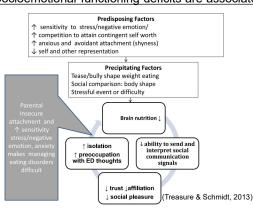
# Biased and Inflexible Interpretations of Ambiguous Social Situations: Associations with Eating Disorder Symptoms and Socioemotional Functioning

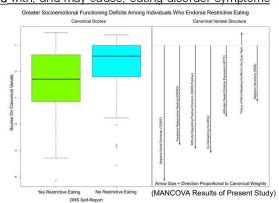
Michael Bronstein,<sup>1</sup> Jonas Everaert,<sup>1</sup> Erich Kummerfeld,<sup>1</sup> Ann F. Haynos,<sup>1</sup> & Sophia Vinogradov<sup>1</sup>

University of Minnesota **Driven to Discover®** 

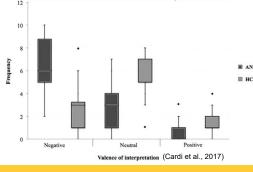
### Introduction

Socioemotional functioning deficits are associated with, and may cause, eating disorder symptoms



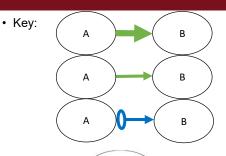


Biased interpretations of ambiguous social situations may impair socioemotional functioning

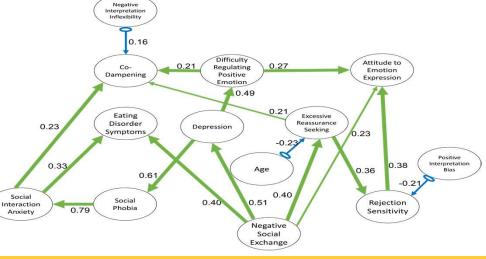


- Less attention has been paid to how inflexible interpretations might impact socioemotional functioning and eating disorder symptoms
- Past work: In the general population, inflexible interpretations of ambiguous social situations are associated with impaired emotion regulation (dampening of positive emotion) and depression/social anxiety (Everaert, Bronstein, et al., 2018, 2020)

### Results



- A most likely directly causes B, unmeasured confound unlikely
- A most likely directly or indirectly causes B, unmeasured confound unlikely
- A may directly or indirectly cause B, and/or unmeasured confound exists



### Method

# **Participants:** 310 nonclinical participants, selected to vary on eating disorder symptoms

- Measures:
  - · General eating disorder symptoms (EPSI)
  - · Restrictive eating (DRS)
  - · Socioemotional functioning (self-report)
  - Emotional BADE Task:
    - Plausibility ratings for explanations of evolving scenarios yield metrics of interpretation bias and inflexibility
- Analyses:
  - · Causal Discovery Analysis yields graph at top-right
    - · Algorithm: GFCI
    - Stability: 10,000 jacknifed re-samples
  - MANCOVA (covariates: age, sex, BMI)
    - Socioemotional functioning ~ restrictive eating

### Example of Emotional BADE Task Scenario

Statement 1	It's your birthday. You received
	few messages on Facebook
Statement 2	You look at your phone. You
	received one missed call and a
Statement 3	You listen to the voicemail and
	hear your friends all singing
	"Happy Birthday"
Lure Explanation	Very few of your friends
	remembered your birthday
Lure Explanation	Many people don't care that it's
	your birthday
Absurd Explanation	Your friends have never heard of
	Facebook
True Explanation	Your friends want to surprise you
	with a nice birthday message

## Discussion

#### Results Summary

- MANCOVA: People who endorse restrictive eating exhibit greater impairment in socioemotional functioning
- Causal Graph: Socioemotional functioning deficits may directly (ex: greater negative social exchange, social anxiety) and indirectly (ex: depression) cause eating disorder symptoms
- · Interpretation inflexibility may cause co-dampening
- Less positive interpretation bias is a (potentially confounded) cause of rejection sensitivity

### · Implications:

- Interpretation bias and inflexibility may not be causes or consequences of mild eating disorder symptoms in the general population
  - However, more severe symptoms may have nutritional effects that increase inflexibility, which our study suggests would reduce social pleasure
- Future research should continue to investigate whether positive interpretation bias causes rejection sensitivity, as this has implications for CBM-I treatment paradigms

Link to full manuscript: https://dx.doi.org/10.2139/ssrn.3936928