PROJECT TITLE: Fit Families: Early Intervention for Children and their Caregivers

INVESTIGATOR: Emily Hill Guseman, PhD

YEAR PROJECT WAS SUPPORTED: 2013-2014

Participants/Subjects: 6 in spring 2014, 27 total from spring 2014-spring 2015

Methods: During the planning phase of this project, Dr. Karen Gaudreault and I had the opportunity to partner with Albany County School District 1 (ACSD1) to offer an after school program to at-risk children and adolescents, and the program was renamed “Healthy Pokes.” Beginning in spring of 2014, we offered one after school option as agreed upon with ACSD1, and one evening option as originally planned. Recruitment for the evening option, that would also have included parents, was unsuccessful. I was involved in the Healthy Pokes program through spring of 2015. Twenty-seven children participated in the program between spring of 2014 and spring of 2015 (three semesters). Children aged 7-14 y, recruited through ACSD1, whose body mass index (BMI) was at or above the 85th percentile for age and sex were invited to participate.

The intervention began with a two-hour orientation and data collection session followed by 8 weekly sessions and a final data collection session. Each weekly session was two hours in duration and consisted of physical activity, nutrition education, and behavioral support. Between each session, participants were asked to keep daily logs of physical activity, screen time, and targeted dietary behaviors. Height, weight, and waist circumference were assessed at the beginning of the program and during week 10. Children also completed a lifestyle and diet questionnaire to assess sedentary behavior, sleep, and dietary habits.

Results: Results presented here are for the 6 participants enrolled in the program in spring 2014, which represents the funded period. Inferential statistics were not computed due to the small sample size. Changes in body size included a mean decrease in BMI of 0.3 kg/m2 and a mean decrease in BMI percentile of 0.1%. Waist circumference increased an average of 4.2 cm. Total screen time per day decreased an average of 36 minutes; however, no participants met screen time recommendations of < 2h/day. Physical activity did not change.

Limitations: The small sample size during the time Dr. Guseman was involved in the project limits publication of these results.

Conclusions: Recruitment through local physicians proved to be unsuccessful, but was managed by working with ACSD1. Additionally, it seems that an afterschool program is more feasible in Laramie than the evening program (including parents) that was originally planned.

Future Research & Dissemination: Dr. Guseman published one paper associated with this project, in cooperation with Dr. Gaudreault and two students (below). Subsequently, Dr. Guseman has shifted the focus of this family-based approach to studies of 2-5 year-old children and their primary caregivers in an effort to identify factors associated with early risk for obesity and develop effective family-based interventions.