
Saturday, July 7th, 2018**11:30 - 12:30**

CONCLUSION: Most of the closed skill measures showed a small to moderate relationship with SC performance variables. This may indicate the presence of additional required qualities like cognitive stimulus processing probably affecting SC performance. However, linear sprinting seems to have a large contribution to SC performance which may be related to the slight technical delay of the visual stimulus that likely impair the proper assessment of reactive agility.

EFFECT OF COMBINED AEROBIC AND ANAEROBIC EXERCISE TRAINING ON PSYCHO-BEHAVIORAL CHARACTERISTICS IN BINGE EATING DISORDER

GALASSO, L.1, MONTARULI, A.1,2, BRUNO, E.1,3, CALOGIURI, G.4, MULÈ, A.1, CASTELLI, L.1, CAUMO, A.1, ROVEDA, E.1,2, ESPOSITO, F.1,2

1: UNIVERSITY OF MILAN, MILAN, ITALY; 4: INN UNIVERSITY, ELVERUM, NORWAY

INTRODUCTION: Eating disorders are the most common psychological and physical diseases for young women (Hudson et al., 2007). According to the DSM-5, Binge Eating Disorder (BED) is characterized by frequent and persistent episodes of binge eating followed by a loss of control and marked distress in the absence of regular compensatory behaviors (Galasso et al., 2017).

The aim of this study was to investigate the effects of an exercise training intervention on anthropometric and psychological characteristics, aerobic capacity, and muscle strength in BED patients compared to traditional treatment alone.

METHODS: Twenty participants with diagnosis of BED were recruited from the Department of Clinical Neurosciences at IRCCS San Raffaele Turro in Milan, Italy, and were randomized into a treatment and a control groups. All patients kept their individual weekly multidisciplinary therapy during the study, consisting in traditional BED treatment and nutritional program. Psycho-behavioral characteristics (i.e. amount of binges), anthropometric parameters (body mass and BMI), and exercise capacity (6MWT and Squat Test) were assessed before (PRE) and after (POST) six months of intervention, consisting in a combination of aerobic and anaerobic exercises (CAAET) in addition to the traditional therapy (CAAET group), or a same period with only traditional therapy (CTRL group).

RESULTS: In PRE, the groups resulted homogeneous and there were no statistically significant differences for all variables analyzed. In POST, the CAAET group obtained a significant decrease in the amount of binges, in body mass and BMI, accompanied by an increase in 6MWT and Squat Test. A delta analysis showed that these changes in women of CAAET group were significantly larger than the one observed in the CTRL group, except for the exercise capacity.

CONCLUSION: Our study shows that patients attending a CAAET treatment, in addition to a traditional therapy only, obtain higher improvements in psycho-behavioral sphere. This suggests that the addition of combined exercise training to the traditional BED treatment can generate beneficial effects in obese individuals with BED. The incorporation of exercise training intervention is proposed to be a valuable addition for effective treatment in BED.

REFERENCES: Galasso L et al. (2017). *Sport Sciences for Health*. Article in Press.

Hudson JI et al. (2007). *Biological Psychiatry* 61:348-358.

CONTACT: Letizia.Galasso@unimi.it