

Association of physical activity and health status with intelligence quotient of high school students in Jeddah

Thanaa El-Kholy, PhD1), Enas Elsayed, PhD2, 3)*

1) Department of Clinical Nutrition, Faculty of Applied Medical Sciences, King Abdulaziz University, Saudi Arabia

2) Department of Physical Therapy, Faculty of Applied Medical Sciences, King Abdulaziz University: P.O. Box 80200, Jeddah 21589, Saudi Arabia

3) Department of Physical Therapy for Neuromuscular Disorders and its Surgery, Faculty of Physical Therapy, Cairo University, Egypt

Abstract

[Purpose] The present study investigated the relationships of physical activity and healthiness with the intelligence quotients of high school students in Jeddah. [Subjects and Methods] A total of 135 male and female students were randomly drawn from public and private secondary schools in Jeddah. A self-designed questionnaire was distributed to the students that included demographic, physical activity, and health status sections. Body mass index measurement and an intelligence quotient test were carried out for all students. In addition, samples of blood were collected to estimate hemoglobin and serum iron. [Results] The highest proportions of males and females (39.1% and 51% respectively) had an intelligence quotient score of more than 75%. Moreover, the findings revealed that about 35% of the students were categorized as overweight obesity, and there was an inverse correlation between body mass index and physical activity. Students who shared physical education classes and exercising at and outside school showed a positive correlation with high IQ scores. Regarding hemoglobin and iron levels, there were significant correlations between their levels in blood and IQ. [Conclusion] The intelligence quotient of adolescent students is positively associated with physical activity and health status.

Key words: Adolescence, Intelligence Quotient, Physical activity