



## The relationship between physical activity, body image, and eating disorders during the COVID-19 pandemic in high-school girls

Oral Presentation

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### Abstract

**Introduction:** Decreased levels of physical activity during the COVID-19 epidemic can cause physical and psychological problems for the individual. Therefore, the aim of this study was to evaluate the relationship between physical activity, body image, and eating disorders during the COVID-19 epidemic in high school girls in Shahrekord, Iran.

**Methods:** This study is a descriptive-analytical cross-sectional study that was completed in cooperation with Shahrekord University (Iran). The statistical population of this study is female high school students in Shahrekord, Iran. Statistical sampling will be performed based on the cluster-random sampling method. Accordingly, the first Farsan city was divided into 6 constituencies (Farsan, Junqan, Babaheidar, Gojan, Pardanjan, Chelicheh) based on its cities. Then a school was randomly selected from each domain. Then, taking into account the share of the student population, they were randomly selected. Who was studying in 2019-2020. In this regard, 535 high school girls (age  $15.95 \pm 1.42$ , weight:  $53.07 \pm 10.01$ , BMI:  $20.14 \pm 3.48$ ) were selected based on cluster-random sampling for participation in the study. Multidimensional body self-relation questionnaires, Beck's physical activity questionnaires, and the eating disorder diagnostic scale were used to collect data. Pearson correlation coefficient was used to establish statistical relationships.

**Results:** The results showed significant positive correlations between body image and physical activity levels ( $r=0.304$ ,  $P=0.001$ ). However, no significant correlations were observed between body image and Anorexia Nervosa ( $r= -0.035$ ,  $P=0.424$ ), Bulimia Nervosa ( $r= -0.033$ ,  $P=0.446$ ) and Binge Eating Disorder ( $r= -0.041$ ,  $P=0.339$ ). There were also no relationships between physical activity and Anorexia Nervosa ( $r= 0.084$ ,  $P=0.052$ ), Bulimia Nervosa ( $r= 0.073$ ,  $P=0.092$ ) and Binge Eating Disorder ( $r= 0.071$ ,  $P=0.099$ ).

**Conclusion:** During the COVID-19 epidemic, physical activity was positively associated with body image but not with eating disorders. Based on the results, physical activity is suggested to improve body image in adolescent girls during the COVID-19 epidemic.

### Keywords

COVID-19; Adolescent; Eating Disorders; Physical activity; Body Image; High School Girls

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