

**Neighborhood Safety and Attractiveness Influence Physical Activity among African American and Hispanic or Latina Women**

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ABSTRACT

**Background:** Although the benefits of adopting physical activity (PA) are well publicized, physical inactivity rates remain high, and African American and Hispanic or Latina women do less PA compared to white women. Many interventions have begun to focus on conveniently performed lifestyle PA, such as walking. **Purpose:** The purpose of this study was to investigate the relationship between neighborhood safety and attractiveness and PA in a sample of African American (AA) and Hispanic or Latina (HL) women participating in Health Is Power (1R01CA109403). **Methods:** Women (AA  $N=202$  and HL  $N=107$ ) who enrolled in the study were middle-aged ( $M=45.8$  years), overweight ( $M$  BMI=34.2 kg/m<sup>2</sup>) and largely sedentary ( $M$  accelerometer measured PA=19.6 min/day). Self-reported PA was measured by the International Physical Activity Questionnaire (IPAQ) long form and objectively measured PA was collected using an accelerometer at baseline (T1) and post intervention (T2). Neighborhood safety and attractiveness were measured by trained observers using the Pedestrian Environment Data Scan (PEDS). **Results:** At T1, African American women did more moderate intensity PA ( $M=24.3$  vs. 10.9 minutes of moderate PA per day) and reported doing more walking ( $M=867.7$  vs. 432.2 MET-minutes per day) than Hispanic or Latina women. At T2, African American still did more PA than Hispanic or Latina women ( $M=25.0$  vs. 11.7 minutes of moderate PA per day), but there were no differences in self-reported PA. Bivariate associations showed that as safety ( $r=-0.144$ ) and attractiveness ( $r=-0.149$ ) for bicycling increased, self-reported walking decreased ( $ps<0.05$ ). Linear regression analyses indicated attractiveness for bicycling predicted increased T2 accelerometer measured PA ( $p=0.025$ ), after adjusting for ethnicity, site, socioeconomic status (SES) and age. **Conclusions:** Neighborhood safety and attractiveness may influence PA. Community leaders and policy makers should consider the relationship between the built environment, PA and obesity in communities where African American and Hispanic or Latina reside when passing and/or enforcing public policies and amendments.

KEY WORDS: Physical Activity, Environment, African American, Women,  
Minority, Intervention