

# EMOTIONAL CASCADES AND UNDERSTANDING THE CHAOS AND COMPLEXITY OF BORDERLINE PERSONALITY DISORDER

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# Borderline Personality Disorder



TURBULENT EMOTIONS  
DYSREGULATED BEHAVIORS  
SUICIDAL BEHAVIOR/SELF-INJURY  
STORMY RELATIONSHIPS

# Vulnerability

Genetic  
Biological  
Social/Familial



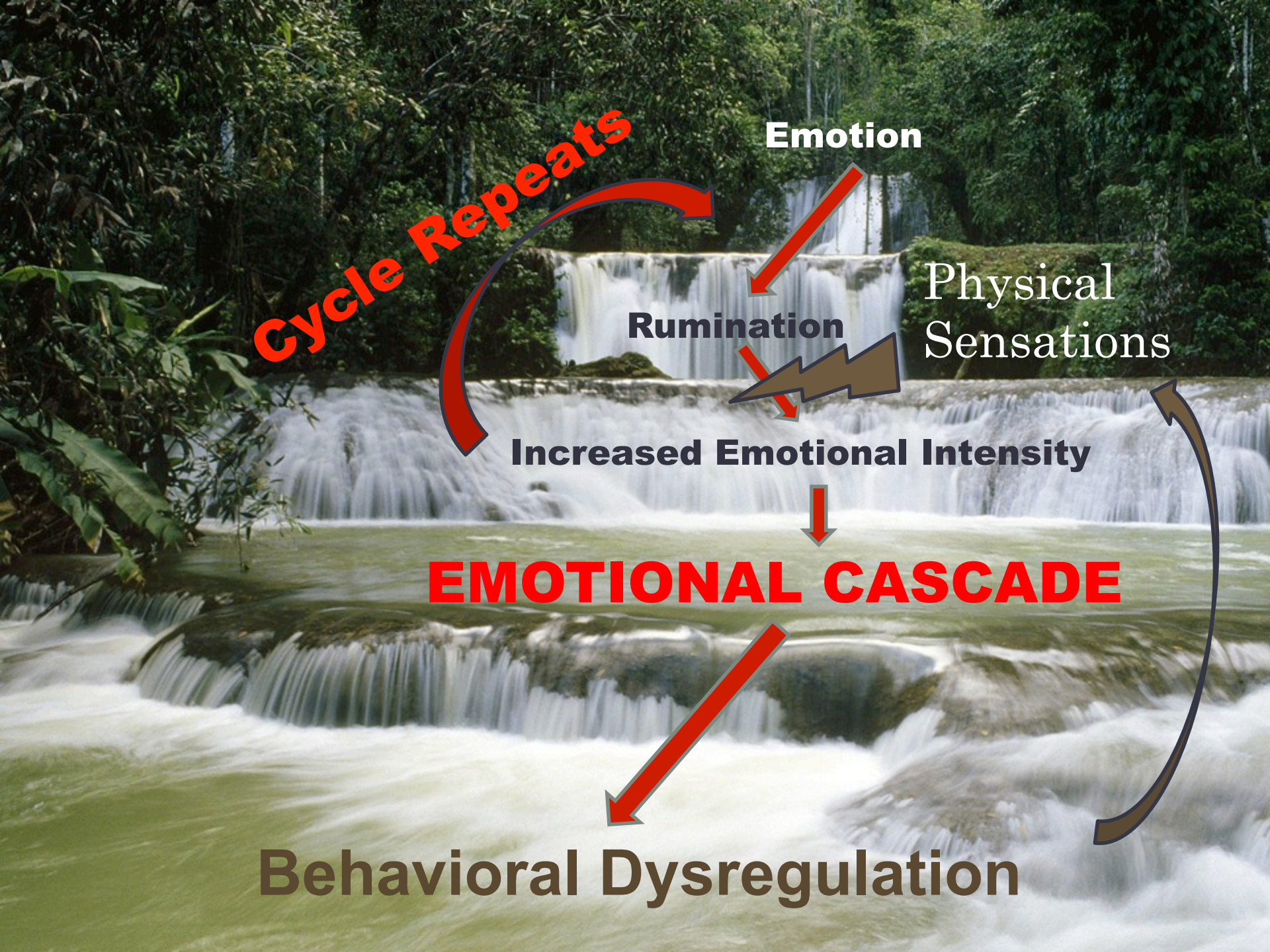
Emotional Mechanisms!

# Psychopathology

Borderline Personality  
Disorder  
Self-Injury/Suicide  
Eating Disordered  
Behavior

# **Emotional Cascades**





**Emotion**

**Cycle Repeats**

Physical  
Sensations

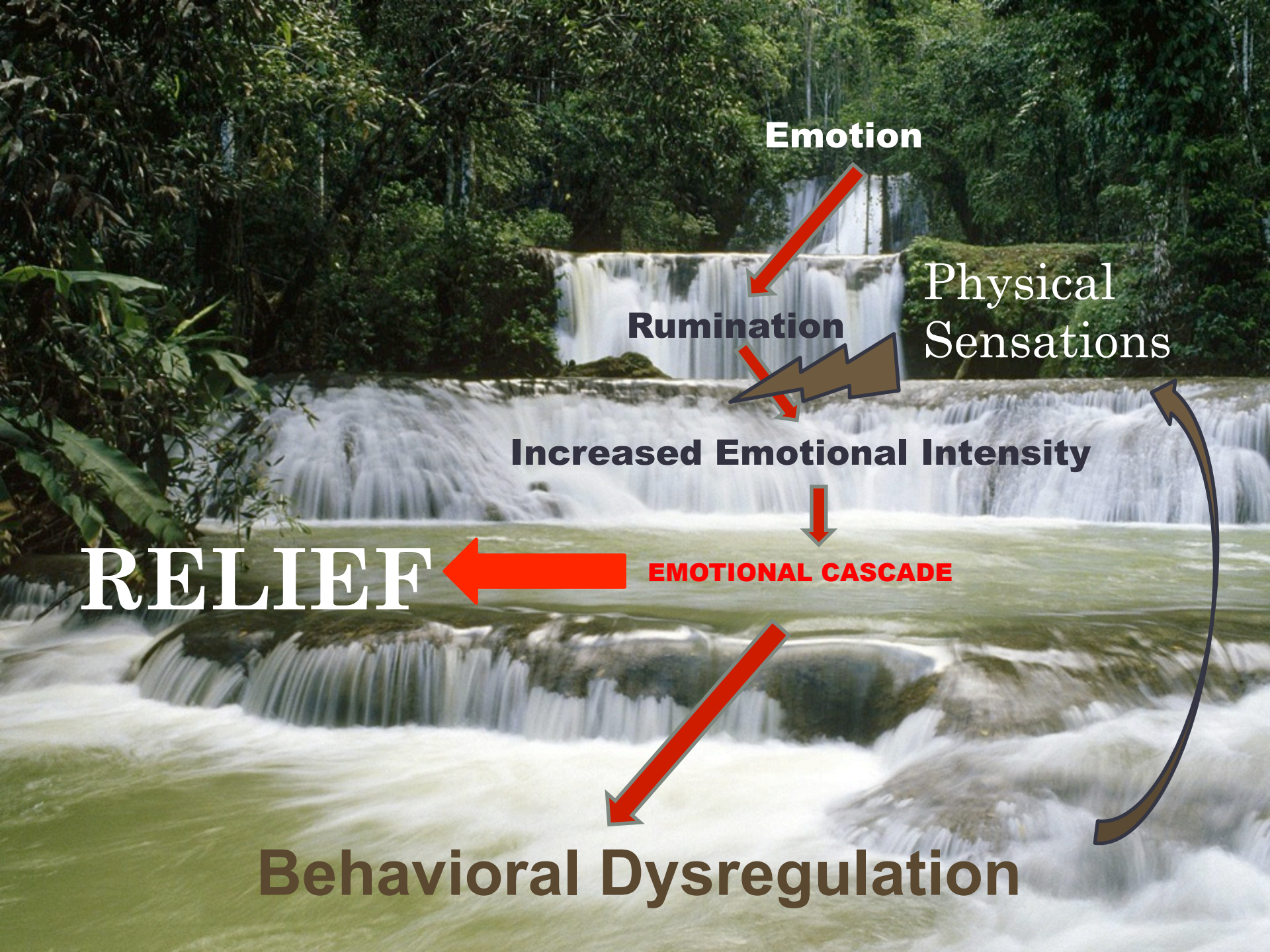
**Rumination**

**Increased Emotional Intensity**

**EMOTIONAL CASCADE**

**Behavioral Dysregulation**





**Emotion**

**Rumination**

Physical  
Sensations

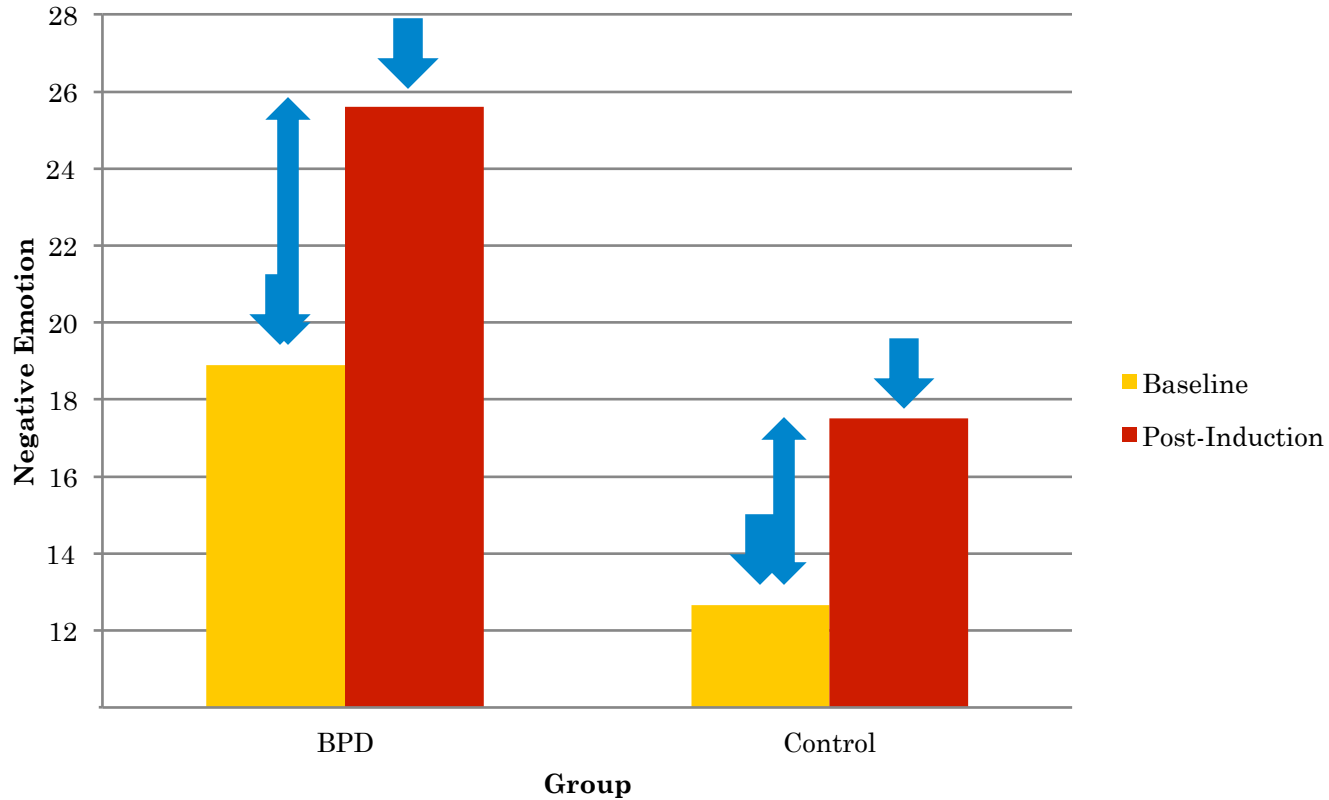
**Increased Emotional Intensity**

**RELIEF**

**EMOTIONAL CASCADE**

**Behavioral Dysregulation**

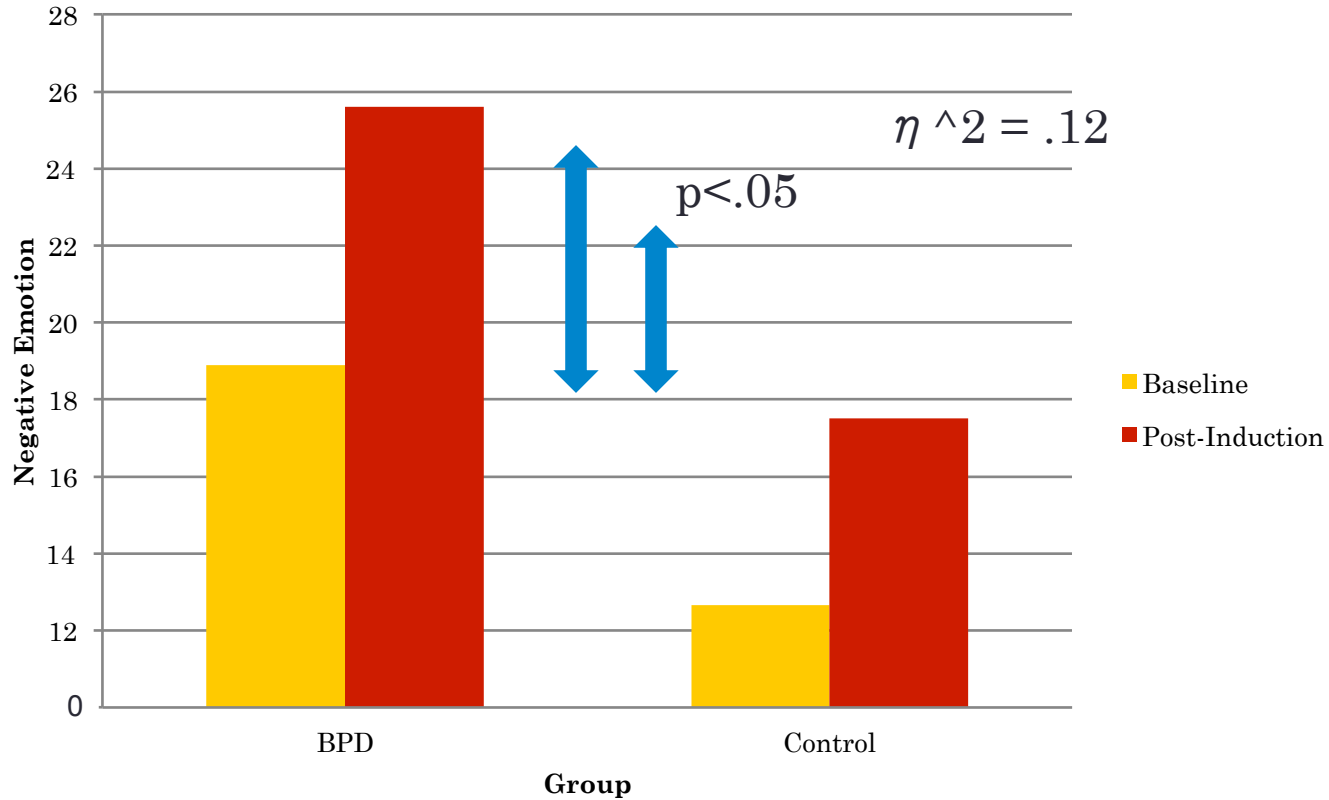
## Rumination Induction



Selby et al. (2009)

J ABNORMAL PSY

## Rumination Induction



Selby et al. (2009)

J ABNORMAL PSY



Do Emotional Cascades  
Predict Future Dysregulated  
Behaviors?

# Experience Sampling



Number Reported    % Sample Reporting Behavior

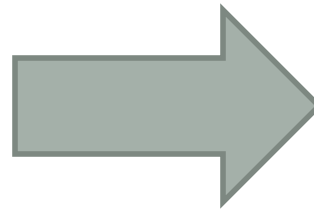
Alcohol Use	50	45.3%
Reckless Driving	14	20.3%
Self-Injury	25	13.8%
Impulsive Shopping	21	25.6%
Marijuana Use	116	34.2%
Binge Episode	62	36.8%
Physical Fight	9	4.4%
Threw Object	20	29.0%

# Predictive Validity

Signal 1



$$\gamma = .18^*$$



Signal 2



High Lag-  
Rumination

$$\gamma = .20^*$$

X

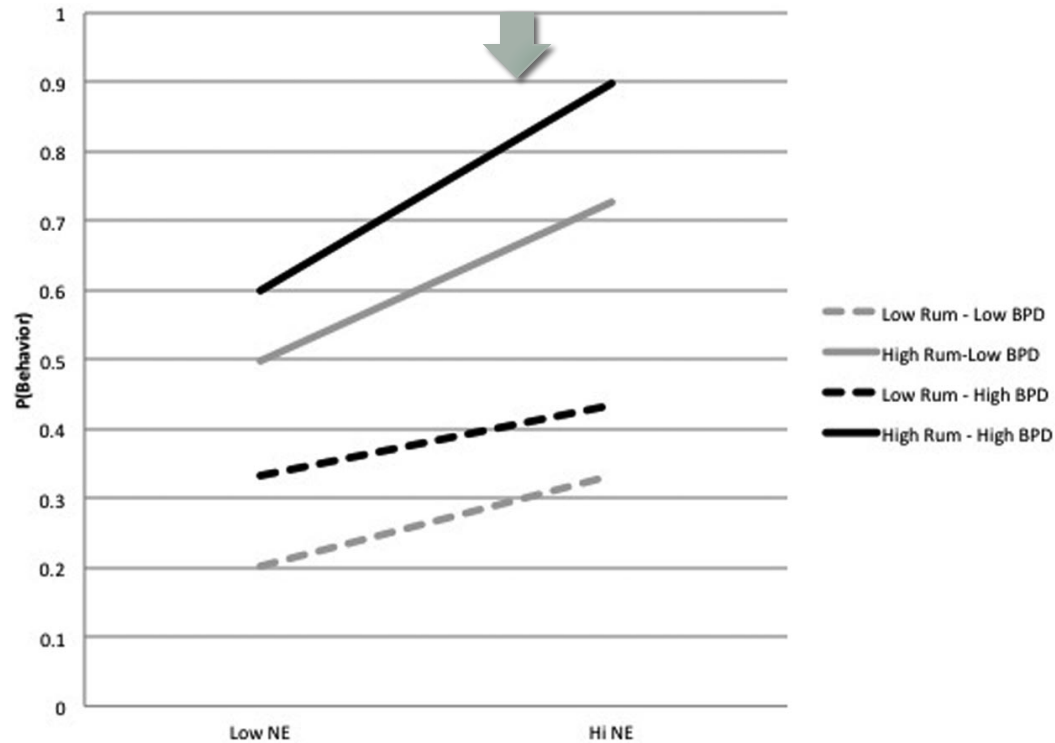
High Lag- Negative  
Emotion

$$\gamma = .17^*$$

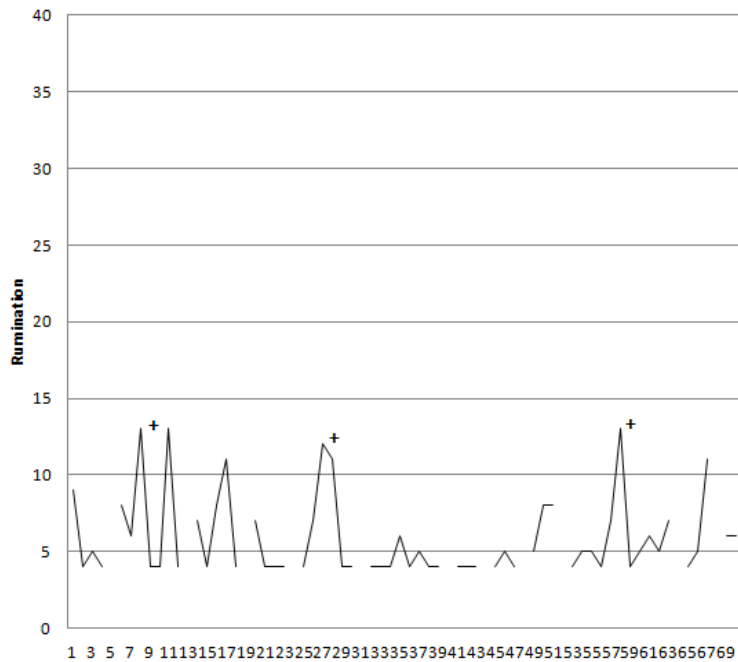
Immediate  
Future  
Dysregulated  
Behavior



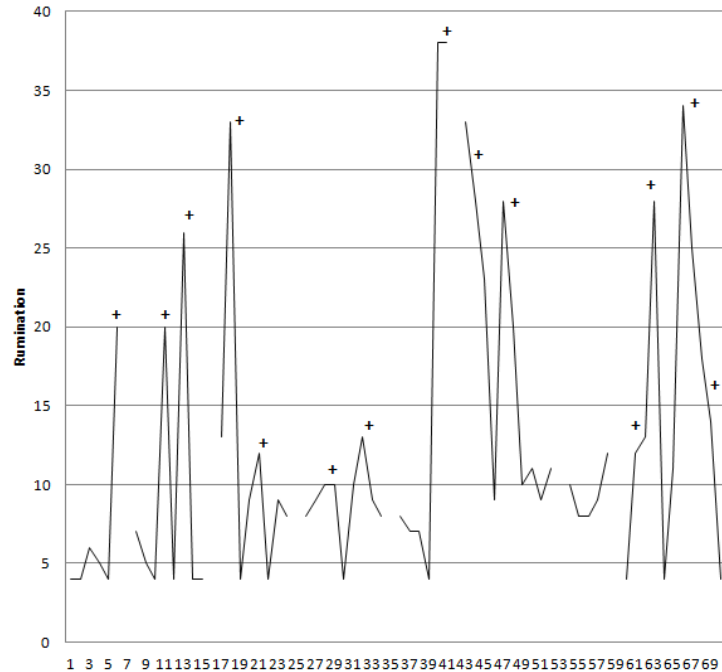
## 3-Way Interaction Predicting Occurrence of a Dysregulated Behavior



# Instability of Rumination



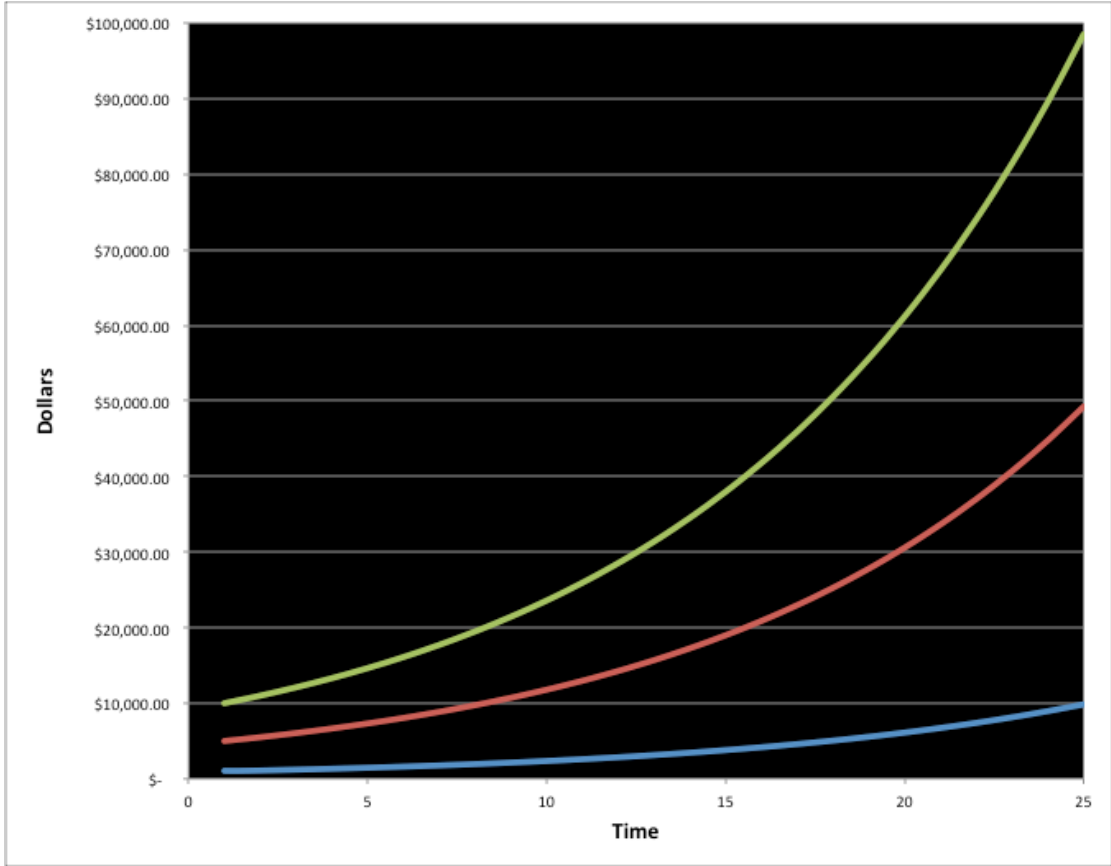
Stable



Unstable

# Butterfly Effect

- Concept from Chaos Theory
- More precisely known as, “Sensitive Dependence on Initial Conditions”
- Easier to think of as a “Compounding effect”
- Even small differences can lead to very extreme differences

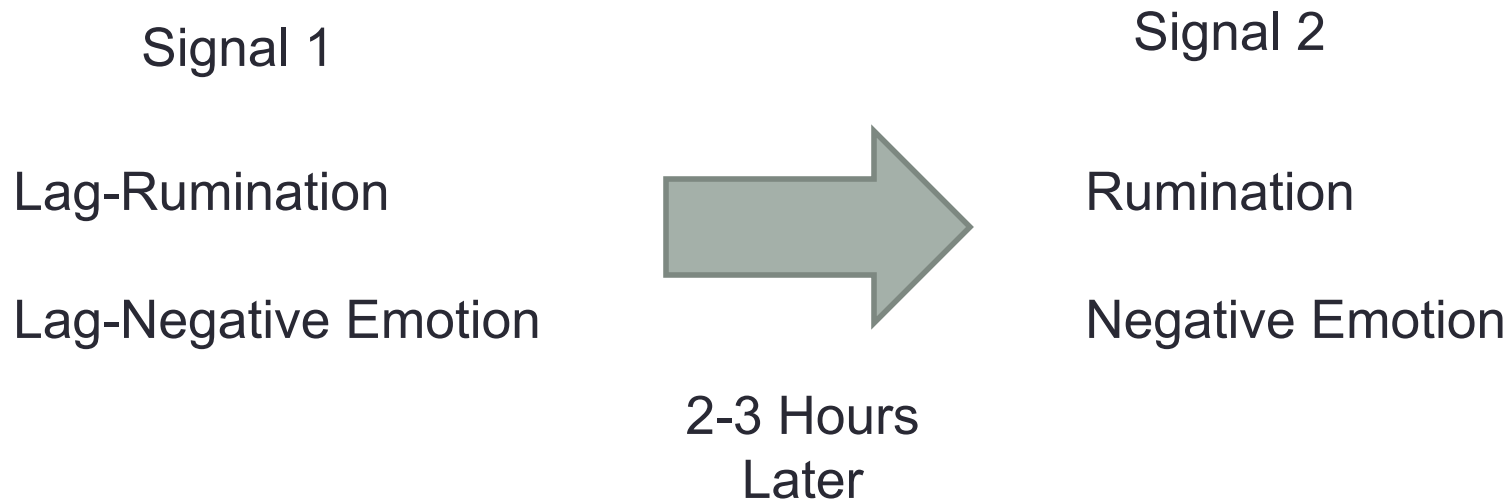




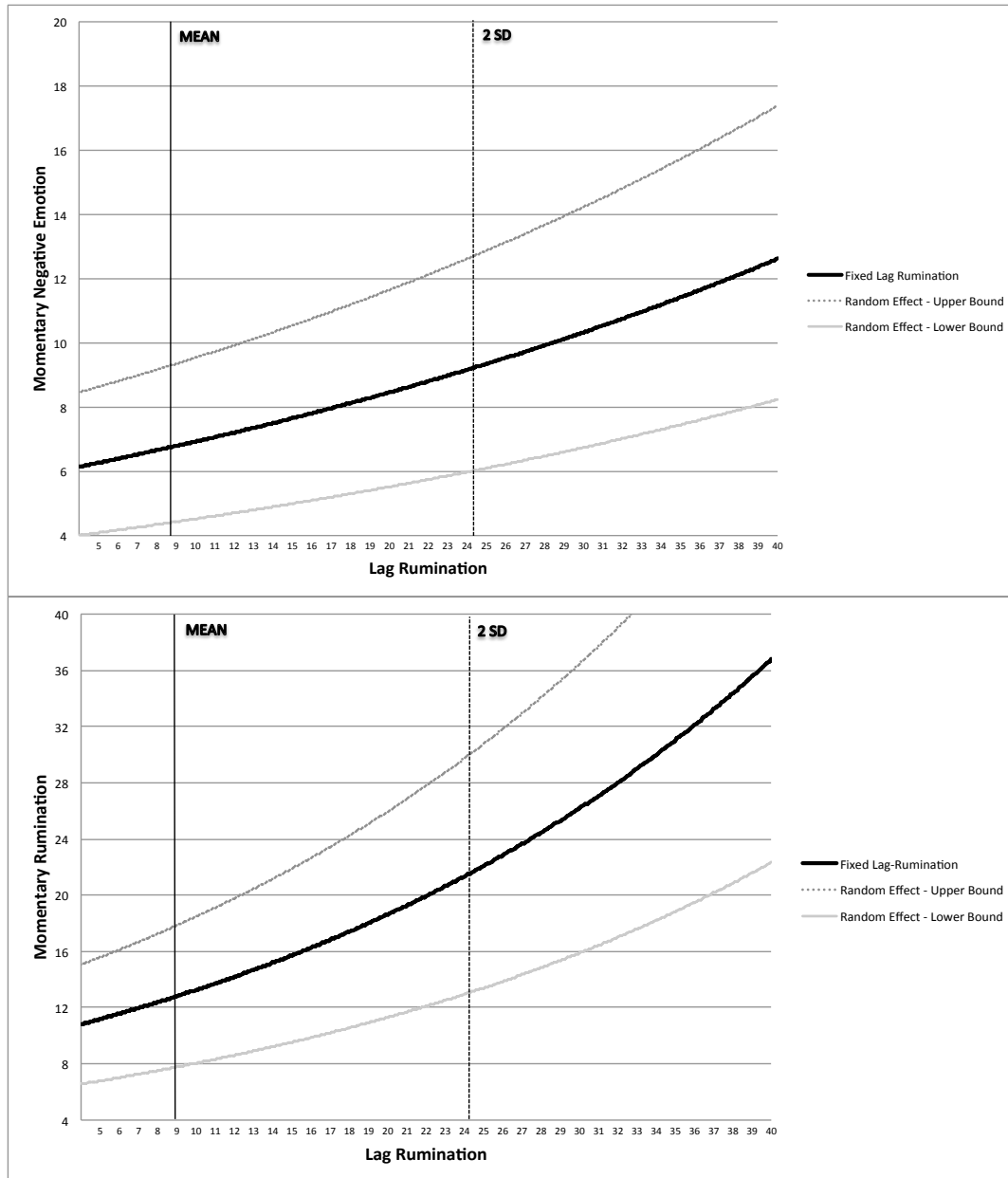
# Butterfly Effect

- Concept from Chaos Theory
- More precisely known as, “Sensitive Dependence on Initial Conditions”
- Even small differences can lead to very extreme differences
- Easier to think of as a “Compounding effect”
- In some people, we see an extremely strong and sensitive connection between negative thought and negative emotion, particularly those with BPD

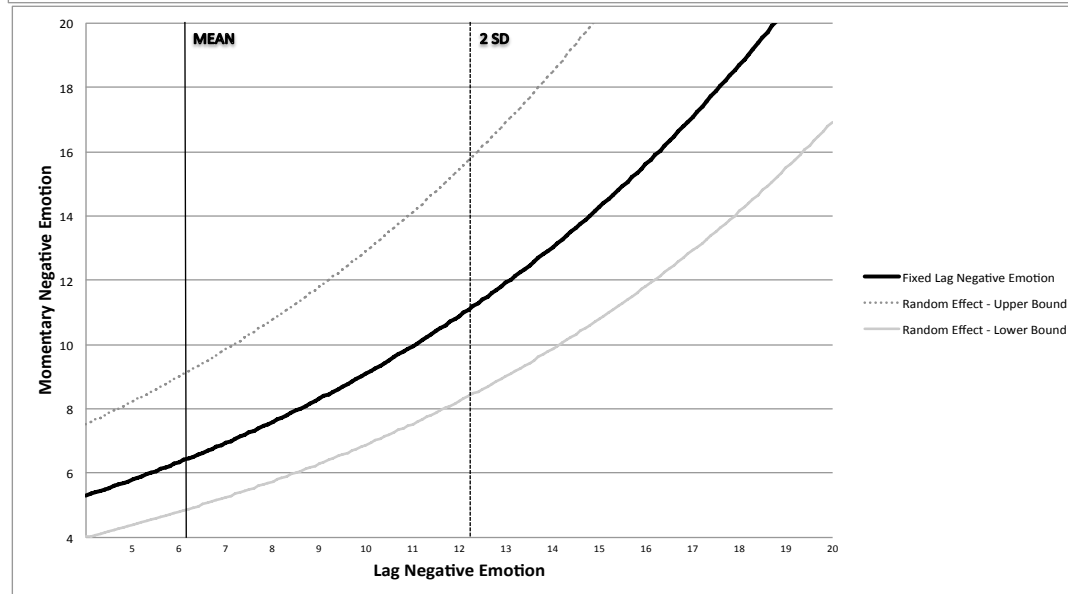
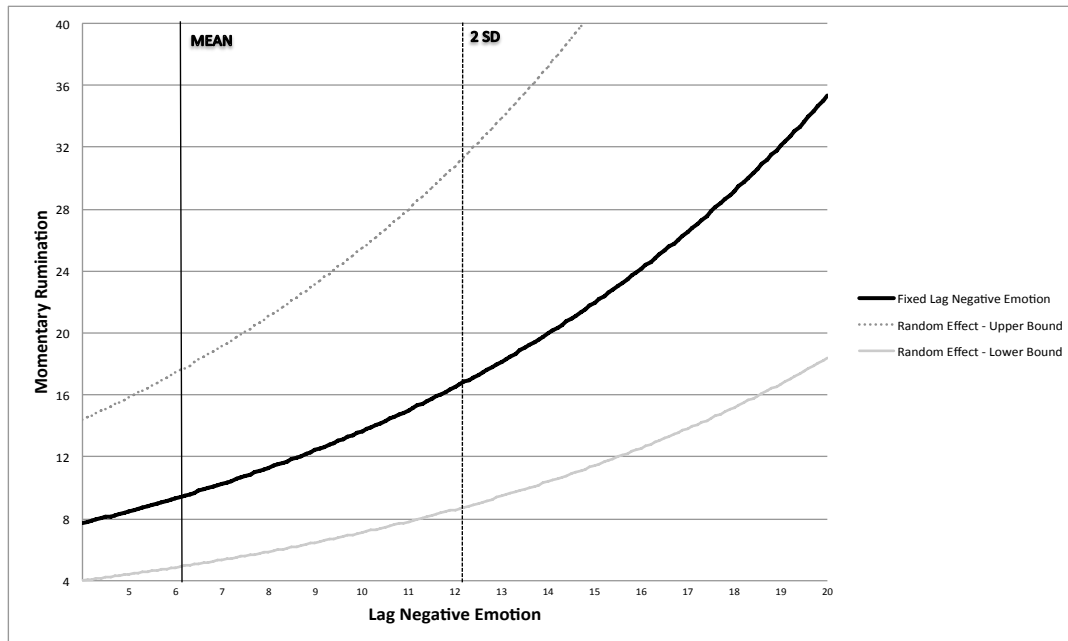
# Butterfly Effect in Emotional Cascades



# Rumination Effects

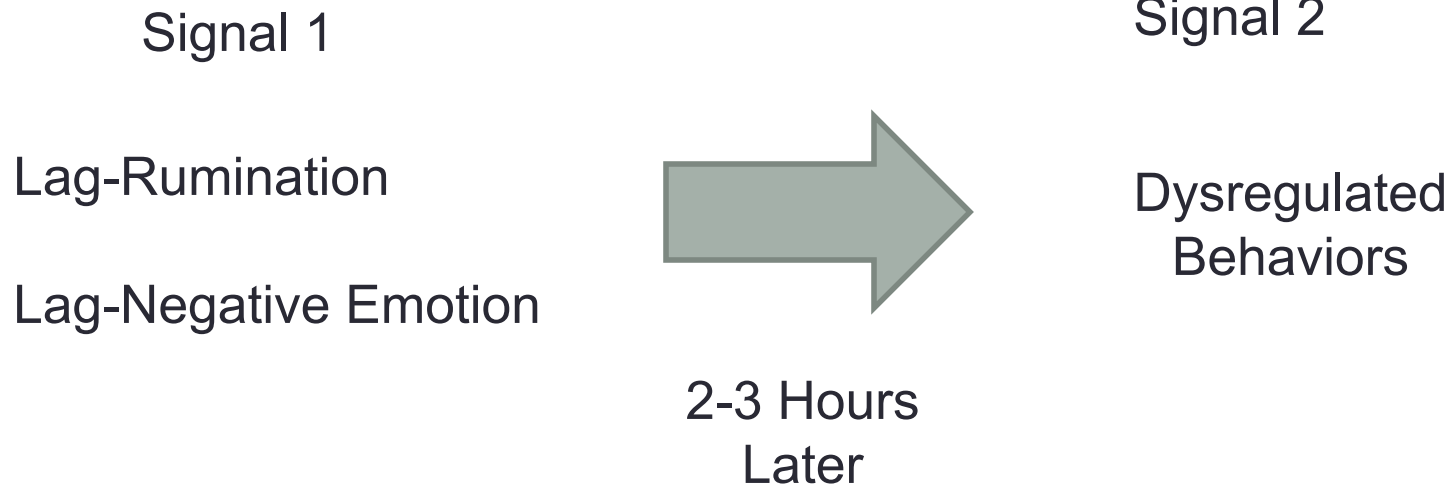


# Negative Emotion Effects

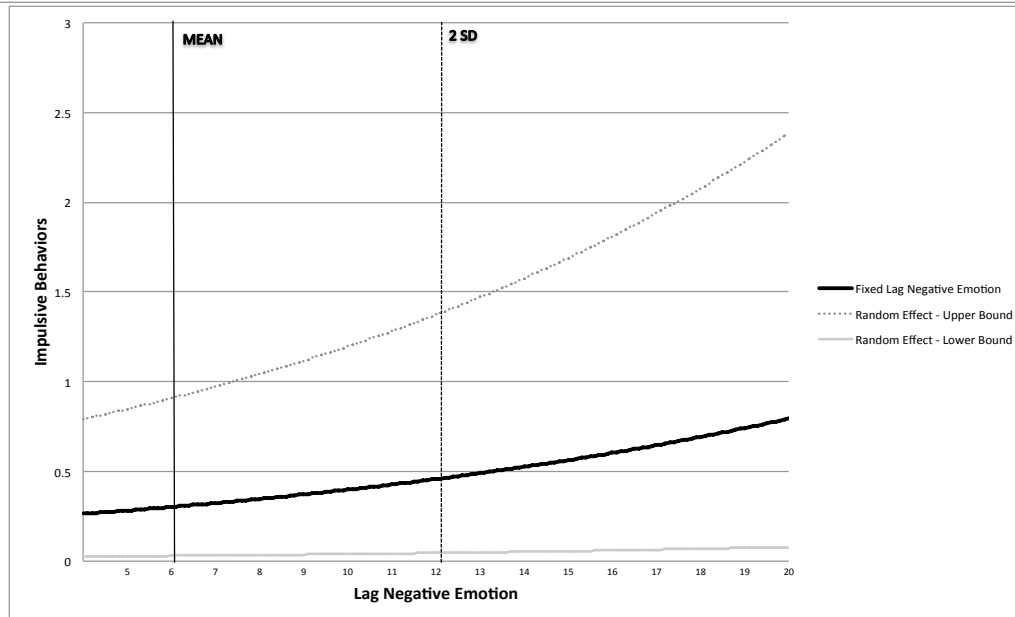
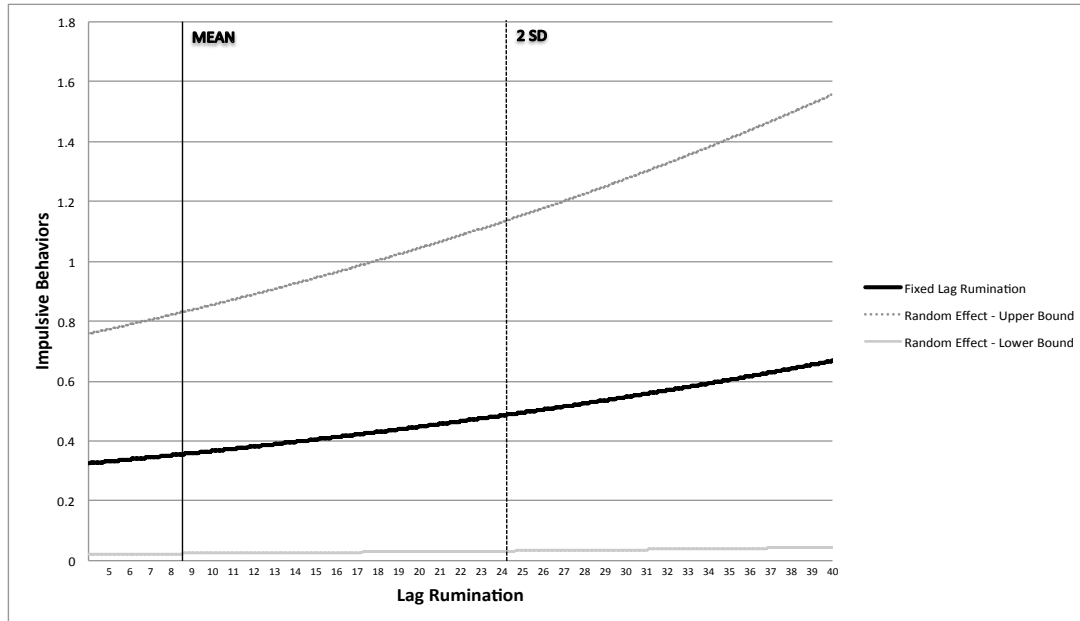




# Butterfly Effect in Emotional Cascades



# Dysregulated Behaviors



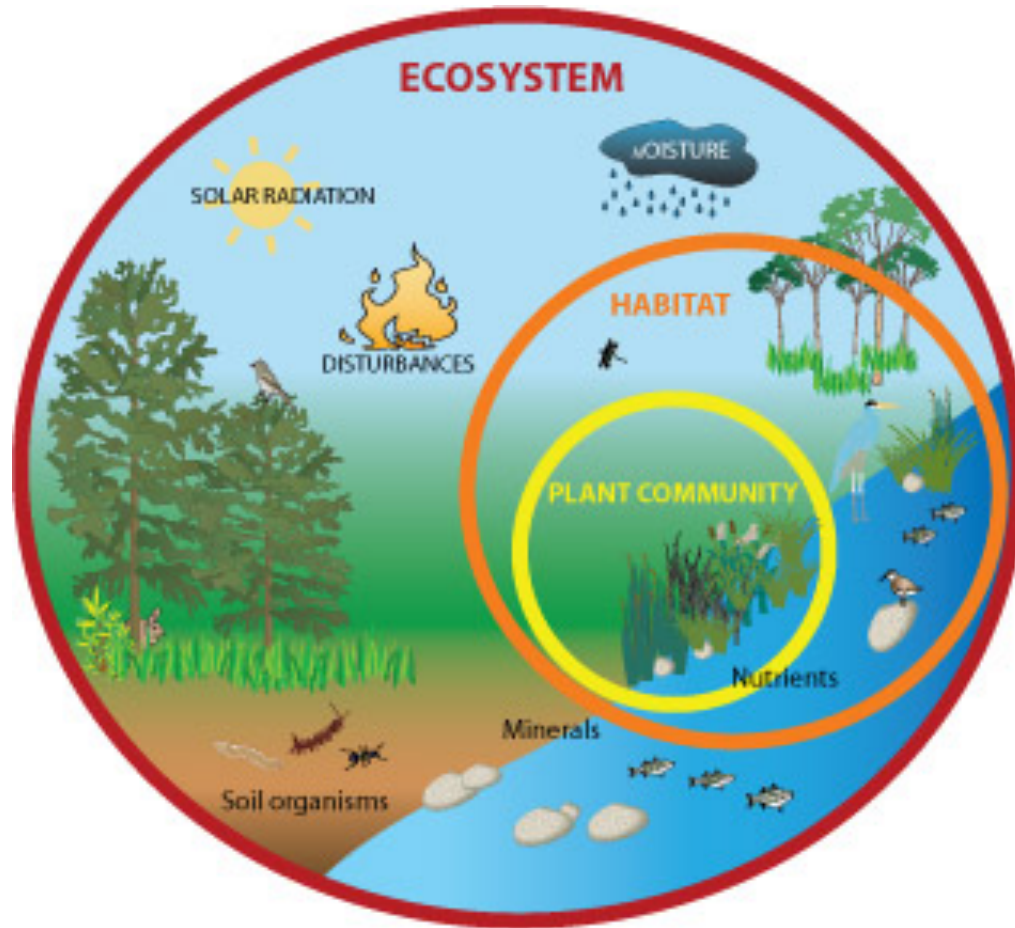
# Take Away

- Demonstrated the Butterfly Effect with Emotional Cascades
- This same effect predicted dysregulated behaviors
- Dysregulated behavior may serve as an “attractor” point toward which dysregulated behaviors are drawn as emotional cascades progress

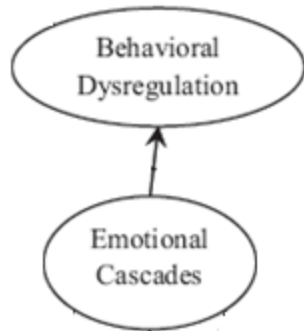


Emergence

# Emergence



# The Emotional Cascade Model

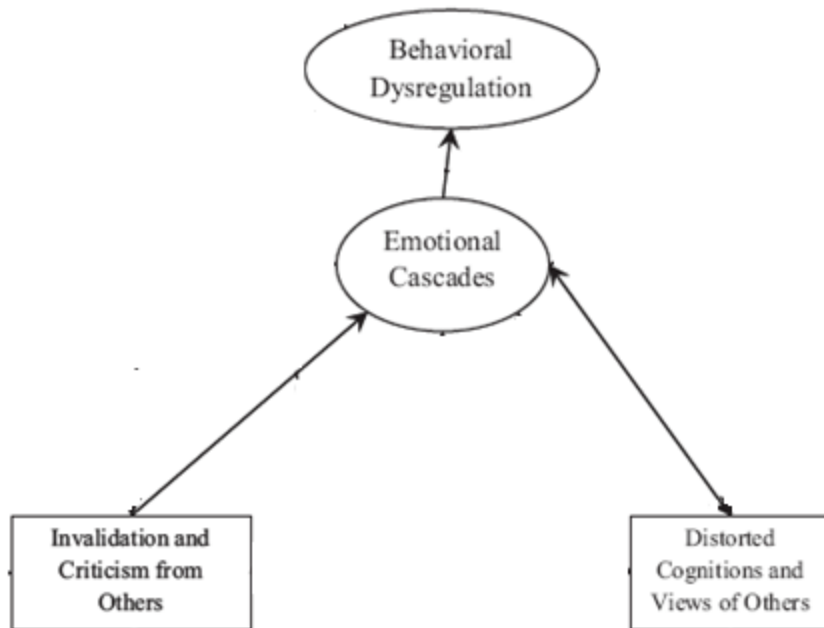


SELBY & JOINER (2009)

*REV OF GEN PSY*



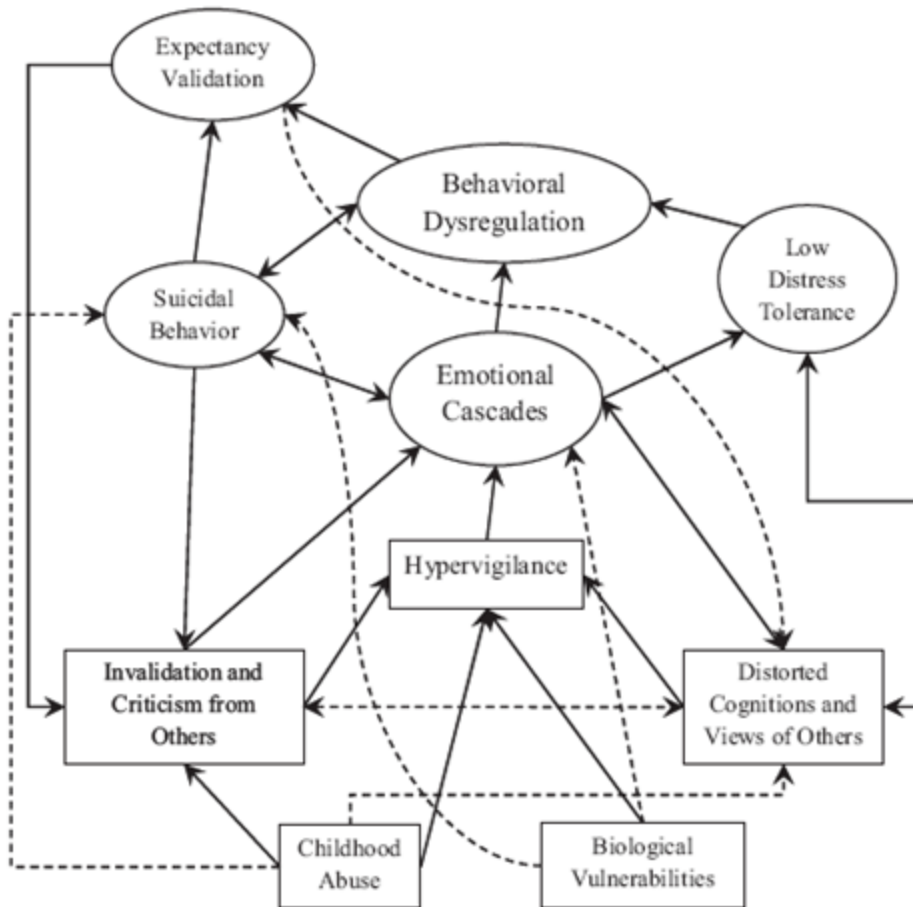
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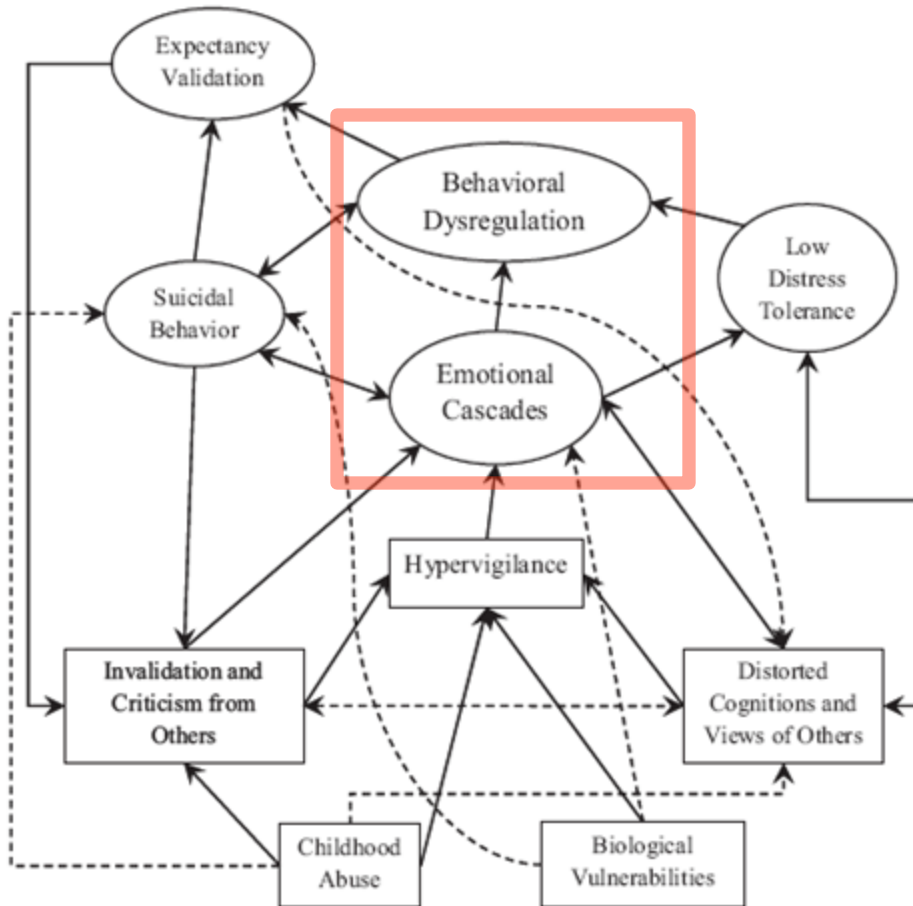
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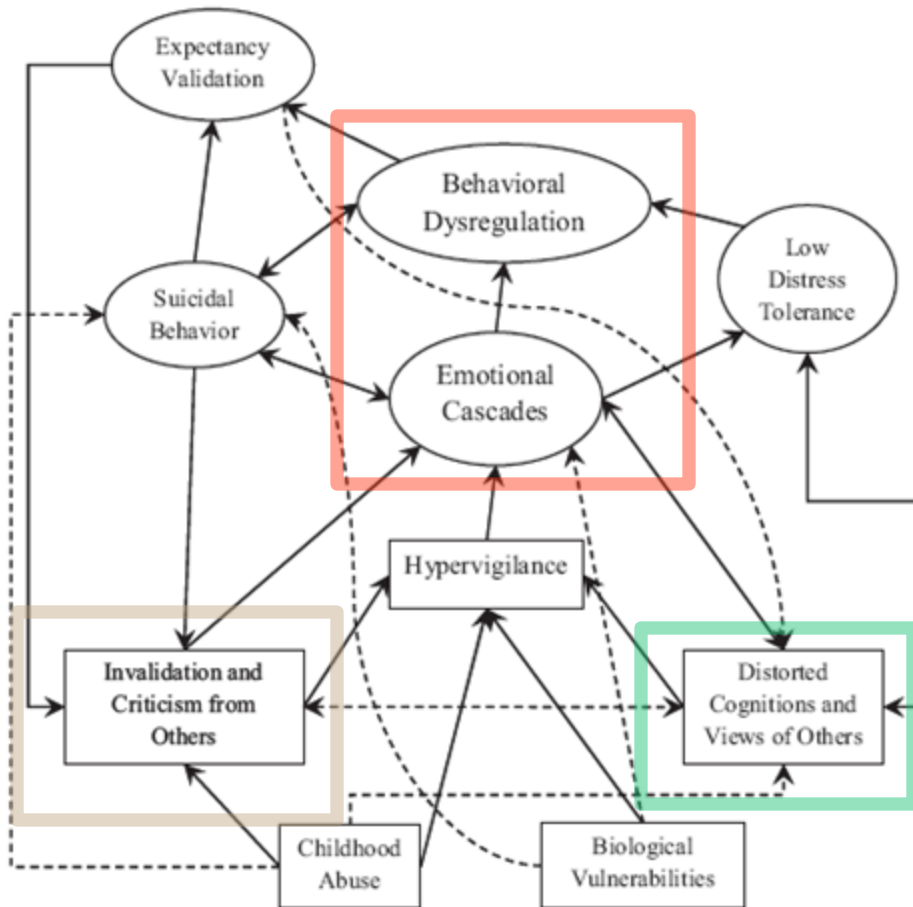
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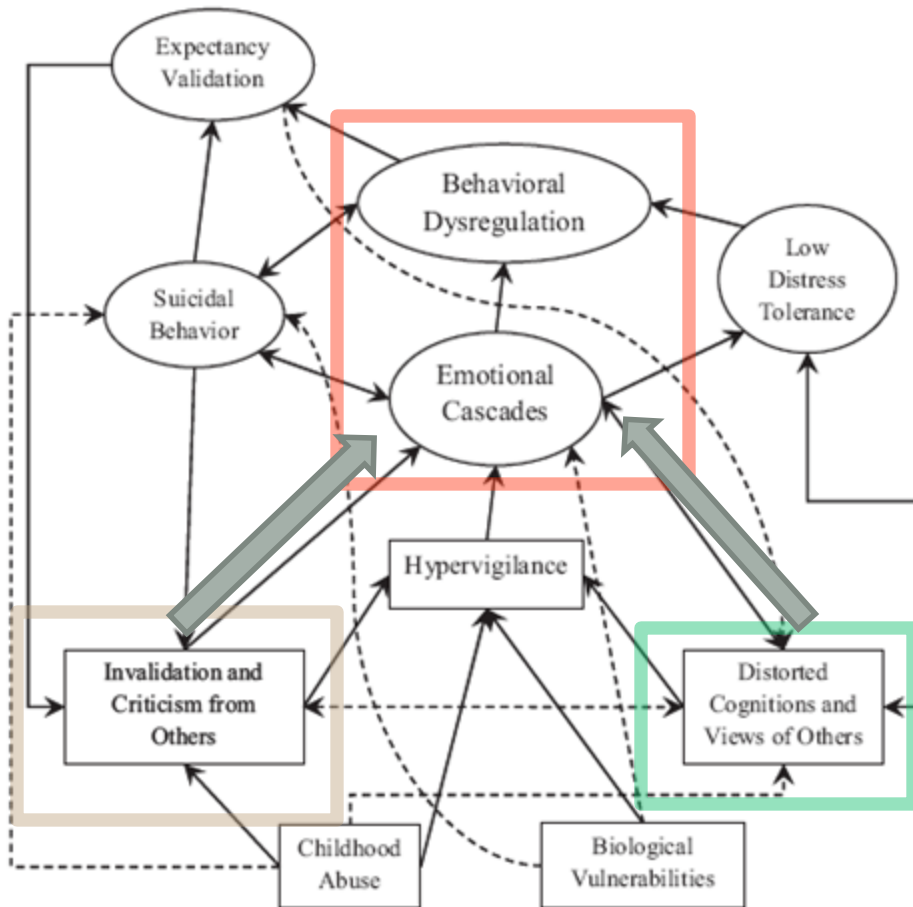
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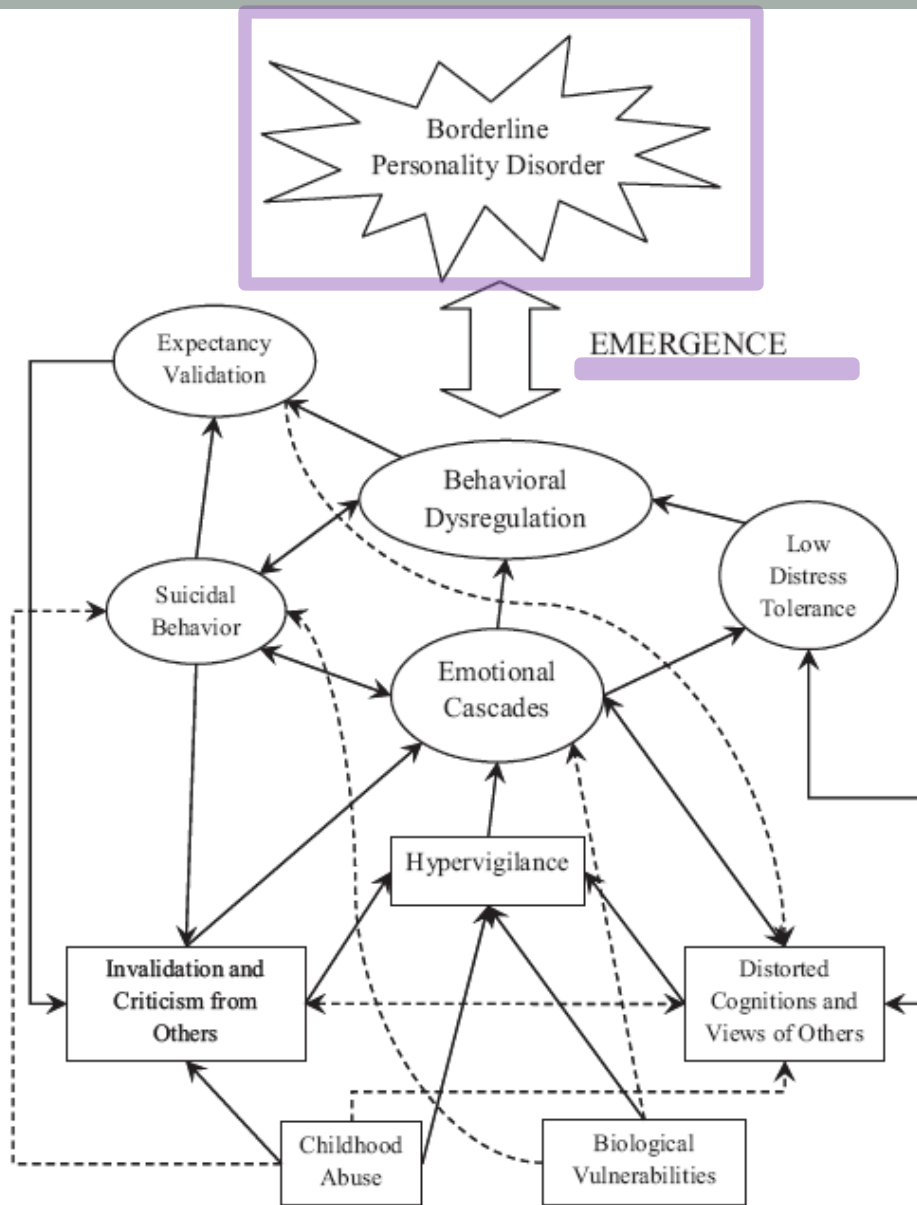
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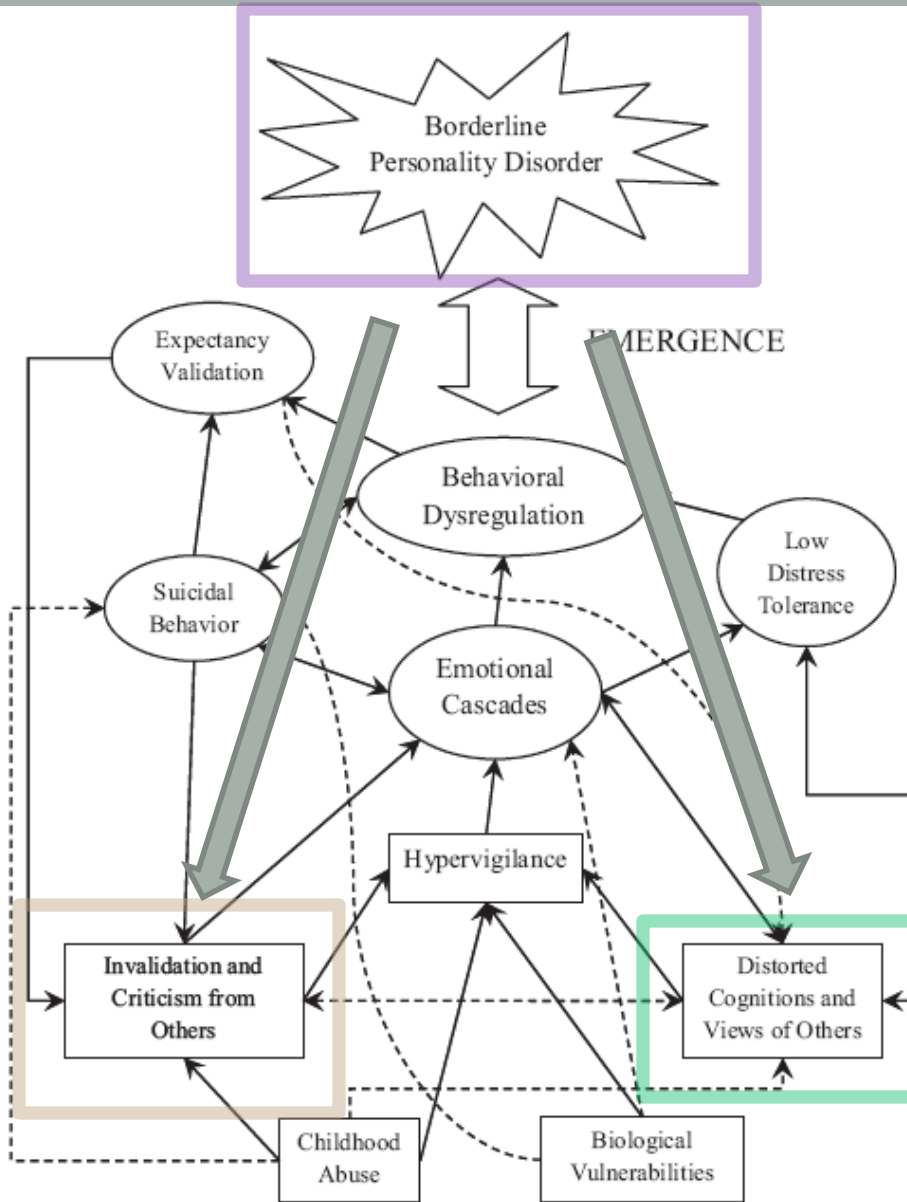
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SELBY & JOINER (2009)

*REV OF GEN PSY*



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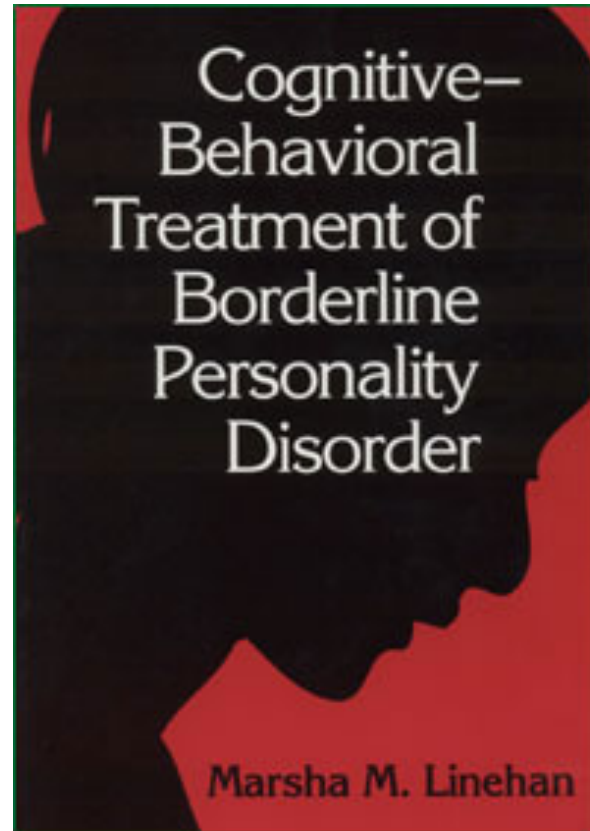
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# Treatment Implications



# Dialectical Behavior Therapy



# Mindfulness

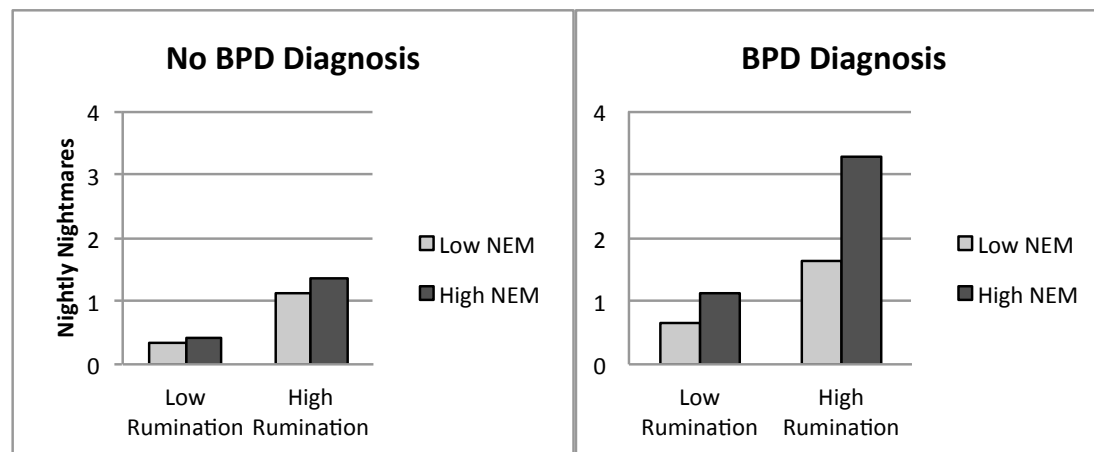


# Activities



# Clinical Applications: Sleep

- **Poor Sleep Quality** (Selby, 2013, *JCCP*)
  - BPD symptoms predict problems with insomnia (initial, middle, and terminal) beyond relevant Axis I disorders
  - Potentially due to rumination/emotional cascades?
- **Nightmares**
  - During ESM those with BPD reported more nightmares (Selby, Ribeiro, & Joiner, 2013, *Dreaming*)





# What Can Family Members Do?

- 1) Understand the emotion process of BPD
  - Knowing what is going on reduces negative reactivity and improves empathy, even in challenging situations
  - Even being able to give a process a name, such as “emotional cascade” can help
- 2) Help your loved one distract when upset
  - Work with them to come up with activities that they enjoy and are willing to do when distressed
  - Develop a “coping card” of distracting activities, it is easy to forget strategies when you are distressed
- 3) Try not to get frustrated
  - When we get frustrated, which can be easy at times, that can feed into the emotion dysregulation process
  - Building emotion regulation skills takes time!

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