (6), 643-658.

3.Marsh. H. W., Martin. A. and Jackson. S. (2010). Introducing a Short Version of the Physical Self-Description Questionnaire: New Strategies, Short-Form Evaluative Criteria, and Applications of Factor Analyses, Journal of sport and exercise psychology. 32, pp: 438-82.

4.Nathanael G. Mitchell JBM, Wendy S. Bibeau, and Kathleen M. Rudasill. (2012). Cardiovascular Fitness Moderates the Relations between Estimates of Obesity and Physical Self-Perceptions in Rural Elementary School Students. Journal of Physical Activity and Health. 9, 288-94.