

## عنوان مقاله:

A study on the relationship between body mass index and participation in planned physical activities and sports in children and youth

## محل انتشار:

یازدهمین کنفرانس بین المللی فناوری های نوآوانه در زمینه علوم ، مهندسی و تکنولوژی (سال: 1401)

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## خلاصه مقاله:

Body mass index (BMI) is a measure of body fat based on height and weight that applies to adult men and women. Body Mass Index (BMI) is a person's weight in kilograms (or pounds) divided by the square of height in meters (or feet). A high BMI can indicate high body fatness. BMI screens for weight categories that may lead to health problems, but it does not diagnose the body fatness or health of an individual. The relationship between sport participation and BMI in children and adolescents is unclear, with some studies showing no association at all and others suggesting that sport is linked to lower BMI. Another possibility, however, is that this relationship is bidirectional, with sport leading to lower BMI but BMI also influencing sport participation. Here, we examine the direction of this association by analyzing a longitudinal dataset. Data come from the Physical Health Activity Study Team (PHAST) study, a prospective open cohort study including ۲۲۷۸ children at baseline, followed from ۲۰۰۴ to ۲۰۱۰. We fit ۳ lagged mixed effects models: One examining the simultaneous relationship, one regressing past BMI on present sport participation, and one regressing sport participation on present BMI. Our baseline sample included ۱۹۹۹ children, of whom ۵۰% were female. Mean BMI increased over the study period from ۱۹.۰ (SD=۳.۷) to ۲۱.۲ (SD=۴.۱), while organized sport participation declined. Model results showed that BMI and sport are weakly associated, and that each of these variables predicts the other, which generally supports a bidirectional relationship. Consistent with some previous reports, however, the effect size in both directions is very small. At the levels of participation in our sample, activity and BMI are very weakly related. Findings should not obscure the other benefits of physical activity.

## کلمات کلیدی:

Sport, BMI, Children

## لینک ثابت مقاله در پایگاه سیویلیکا:

<https://civilica.com/doc/1529454>

