Food, Health & Choices (FHC) in Context: 5th Graders Show and Tell About Adopting Energy Balance Related Behaviors (EBRBs)

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Abstract

Food, Health & Choices (FHC) is a New York City Department of Education School Nutrition Program that supports integrated childhood obesity prevention and nutrition education in 5th grade classrooms. Research has been conducted to understand the effectiveness of this intervention, however, the use of mixed-methods in context of the intervention has been limited. This study aimed to expand the qualitative methods in FHC study design using a mixed-methods approach to conduct a process evaluation. Students from Citywide+Wellness (C+W) and Wellness (W) schools were invited to participate in this study. Five schools were selected for the study and at each school, one class was randomly selected. Purposeful sampling was used to select a range of FHC reception with 50% female participants. Table 1 illustrates the descriptive statistics for each study condition. Table 2 lists the interview questions by Comprehensive Approach to Process Evaluation (CAPE) construct. This study is unique because it was conducted fully remotely, and the interviewees in this group indicated this as a salient motivator. A Only the motivators, supports, and barriers indicated by both interviewees in this group indicated this as a salient motivator, support or barrier. The interviewees in this group indicated this as a salient motivator, support or barrier. Cramer’s V coefficient was used to assess the strength of the association between the interviewees in this group and the FHC EBRBs. The interviewees in this group indicated this as a salient motivator, support or barrier. Cramer’s V coefficient was used to assess the strength of the association between the interviewees in this group and the FHC EBRBs.

Methods and Study Flow:

Interviews:
- 13-30 minute photo elicitation interviews with each participant
- Semi-structured interviews to explore the process based on CAPE
- Classroom teachers and FHC instructors helped talk kids to represent a range of engagement with FHC

Analysis:
- Descriptive and thematic coding
- Within-and cross-case analysis

Results:

Activity Patterns and Behavior Change Patterns:
Four patterns of EBRB adoption were identified with corresponding interventions and external context factors that facilitated and hindered EBRB adoption in each group.

Behavior Change Patterns:

Descriptions and Quotes:
Interviewed students had strong interpersonal motivators and supports, which outpaced their preferences for junk foods. Inspired interviewees had some interpersonal motivators, and experienced their support environments in both strengths and barriers to these interpersonal motivators and supports. Reinforced interviewees had some interpersonal motivators and supports, but they also had strong external support, particularly from their families. Indifferent interviewees had low interpersonal motivators or supports and were not cognizant of barriers, but did have strong support from their families.

Conclusions:

By asking participants about experiencing the intervention in the context of their own lives, we better explain the intervention process and its effectiveness. Although small sample due to a feasibility, the depth of analysis of behavior can introduce new insights into new ideas that might be implemented with further potential in future research. Student and parent participants were induced to longitudinally report changes in their diet and engagement in FHC intervention by and by shifting the balance of power to the participants, making them responsible for their own photography. FHC was motivational for nearly all interventions, regardless of EBRB adoption. Successful students seemed to have strong internal motivators and supports. This study highlights the importance of nutrition education—"why do I care?"" activities; family education that compliments school-based nutrition education, and local and national policies that regulate marketing and availability of junk food. With knowledge of these EBRB adoption trends, nutrition education and evaluation could be better tailored to students with different motivators and supports.

Contact & References

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References


Background

Food, Health & Choices (FHC) in Context: 5th Graders Show and Tell About Adopting Energy Balance Related Behaviors (EBRBs)

This project was supported by Agriculture and Food Research Initiative Grant no. 2013-81125-20663 from the USDA National Institute of Food and Agriculture, Human Nutrition and Obesity – 93330.

FHC Study Design

We used a cluster randomized, controlled design to examine the impact of FHC (Food, Health & Choices) intervention (Wellness Classroom), and Curriculum Wellness (Both) conditions to determine the impact of each, along with the synergistic effect of the combination.

Food, Health & Choices only
(5-8 schools, 14 classes)

Positive Healthful Classrooms only
(5-8 schools, 15 classes)

FHC & PHC
(5-8 schools, 16 classes)

CURRICULUM
Food, Health & Choices only
(5-8 schools, 14 classes)

Wellness
Positive Healthful Classrooms only
(5-8 schools, 15 classes)

CURRICULUM-WELLNESS
(Both)
FHC & PHC
(5-8 schools, 16 classes)

[Standard NYCDOE]
Delays
Curriculum Wellness
(5-8 schools, 14 classes)

Nutrition education researches have periodically called for the use of qualitative methods in order to explain and explore influences on EBRB and these methods are used in basic research related to childhood obesity. However, qualitative methods are used less frequently in other stages of the intervention evaluation cycle. To our knowledge, there are no qualitative evaluations of childhood obesity prevention often include qualitative data, and these methods are used in basic research related to childhood obesity. Nutrition education researchers have periodically called for the use of qualitative methods to explore students’ behavior change processes. By identifying and describing the factors that are salient to behavior-changers, we can generate insights that provide rich descriptions of the behavior change process can generate insights that improve nutrition education.