**Introduction**

**BACKGROUND**
- Internalized weight bias occurs when an individual views their own self-worth through the lens of common negative stereotypes and attitudes about people who are overweight.1
- Internalized weight bias contributes to binge eating in young adults across the weight spectrum.2

The current study investigated the relationship between internalized weight bias, restrictive eating in social settings, and binge eating, using the all-or-nothing model of binge eating3 depicted below as a framework for understanding the potential role of internalized weight bias in eating behavior.

**HYPOTHESES**

**Hypothesis 1:** Restrictive eating in social settings mediates the relationship between internalized weight bias and binge eating.

**Hypothesis 2:** Gender will moderate the relationship between internalized weight bias on restrictive eating in social settings as a mediator. *p < .05, ***p < .001

**Hypothesis 3:** More salient and significant memories will be associated with more severe internalized weight stigma.

**Method**

**PARTICIPANTS**
Duke University undergraduates (N = 100) were recruited from the Psychology & Neuroscience subject pool to take an online survey. The data from 3 participants were incomplete and were excluded from analysis.

<table>
<thead>
<tr>
<th></th>
<th>MEN</th>
<th>WOMEN</th>
<th>TOTAL</th>
</tr>
</thead>
<tbody>
<tr>
<td>n</td>
<td>35</td>
<td>62</td>
<td>97</td>
</tr>
<tr>
<td>M(±SD)</td>
<td>19.23 ± 1.31</td>
<td>18.68 ± 0.83</td>
<td>18.94 ± 1.16</td>
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<tr>
<td>M(±SD)</td>
<td>23.43 ± 1.14</td>
<td>23.80 ± 0.45</td>
<td>23.67 ± 0.01</td>
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</table>

**Ethnicity**
- White: 24, 36, 60
- Black: 0, 10, 10
- Asian: 12, 17, 29
- Latinx: 4, 8, 12
- Native American: 0, 1, 1
- Pacific Islander: 0, 0, 0
- Other: 0, 2, 2

**MEASURES**

**Demographics.** Gender, age, ethnicity, BMI.

**Binge eating.** Item 6 of the Eating Disorder Diagnostic Scale (EDDS)4: “How many times per month over the past 3 months have you eaten an unusually large amount of food and experienced a loss of control?”

**Internalized weight bias.** The Modified Weight Bias Internalization Scale (WBIS-M)5.

**Restrictive eating in social settings.** Researcher-designed questions related to eating less in front of other people.

**Depression.** The Beck Depression Inventory-II (BDI-II)6.

**Weight stigma memories.** Version of the Autobiographical Memory Questionnaire6-7 (AMQ) specific to body shame, Centrality of Event Scale (CES)8.

**Results**

**HYPOTHESIS 1**
Indirect effect: β = 0.104*
95% CI: (0.015, 0.204)
Direct effect: β = 0.327
95% CI: (-0.237, 0.892)

The direct path from internalized weight bias to binge frequency becomes nonsignificant with the addition of restrictive eating in social settings as a mediator. *p < .05, ***p < .001

**HYPOTHESIS 2**
Linear regression analysis revealed that there was no significant gender difference in the effect of internalized weight bias on restrictive eating in social settings (βmen = .312, βwomen = .256, t = -.375, p = .708).

**HYPOTHESIS 3**
Eighty-six participants wrote about past experiences of weight stigma and body shame. Memory salience accounted for significant variance in WBIS-M score ($R^2 = .271$, $F(1, 84) = 31.281, p < .001$), as did memory significance ($R^2 = .154$, $F(1, 84) = 15.293, p < .001$).

**WEIGHT STIGMA MEMORIES**
Qualitative analysis of body shame memories revealed several recurring themes:
- Removing clothing in front of others
- Disgust at one’s appearance in photographs
- Comparing their bodies with peers’ or with their younger selves
- Embarrassment about poor athletic performance
- Shame after eating large amounts of food

**Discussion**

- Restrictive eating in social settings mediates the relationship between internalized weight bias and binge eating.
- Stigmatizing experiences may contribute to weight bias internalization in individuals across the weight spectrum.

**Conclusion**
- The current study suggests that increased risk for binge eating among individuals with internalized weight bias may be a product of shame around eating in front of others.
- Forms of restrictive eating less severe than total fasting may have significant impacts on binge eating risk, although further study is needed before causation can be established.

**References**