

THE RELATIONSHIP BETWEEN SOCIOECONOMIC STATUS AND OBESITY IN ADOLESCENTS: PHYSICAL INACTIVITY AS A MEDIATOR

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Purpose: Obesity is rapidly increasing in children and adolescents (Kumanyika, 2002). According to Popkin and Udry (1998), over 25% of the US adolescents are obese. Thus, early prevention and treatment of childhood and adolescent obesity are desperately needed. To maximize the effectiveness of prevention requires theory driven interventions based on an adequate and comprehensive conceptual framework. Of particular importance are models that hypothesize the pathways through which risk factors are associated with obesity. However, there is little clarity in understanding moderators or mediators related to obesity. Therefore, the purpose of the study is to investigate the mediating effect of physical activity level on the relationship between parental socioeconomic status (SES) and adolescent obesity. The research questions were: first, is the SES of parents associated with obesity of their child through the mediation of physical activity level? Second, if there is a mediating effect of physical activity level, is it related to adolescent obesity in a year later? **Method:** This study used the National Longitudinal Study of Adolescent Health (Add Health Data). Add Health was the investigation of broad health related behaviors in the national sample of over 12,000 adolescents who were on 7th to 12th graders using a school-based stratified random sampling method. To investigate the mediation effect of physical inactivity, three regression models were constructed. The first model deals with the relationship between a predictor variable, parental SES measured by family income, and an outcome variable, obesity represented by BMI. The associations between the predictor variable and a mediator variable, physical inactivity measured by television viewing hours are examined in the second model. The last model includes two types of associations under the control of the mediator variable: one of them was the relationship between the mediator and the outcome variable, and the other was the association between the predictor and the outcome variable. Regression models are examined separately for in each gender. SOBEL test is employed to confirm the mediation effect. **Findings:** Analyses are in process. Preliminary data analysis using the public dataset of Add Health (subset data) reveals that physical inactivity indicated a partial mediation effect on the pathway between parental SES and obesity of children but only for girls. This suggests that, for girls, physical inactivity affects the relationship between SES and obesity. The results strengthen the need for further investigations aimed at delineating specific gender differences for the relationship between inactivity and obesity. Also, intervention programs to decrease inactivity targeting female adolescents of lower SES groups are warranted.