Jul 11th, 2:45 PM - 3:45 PM

Emotional Intelligence and Disordered Eating: Efficacy of Analysis Via Ecological Momentary Assessment

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EMOTIONAL INTELLIGENCE AND DISORDERED EATING

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INTRODUCTION

- Disordered eating (DE)
  - Any abnormal eating behavior
- Emotional intelligence (EI)
  - The ability to perceive and handle emotions (Salovey & Mayer, 1989)
  - Debate as to whether it constitutes an intelligence or a personality trait (Petrides, 2009)
- Pilot study to assess the connection between DE, EI, and stress

EMOTIONAL INTELLIGENCE, DISORDERED EATING, AND STRESS

- Anorexia nervosa, bulimia nervosa, binge-eating disorder, and subclinical DE are correlated with lessened EI (e.g. Svaldi, et al., 2012; Harrison, et al., 2010; Markey & Vander Wal, 2007; Cuesta-Zamora, et al., 2018; Griffiths, et al., 2014; Zysberg, 2014)
- Increased body dissatisfaction is related to lower EI (e.g. Griffiths, et al., 2014; Svaldi, et al., 2012; Zysberg, 2014)
- Subsections of EI related to understanding one's own and other's emotions most related to disordered eating (e.g. Hambrook & Tchanturia, 2012; Gardner et al., 2014; Markey & Vander Wal, 2007)
- Low EI, as well as increased DE behaviors, are related to higher perceived levels of stress (Espinosa, et al., 2019; Martínez-Monteagudo, et al., 2019; Hendelman, 2017)
- How might stress impact the relationship between DE and EI?

ECOLOGICAL MOMENTARY ASSESSMENT (EMA)

- Technology that allows for gathering small amounts of data several times a day
- Participants receive prompts to complete a short survey on their phone

HYPOTHESES

- Global EI scores will be negatively correlated with global DE symptomology (low EI = high DE)
- The Sociability and Emotionality EI subscales will be the most strongly related to DE
- Stress measures will be positively correlated with DE, EI, and actual-ideal weight discrepancy
- Additional research questions:
  - Will body mass index (BMI) be related to EI? (past research is mixed)
  - How much will EI fluctuate day to day?
  - How will the time of day or day of the week affect results?

MATERIALS & PARTICIPANTS

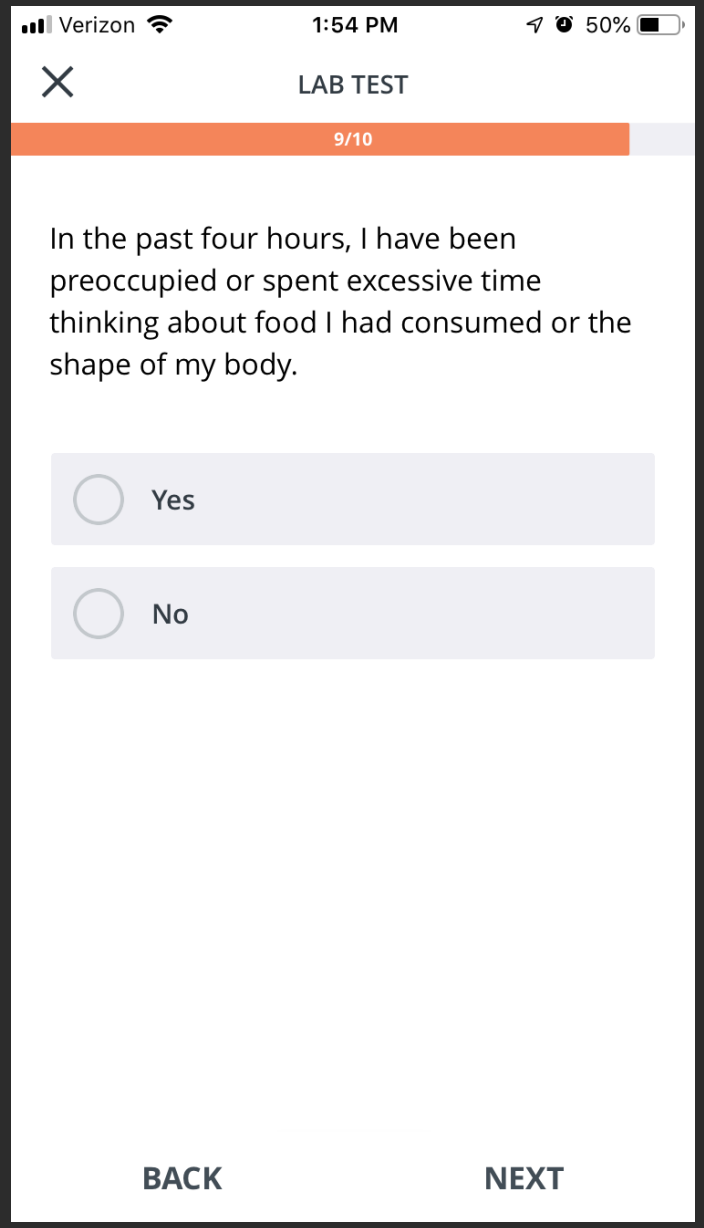
- Participants
  - E-town students living at or near the college over the summer (n = 20; 75% women, 20% men, 5% other)
  - Recruited through fliers, Campus News, and word of mouth
- Materials
  - Trait Emotional Intelligence Questionnaire – Short Form (TEIQue-SF; α = .81) (Petrides, 2009)
  - Eating Attitudes Test (EAT-26; α = .86) (Garner, Olmsted, Bohr, & Garfinkel, 1982)
  - Perceived Stress Scale (PSS; α = .86) (Cohen, 1994)
  - Daily Hassles (novel measure, similar to previous measures including: Daily Stress Inventory, Brantley, Waggoner, Jones, & Rappaport, 1987; Hassles and Uplifts Scale, DeLongis, Folkman, & Lazarus, 1988; The Inventory of College Students' Recent Life Experiences, Kohn, Lafreniere, & Gurevich, 1990)
  - EMA technology: Expimetrics (Expimetrics, 2018)

PROCEDURE

- Lab session
  - Complete consent form
  - Take survey
    - Demographic information
    - TEIQue-SF
    - EAT-26
    - PSS
    - Daily Hassles
  - EMA instruction

PROCEDURE

- EMA period
  - Two weeks long
  - Prompts sent at a randomized time three times daily
  - Since my past check-in, I… (sample items)
    - (T/F) Had difficulty figuring out what emotion(s) I was feeling (TEIQue-SF)
    - (T/F) Been preoccupied or spent excessive time thinking about food I had consumed or the shape of my body (EAT-26)



DATA ANALYSIS PLAN & RESULTS

- Baseline data: SPSS, mostly correlational analyses
- EMA data: multilevel modeling using Stata and MixWild
- Results (baseline only):

	Mean	SD	Range
TEIQue	4.460	0.92	2.90-6.07
EAT	15.41	12.54	0.00-50.00
PSS	20.25	8.89	2.00-35.00
Daily Hassles	8.00	4.39	1.00-16.00
Weight Discrepancy	16.40	19.05	-10.00-80.00
BMI	25.3	5.48	17.23-40.74

RESULTS

- Global EI and global DE scores were not significantly correlated
  - Global EI was correlated with Oral Control EAT subscale ($r = -.481$, $p = .032$)
  - Self-Control TEIQue subscale was correlated with Oral Control EAT subscale ($r = -.592$, $p = .006$)
- Global EI was correlated with both perceived stress ($r = -.660$, $p = .002$) and objective stress ($r = -.499$, $p = .025$)

RESULTS

- Global DE was not significantly correlated with perceived stress or objective stress
  - Perceived stress was correlated with Bulimia and Food Preoccupation EAT subscale ($r = .528$, $p = .017$)
- Actual-ideal weight discrepancy was correlated with perceived stress ($r = .468$, $p = .037$), but not significantly with EI or objective stress
- BMI was not significantly correlated with EI

CONCLUSION

- Why is the Self-Control TEIQue subscale related to DE but not others?
  - This contradicts past research; do those who perceive more control over emotions perceive more control over food?
- Why were both measures of stress related to the TEIQue?
  - Perhaps those low in EI may place themselves in more stressful situations, as well as experiencing more perceived stress?
- How will EI measured via EMA inform future research?
  - If EI fluctuates a great deal day to day, does this mean it is more malleable than intelligences or personality traits usually are?
  - How will this inform possible interventions?

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