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Improving Access to Psychological Therapies

NHS

Fundación Castilla del Pino

Mentalization based interventions and a mechanism of change in psychological therapy

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Saturday, April 13th 2013

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Boasting about mentalizing (but only briefly)

- Traditional common factors
- Common principles
- Cross modality predictors

Some of the Mentalizing Mafia

- **UCL/AFC/Tavistock**

Prof George Gergely

Professor Pasco Fearon

Professor Mary Target

Prof Anthony Bateman

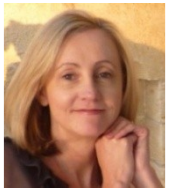
- **University of Leuven & UCL/AFC**

Dr Patrick Luyten

- Dr Liz Allison

- Professor Alessandra Lemma

- Professor Eia Asen



- Dr Trudie Rossouw

- **Dr Dickon Bevington**

Some more mafiosi (The USA branch)

- **Menninger Clinic/Baylor Medical College**

- **Dr Jon Allen**

- Dr Lane Strathearn

- Dr Brooks King-Casas

- Dr Read Montague

- **Dr Carla Sharp**

- Dr Efrain Bleiberg

- Professor Flynn O'Malley

- Dr Elisabeth Newlin

- **Yale Child Study Centre**

- Prof Linda Mayes

- Professor Nancy Suchman

And European recruits to the 'Family"

- **Dawn Bales**

- **Dr Mirjam Kalland**

- **Professor Finn Skårderud**

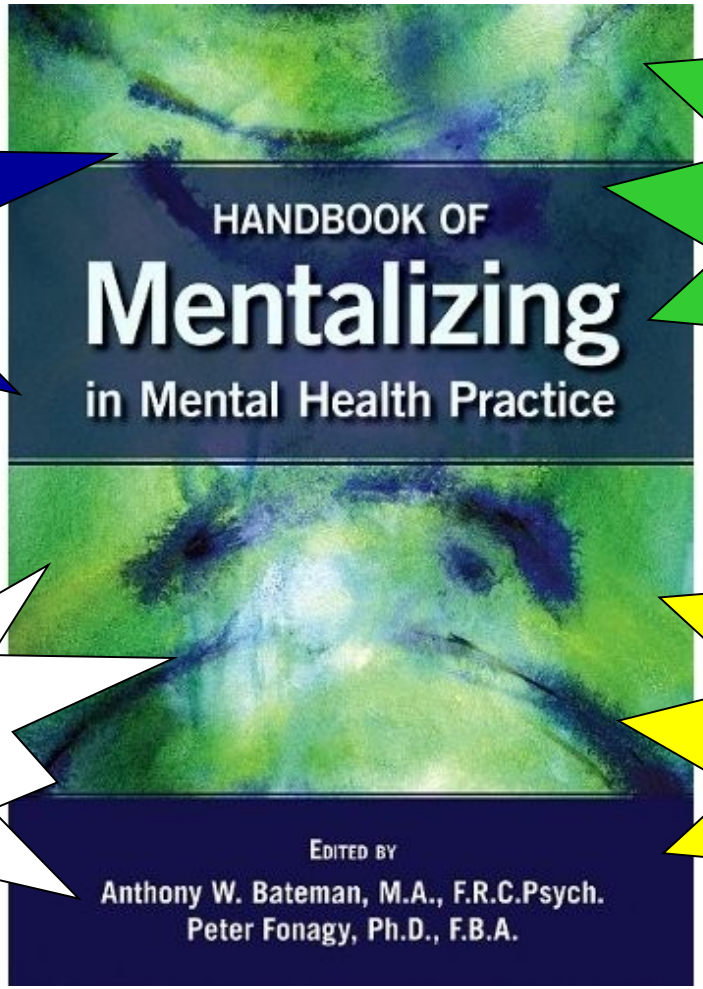
- **Professor Sigmund Karterud**

- Cindy Decoste
- Catherine Freeman
- Ulla Kahn
- Morten Kjolbe
- Benedicte Lowyck
- Tobi Nolte
- Marjukka Pajulo
- Svenja Taubner
- Bart Vandeneede
- Annelies Verheught-Pleiter
- Rudi Vermote
- Joleien Zevalkink
- Bjorn Philips
- Dr Peter Fuggle

Clear evidence of having little to de are

NEW!
IMPROVED!

JUST RELEASED!



Washes brains whiter!

Longer than all previous versions!

American Psychiatric Publishing, Inc 2012

Psychological therapies & mentalizing

- When we interact with other people, we are only moderately interested in their **visible shell**.
- Vastly more important are the invisible **beliefs, desires and intentions** that lie behind their actions ➔ that which needs **addressing in psychotherapy**.
- Therapy occurs in the midst of an evolutionarily protected set of **mechanisms** that have evolved to ensure **social understanding**
- There is a group of developing **brain regions** in the human cortex that selectively and specifically underlie our capacity to mentalize

Measuring Mentalization (Baron-Cohen et al., 2001) Reading the Mind in the Eyes Test

Surprised-A

Sure about something-B

Joking-C

Happy-D

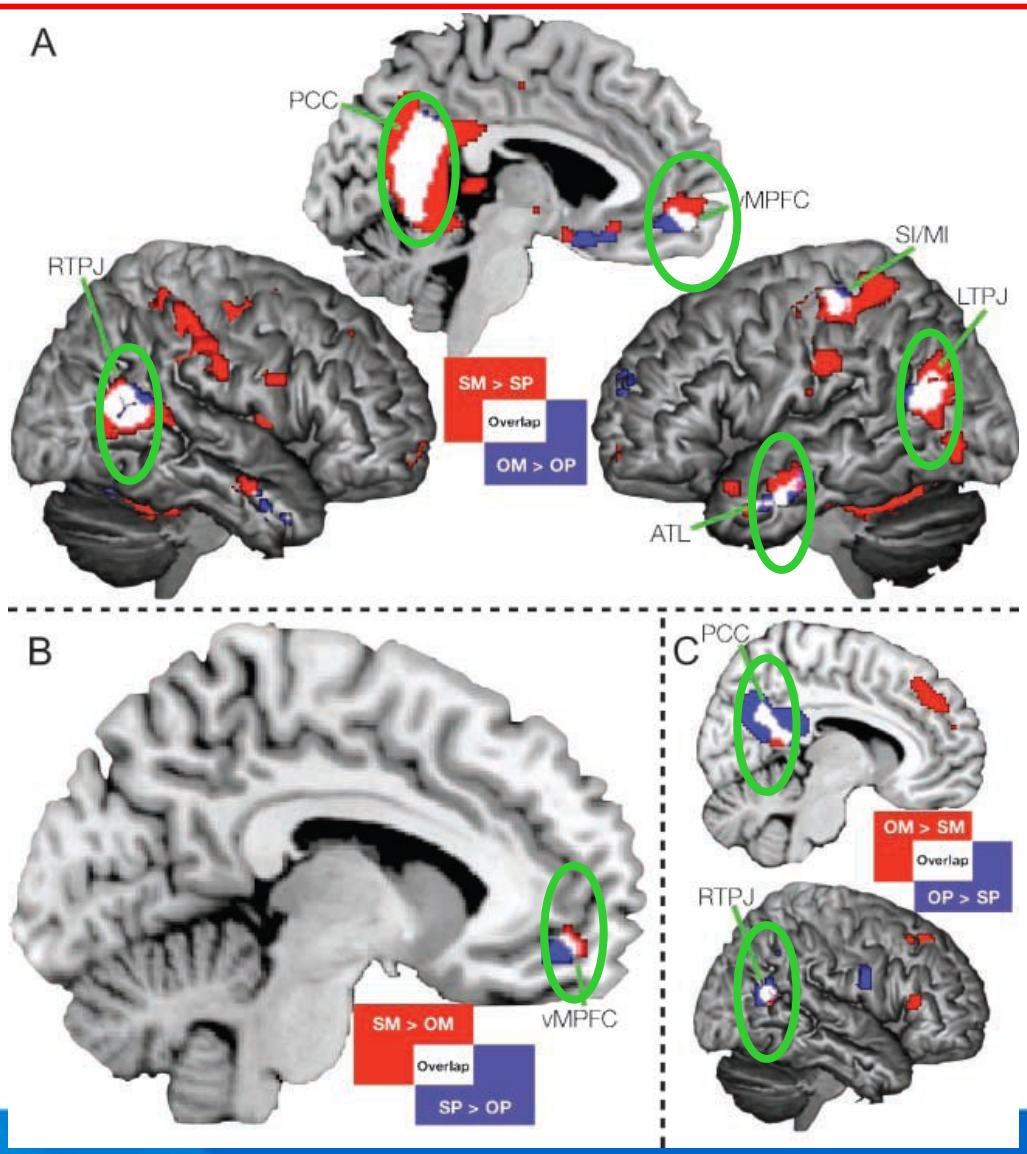
Mentalizing at the World Cup: How does Robert Green feel after letting in the USA goal?

Shared neural circuits for mentalizing about the self and others
(Lombardo et al., 2009; J. Cog. Neurosc.)

Self mental state

Other mental state

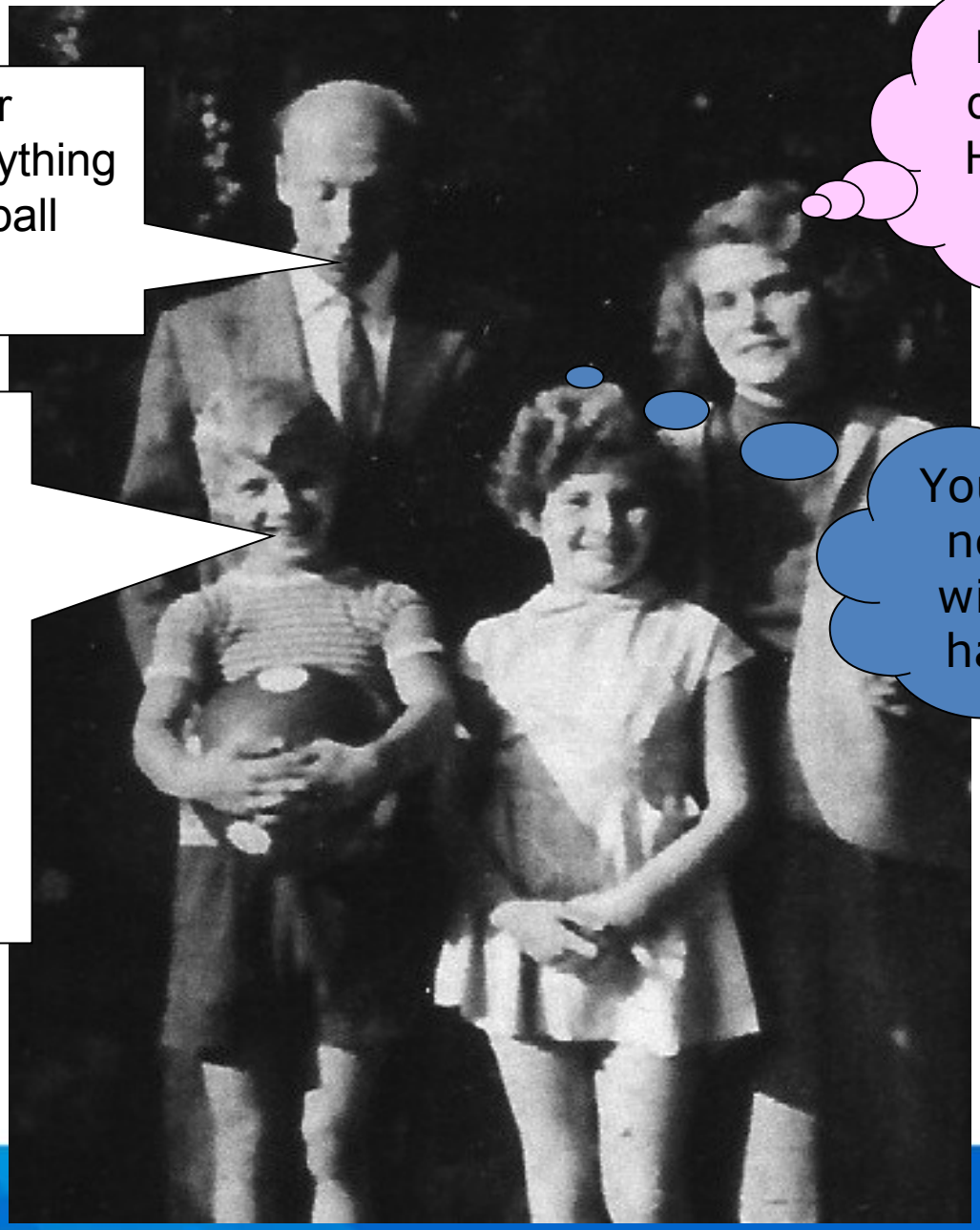
Overlapping for Self and Other



You will never amount to anything if you hold a ball like that!

Let the boy dream Ivan, He is a born dilettante!

I want to write my PhD on the “Use of low signal-to-noise ratio stimuli for highlighting the functional differences between the two cerebral hemispheres”.



You look smug now but you will lose your hair just like Dad

Mentalizing Profile Associated with Arousal

Fonagy, P., & Luyten, P. (2009). *Development and Psychopathology*, *21*, 1355-1381

Implicit-Automatic-Non -conscious-Immediate. ⟷ **Explicit-Controlled Conscious Reflective**

amygdala, basal ganglia, ventromedial prefrontal cortex (VMPFC), lateral temporal cortex (LTC) and the dorsal anterior cingulate cortex (dACC)

lateral and medial prefrontal cortex (LPFC & MPFC), lateral and medial parietal cortex (LPAC & MPAC), medial temporal lobe (MTL),rostral anterior cingulate cortex (rACC)

Mental interior cue focused ⟷ **Mental exterior cue focused**

medial frontoparietal network activated

recruits lateral fronto-temporal network

Cognitive agent:attitude propositions ⟷ **Affective self:affect state propositions**

Associated with several areas of prefrontal cortex

Associated with inferior prefrontal gyrus

Imitative frontoparietal mirror neurone system ⟷ **Belief-desire MPFC/ACC inhibitory system**

frontoparietal mirror-neuron system

the medial prefrontal cortex, ACC, and the precuneus

Mentalizing Profile of Prototypical BPD patient

Fonagy, P., & Luyten, P. (2009). *Development and Psychopathology*, *21*, 1355-1381.

BPD

Implicit-Automatic-Non-conscious-Impressionistic ⟷ **Explicit-Controlled Conscious Reflective**

amygdala, basal ganglia, ventromedial prefrontal cortex (VMPFC), lateral temporal cortex (LTC) and the dorsal anterior cingulate cortex (dACC)

lateral and medial prefrontal cortex (LPFC & MPFC), lateral and medial parietal cortex (LPAC & MPAC), medial temporal lobe (MTL),rostral anterior cingulate cortex (rACC)

BPD

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BPD

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frontoparietal mirror-neuron system

the medial prefrontal cortex, ACC, and the precuneus

Hypothetical Pattern of Association of PD and Multidimensional Model of Mentalizing

	BPD	ASPD	NPD	Paranoid
Self/Other	+/+++	+/+++	+++/-	+++/-
External/ Internal	+++/+	+++/+	+/+++	+/+++
Implicit/ Explicit	+++/+	+++/+	++/++	++/++
Cognitive/ Affective	+/+++	++/-	++/+	++/++

Treatment AIMS in re-establishing mentalizing in borderline personality disorder

Implicit-Automatic ⟷ Explicit-Controlled

Mental interior focused ⟷ Mental exterior focused

Cognitive agent:attitude propositions ⟷ Affective self:affect state propositions

Imitative frontoparietal mirror neurone system ⟷ Belief-desire MPFC/ACC inhibitory system

Clinical summary of intervention

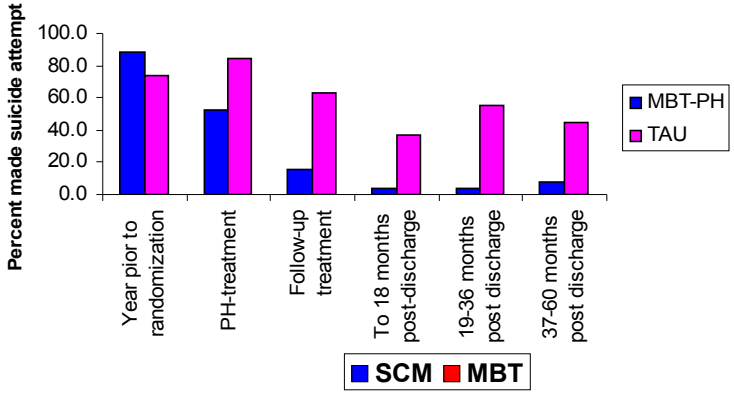
- Focus is on a **break in mentalizing** – psychic equivalence, pretend, teleological
- **Rewind** to moment before the break in subjective continuity
- Explore current **emotional context** in session by identifying the momentary affective state between patient and therapist
- Identify **therapist's contribution** to the break in mentalizing (humility)
- Seek to **mentalize** the therapeutic **relationship**

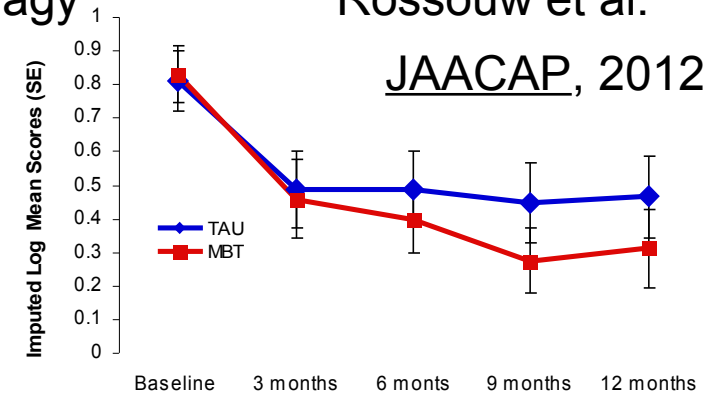
So what should the therapist aim do?

- In MBT, the mind of the patient becomes the focus of treatment.
- Help the patient learn about the **complexities** of his thoughts and feelings about himself and others, how that relates to his responses, and how 'errors' in understanding himself and others lead to actions
- It is **not for the therapist to 'tell'** the patient about how he feels, what he thinks, how he should behave, what the underlying reasons are, conscious or unconscious, for his difficulties.
  - *any therapy approach to BPD which moves towards 'knowing' how a patient 'is', how he should behave and think, and 'why he is like he is', could be harmful.*
- We recommend an inquisitive or 'not-knowing' stance. Conveys a sense that mental states are opaque

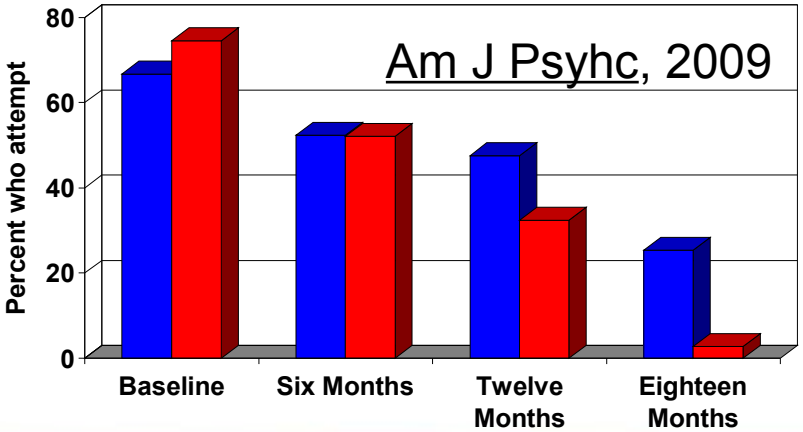
State of the Art: MBT as Long Term therapy

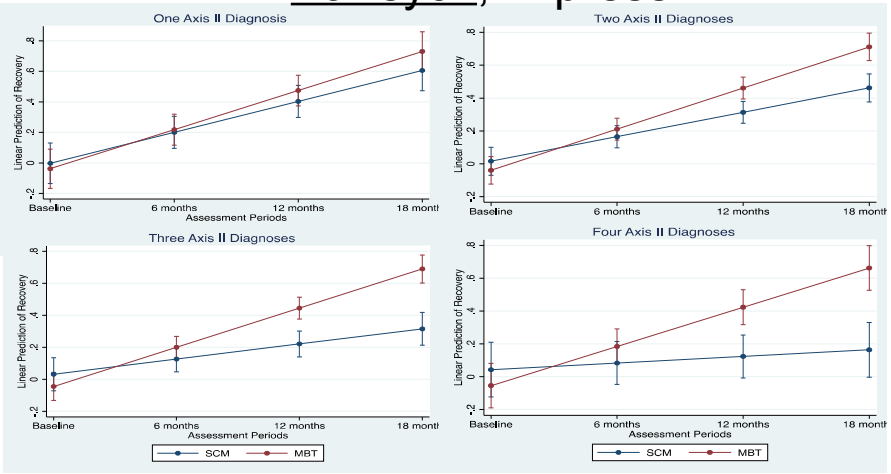
Mentalization Based Day Hospital	Mentalization Based Intensive Outpatient Treatment	Mentalization Based Treatment for Adolescents
Bateman & Fonagy	Bateman & Fonagy	Rossouw et al.
American J Psych, 2001		JAACAP, 2012





BJPsych, in press

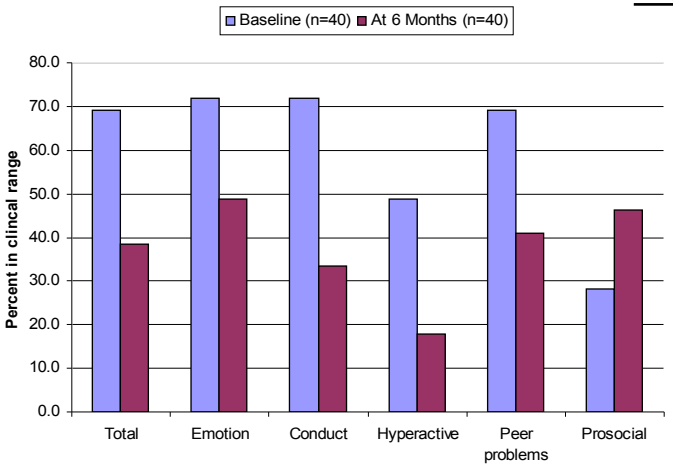




State of the Art: MBT Derivatives

Mentalization Based Therapy for Families & Couples

Fearon, Bevington, Williams, Bleiberg Midgley, Asen, Target.

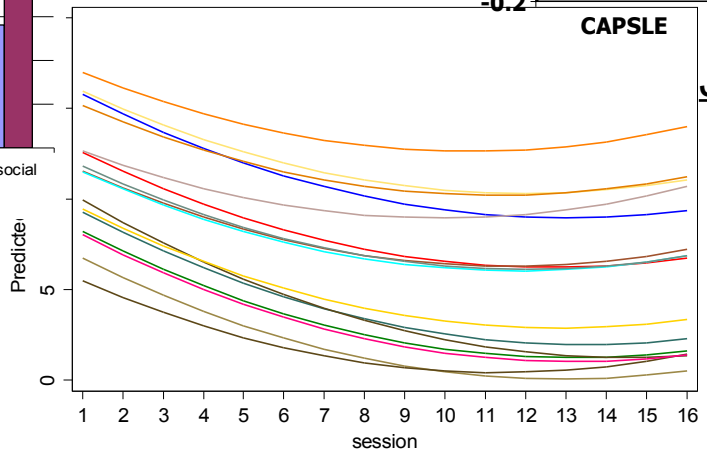


J. Fam.Therap, 2012

Mentalization Based Object Relations Therapy for Depression (DIT)

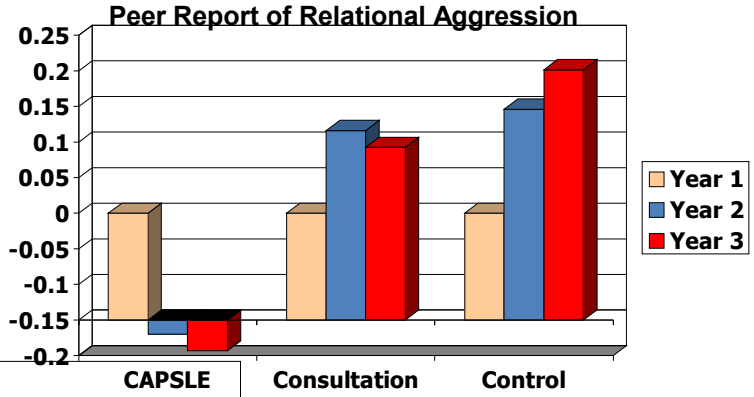
Lemma, Target, Luyten, Fonagy et al.

Psychiatry, 2010



Mentalization Based Systemic Interventions (Peaceful Schools)

Twemlow, Vernberg, et al.



JCPP, 50, 2009, 607-16

Psychiatry, 2012

Articles using ‘mentalization’ in title or abstracts

Number of articles on Web of Science Database

Source: http://apps.webofknowledge.com, Data collected 1.3.2013

Evidence based or promising treatments

MBT is in its infancy as an EST

Prof. Anthony Bateman, MD

Prof. Peter Fonagy, PhD FBA

Psychotherapy for BPD

- A range of structured treatment programmes for BPD shown to be effective in studies
  - DBT
  - TFP
  - SFT
  - CBT
  - SPT
  - DDP
  - CAT
  - GPM
  - MBT

- Do they work for the reasons the developers suggest?

"Common factors" research in psychotherapy

- Traditional common factors
- Common principles
- Cross modality predictors

Common Factors

- Centrality of the **therapeutic relationship** (working alliance, caring, agreement on treatment goals)
- The importance of establishing a **clear treatment frame** (safe and structured, therapist knowledge of strategies)
- ‘‘**Faux-unique**’’ variables (Castongay, 2011) - components of therapy that are typically **associated with one** orientation **plays a role** in the effectiveness of **other approaches** (such as focusing on early attachments in CBT)

The **working alliance** controversy

Castonguay et al. (1996)

Depressed patients treated with CBT

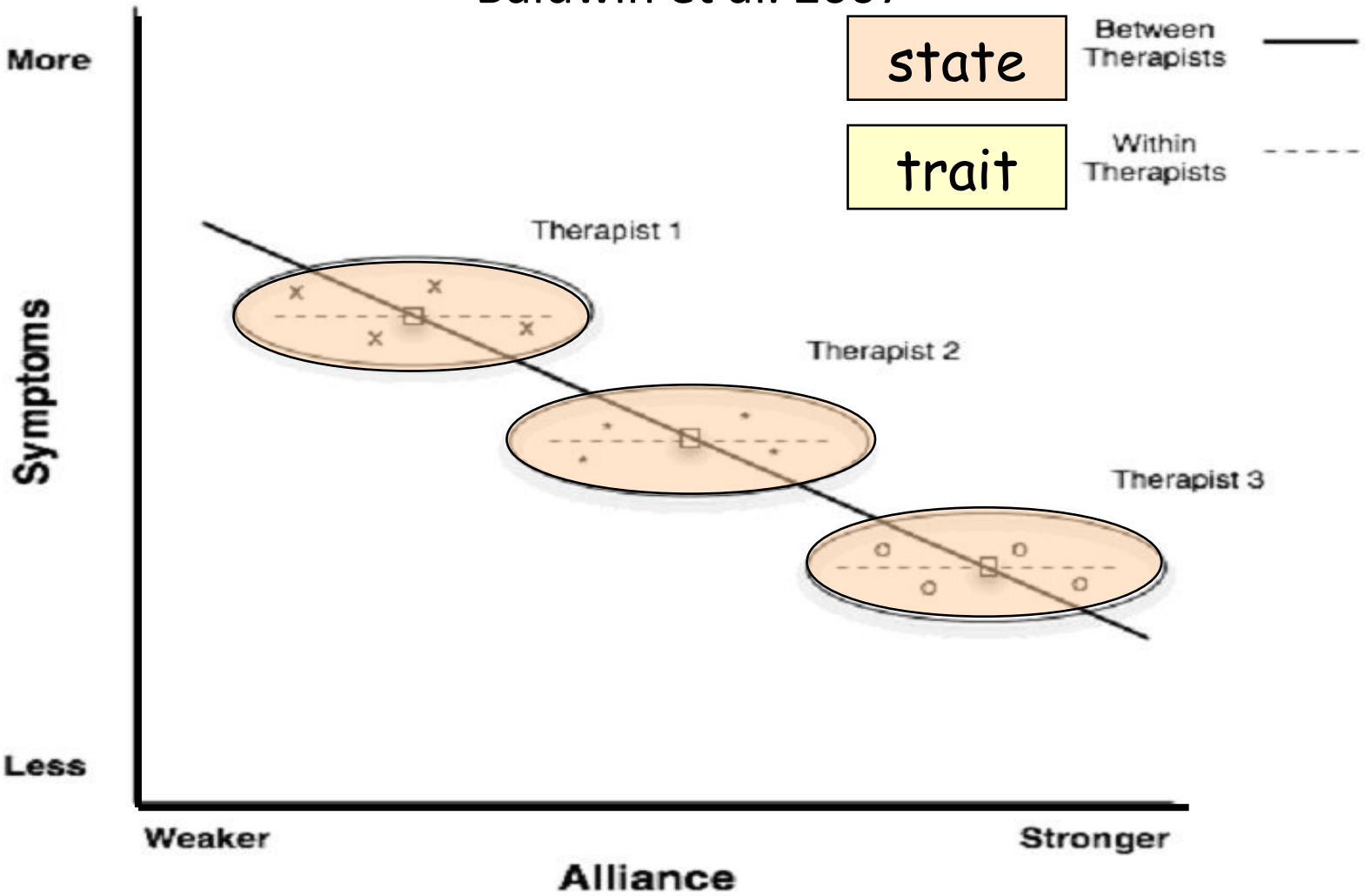
took measures of:

- level of **alliance**
- therapist focus on **distorted thinking**

- **alliance** significantly **associated with outcome**
- greater **focus on distorted thinking** associated with **poorer** outcomes
- effect **disappears if alliance** levels **controlled** for

Within and between therapist variance

Baldwin et al. 2007



The working alliance controversy

Therapeutic Alliance Predicts Symptom Improvement Session by Session
Falkenström et al., (2013) Journal of Counseling Psychology

Fixed effects	*b*	95% CI
CORE-OM lag1 → CORE-OM	-0.06^{**}	[−0.09, −0.02]
WAI-S lag1 → CORE-OM	-0.30^{**}	[−0.52, −0.08]
WAI-S lag1 → WAI-S	-0.15^{***}	[−0.19, −0.12]
CORE-OM → WAI-S	-0.03^{***}	[−0.03, −0.02]

A sample of 646 patients (76% women, 24% men) in primary care psychotherapy
Administered the Working Alliance Inventory and CORE session by session,

Reciprocal Influence of Alliance to the Group and Outcome in Day Treatment for Eating Disorders

Tasca & Lampard (2012) Journal of Counseling Psychology 59, 507–517

Model	Alliance	
	b (SE)	p
Baseline ($\gamma = 0$)	−0.23 (0.08)	.003
Model 1 (alliance → restrict γ = free)	−0.22 (0.08)	.003
Model 2 (restrict → alliance γ = free)	−0.18 (0.09)	.045
Final model (γ = free)	−0.23 (0.05)	<.001

SO WHY DOES IMPROVED ALLIANCE IN SESSION$_{t-1}$ LEAD TO IMPROVEMENT IN SESSION$_t$?

Understanding benefit from working alliance

- Is it to do with **learning about oneself**?
  - Most unlikely because **improvement** occurs **between end** of **session and** beginning of **next session**
- So **what** is it **about** working **alliance** that actually **improves** the **patient**?
  - a bizarre **delayed reverse causality**?
  - **attachment** mediated – but through what process?
  - opening up **a social learning process** that benefits the patient between sessions

The Transmission of Culture and Why Therapy Works

- How do we know who to learn from?
- How does trust relate to attachment?
- How do you get people to trust you?
- Why does trust make a difference?

Brains and social behavior vary across different mammalian species

- **Insectivors**: Regulated **maternal** behaviors

- **Chimpanzees**: Societies of a **few dozen**

- **Modern Humans**: Societies of **millions** of interacting people

Humans exceedingly skilled at **large scale social interaction**

↓

Competition for social skills led to the evolutions of cognitive **mechanism for collaborating** with others

↓

Fuelled **evolution of** human **brain**.

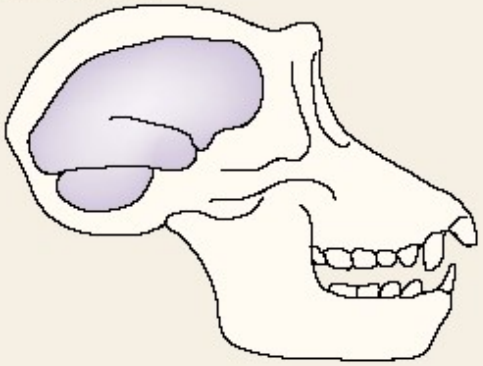
↓

*Therefore **correlation** in mammals **between size of** social **group and** volume of **neocortex***

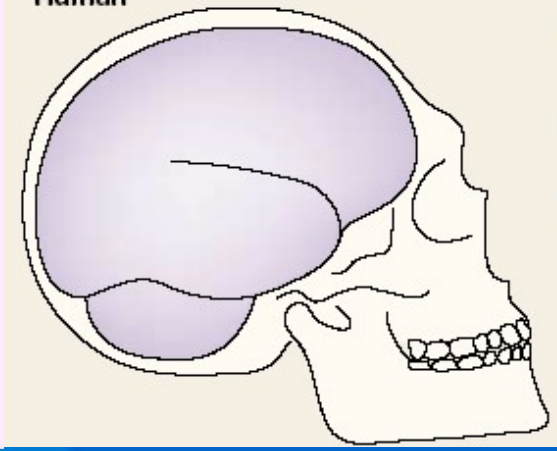
Hedgehog

Courtesy of Laura Roberts

Chimpanzee



Human



Instincts in explanations of psychopathology

- Historically **three attempts** to ground the assumptions of clinical causation to instinct
- Three **major human instincts** have been the focus of explanations of development and its distortion in psychological disorder
  - 1. The **psychosexual** AND agression instinct – Freud and classical psychoanalysis
  - 2. The instinct for **attachment** – Bowlby, Ainsworth and early infant researchers
  - 3. The instinct for **communication** – Gergely, Tronick and modern infant research

Species-specific ways to acquire beliefs

- We can accept a culturally transmitted belief for **two reasons** (Sperber, 1997, 2001, Sperber et al., 2010)
  - its **content**
  - the **authority** of its source
- To accept because of **content**
  - grasp its **deductive** relations to the contents of **other beliefs**
  - **inductive** relations to the evidence, in accordance with the **principles of theoretical rationality**.
- To accept on account of the **authority** (*'deferentially'* transmitted, Recanati, 1997)
  - its **source** is **known**, **remembered** and **judged** to be reliable (or trustworthy)
  - taken to be **shared common knowledge** among members of one's community

The need for human natural pedagogy

- We are born into a world populated with **man-made tools** whose functional properties, appropriate manner of application or method of (re)production often remain in many respects **epistemically opaque → NEED COMMUNICATION**
- The cognitive opacity of kind or **category-relevant aspects of human-made** functional **artifacts** raises a **learnability problem** (of relevance-selection) for the naïve juvenile observational learner

Natural Pedagogy theory

(Csibra & Gergely, 2006; 2009, 2012)

- A human-specific, **cue-**driven social cognitive adaptation of mutual design dedicated to ensure efficient **transfer of** relevant **cultural knowledge**
- Humans are predisposed (EVOLVED) to **'teach' and 'learn'** new and relevant cultural information from each other
- Human **communication** is specifically adapted to allow the transmission of

  a) cognitively **opaque** cultural knowledge

  b) kind-**generalizable** generic knowledge

  c) **shared** cultural knowledge

Definition of **Ostensive Stimuli**

Sperber & Wilson (1995)

- The signals whereby an agent **makes manifest** to an addressee her **communicative intention**: to manifest some **new relevant information** for the addressee (i.e. her informative intention).
  - NOT PART OF **EPISODIC** MEMORY BUT PART OF **SEMANTIC**/CULTURAL KNOWLEDGE
- Infants display **species-specific sensitivity** to, and preference for, some **non-verbal ostensive behavioral signals** (see Csibra, 2010, Csibra & Gergely, 2009 for reviews)
- Examples of **ostensive communication cues**
  - **eye-contact**
  - turn-taking **contingent reactivity**
  - special **tone** ('motherese')

Triggering the Pedagogical Stance

- The pedagogic stance is **triggered** by **ostensive** communicative **cues** (E.G. EYE CONTACT)
- Ostensive cues have **in common**
  - Infant **recognized as a self**
  - Paid special attention to (**noticed as an agent**)
- Ostensive cues **function to trigger epistemic trust**:
  - **Opening** channel to **receive** knowledge about social and personally relevant world (CULTURE)
  - Going **beyond** the **specific experience** and acquire knowledge relevant in many settings
  - Triggers opening of an evolutionarily protected **epistemic superhighway** for knowledge acquisition

The Developmental Evidence

- Learning from babies learning
- Evidence for transferring knowledge for episodic to semantic memory
- Link to contingent responding
- Why attachment is key to learning

Experimental illustration of ostensive cues

Gergely, Egyed et al. (in press)

Subjects : 4 groups of 18-month-olds
Stimuli: Two unfamiliar objects

1: Baseline – control group

No object-directed attitude demonstration

Simple Object Request by Experimenter A

Subjects: n= 20 Age: 18-month-olds

Ostensive Communicative Demonstration

Requester: OTHER person (Condition 1)

Learning from Attitude Expressions

18-month-olds

Ostensive Expression - Generalization

Non-Ostensive (Non-Communicative) Demonstration

Requester: OTHER person (Condition 2)

Learning from Attitude Expressions

18-month-olds

Ostensive Expression - Generalization

Non-Ostensive Expression - No Generalization

Condition 4: Non-Ostensive (Non-Communicative)

Demonstration Requester: SAME person

Learning from Attitude Expressions

18-month-olds

Percent Giving Positive Object

Ostensive Expression - Generalization

71

Non-Ostensive Expression - No Generalization

40

Non-Ostensive Expression - Person-Specific Attribution

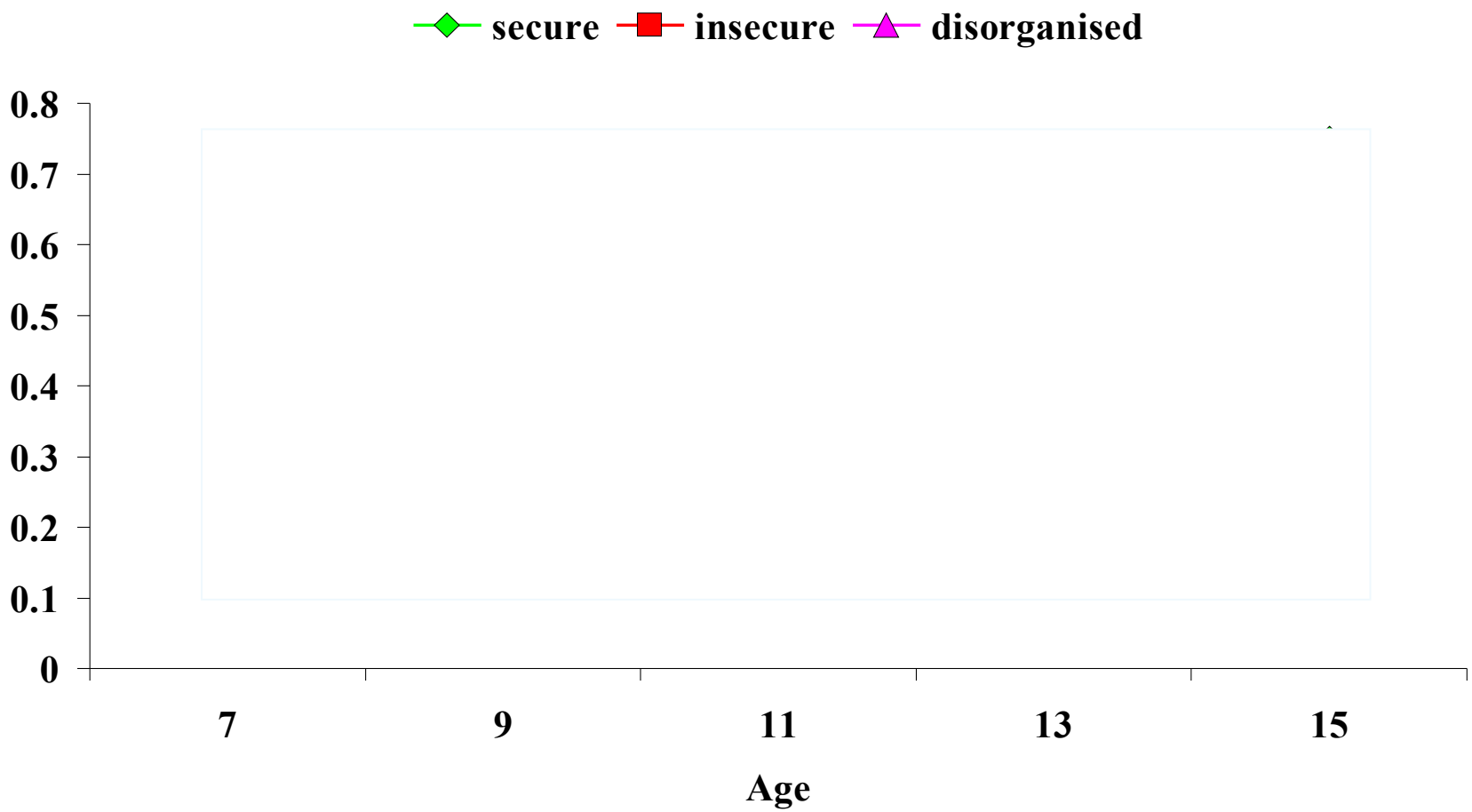
77

Egyed et al., in prep.

Epistemic trust and secure attachment

- **Secure attachment** is created by a system that also induces a sense of **epistemic trust** → that the information relayed by the teacher may be trusted (i.e. learnt from)
- Evidence
  - **Contingent** responsiveness to the infant's own (at first, automatic) expressive displays in secure attachment
  - During **"mirroring" interactions**, the other will "mark" her referential emotion displays in a 'manifestative' manner to instruct the infant
  - Cognitive **advantage** of secure attachment

Attachment and cognitive functioning: the development of competence in logical reasoning



Source: Jacobson et al

How Attachment Links to Learning

The forming of an attachment bond

Down Regulation of Emotions

BONDING

EPISTEMIC TRUST

Social Cues that Create Epistemic Trust

- **Attachment** is **special condition** for generating epistemic trust
- Generally any **communication** marked by **recognition** of the listener as **intentional agent** will increase **epistemic trust and** likelihood of **communication** being **coded** as
  - **Relevant**
  - **Generalizable**
  - To be retained in **semantic memory**
- **OSTENSIVE CUES TRIGGER EPISTEMIC TRUST WHICH TRIGGERS A SPECIAL KIND OF ATTENTION**

Individual Differences in Creating Epistemic Trust

Influential communicators

- use ostensive **cues** to **maximum**
- create '**illusion**' of **recognizing** agentiveness of listener
  - **Looking** at audience
  - Addressing current **concern**
  - Communicating that they see problem from **agent's perspective**
  - Seeing and recognizing individual **struggle in understanding**

- Massive **difference in ability** of individuals to influence (teachers, politicians, managers) explicable in terms of varying capacity to **generate epistemic trust**

Meta-analytic studies of teacher effectiveness

- John Hattie is Professor of Education at the University of Auckland, New Zealand.
- **15 years research** and synthesizes over **800 meta-analyses** relating to the influences on achievement in school-aged students.
- Builds a story about the **power of teachers** and of **feedback**, and constructs a model of **learning and understanding**.
- Is there a set of **predictors to good teaching outcomes** based on:
  - The child?
  - The home?
  - The school?
  - The curricula?
  - The teacher?
  - The approaches to teaching?

With grateful thanks to Dr Peter Fuggle

Meta-analytic studies of teacher effectiveness

- Things that do not work:
  - **Mobility** (shifting schools) -0.34
  - Television -0.14
  - Summer vacation -0.09
  - Ability grouping 0.10
  - **Individualized instruction** 0.20
  - **Homework** 0.30

With grateful thanks to Dr Peter Fuggle

Meta-analytic studies of teacher effectiveness

- What makes a **teacher** the most **effective**?
  - It is teachers **seeing learning through the eyes of students**; and **students seeing** teaching as the key to their ongoing learning
- The **key ingredients** are:
  - Awareness of the **learning intentions**
  - **Knowing when** a student is **successful**
  - Having sufficient **understanding of** the **student's understanding**
  - Know enough about the content to provide **meaningful** and challenging **experiences**
- Passion that reflects the **thrills** as well as awareness of the **frustrations of learning.**

With grateful thanks to Dr Peter Fuggle

The implications for clinical work: Its organisation and delivery

- Mentalizing – what is it?
- Why is seeing from others' perspective essential to therapy?
- How does therapy free a patient?

Implications: A mechanism of change

- *Mentalizing* (seeing behavior in terms of mental states) entails **collaboration**
  - Seeing from **other's perspective**
  - Treating the **other as** a **person**
  - **Recognizing** them as an **agent**
  - **Assuming they** have things to **teach you** – since mental states are opaque

Implications: The nature of psychopathology

- Social adversity (most deeply **trauma)** is the **destruction of trust in social knowledge** of all kinds →**rigidity**, being **hard to reach**
- Cannot change because **cannot accept** new information **as relevant** (to generalize) to other social contexts
- **Personality disorder** is not disorder of personality (except by old definition of being enduring) but **inaccessibility to cultural communication** from
  - Partner
  - Therapist
  - Teacher

} **Epistemic Mistrust**

Implications: The nature of psychopathology

- **Epistemic mistrust follows** experiences of **maltreatment** or abuse
  - Therapists ignore this knowledge at their peril
- Personality disorder is a **failure of communication**
  - It is not a failure of the individual but a **failure of a relationship**
  - It is associated with an **unbearable sense of isolation** in the patient generated by epistemic mistrust
  - Our inability to communicate with patient causes **frustration in us** and a tendency to **blame the victim**
  - We feel they are not listening but actually it is that they find it **hard to trust** the truth of what they hear

Implications: The nature of psychotherapy

- *Mentalizing* patients may be **a common factor** to psychotherapy **not** because we need **to learn about** our **minds** to learn about those of others
- **Mentalizing is** a generic way of establishing **epistemic trust and achieving change**
  - Our subjectivity being understood is necessary **key to open up** wish to learn about world including social world
  - Open a key biological route to information transmission and possibility of change **epistemic super-highway**
  - Experience of **feeling thought** about makes us feel **safe** enough to **think about social world**

Implications: The nature of psychotherapy

- Therapy is not just about the **what** but the **how of learning:**
  - **Opening the person's mind** via establishing **epistemic trust** (**collaboration**) so he/she can once again trust the social world by changing expectations
  - It is **not just what is taught** in therapy that teaches, but the evolutionary **capacity for learning from social situation** is rekindled
  - Therapy interventions are effective because they open the child to **social learning experience** which then feed back in virtuous cycle

Psychotherapy may be effective for **two reasons**

- Learning **content** → by focusing on **trustworthy aspects of context**
  - We may have some **wisdom** that is worth communicating
  - Once epistemic superhighway is open the patient can **learn from us**
- Learning about **sources of knowledge** → by providing a clear **social illustration of trust** we undo epistemic isolation
  - By using **ostensive cues** and establishing a sense that we are concerned to see the **world from the patient's standpoint** we model a situation of interpersonal trust
  - **Improved understanding** of social situation → Leads to better understanding of attachment figure → more trusting (less paranoid) interpersonal relationships → it opens up the potential to feeling sensitively responded to in **virtuous cycle**

Implications: Learning beyond therapy

- What is **the process at work:**
  - **Limitless** therapies - 1,246 different ways to understand
  - But each model capable to provide a **content to treatment** that makes person feel understood
  - The **rationale** of the treatment and the **model** of **pathology** and the model of **therapeutic** effect **gives the treatment the content to create the process**
  - Mentalizing by itself is not a realistic therapy – it does not tell the therapist what to focus on, **just focusing** the patient **on** their **thoughts** and those of others around them **will not achieve change**
  - Improvement based on learning from **experience beyond therapy**

Implications: Learning beyond therapy

- The **specific frame of the therapy** around which mentalizing occurs
  - the model of **mind**,
  - the model of **interaction**,
  - the model of **underlying dysfunction**,
  - the model of **therapeutic goals**

} **The scaffolding for creating epistemic trust**

- The enhancing of mentalizing is **also** a common factor that achieves **improved social relationships**
- Improved sense of epistemic trust enables **learning from experience** → change due to what happens beyond CAMHS
- The **enhancing of epistemic trust** may be **achieved by treatment** but also a **consequence of improved social relationships** and consequent on what happened in the social world.

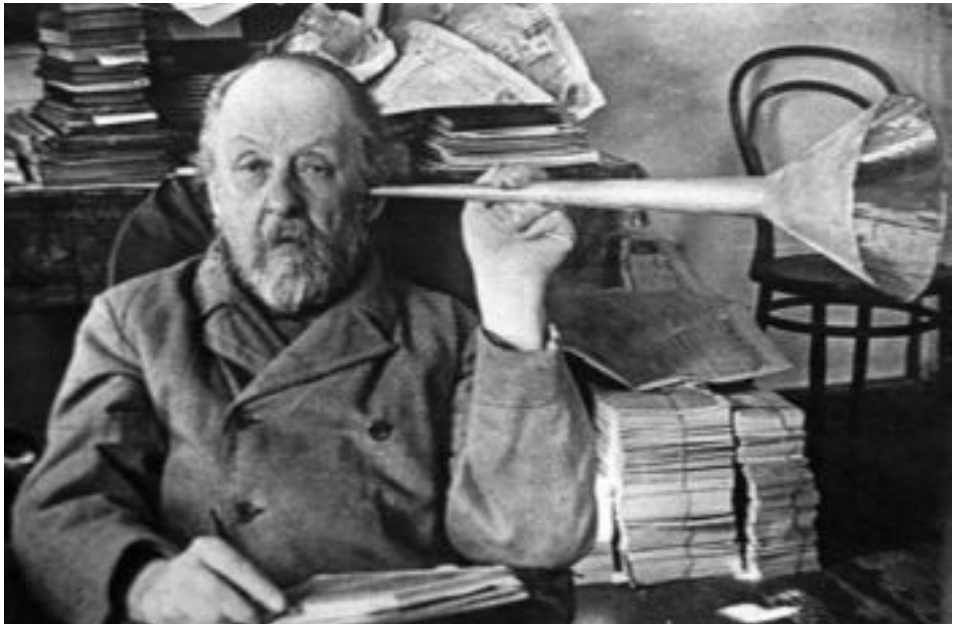
British Psychoanalytic Council

British Association for Counselling and Psychotherapy

BABCP
BRITISH ASSOCIATION FOR BEHAVIOURAL & COGNITIVE PSYCHOTHERAPIES
Registered Charity No 1098704

UKCP
UK COUNCIL FOR PSYCHOTHERAPY

Why is participation important in MH?



Decision support & routine measuring of experience & outcome:

NOT a management tool but a tool to place the child and family at the centre of THEIR treatment experience

Why is patient participation essential?

Now let me say it in longer words…

No! Explain so people can understand for once what you are talking about!!!

And now you already look more interesting!

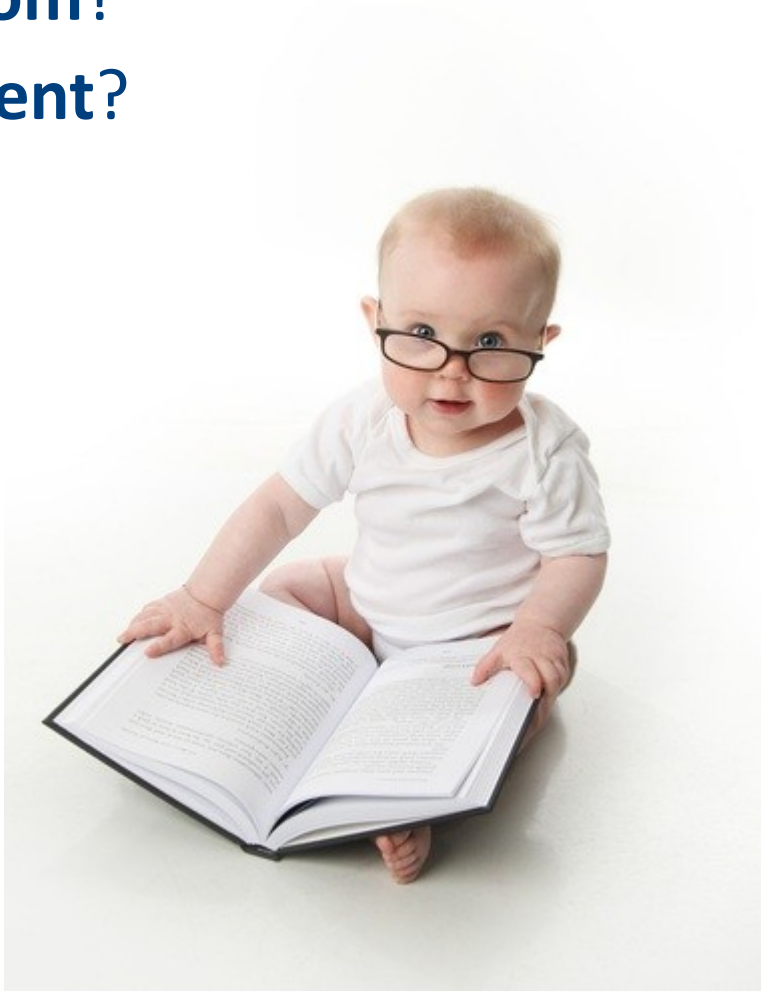
The **transmission of culture** and why therapy works

How do we know **who to learn from**?

How does **trust** relate to **attachment**?

What do you need to do?

Why should it work?



Getting comfortable in the social world

Adapting to the social world is a steep learning curve

Getting comfortable in the social world

For example, it is not obvious what is the true function of all the objects we use.

Getting comfortable in the social world

Luckily, humans have evolved to teach and learn from each other quickly and efficiently …

Getting comfortable in the social world

... quickly and efficiently if certain conditions are met …

Blocks in the epistemic superhighway

… but this special interpersonal channel for learning about the social world is not always tuned in.

Tuning in to the interpersonal channel

When there is abuse, there is no trust, the mind is blocked and it is impossible to move forward

Tuning in to the interpersonal channel

Win the other person's trust by responding contingently to their feelings and thoughts, showing them that you are hearing and thinking about what's going on in their mind …

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