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Fall 11-18-2020

Effectiveness of school-based exercise programs on childhood obesity

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Newman, Amanda and Deacon, Hannah, "Effectiveness of school-based exercise programs on childhood obesity" (2020). *Fall Showcase for Research and Creative Inquiry*. 52.
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In school-aged children, what is the effect of a school-based physical activity programs on a reduction in the incidence of childhood obesity compared with no intervention within 1 school year?

By: Amanda Newman and Hannah Deacon

Abstract

- Childhood obesity has increased over the last 4 decades (Love et al., 2019)
- 17% of children are obese (Sanyaolu et al., 2019)
- Children spend time at school, so school-based programs are ideal (Liu et al., 2019)

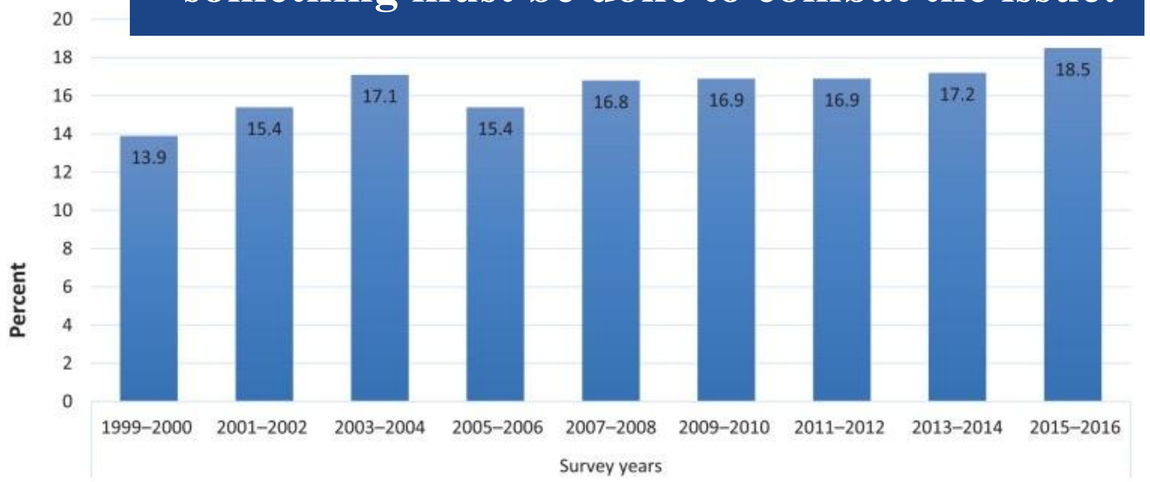
Introduction

- The AMA's recent obesity policy agrees that increased attention to the current childhood obesity epidemic is crucial
  - Childhood obesity leads to adulthood obesity
- Preventing and treating obesity should be a priority
- (Messiah et al., 2015)

Methods

- Phase 1: DVD shown to kids to increase awareness
- Phase 2: first 4 weeks Students used child-sized gym equipment for circuit training sessions during PE class, optional times were through the school day
  - Students met goals to receive prizes
- (Griffiths & Griffiths, 2019).

Percentage of obesity throughout the years have stayed at a high rate, it is clear something must be done to combat the issue!



Uncontrolled childhood obesity can lead to these complications in adulthood (Mabli et al., 2020)

Graphics: (Sanyaolu et al., 2019)

Evaluation & Analysis

- Students complete physical fitness tests that were administered in class after phase 1 (January) and at the end of phase 2 (end of school year-July)
- Health professionals advocate school-based interventions is an effective method to increase physical activity levels
- (Griffiths & Griffiths, 2019)

Conclusion & Implications for Future Research

- How can school help combat childhood obesity?
  - Provide structure with recess and gym class
  - Implement programs to help combat childhood obesity
  - (Tucker & Lanningham-Foster, 2015)
  - Offer PE classes and PA during recess
  - Staff can contribute to the delivery of interventions
  - Primary school education is compulsory for all children in most countries and with different ethnic backgrounds (Lambrinou et al., 2020)
- Studies show overweight participants significantly decreased BMI scores and improved their fitness levels, cardiovascular health, and health and wellness knowledge over one school year (Messiah et al., 2015)

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