Understanding Intolerance of Uncertainty in Women with Eating Disorder Symptoms:

Personality Traits and Attachment Styles

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Talk Map

• What is IU and why might it be relevant to understanding EDs?
• Aims and hypotheses
• Method
• Results
• Discussion
Intolerance of Uncertainty

- High IU $\rightarrow$ tendency to respond negatively to uncertainty on cognitive, behavioural and emotional level
- Key predictor of worry and anxiety

(Dugas et al., 1998; Dugas et al., 2003; 2010; Ladouceur et al., 2000)
Intolerance of Uncertainty

• High IU →
  • Poorer decision making (Carleton et al., 2016)
  • Poor (social) problem solving (Ladouceur et al., 2000)
  • Impacts functioning (Thibodeau, Carleton, Gómez-Pérez, Asmundson, 2013)

• Neural circuitry: possible role of amygdala and DLPFC (Wever, Smeets & Sternheim, 2015)
Importance for EDs

• Recovery requires significant change
• Demands flexibility and the ability to face uncertainty
• May be a co-morbid feature which impacts recovery
“The uncertainty about what coping strategies I’ll be able to employ other than the eating disorder”

“(Uncertainty) makes me want to get some control over everything that’s around me.”

“I close off. . .sorry, that’s what I do. . . I close off and get into my little world. . .

“To me the world is out of control and messy”

“The world is bad and horrific”

*Sternheim et al., 2011*
Intolerance of Uncertainty & EDs

• **Women with ED pathology**
  - Higher IU compared to those without ED symptoms
    (Konstantellou et al., 2011)

• **Clinical studies in adults with AN**
  - Heightened IU
  - Relation to more severe ED symptoms
  - Associations with more anxiety and depression

(Sternheim et al., 2011, 2012, 2015; Frank et al., 2012; Konstantellou et al., 2012; Abbate-Daga et al., 2015)
Intolerance of Uncertainty & ED’s

- Clinical studies in adults with AN (cont.)
  - Higher IU → longer time required when decision making
    - Particularly for affective stimuli (*Smeets et al., in preparation*)
  - Higher IU → less effective problem solving styles (*Sternheim et al., in preparation*)
Intolerance of Uncertainty & ED’s

• Clinical studies in adolescents with AN
  • Heightened IU (Sternheim et al., submitted)
  • IU predictive of EDEQ and anxiety scores (Rover et al., in preparation)
  • Successful targeting of IU (Sternheim & Harrison, submitted)

• Clinical studies in adults with BN
  • Heightened IU (Frank et al., 2012; Sternheim et al., 2012)
Take Home Message so Far

• IU is an important concept in EDs
• Clear clinical examples of its impact
• Opportunity to develop ways to support patients in this aspect of their recovery
Unanswered Questions: Understanding IU in ED

• Possible role of personality traits?
  • Need for control
  • Harm avoidance

• Possible role of early experiences?
  • Attachment style

(Pro-Egalitarian, 2011)
Personality in ED

- Cassin & van Ranson (2005): Review and meta-analysis

- AN and BN characterised by perfectionism, obsessive-compulsiveness, neuroticism, negative emotionality, harm avoidance, low self-directedness, low cooperativeness, and traits associated with avoidant PD

- However, consider over use of self-report = over-estimation
Attachment styles in ED

• Importance of attachment  (Tasca & Balfour, 2014)

• Attachment insecurity  (Brennan et al., 1998)

  • Attachment anxiety style  →  individual is highly motivated to engage in close relationships and has a tendency to idealise others while devaluing themselves.

  • Attachment avoidance style  →  tend to minimise their own attachment needs and avoid close relationships with others.
Research Question

• Might personality traits and attachment style underline the high IU observed in people with EDs?
• Exploring this link might help us to better understand how to target high IU during treatment
Aims & Hypotheses

• **AIM:** Investigate potential factors contributing to IU in women with ED symptoms

• **Hypothesis 1:** those with ED symptoms will have higher levels of IU, will be less extrovert and open to new experiences and display a more anxious and avoidant attachment style

• **Hypothesis 2:** for those with ED symptoms, low extroversion, low openness, anxious and avoidant attachment styles will be predictive of IU
Methods

• **Measures**
  • Eating Disorder Examination Questionnaire (EDE-Q)
  • Intolerance of Uncertainty Scale (IUS-27)
  • NEO Personality Inventory (NEO-FFI): Openness to Experience and Extraversion subscales
  • Experience in Close Relationships-Revised Scale Short Form (ECR-S)

Participants

• 809 people started the survey; \( N = 563 \) completed and met inclusion criteria (**ED group** = 349; >community norm on EDEQ)
• Online Survey (Survey Monkey)
• Female adults aged over 18

*Costa & McCrae, 1992; Freeston, Rhéaume, Letarte,, Dugas & Ladouceur, 1994; Wei, Russell, Mallinckrodt and Vogel, 2007; Fairburn & Beglin, 2008*
## Results 1

<table>
<thead>
<tr>
<th></th>
<th>ED group N = 349</th>
<th>Non-ED group N = 214</th>
<th></th>
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</thead>
<tbody>
<tr>
<td></td>
<td>Mean SD</td>
<td>Mean SD</td>
<td>p</td>
</tr>
<tr>
<td><strong>Age</strong></td>
<td>34.5 (12.9)</td>
<td>37.7 (13.8)</td>
<td>&lt; .006</td>
</tr>
<tr>
<td><strong>IUS-27</strong></td>
<td>76.8 (26.2)</td>
<td>51.2 (18.1)</td>
<td>&lt; .0001</td>
</tr>
<tr>
<td><strong>ECR anxious</strong></td>
<td>25.0 (7.9)</td>
<td>20.6 (6.7)</td>
<td>&lt; .0001</td>
</tr>
<tr>
<td><strong>ECR avoidant</strong></td>
<td>19.9 (8.1)</td>
<td>16.9 (7.2)</td>
<td>&lt; .0001</td>
</tr>
<tr>
<td><strong>NEO Extroversion</strong></td>
<td>3.1 (.7)</td>
<td>3.4 (.6)</td>
<td>&lt; .0001</td>
</tr>
<tr>
<td><strong>NEO Openness</strong></td>
<td>3.7 (.6)</td>
<td>3.8 (.5)</td>
<td>= .005</td>
</tr>
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Results 2

- Adj R2 = .458 (model explains **45.8% of variance** in IUS scores
- F(5,343) = 59.8, *p* < .0001 (controlling for age)

- Unique contribution of anxious and avoidant attachment, as well as extroversion. No effect of openness.
Results: Summary

• Women with ED symptoms have higher IU, lower extroversion and openness to experience and more anxious and avoidant attachment styles than women without ED symptoms.

• Lower levels of extroversion and openness, and more anxious and avoidant attachment styles are predictive of higher levels of IU in women with ED symptoms.
Discussion

• Personality traits and insecure attachment styles are relevant for understanding IU in EDs.

• Treatment enhancers which target IU may wish to consider attachment style and the patient’s personality

• What can and what can’t be changed?
Discussion: Clinical Implications and Future Research

• Working on developing a new internal working model of relationships may help to reduce IU
• Core part of most treatments for EDs – link may need to be emphasised/made even clearer
• Focus on how this can enable patient to feel safe to explore the inherently unpredictable world
• Working on being flexible in terms of personality traits may be useful (resilience)
Thank you!

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References


