Implicit processes in adult attachment

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Basic attachment idea (Bowlby)

Attachment experiences

Mental working models

AUTOMATIC

Cognitive, emotional, behavioral processes

Mental models confirmed and consolidated
Basic attachment idea (Bowlby)

Working models serve emotion regulation functions

1. Signs of threat? (yes or no)
   - yes: Activation attachment system
     - Proximity seeking
   - no: Continue ongoing activities

2. Attachment figure available? (yes or no)
   - yes: Security-based strategies
     - Engagement in non-attachment activities (e.g., exploration, caregiving)
   - no: Continuing distress

3. Proximity seeking viable option? (yes or no)
   - yes: Deactivating strategies
     - Distancing of threat and attachment cues
   - no: Hyperactivating strategies
     - Hypervigilance for threat and attachment cues
Attachment and emotion regulation

Attachment style $\Rightarrow \neq$ in emotional reactivity and regulatory strategies

**Secure:** emotional stability, proximity seeking during distress

**Anxiety:** hyper-emotional, $\nearrow$ proximity seeking

**Avoidance:** inhibition/denial of emotions, $\searrow$ proximity seeking
Attachment and emotion regulation

**Insecure attachment:**
Cognitive distortions & emotional dysregulation

Emotion regulation processes

- **Attention**
  - orientation
  - inhibition
  - breadth of focus
  - Filter/trigger of attachment system
  - Regulation of proximity seeking

- **Proximity seeking**
  - attention
  - approach-avoidance
  - goal-representations

- **Multi-component approach**
  - physiological distress
  - subjective distress
  - proximity behaviour
Emotion regulation processes

**Self-report:**
Conscious beliefs
Outcome of emotion regulation

**Implicit measures:**
Process of emotion regulation

**Attention to threat**
Attention as trigger of attachment system:
Selective attention

- Little direct research
- Attentional bias => regulation of affect
  Selective attention for goal-relevant and expectations-consistent information
- Hypotheses
  **Anxiety:** Hypervigilance
  **Avoidance:** Attentional avoidance


*Dewitte, M., & De Houwer, J. (2008). Adult attachment and attention to positive and negative emotional face expressions, Journal of Research in Personality*
Attention as trigger of attachment system:
Selective attention

- Little direct research
- Attentional bias => regulation of affect
  Selective attention for goal-relevant and expectations-consistent information
- Hypotheses

DOT–PROBE TASK
Attachment threat: rejection, abandonment
General threat: murder, violence
Attachment positive: proximity, support
General positive: happiness, health

Experiences in Close Relationships Scale (ECR-R)

- Hypotheses


Experiences in Close Relationships Scale (ECR-R)
**Dot – probe task** *(MacLeod et al., 1986)*

- Both anxiety and avoidance look away from attachment threat
- Interaction high anxiety and avoidance
- Specific for attachment threat
- Not explained by general anxiety (STAI)
✓ Both anxiety and avoidance look away from attachment threat

✓ Interaction high anxiety and avoidance

✓ Specific for attachment threat

✓ No support for theoretical predictions
  → general effect of secure versus insecure attachment on attentional processing

✓ Interaction Anxiety x Avoidance: best predictor
  → cfr. fearful attachment: fear of rejection and hurt
  protective bias: mood regulation => reduce distress

✓ No support for vigilance-hypothesis in attachment anxiety
  → pre-attentive processing: vigilance followed by avoidance
Attention as trigger of attachment system:
Attentional inhibition

✓ Inhibition of goal-irrelevant info important for encoding, storing and retrieving info

✓ 2 studies: angry, happy, neutral  sad, happy, neutral ➔ Generalizibility of the effect

✓ Hypotheses

Anxiety:↘ inhibition negative stimuli
Avoidance:↗ inhibition negative stimuli


Negative affective priming (Joorman, 2004)

Experimental

Control

RT exp > RT con: good inhibition
RT exp < RT con: deficient inhibition (facilitation)
Avoidance: stronger inhibition of negative stimuli

- General effect: Interpersonal threat (angry) + caregiving distress (sad)
- Preventing that emotional experiences become integrated in memory
- Reduce impact of threat signals
- Preventing activation of attachment needs => independence, distance
✓ **Anxiety:** no inhibition of negative stimuli
   less inhibition of positive stimuli

**Proximity seeking**
Attention as regulator of proximity seeking

- Attachment system activation in response to stress
  - Threat context versus non-threat context

- Specifically oriented towards attachment figure
  - Attachment versus neutral/acquaintance

- Psychological proximity: threat automatically activates mental representation of attachment figure
Attentional breadth and proximity seeking

Avoidance: broader attention regarding attachment figure  
< distance keeping

Anxiety: narrow attention towards attachment figure  
< proximity seeking
Wie zag je in het midden van het beeldscherm? Kies "1" of "2"

PARTNER

ONBEKEND

1

2
Threat: Think about a situation in which you felt your partner didn’t really love/appreciate you

Neutral
Avoidance: broader attention in threat context, short and long stimulus presentation
=> protective bias, mood repair - disengage from distress

Anxiety: narrow attention, short stimulus presentation
=> constant monitoring of attachment figure < wish for proximity

Avoidance in partner: broader attention in threat context

Appproach-avoidance tendencies

Proximity seeking = motivational action tendency associated with approach and avoidance goals

Hypotheses

✓ Stronger approach response in threat context compared to a neutral context
✓ **Anxiety:** stronger approach response, regardless of context
✓ **Avoidance:** stronger avoidance response, threat context

Incompatible block:
Move away from attachment figure
Move towards acquaintance

1: Think about attachment figure leaving for 2 years vs. describing a typical Tuesday

2: Thinking about failing exams vs. describing a typical Tuesday
Experiment 1: Separation threat

![Bar chart showing stronger approach in threat context: F(1, 58) = 7.47, p < .01]

Main effect of anxiety, $\beta = .27, p = .06$

No interaction effects with prime condition

Neutral (n = 30)
Separation threat (n = 30)

No main effect of avoidance, no interaction

Experiment 2: Failure threat

![Bar chart showing stronger approach in threat context: F(1, 58) = 8.31, p < .01]

Sign main effect of avoidance, $\beta = -.27, p < .05$

No interaction effects of prime condition and anxiety and avoidance
 ✓ Threat: ↑ approach response towards the attachment figure
   → attachment-related and attachment-unrelated threat

 ✓ Anxiety: ↑ approach responses towards attachment figure
   (Exp 1 and 2)
   → both threat and non-threat context

 ✓ Avoidance: ↓ approach response towards attachment figure
   (Exp 2)
   → both threat and non-threat context

Anxiety: proximity vs ambivalence

Observation studies: no relation with attachment anxiety

Automatic motivation towards proximity
  → Automatic approach tendency

Att figure unavailable → Ambivalence: security vs. fear of rejection
Interferes with actual proximity seeking
Interim conclusion

✓ Anxiety
  ➡ Attentional avoidance of threat, no impaired inhibition => hyperactive distress-response?
  ➡ Proximity seeking at level of attention and motivational tendencies (chronic!), but not implicit goal-representations

✓ Avoidance
  ➡ Attentional avoidance and inhibition of threat
  ➡ Distance keeping at level of attention, motivational tendencies and goal-representations

Attachment distress and proximity seeking: A multi-modal approach
Multi-componential nature of emotion regulation

Emotions are multi-level, multi-component processes

✓ Subjective distress: consciously accessible self-report
  !!!! Self-presentation and lack of introspection

✓ Physiological responses: heart rate, blood pressure, skin conductance, cortisol
  !!!! Automatic output

✓ Behaviour: proximity-distance

Multi-componential nature of emotion regulation

✓ Attachment strategies can have different impact at different levels of responding
  ⇐ Come into conflict ⇒ Dissociations

✓ Measure different components of emotional response
  < = and ≠ across multiple emotional response systems in relation to attachment style
✓ l study-design: Induction of distress
   attachment-style ≠ in emotional reactions (automatic and controlled)

✓ Sample of couples

✓ Relational stressor: threatening, uncontrollable, similar for men and women

✓ Reactivity and recovery

Procedure

Baseline  Couple separated  Distress induction  Reunion  Recovery

Behaviour  Subjective affect  Questionnaires  Cortisol  Subjective affect  Cortisol

<table>
<thead>
<tr>
<th>Cortisol</th>
<th>Distress</th>
<th>Slope</th>
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<tbody>
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<tr>
<td>Male anxiety</td>
<td>.33</td>
<td>2.36**</td>
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Cortisol as a function of female anxiety x avoidance

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<th>Cortisol baseline</th>
<th>Cortisol distress</th>
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**Note:**
- **p < .05** indicates statistical significance.
- **p < .01** indicates strong statistical significance.
- **p < .001** indicates very strong statistical significance.
Female cortisol as a function of male anxiety x avoidance

![Graph showing cortisol levels as a function of gender and anxiety dimensions.](image)

<table>
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<tr>
<th>Negative affect</th>
<th>Jealousy</th>
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Jealousy as a function of anxiety x avoidance

![Graph showing jealousy as a function of anxiety x avoidance]

Proximity – distance behaviour

**Baseline**
- Male avoidance: \(\downarrow\) proximity
- Men with avoidant partners: \(\uparrow\) distance

**Distress**
- Male and female avoidance: \(\downarrow\) proximity, \(\uparrow\) distance
- Men with anxious and avoidant partners: \(\uparrow\) proximity, \(\downarrow\) distance
Summary of results

- **Anxiety** associated with:
  - cortisol
  - subjective affect

- **Avoidance** associated with:
  - behavior
  - subjective affect (indifference)

- **Partner-effects**: insecure attachment risk emotional maladjustment
  
  Fraley & Shaver, 1998

Interrelations: regulatory strategies of **anxiety**

- ↑ Cortisol, - affect
  - Persistent stress
  - Hyperactivation of stress response < catastrophic appraisal

- No relation with proximity behavior
  - Ambivalence, approach-avoidance conflict
Interrelations: regulatory strategies of *avoidance*

- ☑️ distance, ☑️ proximity

- ☑️ No relation with cortisol
  - ➞ Defense: emotional inhibition

- ☑️ - Affect ? ➞ low cortisol
  - ➞ Dissociation: maladaptive emotion regulation

**Conclusions**

- **Anxiety and avoidance:**
  - ➢ Stress response & affective lability
    - ➞ Emotional dysregulation
  - Divergence emotion & behavior

- **Secure:** lowest stress-reactivity ➞ stress-buffer

- **Fearful:** highest stress-reactivity ➞ no viable coping actions
General conclusion

- Attachment insecurity
  - emotional & behavioral dysregulation
  - interpersonal problems
  - confirmation negative attachment schemas

- Multiple indicators: different levels
  - automatic versus controlled

- Dynamics of emotion regulation
  - Complexity
Complexity

✓ Time course of emotion regulation
✓ Automatic vs controlled
✓ Context
✓ Interplay with goals

different outcome: same goal
same outcome: different goal

Thank you

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