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Strategies for Reducing Screen Time Promoting In-Person Activities Among Youth

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Excessive screen use is a growing public health concern for children and adolescents

From 2021 to 2023, 50.4% of U.S. teenagers ages 12–17 reported spending four or more hours per weekday on screens outside of schoolwork.[1]

Adolescents reporting higher screen use were more likely to:

- Participate in **less physical activity**
- Report more **irregular sleep**
- Report **more depressive and anxiety symptoms**
- Describe **inadequate social and peer support**

Adolescent screen use is also associated with mental health challenges, and the type, content, and context of screen use may influence these associations. Identifying effective approaches to support healthy digital habits while creating meaningful opportunities for youth to engage in physical activity and in-person social experiences are important.

How can we reduce screen time for youth?

Research suggests that interventions targeting reductions in children's screen time, either alone or with other components (e.g., nutrition and physical activity), are effective at reducing children's screen time and can lead to increased physical activity, improved dietary habits, and improved weight status (e.g., lower BMI or risk of obesity).[3,4,5]



Which intervention strategies are most effective?

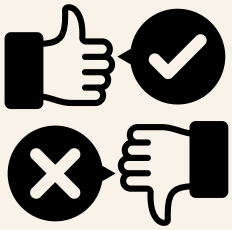
A 2021 systematic review and meta-analysis of 204 studies[6] identified four groups of strategies:



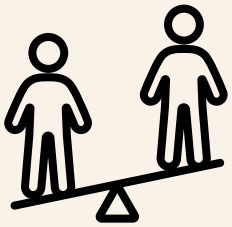
Goals, Feedback, & Planning:
Goal setting, feedback, self-monitoring, behavioral contract, barrier identification, follow-up



Behavioral Repetition & Practice:
Prompts cues, prompts practice, graded tasks, contingent rewards



Knowledge and Consequences:
Information on behavior-health link, information on consequences, instruction



Social Comparison:
Social support, modeling, encouragement, role model

Interventions that included goal setting, goal review, and self-monitoring were likely more effective compared to interventions that include other techniques.

These findings are consistent with a recent review that identified goal setting, positive reinforcement, and family social support as active ingredients in behavioral interventions targeting reductions in children's sedentary behavior.[7]

School-based interventions

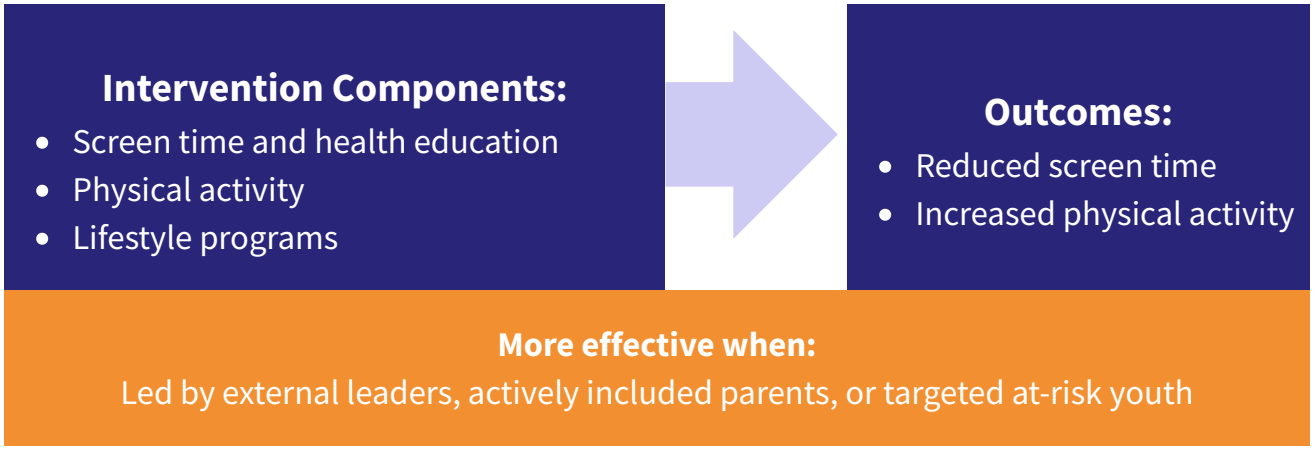
Schools play a pivotal role in children's learning, behavior, and health, and are thus ideal settings for interventions targeting screen time.

Intervention strategies commonly include screen-time and health education, substitution with physical activity, and more comprehensive lifestyle programs. There are also opportunities for more intensive approaches such as cognitive-behavioral therapy or counseling, as well as opportunities for parent involvement.

A meta-analysis of 39 studies involving 95,033 participants found that school-based interventions modestly reduced screen time and increased physical activity.[8]

Effects did not vary by whether screen time reduction was the main intervention or a part of more comprehensive lifestyle interventions.

Another review showed that school-based interventions that were led by an external leader (e.g., research team or psychologists, rather than teachers or other school staff), actively included parents, or specifically targeted at-risk children were associated with greater reductions in screen time and problematic digital technology use.[9]



Parent- and family-focused interventions

Parents and caregivers play an important role in shaping children's health and habits, including those related to media and technology use. Family-based interventions for managing or reducing children's screen time commonly include:

- providing educational materials
- engaging parents through interactive activities
- supporting parental monitoring
- implementing changes within the home environment

A meta-analysis of 45 family-based interventions showed a modest reduction in total screen time (SMD = -0.11).[10]

54% Percent of students who received the screen-time intervention reporting lower use compared to the average control group student

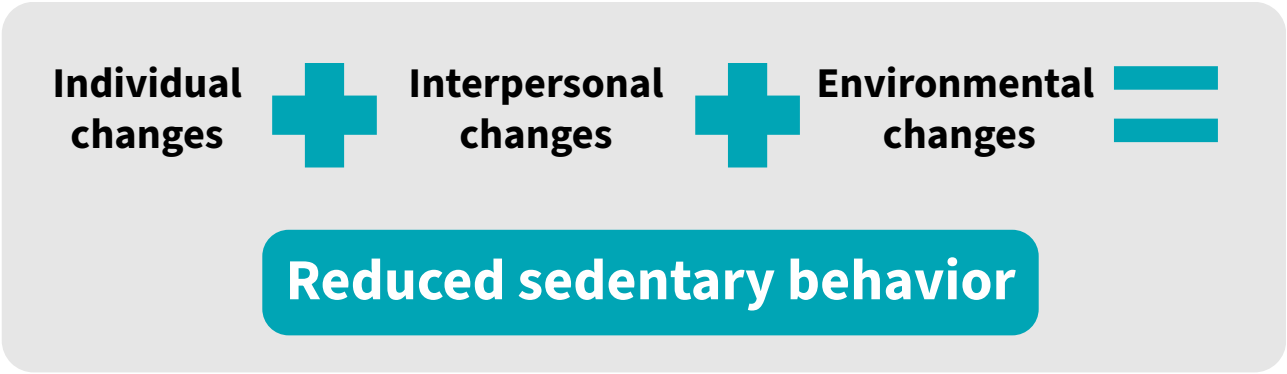
This review identified two main pathways for effective interventions:

- Individual-focused components: Structured classroom lessons on screen use and healthy lifestyle AND/OR Self-paced or teacher-distributed screen use educational resources AND/OR Interactive classroom activities on managing screen use AND/OR Educational content on knowledge, awareness of benefits and consequences of screen use
- Family-focused components: Written and digital informative materials for parents on screen use AND/OR Educational content on knowledge, awareness on benefits and consequences of screen use in children

Interventions containing components from both of these configurations are likely to be most effective. Furthermore, most (62%) of the interventions examined in this review were school-based, suggesting that school-family partnerships are particularly important for promoting healthy screen use.

Reducing Sedentary Behavior, Increasing Physical Activity and Social Connection

A systematic review of interventions to decrease sedentary time in children found that the most effective interventions address change across multiple levels, including individual-, interpersonal-, and environmental-level factors.[11]



Ways to increase physical activity and social connection:

- A review of interventions for physical activity and social connectedness found that **play and contact with nature** were dominant themes across interventions, with most taking place in a school or public park.[12] Authors suggest increasing exposure to nature and incorporating play-based elements into outdoor spaces.

- Another review demonstrates the positive effects of urban interventions on physical activity,[13] including:
  - **Renovating parks and playgrounds**
  - **Adding exercise equipment and recreation facilities**
  - **Improving infrastructure for walking and cycling**
  - **Enhancing availability and accessibility of destinations**

- Research also highlights the potential of programs that promote both social-emotional learning and physical activity simultaneously in schools and out-of-school settings (e.g., after school programs).[14]

Exemplar Programs and Resources for Local Implementation

1. The 5-2-1-0 Approach is an evidence-based framework promoted by pediatricians and public health organizations to help children and families build healthy habits.
2. The American Academy of Pediatrics Family Media Plan is a tool that helps parents and caregivers create a customized screen and technology agreement for the household.
3. Playworks is a school-based initiative that helps create structured, inclusive recess and play environments.
4. Safe Routes to School is a community-driven initiative designed to make it safer and easier for children to walk, bike, or roll to school.
5. Play Streets are community-led events that temporarily close neighborhood streets to create safe spaces for children and families to play, exercise, and socialize.
6. Active Parks! is a resource developed by the Centers for Disease Control and Prevention and National Recreation and Park Association to help improve equitable access and use of parks, trails, and greenways.



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Methods

Findings presented in this brief come from a literature review of academic peer-reviewed studies, as well as a review of research and findings from non-partisan think tanks, foundations, and organizations. Given the rapid nature of this search, other relevant studies may exist. In addition, please note that we did not use formal statistical methods for summarizing results and exploring reasons for differences in findings across studies.

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