PERSONALITY OR MENTAL ILLNESS?
UNDERSTANDING THE LINK BETWEEN TRAITS AND DISORDERS

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Director, Pediatric Psychiatry Clinic
Program Director, Child Psychiatry Fellowship
University of Vermont, College of Medicine

Blogs
http://blog.uvm.edu/drettew
http://www.psychologytoday.com/blog/abcs-child-psychiatry
## DISCLOSURES OF POTENTIAL CONFLICTS

<table>
<thead>
<tr>
<th>Source</th>
<th>Research Funding</th>
<th>Advisor/Consultant</th>
<th>Employee</th>
<th>Speakers’ Bureau</th>
<th>Books, Intellectual Property</th>
<th>In-kind Services (example: travel)</th>
<th>Stock or Equity</th>
<th>Honorarium or expenses for this presentation or meeting</th>
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<tbody>
<tr>
<td>WW Norton &amp; Company</td>
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*Book on temperament by WW Norton*
CHILD TEMPERAMENTAL TRAITS
(CHESS AND THOMAS)

- Activity Level
- Rhythmicity
- Approach-Withdrawal
- Adaptability
- Response Threshold
- Response Intensity
- Mood
- Distractibility
- Attention Span/Persistence

3 Types: Difficult, Easy, Slow to Warm Up

GOODNESS OF FIT THEORY
## MAJOR CATEGORIES

<table>
<thead>
<tr>
<th></th>
<th>Negative Emotionality</th>
<th>Extraversion</th>
<th>Regulation</th>
</tr>
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<tbody>
<tr>
<td><strong>Moderate</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Confident</strong></td>
<td>$\downarrow$</td>
<td>$\uparrow$</td>
<td>$\uparrow$</td>
</tr>
<tr>
<td><strong>Anxious</strong></td>
<td>$\uparrow$</td>
<td>$\downarrow$</td>
<td>$\downarrow$</td>
</tr>
<tr>
<td><strong>Agitated</strong></td>
<td>$\uparrow$</td>
<td>$\uparrow$</td>
<td>$\downarrow$</td>
</tr>
<tr>
<td><strong>Mellow</strong></td>
<td>$\downarrow$</td>
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</tbody>
</table>

Rettew, *Child Temperament, 2013*
TEMPERAMENT IN THE BRAIN

Pezawas et al., 2005
Many studies show heritabilities of around 50%.

Degree of genetic influence can change based upon sex, age, environment.

Rettew et al., Twin Research, 2006
NATURE  vs  NURTURE
INTERACTIVE MODEL IN ANXIETY

Rettew, 2013
WHERE TO DRAW THE LINE?

Polderman et al., 2007
Table 5.1. Temperament traits associated with common psychiatric disorders.

<table>
<thead>
<tr>
<th>Disorder</th>
<th>Negative Affectivity</th>
<th>Extraversion/Approach</th>
<th>Sociability</th>
<th>Regulatory Ability/ Effortful Control</th>
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<tbody>
<tr>
<td>ADHD - combined</td>
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<td>ADHD - inattentive</td>
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<td>ODD</td>
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<tr>
<td>CD/psychopathy</td>
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<tr>
<td>General Anxiety</td>
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<tr>
<td>Depression</td>
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<tr>
<td>Bipolar Disorder</td>
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<tr>
<td>Autistic Spectrum</td>
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<td>Substance Abuse</td>
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<td>Psychotic Disorders</td>
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<td>Eating Disorders -</td>
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<td>Eating Disorders -</td>
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<tr>
<td>“Overcontrolled”</td>
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</table>

Rettew, *Child Temperament*, 2013
Effect of parent temperament on child psychopathology depends on child temperament.

High mother Novelty Seeking related to child attention problems only if child also has high Novelty Seeking.

Rettew et al, Comp Psych, 2006
HOW ARE TEMPERAMENT AND PSYCHOPATHOLOGY RELATED?

• Spectrum model (e.g. ADHD and activity level)
• Risk model (e.g. novelty seeking and drug use)
• Common factor model (e.g. trait anxiety and anxiety disorders)
• Scar model (e.g. Alzheimer’s and personality change)
• Bidirectional model (e.g. extraversion/negative affectivity and depression)
DO TRAITS AND DISORDERS SHARE NEUROBIOLOGY?

- Genetic liability to neuroticism accounts for 1/3 to 2/3 of total genetic liability to internalizing disorders.
- Disorder specific influences most prominent for unshared environment.

Hettema et al., AJP, 2006
LOTS OF LABELS

ONE BRAIN
<table>
<thead>
<tr>
<th></th>
<th>Internalizing</th>
<th>Externalizing</th>
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</thead>
<tbody>
<tr>
<td><strong>Anxious/Depressed</strong></td>
<td>Anxious/Depressed</td>
<td></td>
</tr>
<tr>
<td>T Score</td>
<td>82-C</td>
<td>72-C</td>
</tr>
<tr>
<td>Percentile</td>
<td>&gt;97</td>
<td>&gt;97</td>
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<tr>
<td><strong>Withdrawn/Depressed</strong></td>
<td>Withdrawn/Depressed</td>
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</tr>
<tr>
<td>T Score</td>
<td>85-C</td>
<td>70-C</td>
</tr>
<tr>
<td>Percentile</td>
<td>&gt;97</td>
<td>&gt;97</td>
</tr>
<tr>
<td><strong>Somatic Complaints</strong></td>
<td>57</td>
<td>&gt;70</td>
</tr>
<tr>
<td><strong>Social Problems</strong></td>
<td>56</td>
<td>&gt;70</td>
</tr>
<tr>
<td><strong>Thought Problems</strong></td>
<td>71-C</td>
<td>95</td>
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<tr>
<td><strong>Attention Problems</strong></td>
<td>10</td>
<td>60</td>
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<tr>
<td><strong>Rule-Breaking Behavior</strong></td>
<td>4</td>
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<tr>
<td><strong>Aggressive Behavior</strong></td>
<td>18</td>
<td>&gt;97</td>
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</table>

**Total Score**: 17

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**Key**
- **C** = Critical item
- **B** = Borderline clinical range
- **C** = Clinical range
- Broken lines = Borderline clinical range

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**Clinicant Information**
- **ID**: [Redacted]
- **Name**: [Redacted]
- **Gender**: Male
- **Age**: 10
- **Date Filled**: 05/09/2009
- **Clinician**: D.C. Retew
- **Agency**: Private
- **Verified**: Yes
- **Informant**: Biological Mother

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**Notes**
- [Redacted]
Psychiatry should be a field about behavior **wellness** not just **illness**

Need to assess for it in our evaluations and keep it in the forefront of our intervention

- Nutrition
- Sleep habits
- Relationships
- Giving to others
- Sports and exercise
- Television and video games

**Hudziak, 2008**
BRINGING IN THE FAMILY

• Behavioral assessment of the parents in all children brought in for evaluation
• Discussions of fit
• Parental guidance
  • What does child pull out in you?
  • What is the natural but maybe suboptimal response?
  • How can you override that?
GENES AND ENVIRONMENT

Parent

Child

Irritability Genes

Anger

Family Conflict
THANK YOU!!
QUESTIONS AND DISCUSSION