REDUCE SCREEN TIME KY: The creation of a data-driven program plan

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PROBLEM

Excess screen time may be having a negative impact on the children of Kentucky. This could aggravate the existing problem the state has with obesity, mental health, educational delays, and drug addiction.

BACKGROUND & SIGNIFICANCE

- Research shows while drugs are different in the way they effect the brain, they have one thing in common: the release of dopamine (Surgeon General, 2016).
- The effects of dopamine on the brain range from trouble sleeping, aggressive behavior, and poor impulse control. Excessive dopamine release can lead to hallucinations (Health Direct, 2021). Dopamine can cause irritable behavior, defensiveness, and irrationality (Northwestern Medicine, 2021). Too much dopamine can lead to behaviors such as binge eating, ADHD, and addiction (Health Direct, 2021). An addiction to screen usage can be formed the same way drug addictions are formed (Northwestern Medicine, 2021).
- Northwestern Medicine (2021) indicates that binge watching TV causes the release of dopamine. Dopamine release during binge watching television has the same effects on the brain as using drugs (Northwestern Medicine, 2021).

The priority population for this program are children, newborn to 17 years, and their parents. The target health outcome is to reduce the amount of screen time given to children and to give parents and caretakers resources that help replace screen usage with healthy, outdoor activities. This is accomplished through adult education on the repercussions of too much screen time and resources for healthy outdoor activities in their communities, focusing on free or low-cost activities. Allowing too much screen time can set children up for addiction struggles in the future.


Physical health
Behavior Issues
Poor posture
Poor core strength
Poor fine motor skills
Frustration
Impulsivity
Moodiness
Stress
Poor endurance
Mental health issues
Emotional health
Less self-control
Decreased attention
Decreased cognitive skills
Overactive brain
Poor transitions
Addiction "state of being"
Less patience
Less play
Lower imaginitive play experience
Less sleep
Less physical activity
less sensory exposure
Creative play experience
Unbalanced activity
Blue light emissions
Poor posturing
Less communication
Less interaction
Learning balance
THE SCREEN TIME ICEBERG

Figure 1: A graphic showing some effects of excess screen time usage

METHODS

- For this project, a "Needs Assessment" was created from research collected the effects and potential repercussions of excessive screen time usage. This research focused on the Social, Epidemiological, Educational, Ecological, Behavioral, and Environmental needs in the community, specifically pertaining to children newborn to 17 years-old, and their caretakers.
- Through that research a program was written that outlined a five-year plan to reduce screen time usage in children.
- This program contains a plan to work with pediatricians and Health Departments, as well as multi-sector community partners, to provide educational materials about screen time and resources for outdoor activities within communities for families residing in Kentucky.

RESULTS & DISCUSSION

- Kentucky has an estimated 32% of people who do not get enough physical activity (Kentucky Health Facts, 2003-2005). The state average state average overweight is 68%, obesity is 35% (Kentucky Health Facts, 2016-2018).
- The average 4-8-year-old uses screens for an estimated 4-6 hours a day, for teens that number goes up to 9 hours per day. This does not include using screens for school purposes (American Academy of Child and Adolescent Psychiatry, 2020).

The focus of this research was the need to reduce screen time in children in Kentucky. Through this research it became apparent that the state of Kentucky has with a problem with excessive screen time usage. The research done also highlighted the lack of existing programming like this on either the state or federal level. The implementation of this program throughout the state could significantly reduce the amount of screen time use in children, while simultaneously providing resources for parents, reducing obesity, and building a stronger sense of community

GOAL & PROJECTED OUTCOMES

- By the end of the five-year program there will be a 25% increase in the number of parents in the program who can list at least 5 of the dangers of too much screen time in children.
- Twenty-five percent of parents involved in the program will be knowledgeable about the outdoor activities in the community that they and their children can participate in as healthy alternatives to screen time by the end of the five years.
- By the end of the program, 20% of children in the program will know about healthier alternatives to screen time.

In short, the current program aims to decrease screen time among youth in Kentucky by the end of the program, while also improving the health outcomes of the participants.

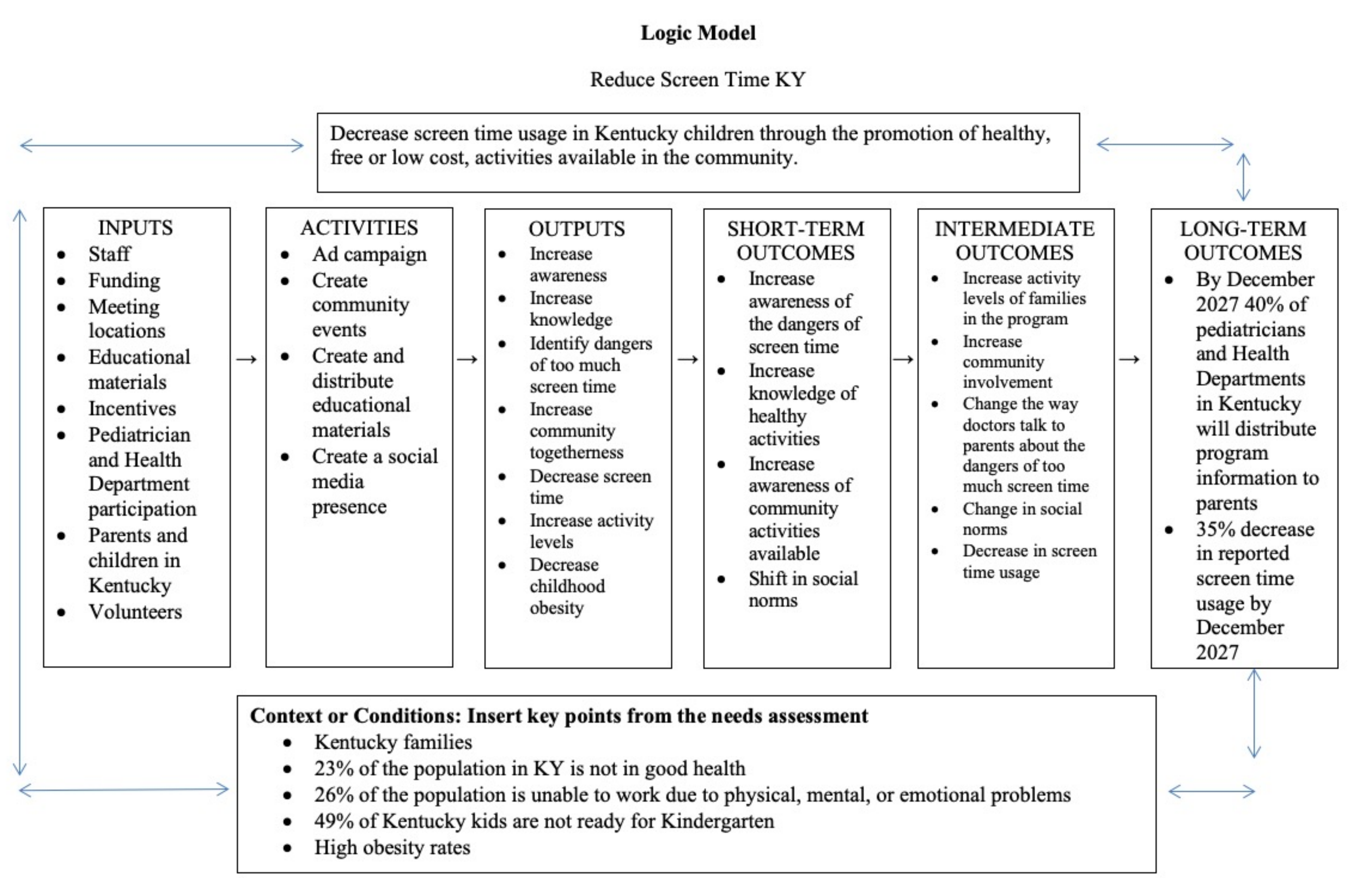
Logic Model
Reduce Screen Time KY
Decrease screen time usage in Kentucky children through the promotion of healthy, free or low cost, activities available in the community.
INPUTS
Staff
Funding
Meeting locations
Educational materials
Incentives
Pediatrician and Health Department participation
Parents and children in Kentucky
Volunteers
ACTIVITIES
Ad campaign
Create community events
Create and distribute educational materials
Create a social media presence
OUTPUTS
Increase awareness
Increase knowledge
Identify dangers of too much screen time
Increase community togetherness
Decrease screen time
Increase activity levels
Decrease childhood obesity
SHORT-TERM OUTCOMES
Increase awareness of the dangers of screen time
Increase knowledge of healthy activities
Increase awareness of community activities available
Shift in social norms
INTERMEDIATE OUTCOMES
Increase activity levels of families in the program
Increase community involvement
Change the way doctors talk to parents about the dangers of too much screen time
Change in social norms
Decrease in screen time usage
LONG-TERM OUTCOMES
By December 2027 40% of pediatricians and Health Departments in Kentucky will distribute program information to parents
35% decrease in reported screen time usage by December 2027
Context or Conditions: Insert key points from the needs assessment
Kentucky families
23% of the population in KY is not in good health
26% of the population is unable to work due to physical, mental, or emotional problems
49% of Kentucky kids are not ready for Kindergarten
High obesity rates

FIGURE 2: The Logic Model for Reduce Screen Time KY

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