

Poster #12

Research Study

Title: “Associations between Income Level on Physical Activity in US Adolescents in 2014”

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Introduction and Objective. A child’s level of physical activity is influenced by many factors, including socioeconomic status (SES). However, studies on the role of SES on physical activity have provided inconsistent results. Our objective was to examine whether family income level is associated with physical activity levels among US adolescents and to evaluate whether this association is modified by sex or race/ethnicity.

Methods. An analytical cross-sectional study was conducted using data from the Family Life, Activity, Sun, Health, and Eating (FLASHE) survey. Participants were between the ages 12-17 and were excluded if they did not report on their ability to read English or had missing information (n=215), leaving a final sample size of 1401. The exposure variable was income level dichotomized into $< \$100,00$ annual household income and $\geq \$100,000$ /year. The outcome variable was level of frequency of physical activity in previous week, dichotomized into < 3 times being physically active/previous week vs ≥ 3 times being physically active/previous week. Potential effect modifiers included sex and race/ethnicity (non-Hispanic whites, non-Hispanic Blacks, non-Hispanic others, and Hispanics). Covariates included adolescent health status, age, body mass index, access to low-cost recreational facilities, access to sidewalks, perceived health, and hours worked per week. Unadjusted and adjusted logistic regression models were used to calculate odds ratios (OR) and 95% confidence intervals (CI).

Results. No statistically significant interaction between sex and income on physical activity was found. However, there was a statistically significant effect modification by race/ethnicity and thus, the results were stratified according to race/ethnicity. After adjusting for the covariates, low income was associated with an increase in the odds of < 3 workouts/week (OR 1.48, 95% CI 1.05-2.09) in non-Hispanic whites. In Non-Hispanic Others, $< \$100,000$ annual income reduced the odds of low physical activity (OR 0.21, 95%CI 0.06-0.69) compared with Non-Hispanic Others with an annual income of $\geq \$100,000$. Among Non-Hispanic Blacks and Hispanics, no statistically significant associations were found.

Conclusions-Implications. Future research should be conducted to explore potential explanations for why being a member of Non-Hispanic Others, despite being low income, may be seen as a protective factor against low physical activity.