# The Role of Psychological Flexibility Variables in Shape and Weight Concerns

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### Introduction

Shape and weight concerns are important factors in emotional eating, eating disorders, and the low quality of life associated with disordered eating (Braden et al., 2018).

Scholars posit that the problem with negative cognitions about weight and shape lie in efforts to control or diminish them, with such efforts leading to contradictory effects (Wenzlaff and Wegner, 2000).

Mindfulness, acceptance, and cognitive defusion are associated with lower levels of emotional eating in part due to increased quality of life (Watford et al., 2019).

Mindfulness, acceptance, and cognitive defusion may aid in reducing the negative effects of shape and weight concerns. By promoting nonjudgment and willingness to experience uncomfortable private events (i.e. thoughts, emotions, physiological sensations), these factors may be associated with better quality of life despite the presence of emotional eating and disordered eating.

#### Hypotheses:

- 1. Mindfulness will be negatively associated with nonacceptance of emotional responses, cognitive fusion, and shape/weight concerns
- 2. Mindfulness, nonacceptance, and cognitive fusion will be significant predictors of shape and weight concerns

### **Methods**

#### **Participants**

Participants (N = 64) were adults with overweight/obesity (97% female) who self-identified as emotional eaters. Participants were recruited for a weight-loss program focused on emotional regulation skills.

#### Measures

Baseline data from self-report questionnaires were used, including the following

- Five Facet Mindfulness Questionnaire (FFMQ);
- Cognitive Fusion Questionnaire (CFQ);
- Difficulties in Emotion Regulation scale –Nonacceptance of emotional responses subscale (DERS – Nonaccept);
- Eating Disorder Examination Questionnaire–Shape and Weight Concerns subscales (EDE-Q SC/WC). The two subscales were combined due to high correlation between them (r = .86 p = .01)

#### **Statistical analyses**

See Table 1 for descriptive statistics of all variables of interest. Correlations, and multiple linear regression were conducted.

Results		
Table 1. Descriptive Statistics		
	М	SD
Mindfulness (FFMQ)	72.75	11.46
Nonacceptance of emotional responses	15.16	6.72
(DERS Non-Accept)		
Cognitive fusion (CFQ)	27.38	9.74
Shape/Weight concerns (EDE SC/WC)	4.38	1.02

Table 2. Correlations Among Study Variables

	1.	2.	3.
1. EDE EC/SC	1		
2. CFQ	.39**	1	
3. DERS Non-Accept	.28*	.38**	1
4. FFMQ	36**	63**	49**

\*\* = p < .01 , \* = p < .05

Table 3. Multiple Regression Model Summary

R	<b>R</b> <sup>2</sup>	SE	F (3, 60)	р
.43	.18	.95	4.49	< .01

#### Table 4. Multiple Regression Coefficients

	В	SE B	в	t	р
Predictors					
Mindfulness	01	.01	13	82	>.05
Nonacceptance of emotional responses	.02	.02	.12	.87	> .05
Cognitive fusion	.03	.02	.27	1.76	> .05

#### **Correlations**

As expected, Shape/Weight Concerns were positively associated with Cognitive fusion and Nonacceptance of emotional responses, and negatively associated with Mindfulness (see Table 2).

#### **Regression Analyses**

- Three independent variables predicted 18% of the variance in shape/weight concerns (see Table 3).
- None of the independent variables were significant predictors if shape/weight concerns (see Table 4).
- Pearson r was equal to .43, which is indicative of a medium effect size (Cohen, 1988)

People with self-reported emotional eating who reported higher levels of shape/weight concerns endorsed higher levels of cognitive fusion and nonacceptance of emotional responses and lower levels of mindfulness. Collectively mindfulness, cognitive defusion, and nonacceptance significantly predicted changes in shape/weight concerns.

These results confirm the association among psychological flexibility variables (i.e. mindfulness, cognitive defusion, and acceptance) as well as their importance in influencing and predicting shape and weight concerns.

These results are important for understanding how different psychological variables may interact in people with self-reported emotional eating, and which variables represent possible protective factors (i.e. psychological flexibility) regarding shape and weight concerns.

Interventions for self-identified emotional eaters could target psychological flexibility concepts as a mechanism for reducing the impact of shape and weight concerns and, in turn, emotional and disordered eating.

longitudinal designs and experimental methods. The data was based solely on self-report assessment, which may increase the likelihood of common method bias. Future studies could employ physiological assessments and other objective measures in combination to self-report scales to increase confidence in findings.

Generalizability of findings is limited by a predominantly female- and adult-only sample. Future studies could examine the relationship among the study's variables in males as well as younger populations.



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### **Discussion and Implications**

## **Limitations and Future Directions**

The current study relied on cross-sectional data, so we cannot empirically infer causality. Future studies should replicate current findings by utilizing

### References

Wenzlaff, R. M., & Wegner, D. M. (2000). Thought suppression. Annual review of psychology, 51(1), 59-91.

Baer, R. A., Smith, G. T., Hopkins, J., Krietemeyer, J., & Toney, L. (2006). Using self-report assessment methods to explore facets of mindfulness. Assessment, 13(1), 27-45.

Braden, A., Musher-Eizenman, D., Watford, T., & Emley, E. (2018). Eating when depressed, anxious, bored, or happy: Are emotional eating types associated with unique psychological and physical health correlates? Appetite, 125, 410–417. Fairburn, C. G., & Beglin, S. J. (1994). Assessment of eating disorders: Interview or self-report questionnaire?. International journal of eating disorders, 16(4), 363-370.

Gillanders, D. T., Bolderston, H., Bond, F. W., Dempster, M., Flaxman, P. E., Campbell, L., ... & Masley, S. (2014). The development and initial validation of the cognitive fusion questionnaire. *Behavior therapy*, 45(1), 83-101.

Gratz, K. L., & Roemer, L. (2004). Multidimensional assessment of emotion regulation and dysregulation: Development, factor structure, and initial validation of the difficulties in emotion regulation scale. Journal of psychopathology and behavioral assessment, 26(1), 41-54.

Watford, T. S., Braden, A. L., & Emley, E. A. (2019). Mediation of the Association Between Mindfulness and Emotional Eating Among Overweight Individuals. Mindfulness, 10(6), 1153–1162.