



Physical Activity

Introduction

The U.S. Department of Health and Human Services recommends that children and youth aged 6-17 years engage in at least 60 minutes of physical activity each day, with most of the 60 minutes being comprised of either moderate or vigorous intensity aerobic physical activity.¹

Children and adolescents who do not get adequate physical activity tend to have more screen time, which includes watching TV or movies and playing video or computer games. Too much screen time among children and adolescents has been linked to obesity, irregular sleep, behavioral problems, impaired academic performance, violence, and less time for play and physical activity.^{2,3,4,5}

Methods

This report used data from the Fifth Grade Health Survey (5GHS). The 2011 5GHS was a random sample of fifth grade classrooms in Oklahoma public schools. Classrooms were selected with probability proportional to size, thus giving every student equal chance of being selected. Of the 105 classrooms selected, 101 classrooms agreed to participate for a classroom participation rate of 96.1%. Among the participating classrooms, 1,359 out of 2,013 parents returned completed surveys for a response rate of 67.5%. The overall response rate, which is the product of the classroom participation rate multiplied by the parent participation rate, was 61.3%. These data were weighted to represent all public school fifth graders statewide. SAS software, version 9.2, was used to perform the statistical analysis. Variables were examined using percentages and confidence intervals. Variables were considered statistically significant at $p < 0.05$.

Results

In Oklahoma, one in six fifth graders engaged in at least 60 minutes of physical activity on two or fewer days per week (Figure 1). Only one-third (33.3%) met the recommendations of at least 60 minutes of physical activity every day. Approximately one-fourth of fifth graders got at least 60 minutes of physical activity on 3-4 days of the week and 26% got at least 60 minutes of physical activity on 5-6 days of the week.

When asked how many hours of TV their fifth grader watches on an average school day, parents reported more than half of fifth graders (53.3%) watched two or more hours of TV per day, one-in three (31.5%) watched one hour of TV, and 15.2% watched less than one hour of TV on an average school day (Figure 2). When asked how many hours their fifth grader plays video or computer games or uses a computer for something that is not school work, one-fourth (23.1%) reported two or more hours per day, 29.2% reported one hour per day, and nearly half (47.7%) reported less than one hour per day (Figure 3).

Fifth graders who were reported getting at least 60 minutes of physical activity on four or fewer days per week were 2.4 times more likely to be perceived as overweight or very

FIGURE 1. NUMBER OF DAYS PER WEEK WITH AT LEAST 60 MINUTES OF PHYSICAL ACTIVITY

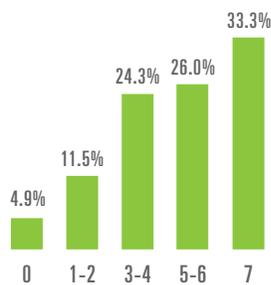


FIGURE 2. HOURS OF TV PER DAY

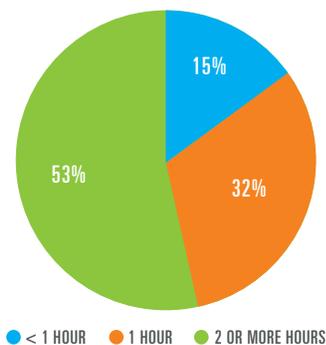
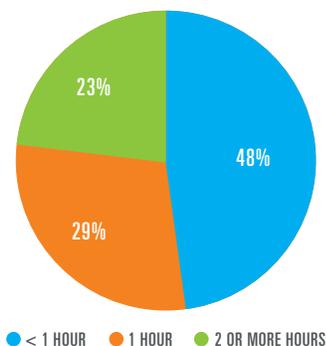


FIGURE 3. HOURS OF VIDEO GAMES PER DAY



HIGHLIGHTS

- Only one-third of fifth-graders met the recommended minimum of 60 minutes of physical activity per day.
- More than half of fifth-graders watched an average of two or more hours of TV per day.
- One-fourth of fifth-graders played video or computer games an average of two or more hours per day.

overweight than those who got at least 60 minutes of physical activity on five-seven days per week ($p < 0.0001$).

Fifth graders who watched two or more hours of TV on an average school day were 1.6 times more likely to be perceived as overweight or very overweight as those who watched less than two hours of TV ($p < 0.01$).

Recommendations for limiting screen time and increasing physical activity.^{4,6}

Have the whole family take a walk or go for a bike ride.

Encourage activities that you can participate in with your child do not allow TV's or computers in the child's bedroom.

Choose video games that encourage physical activity.

Turn the TV off when not actively watching a program.

Set a good example by limiting your own screen time.

Designate one day a week a screen-free day.

References

- 1 U.S. Department of Health and Human Services. *2008 Physical Activity Guidelines for Americans*. Washington, DC: U.S. Department of Health and Human Services; 2008.
- 2 Christakis DA, et al. Television, video and computer game usage in children under 11 years of age. *The Journal of Pediatrics*. 2004;145:652.
- 3 Thompson DA, et al. The association between television viewing and irregular sleep schedules among children less than 3 years of age. *Pediatrics*. 2005;116:851.
- 4 Laurson KR, et al. Combined influence of physical activity and screen time on recommendations on childhood overweight. *The Journal of Pediatrics*. 2008;153:209
- 5 What children are not doing when watching TV. American Academy of Pediatrics. <http://www.healthychildren.org/English/family-life/Media/Pages/What-Children-are-NOT-Doing-When-Watching-TV.aspx>. Accessed Jan. 7, 2013.
- 6 Media education: What parents can do. American Academy of Pediatrics. <http://www.healthychildren.org/English/family-life/Media/Pages/Media-Education-What-Parents-Can-Do.aspx>. Accessed Jan. 7, 2013.

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The 2011 Fifth Grade Health Survey (5GHS) was a 53 question survey developed to better understand what affects the health of young children in Oklahoma. Topics covered in the 5GHS were: health needs; access to health care; tobacco exposure; safety; and nutrition. The 5GHS is conducted biennially on odd numbered years.

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