

## POSITIVE AFFECT PREDICTS FUTURE BODY MASS INDEX: A 2-YEAR PROSPECTIVE ANALYSIS OF THE AFRICAN AMERICAN HEALTH STUDY

**Misty AW Hawkins**<sup>1</sup>, Jesse C Stewart<sup>1</sup> (mentor), and Douglas K Miller<sup>2-4</sup>

<sup>1</sup>Department of Psychology, Indiana University Purdue University Indianapolis, Indianapolis, IN 46202

Although prospective studies indicate that negative affective factors (e.g., depression) predict increases in body mass index (BMI), few studies have examined whether positive affect is prospectively related to BMI in African Americans. Thus, it is unknown whether positive affect is related to BMI, independently of negative affect, for this ethnic group. This deficit in the literature is unfortunate, given that positive affect may protect against increases in BMI, and African Americans have among the highest rates of obesity (BMI  $\geq 30$  m/kg<sup>2</sup>). Accordingly, our objective was to determine whether positive affect predicts 2-year changes in BMI, independently of negative affective factors, in middle-aged African Americans.

Participants were 674 African Americans aged 57-72 years who were enrolled in the African American Health study. For our study, all variables were measured in 2008 (baseline) and at 2-year follow-up. Positive affect was assessed using the 4-item positive affect subscale of the Center for Epidemiologic Studies-Depression Scale (CES-D), whereas depressive symptoms were assessed using the remaining CES-D items. Anxiety was measured using the GAD-7, and low vitality was assessed with the SF-36. Self-reported BMIs were used.

Multiple linear regressions revealed that greater baseline positive affect predicted 2-year decreases in BMI ( $\beta = -.048$ ,  $p = .026$ ) after adjusting for age, sex, baseline BMI, depressive symptoms, anxiety, and low vitality. Depressive symptoms, anxiety, and low vitality did not predict BMI ( $ps > .10$ ). Baseline BMI did not predict 2-year changes in positive affect ( $p = .55$ ).

Our findings suggest that positive affect may exert a protective effect against obesity in African Americans, whereas negative affective factors (i.e., depressive symptoms, anxiety, and low vitality) were unrelated to BMI in our sample. A key implication is that interventions for increasing positive affect in African Americans may be helpful in obesity prevention efforts for this at-risk population.

<sup>2</sup>Department of Medicine, Indiana University School of Medicine, Indianapolis, IN 46202

<sup>3</sup>Center for Aging Research, Indiana University, Indianapolis, IN 46202

<sup>4</sup>Regenstrief Institute, Inc, Indianapolis, IN 46202

### Funding Acknowledgements

This research was supported by Grant R01 AG-010436 from the National Institute on Aging to Douglas K. Miller, MD.