Personal Weight Beliefs Predictive of Eating Behavior Patterns and Actual Weight in Young African-American Women

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Introduction

- African American women bear a disproportionate burden of overweight and obesity in the U.S. 1
  - 82% overweight
  - 59% obese
- African American women are at increased risk for obesity related illnesses e.g. CVD, DM type 2, sleep apnea 2
- Multiple factors contribute to excess weight 3,4,5,6,7
  - 57% sedentary
  - 87% do not consume 5 servings of fruits & vegetables/day
  - Culturally influenced weight beliefs

Beliefs and Behavior

- Beliefs are a certainty that a proposition is true
- Acquired through culture and inferred from one’s speech or actions
- Beliefs are predispositions to action 8,9,10

Health beliefs have been associated with engaging in health behaviors but this relationship has had limited examination with regard to weight beliefs and weight management behavior e.g. eating behavior patterns 11

Objective

- The objective of the study was to determine whether beliefs about personal weight were predictive of eating behavior patterns and weight in young African American women.

Defining: Beliefs about Personal Weight

- Beliefs about a belief object (e.g. weight) are made explicit or accessible through inquiry about:
  - Characteristics
  - Causal attributions
  - Consequences

Definition:

Beliefs about personal weight is a multidimensional concept regarding the descriptive characteristics, causal attributions, and consequences of one’s personal weight.

Conceptual Framework – TSC

Beliefs about personal weight are conceptualized as a foundational disposition within self-care agency in the theory of self-care 1,2

Methods

- Design:
  - Observational, Cross-Sectional
- Sample and Setting:
  - N = 150 African American women
  - Not pregnant or breastfeeding
  - Generally good health
  - Academic, medical and community sites
- Age 18-40 yrs, M = 28.39, (SD 7.69)
- Education 9-22 yrs, M = 13.78, (SD 2.04)
- Annual Income 63.90% < $ 25,000
- BMI 16-52 M = 31.50, (SD 7.82)
- Instruments/Measurements
  - Beliefs about Personal Weight Survey (BPW) 13
  - 57 items - 16 composite-scales developed from principal component items
    - Descriptor domain (α .68 - .80)
    - Cause domain (α .38 - .80)
    - Consequence domain (α .68 - .90)
  - Eating Behavior Pattern Questionnaire 14 (α .46 - .87)
    - 51 items measuring six dimensions of eating behavior [low fat eating, snacking on sweets, cultural/lifestyle, haphazard planning, meal skipping, emotional eating]
  - BMI
    - Calculated using measured weight and height
    - Weight-pounds using portable scale
    - Height-inches using portable stadiometer Seca 217

Results

Regression Models: Beliefs about Personal Weight Predictive of Eating Behavior Patterns

<table>
<thead>
<tr>
<th>Weight Beliefs</th>
<th>Eating Behavior</th>
<th>Beta</th>
<th>R²</th>
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<tbody>
<tr>
<td>Descriptors</td>
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<td>Overweight</td>
<td>Emotional eating</td>
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<td>.12</td>
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<td>Causal Beliefs</td>
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<td>Unhealthy Eating</td>
<td>Stress Factors</td>
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<td>Planning</td>
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Regression Models: Beliefs about Personal Weight Predictive of BMI

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<tr>
<td>Consequence Beliefs</td>
<td>Health Problems</td>
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Conclusions

- Causal and consequence beliefs about personal weight most predictive of eating behavior patterns (low fat eating, emotional eating, haphazard meal planning)
- Beliefs about weight descriptors (overweight) most predictive of BMI
- Beliefs about Personal Weight among young African American women
  - Predictive of eating behavior patterns
  - Predictive of BMI
- Implications for Clinical Practice
  - Assisting young African American women with weight management should include:
    - Assessing patient’s beliefs about personal weight descriptors, causes and consequences