Unpredictability, Body Awareness, and Eating in the Absence of Hunger: A Cognitive Schema Approach

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INTRODUCTION

- Life history theory predicts early environmental circumstances serve as blueprint for the future, enabling development of behaviors that maximize survival in such conditions (adaptive calibration)
- Low childhood SES predicts eating in the absence of hunger (EAH; Hill et al., 2016)
- Current research examined **childhood environmental factors** (household unpredictability, dangerous neighborhood conditions & parental inconsistency), development of an **unpredictability schema** (a mindset about the world and people in it as unpredictable), and how **lower body awareness impacts eating in the absence of hunger** (Proffitt Leyva & Hill, under review *Health Psychology*)

STUDY 1

- **Participants**: *N* = 353 men (*n* = 154) & women (*n* = 199) undergraduates ages18-30
- **Measures**:
  - Childhood SES (α = .80; Griskevicius et al., 2011)
  - Childhood Household Unpredictability (α = .74; Mittal et al., 2015)
  - Parenting Inconsistency (α = .68)
  - Neighborhood Quality (α = .72)
  - Unpredictability Schema (α = .79; Cabeza de Baca et al., 2016)
  - Body Awareness Questionnaire [BAQ] (α = .85; Shields, Mallory, & Simon, 1989).

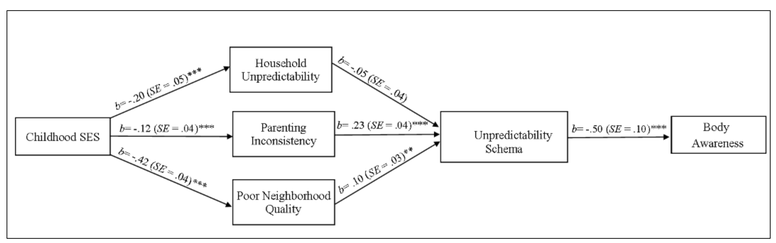

Figure 1. Path model analysis demonstrating relationship between Childhood SES and Body Awareness via factors of environmental quality (Household Unpredictability, Parenting Inconsistency, and Poor Neighborhood Quality) and the Unpredictability Schema. Note: ** indicates $p \leq .01$ and *** $p \leq .001$.

STUDY 2

- **Participants**: *N* = 69 men (*n* = 16) & women (*n* = 53) undergraduates ages 18-30
- **Measures**:
  - Unpredictability Schema (α = .78)
  - BAQ (α = .69)
  - Mindful Eating (α = .78; Framson, Kristal, Schenk, Littman, Zeliadt, & Benitez, 2009)
  - Eating in the Absence of Hunger (α = .91; Tankofsky-Kraff et al., 2008).

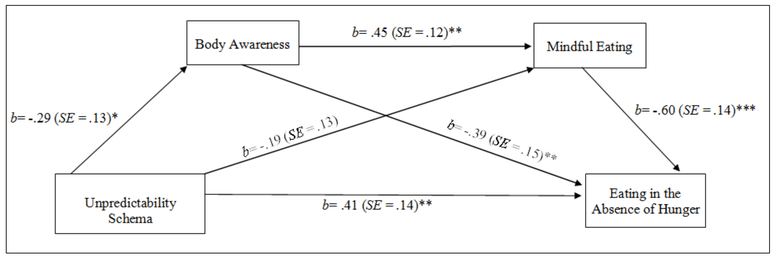

Figure 2. Serial mediation model with the Unpredictability schema significantly predicting Body Awareness, Mindful Eating, and Eating in the Absence of Hunger. Note: * indicates $p \leq .05$, ** $p \leq .01$, and *** $p \leq .001$.

STUDY 3

- **Participants**: *N* = 80 normal weight (BMI <30) men (*n* = 27) & women (*n* = 53)
- **Procedure:**
  - Processed individually under consumer taste test ruse
  - Measured blood glucose
  - Engaged in consumer taste test and rating paradigm
    - Measured weight of foods (mini chocolate-chip cookies & pretzels)
    - Converted grams consumed to total calories consumed
- **Measures**:
  - Biometrics (height, weight, calculated BMI) (α = .80; Griskevicius et al., 2011)
  - Unpredictability Schema (α = .79; Cabeza de Baca et al., 2016)
  - Body Awareness Questionnaire [BAQ] (α = .85; Shields, Mallory, & Simon, 1989)
  - Product Liking

STUDY 3 CONTINUED

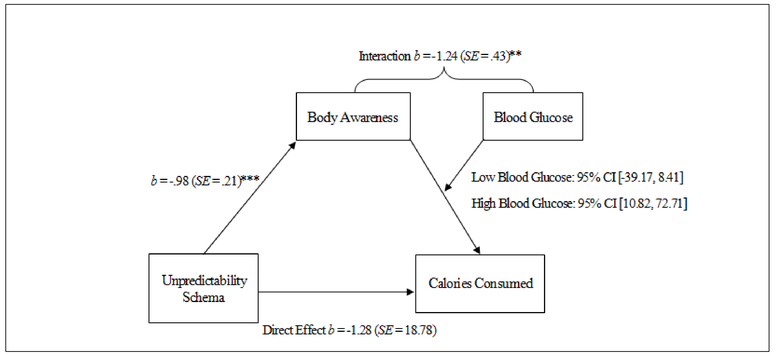

Figure 3. Conditional moderated mediation using PROCESS macro (Model 14; Hayes 2013) with the Unpredictability Schema significantly predicting Body Awareness and Blood Glucose on Calories Consumed, while controlling for product liking and participant BMI. Note: ** indicates $p \leq .01$, and *** $p \leq .001$.

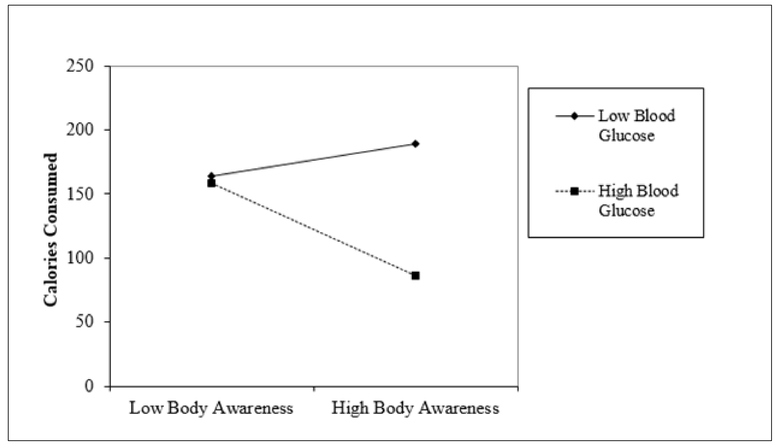

Figure 4. Moderated regression model using PROCESS macro (Model 1; Hayes 2013) to probe the effect of blood glucose on Body Awareness and Calories Consumed.

DISCUSSION

- Findings lend support for the adaptive calibration model of life history theory, indicating that **predictability of childhood environment is important for:**
  - Development of unpredictability schema
  - Body Awareness
  - Energy regulation
- **Unpredictability schema may be novel risk factor for lowered body awareness and dysregulated eating behavior**