Title: Ecological Momentary Determinants of Sedentary Behavior

Unique Protocol ID: STUDY00004349

Date: December 21st 2017

Statistical analyses

PART A

All statistical analyses will be completed using SAS Version 7.1 (SAS Institute, Inc., Cary, North Carolina). Mixed model analyses will be conducted using PROC MIXED to examine the bi-directional associations of sitting, standing, and moving behaviors and affective states. All models will be adjusted for age, gender, race and job type.

PART B

For instances where prompts were sent and a response occurred, the response time will be recorded (seconds) and the average response time calculated. The number of responses occurring each hour will be calculated to identify the frequency of responses by hour. Generalized estimating equations (GEEs) will be ran using GENMOD (with a repeated statement) to examine the main effect of prompt delivery (sent or not sent) by modeling the mean likelihood of a response as an odds ratio, over the next 5-minute and 30-minute periods. An autoregressive model will be used to account for time dependency and the correlation between observations. Mixed model analyses will be conducted using PROC MIXED to examine the association between prompt type and total sedentary time over the next 5-minute and 30-minute period. All models will be adjusted for age, race, gender, day of intervention and minutes of sitting 30 minutes prior to a prompt. Decision points where the participant was standing or moving at the time of prompt delivery (sent) or scheduled (not sent) time will be excluded from analyses.