



# Developing A Tool to Assess Practitioner Capacity to Change Policies and Environments



Jennifer Leeman, DrPH<sup>1</sup>; Jonathan Blistein, PhD<sup>2</sup>; Joshua Goetz<sup>2</sup>; Alexis Moore, MPH<sup>3</sup>; Nell Tessman, MS<sup>4</sup> and Jean Wiecha, PhD<sup>2</sup>

<sup>1</sup>School of Nursing, The University of North Carolina at Chapel Hill (UNC-CH); <sup>2</sup>RTI International, Inc.; <sup>3</sup>Lineberger Comprehensive Cancer Center, UNC-CH; <sup>4</sup>Alliance for a Healthier Generation

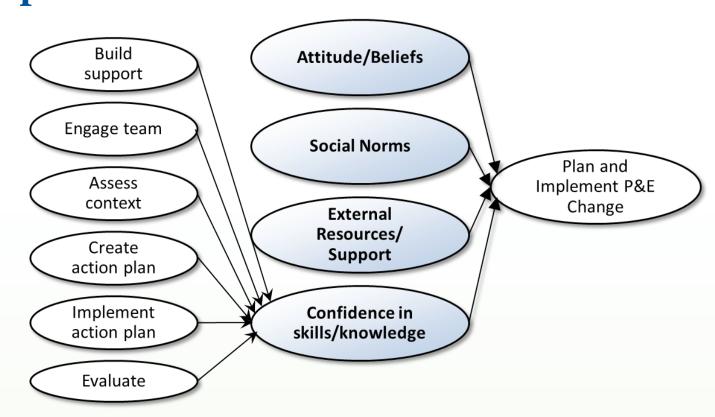
# Background

- Funders and others are asking public health practitioners to implement changes to organizational policies and environments. However, practitioners often lack the capacity to do so.
- Many organizations are providing training and technical assistance to build public health workforce capacity. Yet, few reliable and valid measures are available to assess impact on practitioner's capacity.
- The paucity of measure limits efforts to evaluate and improve initiatives to develop public health workforce capacity to change organizational policies and environments.

### Research Objective

We developed and tested a theory-derived measure of practitioners' capacity to lead and collaborate on organization-level policy and environmental (P&E) change strategies.

#### Figure 1. Conceptual Framework that Guided Instrument Development



**P&E = Policy and Environment** 

Building on behavior change theory, we developed an instrument to assess practitioners' overall motivation (attitude, beliefs, norms) and perceptions of their ability (skills, knowledge, external resources, and supports) to engage in the behaviors required to plan and implement P&E change. Planning and implementing P&E involves a number of complex and inter-related behaviors, which we identified via review of the literature.

#### Data Sets and Sources

The measure was developed and tested with practitioners working to implement the Alliance for a Healthier Generation's (AFHG's) Healthy Out-of-School Time (HOST) Framework in afterschool programs, parks, and Boys & Girls Clubs nationwide. The Framework provides a menu of standards and best practices designed to create environments that promote healthy eating and physical activity. (Photo of kids in afterschool setting – eating, physical activity)

#### Study Design

**Phase 1:** Literature review and interviews with AFHG practitioners to identify key constructs and specific behaviors essential to implementing P&E strategies generally and HOST specifically. Existing measures were reviewed to select relevant items and new items developed as needed to fully capture identified constructs and behaviors.

**Phase 2:** The list of potential survey items was sent to researchers with expertise in survey design/or behavior change (n=4) and practitioners experienced with HOST (n=4) who were asked to identify important questions within each construct and to suggest revisions, deletions, and additions.

**Phase 3:** Two rounds of cognitive interviews with 12 practitioners experienced with HOST to assess item interpretability and usability.

Phase 4: Feld tet measure via a web-based survey to practitioners implementing HOST followed by an exploratory analysis of its factor structure.

#### Analysis

Exploratory factor analytic was conducted using Principal Factors Analysis with a Promax rotation using R statistical software to identify the initial factor structure of the items included in the measure based on factor loadings (threshold > 0.6) and Alpha Score (threshold > 0.7).

## Results of the Exploratory Factor Analysis: Constructs

The survey was completed by 185 practitioners with 145 surveys fully completed The Instrument captured four factors/constructs (See Figure 2)

- Social Norms: 9 items, Scale Alpha = .92
- Confidence in Skills/Knowledge
- Build support: 6 items, Scale Alpha = .88
- Create action plan: 5 items, Scale Alpha = .92
- Implement action plan: 4 items, Scale Alpha = .92

The factor analysis supported four constructs. Of the nine constructs in the original framework, two were combined into a single construct (Build support/Engage Team) and two were not supported because they included only two items, less than the three items required to support a construct (Attitudes/Beliefs and Assess Context). The analysis did not support external resources or evaluation as a construct.

#### Discussion

The exploratory factor analysis resulted in a measure that captures most of the constructs identified in our original framework. Attitudes/beliefs are a central construct in behavior change theory and assessing the context is identified as a central behavior in the literature on P&E change. We only had a few questions for each of those constructs and thus they fell below two items each following factor analysis. We will trial new questions for each of those constructs as we further develop the intervention with practitioners' implementing HOST and other interventions. Although the literature identifies evaluation as a central behavior, AFHG uses external evaluators and therefore it is not surprising that it was not part of the final framework. We will retest the evaluation questions with populations of practitioners for whom those questions would be more relevant.

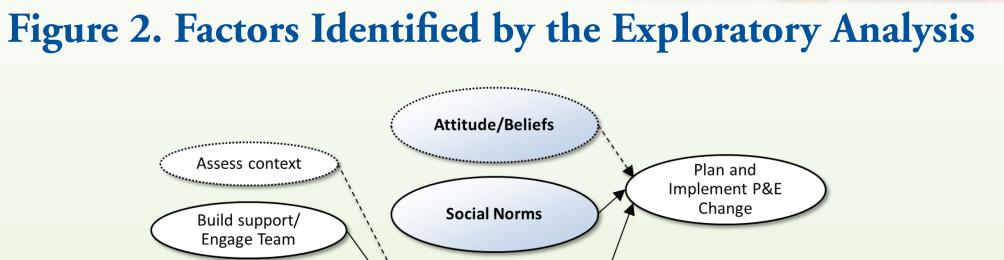
#### The next steps in developing the instrument include:

- Confirmatory Factor Analysis with 200 practitioners implementing HOST
- Adapting and testing the instrument with practitioners planning and implementing different types of P&E interventions
- Testing the instrument's effectiveness at measuring improvement following a capacity-building intervention
- Testing the instrument's effectiveness at predicting quality of intervention implementation

#### Conclusions

Workforce development is critical to building practitioners' capacity to implement the P&E strategies necessary to support healthy behaviors. Developing measures of practitioners' capacity to implement P&E strategies is essential to assessing and improving the effectiveness of workforce development interventions.

Acknowledgements: The project described was supported by the National Center for Advancing Translational Sciences (NCATS), National Institutes of Health, through Grant Award Number 1UL1TR001111. The content is solely the responsibility of the authors and does not necessarily represent the official views of the NIH.



Confidence in skills/knowledge

P&E = Policy and Environments

Create action

Implement action plan



