

Adding Parent-Child Feeding Content to an Established Nutrition Education Program: Fidelity across 2 States and 2 Languages in a Randomized Control Trial

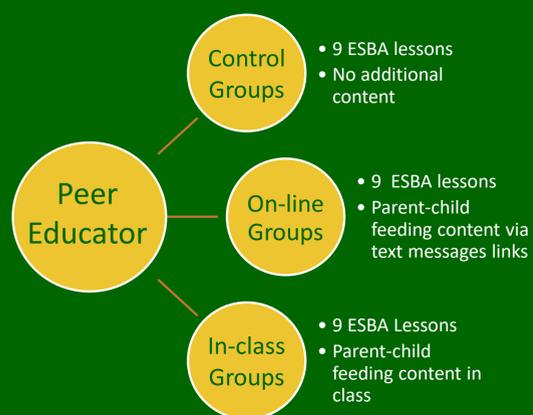
Susan S. Baker, EdD¹, M. Catalina Aragon, MS², Garry Auld, PhD¹, Karen V. Barale, MS, RD², Theresa Berger, BS¹, Karina Silva Garcia, PhD², Jane Lanigan, PhD², Nilda E. Micheli, BS³, Louise Parker², Thomas G. Power, PhD², Sheryl O. Hughes, PhD³

ABSTRACT

Objective: Determine if peer educators can simultaneously deliver 3 arms of a randomized control trial while maintaining curriculum fidelity. EFNEP participants received 9 lessons using the Eating Smart • Being Active (ESBA) curriculum and parent-child feeding content either in-class or online via text messages links sent between classes. Peer educators taught classes in English and Spanish in Colorado and Washington. Results indicate peer educators maintain curriculum fidelity while delivering multiple arms in a randomized control trial given proper training and support

DESIGN AND SETTING

Food Feeding and Your Family (FFYF) provided parent-child feeding content to participants of the Expanded Food and Nutrition Education Program (EFNEP). Participants in this randomized control trial were randomized into 1 of 3 arms, each offering English and Spanish classes. The same educators (n=11) taught Control, In-class, and Online arms.



Three arms of the FFYF Randomized Controlled Trial

METHODS

Implementation Science (IS) describes strategies to promote evidence-based practices and strengthen program outcomes. FFYF incorporated IS strategies to establish and maintain fidelity including dynamic training of educators, detailed protocols and lessons, and auditing of and feedback to educators as well as interviews with educators.

All participants (n=540) were offered 9 in-person group lessons. In-class participants watched 7 videos on parent-child feeding behaviors (adapted from previous work) and participated in related educator-led activities. Online participants received texts with links to the same videos and similar activities between face-to-face lessons but no in-class content.

To address fidelity, experienced educators received extensive training and practice opportunities. Lesson plans and protocols were tightly scripted. Multiple observations in each class series and educator-supervisor discussions assessed and reinforced fidelity.

Detailed class observation forms (Figure 1), tailored to the specific intervention arm, assessed adherence to ESBA and parent-child feeding content as well as any cross-contamination of parent-child feeding content between arms.

Figure 1. One of the Classroom Observation Forms used in both states for the On-line Arm.

RESULTS

Out of 540 participants, 73% were retained at 12 months. In total, 128 classroom observations were conducted (58 in English and 70 in Spanish; Figure 2). Most issues were minor and, typically involved hurried discussions or review of previous material.

- The **Control Group** received no parent-child feeding content. ESBA was delivered as intended 89% of the time.
- In the **Online Group**, minor parent-child feeding content was shared during 3 of the observations; ESBA was delivered as intended 87% of the time.
- For the **In-class Group**, educators delivered the parent-child feeding content appropriately 84-90% of the time.

Seven educators were interviewed following the completion of lesson delivery. Educators held universally favorable opinions on the parent-child feeding content (videos, activities, infographics) and noted information stimulated a lot of discussion and interactions.

Educators like having new, useful information to share but were frustrated by not being able to share it with all their classes. They also felt the FFYF content and approach fit well with EFNEP.

Figure 2. Number of Classroom Observation by Randomization Assignment Per State.



CONCLUSIONS

With proper training and support, peer educators can maintain high fidelity while delivering multiple arms in a randomized control trial. There was minimal evidence for cross-contamination (none in the control).

EFNEP has access to a diverse, low-income nationwide audience. EFNEP peer educators are connected in their communities. They are skilled at building rapport and relationships which helps with recruitment for education and research studies. Their ongoing relationships with participants fosters retention and an ability to maintain long-term contact.

Researchers interested in studying educational programming in low-income audiences delivered by peer educators must devote resources to establish and maintain fidelity.



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PRESENTING AUTHOR: Susan S. Baker
EMAIL: Susan.Baker@ColoState.edu
ADDRESS: 102 Gifford, Campus Box 1571, Colorado State University, Fort Collins, CO, 80523-1571

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COLORADO STATE UNIVERSITY

¹Colorado State University, Ft. Collins, CO ²Washington State University, Pullman, WA ³USDA/ARS Children's Nutrition Research Center at Baylor College of Medicine, Houston, TX