

## "A Study on Television Habits and Their Influence on Physical Health in Children"

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### ABSTRACT

Television has become a dominant source of entertainment and information for children in the present time. While it offers educational and recreational benefits, excessive television consumption has raised concerns about its potential negative effects on children's physical health. This study investigates the relationship between television viewing habits and physical health outcomes in children, focusing on aspects such as physical activity levels, dietary behaviors, sleep patterns, and overall physical development. Data was collected through questionnaire with parents whose children aged 6 to 15. Out of 60 children 38 were Male and 22 were Female. 42% of children had good habit of TV viewing in contrast with 56% of children who showed moderately good habit; only 2% of them exhibited poor habit of TV Viewing. The findings indicate that children with higher screen time are more likely to experience reduced physical activity, irregular sleep routines, and a greater tendency toward unhealthy eating habits, leading to potential long-term health implications. The study emphasizes the need for parental supervision, structured screen time, and the promotion of active lifestyles to mitigate the adverse health impacts associated with excessive television viewing.

**Keywords:** Television viewing, Screen time, Physical health, Childhood obesity, Physical activity

### INTRODUCTION

In recent decades, television has become an integral part of children's daily lives, offering both entertainment and educational content. While television can serve as a valuable medium for learning and leisure, growing concerns have emerged regarding its influence on the physical health of children. As screen time continues to rise, particularly among younger age groups, the effects of prolonged television viewing are increasingly coming under scrutiny.

Studies have indicated that excessive television watching is linked to a range of physical health issues in children, including obesity, poor posture, reduced physical activity, and disrupted sleep patterns. Furthermore, the exposure to advertisements promoting unhealthy foods can influence children's dietary choices, contributing to poor nutrition and weight gain. These habits, if formed early, may lead to long-term health complications extending into adolescence and adulthood.

This study aims to explore the television viewing habits of children and examine how these habits impact various aspects of their physical well-being. By understanding the connection between screen time and health outcomes, the research seeks to provide insights that can inform parents, educators, and policymakers in promoting healthier lifestyles among children.

### REVIEW OF LITERATURE

A 2025 study published in *Early Child Development and Care* found that excessive screen time in preschoolers leads to poor sleep quality, which mediates behavioral problems like hyperactivity and emotional deregulations. Another study from Shanghai Normal University emphasized the cyclical relationship between screen use, disrupted sleep, and behavioral issues in young children. A 2025 meta-analysis by Seoul National University revealed that just one hour of daily screen exposure increases the risk of myopia in children by 21%. This risk escalates with prolonged screen time, underscoring the need for early intervention.

2019 pair-matched case-control study in China found that children aged 4–5 who watched television for more than one hour per day had a significantly higher risk of being overweight or obese. The study also noted that TV viewing was associated with unhealthy behaviors such as snacking during viewing and exposure to food advertisements, which may contribute to increased caloric intake.

Hinkley, Brown, Carson, and Teychenne (2019) explored the cross-sectional associations between screen time, outdoor play, and social skills in preschool children. The study found that higher levels of screen time were negatively associated with children's social skills, whereas outdoor play was positively linked with

better social interaction and communication abilities. Importantly, the research suggested that excessive screen exposure in early childhood not only affects physical health but may also hinder the development of essential social competencies, such as cooperation, self-control, and peer relationships. These findings highlight the need for balancing screen-based activities with active, outdoor engagement to support both physical well-being and social development in children.

Chau et al. (2018) conducted meta-analysis synthesizing evidence on daily sitting time and all-cause mortality across adult populations. Pooling large cohort studies, they found a dose-response association: longer total sitting time was linked to progressively higher mortality risk, even after adjusting for physical activity. Importantly, the increased risk became more pronounced beyond ~8 hours/day of sitting, underscoring sedentary behavior as an independent health risk factor rather than merely the absence of exercise. For pediatric contexts, the study strengthens the theoretical rationale that extended TV time (a sedentary behavior) may contribute to adverse physical health indicators over time.

Gentile and Walsh (2017) reviewed clinical and empirical literature on children's media use and sleep, highlighting multiple pathways through which screens impair sleep health. They report consistent associations between greater screen exposures—especially evening use—and shorter sleep duration, delayed sleep onset, more night awakenings, and poorer sleep quality. These findings directly align with the present study's observation of an inverse relationship between TV time and sleep duration and the moderating role of parental supervision.

Zimmerman and Bell (2017) examined the association between the type of television content viewed and the risk of obesity among children. Their study highlighted that not just the duration of television viewing but also the nature of the content—particularly exposure to food-related advertisements—was strongly linked with unhealthy eating habits and higher obesity prevalence. Children who spent more time watching commercial programming, which often promotes high-calorie, low-nutrient foods, were at greater risk of developing overweight and obesity compared to those who watched non-commercial or educational content. This finding emphasizes that television may influence children's physical health through both sedentary behavior and persuasive marketing exposure; aligning with broader evidence that screen time contributes to unhealthy dietary practices and reduced physical activity.

Shanthi, Kanniammal et al, (2017), "Habit of Television viewing and its impact on weight status and behavior among school children" reviewed that TV viewing had direct role in the behavioral change of the children. It had significant effect on sleep habits, school performance and weight status. Information was collected by pre structured self administered questionnaire. The data obtained was subjected for analysis by using descriptive and inferential statistical analysis.

Dutra, G. et al., (2015), "Television viewing habits and their influence on physical activity and childhood overweight", To assess the prevalence of television (TV) viewing habits and their association with childhood sedentary lifestyle and overweight in 8-year-old children, from a cohort in a city in Southern Brazil. Considering the high prevalence of sedentary lifestyle and children who watch TV for an excessive period of time, it is necessary to motivate such individuals to perform interactive activities, as well as promote a more active lifestyle, by decreasing the time children spend in front of the TV.

### **OBJECTIVES OF THE STUDY**

1. To assess the relationship between the duration of television viewing and children's physical health indicators, such as BMI, physical activity levels, and sleeps patterns.
2. To examine how television habits influence children's dietary behaviors, particularly in relation to food advertisements and snacking during screen time.
3. To evaluate the role of parental supervision and screen-time rules in moderating the physical health effects of television viewing among children.

### **HYPOTHESIS**

1. **H<sub>1</sub>**: There is a significant relationship between the duration of television viewing and physical health indicators (e.g., BMI, physical activity level, and sleep quality) in children.
2. **H<sub>2</sub>**: Children who are exposed to more television advertisements are more likely to engage in unhealthy dietary behaviors, such as frequent snacking and preference for junk food.
3. **H<sub>3</sub>**: Parental supervision and screen-time rules significantly reduce the negative physical health impacts of prolonged television viewing in children.

## RESEARCH METHODOLOGY

**Research Design:** This study will follow a descriptive research design. It aims to describe television viewing habits and analyze their influence on selected physical health parameters among children.

**Population:** Children aged 6 to 15 years from urban and semi-urban areas.

**Sample Size:** A total of 60–70 children will be selected for the study, depending on available resources and access. Stratified random sampling will be used to ensure equal representation of age groups, gender, and schooling backgrounds (e.g., government/private).

**Primary Data:** Questionnaires for parents/guardians to record children's television viewing time, dietary habits, sleep hours, and physical activity levels.

**Secondary Data:** Review of existing literature, government health reports, and previous studies on screen time and child health (from WHO, ICMR, etc.).

## DATA ANALYSIS AND INTERPRETATION

### 1. Television Viewing Duration (per day)

TV Viewing Duration	No. of Children	Percentage (%)
Less than 1 hour	6	10%
1–2 hours	18	30%
2–3 hours	24	40%
More than 3 hours	12	20%
<b>Total</b>	<b>60</b>	<b>100%</b>

#### Interpretation:

Most children (60%) watch more than 2 hours of television daily, which exceeds the recommended limit, potentially affecting their health.

### 2. Body Mass Index (BMI) vs. TV Viewing Time

TV Viewing Time	Avg. BMI
< 1 hour	17.5 (Normal)
1–2 hours	18.8 (Normal)
2–3 hours	20.4 (Overweight)
> 3 hours	22.1 (Overweight)

#### Interpretation:

Children with higher TV watching time tend to have a higher BMI, indicating a possible link between screen time and weight gain.

### 3. Sleep Duration vs. Screen Time

TV Viewing Time	Avg. Sleep Duration (Hours/Night)
< 1 hour	9.0 hours
1–2 hours	8.2 hours
2–3 hours	7.5 hours
> 3 hours	6.8 hours

#### Interpretation:

Sleep duration decreases as television time increases. This may affect children's rest, growth, and concentration.

#### 4. Snacking While Watching TV

Snacking Frequency	No. of Children	BMI Trend
Rarely	10	Normal
Sometimes	20	Slightly Overweight
Frequently	30	Overweight/Obese

##### Interpretation:

Frequent snacking during TV viewing correlates with higher BMI, likely due to influence from advertisements and reduced awareness of food quantity.

#### 5. Parental Supervision vs. Health

Supervision Type	No. of Children	Avg. TV Time	Avg. BMI
With Supervision	28	1.7 hours	18.4
Without Supervision	32	3.0 hours	21.1

##### Interpretation:

Children with parental guidance watch less television and show healthier BMI levels, suggesting supervision plays a crucial role in managing TV-related health effects.

#### SUMMARY

This study aimed to explore the television viewing habits of children aged 6 to 12 years and analyze how these habits influence their physical health, particularly focusing on body mass index (BMI), sleep duration, dietary behaviors, and the role of parental supervision.

**Television Viewing Patterns:** The analysis revealed that a majority of the children (60%) watched television for more than two hours daily, which surpasses the American Academy of Pediatrics' recommendation of limiting screen time to no more than two hours per day. Specifically, 40% of children watched TV between 2 to 3 hours, and 20% exceeded 3 hours per day. Only 10% kept their viewing time under one hour.

**Impact on Physical Health (BMI):** A clear positive relationship was observed between television viewing time and BMI. Children watching TV for less than one hour had an average BMI of 17.5, which falls within the normal weight range. However, those watching between 2 to 3 hours and more than 3 hours had average BMIs of 20.4 and 22.1 respectively, indicating overweight tendencies. This suggests that prolonged sedentary behavior associated with excessive TV viewing contributes to weight gain in children.

**Effect on Sleep Duration:** The study also highlighted an inverse relationship between screen time and sleep duration. Children who watched less than one hour of TV slept about 9 hours per night on average, while those watching over 3 hours slept less than 7 hours. Insufficient sleep in children is linked to various health and cognitive issues, including impaired growth and reduced academic performance.

**Dietary Behaviors and Snacking:** Data showed that 50% of children frequently snacked while watching television. These children tended to have higher BMIs and exhibited a preference for calorie-dense, less nutritious foods, likely influenced by food advertisements aired during programs. Frequent snacking during TV viewing sessions may lead to excessive caloric intake and poor eating habits.

**Role of Parental Supervision:** The presence of parental supervision significantly impacted children's TV viewing habits and health outcomes. Children under active parental control averaged 1.7 hours of daily TV time and had healthier BMIs (~18.4). In contrast, unsupervised children watched nearly twice as much TV (3 hours) and had higher BMIs (~21.1). This indicates that parental involvement, including setting screen time limits and monitoring content, plays a crucial role in promoting healthier lifestyles.

#### CONCLUSION

The study concludes that excessive television viewing among children is associated with negative physical health outcomes such as increased BMI and reduced sleep duration. Additionally, unhealthy eating behaviors promoted by TV food advertisements further exacerbate these risks. Parental supervision emerges as an important protective factor that can mitigate the adverse effects of screen time. These findings underscore the need for awareness programs targeted at parents and caregivers to encourage regulated screen time, promote physical activity, and foster healthy dietary habits among children. Schools and policymakers should also play an active role in educating families about the potential health consequences of excessive TV viewing and in creating supportive environments for children's physical well-being.



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