

Purpose: It is known that people living in rural or isolated communities spent more time in sedentary activities than those of urban ones.¹ The aim is to examine the impact of specific exercise modalities on physical, physiological, and psychological health outcomes in older adults living in maritime community.

Methods: A physical activity promotion project was developed in remote maritime area of the north-east Adriatic coast (Delta del Po region, Emilia Romagna, Italy). Forty-seven (47) older adults were involved in a dry-land and water exercise intervention promoted by a “Palestra della Salute” recognized by the Emilia Romagna Region and CONI.

Individuals were evaluated for anthropometric (weight, waist circumference, BMI) and functional (VO_{2peak} , and lower limb fluids accumulation) variables. The adherence to the projects were assessed through the rate of participation at the activities proposed.

Results: The sample is constituted by 37 women and 10 men, the 29.6% normal weight, the 55.5% overweight and the 14.8% was obese. The adherence to the program was recorded in 70% ($n = 17$ exercise sessions). The walking test assessed an average value of estimated VO_{2peak} ranged from good to very good (23.8 ± 3.5 to 26.4 ± 3.7 ml/kg/min, $P = 0.009$). Weight reduction from 66.4 ± 9.9 to 65.7 ± 3.9 ($P = 0.006$). Finally, lower limb fluids accumulation significantly decreased from the baseline to 8-week (mean value right and left leg: ranged from 2402 ± 423 to 2348 ± 392 ml $p < 0.0001$).

Conclusions: A physical activity program combining both dry-land and water exercise sessions was effective in promoting active lifestyle even in remote maritime communities more subjected to sedentary behaviors. Cardiovascular fitness improvement and fluids accumulation reduction are potentially related to the transition from sedentary to active lifestyle, even in healthy subjects.

References:

1. Machado-Rodrigues AM, Coelho-E-Silva MJ, Mota J, Padez C, Martins RA, Cumming SP, Riddoch C, Malina RM. Urban-rural contrasts in fitness, physical activity, and sedentary behaviour in adolescents. *Health Promot Int.* 2014 Mar;29(1): 118-29.

How Athletic pursuits shape body image in young adults

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Purpose: Mental health is an important component of overall health, although concerns about body's appearance could affect mental health. Body image (BI) is a multidimensional construct focused on how subjects see, feel, think and behave regarding their bodies. Negative BI is predictors of health-related problems such as depression, weight control and eating disorders. Given the positive impact of sport practice, in particular team sport, on health, this study aimed to evaluate the effect of team sport practice on individual's BI.

Methods: Forty young adults (17 males, 23 females) were allocated in two groups: Team Sport Group (TSG = 20 team sport athletes) and Sedentary Group (SG = 20 sedentary individuals). To assess the subjective and emotional dimensions of BI, subjects were asked to complete the BI Dimensional Assessment (BIDA) questionnaire. BIDA is a neutral silhouette-based scale, ranging from 1.8 to 5.2. Participants had to indicate their perceived and ideal body shape, the most appropriate body shape for their peers and the most appreciated body shape by the opposite sex. Three direct indexes were then calculated: Body Dissatisfaction (BD), Sexual Body Dissatisfaction

(SxBD), Comparative Body Dissatisfaction (CBD). The scores can range between -100% and 100% . Positive values indicate that subjects currently rate their BI higher than idealized levels. To verify differences ($p < 0.05$) in BD, SxBD, CBD in team sport athletes compared to sedentary individuals a multivariate analysis of variance (MANOVA) was applied.

Results: TSG showed significant ($p < 0.05$) lower values for BD ($3.5 \pm 9.3\%$), SxBD ($-1.3 \pm 9.4\%$) and CBD ($-10.8 \pm 8.5\%$) with respect to SG (BD: $12.7 \pm 17.1\%$; SxBD: $10.7 \pm 18.3\%$; CBD: $4.3 \pm 24.7\%$).

Conclusions: Findings confirm the relevant role of sport participation in determining psychological benefits, such as a person's perceptions of body. The TSG reported better perceived BI than sedentary counterparts. Scores of BD and SxBD were higher (positive) in SG than TSG, indicating that perceived body shape of athletes is similar to the ideal and the most appreciated body shape by the opposite sex. Conversely, scores of CBD were lower (negative) in TSG than SG, indicating that perceived body shape is different than the most appropriate body shape for their peers. This difference could be due to athletes tending to resemble the aesthetic ideal of a healthy and appealing physique, which is not achieved by their peers.

Physical performance in masters' students in sport sciences related to the learning approach

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Purpose: Minimum levels of physical activity (PA) prescribed by the World Health Organization are achieved through a variety of modalities. Some are characterized by a cognitive approach, which aims to improve physical skills through a reproductive style, while others are characterized by an ecological-dynamic approach, which optimizes heuristic learning through a productive style. Currently, kinesiologists do not give due importance to the effects on practice levels of different teaching-learning methodology in the two different teaching methods: prescriptive teaching and heuristic learning. The objective is to measure levels of physical performance in the category of future sports kinesiologists and to test whether significant relationships exist between the effects of exercise and the type of approach to learning following individual PA.

Methods: Sample consists of 51 students attending the Master's degree course in Sports Science at the University of Salerno to whom a question was preliminarily administered to divide them into two groups: cognitive (CG) and ecological dynamic (EDG) based on the approach used in PA practice. A battery of quantitative tests was then administered: squat jump (SJ), counter movement jump (CMJ), free arms counter movement jump free arms (FA-CMJ), stiffness test (ST). Finally, a questionnaire was administered with Google Forms containing questions on the following topics: movement mode from one place to another, weekly PA practice and continuous PA practice. Subsequently, the collected data were processed using SPSS software with Chi-square and Student's t-tests for independent samples to verify relationships between variables and differences between performance levels.

Results: 100% ($n = 38/38$) of the respondents used a motorized vehicle every day; 37% of CG and 26% of EDG used motorized vehicles at least once a week ($P < .05$; Cramer V, 591); Bicycle use is very low in both groups and there is no association between group membership and bicycle use ($P > .05$); only 5% of CG and 26% of EDG walked for the entire week ($P = < 0.05$; Cramer V = 0.609); 100% of CG and 79% of EDG practiced PA continuously ($P < 0.05$;