

## COLLEGE OF HEALTH SCIENCE FACULTY GRANT-IN-AID REPORT

(No longer than 1 Page)

**PROJECT TITLE:** The Creation of Tailored Health Communication for Type 2 Diabetes Risk

Reduction

**INVESTIGATOR:** Jenifer J. Thomas

**YEAR PROJECT WAS SUPPORTED:** 2014-2015

### **Participants/Subjects**

A total of 10 college students participated in a focus group. A total of 101 college students completed a new survey.

### **Methods**

An existing scale, the Generalized Health-Related Self-Concept Questionnaire (Weismann et al., 2008), was modified to measure HRSC in the context of lifestyle change (the Lifestyle-HRSC). Scale construction procedures were: 1) creation of new items that indicate HRSC and lifestyle change activities, 2) review of new items by a content expert, 3) test of new items with a small sample of individuals, and 4) test of new items with a large sample of individuals.

### **Results**

Principle component factor analysis was performed using varimax rotation. Factor analysis revealed ten dimensions, with factor loadings ranging from 0.30-0.99. Item reduction procedures were implemented to reduce the scale to 31 items.

### **Limitations**

The college student sample (generalizability) and number of participants (statistical power).

### **Conclusions**

Lifestyle-HRSC dimensions may distinguish individual success/failure in lifestyle intervention participation (i.e., reaching desired health outcomes) and may provide additional insight into the initiation and maintenance of health behavior change.

### **Future Research & Dissemination**

The results of this project were presented at the 2016 Society of Behavioral Medicine Annual Meeting. I am currently preparing the CHS seed grant funded project for publication. A grant to support further study of the Lifestyle-HRSC scale was awarded by the Mountain West Clinical Translational Research Infrastructure Network (CTR-IN) Mini Grant program in November 2015. The Lifestyle-HRSC questionnaire was implemented within a type 2 diabetes prevention intervention conducted in rural North Carolina ("Pirates for HEALTH: Healthy Eating, Active Living Through a Hybrid Intervention" through collaboration with Bhibha Das, Ph.D. at East Carolina University). The relationship between Lifestyle-HRSC scores and type 2 diabetes intervention outcomes are being examined, and the psychometric properties of the scale will be assessed and compared to the college student sample (from the CHS seed grant). Dr. Das and I will present results from this collaboration at the American Public Health Association Annual Meeting & Expo in November 2016.