Discussion: Bridging the gap
Towards an integration of attachment theory, information processing and cognitive behavior therapy

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UZGent, 11/06/2015

Cognitive Behaviour Therapy

Evidence-based treatment based on mechanisms underlying the development of psychopathology
- High relapse and recurrence

Attachment: a transdiagnostic concept

Predictor of the development of psychopathology
- Related to automatic and strategic processes > mediators between attachment and psychopathology

Scripts (Waters, Brockmeyer & Crowell 2013)

Attachment system > Secure Base Script
Two properties of script like representations
- Learned from experience > stored in memory
- Influence on behavior in novel contexts

Scripts influence basic cognitive processes
- Attention
- Interpretation

Experiences with responsive parenting Secure Base Script Support seeking behavior
Stress
Exploration Adaptive development
Attention Interpretation
**Strategic biases**
(Vandervivere, Braet, Bosmans, Maenh,- & De Raedt, 2014)

**Attention:** defensive-exclusion hypothesis
(Dykas & Cassidy, 2011)

Avoidantly attached:
- Exclusion of information related to attachment figure

Securely attached:
- Open processing all attachment related information

**Automatic biases**

**Attachment & Attention:**

- Stronger focus on mother
  (Bosmans, De Raedt & Braet, 2007; Bosmans, Braet, Koster & de Raedt, 2009)
- Decreased attention exploration
  (Chajetin, De Raedt, Braet, C. & Bosmans, in press)
- Decreased proximity seeking after stress
  (Bosmans, Braet, Heylen & De Raedt, 2015)

**Interpretation**
(De Winter, Waters, Vandervivere, Braet & Bosmans, 2014)

Insecurely attached
- Insecure interpretation bias

Securely attached
- Secure interpretation bias

> Train 3 phases of Secure Base Script

**Emotion regulation**

(Girotto, 2001)
Emotion regulation

**Effortful Control**

- Shift and refocus attention, and overwrite dominant prepotent RESPONSE

(Posner & Rothbart, 2000)

Emotion regulation

Response-focused emotion regulation

Effortful Control

Insecure attachment is linked to both internalizing and externalizing behavior problems VIA EC

(Heylen, Bosmans, Vasey, Dujardin, Vandereycken, Braet, & De Raedt, 2013)

(Somerville et al., 2010)

Prefrontal regions related to EC

Subcortical regions related to emotion processing

Response focused emotion regulation would not work

Anticipation facilitates emotion regulation

- Trust in support of attachment figure > positive expectation
- Expectation > Anticipation > Proactive control: anticipatory maintenance of goal relevant info in prefrontal cortex (De Raedt & Hesley, submitted)
- Increased proactive control during anticipation > reactive control requires less prefrontal activity (less EC)
  (Vanderhasselt, De Raedt et al., 2014; Vanderhasselt, De Raedt et al., 2015)
- More pupil dilatation during anticipation of emotion-eliciting events > less pupil dilatation during the event
- Higher reappraisal > more anticipatory pupil dilatation
  (Vanderhasselt, Bernts, Knol, & De Raedt 2014)

Additional component to CBT?

- Attention training tasks
- Exploration
- New corrective experience
- Decreased negative memories
- Adaptive secure base script
- Reappraisal
- Changes in expectations
- Interpretation bias training tasks

(Gross, 2002)

(Gross, 2002)

(Somerville et al., 2010)

Attachment-Based Family Therapy

- Positive expectations
  - Interpretation bias training tasks
  - Reappraisal
- Changes in expectations
- New corrective experience
- Decreased negative memories: Adaptive Secure Base Script

Visuospatial Training tasks

Open processing attachment-related info

Attachment-Based Family Therapy

- Positive expectations
  - Interpretation bias training tasks
  - Reappraisal
  - Emotion regulation
- Changes in expectations
- New corrective experience
- Decreased negative memories: Adaptive Secure Base Script

Visuospatial Training tasks

Open processing attachment-related info

Thanks to
- Guy Bosmans
- Caroline Braet
- Laurence Claes
- Theo Waters
- Eva Vandervivere
- Simon De Winter
- Adinda Dujardin
- Joke Heylen
- Magali Van de Walle
- Tara Santens

Multidisciplinary Research Platform NEUROSCIENCE