Developing a Culture of Health: Combining Research and Education to Develop Sustainable and Scalable Wellness Programs for Head Start Educators

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Objective: The goals of this study are to design, implement, and evaluate an integrated workplace wellness randomized controlled trial (RCT) at diverse Head Start centers to improve the health and wellness of Head Start educators (HSE); and provide experiential education in research methods for MS and PhD nutrition students.

Description: Conduct a national needs survey and identify the factors that influence HSE’s wellness behaviors and engagement in worksite wellness and health promotion services. Design, implement, and evaluate the RCT at diverse Head Start centers, in collaboration with graduate-level trainees. Evaluate the effectiveness of the workplace wellness intervention on HSE’s cardiometabolic risk factors, and model the potential cost savings associated with changes in absenteeism and diet-related chronic disease conditions. Develop, deliver, and evaluate an ongoing innovative, graduate-level (MS and PhD) community-engaged research methods course, with an experiential learning component.

Evaluation: The national needs survey (expected N = 2300) data will be analyzed using descriptive statistics. Findings will be presented at the aggregate and subgroup levels. Process and outcome evaluations will be conducted to assess the implementation and impact of the intervention. Evaluation will include measures such as biometrics, economics, and challenges to implementation. These data will be gathered through in-person assessments, interviews, surveys and administrative records. Evaluation of the graduate level course will be ongoing and subject matter refined based on contemporary pedagogy.

Conclusions and Implications: Findings from the study will provide insights on strategies to improve HSE health while realizing economic benefits such as improved productivity and reduced disability claims. These results have implications for policy makers and upstream and system-level change. Mentored-training of MS and PhD students will demonstrate that applied learning can facilitate the development, implementation, and evaluation of an applied nutrition intervention, thereby expanding best practice nutrition higher-education and diversifying the pool of practitioners.

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Eat, Play, Go! Integrated Transdisciplinary Research, Education, and Extension Project to Prevent Latino Youth Obesity

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Objective: Hispanic/Latino children in the U.S. experience the highest obesity prevalence (26.2%), compared to other racial/ethnic groups. Current profiles of health professionals and dietitians highlight the need to increase the number of Latino students trained to curve the obesity epidemic among Latinos, a large segment of the U.S. population. The Eat, Play, Go! study aims to reduce the prevalence of overweight and obesity among Latino youth via an interactive intervention. The study goals are to: evaluate the effectiveness of Eat, Play, Go! in reducing overweight and obesity among Latino youth; and increase the pool of qualified health and nutrition professionals entering the workforce to address chronic conditions among Latino youth.

Description: The Eat, Play, Go! intervention has a one-group study design with repeated measures (pre, post, 3-month follow-up). The study will engage 174 Latino youth (ages 10-13) and their parents/caregivers in a six-session intervention, including two booster sessions, informed by the Social Cognitive Theory. Six graduates and six undergraduates will be engaged in a 10-month experiential learning fellowship including training, professional development, and opportunities to assist with study activities.

Evaluation: Measurable outcomes include increased nutrition knowledge, dietary changes (increases in fruit and vegetable intake/ decreases in sugar-sweetened beverages and fast-food consumption), and changes in sedentary time and physical activity. Data collection includes self-report surveys and objective anthropometric and physical activity measurements. Training effectiveness will be measured via self-report survey to assess changes in knowledge, skills, and self-efficacy. Paired sample t-tests evaluated changes between pre- and post- participant as-
Garcia (continued)

sessions. To date, 59 youth and their caregivers have participated in the study. Preliminary findings show increases in vegetable intake and reductions in sugar-sweetened beverages and fast-food consumption. A total of nine student fellows have engaged in research, training, and professional development, showing increased skills and efficacy in community-based research.

**Conclusions and Implications:** Eat, Play, Go! is a promising culturally tailored intervention focused on increasing healthy lifestyles among Latinos.

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Expanding Nutrition Student Competency in Telehealth to Improve Diet and Prevent Chronic Disease in Adults With Obesity: Year 1

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**Objective:** The objectives of this four-year integrated research and education project are 1) to develop, implement, and evaluate a telenutrition intervention that includes student-delivered health coaching and 2) to use competency-based training and experiential learning activities to prepare future nutrition professionals to provide virtual nutrition coaching for chronic disease prevention.

**Description:** Year 1, the developmental phase, included designing intervention components and amending the educational materials that were previously pilot tested in men. Additionally, the curriculum for one of a series of competency-based telenutrition courses for chronic disease prevention was developed and is being pilot tested. In the implementation phase, all participants will receive a nutrition prescription and counseling by a registered dietitian (RD), educational materials, and in-person assessments at months zero, three, six, 12, and 18. Participants assigned to the high-intensity group will receive support from an RD through five virtual medical nutrition therapy (MNT) encounters and 15 telephonic nutrition student coaching sessions. The low-intensity group will receive three virtual MNT encounters and four nutrition-coaching sessions.

**Evaluation:** The project will use a randomized comparative effectiveness intervention design to evaluate the program under the two levels of intensity on primary outcomes (knowledge, self-efficacy, diet quality, and weight change) and secondary outcomes (health-related quality of life and risk factors for cardiovascular disease). An incremental cost-effectiveness ratio will also be determined. Additionally, competency-based courses will be evaluated using both formative and summative assessments.

**Conclusions and Implications:** This project is expected to represent an essential step toward increasing access to nutrition care and dietary counseling for improvements in diet quality and reaching and maintaining a healthy weight, which ultimately reduces comorbidities, improves the quality of life, and reduces healthcare costs. Additionally, by educating and training students to provide virtual nutrition coaching as part of the program, we will improve the knowledge and skills of future nutrition care professionals and contribute to the program’s sustainability.

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HCRC 2022: A Novel Conference Approach for Disseminating Information on Assessing the Healthfulness of College Campuses

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**Objective:** The goal of the conference was to disseminate education and assessment tools that can help professionals more effectively assess their college environments and develop health promotion interventions/programs.

**Description:** This online, three-day conference brought people together who wanted to assess and create healthy behaviors and positive environmental supports on college campuses. Speakers shared information on tools that can be used to assess the healthfulness of the college campus and students’ behaviors. Speakers also shared interventions/program approaches that can be used to improve behaviors of and environmental factors that support healthy behavior.

**Evaluation:** The conference was attended by 199 participants from 51 different universities (including seven administrators, three community partners, six extension professionals, 52 faculty members, 64 graduate students, 43 undergraduate students, 20 health and wellness professionals, and four staff members) and brought together 22 speakers from across the nation. All of the participants who attended sessions and completed feedback surveys provided positive evaluations.

**Conclusions and Implications:** The conference format was successfully implemented and well received by attendees. Research is needed to assess impacts of attending the conference on the attendees’ future health-related assessments and intervention efforts. If a similar conference is repeated, efforts are needed to attract more non-faculty and student attendees (specifically more administrators, community partners, extension professionals and health and wellness professionals).

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Impact of Food Retailers’ Presence and Composition on Nutritional Equity and Health Outcomes in the United States With Machine Learning

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