

# The Moderating Role of Premeditation on the Relationship between Food Craving and Disordered Eating

Angelina M. Cooper<sup>1</sup>, Julia E. Geismar<sup>1</sup>, Anastasia P. Hockaday<sup>1</sup>, Allison Cuning, M.A<sup>1</sup>, Diana Rancourt, PhD<sup>1</sup>

<sup>1</sup>Department of Psychology, University of South Florida

## INTRODUCTION

- Food craving is associated with disordered eating behaviors, including overeating and binge eating<sup>1</sup>.
- Most work investigates the role of the negative urgency facet of impulsivity as related to disordered eating<sup>2</sup>, but less work examines the role of other facets, like lack of premeditation.
- The current study examined the interaction of food craving and premeditation on disordered eating behaviors. It was anticipated that:
  - **H1 & H2:** The relationship between *approach*, but not avoidance, food craving and disordered eating (*binge eating, purging*) will be strongest for those with high premeditation.
  - **H3:** The relationship between *avoidance*, but not approach, food craving *and restrained eating* will be strongest for those with high premeditation.

## METHODS

### Participants & Procedures:

- Collected online via Qualtrics
- Conducted at a Southeastern college for SONA credit
- 591 participants (55.7% were Female,  $M_{BMI} = 24.33$ , 18.1% White, 71.7% Hispanic).

### Measures:

- **Independent Variable:** 8-item Food Approach and Avoidance Questionnaire (FAAQ-8)<sup>3</sup>
- **Moderating Variable:** Lack of premeditation subscale of the Impulsive Behavior Scale (UPPS)<sup>4</sup>
- **Dependent Variable:** Eating Pathology Severity Index (EPSI)<sup>5</sup>
- **Covariate:** Body mass index (BMI)

### Data Analytic Strategy:

- The PROCESS Macro (Model 1) for SPSS 28<sup>6</sup> used to conduct moderation analyses to examine the interaction between premeditation and food craving on disordered eating behaviors.

The relationship between craving and binge eating depended on levels of premeditation.

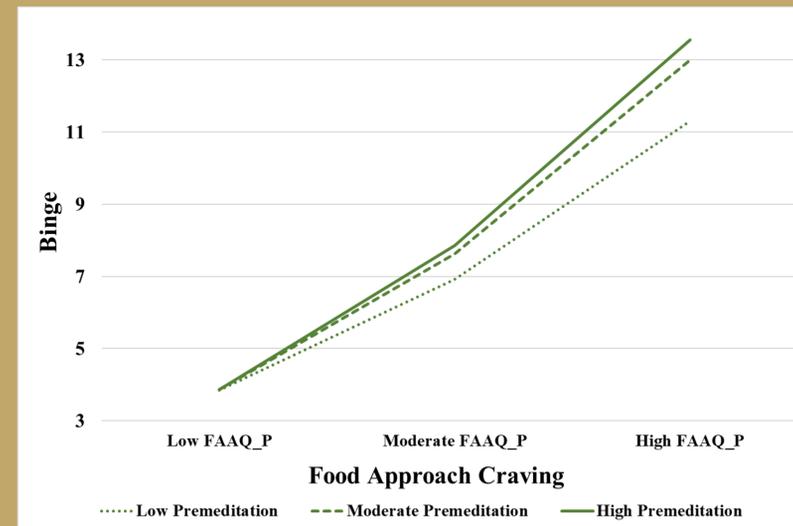


Figure 1: Food Approach Craving and Binge eating Moderated by Premeditation.

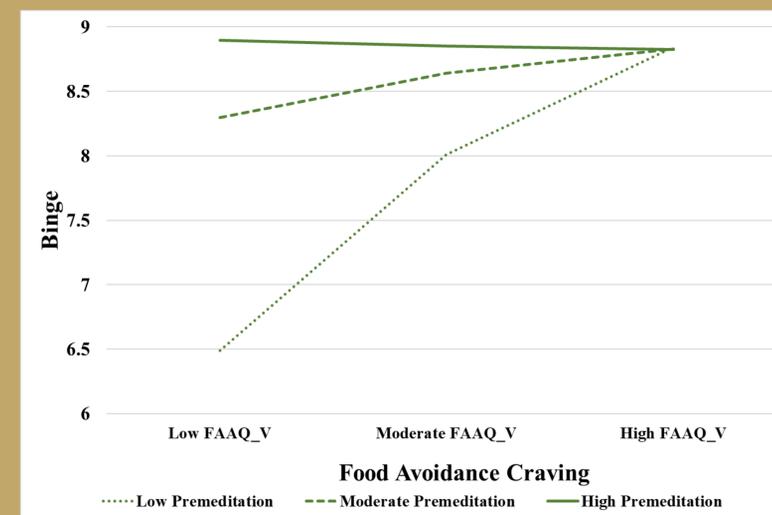


Figure 2: Food Avoidance Craving and Binge eating Moderated by Premeditation.

	Binge Eating			Restrained Eating			Purging		
	B	SE	p	B	SE	p	B	SE	p
Approach	2.13	0.16	< .001	-0.18	0.18	.327	0.13	0.08	.116
Avoidance	-0.11	0.16	.502	0.90	0.18	< .001	0.42	0.08	< .001
Premeditation	1.25	0.42	.003	1.37	0.47	.003	0.59	0.23	0.010
BMI	0.15	0.04	< .001	-0.22	0.05	< .001	0.06	0.02	0.005
R <sup>2</sup> /Pseudo R <sup>2</sup>	.478			.134			.229		

Table 1: Main effects of food approach and avoidance food craving on disordered eating outcomes.

## RESULTS

- Main effects, but not moderation effects were supported for food craving and premeditation on and both restriction and purging.
- The relationship between approach ( $p = .001$ ) craving and binge eating was strongest for those with **greater** reported premeditation.
- The relationship between avoidance ( $p = .002$ ) craving and binge eating was only significant for those with **low** premeditation such that increased avoidance craving was associated with less binge eating.

## DISCUSSION

- Results suggest that premeditation moderates the relationship between food craving and binge eating, but does not moderate this relationship for purging or restricting behaviors.
- Findings extend previous work that exclusively considers the negative urgency facet of impulsivity by examining the role of premeditation.
- These findings suggest that premeditation may be an effective intervention target to decrease binge eating.

### Limitations and Future Directions

- The use of a cross-sectional study, rather than a longitudinal design, limits the ability to determine if premeditation preceded food cravings.
- Future research is needed to examine the temporal sequencing of premeditation, food craving, and maladaptive eating behavior.

### References:

- Ahlich, E., Verzijl, C. L., Simon, J. A., Schlauch, R. C., & Rancourt, D. (2020). Support for a two-dimensional model of food craving using self-report questionnaire and cue-reactivity methodologies. *The International Journal of Eating Disorders*, 53(9), 1439–1449. <https://doi.org/10.1002/eat.23290>
- Stojek, M. M., Fischer, S., Murphy, C. M., & MacKillop, J. (2014). The role of impulsivity traits and delayed reward discounting in dysregulated eating and drinking among heavy drinkers. *Appetite*, 80, 81–88. <https://doi.org/10.1016/j.appet.2014.05.004>
- Rancourt, D., Ahlich, E., Levine, J. A., Lee, M. S., & Schlauch, R. C. (2019). Applying a multidimensional model of craving to disordered eating behaviors: Development of the Food Approach and Avoidance Questionnaire. *Psychological Assessment*, 31(6), 751.
- Whiteside, S. P., Lynam, D. R., Miller, J. D., & Reynolds, S. K. (2005). Validation of the UPPS impulsive behaviour scale: a four-factor model of impulsivity. *European Journal of Personality*, 19(7), 559–574.
- Forbush, K. T., Wildes, J. E., Pollack, L. O., Dunbar, D., Luo, J., Patterson, K., ... & Watson, D. (2013). Development and validation of the Eating Pathology Symptoms Inventory (EPSI). *Psychological Assessment*, 25(3), 859.
- Hayes, A. F. (2013). Introduction to mediation, moderation, and conditional process analysis: A regression-based approach. Guilford Press.

