Changes in Physical Activity, Movement, and Sleep During the Pandemic

Pre-Pandemic
76% of children were not meeting the nationally recommended 60 minutes of daily to moderate vigorous physical activity.1

COVID-19 Family Study
Demographics

Our Data
How The Data Was Collected
Participants wore acticals, or physical activity bands, for 7 days to track daily movement and activity. Caregivers and children also took surveys.

What We Looked At
Changes in moderate to vigorous physical activity, light intensity physical activity, and sedentary behavior/sleep from pre-pandemic (2017- March 2020) to early-pandemic (May 2020 to July 2020). We also compared activity and sedentary behaviors on weekdays vs weekends.

What We Found
Pre-Pandemic
63%
49%
43% Middle school
11-14 years
29% Preschool
3-5 years
28% Elementary
6-10 years

Middle Schoolers
Sitting and sleeping decreased by 31 minutes per day during the weekday.

Moderate-vigorous physical activity increased by 8.5 minutes per day on weekdays.

Elementary Schoolers
Sitting and sleeping increased by 94 minutes per day during the weekday.

Moderate-vigorous physical activity increased by 1 minute per day during the weekday.

Graph 1.
Changes in moderate to vigorous physical activity from pre-pandemic to during pandemic among preschoolers, elementary, and middle schoolers.

Graph 2.
Changes in sedentary behavior & sleep from pre-pandemic to during pandemic among preschoolers, elementary, and middle schoolers.

March 2020
Schools and recreational facilities closed, limiting access to physical activity opportunities.

COVID-19 Family Study

Our Data
How The Data Was Collected
Participants wore acticals, or physical activity bands, for 7 days to track daily movement and activity. Caregivers and children also took surveys.

What We Looked At
Changes in moderate to vigorous physical activity, light intensity physical activity, and sedentary behavior/sleep from pre-pandemic (2017- March 2020) to early-pandemic (May 2020 to July 2020). We also compared activity and sedentary behaviors on weekdays vs weekends.

What We Found
Preschoolers
Sitting and sleeping decreased slightly.

Moderate-vigorous physical activity increased by 8.5 minutes per day on weekdays.

Middle Schoolers
Sitting and sleeping increased by 94 minutes per day during the weekday.

Moderate-vigorous physical activity decreased by 15 minutes per day during the weekday.

Middle schoolers showed greater changes compared to preschoolers and elementary schoolers.

Sitting and sleeping increased by 54 minutes per day during the weekday.

Changes in moderate to vigorous physical activity from pre-pandemic to during pandemic among preschoolers, elementary, and middle schoolers.

Changes in sedentary behavior & sleep from pre-pandemic to during pandemic among preschoolers, elementary, and middle schoolers.

1 COVID-19 Family Study

49%
1%
15%
33%
43%
29%
28%
 ASIAN
MIXED RACE
BLACK/AFRICAN-AMERICAN
WHITE
Demographics

43% Middle school
11-14 years
29% Preschool
3-5 years
28% Elementary
6-10 years

- 49%
- 63%
- 49%

- 49%
- 63%
- 49%

- 49%
- 63%
- 49%

- 49%
- 63%
- 49%

- 49%
- 63%
- 49%

- 49%
- 63%
- 49%

- 49%
- 63%
- 49%
We may continue to see larger gaps in physical activity by age. Structured activities encourage physical activity and may protect against behaviors that lead to obesity.

Why It Matters

Moving Forward

- Let's begin to address these changes so children can practice healthy behaviors, now and in the future.
- Let's be more active now since COVID-19 restrictions have eased.

Thank you for participating in our study!