

O'Malley, P. M., Johnston, L. D., Delva, J., & Terry-McElrath, Y. M. (2009). School physical activity environment related to student obesity and activity: A national study of schools and students. *Journal of Adolescent Health, 45*(3), S71–S81.

Abstract

Purpose. To explore whether characteristics of the U.S. secondary school physical activity environment are associated with student body mass index (BMI) and physical activity.

Methods. This report uses data from two studies: Monitoring the Future (MTF; an annual nationally representative survey of 8th-, 10th-, and 12th-grade public and private school students) and Youth, Education, and Society (a survey of administrators in schools that have completed their 2-year participation in the MTF study). School policies and programs related to various health issues, including physical education (PE) and sports activity, were examined for relationships with student self-reported height, weight, being active in sports, exercising vigorously, and participating in school athletics.

Results. The results show that in 2004–2007, the percentage of students who attended schools that required PE in their grade differed sharply by grade level: 88% of 8th graders, 48% of 10th graders, and 20% of 12th graders. There were few statistically significant associations between school PE requirements and student BMI. The average percentage of students who participated in interscholastic or varsity sports was associated at the bivariate level with a lower percentage of students being overweight in all three grades. Other measures of PE and sports activity showed varying associations with BMI and physical activity measures.

Conclusions. Relationships between the school physical activity environment and student BMI and physical activity were not uniformly strong. We conclude that, as currently practiced in schools, existing variations in physical activity policies may not be sufficient to produce discernible schoolwide differences; thus, there is a need for more vigorous PE programming than is typically provided.