

Sroufe and colleagues (Sroufe et al., 2005) conclude "nothing is more important in children's development than how they are treated by their parents, beginning in the early years of life" (p. 288). Coan (2008) "One of the striking things about humans (and many other mammals) is how well designed we are for affiliation" (p. 247)... "the brain's first and most powerful approach to affect regulation is via social proximity and interaction. This is most obvious in infancy..... (p. 255)

Coan (2008) "One of the striking things about humans (and many other mammals) is how well *designed* we are for affiliation" (p. 247, emphasis in original). More specifically, the attachment system is "primarily concerned with the social regulation of emotion responding" (p. 251).

the brain's first and most powerful approach to affect regulation is via social proximity and interaction. This is most obvious in infancy.... Because the PFC [prefrontal cortex] is underdeveloped in infancy, the caregiver effectively serves as a kind of 'surrogate PFC'—a function that attachment figures probably continue to serve for each other to varying degrees throughout life. (p. 255)

social affect regulation is a relatively effortless, "bottom-up" process that ameliorates the initial perception of threat and thus decreases the need for effortful distress regulation.

In contrast, self-regulating by a relatively "top-down" process involves more effortful control over attention and cognition (i.e., explicit mentalizing), relying to a greater degree on the prefrontal cortex. He concludes,

"Simply put, affect regulation is possible, but more difficult, in isolation" (Coan, 2008, p. 256).

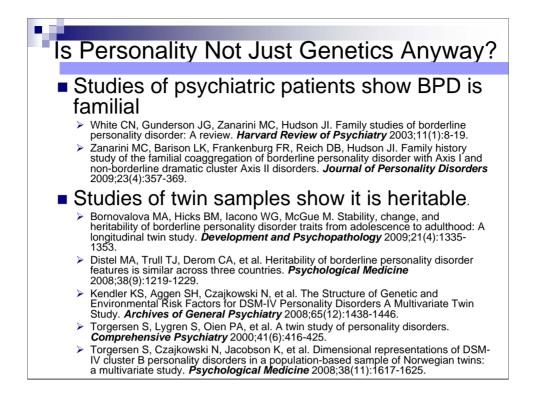
Clinical Features of Borderline Personality Disorder (DSM-IV: 5 of 9)

unstable relationships

affective dysregulation

impulsivity

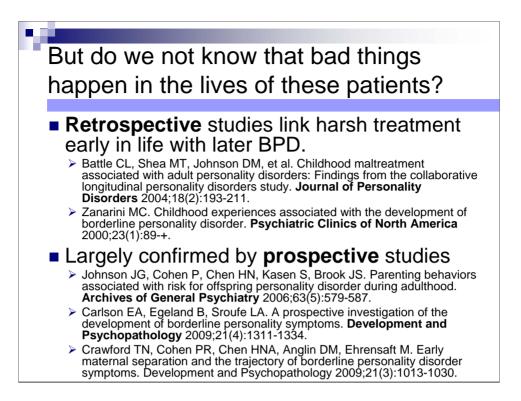
aggression

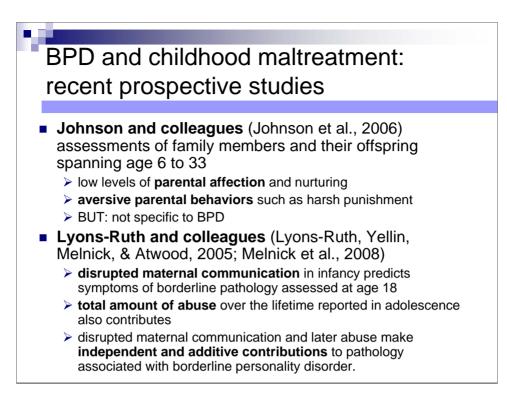


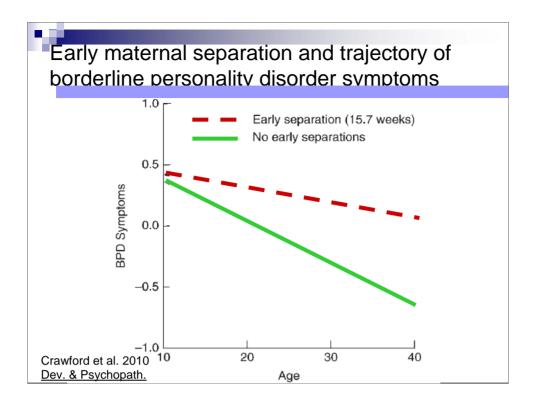
-Non twin family studies → increased rates of BPD in family members of BPD patients

-Classical twin studies → heritability estimates of around 40%

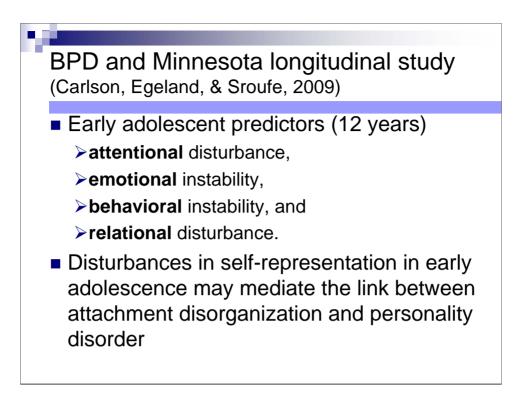
-Adding siblings, spouses and parents of twins

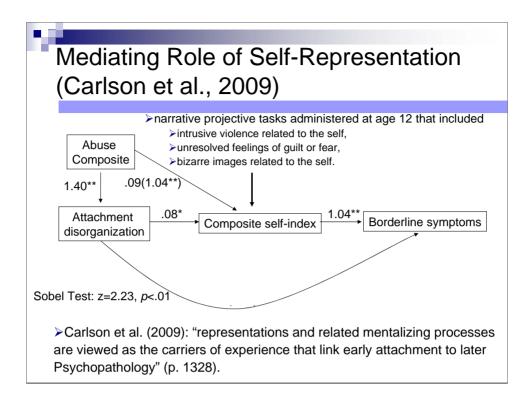






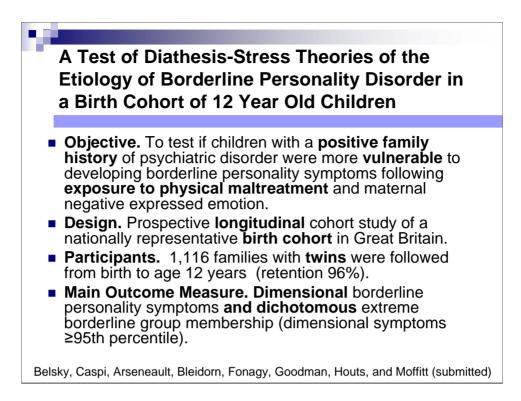
BPD and Minnesota longitudinal study (Carlson, Egeland, & Sroufe, 2009)	
<ul> <li>Correlated extensive assessments from infancy onward with borderline personality disorder symptom at age 28</li> </ul>	
<ul> <li>Early predictors borderline personality syr</li> <li>&gt; attachment disorganization</li> </ul>	nptoms: .20*
o (12-18 months),	
maltreatment o (12-18 months),	.20**
<ul> <li>maternal hostility and boundary dissolution o (42 months),</li> </ul>	.42***
family disruption related to father presence o (12-64 months),	.21**
<ul> <li>family life stress</li> <li>o (3-42 months).</li> </ul>	.29***

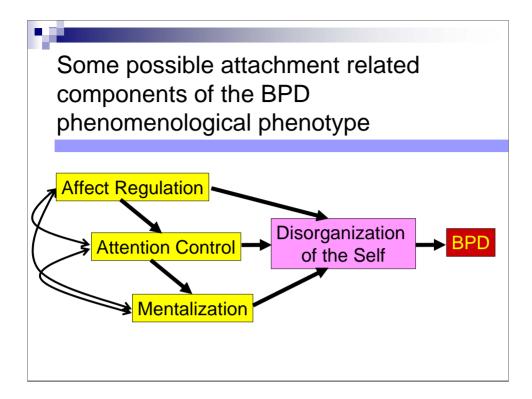






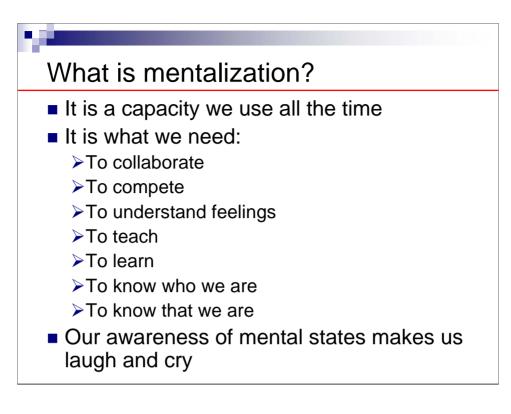






## What is mentalizing?

Mentalizing is a form of *imaginative* mental activity about <u>others</u> or <u>oneself</u>, namely, perceiving and interpreting <u>human</u> behaviour in terms of *intentional* mental states (e.g. needs, desires, feelings, beliefs, goals, purposes, and reasons).



It is a capacity we use all the time

It is what we need TO EFFECTIVELY :

To collaborate & To compete

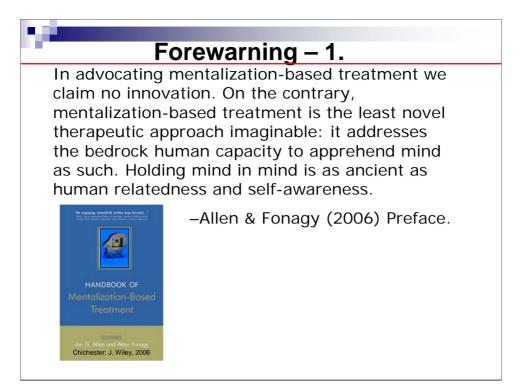
To teach &

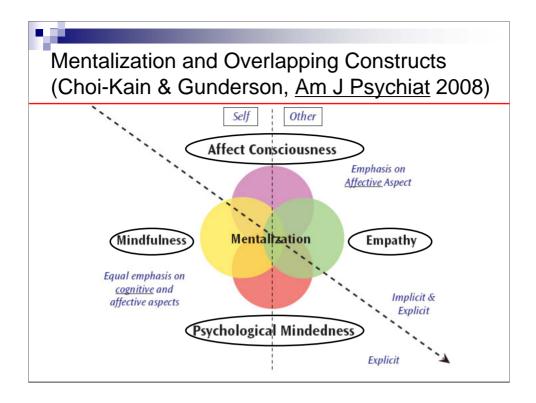
To learn

To know who we are &

To know that we are

Our awareness of mental states makes us laugh and cry

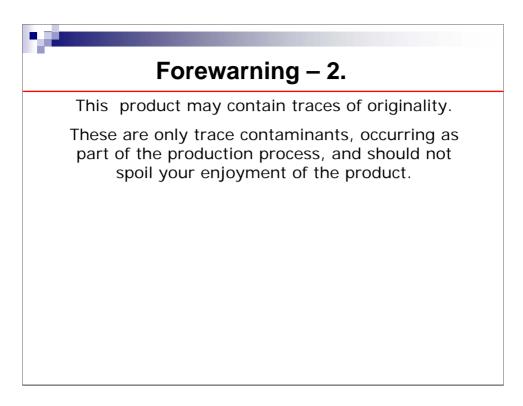


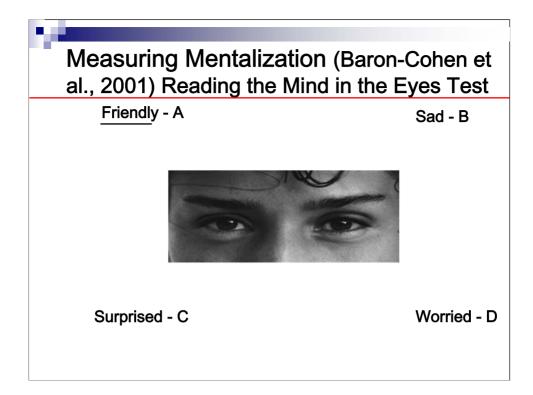


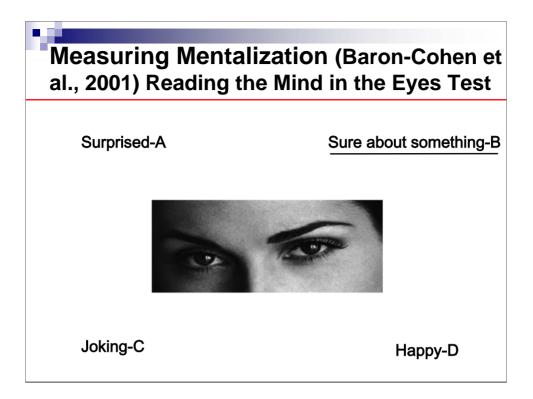
This Venn diagram maps the conceptual overlaps between mentalization

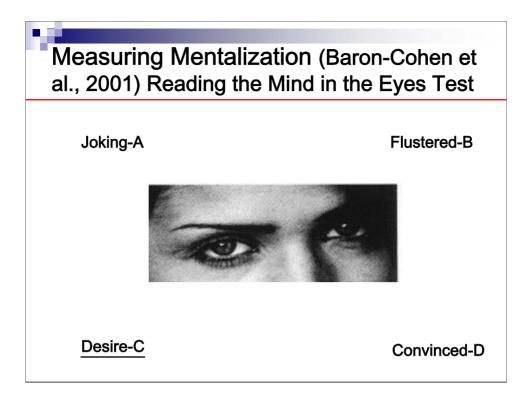
and four related concepts including mindfulness, psychological mindedness, empathy, and affect consciousness, which are represented by the four circles. The lines which bifurcate the diagram according to its three dimensions (i.e., self-/other-oriented, implicit/explicit, and cognitive/affective) are dashed to illustrate the permeable and nonabsolute nature of these divisions. In the self/ other dimension, mindfulness focuses more on mental states within oneself, while empathy is primarily understood in terms of one's imagination of mental states within others. Both affect consciousness

and psychological mindedness concern both sides of the self and other distinction. While mindfulness and psychological mindedness emphasize both cognitive and affective aspects of mental states and function explicitly, affect consciousness and empathy relate more primarily to affective mental contents and function both explicity and implicity. Mentalization lies at the intersection of these concepts but the boundaries between them are not distinctly drawn.







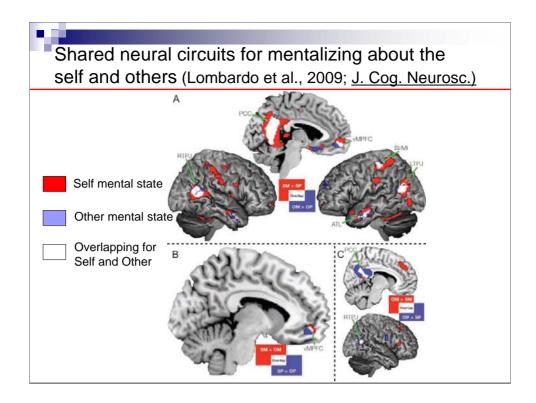




Mentalization allows us to have common experiences – we need to coordinate our emotional experiences to function in large social groups. Imagine what would happen if we all felt differently about Lampard's disallowed goal! Fortunately not the case.

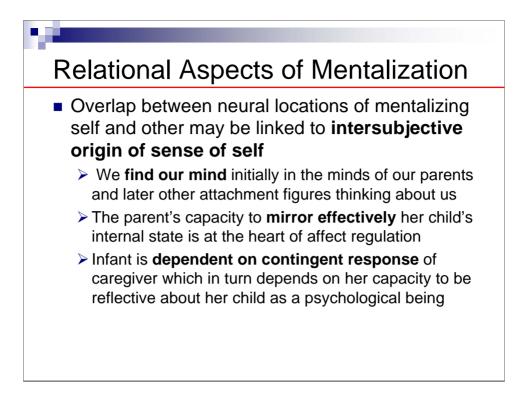


Have to be able to step into the shoes of another person -



CAN DEVELOPMENTAL PSYCHOLOGUY RESEARCH HELP US GET CLOSER TO THE POTENTIAL SOCIAL EXPEREINCES THAT COULD SET OF THE EPIGENETIC CASCADE THAT Dr Moshe Szyf was describing to us yesterday?

INTERSUBJECTIVE ORIGINS OF THE SELF



## JUST HOW IMPORTANT CONTINGENT RESPONDING TO AFFECT IS WE KNOW FROM STILL FACE PARADIGM (GERGELY)

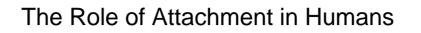


Shows the infant ABSOLUTELY EXPECT TO FIND HIS MIND OUT THERE, IS IN NO SENSE PROVIDED WITH A MIND BY THE CAREGIVER BUT HE SEARCHES OUT, SEEKS OUT OPPORTUNITIES FOR SHARING OF SUBJECTIVITY BECAUSE OF EXTREMELY PWOERFUL BIOLOGICAL PREDISPOSITION. SO IN MIRRORING BUT MIRRORING MUST BE OF A SPECIAL KIND – NOT LIKE A REAL MIRROR

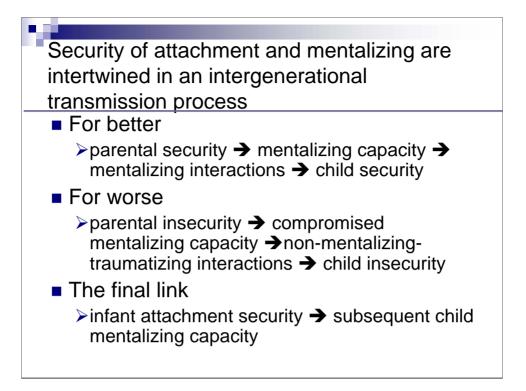


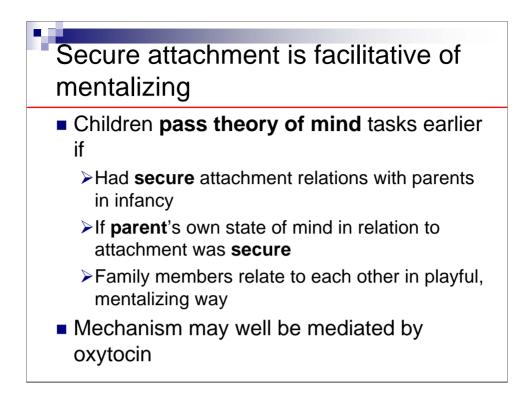
Mirroring must not be too accurate, it must be 'marked' (systematically distorted) so child knows he is not observing

IN SEVERAL STUDIES WITH Kos and Gergely WE HAVE SHOWN MARKED MIRRORING to LEAD TO MORE ROBUST MENTALIZATION

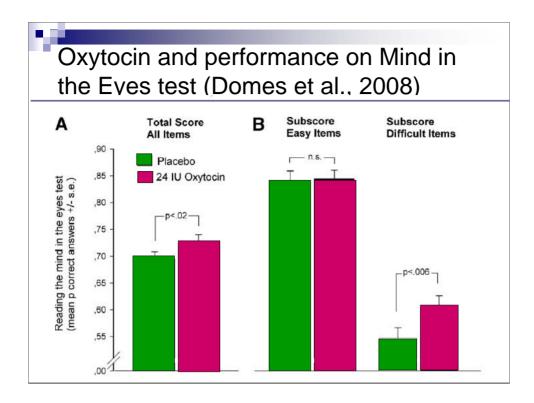


- Evolution uses the early attachment relationship as a signaling system to the newborn as to the kind of environment he/she might expect.
  - An environment where caregivers do not have the time or resources to devote attention to the infant is far more likely to necessitate the later use of violence in order to ensure the survival of the individual in subsequent struggles for limited resources.
  - >Violence and mentalizing are not compatible



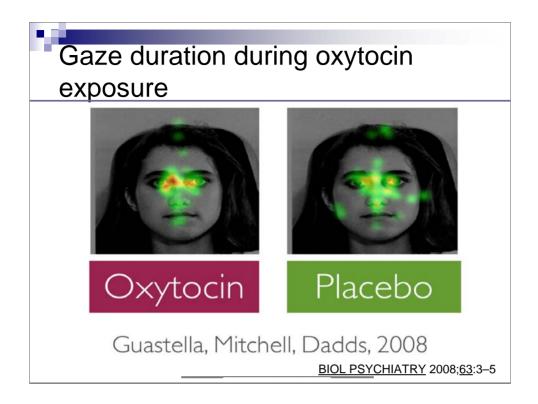


Oxytocin is the VIAGRA of mentalization

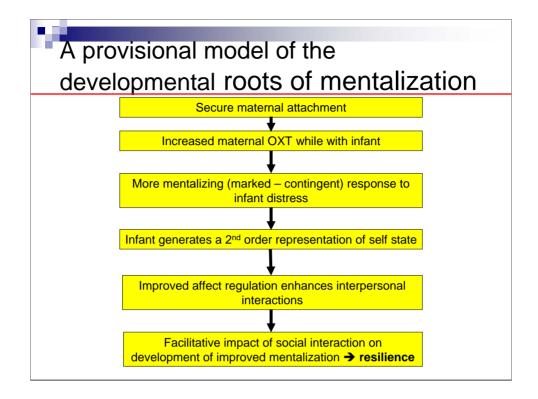


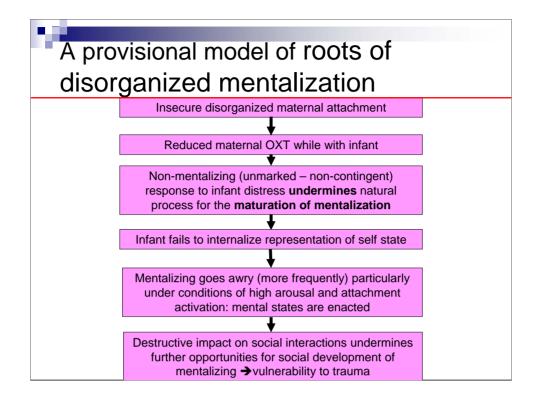
Around in great quantity (breast feeding) when the infant needs it most – when it totally depends on being understood

Oxytocin turns us towards the face to try to find the mind therein



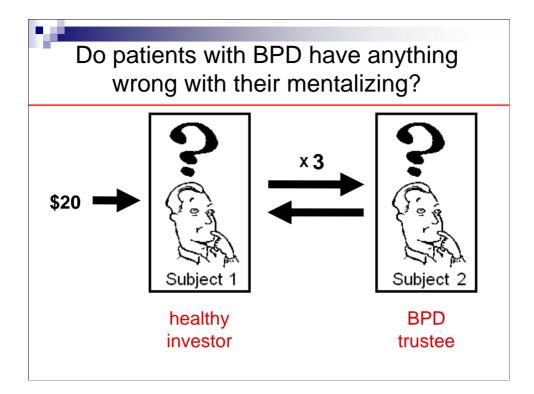
Is there less oxyticin around when parents have insecure attachment history?

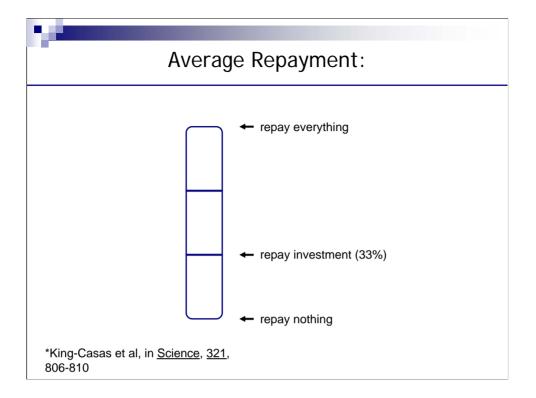


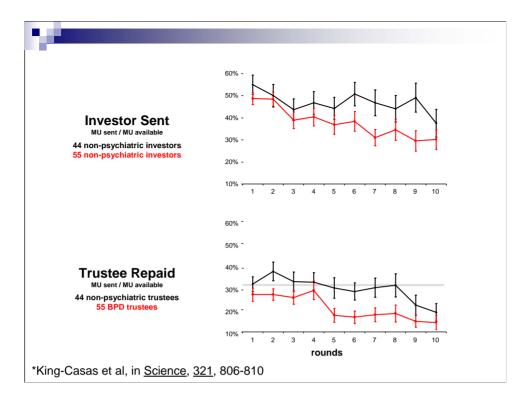


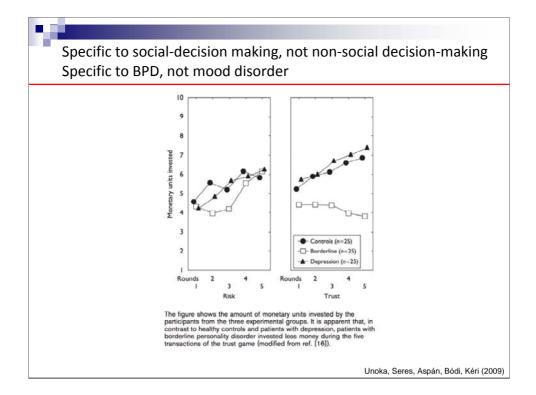
Need Oxy not to undermine natural process of the unfodling of mentalization (infants expect to find the contents of their mind) they look for it

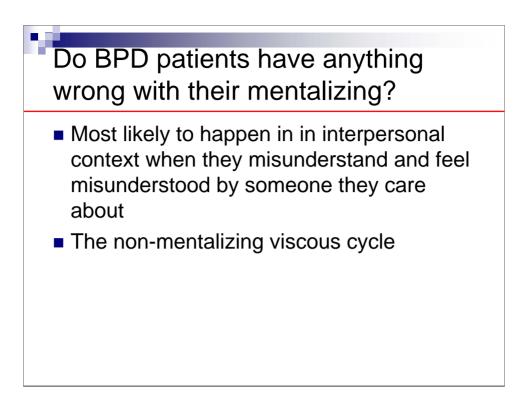
It has developmental roots in genetic or social or epigenetic diathesis that undermines the creation of robust social relationships that might help the child overcome an early deficit

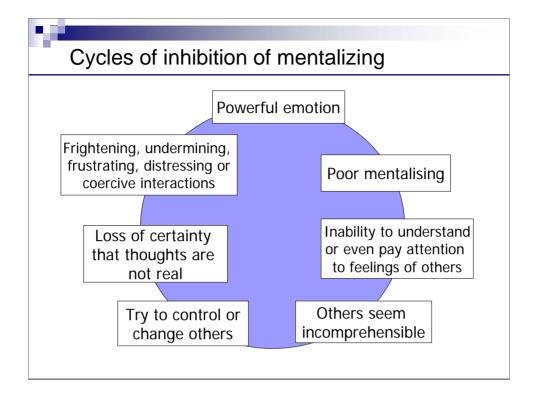


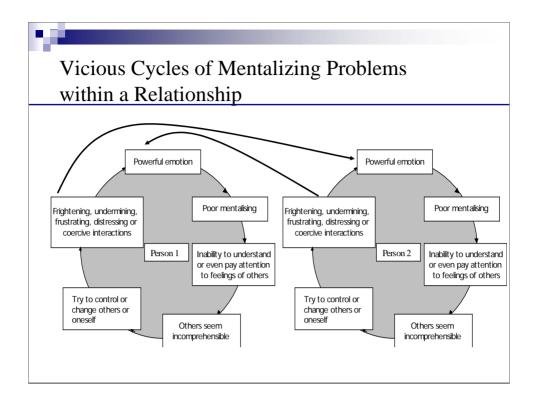












Powerful emotions in an interpersonal context activate the attachment system

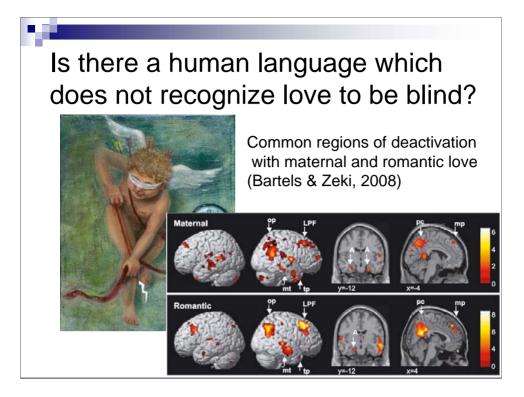


Fig. 2. Deactivated regions with maternal and romantic love. The sections and rendered views show regions whose activity was suppressed with maternal love

(cO vs. cA) (top). These regions were the same as those that were deactivated with romantic love (viewing loved partner vs. friends) in our previous study

(bottom). All labelled regions reached significance at P < 0.05, corrected for small volume (for illustration, following thresholds were used—top: P < 0.05,

uncorrected; bottom: P < 0.001, uncorrected). Abbreviations: A = amygdaloidal cortex, pc = posterior cingulate cortex, mp = medial prefrontal/paracingulate

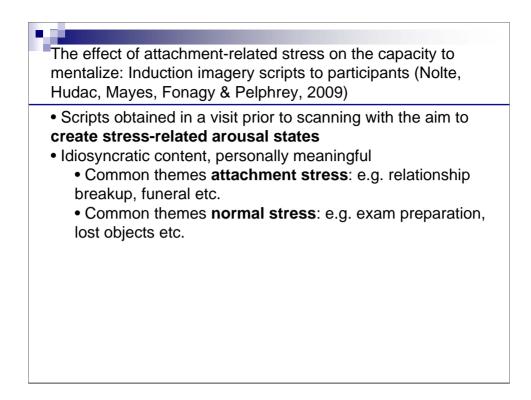
**gyrus**; mt = middle temporal cortex; op = occipitoparietal junction; tp = temporal pole.

Two areas:

•middle prefrontal, inferior parietal and middle temporal cortices mainly in the right hemisphere, as well as the posterior cingulate cortex → attention, long-term memory, variable involvement in both positive negative emotions → underpin interface of mood related cognition

•amygdala, temporal poles, parietotemporal junction and mesial prefrontal cortex  $\rightarrow$  social trustworthiness, moral judgements, 'theory of mind' tasks, negative emotions, attentions

BUT IS IT JUST AROUSAL OR IS IT SPECIFICT TO ATTACHMENT?



Scripts obtained in a visit prior to scanning with the aim to create stressrelated arousal states

Idiosyncratic content, personally meaningful

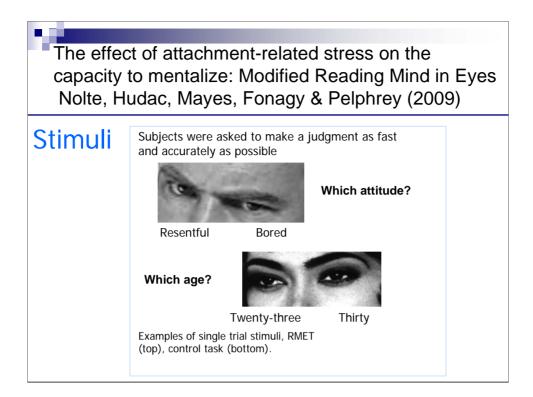
Common themes attachment stress: e.g. relationship breakup, funeral etc

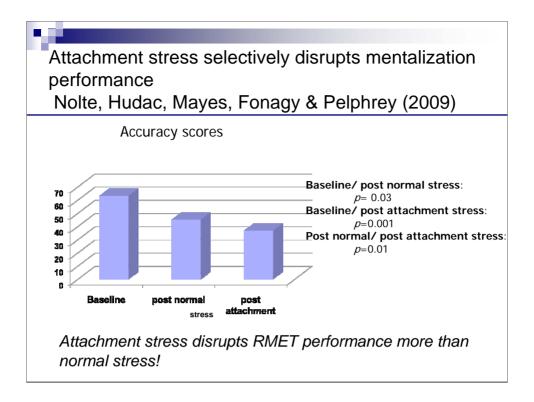
Common themes **normal stress**: e.g. exam preparation, lost objects etc.

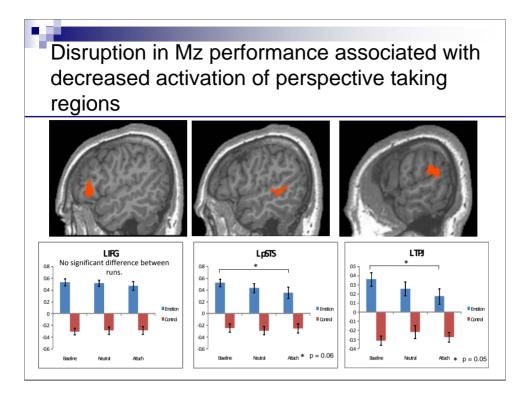
Edited, recorded, semi-standardized about 5 mins. of length each

Only scripts that were subjectively rated 8 or above on a 1-10 scale of subjective stress accepted.

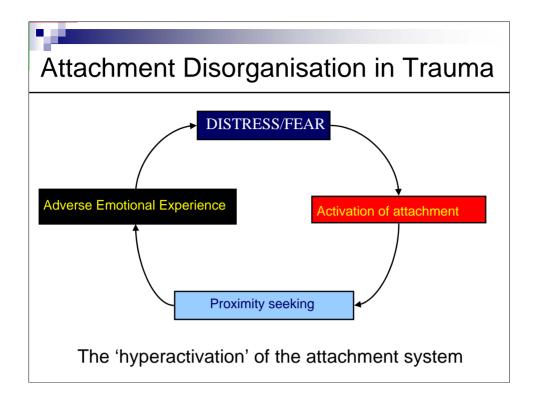
No differences in subjective level of stress ratings between 'attachment' and 'normal' stress



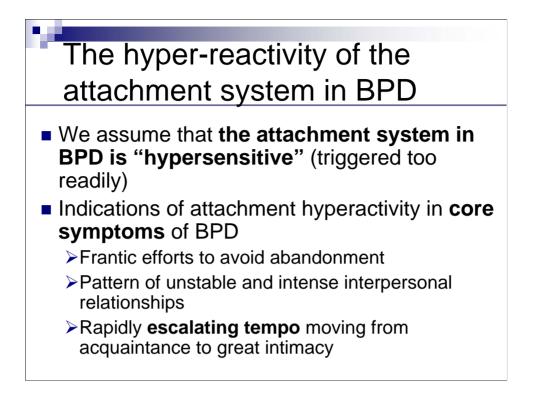


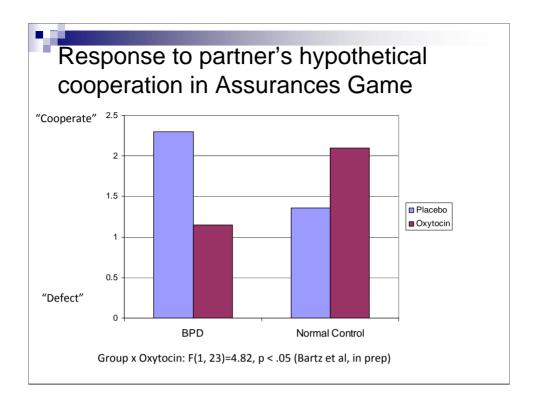


Identified brain regions that show greater activation during the Reading the Mind in the Eyes Test (highlighted) and control task, see table. Below: Activation maps of the regions with greater activiaty during the REMT task. Left inferior frontal gyrus, posterior superior temporal sulcus and temporal parietal junction are areas that have repeatedly been associated with mentalization/ social cognition tasks (5), (6).



Hyperactivation of attachment system may be core aspect of BPD





Participants: 13 healthy (male=7) and 14 BPD (male=4);

<u>Study design</u>: Participants randomly received 40 IU intranasal oxytocin (n=14) (Syntocinon) or placebo (n=13);

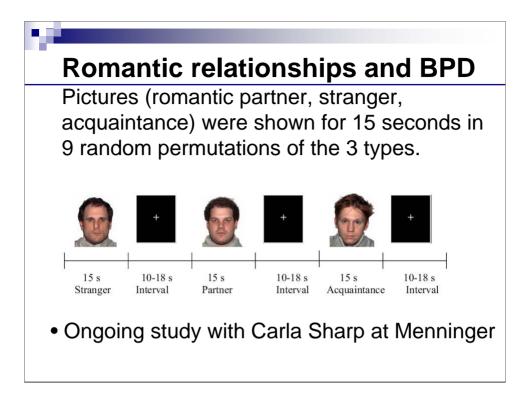
45-min after administration, participants played the Assurances Game with an ostensible partner (confederate);

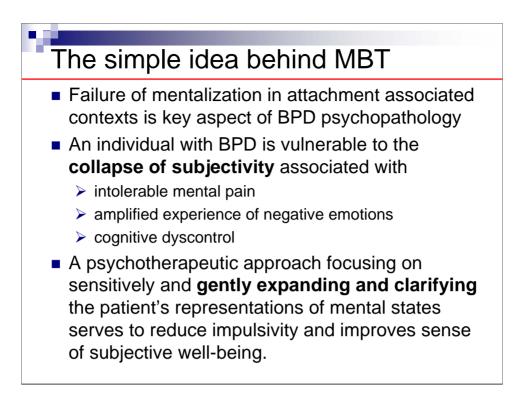
Baseline and post-dose mood assessed with the POMS; no mood changes observed.

Prisoner's dilemma emphasizes self-interest (payoff is greater for defecting) AG emphasizes trust:

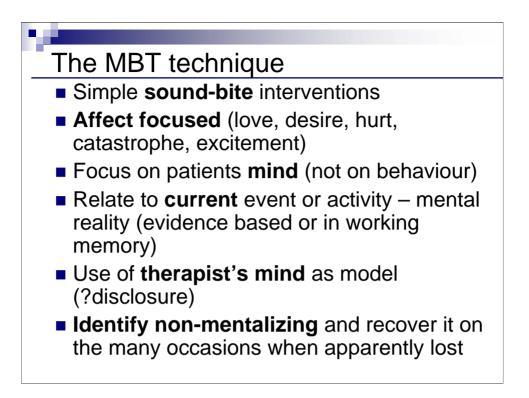
locates the selfish and interpersonal solution in the same, mutual cooperation cell (i.e., payoff is highest for both players when they cooperate)

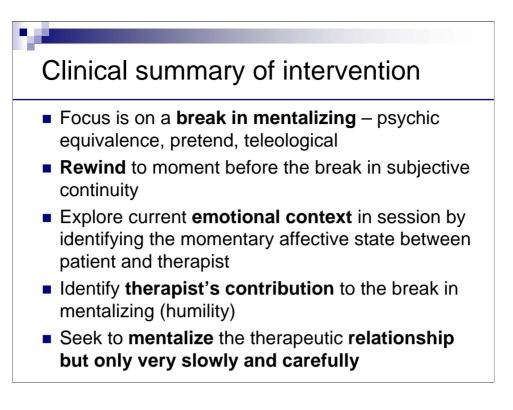
However, one should only cooperate if one is assured that one's partner will do the same; if partner's are mistrustful, they should pursue mutual defection, which is sub-optimal (i.e., the payoff is less than it would be if your partner cooperated, but the more than it would be if your partner defects)





How do you do that – is there a technique. PERHAPS THERE ARE SOME OF YOU THERE WHO HAVE NO IDEA WHAT WE ACTUALLY DO IN MBT?





## Psychic equivalence:

Mind-world isomorphism; mental reality = outer reality; internal has power of external  $\rightarrow$  Fran

Intolerance of alternative perspectives → "YOU LOOKED AT YOUR WATCH"

Pretend mode:

Ideas form no bridge between inner and outer reality; mental world decoupled from external reality →FRAN

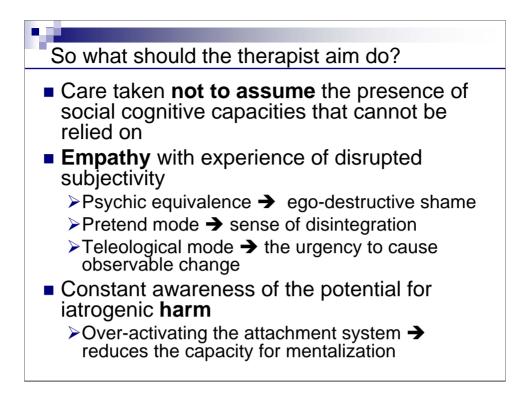
"dissociation" of thought, hyper-mentalizing or pseudomentalizing → ENDLESS HOURS OF 'THERAPY'

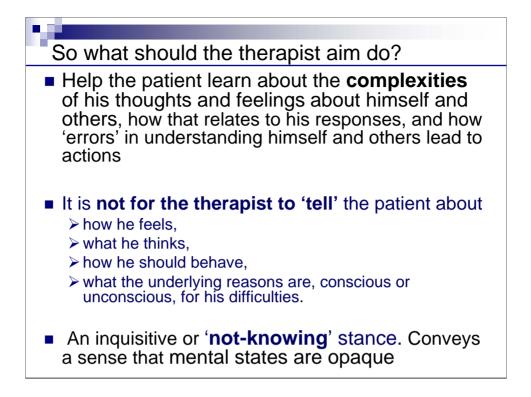
## Teleological stance:

A focus on understanding actions in terms of their physical as opposed to mental constraints

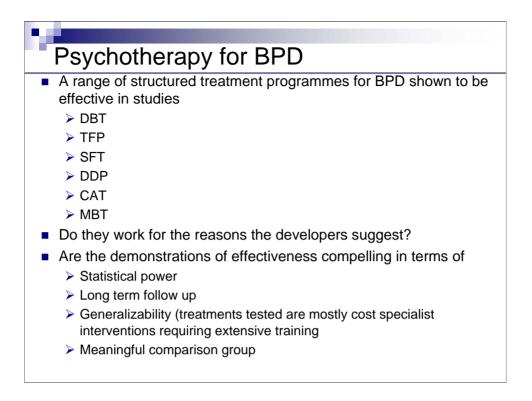
Cannot accept anything other than a modification in the realm of the physical as a true index of the intentions of the other.

WHAT ARE THE THERAPISTS AIMS?





Fairly generic formulation before you try to do it. At its heart is the idea that patient will get better if therapists makes mind available for patient to find their own capacity to think – much like with early development – INFANT'S SEEKING OF SUBJECTIVITY CAN BE UNDERMINED



ONE MAY BE FORGIVEN FOR CONTEMPLATING IF ANY Treatment WITH A 3 LETTER ACRONYM HAS A CHANCE OF IMPROVING THE WELLBEING OF INDIVIDUALS WITH BPD

All provide structure – Perhaps it is the structure that is crucial because allows people to think. If we just provide a structure that tells therapists what to do will we remove the effective component.

