



# MENTALIZING AND LEARNING TO TRUST AND TRUSTING TO LEARN


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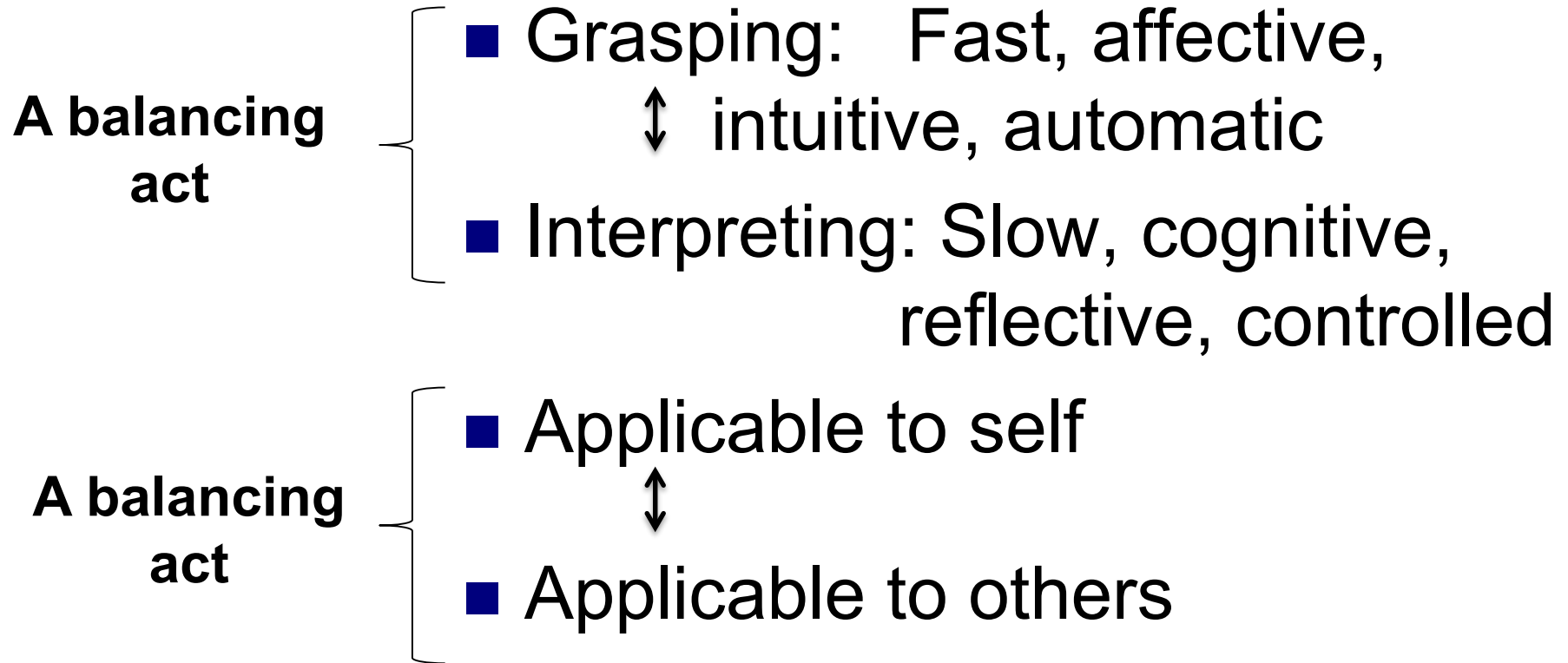
# ATTACHMENT, MENTALIZING AND EPISTEMIC TRUST


- To hear (and feel heard and recognized)
- To understand (and feel understood; mentalized)
- To believe (trust) (and feel safe, able to “turn-off” mistrust and defensiveness and learn, explore, play)
- To remember (and apply and generalize to find soothing and affect regulation, represent and gain perspective, update sense of self and create a social map and a roadmap for the future.



Mentalizing: The skills and attitudes we utilize to understand human behavior based on intentional mental states.

# MENTALIZING: SKILLS AND ATTITUDES





## The active ingredients and the question of resilience:

- Revisiting the ghosts in the nursery
- Protective mechanisms accounting for resilience: genetic diathesis vs. stress and adversity

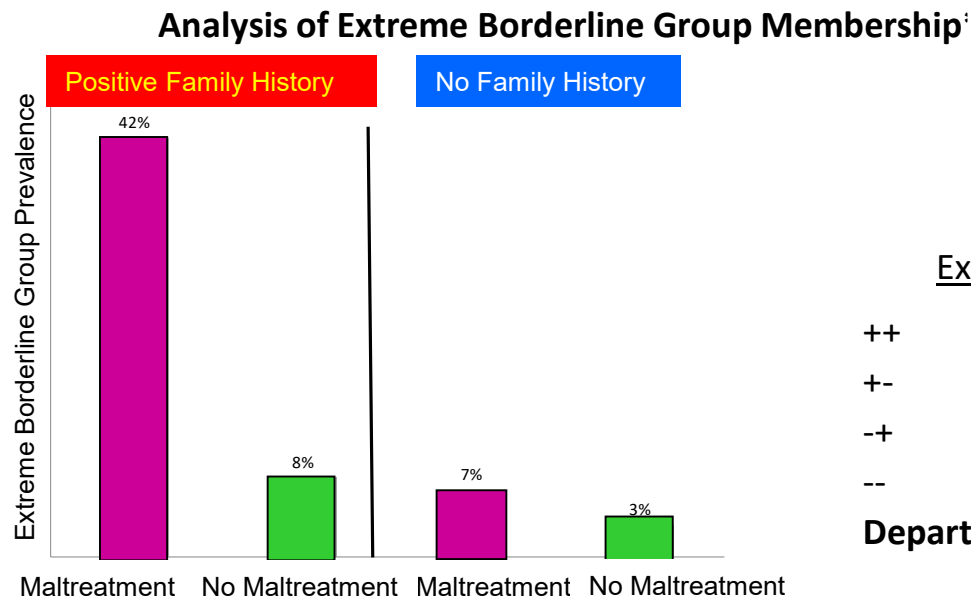


# Trauma and Genetics in BPD: A Diathesis – Stress Model Mediated by Mentalizing

# A Test of Diathesis-Stress Theories of the Etiology of Borderline Personality Disorder in a Birth Cohort of 12 Year Old Children

- **Objective.** To test if children with a **positive family history** of psychiatric disorder were more **vulnerable** to developing borderline personality symptoms following **exposure to physical maltreatment** and maternal negative expressed emotion.
- **Design.** Prospective **longitudinal** cohort study of a nationally representative **birth cohort** in Great Britain.
- **Participants.** 1,116 families with **twins** were followed from birth to age 12 years (retention 96%).
- **Main Outcome Measure.** **Dimensional** borderline personality symptoms **and dichotomous** extreme borderline group membership (dimensional symptoms  $\geq 95$ th percentile).

# Interaction between family history of psychiatric illness and history of maltreatment on BPD symptoms

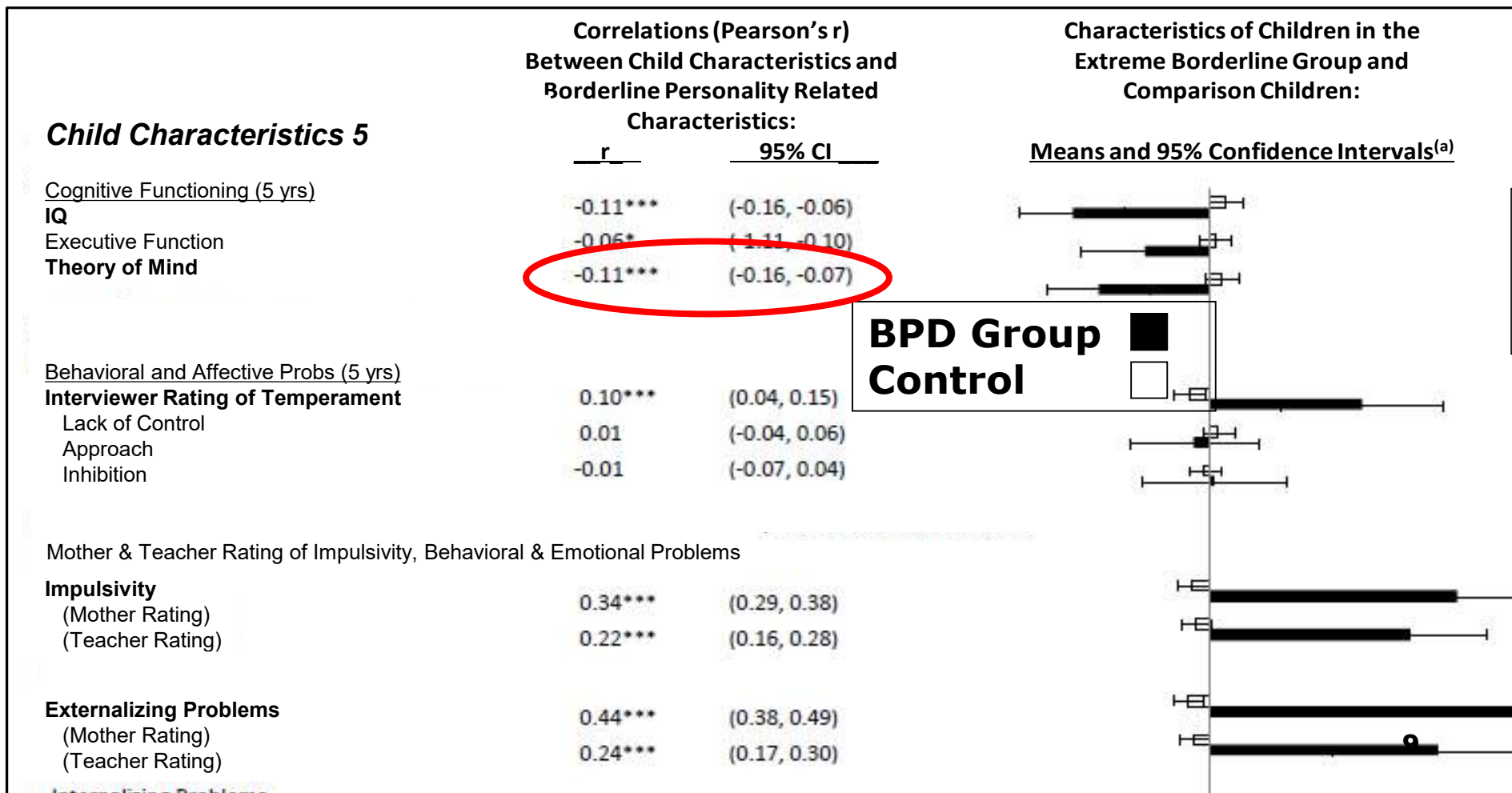


	Extreme Group	Comparison Children	RR
++	20	28	13.41
+-	48	562	2.53
-+	3	42	2.15
--	44	1,372	1.00
Departure from Additivity = 9.73			95% CI (1.90 , 15.73)

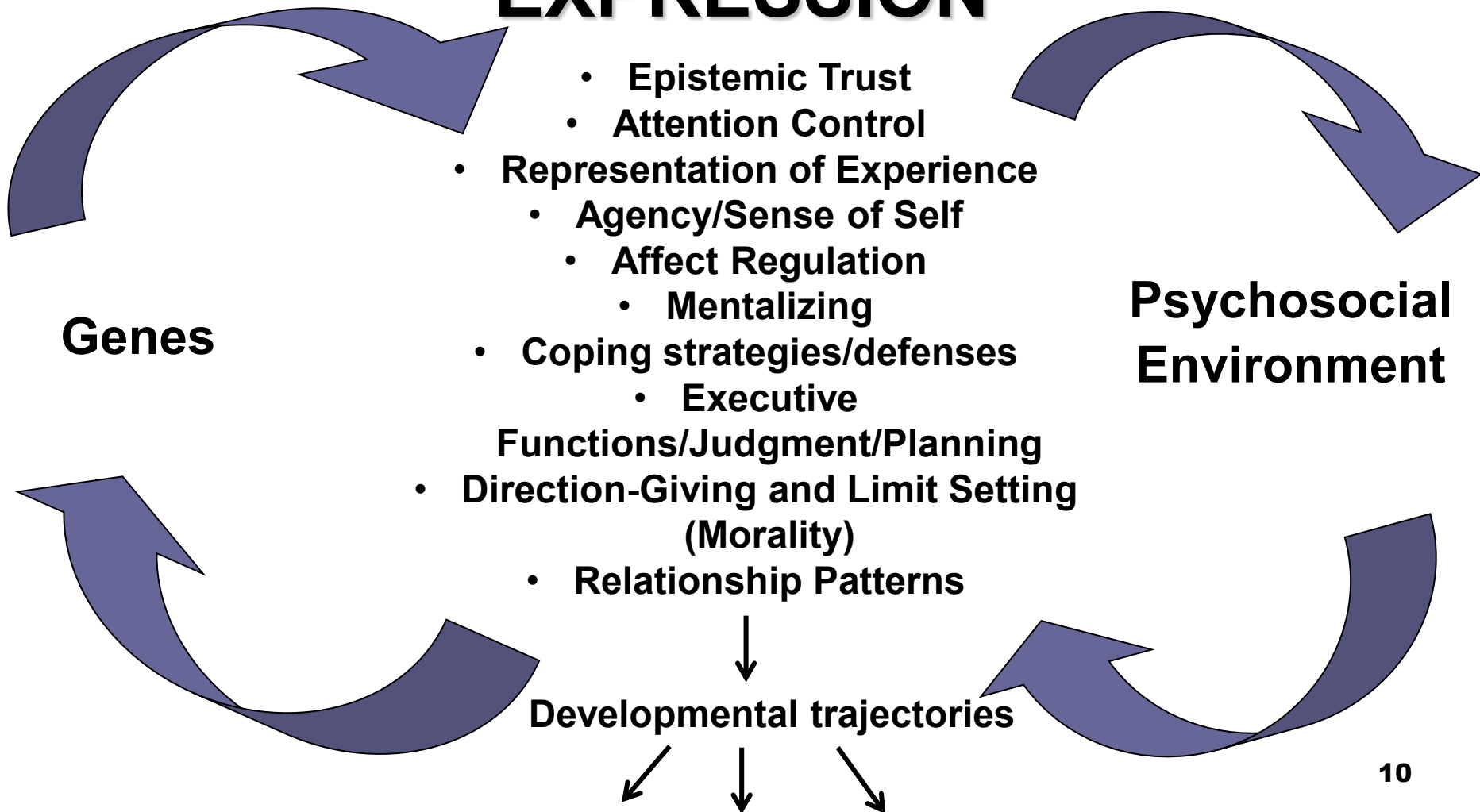


# Antecedents and co-morbidities of BPD related characteristics in 12 year old children (Belsky et al., 2012)

Figure 1. Psychiatric Antecedents and Comorbidities of Borderline Personality Related Characteristics in 12 Year Old



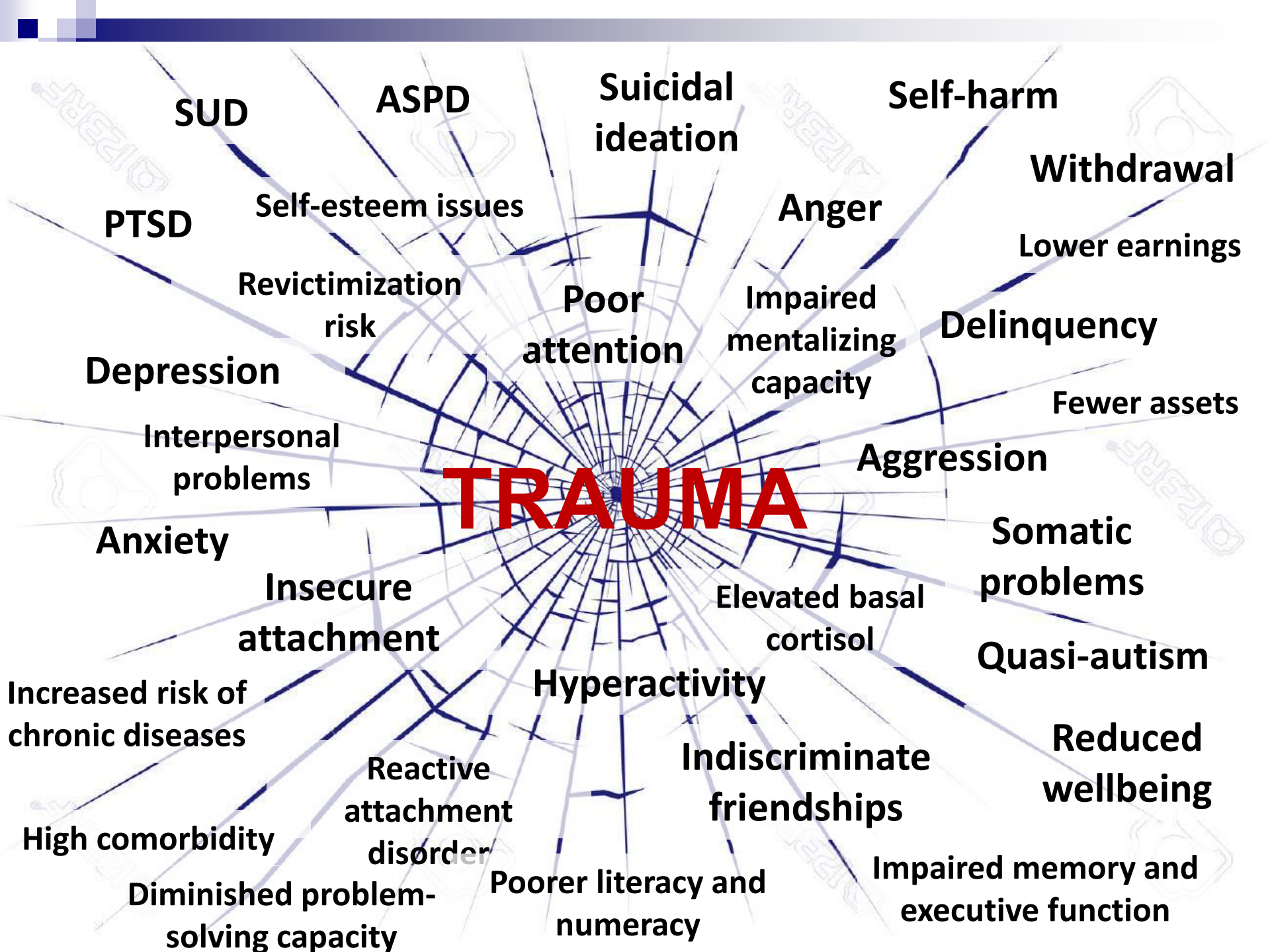
# MEDIATING PROCESSES SHAPE CONTEXT AND INFLUENCE GENE EXPRESSION



# The “P” Factor


(Caspi & Moffit, 2018)

- All for one and one for all: Mental disorders in one dimension
- Psychiatric symptoms aggregate into dozens of categorical, distinct diagnosis
- Psychiatric diagnosis aggregate into three domains: Externalizing, Internalizing and Psychotic experience domains
- These three domains aggregate into one dimension of psychopathology (“P”) from low to high



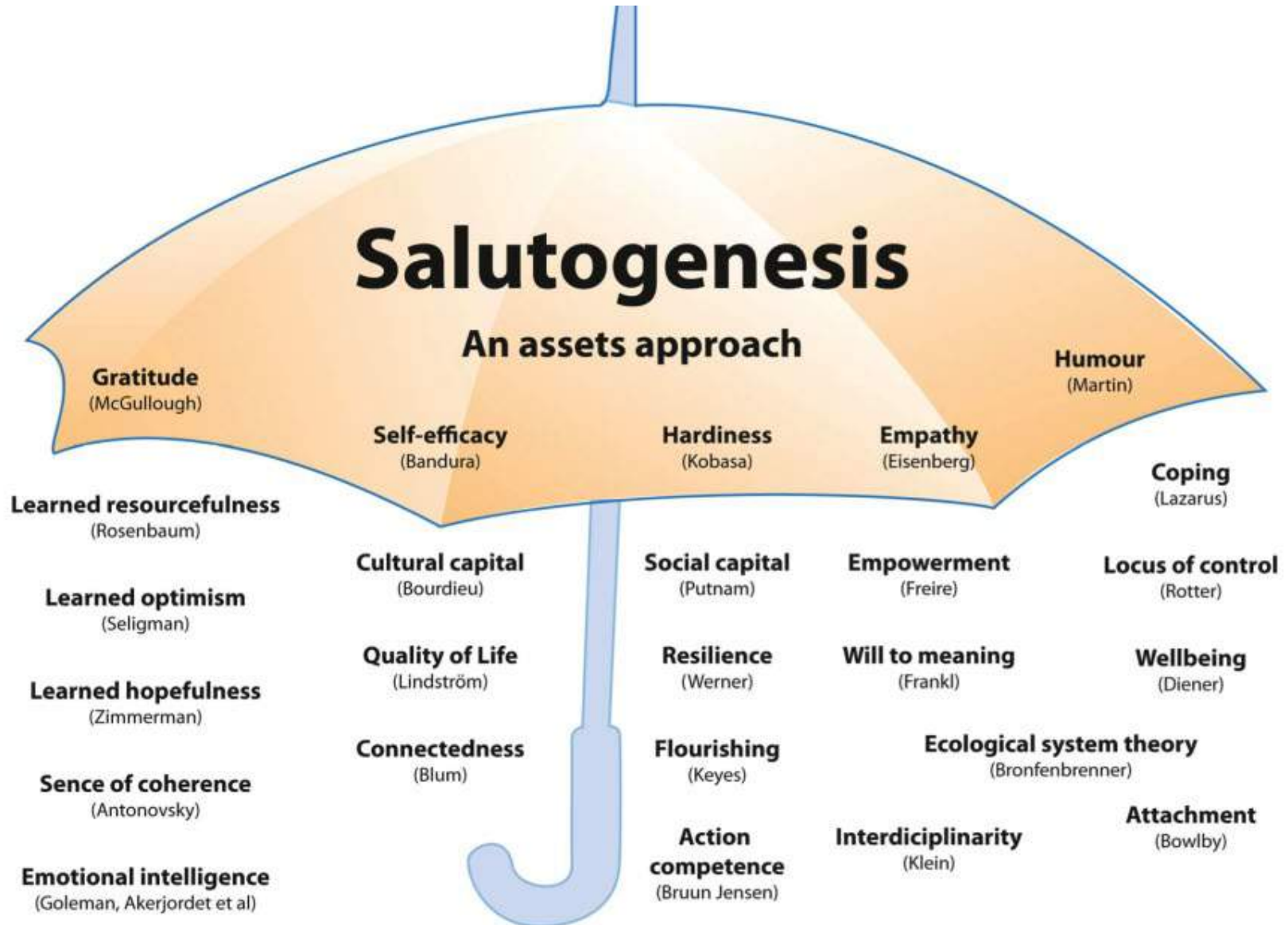
# THE PATH OF RESILIENCE

- The Ghosts in the Nursery  
(S. Fraiberg, 1966)
- Out of the Woods  
(Hauser, Allen & Golden 2006)

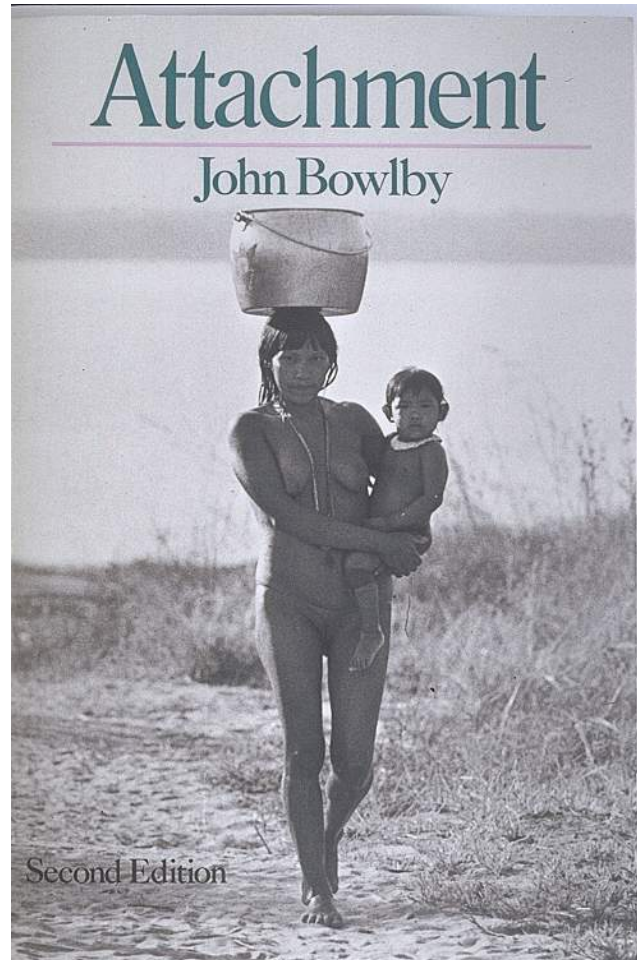


Resilience: The capacity to  
function and adapt effectively in  
the face of adversity and/or  
vulnerability

# Trauma or Resilience or Salutogenesis (Antonovsky & Sagy, 1986)







# *The Nature of Attachment*



# ATTACHMENT

- Pattern of affect, physiology, vocalization, movement activated by fear (threats to survival)
- Automatically triggers defensive (stress) response of fight-flight-freeze

# ATTACHMENT

- Defensive (stress) response activates attachment: to seek proximity and signal to evoke protection and regulation from another person

# PSYCHIC EQUIVALENCE

Disposition to seek a matching, contingent, reciprocal response:

- Contingent: Cause (my signal) → effect  
(timing) (social outcome)
- Attuned: Matching affect, physiology



**“What does mommy want for her birthday?”**



# VISCERAL SIMULATION

Brain generates empathy by creating internal models of the other person's brain activity (visceral simulation) and seeking to evoke a similar simulation of our own brain activity in the brain of the other.

# ACHIEVING A MATCH ACTIVATES TWO RELATED NEURAL NETWORKS

- A limbic motivational – reward network involving the nucleus accumbens, ventral tegmental area, caudate, insula, amygdala mediated by dopamine, beta endorphins and oxytocin
- An attention – empathy network involving the superior temporal and parietal cortices and the mirror neuron system
- Intense and simultaneous activation of these two networks and the triggering of “cute aggression” as a natural break to the experience of fusion?

# READING THE MIND IN THE EYES

**Guilt?**



**Fear?**



**Seductiveness?**



The eye region can signal specific social information, such as guilt, fear or flirtatiousness and a CFP study found that abused children could not read these expressions which might predispose to certain PDs.



## Mirror Neurons






# SECURE ATTACHMENT

- The experience of effectiveness in evoking a response that reduces distress and reverses helplessness and the threats to survival is the basis of the infant's procedural sense of security and agency ("I am effective and can trust that others are responsive")

# THE ESSENCE OF TRAUMA

- The brain encoded that survival = another person's contingent, attuned, reciprocal response
- The essence of trauma is social helplessness (“I cannot evoke a response”)
- Adversity becomes traumatic when is complicated by the experience of being alone, without access to the mind and the responses of another person to downregulate our brain and help us gain perspective and represent the experience (give meaning)



Lack of reciprocity (social helplessness) is encoded as a threat to survival and automatically activates a defensive response of flight-freeze-flight (anxiety, distance, dissociation, anger) that evolved to reverse the state of helplessness


# Certainty about other minds and the way the world IS...





# **THE PROBLEM WITH DEFENSIVENESS: THE PROBLEM IS THE SOLUTION TO THE PROBLEM**

- Evokes defensiveness in others  
(coercive cycles)
- Prevents social learning (epistemic  
mistrust)



The change from  
automatic processing to  
controlled, flexible,  
context-dependent  
processing

# Contingent and marked mirroring



## Contingency of Mirroring

The caregiver offers a response that has a “fit” with the infant’s current intentional mental state, at the time it is expressed

## Markedness of Mirroring

The caregiver mirrors while indicating that she is *not expressing her own feelings* (caricaturing)

# THE GOOD AND THE BAD ENOUGH PARENT

- 2/3 failure rate in “good enough” parents (and therapists)
- Repair as the epigenetic signal to:
  - Inhibit mistrust and defensiveness
  - Activate epistemic trust
  - Effortful control of attention and representation of experience



# CARETAKER'S RESPONSE PROMOTES DEVELOPMENT OF EXPLICIT/SYMBOLIC/PRETEND MODE OF SUBJECTIVITY

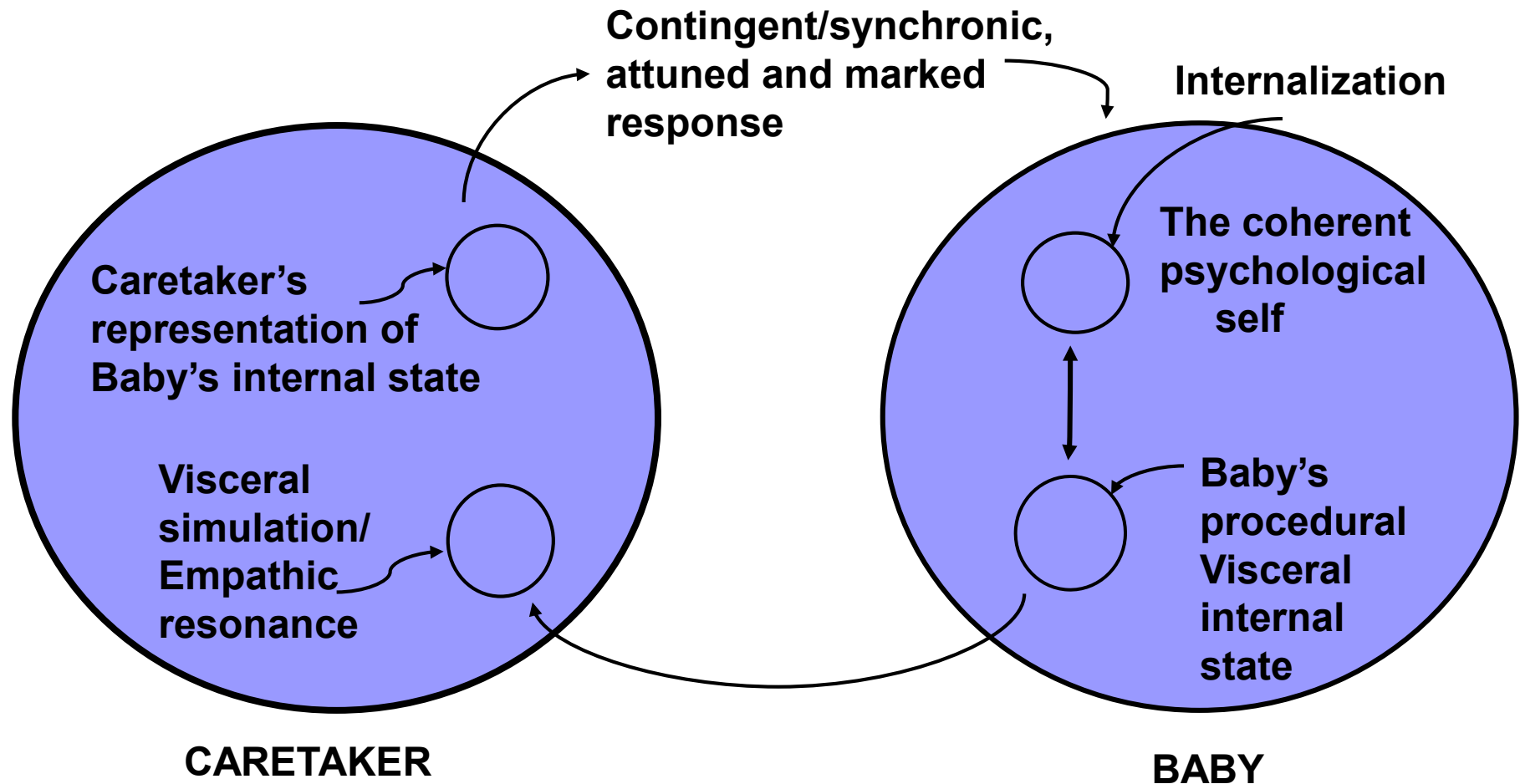
- Coming “on line” of control of attention and he awareness of different perspectives and joint attention (9 months)
- Coming “on line” of medial prefrontal cortex and anterior cingulate “puts the breaks” on automatic matching
- Separation of the representational (a perspective or a mental model) from the concrete and procedural: pretend vs “for real” encoded as explicit memories



# THE RE-PRESENTATION OF EXPERIENCE

- Separate meaning from concrete experience
- Symbolize, categorize, multiple perspectives, “seeking” a coherent narrative
- The autobiographical narrative (the representation of the self)

# THE ORIGIN OF THE SELF AS AN AGENT WITH INITIATIVE, CONTINUITY AND COHERENCE



# The Birth of the “Alien Self” in Disorganized Attachment

*The caregiver's perception is inaccurate or unmarked or both*

Attachment Figure

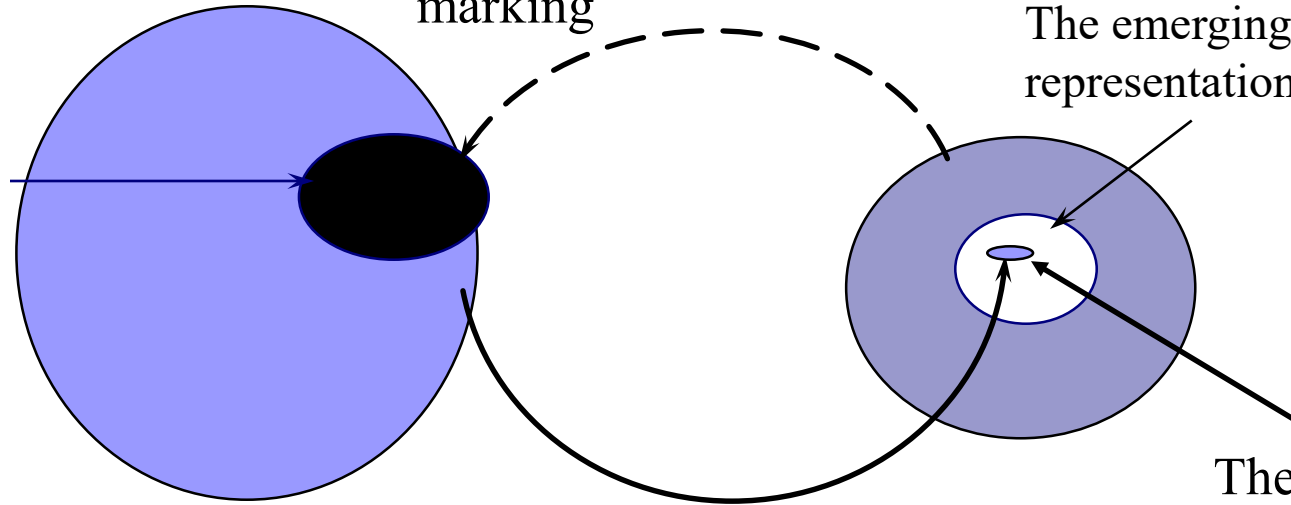
Failure in contingency,  
attunement and/or  
marking

Infant

The emerging  
representation of the self

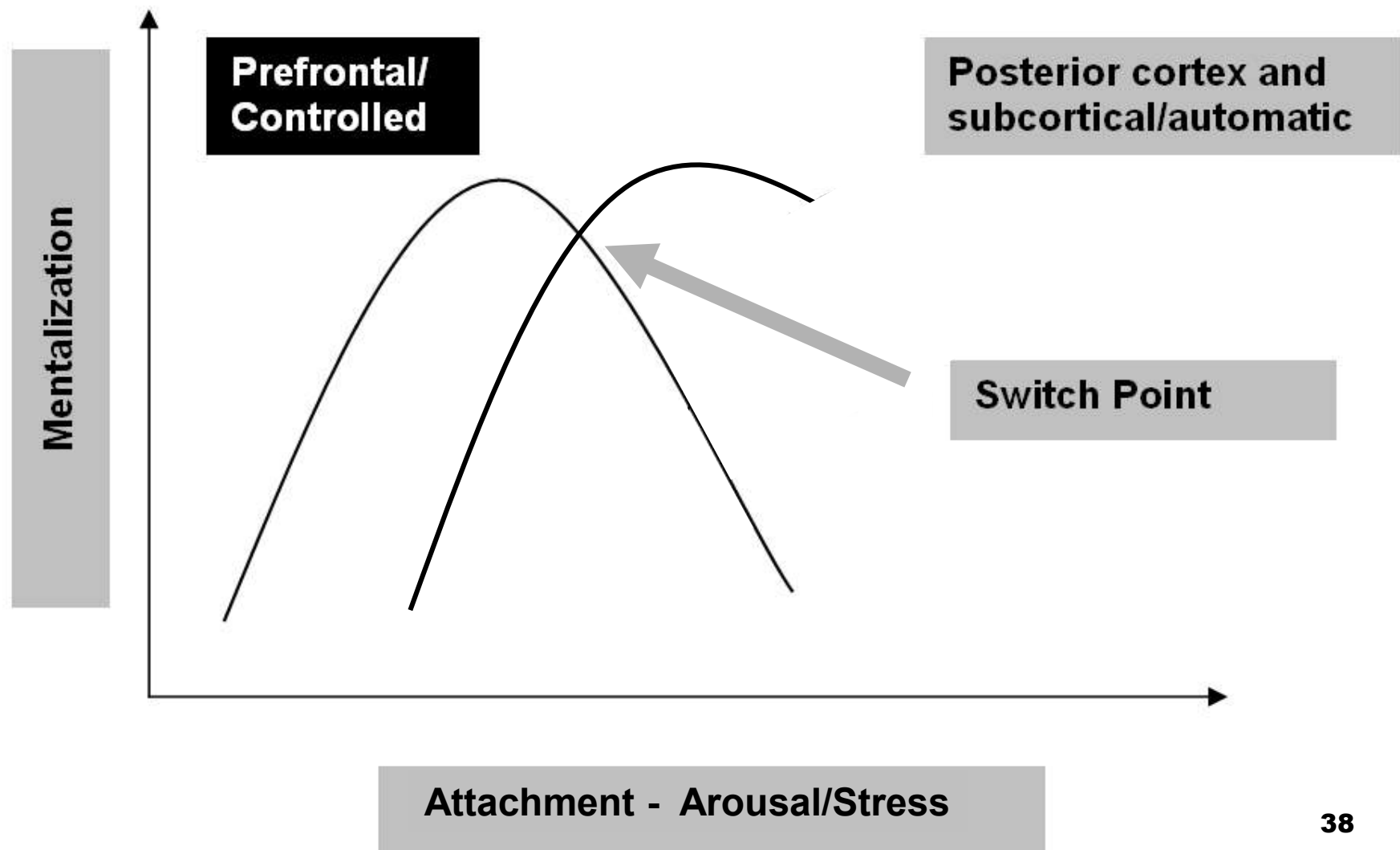
The alien self

The mental  
state of the  
baby is not  
represented





**The mentalizing “holes” –  
aspects of not-represented, not-  
mentalized experience – are  
activated by specific or generic  
stress**



### Automatic Mode

- Embodied simulation
- Responses are procedural, habitual, and automatic (motor and affective cry) mimicry “triggered by concrete physiological, emotional, perceptual, motor cues
- Single perspective
- No model, concrete
- Certainty and demand for a concrete match (coerciveness/ psychic equivalence)
- Anterior insula, inferior mirror neuron network (superior temporal sulcus, lateral inferior parietal cortex, frontal gyrus,) Nacc, amygdala
- **Psychic equivalence**

### Controlled Mode

- Imagined (mentalizing)
- Delay
- Takes more information (multiple perspectives)
- Creates flexible coherent model (representational/symbolic) (pretend)
- dmPFC, vmPFC, TPJ, Temporal pole, ACC
- **Pretend Mode**



# EPISTEMIC TRUST

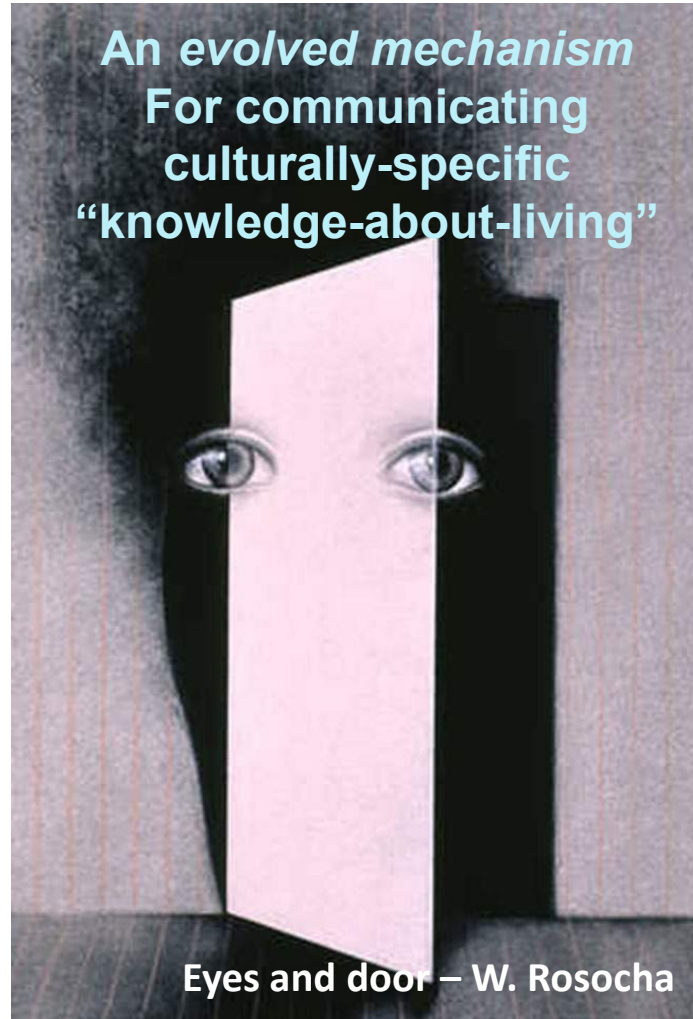
- Repair leading to feeling understood is the epigenetic signal to “pay attention and learn”. The signal that it is safe to inhibit automatic, defensive responses and psychic equivalence (one perspective) and shift to trusting, learning, remembering and representing



# Mentalizing, *Learning*, and the hard-to-reach

## “Pedagogical stance” and “Epistemic Trust”


An evolved mechanism  
For communicating  
culturally-specific  
“knowledge-about-living”



Eyes and door – W. Rosocha

Csibra and Gergely

An evolved  
mechanism for  
“opening the mind”  
to receive  
socially – useful,  
culturally – attuned  
learning about how  
to negotiate the  
social world

- 
- Trust, pay attention and learn from this person
  - “What you are learning is crucial for your survival and is universally shared”

# EPISTEMIC TRUST cont.

- Necessary to risk not knowing long enough to generate new understanding and knowledge
- The active ingredient of psychosocial interventions?



# The Therapeutic Bargain

Taking the risk of attempting new ways to communicate, cope and relate in order to replace a non-mentalizing illusion of control and attachment with a mentalizing approach that offers the opportunity for real mastery and genuine attachment



# MENTALIZING ASPECTS OF EFFECTIVE TREATMENT (AND RESILIENCE)

- To interrupt vicious, coercive, defensive cycles
- To model and promote a mentalizing stance of curiosity, openness, interest, tentativeness, that tolerates not knowing and respects other perspectives and seeks to understand the other from the inside and oneself from the outside
- To understand and to feel understood to evoke epistemic trust and social learning
- To take responsibility for mistakes and recognize them and the related breakdowns of mentalizing as opportunities to practice repair
- To focus on affect and trust and on how to acquire the capacity to regulate affect and learn socially when feeling threatened
- To acknowledge the courage needed to trust and change