Community-Based Participatory Research Targeted Toward the Prevention of Adolescent Obesity: Ripple Effect Mapping Outcomes

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Abstract

Objective: To conduct an analysis of the impact of a five-year, tri-state, community-based adolescent overweight and obesity prevention program, Ignite: Sparking Youth to Create Healthy Communities, in three minority, limited resource middle schools and surrounding communities using ripple effect mapping (REM).

Description: REM is a guided focus group method involving six to twelve participants per session centering around one topic and collecting responses from questions; each question addressing a different ripple of impact at different levels of the community. Trained moderators conducted seven REM sessions among the three intervention communities. Participants included both target youth (6-8th graders), former students, and adults.

Evaluation: REM was conducted at post-assessment to capture perceived qualitative outcomes contributed to Ignite programming in addition to quantitative methods used to evaluate changes pertaining to community food and physical activity environments, student health perceptions and behaviors, as well as indicators of youth empowerment.

Conclusion and Implications: The project aims to identify a potential framework for creating community-focused, sustainable and effective adolescent obesity prevention programs. Outcomes reported from REM data support this aim. Some outcome trends included an increased student awareness and importance of positive health behaviors, as well as the willingness to adopt these health behaviors; positive changes in school culture related to collaboration, involvement and commitment to wellness; an increase in school-community partnerships; improvements in the school physical environment; and increased opportunities for physical activity before, during and after school and in the community. Resource capitals predominantly cited for these changes were the value placed on people and the community culture, as well as the importance of social, financial and political resources.

REM Method

- Researchers were trained in the Ripple Effect Mapping (REM) method prior to facilitating sessions.
- REM sessions were conducted at post-assessment in intervention communities only.
- Each of the three communities held at least two sessions. One session consisted of 6-8 adults active in the Ignite project. The second session consisted of 7-10 current and past students from the participating schools.

Tristate Summary Mapping

- Physical Activity
- Nutrition

- Project Objectives Align with REM Impacts

- Behavior Objectives
- Project Impact: More family engagement in activities and learning about nutrition in the home
- Increased dietary fruit and vegetable consumption
- Reported impact: More mealtime with family
- Reported impact: Eating more meals with family
- Decrease solid fat and added sugar consumption
- Increase physical activity
- Reported impact: Decreased vending machine sales at school; drinking less soda; more water
- Reported impact: Increase in youth participation in school athletics; exposure to new activities
- Assist communities in creating an environment and promote change in the environment that will prevent overweight and obesity among 6th-8th grade youth
- Reported impact: Increased youth leadership in school; improved sense of community and increased community relations

Conclusion

- REM aided in capturing a rich picture of the perceived impact the Ignite program has had regarding nutrition and PA in individuals and throughout the communities.
- REM results will be used with other postassessment measures pertaining to potential changes in the built environment, individual health behaviors and perceptions, and wellness policy change.
- Currently, the project team is developing a community toolkit for use in other communities with the purpose of identifying a potential framework for creating community-focused, sustainable and effective adolescent obesity prevention programs.