



# Childhood Obesity in Relation to Screen Time

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## Abstract

**Objective:** analyze the correlation of the rate of increased childhood obesity on the increased rate of screen time

**Design:** Non-Experimental, Longitudinal Correlation

**Setting:** Midwestern homes

**Participation:** Midwestern homes in Kansas

**Results/conclusions:** Pending results and data collection

## Introduction

As technology advances, the world population is seeing an alarming increase in childhood obesity (Vernikoff, 2017). This epidemic could be occurring for a variety of reasons including the expanse of fast-food chains, the growth of the lower class impacting the quality of food being presented to children, or simply genetics and race playing a factor. However, the most feasible reason children's BMIs are increasing is related to advancing technology and the increasing time children are spending in front of screens. As electronic entertainment becomes more diverse and more available, more children are participating in sedentary activities and lifestyles rather than partaking in the more active and enriching lifestyles that previous generations embraced (Bakour, 2022). The goal of this study is to support the thesis that the main reason childhood obesity rates are increasing is due to the amount of time they spend in front of screens.

## Purpose Statement

The purpose of this study is to compare the rates of screen time utilized by children with the rates obesity seen in children.

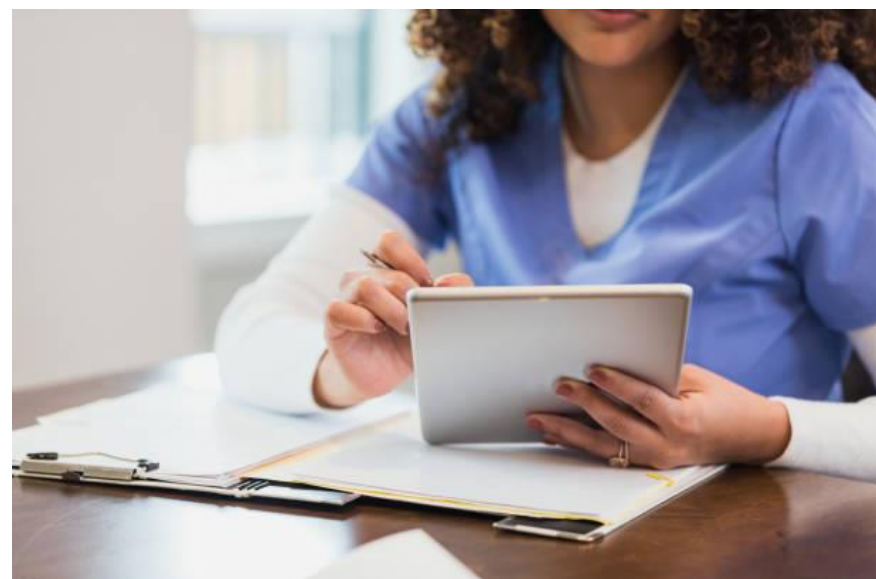
## Key Terms

**Children's use of greater than or equal to three hours of screen time for entertainment:** the increasingly popular method of entertainment used by parents for children that requires minimal physical activity.

**Childhood obesity:** a rapidly developing issue seen across the world, defined by being in the 95th percentile of weight among children of the same age (Robinson, 2017).

## Framework

The Kathryn Barnard Child Interaction Theory (2022) focuses on the importance of parents picking up on cues from their children starting at birth. The importance of this in our study is highlighting the cues of impending obese characteristics in childhood, and how the parent can adapt to make them more active.



<https://www.istockphoto.com/photo/nurse-uses-digital-tablet-during-home-visit-gm1314076199-402405914?phrase=nurse+reading&searchscope=image%2Cfilm>

## Methodology

### Proposed RQ

In children, how does less than three hours of screen time per day compared to three or more hours of screen time per day influence childhood obesity over two years?

### Research Design

Non-Experimental, Longitudinal Correlation

This study looks at childhood obesity rates in relation to use of screens for entertainment

### Interventions

**IV:** Use of three or more hours of screen time by children as means for entertainment

**DV:** Incidences of obesity in children

### Literature Sources

This study was conducted by using a non-experimental correlation approach because of the relationship noted between the use of screens for children's entertainment and the rising incidences of childhood obesity (Vernikoff, 2017). This study will span over two years in order to produce the most reliable and accurate result possible, given the extensive amount of data and studies available to be analyzed (Fang et al., 2019).

### Data Collection

N= 100

n= 50 families who utilize equal to or greater than three hours of screen time per day for means of activity

n= 50 families who utilize less than three hours of screen time per day for means of activity

Over the course of two years, this study compares the childhood obesity rates between 50 families that utilize greater than or equal to three hours of screen time per day as means for activity and distraction in adolescence and 50 families that utilize less than three hours of screen time at all in adolescence. The results will be obtained by closely following and monitoring the children's weights compared to the amount of daily screen time throughout the two years. The data will be compared and analyzed for differences shown in a data chart at the end of the study.

### Sample

Families in Midwest Kansas with children ages 5-13 who utilize screen entertainment.

### Ethical Considerations

Seeking full review from Hays Medical Center, Fort Hays State University Department of Nursing and Fort Hays State University, IRB.

## Results/Findings

### Projected Data Analysis Method

For this study, an independent chi-square test will be utilized to compare the incidence of childhood obesity between two independent groups. These independent groups are children who spend more than three hours per day on screens each and ones who spend less than that each day. The predicted results from this study are three or greater than three hours of screen time used by children per day will increase the incidence of obesity.



<https://www.istockphoto.com/photo/measures-weight-gm530202939-54706090?phrase=child+on+scale&searchscope=image%2Cfilm>

### Literature Findings

The results of the analysis show that children partaking in the highest category of screen time are 1.27% more likely to develop obesity (Haghjoo et al., 2022). The results also show that other factors such as race and socioeconomic status may play a role as well, which opens the door to a whole new world of issues affecting our youth (Vernikoff, 2017).



<https://www.istockphoto.com/photo/unhealthy-eating-gm155073233-17581058>

## Discussion

To help eradicate this epidemic, the need for our nurses to be well educated and trained is of the upmost importance. The nurse's job in this study will be to provide meticulous education to parents and children, highlighting the ways to avoid this dilemma. It is more important now than ever for all members of the healthcare team to step up and decrease screen time use exceeding three hours per day.

## Conclusion

Pending results and data collection. Studies have shown that children exposed to three hours of more of screen time during childhood directly affect the increasing rates of obesity in childhood. Future studies should focus on continuing to examine the correlation of increased screen time and childhood obesity. This validity of this study could be improved by researching with families all over the world, and not just Midwestern Kansas.

## References

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