



Negative affect as a potential moderator between reward-based eating and waist circumference

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Background

- While BMI is often used as a measure of one's health, it doesn't taken into account an individual's bodily proportions. Waist circumference may be a better indicator of one's health.
- A large waist circumference if related to negative health outcomes such as poor hypertension, diabetes, and metabolic syndrome.¹
- Dysregulated eating behaviors are related to excess body weight.²
- Mental illness associated with negative emotions, such as anxiety and depression, are linked to a greater body weight and risky health behaviors.^{3,4}

The present study aims to examine the relationship between waist circumference and reward-based eating behaviors, as well as the exploring negative affect as a moderator.

Hypotheses:

1. Engaging in more reward-based eating behaviors will predict a larger waist circumference.
2. Negative affect will moderate the relationship, such that experiencing more negative emotions will strengthen the relationship between reward-based eating behaviors and waist size.

Methods & Measures

Participants

- 149 middle-aged female participants ages 30-60 ($M = 42.34$, $SD = 9.86$) from the community.

Measures

- *Eating behaviors:* The Reward-Based Eating Drive Scale (RBED). A self-report measure of reward-based eating characteristics and behaviors.
- *Negative affect:* Self-report using the Modified Differential Emotions Scale (mDES).
- *Waist circumference:* Participants came into the lab and had various measurements taken. Waist circumference was collected in centimeters using a cloth tape measure.

Results

- Waist circumference was positively associated with reward-based eating drive ($B = 0.29$, $SE = 0.07$, $t = 3.55$, $p < .001$)

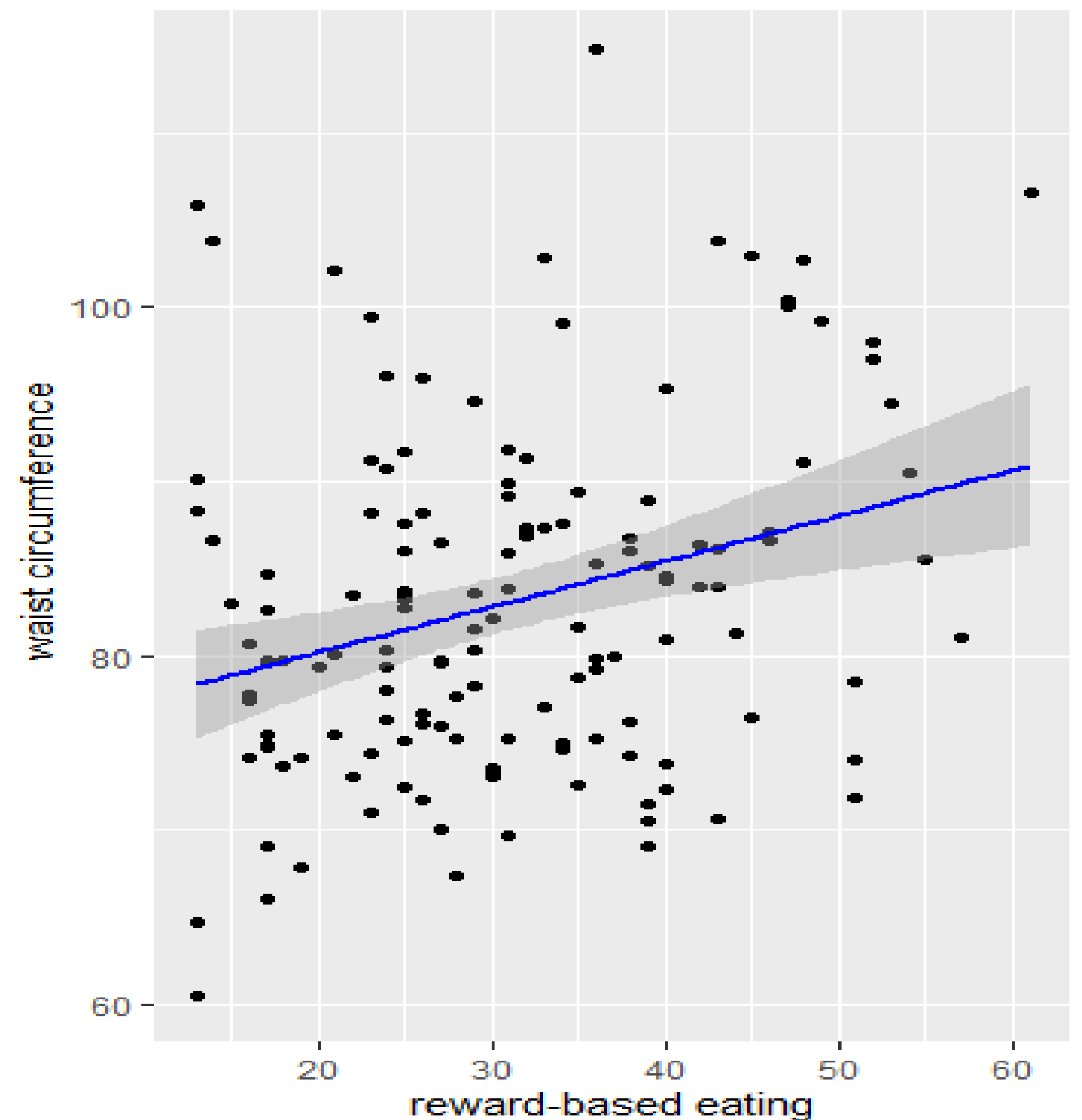


Figure 1. Regression model predicting waist circumference by reward-based eating.

- The interaction between negative affect and reward-based eating on waist circumference was non-significant.

Discussion

- These findings suggest that individuals that engaging in reward-based eating behaviors may be at risk for a higher waist circumference, and in turn, poorer health outcomes.
- Negative affect may not be an important factor when assessing this relationship. Factors such as stress and mental illness may play a role.
- Future research should assess the relationship between eating behaviors and other body metrics, such as waist-to-hip ratio.

References

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