

SAES-422 - NC1193 Accomplishments Report

Project/Activity Number: NC1193

Project/Activity Title: Using Behavioral and Environmental Tools to Identify Weight Related Factors Associated with Health in Communities of Young Adults

Period Covered: 10/01/2017 to 09/30/2018

Date of Report: 04/02/2018

Annual Meeting Dates: 01/29/2018 to 02/03/2018

Participants: Brown, Onikia (onb0001@auburn.edu) – Auburn University; Byrd-Bredbenner, Carol (bredbenner@aesop.rutgers.edu) – Rutgers University; Colby, Sarah (scolby1@utk.edu) – University of Tennessee; Franzen-Castle, Lisa (lfranz2@unl.edu) – University of Nebraska; Greene, Geoffrey (gwg@uri.edu) – University of Rhode Island; Horacek, Tanya (thoracek@syr.edu) – Syracuse University; Kattelmann, Kendra (kendra.kattelmann@sdsu.edu) – South Dakota State University; Kidd, Tandalayo (martan@ksu.edu) – Kansas State University; Morrell, Jesse Stabile (jesse.morrell@unh.edu) – University of New Hampshire; Mosby, Terezia (terezie.mosby@msstate.edu) – Mississippi State University; Olfert, Melissa (melissa.olfert@mail.wvu.edu) – West Virginia University; Shelnutt, Karla (kpagan@ufl.edu) – University of Florida

Brief Summary of Minutes of Annual Meeting:

- Welcome, introductions, agenda review: the meeting started with a general welcome to the group as well as reviewing the agenda. Introductions were done with the whole group, which included not only NC-1193 members but also students who were in attendance.
- Administrative Update: Mallory Koenings provided an administrative update on the proposed changes & reorganization to the AFRI program, as well as staffing/hiring status at USDA.
- State report highlights: Group members provided pertinent updates regarding changes or new developments at the individual, department, college, and/or university level as well as information regarding new hires and position announcements.
- Project review: Group reviewed the 5-year current plan for the NC1993 project and discussed plans for the upcoming year.
- Updates from lead personnel regarding the progress made and short-term plans for advancing the Healthy Campus Environmental Audit and Healthy Community Index, eB4CAST, the Behavioral Environmental Perceptions Survey, and the Behavioral Environmental Perceptions - Community Survey
- Impact Writing Workshop: Sara Delheimer from the Multistate Research Fund Impacts Program shared with the group strategies and instruction on crafting effective impact statements. Time was allotted for participants to draft impact statements integrating Sara's suggestions and feedback.
- Future grants, presentation and publications plans: Group reviewed all grants, abstracts and papers submitted, in progress, and in the pipeline.
- Review of Organizational Chart and Elections: Officer elections were held and confirmed for 2018-2019 and 2019-2020.
- Scheduled monthly conference calls and 2019 annual meeting: Monthly conference calls were scheduled from February – August 2018. The 2019 annual meeting date and location was tentatively set.

Accomplishments: Excessive weight gain is associated with increased risk of developing many serious diseases, including heart disease, diabetes, and high blood pressure, however, programs to address overweight/obesity among communities of young adults are lacking. The NC1193 multistate group is developing tools to assess the healthfulness of college campuses and effectively disseminate information

that can be used by campus administrators and stakeholders to make changes that support and sustain healthier environments for their students.

Short-term Outcomes: No outcomes to report at this time.

Outputs: The environmental assessments included in the Healthy Campus Environmental Audit have been conducted on over 75 campuses as part of the continued validation of the instruments. The environmental instruments that have been developed are:

- **The Full Restaurant Evaluation Supporting a Healthy (FRESH) Dining Environment Audit** evaluates the nutrition environment of dining establishments including restaurants (fast food, sit down, cafes), dining halls, cafeterias, buffets and food courts. The audit evaluates the food and preparation descriptions to determine healthfulness of menu items, rather than a nutrient analysis perspective, and the availability/extensiveness of other supports for making healthy dining decisions.
- **The Convenience Store Supporting Healthy Environment for Life-promoting Food (SHELF) Audit** evaluates the healthfulness of the food store environment of convenience stores, drug stores, dollar/discount stores, mini-marts, bodegas/corner stores, and food carts. The audit evaluates the presence of healthier foods and the availability/extensiveness of other environmental supports for making healthy food purchasing decisions.
- **Healthfulness Vending Evaluation for Nutrient-Density (VENDING) Audit** evaluates the nutrition environment of vending machines (snack, beverage and prepared foods) using nutrient density healthfulness scores and the availability of environmental supports for making healthy vending purchase decisions.
- **Physical Activity Campus Environmental Supports (PACES) Audit** evaluates the recreation facilities and programs for a campus environment and the availability and extensiveness of the environmental physical activity supports.
- **Sneakers and Spokes Walkability/Bike-ability Audit** is adapted from the Centers for Disease Control and Prevention's (CDC's) Healthier Worksite Initiative Walkability Audit and evaluates the safety and quality features of walking/biking path segments on a campus.
- **Healthy Environment Policies, Opportunities, Initiatives, Notable Topics Survey (POINTS) Audit** evaluates and benchmarks the extensiveness and quality of health promotion/obesity prevention initiatives/interventions, programs, resolutions/pledges and policies for a campus environment. The audit surveys campus professionals with expertise who categorize the extensiveness of each health promotion/obesity prevention topic rather than recording/evaluating every specific initiative/program in the environment.
- **Campus Environment Demographics Audit** tracks the geographic, demographic and environmental variables necessary to describe, modify and compare campus results.

Activities:

- The eB4CAST dissemination tool was refined over the past year via cognitive interviews and expert review. The tool was tested at 75 college campuses and 6 high school sites.
- The seven components of the Healthy Campus Environmental Audit were tested against validated tools at all multistate partner campuses.
- Instead of adapting the Behavior Environment Perceptions Survey for low-income communities, plans to create a new instrument appropriate to the target audience have been formulated.

Milestones: In Year 2 (2017-18) of this 5-year project, implementation and dissemination efforts continue on the eB4CAST tool to benchmark community-programming efforts and their effectiveness in change and sustainability, the revised Behavioral Environmental Perceptions Survey will be administered, and the Behavioral Environmental Perceptions-Community Survey will be developed.

Impacts: Healthy diet and exercise habits help people manage their weight and prevent chronic diseases, but people can only make healthy choices if their surroundings provide easy, affordable

healthy options. To help communities pinpoint changes that will provide and encourage healthier habits, the NC1193 research team developed the Healthy Community Audit, which evaluates the food choices at local dining options, vending machines, and grocery and convenience stores, walkability and bikeability, recreation facilities and programs, and policies, and the Healthy Community Index, which tracks and compares audit scores. So far, 75 communities have used these new tools and have gained knowledge related to their campus' policies and ways to improve their food and physical activity environments. These changes make healthy habits an easier, more sustainable choice for more people. Good health means better quality of life, reduced healthcare costs, and an able workforce in communities across the U.S.

Publications:

Sowers MF, Colby S, Greene GW, Pickett M, Franzen-Castle L, Olfert MD, Shelnut K, Brown O, Horacek TM, Kidd T, Kattelman KK, White AA, Zhou W, Riggsbee K, Yan W, Byrd-Bredbenner C. Survey Development to Assess College Students' Perceptions of the Campus Environment. *Am J Health Behav* 2017; 41(6):701-709 <https://doi.org/10.5993/AJHB.41.6.4>.

Vilaro M, Zhou W, Colby SE, Riggsbee K, Byrd-Bredbenner, Olfert MD, Barnett TE, Mathews AE. Development and Preliminary Testing of the Food Choice Priorities Survey (FCPS): Assessing the Importance of Multiple Factors on College Students' Food Choices. *Evaluation & the Health Professions* 2017; 40(4): 425-449 <https://doi.org/10.1177/0163278717735872>

Colby S, Zhou W, Sowers M, Shelnut K, Olfert M, Morrell J, Koenings M, Kidd T, Horacek T, Greene G, Brown O, White A, Hoerr S, Byrd-Bredbenner C, Kattelman K. College Students' Health Behavior Clusters: Differences by Sex. *Am J Health Behav* 2017;41(4):378-389 <https://doi.org/10.5993/AJHB.41.4.2>

Loso J, Staub D, Colby SE, Olfert MD, Kattelman K, Vilaro M, Colee J, Zhou W, Franzen-Castle L, Mathews AE. Gardening Experience Is Associated with Increased Fruit and Vegetable Intake among First-Year College Students: A Cross-Sectional Examination. *J Acad Nutr Diet* 2018 118(2):275-283. DOI: 10.1016/j.jand.2017.09.005

Horacek TM, Yildirim ED, Simon MB, Byrd-Bredbenner C, White AA, Shelnut KP, Olfert MD, Morrell J, Mathews A, Kidd, Kidd T, Kattelman K, Franzen-Castle L, Colby S, Brown O. Development and Validation of the Full Restaurant Evaluation Supporting a Healthy (FRESH) Dining Environment Audit. *J Hunger Environ Nutr* 2018 Published online <https://doi.org/10.1080/19320248.2018.1434103>

Olfert MD, Barr ML, Riggsbee K, Kattelman KK, Leischner K, Mathews AE, Vilaro M, Colby SE. A Community Based Participatory Approach to Training Young Adults to Design and Implement a Social Marketing Framed Lifestyle Intervention on their College Campus. *JMIR Preprints*. 26/10/2017:9281 DOI: 10.2196/preprints.9281

Famodu OA, Barr ML, Holaskova I, Zhou W, Morrell JS, Colby SE, Olfert MD. Shortening of the Pittsburgh Sleep Quality Index Survey using Factor Analysis. *Sleep Disorders* 2018, In press.

Horacek TM, Dede Yildirim E, Kattelman K, Byrd-Bredbenner C, Brown O, Colby S, Greene G, Hoerr S, Kidd T, Koenings MM, Morrell J, Olfert MD, Phillips B, Shelnut K, White A. Healthfulness of convenience stores mediated by college students' meal intentions and energy from fat intake predicts their body mass index. *Appetite* 2018, In review.