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## Health promotion intervention increases fruit and vegetable consumption and physical activity among Sub-Saharan African University students: A randomized controlled pilot study

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A Health-Promotion intervention has been conducted at a Sub-Saharan African University to evaluate the efficacy of increasing self-reported physical activity and diet habits among university students. Randomly selected second-year students at a university in Eastern Cape Province were randomized to one of two 4-session interventions based on social cognitive theory integrated with qualitative research on the population: Health-promotion, targeting physical activity (the primary outcome) and fruit, vegetable and fat consumption or HIV risk-reduction, targeting sexual-risk behaviors and the attention-matched control group. Participants completed assessments via audio computer-assisted self-interviewing pre-intervention and 6 and 12 months post-intervention. Of 244 randomly selected students, 176 were randomized (mean age, 20.8 years) with 171 (97.2%) retained 12 months post-intervention. Only 18% met guidelines for aerobic and strength-building physical activity pre-intervention. Generalized-estimating-equations analyses indicated that the health-promotion-intervention participants were more likely to meet physical-activity guidelines than were control participants post-intervention, adjusting for pre-intervention physical activity (odds ratio [OR]=3.35; 95% CI: 1.33-8.41). Health-promotion participants reported a greater number of days on which they did vigorous-intensity (risk ratio [RR]=2.01; 95% CI: 1.43-2.83) and moderate-intensity (RR=1.40; 95% CI: 1.01-1.95) aerobic activity but not strength-building activity (RR=1.37; 95% CI: 0.091-2.07). Although the intervention did not increase adherence to 5-a-Day fruit-and-vegetable guidelines (OR=0.98; 95% CI: 0.35, 2.73), it reduced self-reported servings of fried foods (mean difference=-0.31; 95% CI: -0.60, -0.02). The findings suggest that theory-based, contextually appropriate interventions may increase physical activity among university students in Sub-Saharan Africa.

### Biography

G Anita Heeren has completed her PhD in 2002 at the University of Fort Hare in Alice, South Africa and her Postdoctoral studies at the University of Pennsylvania at the Annenberg School for Communication and Health Behavior. She is an Assistant Professor at St. Joseph's University in the Department of Health Science. She has published more than 30 papers in reputed journals and is serving as an Editorial Board Member at three journals.

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