

Using Community Based Participatory Research in Program Planning Leads to a Tailored, Evidence-Based Intervention Design

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INTRODUCTION

- Community-Based Participatory Research (CBPR) was utilized in this study to aid local college communities by empowering participants to assist in health programming research and development while creating a positive impact on college student's health and wellness.
- Nominal Group Technique (NGT) was used in a community group workshop to streamline group brainstorming productivity to identify key programming components.

Study Aims:

- (1) Train students in the principles of CBPR to apply student-driven approach to assess the healthfulness of their university campus environment
- (2) Utilize the NGT approach when partnering with students in the course to determine best practices for a peer-led, campus intervention.

METHODS

- Students (N=10) conducted a Needs Assessment survey assessing fellow college students, conducted ten interviews with health and wellness professionals on campus, and created environment assessments.
- Using these results, students independently developed their own campus health programming intervention.
- NGT was used in a 3-day hybrid group workshop where each university student presented their interventions.
- A series of ten questions were posed to facilitate the group discussion and narrow campus health programming topics.
- Upon completing the NGT workshop questions, the group finalized the intervention program's thematic priorities and delivery details.

RESULTS

- A Campus Needs Assessment, community interviews, and built environment assessments revealed *three main themes in common with both campuses* →
- NGT was used in this community workshop to finalize health programming, suggesting a **Two-Part Intervention**:
 - (1) **Meal-Prepping Workshops** to improve diet quality and reduce food insecurity.
 - (2) **Text Messaging Campaign** to share health resources and programming on campus that address other health needs.

1) Underutilization of campus health resources and programming

2) Barriers to living healthy lifestyles are created in college environments and lead to poor student health and wellbeing

3) Students lack the skills and education necessary for better health outcomes

Table 1: Health Behaviors (N=1036)

Variable	Mean (SD), or %
Perceived General Health Status	
Excellent	7.3
Very good	21.1
Good	42.6
Fair	22.3
Poor	6.7
Perceived Nutrition Health Status	
Excellent	7.6
Very good	16.4
Good	36.7
Fair	25.6
Poor	13.7
Hours of Sleep (Per Night)	6.9 (1.4)
Overall Sleep Quality	
Very good	9.6
Fairly good	61.2
Fairly bad	26.0
Very bad	3.2
Diet Quality (n=983)	
Total Healthy Eating Index	47.6 (10.1)
Servings of Fruit	0.92 (.35)
Servings of Vegetables	2.4 (.52)
Cooking Confidence	
Cooking methods	3.8 (.7)
Cooking with specific foods	4.0 (.8)
Preparing recipes	4.0 (.8)
Food Security	
High	41.0
Marginal	22.2
Low	18.6
Very Low	18.3
Perceived Stress	
Low	2.8
Moderate	54.9
High	42.3

Perceived General Health was assessed using one item from the CDC's Healthy Days Module. Hours of sleep and sleep quality was measured using the Pittsburgh Sleep Quality Index Survey. Diet Quality was measured using the Short Healthy Eating Index. Food security was assessed using the U.S. Adult Food Security Survey Module; Cooking Confidence assessed using the Food Preparation Experience and Confidence survey; Perceived Stress was assessed by the Perceived Stress Scale.

Figure 1: Study Phase Overview

Methods	
Survey Data Collection:	Nominal Group Technique Prompts:
<ul style="list-style-type: none"> Demographics Anthropometrics Food security Stress Sleep Cooking confidence Diet quality 	<ul style="list-style-type: none"> "If you were to participate in a health/well-being program on your campus, what would influence you to participate?" "How often would you attend program events throughout a semester? Why?" "How often do you believe others would attend events during the semester? Why?" "What time of day & day of week do you believe would work best for events throughout the semester?" "In ranking order, what top 3 topic areas/ideas for an intervention do you feel is most important to design for students at your university?" "What top 2 modes of delivery do you feel would work best for our program? (In-person, online, text, mixture, etc.)" "Overall, which idea from you and your peers' presentations do you feel would be best received (people would be most excited to participate in) on your campus? Why?"
Built Environment Assessment:	
<ul style="list-style-type: none"> Food pantries Health policies 	

DISCUSSION

- Used in conjunction with previously conducted data in the semester course, an NGT was determined to be an effective method of brainstorming, narrowing down, and agreeing upon programming details in a community workshop.
- These findings suggest that groups may use NGT in the future to brainstorm and narrow down ideas in a group workshop setting.

FUTURE DIRECTION

- The next steps in the present study will include pilot testing the student-developed program using an outcome evaluation the student advisory board will design.

