Body Shape Dissatisfaction and Disordered Eating Among Women: The Role of Body-Image Related Cognitive Fusion as a Moderator

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Body image-related cognitive fusion moderates the relationship between body shape and dissatisfaction and disordered eating among women

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INTRODUCTION

- 76.9% of women college students are dissatisfied with their body image (Kamaria et al., 2016).
- College women who are dissatisfied with their body shape have higher disordered eating patterns (Cooley & Toray, 2001).
- There must be moderating variables in this relationship. One such variable may be body image-related cognitive fusion

METHOD

Participants

- 432 Participants
- Mean age: 23.07, *SD* = 7.23, range: 17-58
- Mean BMI: 26.17, *SD* = 6.59, range: 15.33 – 26.17
- Gender: 1.4% male, 94.4% female, 3.5% non-binary, .7% other
- Ethnicity: 42.1% Hispanic
- Race: White: 65.1%; Other: 9.9%; 8.7% other categories/mixed; 8.2% African American; Asian American/Asian: 3.4%; Native American/Alaskan Native: 4.1%; Middle Eastern/North African: .5%

Measures

- ***Demographic Questionnaire.*** **I**tems assessed age, gender identity, race, ethnicity, year in school, height, and weight.
- ***Cognitive Fusion Questionnaire - Body Image (CFQ-BI).*** This is a 10-item measure that assesses body image-related cognitive fusion. Higher scores indicate higher levels of cognitive fusion.
- ***Eating Attitude Test (EAT-26).*** The EAT-26 is a 26-item measure that assesses symptoms and psychological features of disordered eating. Higher scores indicate higher levels of disordered eating
- ***Body Shape Questionnaire (BSQ).*** The BSQ is a 34-item measure that assesses body shape dissatisfaction. Higher scores indicate higher body dissatisfaction

Procedure

- Undergraduates completed a series of online questionaries for course credit

RESULTS

Table 1

Correlations

Variables	1	2	3	4	5	6
1. Body Shape Dissatisfaction						
2. EAT Total Score	.69***					
3. EAT Dieting	.71***	.95***				
4. EAT Food preoccupation/bulimia	.79***	.81***	.71***			
5. Fusion	.79***	.64***	.64***	.53***		
6. BMI	.38***	.09	.13**	.20***	.20***	
Mean	104.15	12.84	7.93	2.09	37.92	26.17
SD	40.98	11.40	7.74	3.03	17.32	6.59

Note. N = 432. *p < .05, **p < .01, *** p < .001: Body shape dissatisfaction = Body Shape Questionnaire; EAT total score = total score from Eating Attitude Test-26; EAT dieting = dieting subscale from Eating Attitude Test-26; EAT food preoccupation and bulimia = food preoccupation and bulimia subscale from Eating Attitude Test – 26; Fusion = Cognitive Fusion Questionnaire – Body Image; BMI = body mass index

Table 2

Overall models, conditioning effects, and interaction effects estimating disordered eating

	b	SE	t	*p*	95% CI
Overall model					
$F(4, 409) = 137.94$, $p < .001$, $R^2 = .57$					
Intercept	11.6	2.47	4.73	< .001	[6.83, 16.53]
Body Shape	-.01	.03	-.36	.72	[-.07, .05]
Fusion	-.22	.06	-3.58	<.001	[-.34, -.10]
Body shape x fusion	.004	.001	7.30	< .001	[.003, .01]
BMI	-.27	.06	-4.33	<.001	[-.39, -.15]

Figure 1

Interaction effect of body image-related cognitive fusion on disordered eating scores at different values

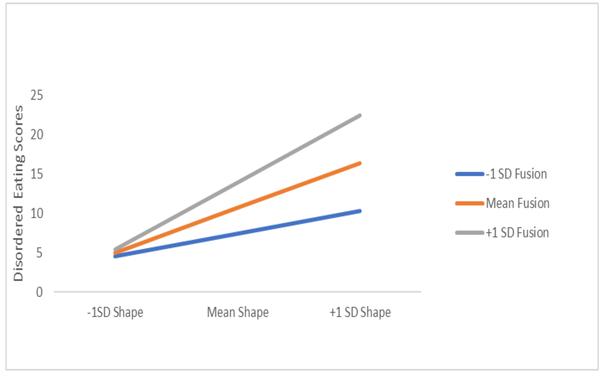


Table 3

Overall models, conditioning effects, and interaction effects estimating dieting

	b	SE	t	*p*	95% CI
Overall model					
$F(4, 412) = 148.33$, $p < .001$, $R^2 = .59$					
Intercept	5.82	1.64	3.54	< .001	[2.59, 9.10]
Body Shape	-.0004	.02	-.02	.98	[-.04, .04]
Fusion	-.17	.04	-4.08	<.001	[-.25, -.09]
Body shape x fusion	.003	.0004	7.51	< .001	[.002, .003]
BMI	-.14	.04	-3.36	<.001	[-.22, -.06]

Figure 2

Interaction effect of body image-related cognitive fusion on dieting scores at different values

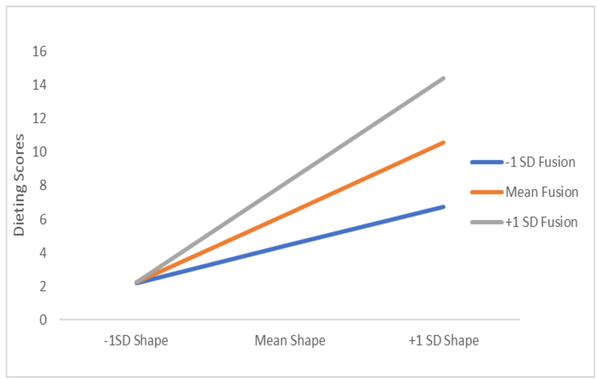


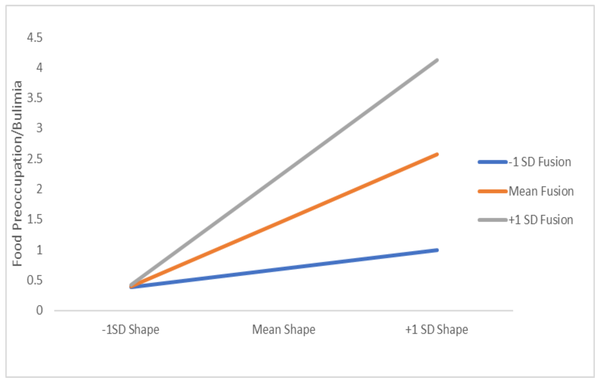
Table 4

Overall models, conditioning effects, and interaction effects estimating food preoccupation/bulimia

	b	SE	t	*p*	95% CI
Overall model					
$F(4, 413) = 73.16$, $p < .001$, $R^2 = .41$					
Intercept	1.24	.77	1.61	.11	[-.27, 2.76]
Body Shape	-.01	.01	-.71	.09	[-.03, .002]
Fusion	-.07	.02	-3.49	<.001	[-.10, -.03]
Body shape x fusion	.001	.0002	6.49	< .001	[.001, .001]
BMI	.002	.02	.10	.92	[-.04, .04]

Figure 3

Interaction effect of body-image related cognitive fusion on food preoccupation/bulimia scores at different values



Moderation Analysis for Body Image-Related Cognitive Fusion and EAT-Total

- The conditional effect of body image-related cognitive fusion significantly predicted disordered eating
- The conditional effect of body shape dissatisfaction did not significantly predict disordered eating
- The interaction between body image-related cognitive fusion and body shape dissatisfaction significantly predicted disordered eating (see Table 2)
  - The pick-a-point analyses indicated there were significant conditional relationships between body shape dissatisfaction and disordered eating at one standard deviation below the CFQ-BI mean, at the CFQ-BI mean, and one standard deviation above the CFQ-BI mean (see Figure 1)

Moderation Analysis for Body Image-Related Cognitive Fusion and EAT-Dieting

- The conditional effect of body image-related cognitive fusion significantly predicted dieting
- the conditional effect of body shape dissatisfaction did not significantly predict dieting scores
- The interaction between body image-related cognitive fusion and body shape dissatisfaction significantly predicted dieting (see Table 3)
  - The pick-a-point analyses indicated there were significant conditional relationships between body shape dissatisfaction and dieting at one standard deviation below the CFQ-BI mean, at the CFQ-BI mean, and one standard deviation above the CFQ-BI mean (see Figure 2)

Moderation Analysis for Body-Image Related Cognitive Fusion and EAT- Food Preoccupation and Bulimia

- The conditional effect of body image-related cognitive fusion significantly predicted food preoccupation/bulimia
- The conditional effect of body shape dissatisfaction did not significantly predict food preoccupation/bulimia
- the interaction between body image-related cognitive fusion and body shape dissatisfaction significantly predicted food preoccupation/bulimia (see Table 4)
  - The pick-a-point analyses indicated there were significant conditional relationships between body shape dissatisfaction and food preoccupation/bulimia, at the CFQ-BI mean and one standard deviation above the CFQ-BI mean (see Figure 3)

DISCUSSION

- Body image-related cognitive fusion moderated the relationship between body shape dissatisfaction and disordered eating
- Future studies could examine the effectiveness of interventions targeting body image-related cognitive fusion on disordered eating among this population.
- This study is consistent with previous findings where there was a positive correlation between cognitive fusion and body shape dissatisfaction (Trindade & Ferreira, 2015).
- Limitations of this study include only including female participants enrolled in one university.
- Future studies could include participants from multiple universities and other populations.