## Adolescent Girl's Weight and High School Fertility: The Role of School Context

Jennifer B. Kane Department of Sociology and Population Research Institute Pennsylvania State University University Park, PA 16802 <u>jbuher@pop.psu.edu</u>

Michelle Frisco Department of Sociology and Population Research Institute Pennsylvania State University University Park, PA 16802 <u>mfrisco@pop.psu.edu</u>

Direct correspondence to Jennifer B. Kane, Department of Sociology, Penn State University, 211 Oswald Tower, University Park, PA 16802; (814)865-5276, jbuher@pop.psu.edu. This study uses data from Add Health, a program project designed by J. Richard Udry, Peter S. Bearman, and Kathleen Mullan Harris, and funded by grant P01-HD31921 from the Eunice Kennedy Shriver National Institute of Child Health and Human Development (NICHD), with cooperative funding from 17 other agencies. Special acknowledgment is due Ronald R. Rindfuss and Barbara Entwisle for assistance in the original design. To obtain Add Health data files, contact Add Health, Carolina Population Center, 123 W. Franklin Street, Chapel Hill, NC 27516-2524 (addhealth@unc.edu). No direct support was received from grant P01-HD31921 for this analysis. Instead, the authors received support from the Penn State Population Research Institute, Eunice Kennedy Shriver National Institute of Child Health and Human Development Interdisciplinary Training in Demography (Grant No. T-32HD007514, PI: Gordon DeJong), grant R01 HD40428-02 (PI: Gary Sandefur), and NICHD grant K 12HD055882 (PI: Carol Weisman). Opinions reflect those of the authors and not necessarily those of the granting agencies.

## Abstract

This study's objective is to examine whether school context moderates associations between obesity and timing of first birth among adolescent girls. On the individual level, obesity may delay first birth given its negative association with adolescent romantic and sexual partnership. Conversely, research also suggests that power dynamics in the romantic relationships that obese girls do experience may lead to earlier first births. Risk regulation theory suggests that both of these suppositions may be applicable and dependent on girls' social contexts. That is, social context can either promote or constrain behavior in ways that enhance or reduce the risk that obesity poses for timing of first birth. Using data from a female sample from the National Longitudinal Study of Adolescent Health (Add Health), we estimate whether important aspects of the school environment shape the risk that obesity poses to timing of first birth. On the individual level, we find that obesity is associated with delayed timing of first birth, but the proportion of obese students within a school moderates this risk such that obese girls in schools with a high proportion of obese students are significantly more likely to experience an earlier birth than obese girls in schools with a low proportion of obese students. Findings show how an important population health problem differentially influences an important demographic life course transition within disparate social contexts. The results also have important implications for understanding teen pregnancy. As obesity rises among adolescents across the entire population distribution, our findings suggest that the subpopulation of adolescent girls who are most at risk of having a teen pregnancy may be changing as well-based on both individual characteristics and surrounding social context.

2