

Does Childhood Television Viewing Lead to Attention Problems in Adolescence?

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FROM ABSTRACT

CONTEXT.

There is controversy over whether childhood television viewing causes attention problems.

The objective of this study was to assess this association.

DESIGN, PARTICIPANTS, AND SETTING.

Study members were a general population birth cohort of 1,037 participants (502 female) born in Dunedin, New Zealand, between April 1972 and March 1973.

Parental estimates of children's television-viewing time were obtained at ages 5, 7, 9, and 11 years.

Self-, parent-, and teacher-reported attention problems in adolescence were obtained at ages 13 and 15 years.

RESULTS.

The mean of hours of television viewing during childhood was associated with symptoms of attention problems in adolescence.

These associations remained significant after controlling for gender, attention problems in early childhood, cognitive ability at 5 years of age, and childhood socioeconomic status.

CONCLUSIONS.

Childhood television viewing was associated with attention problems in adolescence, independent of early attention problems and other confounders.

These results support the hypothesis that childhood television viewing may contribute to the development of attention problems and suggest that the effects may be long-lasting.

THESE AUTHORS ALSO NOTE:

"There is widespread concern about the increasing prevalence of attention problems in children."

Excessive television viewing is a possible cause of attention problems in children.

"It has been suggested that television is so exciting that real-life tasks, such as schoolwork, may seem boring by comparison, leading to difficulties in maintaining attention."

"The rapid sequence changes during television programs may influence neurologic development."

RESULTS

In this study, "childhood television viewing predicted adolescent attention problems."

There was a 0.09-SD increase in attention problems for every 50 minutes of television viewing.

For each hour of television viewing, the odds ratio for high attention problems in adolescence was increased by 43%.

"Those who watched >2 hours, and particularly those who watched >3 hours, of television per day during childhood had above-average symptoms of attention problems in adolescence."

DISCUSSION

"In this general population longitudinal study, we found that a greater number of hours of childhood television viewing was associated with attention problems in adolescence."

"These findings lend support to the hypothesis that childhood television viewing may contribute to the development of attention problems."

"Both childhood and adolescent television viewing independently predicted attention problems in adolescence. This suggests that the effects of childhood viewing on attention may be long lasting and largely independent of the continuity of television viewing into adolescence."

"Because there is considerable brain plasticity during the first few years after birth, the rapid image and scene changes commonly found in television may overstimulate the child and adversely affect brain development. If this is true, we might expect very young children to be particularly vulnerable to these effects."

"Another explanation is that life as portrayed on television with its fast-paced editing and attention-grabbing techniques makes reality seem boring by

comparison. Hence, children who watch a lot of television may become less tolerant of slower-paced and more mundane tasks, such as school work."

"Television viewing displaces other activities that promote and encourage attention, such as reading, games, sports, and play." **[Important]**

"The adverse effects of television may be cumulative."

Because attention problems are known to be an important predictor of poor educational achievement and has been implicated in poor socialization, it is "prudent to observe the recommendation of the American Academy of Pediatrics to limit children's television viewing to a maximum of 2 hours per day."

CONCLUSIONS

"We found a prospective association between childhood television viewing and attention problems in adolescence."

"The results support the hypothesis that excessive television viewing may lead to attention problems in children and adolescents."

KEY POINTS FROM DAN MURPHY

- 1) "There is widespread concern about the increasing prevalence of attention problems in children."
- 2) Excessive television viewing is a possible cause of attention problems in children.
- 3) "It has been suggested that television is so exciting that real-life tasks, such as schoolwork, may seem boring by comparison, leading to difficulties in maintaining attention."
- 4) "The rapid sequence changes during television programs may influence neurologic development."
- 5) In this study, "childhood television viewing predicted adolescent attention problems."
- 6) For each hour of television viewing, the odds ratio for high attention problems in adolescence was increased by 43%.
- 7) "Those who watched >2 hours, and particularly those who watched >3 hours, of television per day during childhood had above-average symptoms of attention problems in adolescence."

- 8) These authors “found that a greater number of hours of childhood television viewing was associated with attention problems in adolescence.”
- 9) “These findings lend support to the hypothesis that childhood television viewing may contribute to the development of attention problems.”
- 10) The effects of childhood television viewing on attention may be long lasting.
- 11) “Because there is considerable brain plasticity during the first few years after birth, the rapid image and scene changes commonly found in television may overstimulate the child and adversely affect brain development. If this is true, we might expect very young children to be particularly vulnerable to these effects.”
- 12) “Another explanation is that life as portrayed on television with its fast-paced editing and attention-grabbing techniques makes reality seem boring by comparison. Hence, children who watch a lot of television may become less tolerant of slower-paced and more mundane tasks, such as school work.”
- 13) “Television viewing displaces other activities that promote and encourage attention, such as reading, games, sports, and play.” **[Important]**
- 14) “The adverse effects of television may be cumulative.”
- 15) Attention problems are an important predictor of poor educational achievement and poor socialization.
- 16) “The results support the hypothesis that excessive television viewing may lead to attention problems in children and adolescents.”