

# The Effect of Body weight, Percentage Body fat and Body Mass Index on Adolescent Academic Performance

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### Abstract :

Studies have been made to evaluate the nutritional status of 110 Nigerian higher institution Physics students and compare it with their performances over a period of one year. Students' weight, Percentage Body Fat (% BF) and Body Mass Index (BMI) were measured using Bioimpedance technique while their performances were determined by finding the Cumulative Grade Point average (CGPA) for all the courses offered. The data were analyzed using Pearson correlation at both 0.01 and 0.05 level of significance for all the subjects (generally) and on the basis of Body Mass Index. While a significant positive correlation was found between the body fat and weight with academic performance ( $r = 0.921$ ,  $r = 0.885$ ) for overweight subjects, a negative significant relationship was obtained between the adolescent academic performance and body fat ( $r = -0.920$ ) as well as body weight ( $r = -0.954$ ) for the obese. The results show that the academic performance of the obese adolescents can strongly be influenced by their body fat and weight after controlling for unobserved heterogeneity. The finding indicates that adolescent obesity may have adverse academic consequences. Thus targeting obesity reduction policies may not only improve health outcomes but also have a positive impact on improving their academic performance and human capital accumulation. [Nature and Science 2010;8(6):36-42]. (ISSN: 1545-0740).

### Key Word :

percentage body fat ; body mass index ; adolescent academic performance

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