



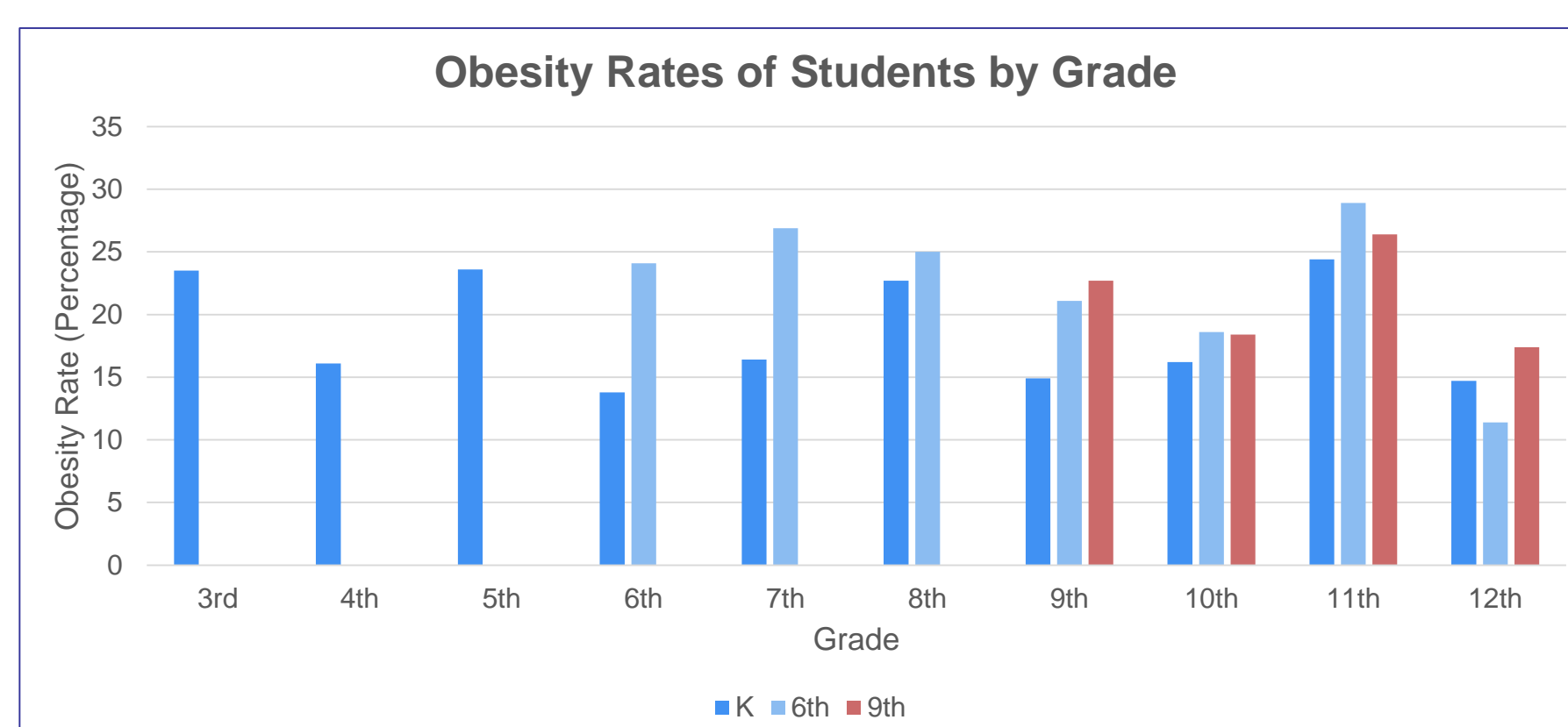
Running to Reduce Obesity in a Rural School

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Background

Obesity in children is increasing in prevalence. In one Illinois rural school district, prevalence of overweight children increased by nearly 10% in 8 years, rising to 43%. The obesity rate in sixth grade is 22%, higher than the national rate of 18.4%. Obesity is defined as BMI >95th %.



Supporting Evidence

Obesity prevalence increased 4% in 17 years. Approximately 1 in 5 U.S. children are obese (Skinner, Ravanbakht, Skelton, Perrin, & Armstrong, 2018).

Obesity and inadequate physical activity contribute to Type 2 diabetes mellitus, asthma, hypertension, and bullying (CDC, 2016; US Preventive Services Task Force, 2017).

School-based physical activity interventions reduce obesity (Ickes, McMullen, Haider, & Sharma, 2014; Jones, Kelly, Cliff, Batterham, & Okely, 2015) and improve physical fitness (Cluss et al., 2016; Mears & Jago, 2016).

Purpose

To evaluate an established program of 8 years to determine the impact on obesity rates utilizing student BMI data on file.

Methods

- BMI collected from K, 6th, & 9th grade school physicals utilizing record review
- Record review of sports physicals from 6th-12th grades
- Two-group retrospective design
- Two-group pre/post test design

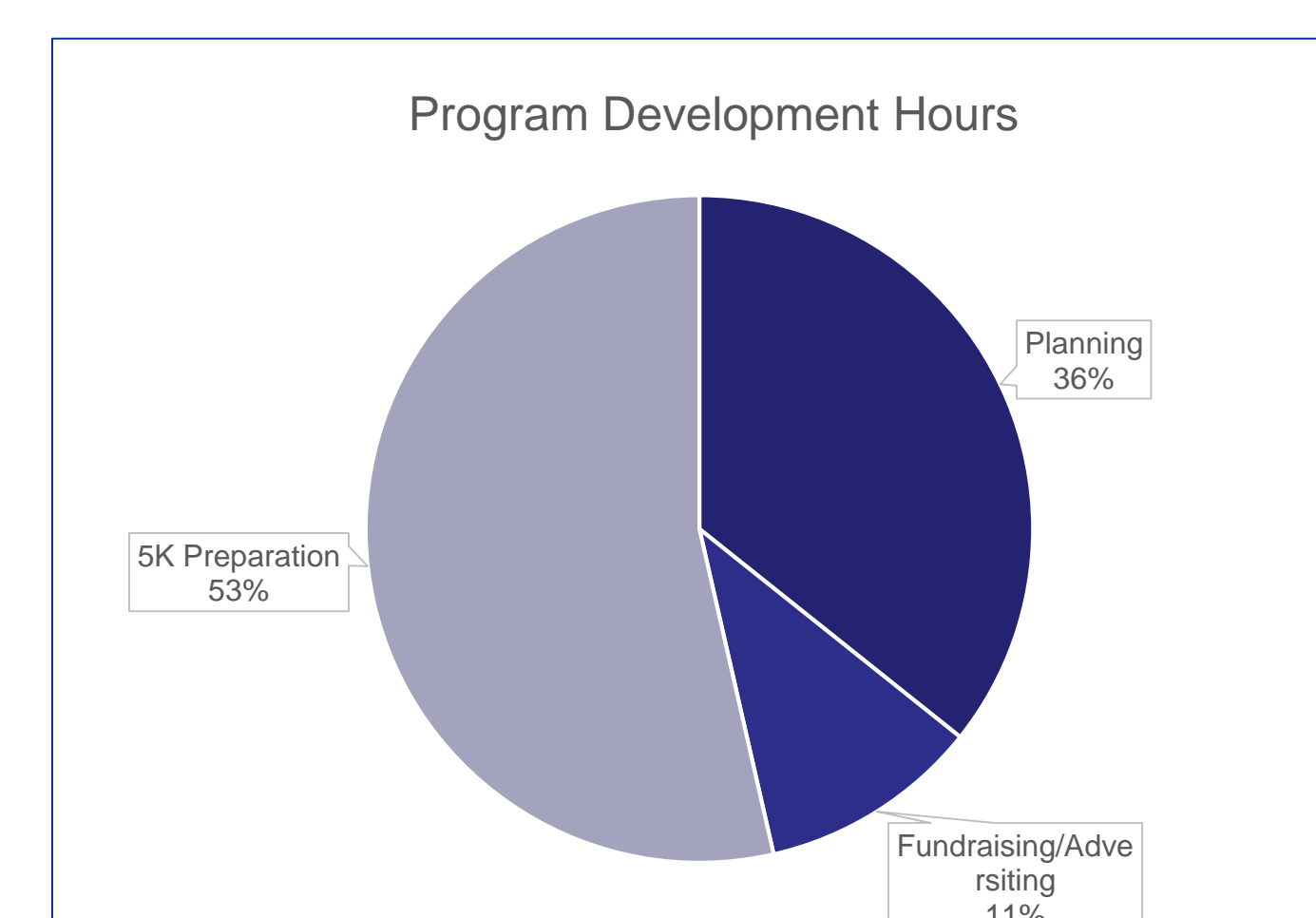
Objectives

- Appraise impact of running program on student's BMI
- Illustrate obesity prevalence in one school
- Examine participation in physical activity throughout schooling

Intervention

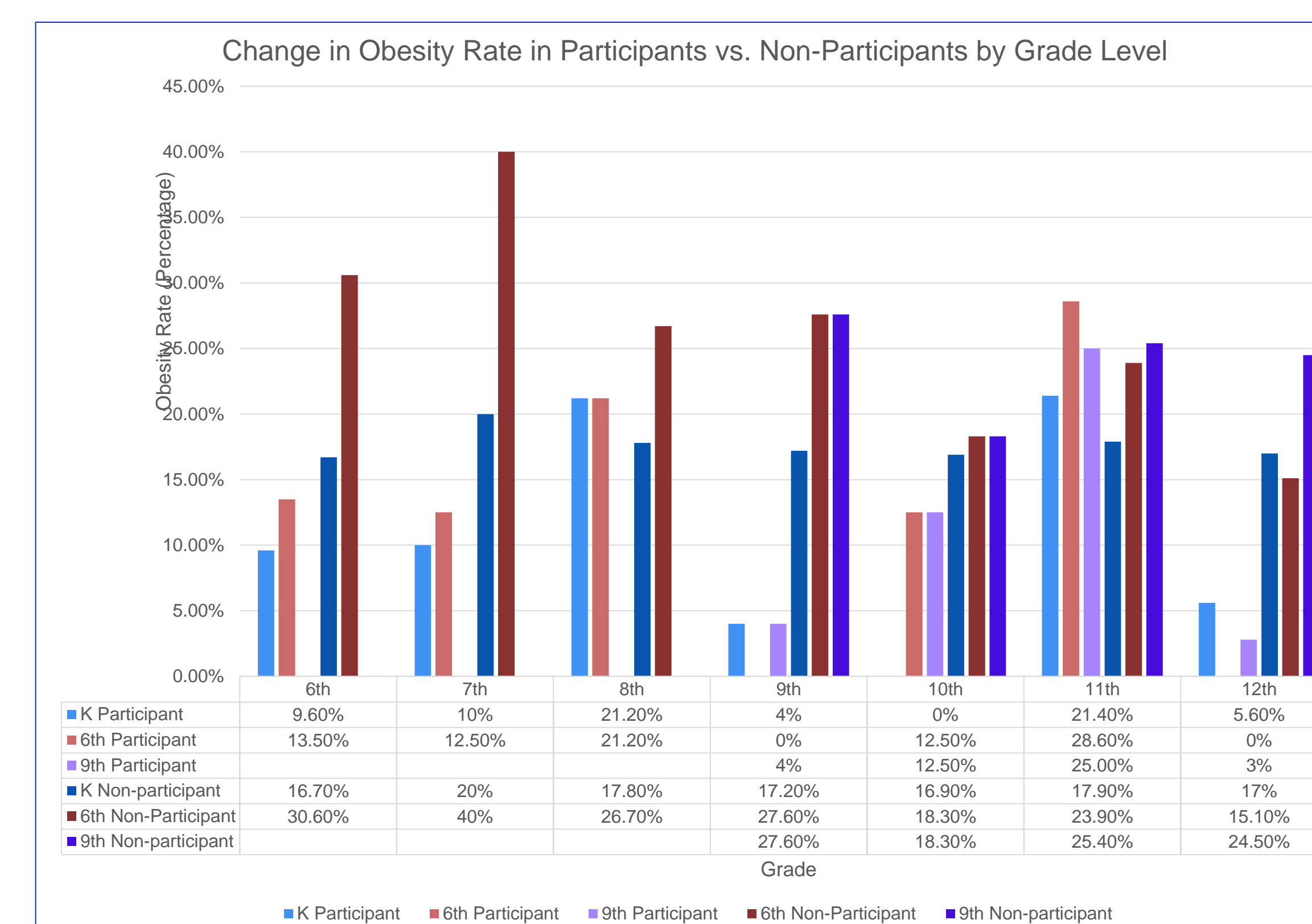
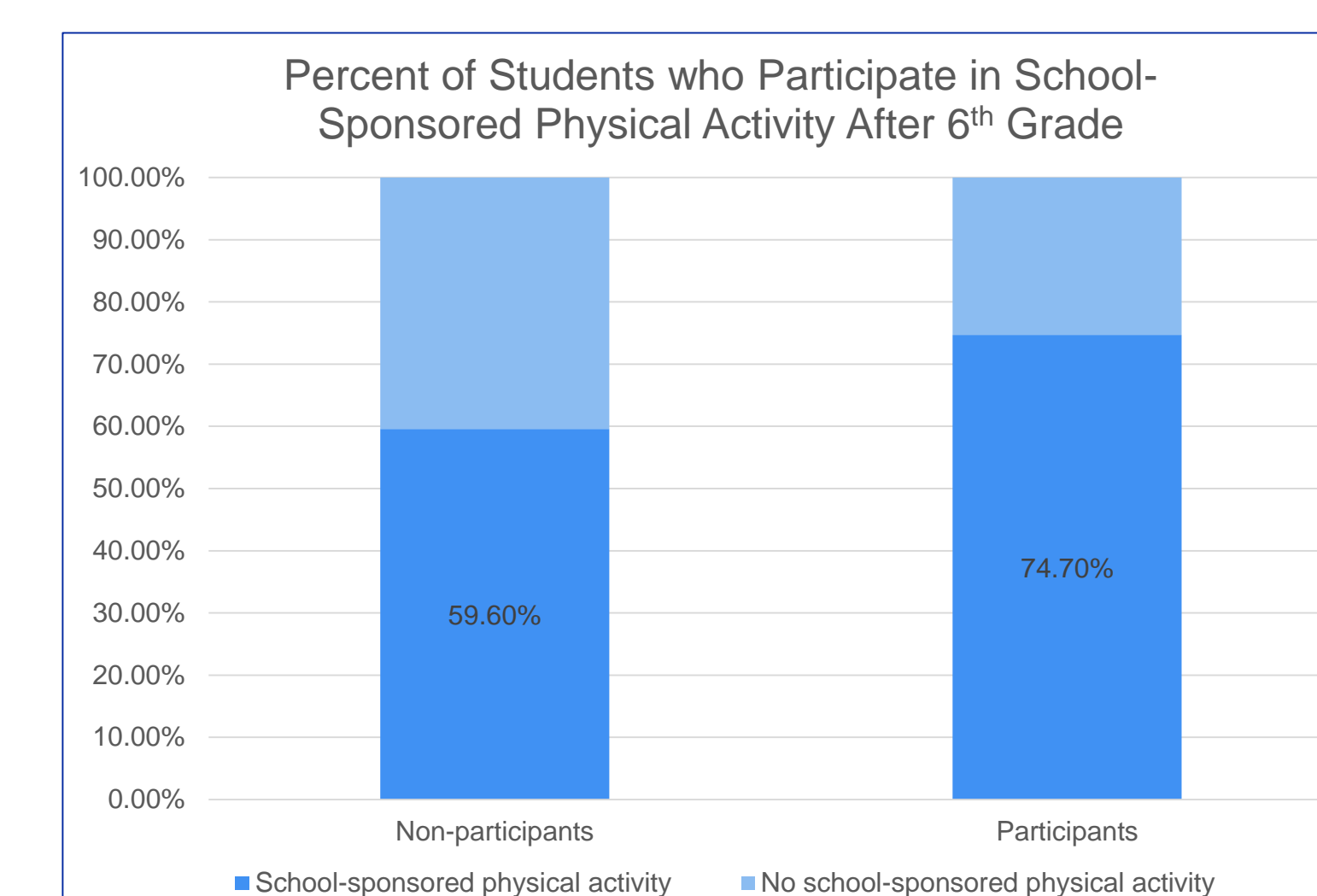
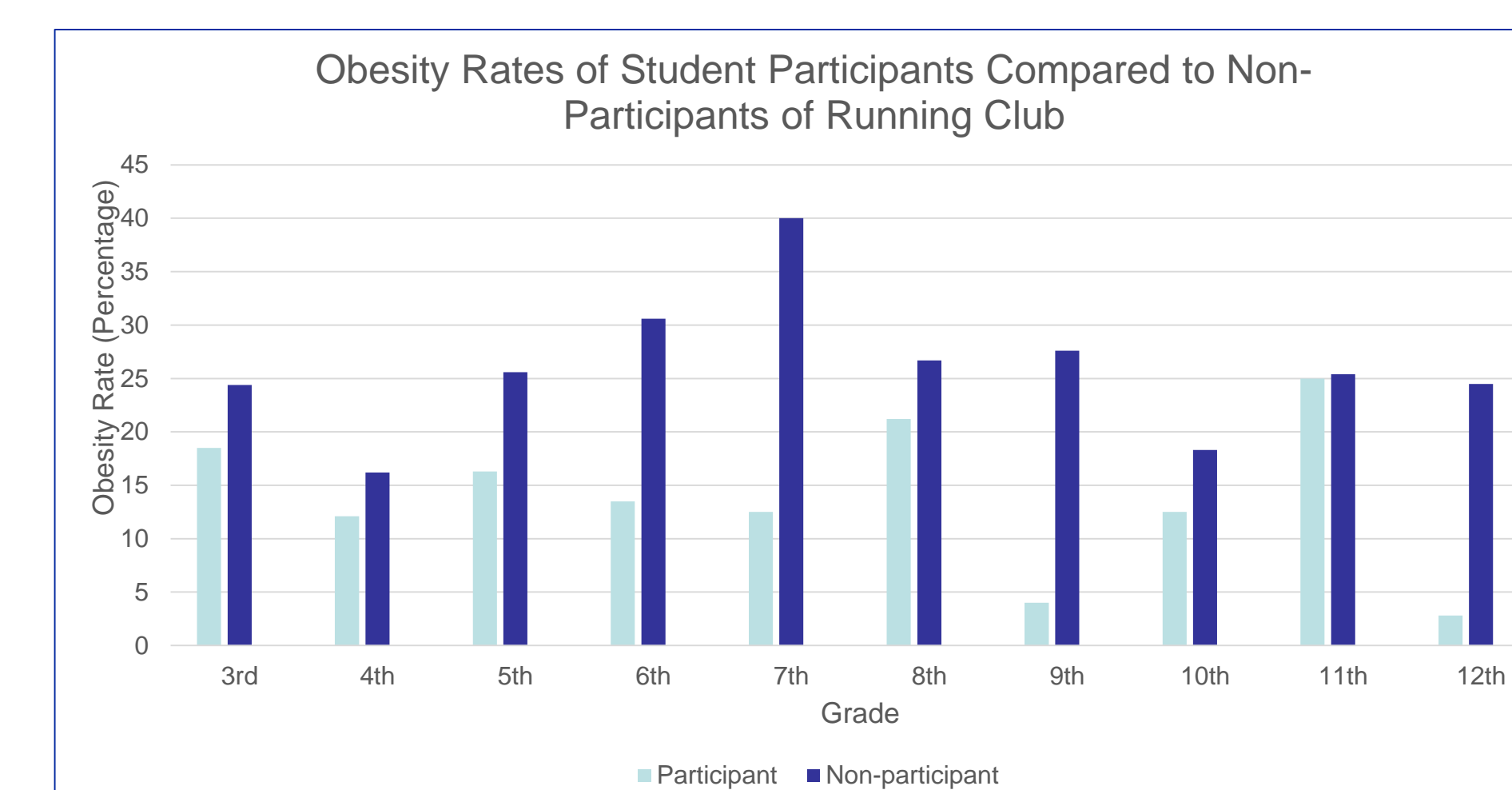
8-week after school Running Club

- 3rd through 6th grade students
- Met 2 days/week for an hour
- Focused on stretching and endurance
- Coordinated by school nurse and volunteers
- Culminating 5K school/community event



Evaluation

- Evaluation results provide impetus for improving the clinical practice of school nursing through implementation of similar physical fitness programs to decrease obesity rates.

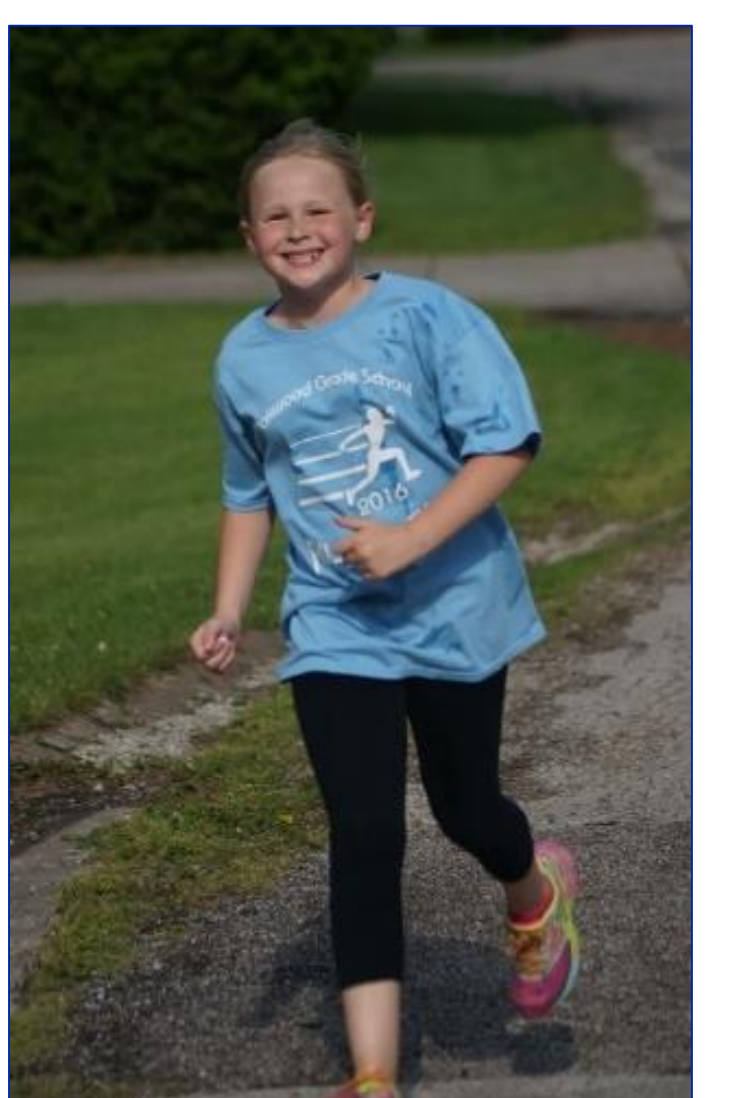


Limitations

- Not all data points were available for some students per record review
- Limited reliability of obesity measurement; BMI does not differentiate between muscle and adipose

Next Steps

- Expansion of the program to include 1st and 2nd grade to start physical fitness interventions earlier.
- Explore strategies to recruit participants with higher BMI.



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