The Relationship of Coping Style, Binge Eating, and Decreases in Negative Affect through Exercise

Nicole Johnson & Kyle De Young, PhD

Department of Psychology, University of North Dakota

INTRODUCTION

- Heightened negative affect (NA) tends to precede the occurrence of eating disorder behaviors, particularly binge eating.
- Research has indicated that individuals who endorse exercising in response to NA also endorse more frequent binge eating, fasting, and body image concerns than their peers.
- The purpose of this study was to identify factors that contribute to effective NA coping through exercise.

METHOD

Participants

- 210 undergraduates (52.4% women) with a M(SD) age of 19.21(2.6) years from a large, northeastern university participated.
- A total of 71.0% identified as Caucasian, 9.5% as Asian American, 8.1% as Black/African American, 8.1% as Latino(a), and 3.3% as other.

Self- report Measures

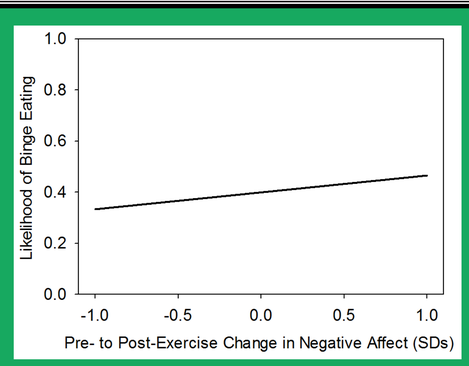
- The Positive and Negative Affect Schedule (PANAS), which was completed for how individuals typically feel immediately before and after exercise
- The Coping Inventory for Stressful Situations (CISS), which assesses a variety of coping styles; and
- The Eating Disorder Examination-Questionnaire (EDEQ), which assesses eating pathology including the presence of binge eating over the past 4 weeks

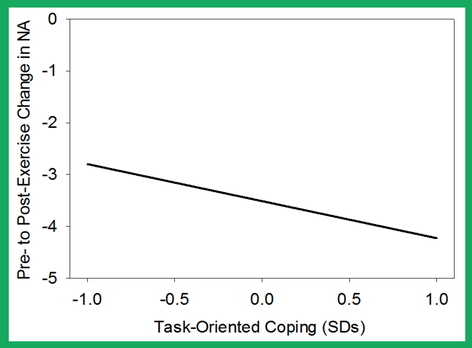
Data Analysis

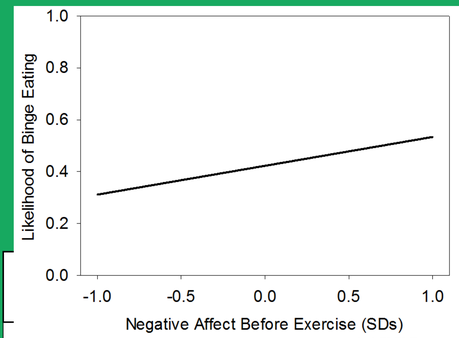
- Scores for NA before exercise were subtracted from scores of NA after exercise to provide an index of typical change in NA from before to after exercise.
- Multiple linear and logistic regression analyses were used to test the relationships between change in NA from pre- to post-exercise, task-orientated coping, and binge eating (coded as present or absent over the previous 4 weeks).
- NA prior to exercise was later added as a covariate, because higher pre-exercise NA was associated with greater pre-to-post change in NA.

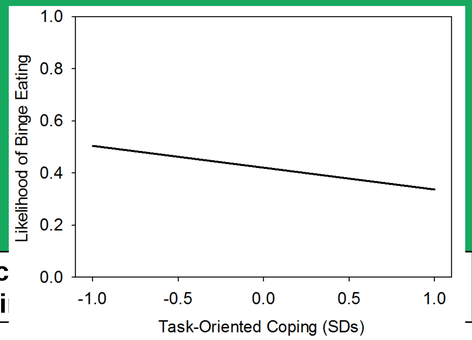
RESULTS

- Task-oriented coping, a style characterized by actively approaching a source of stress, was associated with larger pre- to post-exercise decreases in NA (p=.001) and higher pre-exercise NA (p=.046).
- Larger decreases in pre- to post-exercise NA were associated with binge eating (p=.044); however, this association was completely accounted for by higher pre-exercise NA (p=.005).
- Task-oriented coping emerged as a negative predictor of binge eating (p=.024), and pre-exercise NA emerged as a positive predictor (p=.023;Table 1).









	Odds Ratio	95% CI	Wald X^2 (1)	p
Negative Affect Change	1.011	.948, 1.077	0.109	.741
Negative Affect Before Exercise	1.057	1.008, 1.109	5.186	.023
Task-Oriented Coping	.969	.943, .996	5.062	.024

CONCLUSIONS

- The results indicate that heightened pre-exercise NA is associated with both binge eating and task-oriented coping; however, task-oriented coping is protective of binge eating.
- As a whole, the results suggest that a task-oriented coping style may mitigate risk for binge eating that is typically associated with exercising in response to NA.
- These findings highlight the importance of considering both the form and function of exercise behavior with regard to whether it comprises a form of eating disorder pathology.