Research Report

Digital Tools and Family-Based Weight Management

Greaux Healthy
Pennington Biomedical

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Parent Training | Weight Loss | Telehealth | Obesity | SafeCare

Read the published, peer-reviewed paper here: https://pubmed.ncbi.nlm.nih.gov/33410760/

Citation

Staiano AE, Shanley JR, Kihm H, Hawkins KR, Self-Brown S, H chsmann C, Osborne MC, LeBlanc MM, Apolzan JW, Martin CK. Digital tools to support family-based weight management for children: mixed methods pilot and feasibility study. JMIR Pediatr Parent.2021;4(1):e24714.

General Summary

Family-based behavioral therapy successfully delivers weight management counseling to children and parents. Unfortunately, many families don't have access to receive in-person, evidence-based treatments. To broaden access, we developed and tested a home-based parent training program called DRIVE (Developing Relationships that Include Values of Eating and Exercise). The present study tests a digital/mobile version, "mHealth DRIVE," which includes remotely delivered sessions and other digital features. Our findings show that children and parents enjoyed digital delivery and it helped kids with their weight. Potential providers report families would benefit from digital tools to support child weight management.

When did the study take place?

This study took place from October 2015 to September 2016.

How will the results help children, parents of children, and those who care for them?

Our findings show that the DRIVE program works for improving childhood weight. It is possible to add this weight management program to existing home-based programs like SafeCare. Also, we can adapt the program to be delivered in a mobile way. SafeCare providers feel families would like this approach.

What is the purpose of the study?

The first purpose of this study was to examine how well the mobile based DRIVE program worked for parents and children. The second purpose was to see if SafeCare would want to offer this program and if they thought families would like it.

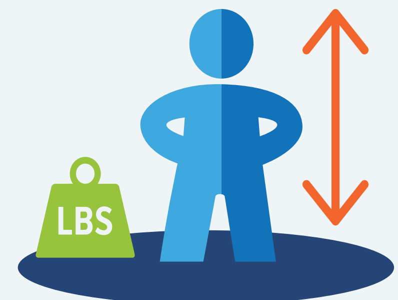
Who was involved?

Parents were recruited from their children's after-school wellness program. Children had to be between the ages of 5 to 14 and able to exercise without any difficulties. Parents had to have a smartphone and be willing to use their smartphone for this project. A total of 10 parent-child pairs were included in this study. We also used information collected from 82 SafeCare providers from 14 states asking what they thought about this program and whether families would want to participate.

How did we get the results and findings?

We took height and weight measurements of the children before the program started and after the 13-week program. We were comparing whether and how kid weight changed over this period of time. We also had SafeCare providers answer questions on using this program and whether they thought parents would like it.

13 week program



What was unique about this study? How were patients given a voice in research?

Using a mobile approach increased the accessibility to a proven program for improving childhood health. Having family based weight management take place in the home, through a remote application, is a new and interesting approach to the field of childhood obesity.

What were participants asked to do during the study?

Parents were invited to attend an informational session that explained the purpose of this study. Parent-child pairs had to attend 8 counseling sessions (about 30 minutes each) mostly over their internet connected device (smartphone, tablet, laptop, desktop). They also received emails and text messages. For the course of the program (13-weeks), the Pennington counselor delivered informational sessions and provided personalized advice and strategies to the parents and children. These lessons focused on healthy eating and active play, and also included an interactive parent training.
Children wore an activity monitor that kept track of their steps per day and parents had to document their child's steps daily. The counselor would plot the child's step data. Children weighed themselves at least weekly on a special scale we gave them. It would wirelessly send information to the counselor. Height and weight were measured, and parents and kids completed surveys on what they thought about this program. We also used information collected from 82 SafeCare providers from 14 states asking what they thought about this program and whether families would want to participate.

What did we learn?

Our findings suggest that a weight management program delivered to parent/child pairs may be successful when implemented alongside a parenting program, such as SafeCare, via an mobile health platform.
Also, SafeCare providers were willing and interested in being trained in delivering this weight management program and they viewed the families would find this approach to be acceptable.

Why is this research important to patients, clinicians, and other researchers?

Having the ability to adapt a program that works – into a technology based program – opens the doors of access for many families.

Were there any limitations to the study?

One limitation is that we did not have another group of parent-kid pairs to compare our health program to. To get more reliable results, we need to do a larger study and compare our group using the program to another group that is not using the program. This would help us make sure the changes in weight and health we see are due to our program.

What's next?

Digitial tools, either used alone or alongside in-person care, provide a new approach to helping kids and families with their health and weight. Our plan is to use this mobile health approach to create a program families can easily access and use to support children's health.