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Examining a Model of Self-compassion, Body Shame, and Mindful Eating

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Abstract

Examining the relationship between individual differences in a self-compassionate self-regulatory stance and healthy approaches to eating is a nascent line of research. This study explored whether the association between self-compassion and mindful eating was indirectly influenced by self-reports of body shame in a sample of 322 undergraduate females. A secondary objective was to evaluate whether this indirect effect was more salient for specific dimensions of the construct of mindful eating. Both standard parametric (i.e., the Sobel test) and non-parametric bootstrap resampling analytic procedures generated significant indirect effect parameter estimates of comparable magnitude for the mindful eating total score as well as for its componential processes of emotional responding, distraction, and disinhibition. These results held when controlling for both body mass index (BMI) and self-esteem. Preliminary findings invite consideration of further model evaluation within subsequent developmental/prospective cohort and prevention-focused research paradigms among at-risk college women.

Introduction

- Self-compassion is an emergent construct that has its roots in ancient Buddhist spiritual approaches that cultivate the adaptive self-regulation of emotion, cognition, and behavior (Neff, 2003).
- Self-compassion emphasizes treating oneself with kindness and care during times of emotional suffering comforted by the recognition that such difficulty is a part of the shared human experience that can be met with compassion and mindful equanimity (Neff, 2003).
- Currently, published research has tended to focus on the relationship of self-compassion to maladaptive forms of eating and body image disturbance (e.g., Adams & Leary, 2007; Ferreira et al., 2013; Wasylikiw et al., 2012; Webb & Forman, 2013).
- Recently, scholars have begun to explore the perceived experience of shame from others within the context of self-compassion, body dissatisfaction and the drive for thinness among individuals with eating disorders (Ferreira et al., 2013).
- The present study sought to extend the existing literature by examining the potential role of internalized body shame in accordance with Objectification Theory (Fredrickson & Roberts, 1997; McKinley & Hyde, 1996) in influencing the relationship between self-compassion and mindful eating (Framson et al., 2009) among college women. We also tested whether this proposed association was more robust for certain components of the mindful eating construct.

Methods

Participants

- Participants were 322 undergraduate females ($M_{Age} = 19.5$ years, $SD = 1.5$; $M_{BMI} = 23.6$ kg/m², $SD = 5.1$) attending a large publicly-funded institution located in the southeastern United States.
- 94% of participants' mothers attained at least a high school education.
- The sample was predominantly White (65%) and African American (20%).
- 78% of the sample was represented by freshman and sophomore students.

Measures

- *Demographic Questionnaire*
- *Body Mass Index*
- *Self-compassion Scale* (SCS; Neff, 2003)
- *Objectified Body Consciousness Scale-Body Shame Subscale* (OBCS-BS; McKinley & Hyde, 1996)
- *Mindful Eating Questionnaire* (MEQ; Framson et al., 2009)
- *Rosenberg Self-esteem Scale* (RSE; Rosenberg, 1965)

Procedure

- Subsequent to receiving IRB approval, participants were recruited through the Department of Psychology's online research sign-up system.
- Participants provided passive consent and completed the surveys online which were part of a larger study.
- Participants received Psychology course credit as an incentive.

Statistical Analyses

- Standard data screening procedures were performed to obtain descriptives and frequencies and to evaluate the tenability of whether the data met assumptions of normality.
- Pearson's correlation coefficients were computed to examine the bivariate associations between the study variables.
- Both the Sobel test and non-parametric bootstrap resampling procedures (with 5,000 resamples) were conducted to test for the presence of the proposed indirect effects using Preacher and Hayes' (2004) INDIRECT script for SPSS.

Results

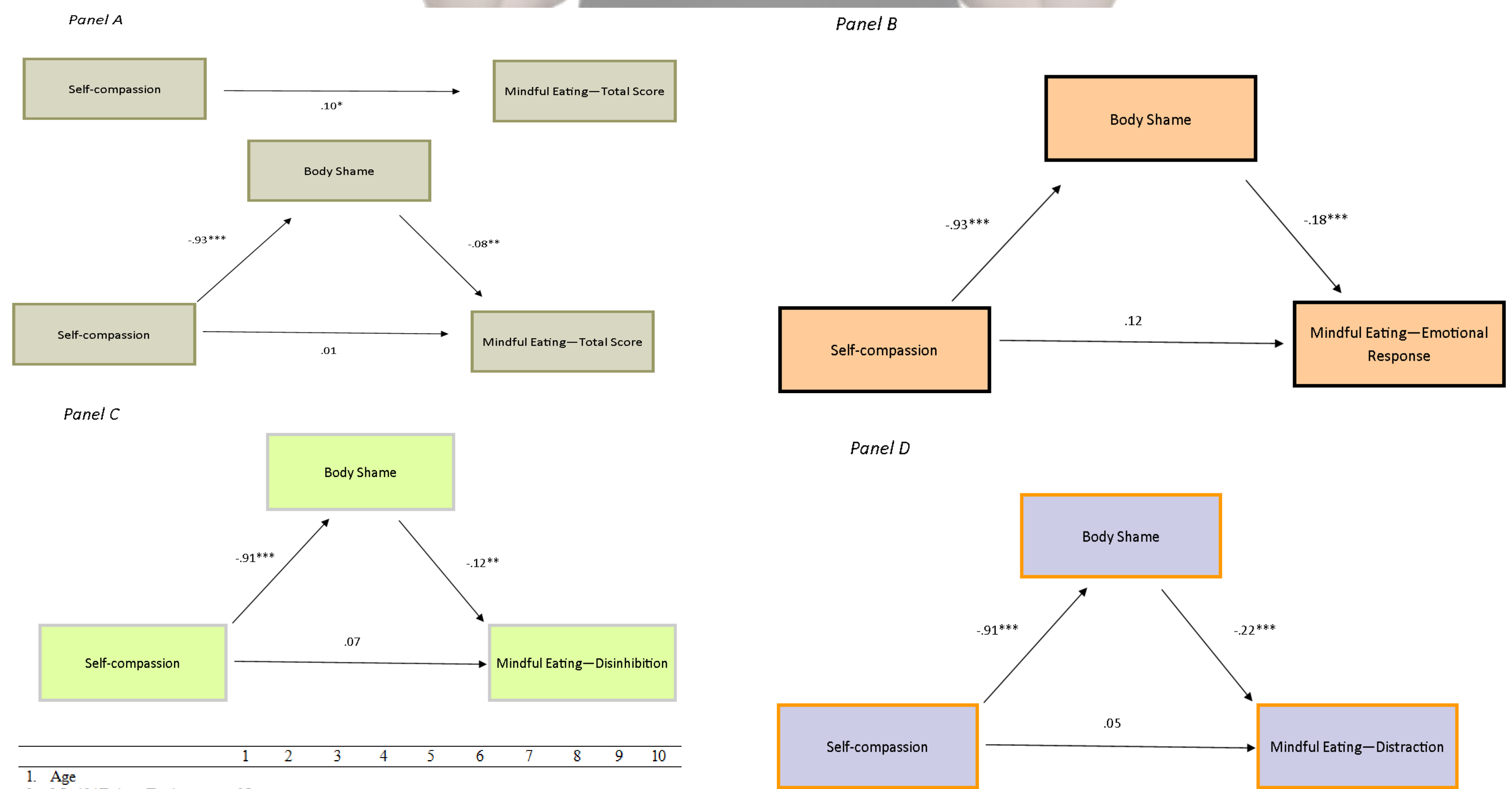


Figure 1. Relationship between self-compassion and mindful eating as mediated by body shame. Panel A presents the total effect (.10, $p < .05$; upper model) along with the direct c' and indirect effects (.08, $p < .01$) of self-compassion on mindful eating total score via body shame. Panel B presents the direct effect of self-compassion on the emotional response subscale of the mindful eating questionnaire in conjunction with its indirect effect via body shame (.17, $p < .01$). Panel C presents the direct effect of self-compassion on the disinhibition subscale of the mindful eating questionnaire in conjunction with its indirect effect via body shame (.10, $p < .01$). Panel D presents the direct effect of self-compassion on the distraction subscale of the mindful eating questionnaire in conjunction with its indirect effect via body shame (.20, $p < .001$). The values presented are standardized Beta coefficients * = $p < .05$, ** = $p < .01$, *** = $p < .001$.

	1	2	3	4	5	6	7	8	9	10
1. Age										
2. Mindful Eating—Total	.05									
3. Mindful Eating—Disinhibition	-.01	.75**								
4. Mindful Eating—Awareness	.10	.60**	.14**							
5. Mindful Eating—External Cues	.08	.45**	.03	.33**						
6. Mindful Eating—Emotional	-.08	.54**	.52**	.00	-.18**					
7. Mindful Eating—Distraction	.00	.37**	.29**	-.03	-.14*	.39**				
8. Body Shame	.11	-.24**	-.22**	-.07	.11	-.29**	-.38**			
9. BMI	.14*	-.16**	-.15*	-.05	-.02	-.18**	-.10	.20**		
10. Self-Esteem	.08	-.08	-.02	-.08	-.14*	-.02	.12*	.09	.10	
11. Self-Compassion	.00	.21**	.19**	.06	-.12*	.30**	.27**	-.50**	-.05	.25**

Table 1. Zero-order correlations. * indicates $p < .05$; ** indicates $p < .01$.

Discussion and Implications

- Results suggest that mindful eating as a healthy approach to food intake may be supported by adopting a self-compassionate orientation to the self-regulation of attitudes and affect stemming from internalized body shame.
- Findings further indicate that the indirect influence of self-compassion on mindful eating through body shame is stronger specifically for processes reflecting not using food as a way to manage negative emotions, not eating while distracted, or consuming food in a manner that is not responsive to internal hunger and satiety cues.
- Our preliminary findings may have important implications for promoting healthy eating among at-risk college women during emerging adulthood.

Limitations

- The all-female sample precludes generalizing our findings to male college students.
- The cross-sectional design does not permit making causal inferences.
- The use of self-reported BMI data may not be as reliable at higher body weights.

Future Areas of Research

- Replicating and refining the model in larger samples that include greater gender, racial/ethnic, weight, and regional diversity
- Evaluating whether the model holds in community samples of other age cohorts across the lifespan and whether the parameter estimates are larger among overweight and obese individuals
- Expanding the model to include additional intrapersonal (e.g., anti-fat attitudes, weight bias internalization) and interpersonal (e.g., fat talk) variables
- Translating the model into prospective cohort and college health promotion intervention paradigms

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