

Body Image Shame, Perceived Behavioral Control, Social Support, and Eating Behaviors Among U.S. Adults

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Background

Disordered eating exists on a spectrum and includes subclinical behaviors such as binge eating, which are common and associated with shame-driven cycles of behavior. Body image concerns—shaped by sociocultural and psychological factors—are a key risk factor, with body image shame (internal and external) strongly linked to disordered eating. However, the roles of perceived behavioral control and social support in this relationship remain understudied, particularly within theory-driven frameworks.

Description

This study addresses a critical gap in understanding how internal and external body image shame influence disordered eating behaviors among U.S. adults. Grounded in the Theory of Planned Behavior, this study examines body image shame as a key predictor of binge eating risk while evaluating perceived behavioral control as a potential mediator and social support as a potential moderator. By focusing on a diverse adult population, this work extends beyond adolescent-focused research and informs more inclusive, stigma-sensitive public health strategies to reduce disordered eating risk.

Methods

Design/Sample

- Cross-sectional study of US adults (18+, English speaking)
- Convenience and purposive sampling
- Recruitment: social media, academic listservs, community centers, targeted outreach to LGBTQI+ organizations and Black owned businesses

Data Collection

- One-time, anonymous web-based survey (REDCap)
- Measures: Body Image shame Scale, Binge Eating Scale, Perceived Behavioral Control, Perceived Social Support, Socio-demographic and psychosocial covariates

Analytic Approach

- Descriptive and bivariate analyses
- Multivariable logistic regression to assess association between body image shame and binge eating risk
- Moderation analysis: social support x body image shame interaction
- Mediation analysis: perceived behavioral control using causal mediation (total, indirect effects, and adjusted)

Results

A total of 414 participants met eligibility criteria (from 481 attempts). The mean age was 37.8 (SD = 13.1), with 61.6% overweight/obese. Most identified as White (54.5%) and cisgender women (66.9%), with 3.6% transgender. The majority had a college degree (71.0%) and were employed (71.3%); 36.2% reported middle income. Participants were primarily urban (46.4%) or suburban (43.7%). Among participants, 41% reported binge eating risk behavior.

	aOR	p-value
Body Image Shame	1.29 (1.12-1.48)	<.001
Cisgender Men	3.05 (1.33-6.99)	0.008
Transgender	4.52 (1.08-18.87)	0.039
Black	2.72 (1.03-7.18)	0.44
SSB Only	0.23 (0.07-0.85)	0.026
Perceived Behavioral Control	0.79 (0.71-0.88)	<.001
Social Support	0.99 (0.98-1.00)	0.42

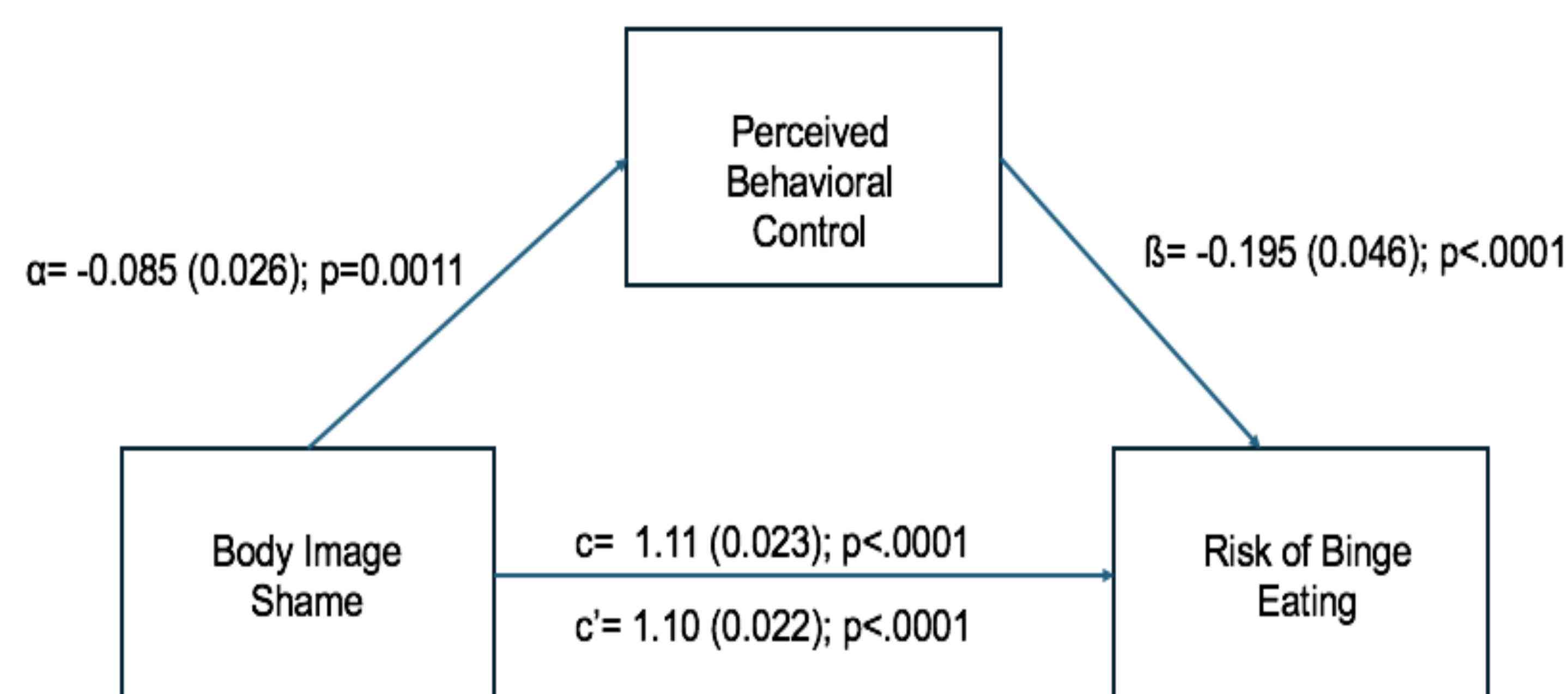


Figure 1: Mediation effect of perceived behavioral control on the relationship between body image shame and risk of binge eating.

	Effect (SE)	p-value
Total Effect (c)	1.11 (1.07-1.16)	<.0001
Direct Effect (c')	1.10 (1.05-1.14)	<.0001
Indirect Effect (Body Image Shame x Perceived Behavioral Control)	1.02 (1.00-1.03)	0.0008
Body Image Shame → Perceived Behavioral Control	-0.085 (0.026)	0.0011
Perceived Behavioral Control → Risk of Binge Eating	-0.195 (0.046)	<.0001
% Mediated	15.99%	0.0006

Discussion

Aim 1: Body image shame emerged as a strong predictor, associated with binge eating risk, loss of control over eating, and restrictive behaviors—suggesting it may drive both overeating and restriction. Notably, cisgender men demonstrated higher binge eating risk despite lower average shame, while Black and rural participants showed elevated prevalence but fewer significant associations in adjusted models. These patterns may reflect unmeasured structural and contextual factors (e.g., access to care, stigma, cultural norms, and help-seeking behaviors).

Aim 2: Perceived behavioral control partially mediated the relationship between body image shame and binge eating risk (16%), suggesting that shame may undermine eating-related self-efficacy and increase vulnerability to loss of control eating. However, the persistent direct effect indicates additional pathways beyond perceived control. Social support did not significantly moderate this relationship, suggesting body image shame may be primarily internally driven and less responsive to external support, which may be inconsistent, underutilized, or insufficient to offset internalized stigma.

Implications

Findings support expanding screening for subthreshold binge eating risk and prioritizing interventions that reduce body image shame while enhancing perceived behavioral control. Public health strategies should move beyond weight-centric approaches to address self-criticism, perceived external judgment, and the role of perceived body image in driving risk. Multi-component, culturally responsive interventions that integrate self-efficacy skill-building with shame reduction may be especially important for high-risk groups, including cisgender men, Black individuals, and rural populations.

Limitations

Findings should be interpreted considering the use of convenience sampling and overrepresentation of White, cisgender women, which may limit generalizability and subgroup analyses. The cross-sectional design precludes causal inference, and reliance on self-report measures introduces potential recall, social desirability, and self-selection biases. Additionally, measures of social support were general rather than behavior-specific, highlighting the need for longitudinal studies with more diverse samples and targeted constructs.

References

Scan here for references



Scan here for video presentation



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