

BODY IMAGE FLEXIBILITY AS A
PROTECTIVE FACTOR
AGAINST DISORDERED
EATING BEHAVIOR FOR
WOMEN
WITH A LOWER BODY MASS
INDEX

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Overview

- Introduction to disordered eating
- Define body dissatisfaction, body image flexibility, & body mass index (BMI)
- Examine body dissatisfaction & body image flexibility as predictors of disordered eating behavior
- Examine BMI as a moderator
- Discuss the implications of results

Disordered Eating

- Disordered eating (DE) is a significant concern for many females that impacts multiple aspects of life

(Hudson, Hiripi, Pope, & Kessler, 2007)

- It is a multifaceted phenomenon that has been linked to

- low self-esteem

(Fairburn, 2008)

- depression

(Pallister & Waller, 2008)

- anxiety

(Pallister & Waller, 2008)

- medical concerns (e.g., menstrual irregularities, esophageal complications, other GI problems)

(Fairburn, 2008)

Disordered Eating

- DE symptoms can be categorized as
 - DE cognitions – thoughts related to need for self-control through diet & weight restriction, positive beliefs about thinness, body dissatisfaction
 - DE behaviors - avoiding eating when hungry, binge eating, avoiding “bad” foods, excessive dieting &/or exercise, self-induced vomiting
- DE behaviors are associated with greater distress & psychopathology

(Fairburn, Cooper, & Shafran, 2003)

(Miller, Vaillancourt, & Hanna, 2009)

Disordered Eating

- There are many factors that contribute to the development & maintenance of DE, including
 - ▣ Body dissatisfaction (BD)
 - ▣ Body image flexibility (BIF)
 - ▣ Body mass index (BMI)

Body Dissatisfaction

- BD - the negative evaluation of one's physical appearance
 - the discrepancy between ideal & perceived body size & shape

(Canpolat, Orsel, Akdemir, & Ozbay, 2005; Phelps, Johnston, & Augustyniak, 1999)

- Evidence has consistently shown BD to be associated with disordered eating

(Stice & Shaw, 2002; Tylka & Subich, 2004)

- BD is a defining feature of eating disorders & maintains disordered eating

(Cooper, 1997; Fairburn, 2008)

Body Dissatisfaction

- However, BD is common among females. Not everyone who endorses BD engages in disordered eating, particularly to a severe degree

(Cash & Henry, 1995; Hilbert, de Zwaan, & Braehler, 2012)

- This suggests that there are other factors involved in disordered eating behavior

Body Image Flexibility

- BIF - the ability to experience difficult body image & other relevant internal experiences fully/openly when doing so promotes value-consistent behaviors
- Similar to psychological flexibility but specifically related to BD & disordered eating
 - ▣ Psychological flexibility may not fully capture an open, flexible, value-consistent process for DE

(Sandoz, Wilson, & Merwin, 2012)

(Masuda, Price, & Latzman, 2012)

Body Image Flexibility

- BIF is associated with
 - ▣ general psychological flexibility
 - ▣ body image dissatisfaction
 - ▣ disordered eating

(Sandoz et al., 2012)

(Sandoz et al., 2012; Wendell, Masuda, & Le, 2012)

Body Mass Index

- BMI is associated with BD & disordered eating
 - ▣ High BMI is directly related to BD

(Lu & Hou, 2009; Stice & Whitenton, 2002)

- ▣ Individuals diagnosed with anorexia & bulimia endorse greater BD

(Cash & Deagle, 1997)

- U-shaped relationship between BMI & disordered eating
 - ▣ Underweight & obese individuals more likely to engage in binge eating than those who fell within the normal & overweight ranges

(Rø, Reas, & Rosenvinge, 2012)

Body Mass Index

- There may be a different mechanism underlying disordered eating in underweight individuals with eating disorder diagnoses vs. those with diagnoses who are within a normal weight range
 - ▣ One's actual size & shape may influence disordered eating
- The extent or direction of associations among BD, BIF, & disordered eating may vary across levels of BMI

(Geller, Cassin, Brown, & Srikameswaran, 2009)

Current Study

- Research questions:
 - ▣ Do BD & BIF uniquely predict disordered eating?
 - ▣ Does BMI moderate these associations?

Current Study

□ Participants

- 259 women

- Age range 18 - 76 years old ($M=28.6$, $SD=9.0$)

- BMI score range 14.5 – 39.7 ($M=26.1$, $SD=6.7$)

- Ethnic/racial makeup

- 60% “Caucasian/White” ($n = 155$)

- 24 % “Latina” ($n = 62$)

- 10 % “African American/Black” ($n = 27$)

- 6% “other” or “mixed” ($n = 15$)

Current Study

- Consent form & study measures were completed online
 - ▣ Demographic information (age, height, weight, & ethnicity/race)
 - ▣ Body Image Acceptance and Action Questionnaire
(BIAAQ; Sandoz et al., 2012)
 - ▣ Body Shape Questionnaire
(BSQ; Cooper, Taylor, Cooper, & Fairburn, 1987)
 - ▣ 9 behavioral items of Eating Attitudes Test - 26
(EAT-26; Garner, Olmsted, Bohr, & Garfinkel, 1982)

Results

Means, standard deviations, coefficient alphas, and zero-order relations among variables.

	1	2	3	4
1. Disordered Eating Behavior (EAT-26 Behavioral)	–			
2. Body Dissatisfaction (BSQ)	.43**	–		
3. Body Image Flexibility (BIAAQ)	–.41**	–.81**	–	
4. Body Mass Index (BMI)	–.09	.19**	–.13*	–
<i>M</i>	2.7	95.3	57.5	26.1
<i>SD</i>	3.7	39.9	17.7	6.7

Note. EAT-26 Behavioral = Eating Attitudes Test behavioral items, BSQ = Body Shape Questionnaire, BIAAQ = Body Image Acceptance and Action Questionnaire.

* $p < .05$.

** $p < .01$.

Results

Hierarchical regression analyses predicting disordered eating behavior.

Predictor	ΔR^2	β
Step 1 Control variables ^a	.10	
Step 2	.22 ^{***}	
Body Dissatisfaction (BSQ)		.74 ^{***}
Body Image Flexibility (BIAAQ)		.69 ^{***}
Step 3	.02 [*]	
BIAAQ \times BMI		-.25 ^{**}
BSQ \times BMI		-.14

Note. EAT-26 Behavioral = Eating Attitudes Test behavioral items, BSQ = Body Shape Questionnaire, BIAAQ = Body Image Acceptance and Action Questionnaire.

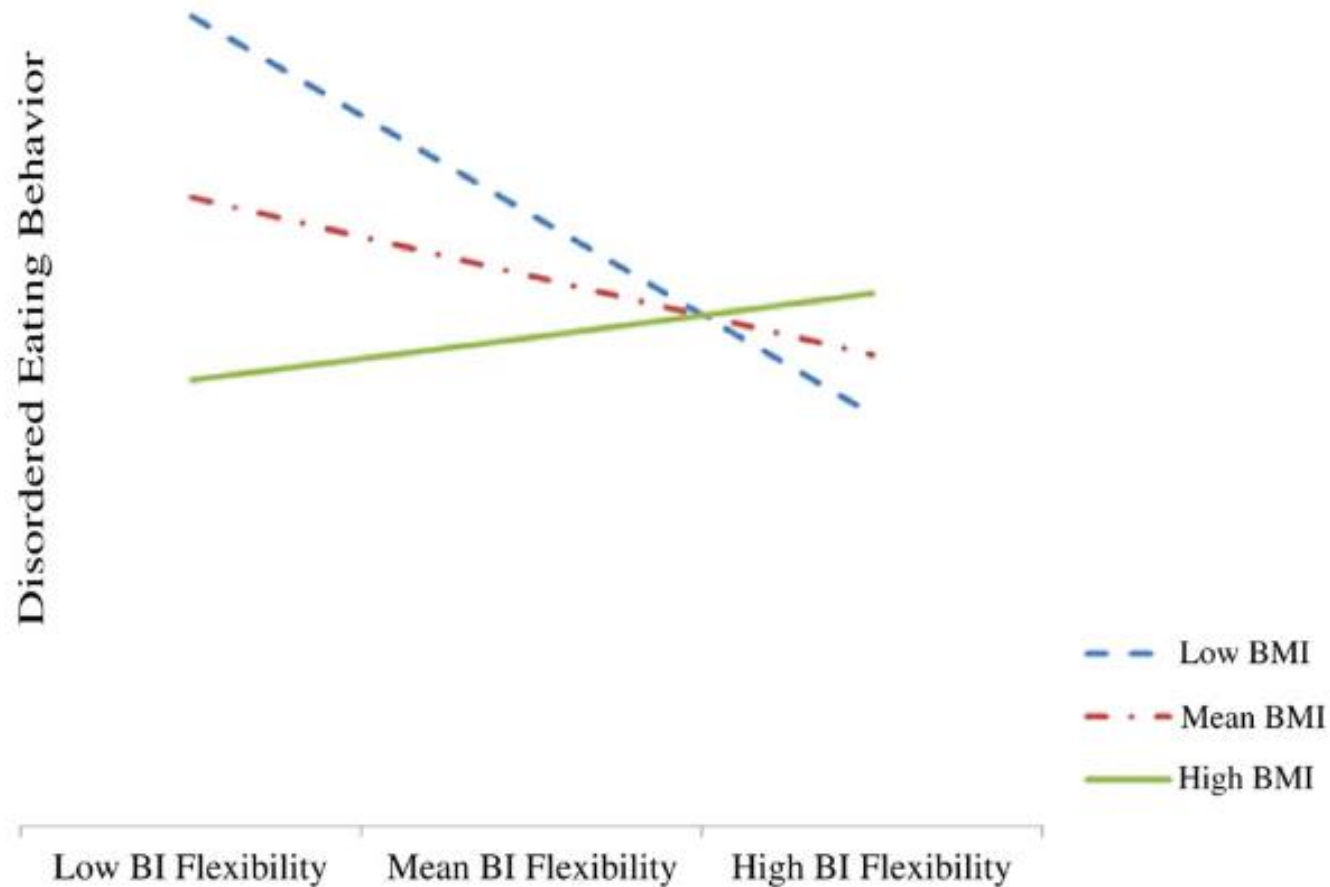
^a Control variables included dichotomized ethnicity and BMI.

* $p < .05$.

** $p < .01$.

*** $p < .001$

Results



Body mass index (BMI) scores moderate the association between disordered eating and body image (BI) flexibility.
Note. High and low values correspond to ± 1 SD from the mean

Implications

- BD is important in understanding disordered eating across levels of BMI & may be important to target in treatment
- BIF may be useful in understanding disordered eating among those with lower BMI
 - Preliminary evidence has shown that interventions that directly promote flexibility & openly relating to difficult internal experiences have demonstrated positive outcomes

Limitations

- Cross-sectional data
- Exclusively used self-report measures
- Participant characteristics largely unknown due to recruitment methods
- Nearly $\frac{1}{2}$ of participants' weight fell within the overweight range (47%)
- Current sample did not endorse clinically significant levels of disordered eating ($M = 2.7$, $SD = 3.7$)



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