

Race & Gender Disparities in the Embedding and Accumulation of Childhood Poverty on Young Adult BMI

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ABSTRACT

Purpose: A disproportionate number of race/ethnic minorities are both impoverished and overweight compared to white populations. Experiencing poverty during childhood is positively correlated with being obese in adulthood, especially for females. However, it is unclear whether it is the *embedding* of childhood poverty (i.e. timing of childhood poverty in relation to children's stage of development) or the *accumulation* (i.e. duration) of the exposure to childhood poverty which contributes to the race and gender disparities in young adult body mass index (BMI). **Methods:** Data from the 1979 National Longitudinal Study of Youth and the Children and Young Adult file were used to explore the relationship between the exposure to childhood poverty from prenatal year to age 18 and weight status in young adulthood (N = 3,517). Controlling for the intergenerational transmission of body weight and poverty status in adulthood, logistic regression models stratified by race/ethnicity and gender were used to assess the embedding and accumulation of childhood poverty on body mass index in young adulthood. **Results:** Results indicated that childhood poverty influenced young adult weight status differently depending on the race/ethnicity and gender of the individual. Embedding models indicated that black males who experienced poverty during infancy (i.e. prenatal to age 1) were at greater odds of being obese or overweight (i.e. BMI \geq 25 kg/m²) than normal weight (i.e. BMI 18.5-24.9 kg/m²) in young adulthood. Accumulating models suggest that white, black, and Hispanic females who were exposed to longer durations of poverty during childhood were at greater odds of being obese or overweight than normal weight in young adulthood. **Conclusions:** Helping impoverished families out of poverty may not only improve the immediate economic circumstances of families, but also improve the long-term health status of their children as young adults.

KEY WORDS: Body Mass Index, Disparities, Longitudinal Data, Obesity,
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