Parental Medical Illness and Health Anxiety: Testing the Interpersonal & Cognitive-Behavioural Models

Nicole M. Alberts & Heather Hadjistavropoulos
Health Anxiety (HA)

- Conceptualized along a continuum
  - Lack of concern ➔ Excessive anxiety

- Some amount of HA is adaptive

- If concerns become more severe
  - May meet DSM-IV criteria for hypochondriasis
Cognitive Behavioural Model of HA
Salkovskis & Warwick (2001)

- Past experiences with illness
- Dysfunctional health beliefs
- Misinterpretation of bodily sensations
- HA and urges to check body, seek reassurance

Triggering Event
Interpersonal Model of HA

(Stuart & Noyes, 1999)

- Negative Parenting Styles
- Aversive Experiences (e.g., illness)
- Insecure Attachment
  - Attachment Avoidance
  - Attachment Anxiety
- HA and Attempts to Elicit Care/Alleviate Worry: Reassurance Seeking
Current Study

- **Objectives**
  - Explore how HA relates to attachment dimensions, dysfunctional health-related beliefs, and parental illness
  - Provide a test of both models of HA and examine relative contributions of variables from each model to HA
Current Study

- **Hypotheses**
  - Dysfunctional health-related beliefs would be associated with higher HA
  - High attachment anxiety would be associated with higher HA
  - Death of ill parent would be associated with higher HA
Method

Participants & Procedure

- $N = 116$ emerging adults
  - Reported that one or both parents had been diagnosed with a serious medical illness
    - Cancer = 34.7%
    - Cardiovascular disease = 9.3%
    - Multiple sclerosis = 8.7%
    - Irritable bowel disease = 8.7%
    - Other illnesses = 24.7%
  - Recruited from undergraduate classes (60.3%) and from across Canada (39.7%)
  - Mean age = 21.2 ($SD = 2.4$)
  - Completed self-report measures online
Method

- **Measures**
  - Questions assessing background/parental-illness variables
  - Short Health Anxiety Inventory (SHAI; Salkovskis et al. 2002)
  - Health Cognitions Questionnaire (HCQ; Hadjistavropoulos et al., 2011)
  - Experience in Close Relationships – Relationships Structures Questionnaire (ECR-RS; Fraley et al., 2011).
### Results

- **Descriptive statistics for study measures**

<table>
<thead>
<tr>
<th>Measure</th>
<th>$M$</th>
<th>$SD$</th>
</tr>
</thead>
<tbody>
<tr>
<td>SHAI</td>
<td>13.03</td>
<td>5.56</td>
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<tr>
<td>ECR-RS</td>
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<tr>
<td>Global Avoidance</td>
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<tr>
<td>Global Anxiety</td>
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<tr>
<td>HCQ</td>
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<tr>
<td>Difficulty Coping with Illness</td>
<td>19.29</td>
<td>5.08</td>
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<tr>
<td>Medical Service Inadequacy</td>
<td>9.66</td>
<td>3.30</td>
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<tr>
<td>Awfulness of Illness</td>
<td>13.91</td>
<td>2.81</td>
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<tr>
<td>Likelihood of Illness</td>
<td>12.51</td>
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## Results

### Correlations among measures

<table>
<thead>
<tr>
<th>Measure</th>
<th>ECR-RS Avoid</th>
<th>ECR-RS Anx</th>
<th>HCQ-Cope</th>
<th>HCQ-Med</th>
<th>HCQ-Awful</th>
<th>HCQ-Like</th>
<th>Death of Parent</th>
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<tbody>
<tr>
<td>SHAI</td>
<td>.08</td>
<td>.43**</td>
<td>.44**</td>
<td>.26**</td>
<td>.21**</td>
<td>.42**</td>
<td>-.24**</td>
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<tr>
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<td>-.10</td>
<td>-.05</td>
<td>.00</td>
<td>-.04</td>
<td>.07</td>
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<tr>
<td>ECR-RS Anx</td>
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<td>.27**</td>
<td>.07</td>
<td>.23*</td>
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<td>HCQ – Cope</td>
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<td>.55**</td>
<td>.26**</td>
<td>-.02</td>
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<tr>
<td>HCQ – Med</td>
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<td>.17</td>
<td>.10</td>
<td>-.10</td>
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<tr>
<td>HCQ – Awful</td>
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<td>HCQ – Like</td>
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* p < .05. ** p < .01
## Results

- Interpersonal and cognitive predictors of HA

<table>
<thead>
<tr>
<th>Variable</th>
<th>$\beta$</th>
<th>$R^2$</th>
<th>$\Delta R^2$</th>
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<td><strong>Step 1</strong></td>
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<tr>
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* $p < .05$. ** $p < .01$. *** $p < .001$. 
## Results

- **Interpersonal and cognitive predictors of HA**

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<th>$\Delta R^2$</th>
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<tbody>
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<td><strong>Step 3</strong></td>
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<td>HCQ – Cope</td>
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<tr>
<td>HCQ – Med</td>
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</tr>
<tr>
<td>HCQ – Awful</td>
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</tr>
<tr>
<td>HCQ – Likelihood</td>
<td>.25**</td>
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<tr>
<td>ECR-RS Avoidance</td>
<td>.17*</td>
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</tr>
<tr>
<td>ECR-RS Anxiety</td>
<td>.29***</td>
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* $p < .05$. ** $p < .01$. *** $p < .001$. 
Among emerging adults who have had a parent diagnosed with a serious medical illness...

Appears that both attachment dimensions, dysfunctional illness-related beliefs, and death of ill parent are associated with elevated HA
Theoretical Implications

CB Model

- Perceptions of increased likelihood of illness
  - Does genetic risk impact this belief?
- Perceptions of oneself as having difficulty coping with illness
  - Product of observational learning?
  - Consistent with IP model
Theoretical Implications

- **IP Model**
  - Attachment anxiety and avoidance = unique predictors of HA
  - Attachment anxiety appears to be stronger predictor of HA than avoidance
  - Consistent with recent theoretical work that suggests...
    - Attachment anxiety $\rightarrow$ hypervigilance/seeking excessive dependence
    - Attachment avoidance $\rightarrow$ minimize attention to threat-related cues/underutilize social support
Clinical Implications

- **Increased awareness** of perceptions of the **likelihood of illness and difficulty coping with illness** could lead to...
  - Better identification of early HA
  - Improved treatment

- **HA treatment** targeting **attachment** problems in addition to dysfunctional beliefs may be effective

- **Death of parent** may be a risk factor for increased HA among emerging adults
Limitations

- Wide variability in parental illnesses
- Focus on emerging adults
  - Different findings with children and adolescents?
Future Directions

- Integrated model of HA

- Past Experience: Parental Illness
  - Dysfunctional Beliefs
    - Difficulty Coping with Illness
    - Likelihood of Illness
  - Insecure Attachment
    - Attachment Anxiety
    - Attachment Avoidance

- Health Anxiety
Questions