

What works for whom revisited –
dramatically: The end or the
beginning of the great psychotherapy
debate?

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With Peter Fonagy and Liz Allison

Overview

- **What works** in psychotherapy: critical approach to
 - Specific factors
 - Common factors: therapeutic alliance
 - Expectancy (placebo) effects
 - Patient factors
- A new take on treatment: a spectrum of interventions rooted in evolutionary views regarding social cognition
- The elusive environment

- Luyten, P., Blatt, S. J., Van Houdenhove, B., & Corveleyn, J. (2006). Depression research and treatment: Are we skating to where the puck is going to be? *Clinical Psychology Review*, 26(8), 985-999.
- Luyten, P., & Blatt, S. J. (2007). Looking back towards the future: Is it time to change the DSM approach to psychiatric disorders? The case of depression. *Psychiatry: Interpersonal and Biological Processes*, 70(2), 85-99.
- Luyten, P., & Blatt, S. J. (2011). Integrating theory-driven and empirically-derived models of personality development and psychopathology: A proposal for DSM-V. *Clinical Psychology Review*, 31, 52-68.
- Luyten, P., & Blatt, S. J. (2013). Relatedness and self-definition in Normal and Disrupted Personality Development : Retrospect and Prospect. *American Psychologist*, 68(3), 172-183.
- Luyten, P., Blatt, S. J., & Mayes, L. C. (2012). Process and outcome in psychoanalytic psychotherapy research: The need for a (relatively) new paradigm. In R. A. Levy, J. S. Ablon & H. Kächele (Eds.), *Handbook of Evidence-Based Psychodynamic Psychotherapy. Bridging the Gap Between Science and Practice* (2nd ed., pp. 345-360). New York: Humana Press/Springer.
- Fonagy, P., & Luyten, P. (in press). A multilevel perspective on the development of borderline personality disorder. In D. Cicchetti (Ed.), *Development and Psychopathology* (3rd ed.). New York: Wiley.
- Fonagy, P., Luyten, P., & Allison, E. (2013). Teaching to learn from experience: Epistemic mistrust, personality, and psychotherapy. *Manuscript submitted for publication*.



Why we need to know how psychotherapy leads to change

- A **few mechanisms** might explain many treatments
- We need to know what **components to improve** and what **components must not be diluted**
- May help us identify **moderators** of treatment (variables on which effectiveness may depend)



Why we need to know how psychotherapy leads to change

- **Generally two approaches:**
 - **Specific factors/techniques**
 - **Common factors**
- **An alternative view?**

Why we need to know how psychotherapy leads to change

- **Different treatments are supported by evidence** that they produce change
- Despite commonalities, they have very **different assumptions** about
 - **Why** these treatments lead to **change**
 - Different proposed moderators/mediators
 - How to **conceptualize personality pathology**
 - See the DSM 5 saga!

What we increasingly realize

- It is unlikely that these treatments “cut nature at its joints”:
 - Common brain mechanisms
 - NIMH RDOC initiative
- If research on outcomes improves intervention techniques than therapies should have in general increased in effectiveness

Secular trends in ESs for EBTs: Effect size of CBT in 29 trials for youth depression

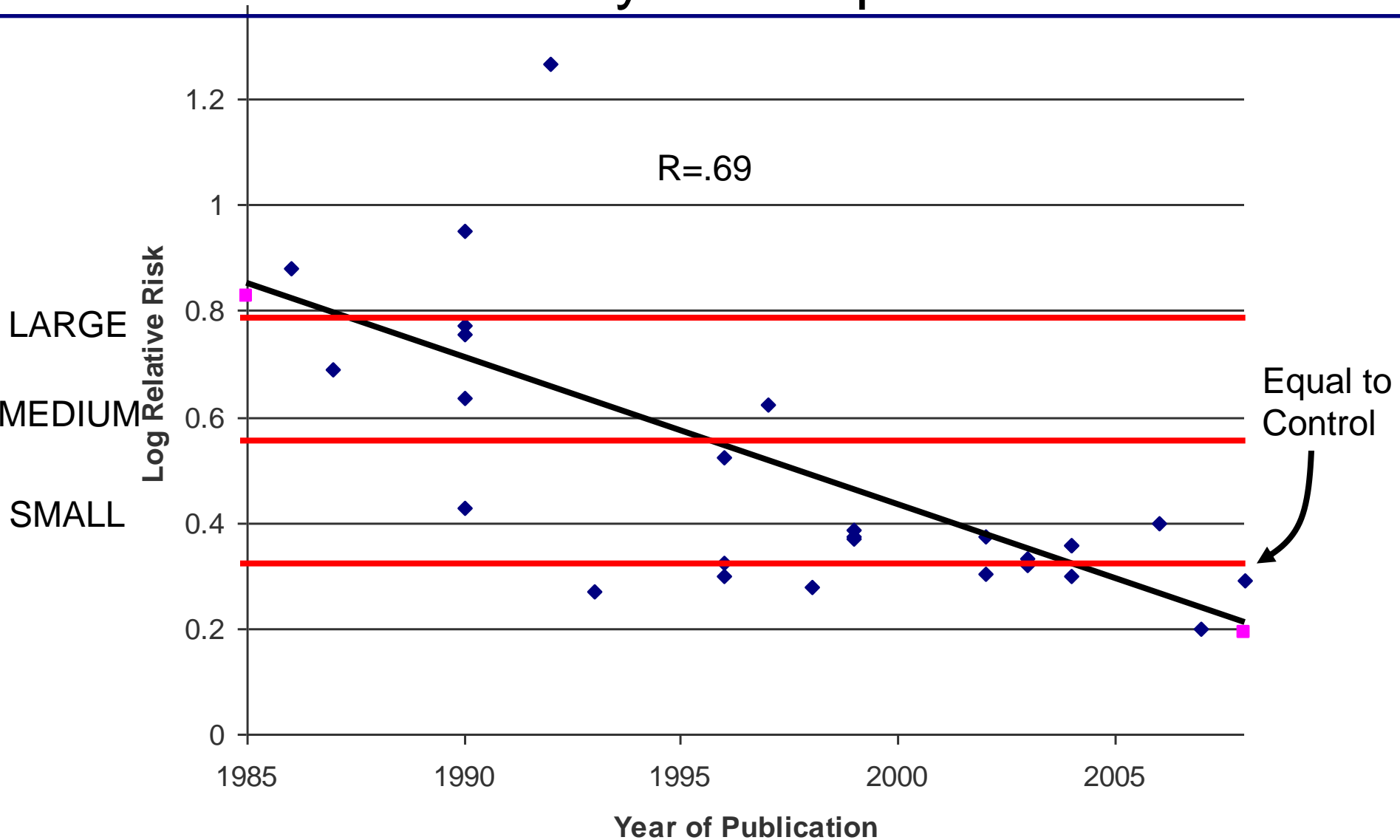
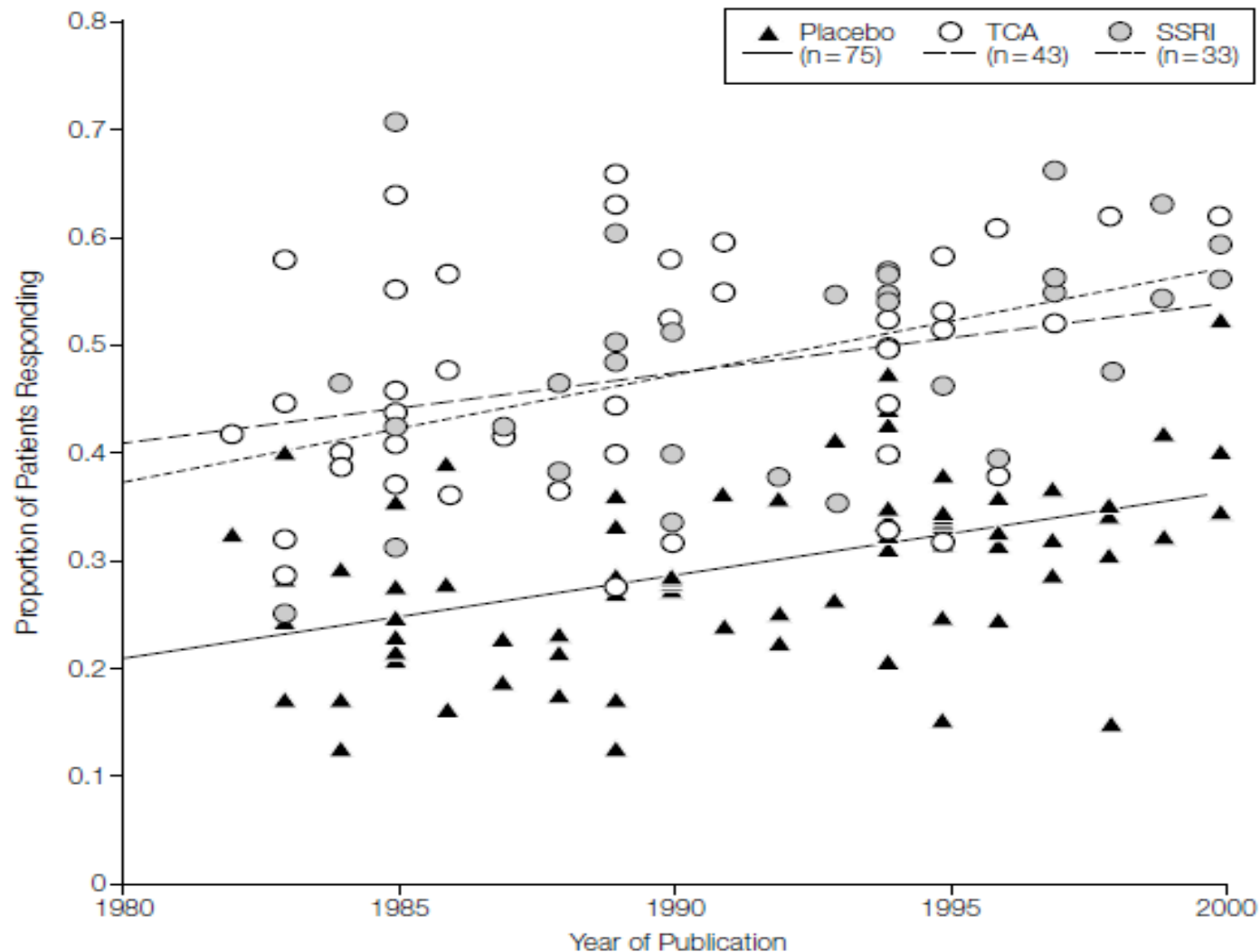



Figure. Proportion of Patients Assigned to Placebo, Tricyclic Antidepressants (TCAs), and Selective Serotonin Reuptake Inhibitors (SSRIs) Who Showed a 50% or Greater Improvement in Hamilton Rating Scale For Depression Score by Year of Publication



Walsh, B., Seidman, S. N., Sysko, R., & Gould, M. (2002). Placebo response in studies of major depression: Variable, substantial, and growing. *JAMA*, 287(14), 1840-1847. doi: 10.1001/jama.287.14.1840

- 
- Are we witnessing something **similar in research on psychotherapy generally?**
 - We do not know because we do not have the relevant studies yet
 - **Generic/common factors approach?**
 - We simply do not know as most studies did not include common factors approach



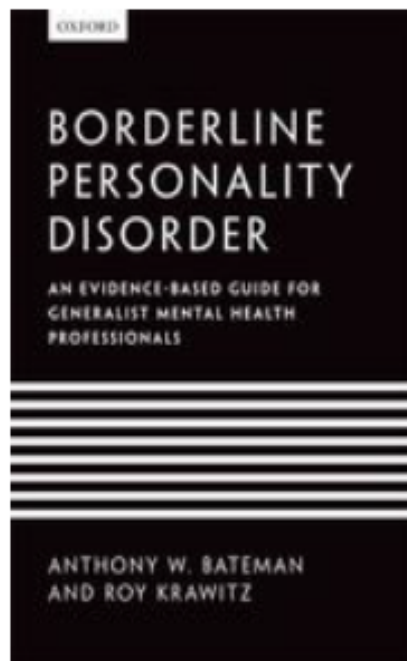
The writing on the wall??

Time may not be on our side!

- Studies that did include a comparison with a common factors approach show that specific treatments are not particularly more effective
 - TFP/DBT/SPT (Clarkin et al. 2007)
 - DBT vs GPM (McMain et al., 2009, 2012)
 - DBT vs SCM (Feigenbaum et al. 2011)
 - MBT vs SCM (Bateman & Fonagy, 2009)
 - MBT vs SPT (Jorgensen et al. 2012)
 - CAT vs GCC (Chanen et al. 2008)

Borderline Personality Disorder:

An evidence-based guide for generalist mental health professionals



Anthony W. Bateman, Consultant Psychiatrist and Psychotherapist, UK and **Roy Krawitz**, Consultant Psychiatrist and DBT therapist, Waikato District Health Board, New Zealand

- Provides an evidence-based intervention for treating people with borderline personality disorder
- Written by two highly experienced clinicians, providing the generalist mental health clinician with a thorough understanding of this disorder
- Includes advice on helping the family of the patient - often neglected in the treatment
- Outlines top 10 interventions that can be given by general mental health clinicians for people with BPD which helps increase their own skills in the area

978-0-19-964420-9

Paperback | May 2013

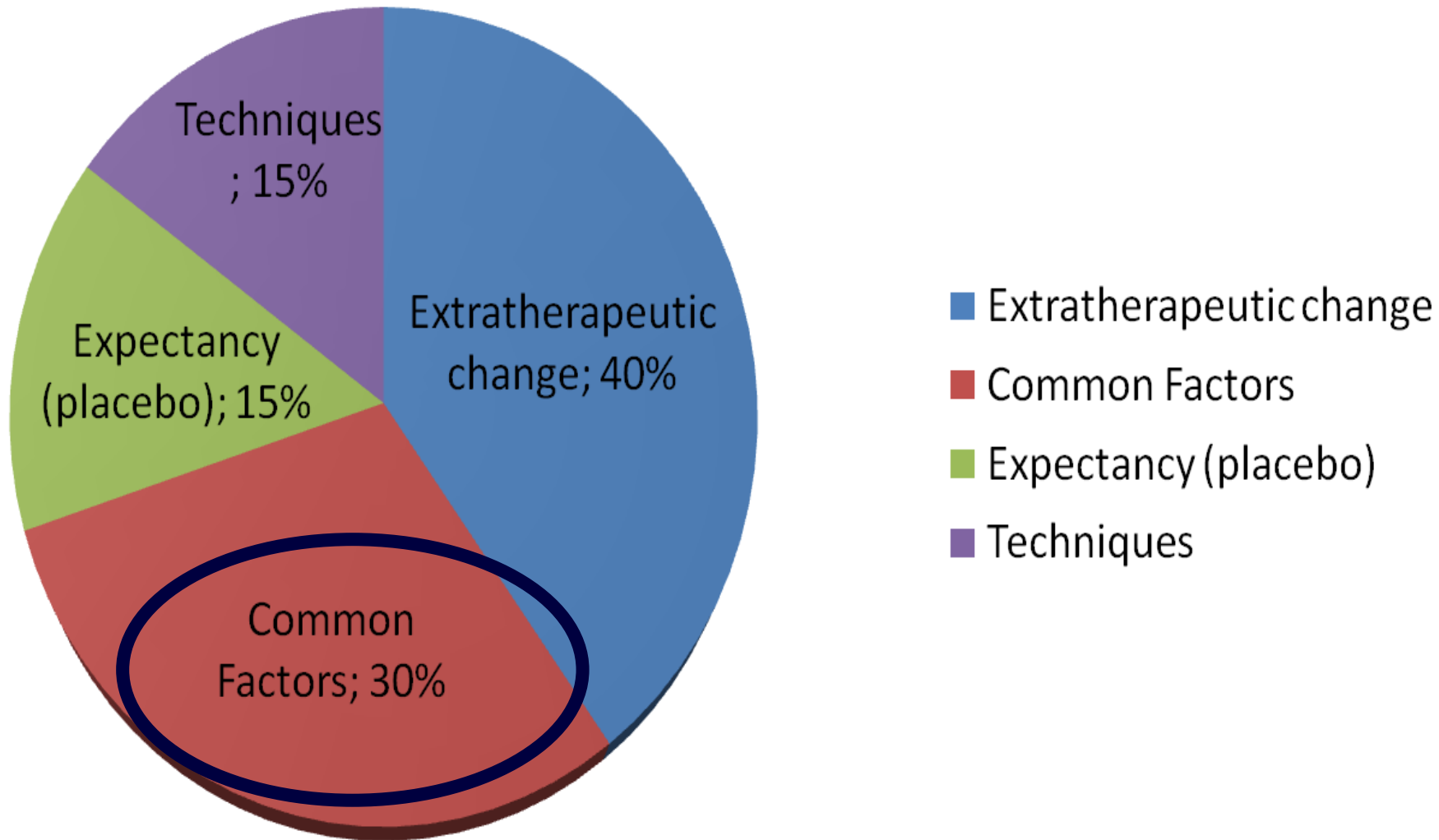
£24.99

Is that all there is? Common factors?

Or, lo and behold,
placebo?



Factors responsible for therapeutic change



The common factors approach



What are the common factors?

Let's examine them

The “Dodo Bird Verdict”

*“everybody has won
and must have prizes”*

- Psychotherapies are **better than no treatment**
- Psychotherapies are **better than medication**
- All psychotherapies **have similar outcomes**



APA, 2012; Zuroff et al., 2010; Lutz et al., 2007

The “Dodo Bird Verdict”

- Since 1975, meta-analyses show no superiority of any *bona fide* psychotherapy
- Change does not depend on specific techniques
- Common factors are the main influencers on change



APA, 2012; Zuroff et al., 2010; Lutz et al., 2007

The “Dodo Bird Verdict”

CBT vs. Psychodynamic Therapy for Personality Disorders
META-ANALYSIS

These result were
replicated in 2007



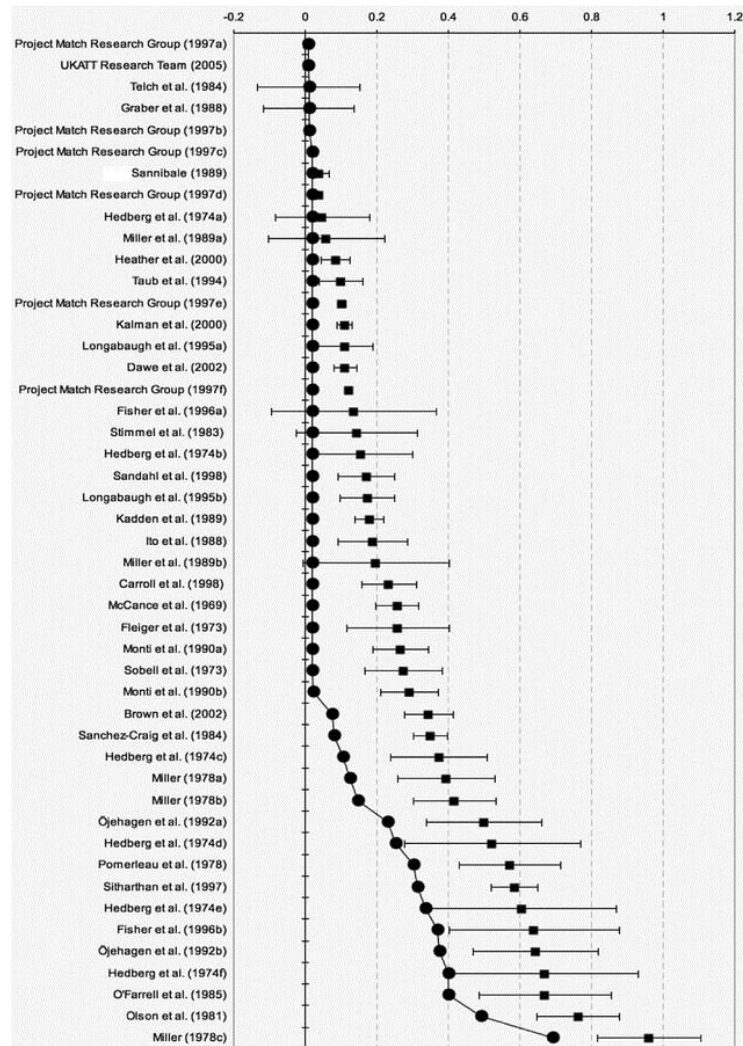
CBT and Psychodynamic psychotherapy are equally efficacious in different settings :

- Individual outpatient psychotherapy
- Group psychotherapy
- Day-hospital individual psychotherapy
- Inpatient individual psychotherapy

Verheul & Herbrink, *Int Review Psych*;
2007

The “Dodo Bird Verdict”

Comparison of *bona-fide* treatments
META-ANALYSES



All *bona fide* treatments are equally efficacious for the intervention in alcoholism

(pooled effect sizes after randomly assigning negative values = 0)

All *bona fide* treatments are equally efficacious for the intervention in PTSD

(pooled effect sizes after randomly assigning negative values = 0)

All *bona fide* treatments are equally efficacious for children and adolescents with depression, anxiety, conduct disorder and ADHD

(pooled effect sizes after randomly assigning negative values = 0)

Benish et al, 2008; Imel et al., 2008; Miller et al., 2008; Spielmans et al., 2007

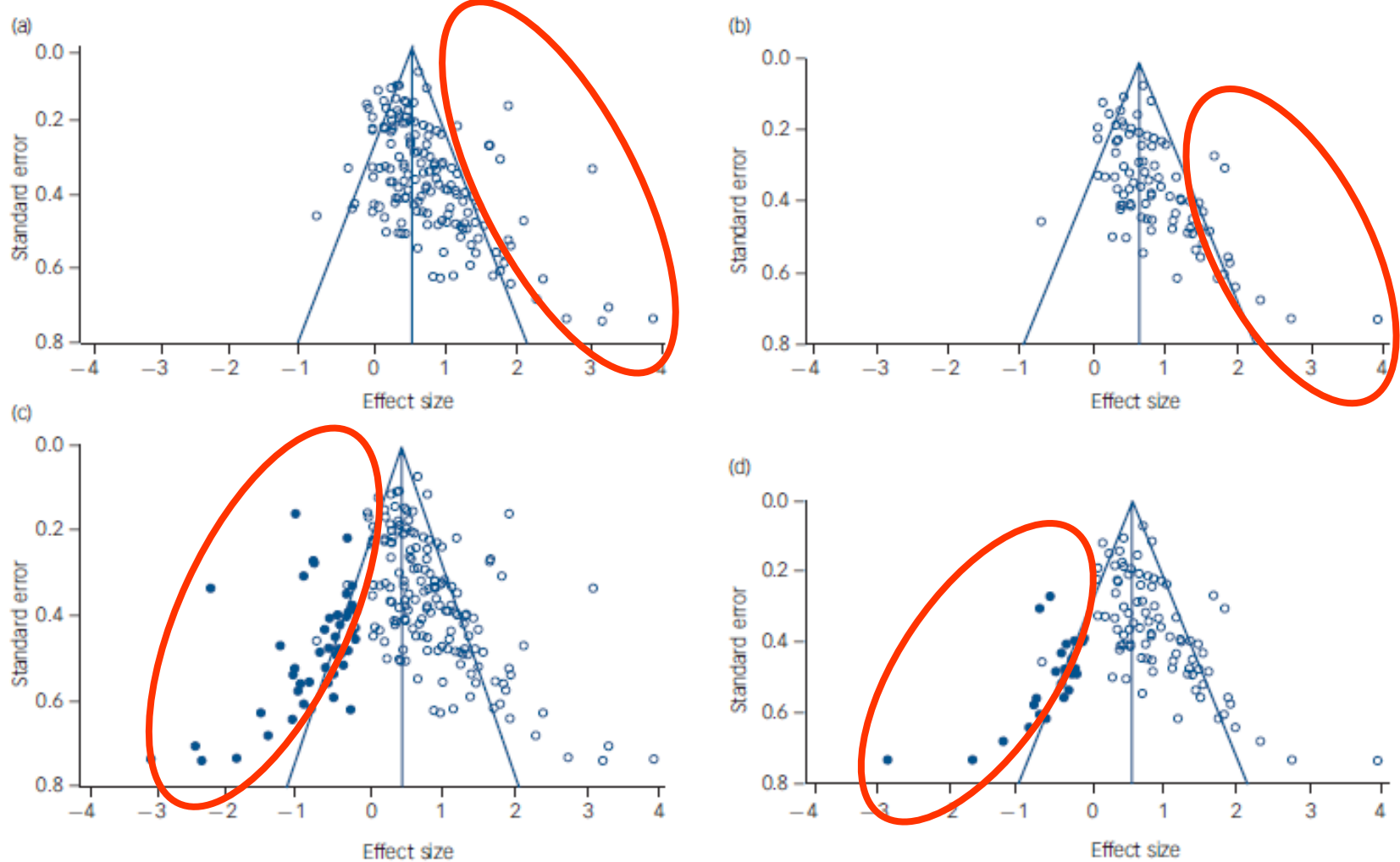


Fig. 2 Funnel plots. (a) All psychotherapy studies, without imputed studies; (b) studies of cognitive-behavioural therapy (CBT) only, without imputed studies; (c) all psychotherapy studies, with imputed studies (black circles); (d) CBT studies only, with imputed studies. Imputation according to Duval & Tweedie trim and fill procedure.

Cuijpers P, Smit F, Bohlmeijer E, Hollon SD, Andersson G: Efficacy of cognitive behavioural therapy and other psychological treatments for adult depression: Meta-analytic study of publication bias. *The British Journal of Psychiatry* 2010;196:173-178

The Therapeutic Alliance?

- Does the **therapeutic relationship explain more?**
 - establishment of a **strong working alliance**
 - My therapist and I have *figured out a good way to work* on my sad or angry emotions.
 - My therapist and I *work well together* on things that bother or upset me
 - therapist capacity for **understanding**
 - My therapist really *understands* what bothers or upsets me
 - I feel uncomfortable talking about my thoughts and feelings with my therapist
 - feeling supported and **cared about**
 - I don't get much support from my therapist (reversed)
 - I feel like my therapist is *on my side* and tries to help me
 - **agreement** between patient and therapist **on treatment goals.**
 - I *use my time* with my therapist *to make changes* in my thoughts and behavior
 - I would rather not work on my problems or issues with my therapist

The score controlling for severity/prior change in symptoms

■ negative studies

10

- Barber et al. 1999, 2001
- De Rubeis & Feeley, 1990
- Feeley et al., 1999
- Gaston et al. 1991
- Puschner et al. 2008
- Ryum et al. 2009
- Strunk et al. 2010, 2012
- Hendriksen et al. 2013

■ positive studies

10

- Barber et al. 2000
- De Bolle et al. 2010
- Crits-Cristoph et al. 2009, 2011
- Falkenström et al. 2013
- Klein et al. 2003
- Strauss et al. 2006
- Tasca & Lampard, 2012
- Webb et al. 2011
- Zuroff & Blatt, 2006

The working alliance controversy

Therapeutic Alliance Predicts Symptom Improvement Session by Session

Falkenström et al., (2013) Journal of Counseling Psychology

Fixed effects	<i>b</i>	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,

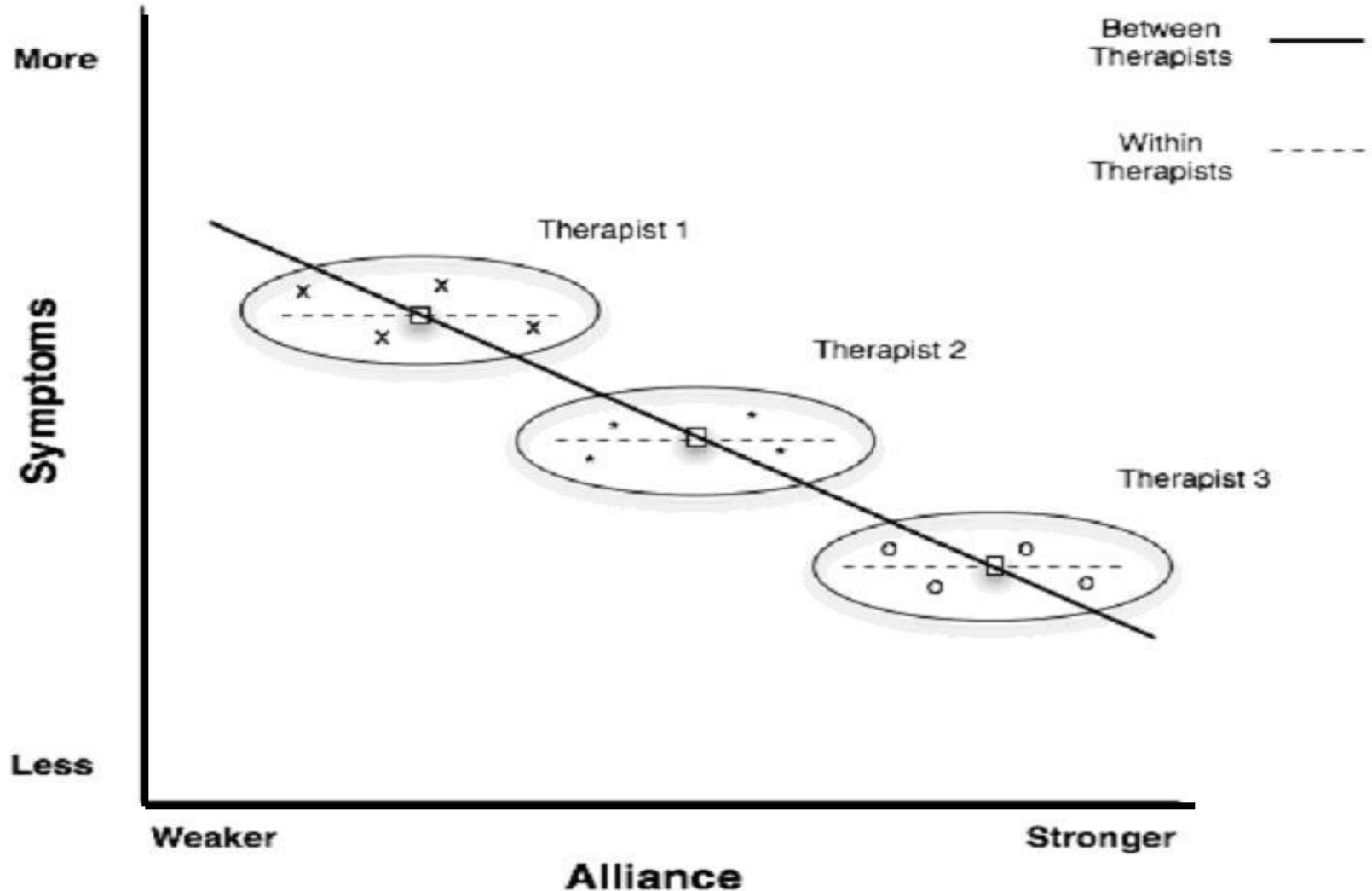
Reciprocal Influence of Alliance Outcome in Day Treatment for Eating Disorders

Model	Alliance	
	<i>b</i> (<i>SE</i>)	<i>p</i>
Baseline ($\gamma = 0$)	-0.23 (0.08)	.003
Model 1 (alliance \rightarrow restrict $\gamma =$ free)	-0.22 (0.08)	.003
Model 2 (restrict \rightarrow alliance $\gamma =$ free)	-0.18 (0.09)	.045
Final model ($\gamma =$ free)	-0.23 (0.05)	<.001

SO WHY DOES IMPROVED ALLIANCE IN SESSION_{t-1} LEAD TO IMPROVEMENT IN SESSION_t?

Within and between therapist variance

Baldwin et al. 2007



What happens in and between sessions?

- Is it to do with **learning about oneself?**

- As a result of theory-specific interventions
- As a result of common features

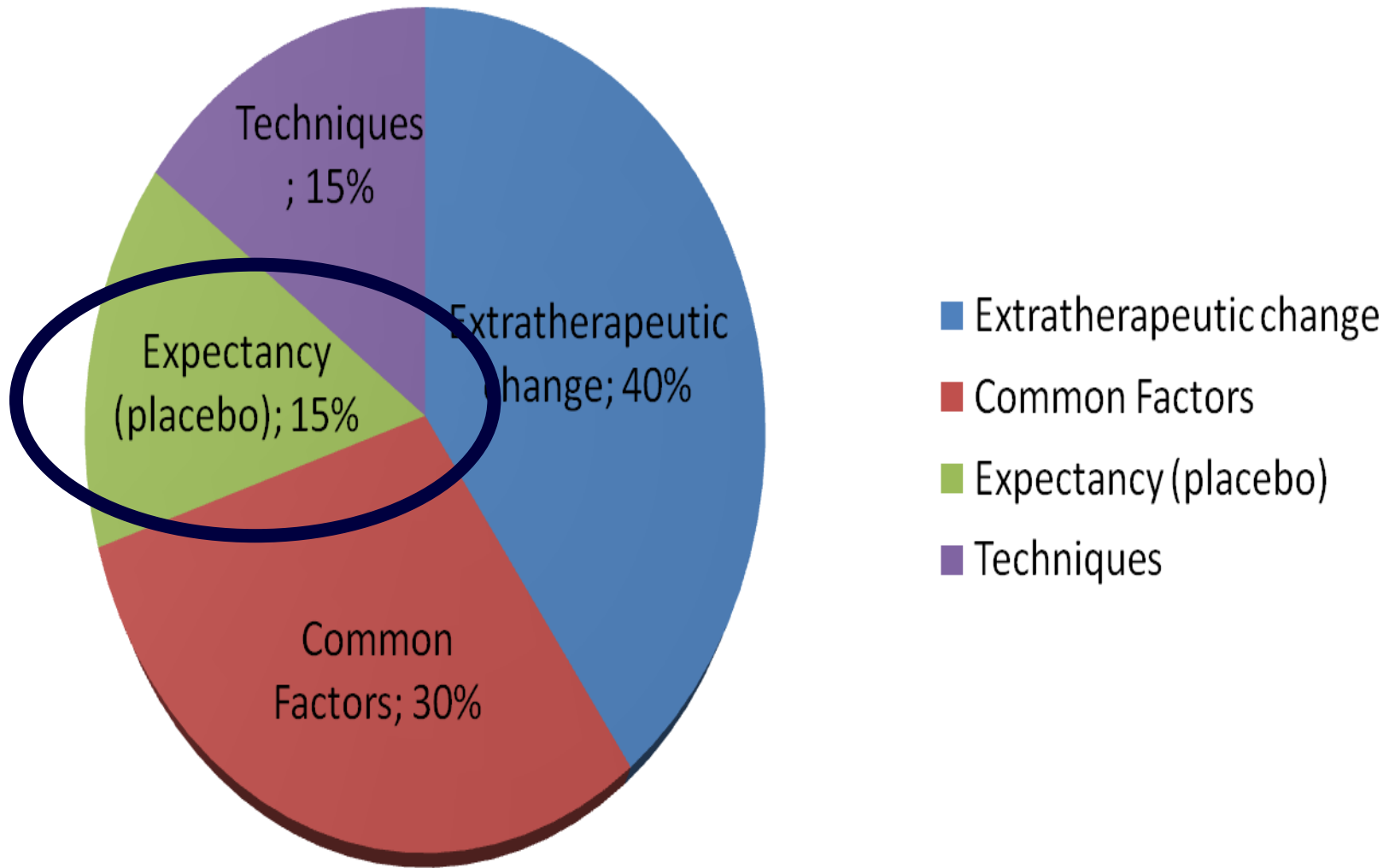
- Is it to do with learning from others?

- In the treatment?
- Outside the treatment: opening up a **social learning process** that benefits the patient **between sessions**
- Let's remember this when we examine placebo and patient factors



Expectancy/Placebo

Factors responsible for therapeutic change



Expectancy/Placebo

■ **Placebo** effect

- What is placebo?
- Why would it be effective?

■ **Placere = to placate**

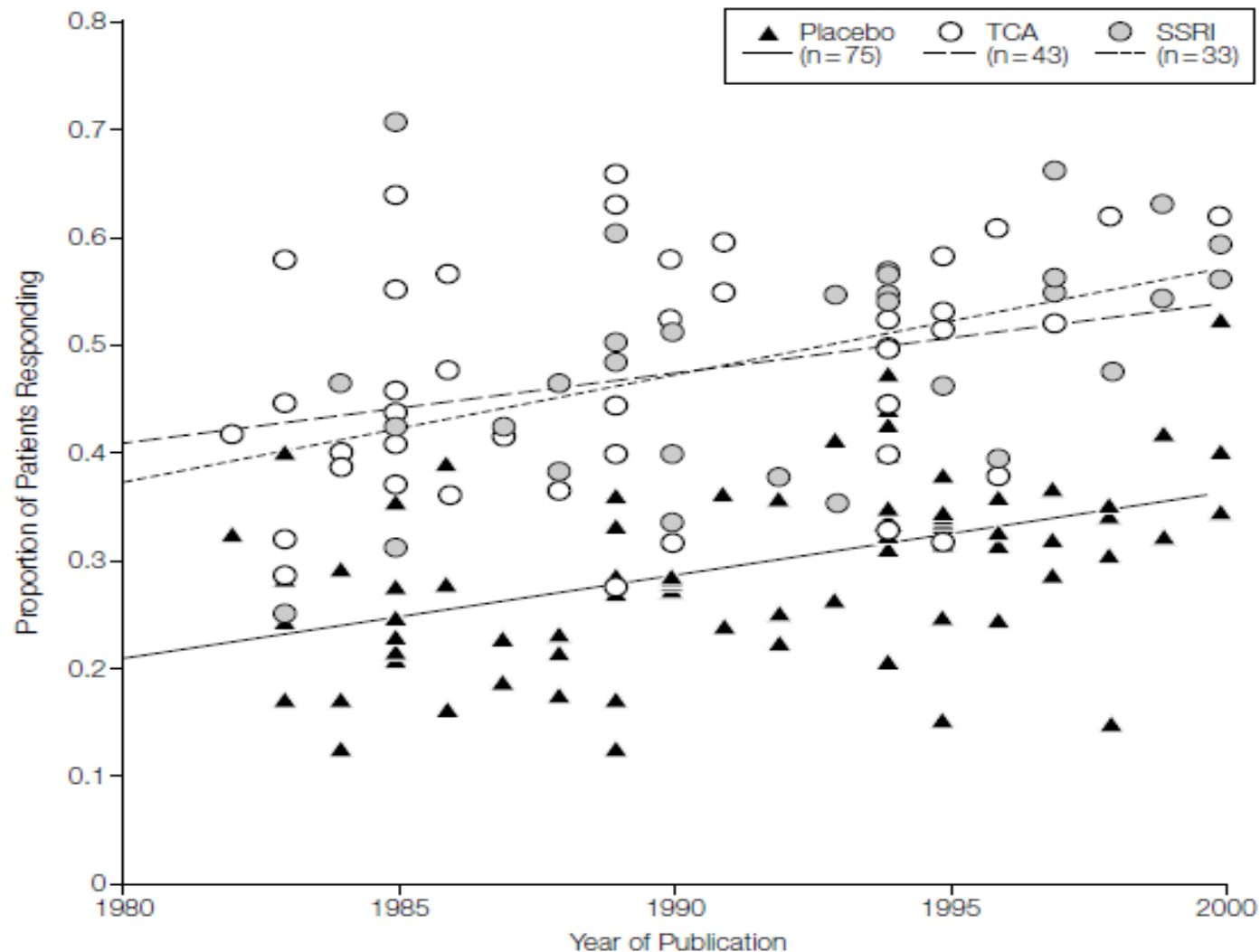
=> Attachment and feeling of being understood/validated

- **So what works in psychotherapy??**

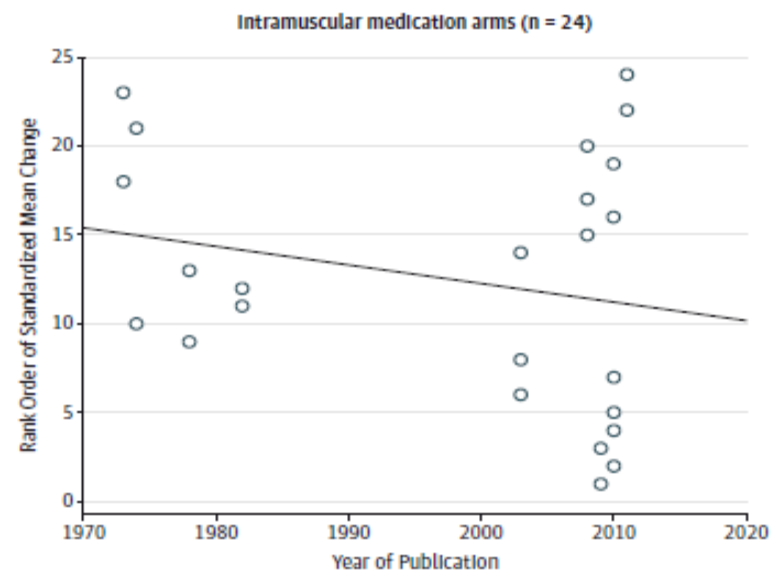
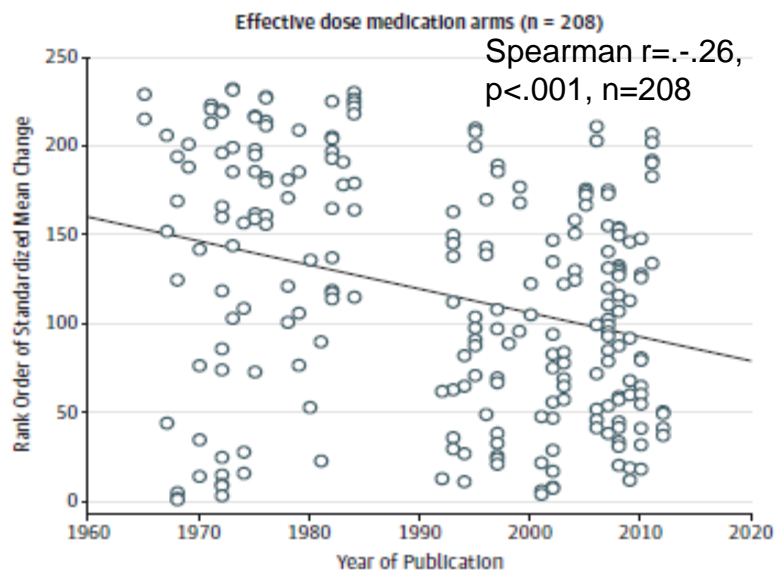
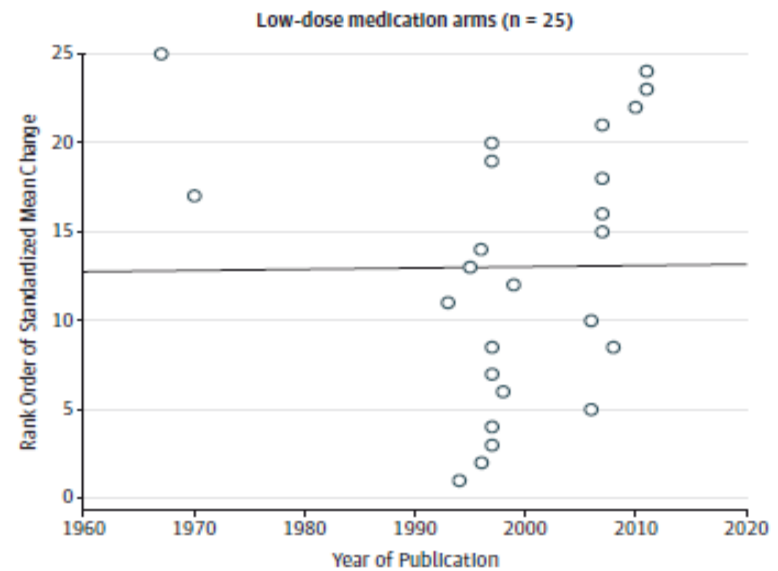
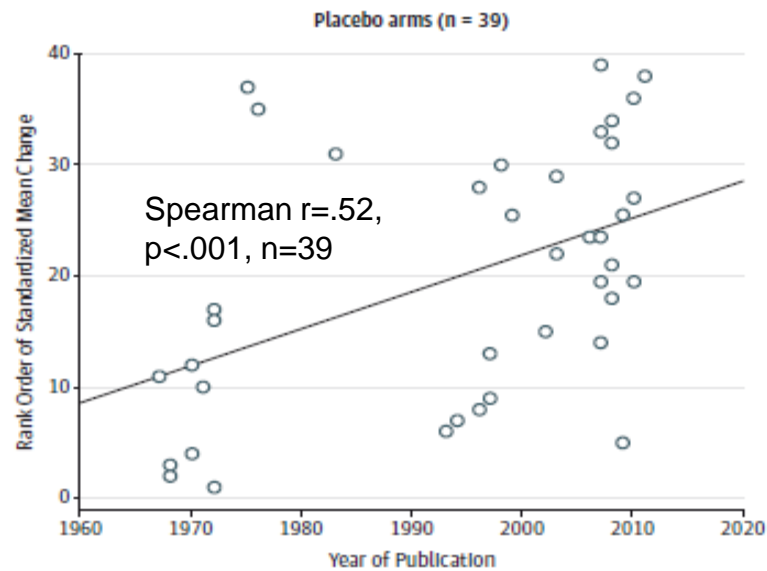
The placebo effect is real

- Placebo effect can be robustly demonstrated and **approaches treatment effects** in some conditions (Wampold et al. 2005, 2007)
- Placebo effects can be **undone** (nocebo)
- **Neurobiology** is increasingly understood
- Placebo effect may be **increasing**, which suggests the importance of **cultural factors** (i.e., growing belief in /credibility of treatments)

Figure. Proportion of Patients Assigned to Placebo, Tricyclic Antidepressants (TCAs), and Selective Serotonin Reuptake Inhibitors (SSRIs) Who Showed a 50% or Greater Improvement in Hamilton Rating Scale For Depression Score by Year of Publication



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Rutherford, B. R., Pott, E., Tandler, J. M., Wall, M. M., Roose, S. P., & Lieberman, J. A. (2014). Placebo response in antipsychotic clinical trials: A meta-analysis. *JAMA Psychiatry*. doi: 10.1001/jamapsychiatry.2014.1319



Placebo: the key role of the *‘healing environment’*

*“**expectation** about response plays an important role in the ultimate response to a treatment”*

Kam-Hansen S et al. Altered placebo and drug labeling changes the outcome of episodic migraine attacks. *Sci Transl Med* 2014; 6; 218ra5.

The healing environment

- Placebo is dependent on feeling **understood and validated**
- By someone who is seen as an **authority = trusted source of knowledge**
- “**invalidation**, i.e. communicating a lack of understanding and acceptance to the patient (albeit unintentionally), is a **key factor in understanding the nocebo response**”

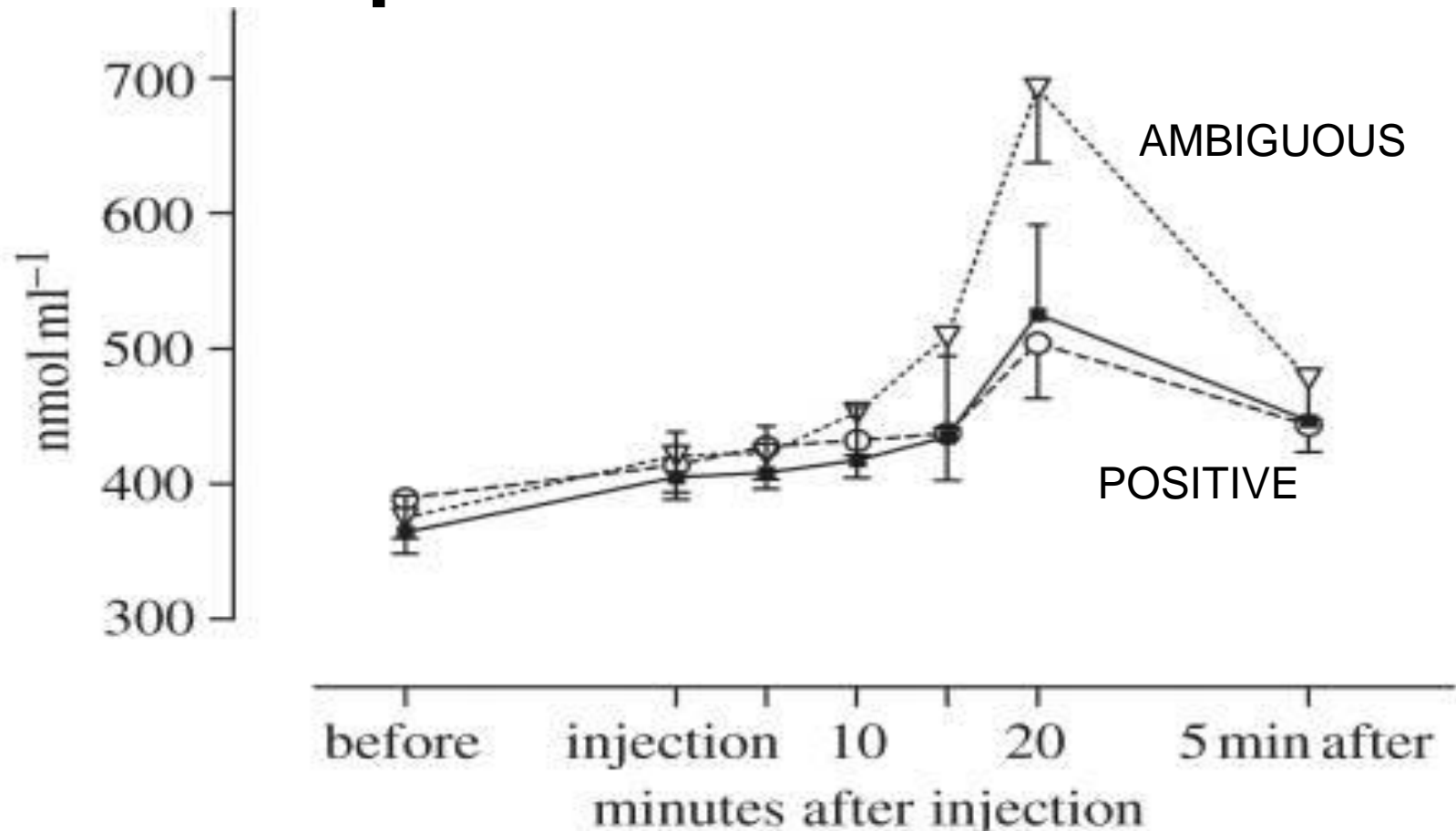
ville-Harris, M., & Dieppe, P. (in press). Bad is more powerful than good: the nocebo response in medical consultations. *The American Journal of Medicine*(0). doi: <http://dx.doi.org/10.1016/j.amjmed.2014.08.031>

Jubb, J., & Bensing, J. M. (2013). The sweetest pill to swallow: How patient neurobiology can be harnessed to maximise placebo effects. *Neuroscience & Biobehavioral Reviews*, 37(10, Part 2), 2709-2720.

- Placebo effect in IBS increased from 44% to 62% when provided with "warmth, attention, and confidence"

Kaptchuk TJ, Kelley JM, Conboy LA, Davis RB, Kerr CE, Jacobson EE, Kirsch I, Schyner RN, Nam BH, Nguyen LT, Park M, Rivers AL, McManus C, Kokkotou E, Drossman DA, Goldman P, Lembo AJ (2008). "Components of placebo effect: randomised controlled trial in patients with irritable bowel syndrome". *BMJ* 336 (7651): 999–1003.

Nocebo: Cortisol response after placebo-injection, with ambiguous or positive comments



The attachment/mentalizing plot thickens

■ Psychological mechanisms

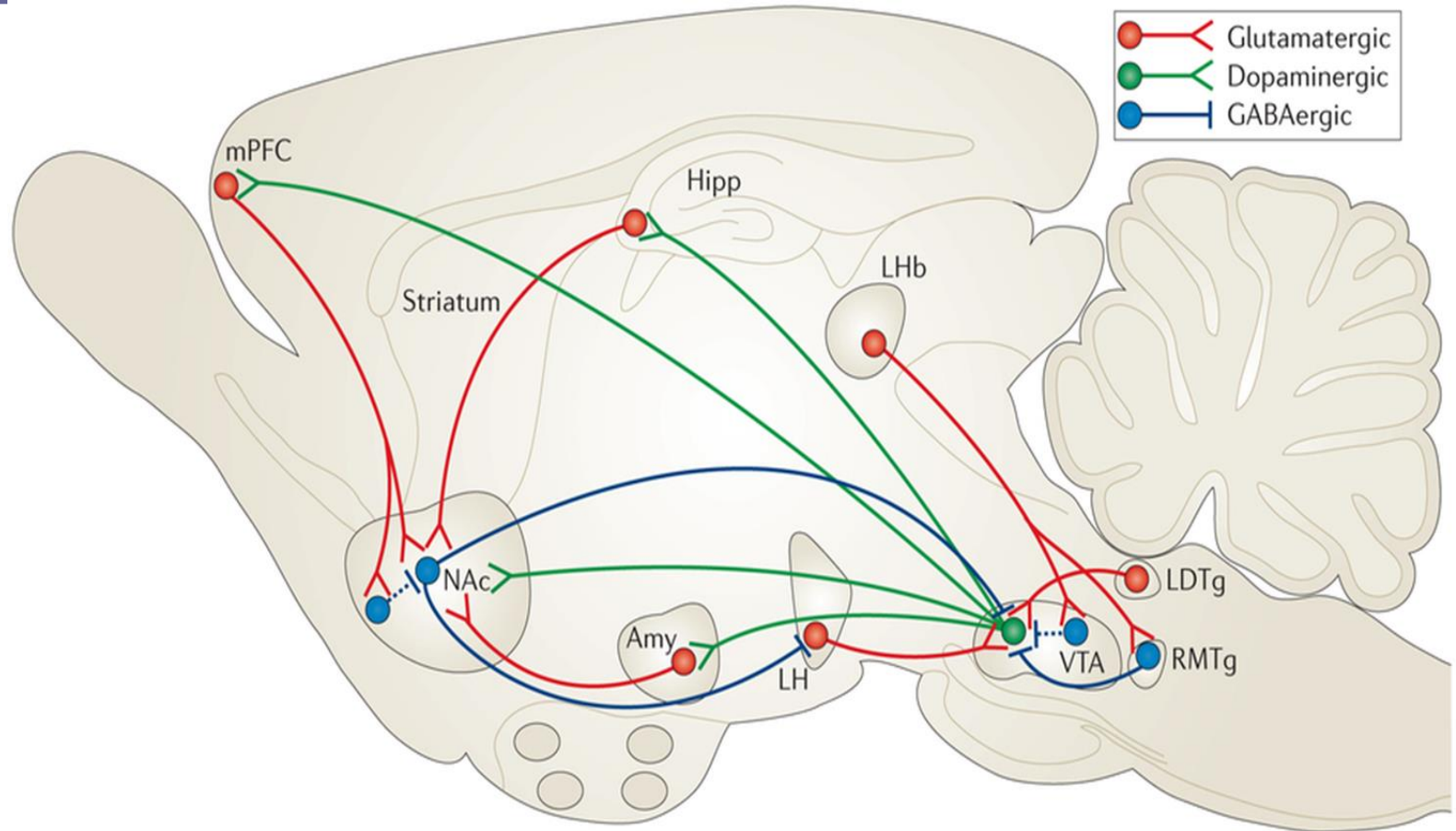
- Feeling **validated and understood**
- Leadings to feelings of **trust and expectation**

■ Biological mechanisms

- Opioid
- Cannabinoids
- dopaminergic
- Oxytocinergic

= neurotransmitters/neuropeptides involved in
reward/attachment linked to mentalizing

The mesocorticolimbic dopaminergic reward circuit



The attachment plot thickens


- “Personality traits related to **reward** (and, from a neurobiological point of view, the **dopaminergic activation**), such as novelty seeking and reward responsiveness, accounted for about 25 to 30% of the variance in placebo analgesic responses.”*
- **Reclusiveness** was associated with poor placebo response in IBS**
- **Extraversion, agreeableness, openness to experience** associated with placebo response in IBS***
- **Ego-Resiliency, NEO Altruism, NEO Straightforwardness** (positive predictors) and **NEO Angry Hostility** (negative predictor) scales accounted for 25% of the variance in placebo analgesic responses.****
- Participants scoring above the median in a composite of those trait measures also presented greater placebo-induced activation of μ -opioid neurotransmission in the subgenual and dorsal anterior cingulate cortex (ACC), orbitofrontal cortex, insula, nucleus accumbens, amygdala and periaqueductal gray (PAG).****

*Schweinhardt P et al. The anatomy of the mesolimbic reward system: a link between personality and the placebo analgesic response. *J Neurosci* 2009; 29, 4882–4887.

**Conboy, L. A., et al (2010). Which patients improve: Characteristics increasing sensitivity to a supportive patient–practitioner relationship. *Social Science & Medicine*, 70(3), 479-484.

***Kelley, J. M., Lembo, A. J., Ablon, J. S., Villanueva, J. J., Conboy, L. A., Levy, R., . . . Kaptchuk, T. J. (2009). Patient and practitioner influences on the placebo effect in irritable bowel syndrome. *Psychosomatic Medicine*, 71(7), 789-797.

****Pecina, M., Azhar, H., Love, T. M., Lu, T., Fredrickson, B. L., Stohler, C. S., & Zubieta, J.-K. (2013). Personality Trait Predictors of Placebo Analgesia and Neurobiological Correlates. *Neuropsychopharmacology*, 38(4), 639-646.

- 
- PET scan showed substantial release of dopamine in striatum in Parkinson patients with good response to placebo

de la Fuente R. et al. *Science*, 2002

Opioid system

643

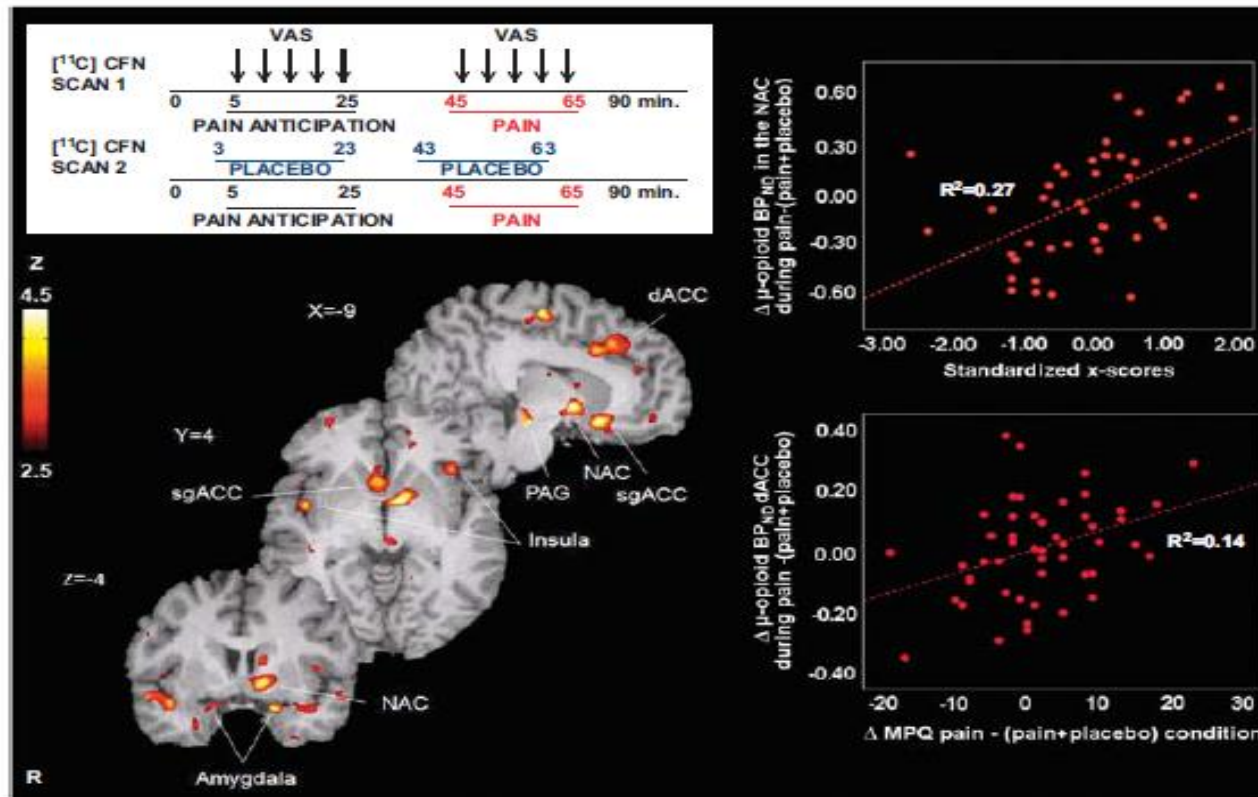


Figure 3 Upper left: experimental design. Two [¹¹C] carfentanil scans were obtained in each subject, with and without administration of a placebo. Lower left: regions of greater μ -opioid release during placebo administration in subjects with High x-scores vs Low x-score. Upper right: x-scores correlations with μ -opioid system activation (change in μ -opioid BP_{ND}) in the NAC after placebo administration. Lower right: correlations between μ -opioid system activation in the NAC during placebo and the change in pain ratings as measured with the MPQ. BP_{ND}, binding potential nondisplaceable; MPQ, McGill Pain Questionnaire; NAC, Nucleus accumbens; PAG, Periaqueductal gray; sgACC/dACC, subgenual/dorsal Anterior Cingulate Cortex; VAS, Visual analog scale.

Pecina, M., Azhar, H., Love, T. M., Lu, T., Fredrickson, B. L., Stohler, C. S., & Zubieta, J.-K. (2013). Personality Trait Predictors of Placebo Analgesia and Neurobiological Correlates. *Neuropsychopharmacology*, 38(4), 639-646.

Opioid system

- **Naloxone (opioid antagonist) inhibits placebo-analgesia**
- **Placebo *analgesia* mediated by the endogenous opioid system**

Levine JD et al. *Lancet*, 1978

Levine, Gordon, *Nature*, 1984

For a review, see Jubb & Bensing, 2013

Mentalizing and placebo: fMRI findings

- “**anticipation of pain** was associated with **increased** brain activity in the prefrontal cortex...

while **placebo analgesia** was related to **decreased** brain activity in pain-sensitive brain regions, including the thalamus, insula, and anterior cingulate cortex...”

Colloca & Benedetti. Nature Rev Neurosci 2005

- (medial) prefrontal cortex activity is essential, as demonstrated by:
 - Alzheimer patients: no placebo analgesic response
 - rTMS of DLPFC blocks placebo response

There is more than attachment/mentalizing

*“Placebo appears to be a **real neurobiological phenomenon** that has evolved through the selection pressure to be able to heal ourselves. The complex language and social structures of humans means that we **can attribute meaning to therapeutic encounters with culturally sanctioned authority figures and we can use our attachment to such figures to generate hope for recovery.**”*

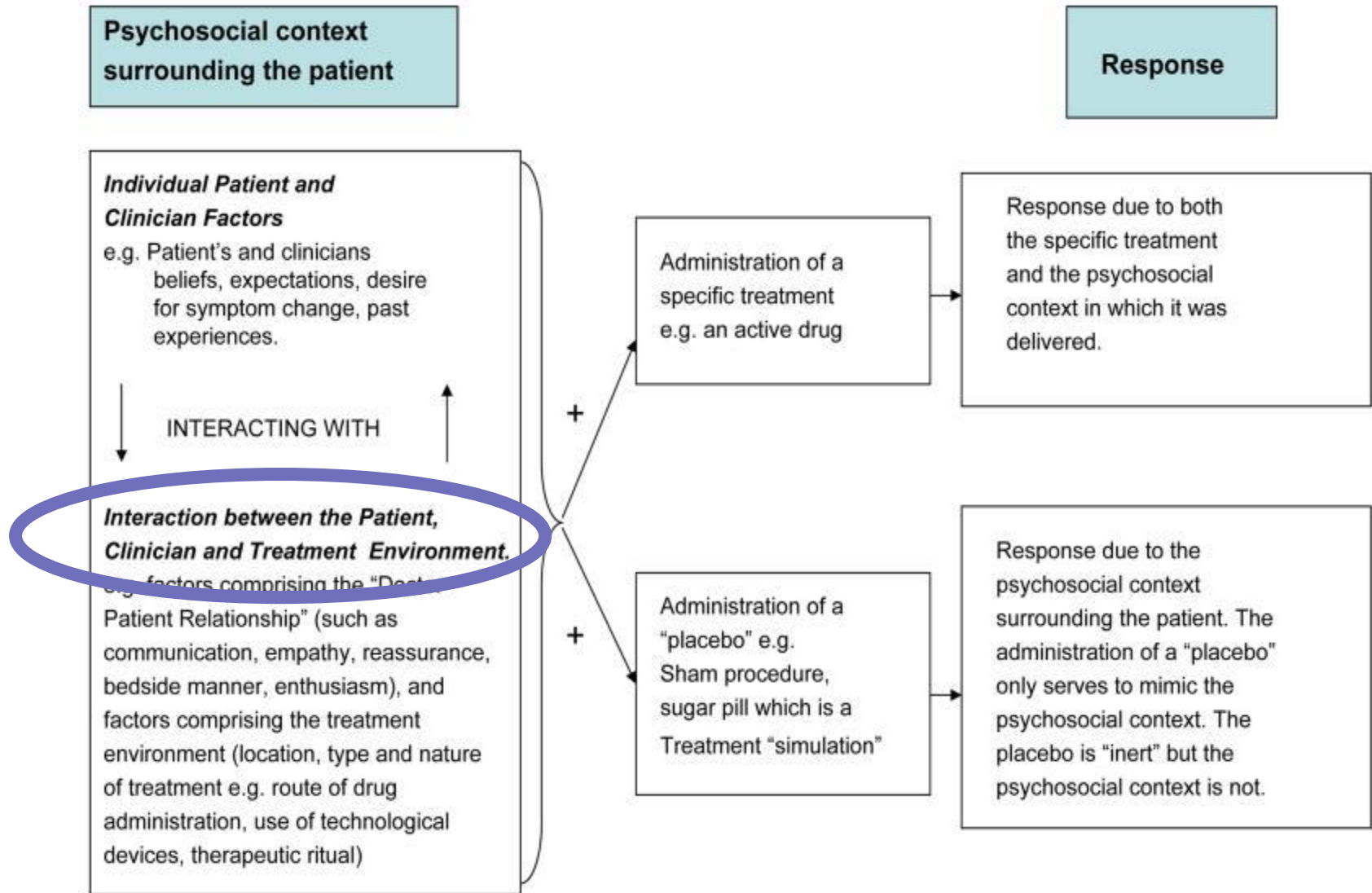
Haresnape C. An exploration of the relationship between placebo and homeopathy and the implications for clinical trial design. *JRSM* 2013; 30,4:2042533313490927

The broader context of placebo/treatment effects

- **Cultural factors** influence the placebo response
- This also translates into the importance of the **nature of the placebo**:
 - E.g. Pill form greater placebo effect for sleep problems, sham needling better for pain
- ⇒ Points to the importance of broader factors

Moerman DE (2000). "Cultural variations in the placebo effect: ulcers, anxiety, and blood pressure". *Med Anthropol* **Q 14** (51–72): 51–72.

ubb, J., & Bensing, J. M. (2013). The sweetest pill to swallow: How patient neurobiology can be harnessed to maximise placebo effects. *Neuroscience & Biobehavioral Reviews*, 37(10, Part 2), 2709-2720.



Finniss, D. G., Kaptchuk, T. J., Miller, F., & Benedetti, F. (2010). Biological, clinical, and ethical advances of placebo effects. *Lancet*, 375(9715), 686-695. doi: 10.1016/s0140-6736(09)61706-2

Patient factors



Patient factors

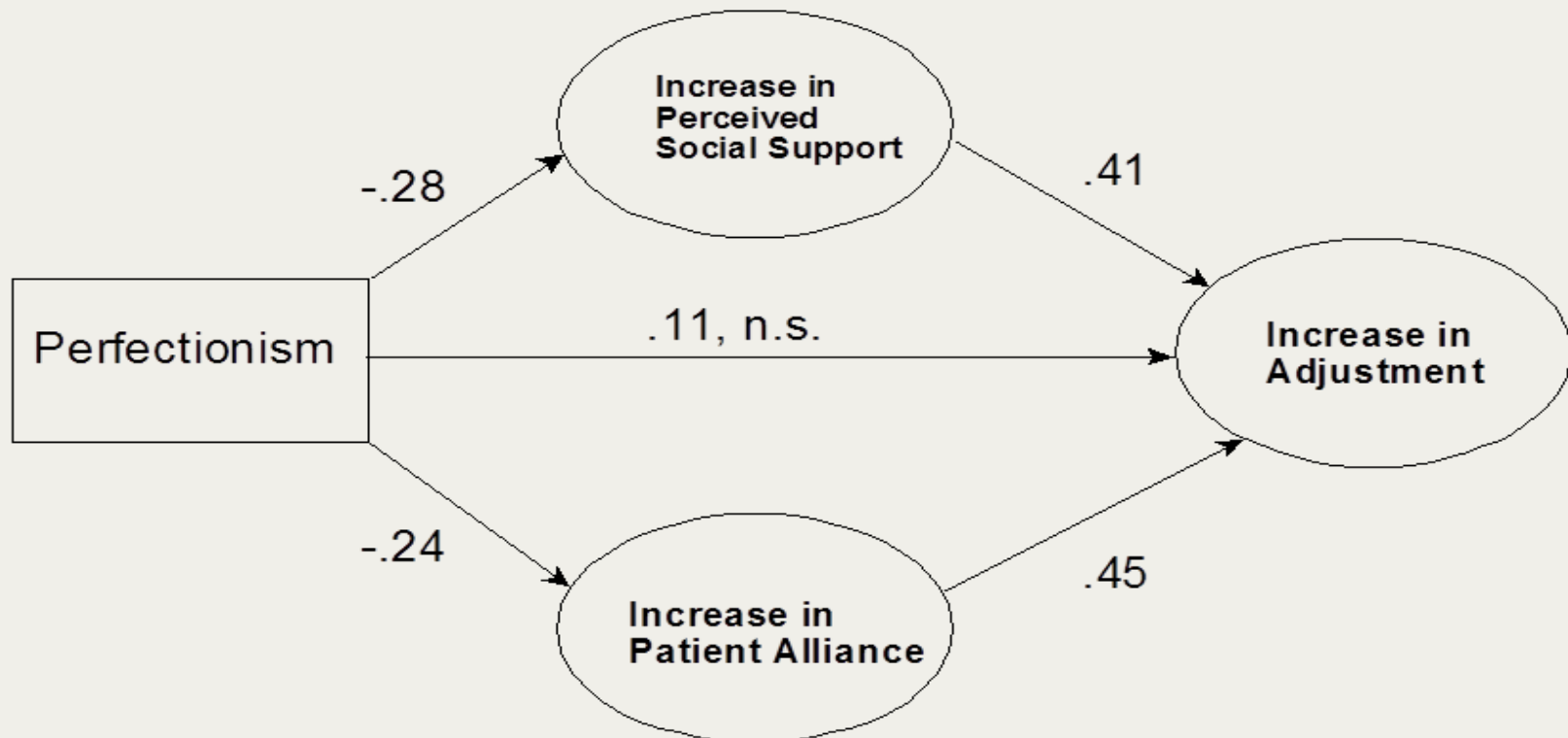
■ Transdiagnostic predictors of outcome

- Personality factors
- Attachment
- Reflective functioning/mentalizing
 - Psychological mindedness
 - Alexithymia
 - Mindfulness
- Trauma/adversity

■ What do they have in common?

- They make individuals more **open** versus **closed** for social influences/interventions
- They **prevent broaden and build cycles**

Complete Mediation of Outcome by Patient Alliance and Perceived Social Support



Shahar et al. 2004

Perfectionism interferes with development of Enhanced Adaptive Capacity (EAC) subsequent to termination

S.J. Blatt, D.C. Zuroff / Clinical Psychology Review 25 (2005) 459–486

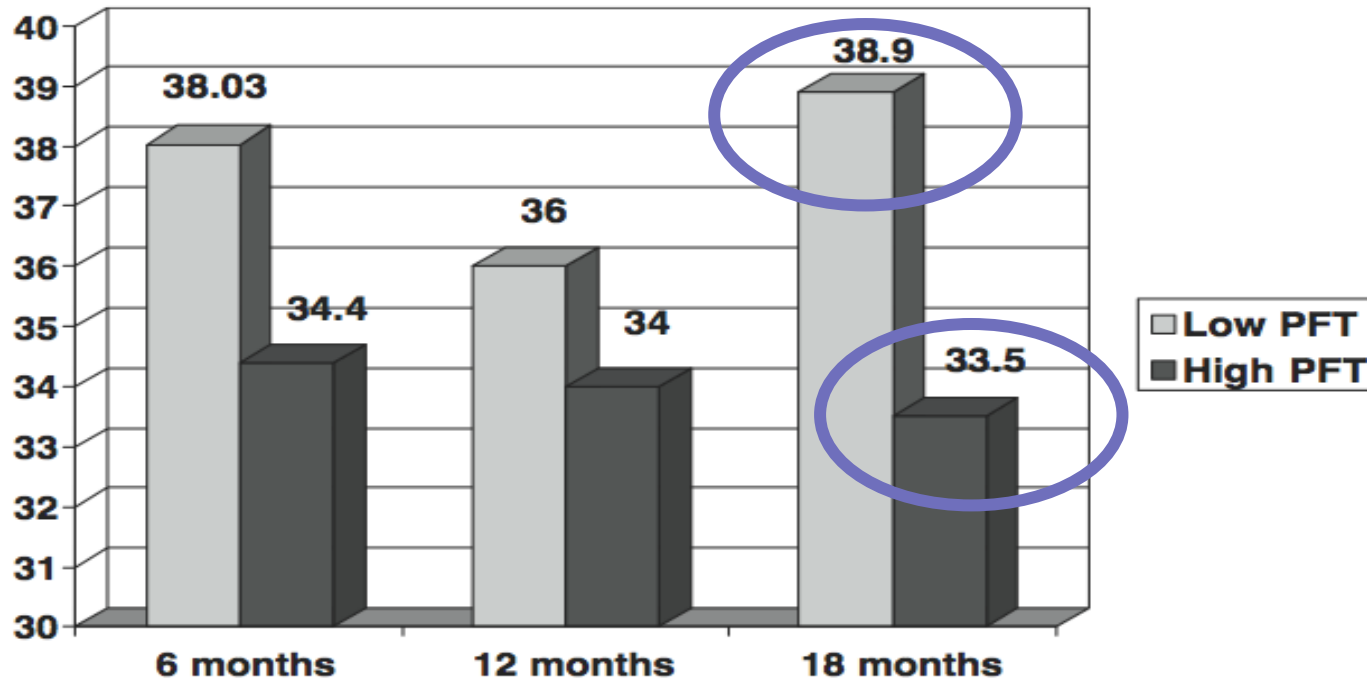


Fig. 12. Impact of pretreatment perfectionism on follow-up EAC.

PFT was also associated with higher stress reactivity in follow-up.

478

S.J. Blatt, D.C. Zuroff / Clinical Psychology Review 25 (2005) 459–486

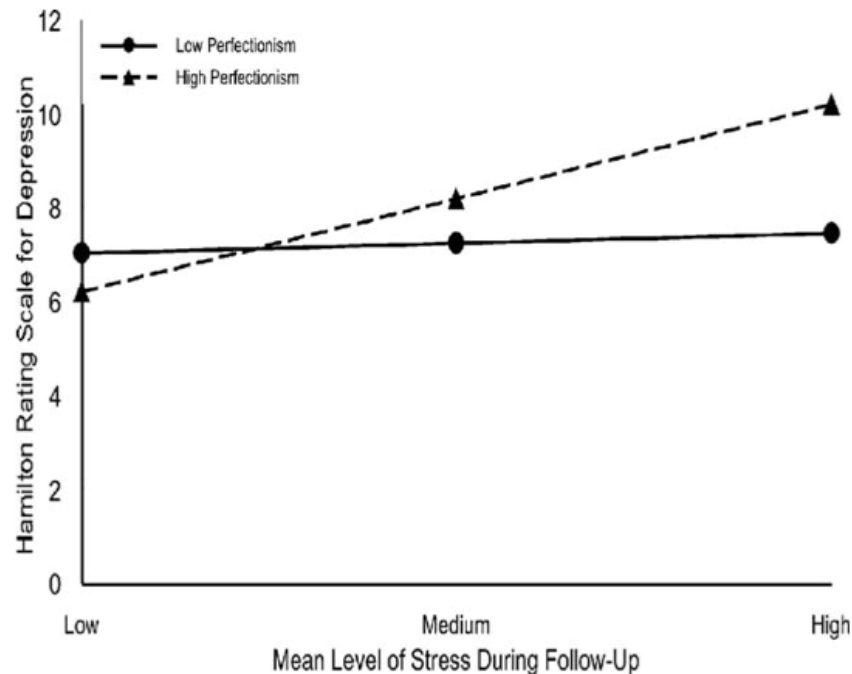
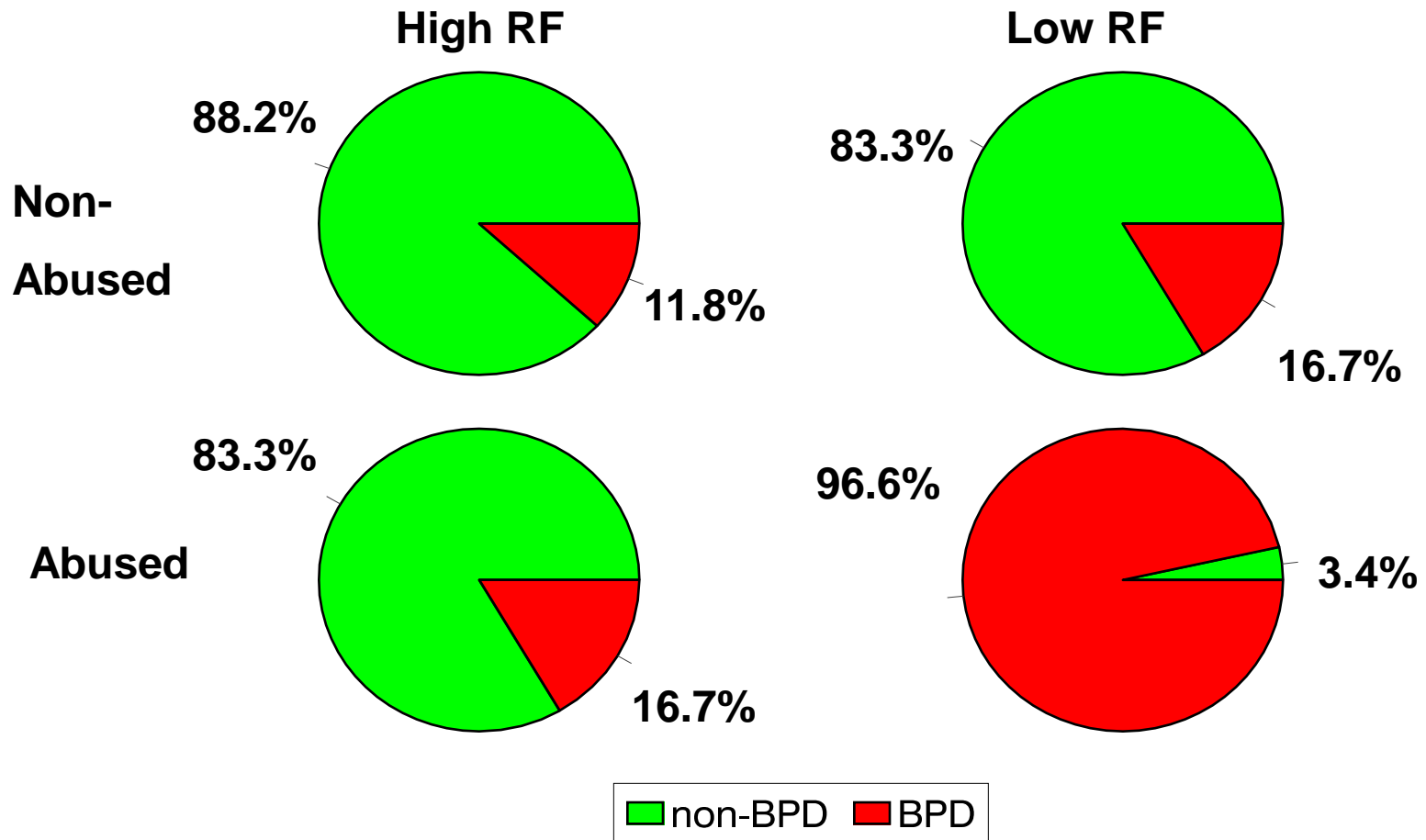


Fig. 13. Impact of termination perfectionism on stress reactivity in follow-up assessment. This figure appeared in Zuroff and Blatt, 2002.



The same is probably true for other
transdiagnostic factors

Interaction of Abuse, Reflective function and BPD (Fonagy et al. 1996)

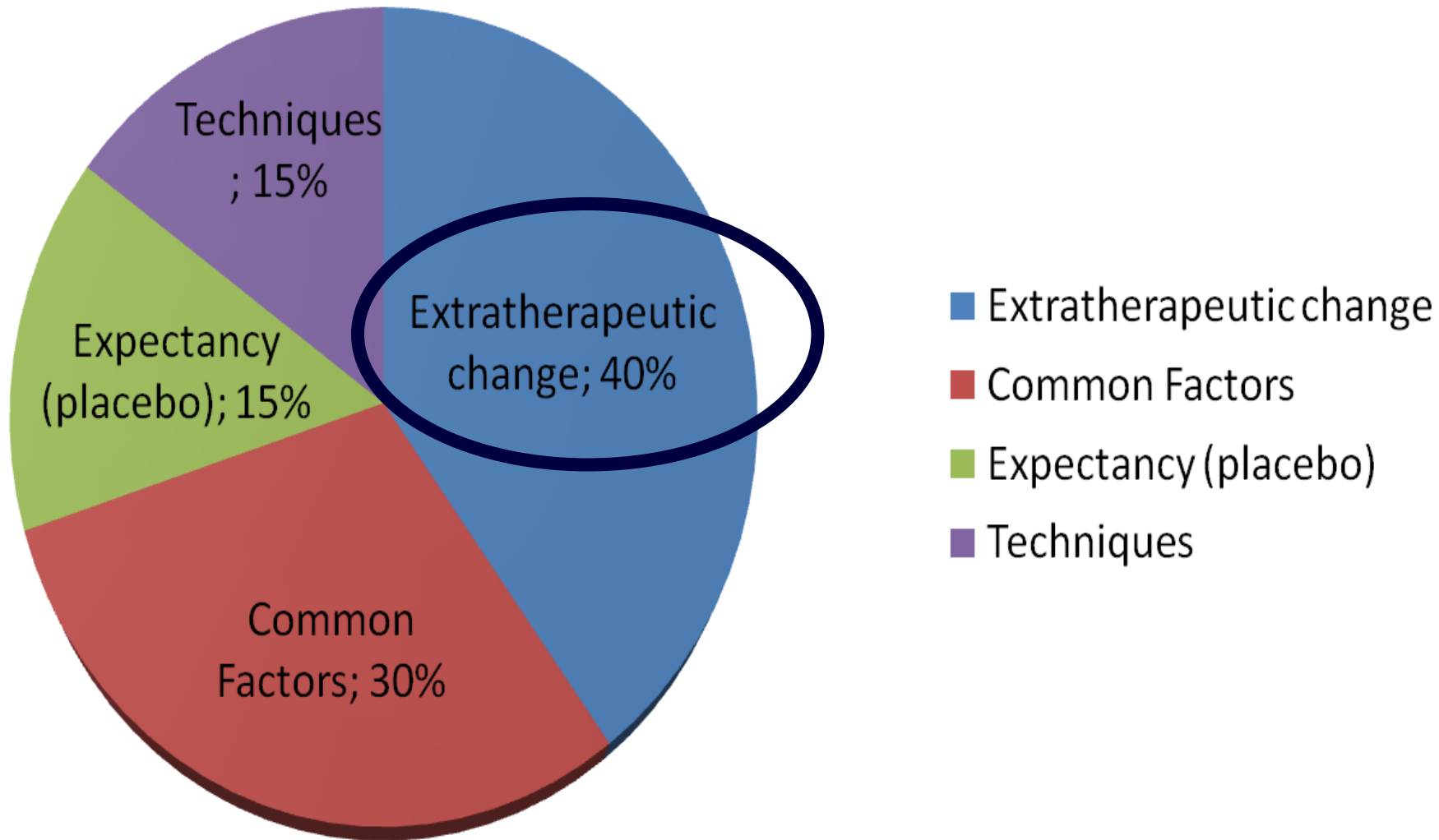


Likelihood ratio: Chi-squared=8.67, df=1, p<.004

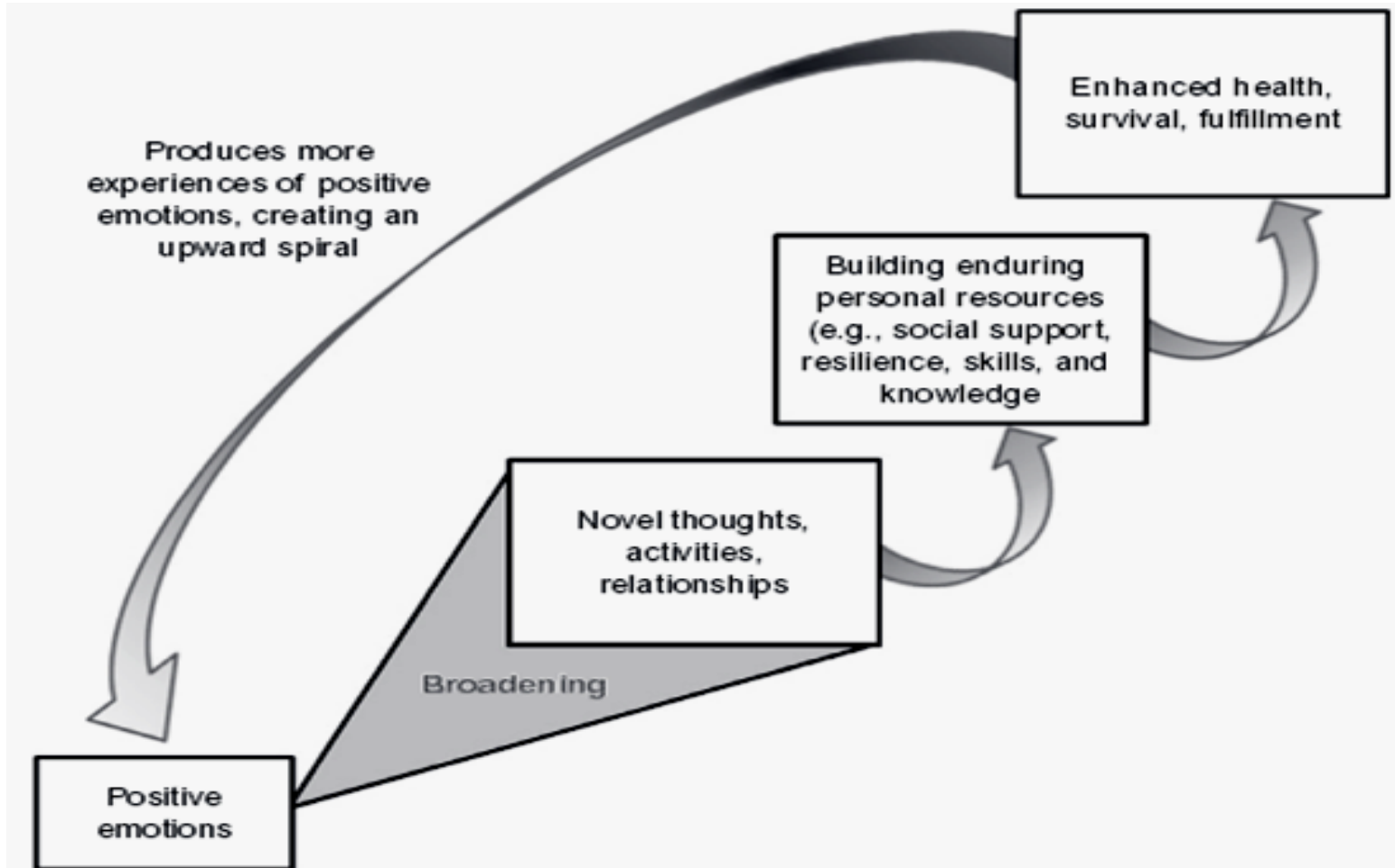
So where does this lead us...?



Factors responsible for therapeutic change

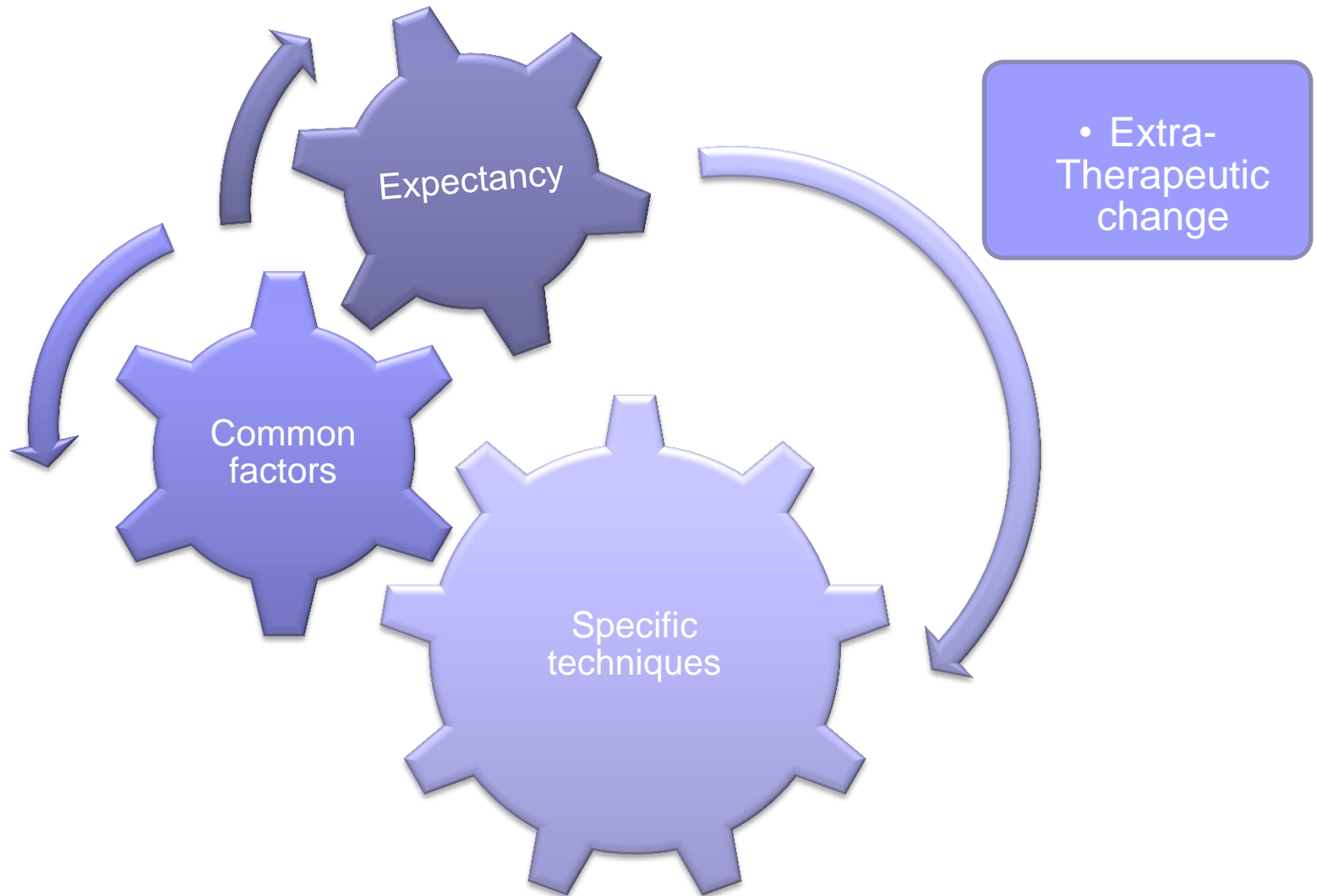


Broaden and build!



Fredrickson, 2013

Dynamic interactionism model



Common features of evidence based treatments

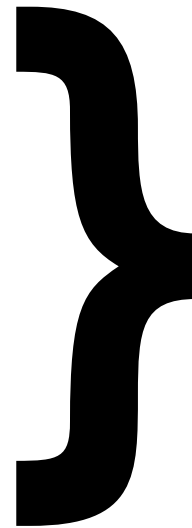
- What works: **Focused, manualized** treatments that tend to



- **maximize** *effective* interventions/ingredients
- **minimize** *iatrogenic* interventions

- The **three C's** of effective treatment

- **Coherence**: offer a coherent and hope-providing approach to illness and cure
- **Consistency**: well-balanced set of interventions based on a theory of the disorder and its cure
- **Continuity**: adherence to the model throughout the treatment

The 4th 'C'
communication





The need for an evolutionary-based
social cognition or communication-
based approach to personality
disorder

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

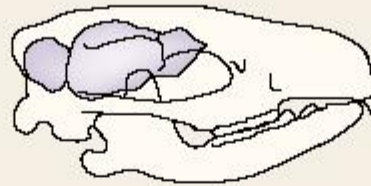
Humans exceedingly skilled at **large scale social interaction**

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

↓
Fuelled **evolution of human brain**.

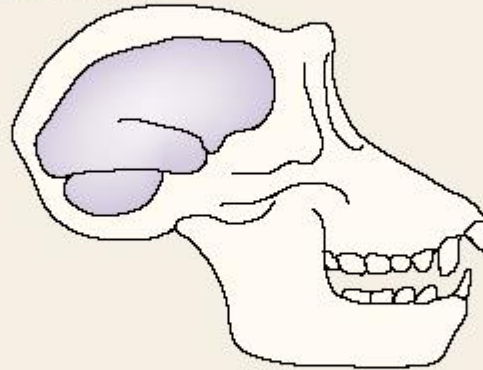
↓
Therefore **correlation in mammals between size of social group and volume of neocortex**

Hedgehog

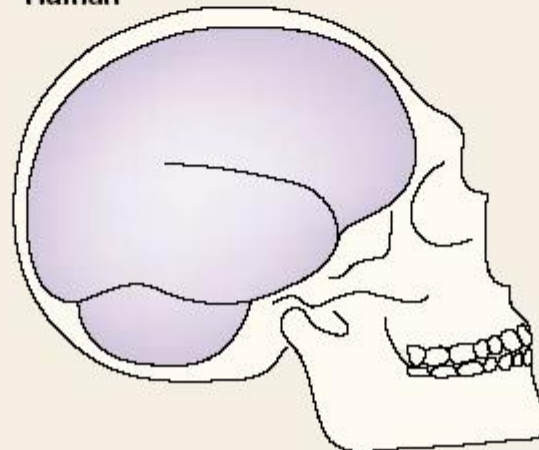


Courtesy of Laura Roberts

Chimpanzee

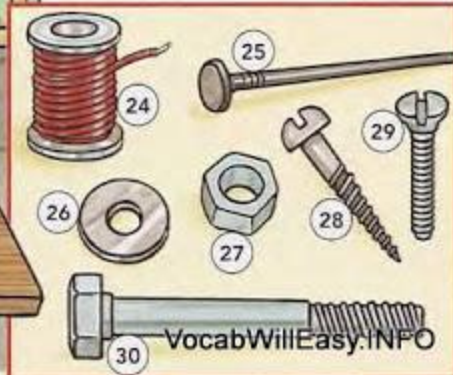


Human



Gergely's argument for 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**
- This raises a **learnability problem**
- Key role of **epistemic trust**: trust in others as the source of knowledge about the (social) world



How Attachment Links to Learning

The forming of an attachment bond

Down Regulation of Emotions

BONDING

**EPISTEMIC
TRUST**



Treatment Implications



A three-pronged approach

Three systems of learning

- System 1: Specific therapy/interventions
- System 2: Mentalizing as a common factor
- System 3: Social learning based on epistemic trust

Tuning in to the interpersonal channel

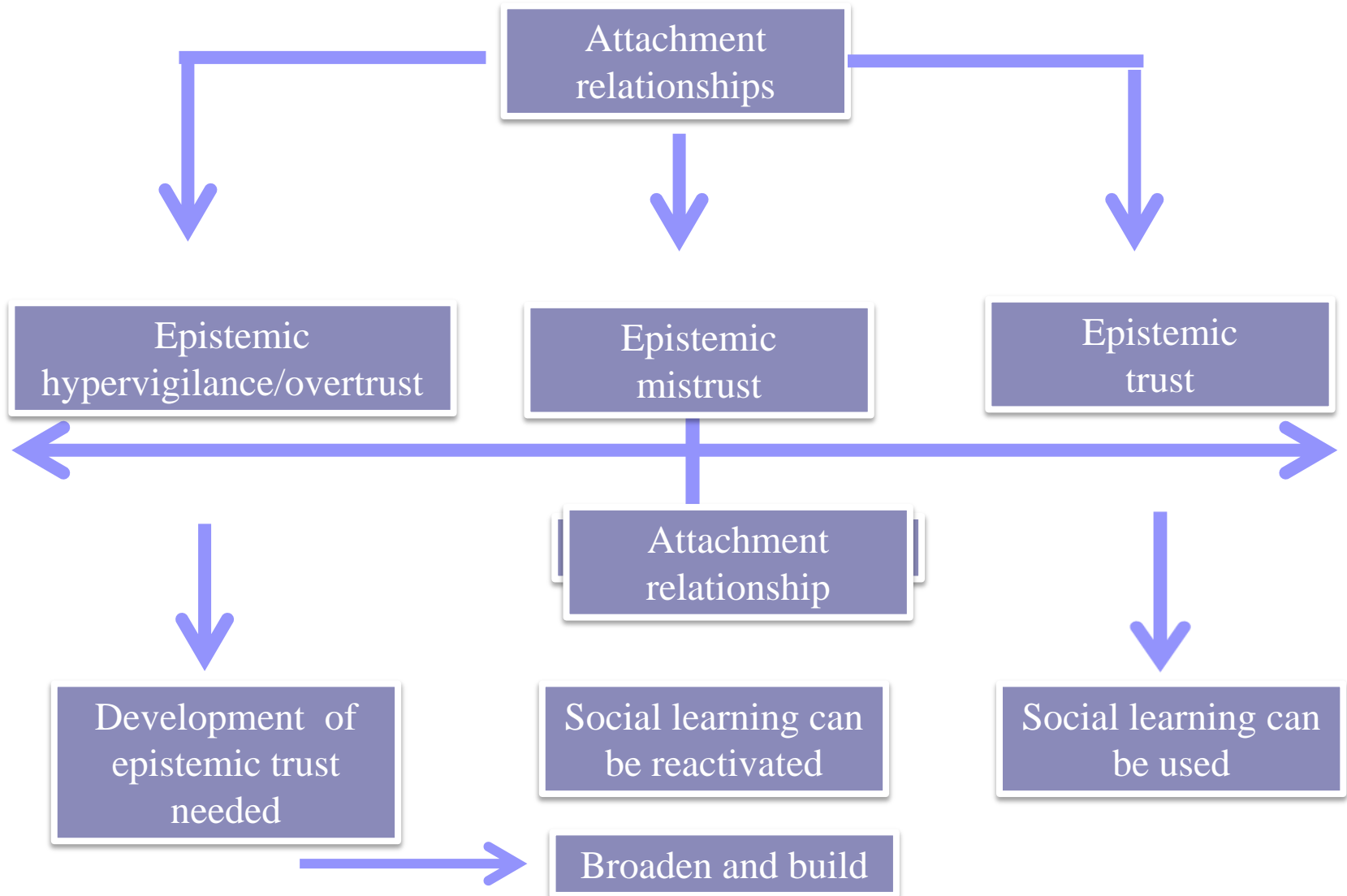


Trust opens up the social communication superhighway, enabling us to learn and change

Implications for treatment learning beyond therapy

- Treatment is not only about the **what** but also and even more so about the **how** of learning:
 - **Opening the patients' mind by recovery of epistemic trust**
 - **Recovery of the evolutionary capacity to learn from others**
 - **Leads to “broaden and build” cycles and recovery in the long term**

Developing effective treatments?



Features of effective treatments

Three levels

- Consist of **theory-specific interventions** that foster social learning process
- By improving **mentalizing** skills
- Fostering empowerment of the patient to benefit from **evolutionary rooted capacity for social learning and benefit from the environment through epistemic trust**

Need to study the environment

- Is implicated in origin of psychopathology
- But also in its perpetuation
 - Suggests need for changes in evocative person-environment transactions
 - How can we foster this process?

From: **Studying the Elusive Environment in Large Scale**

JAMA. 2014;311(21):2173-2174. doi:10.1001/jama.2014.4129

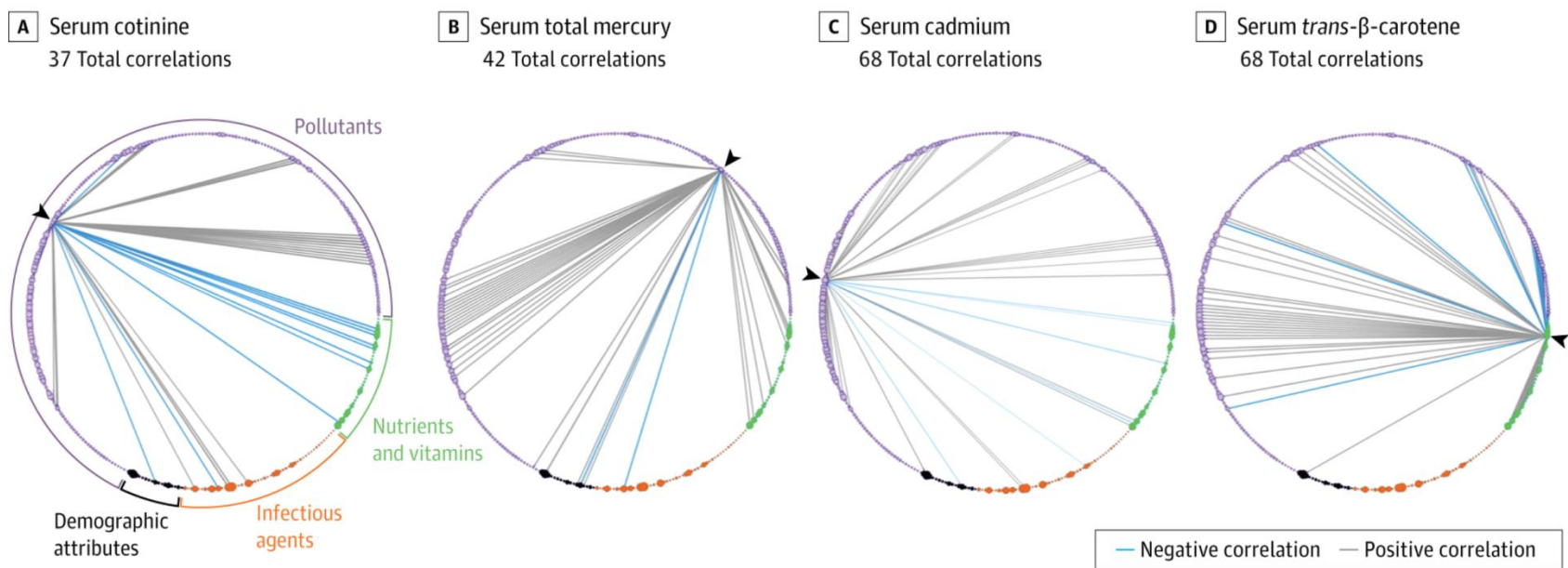


Figure Legend:

Correlation Interdependency Globes for 4 Environmental Exposures (Cotinine, Mercury, Cadmium, Trans-β-Carotene) in National Health and Nutrition Examination Survey (NHANES) Participants, 2003-2004 Each correlation interdependency globe includes 317 environmental exposures represented by the nodes around the periphery of the globe. Pairwise correlations are depicted by edges (lines) between the node of interest (arrowhead) and other nodes. Correlations with absolute values exceeding 0.2 are shown (strongest 10%). The size of each node is proportional to the number of edges for a node, and the thickness of each edge indicates the magnitude of the correlation.

Conclusions

- While development of specific treatments has led to **justified optimism** with regard to treatment
- **Guildification** of psychotherapy may now stand in the way of developing more effective treatments
- The good news is that **integrative efforts are underway**
- Perhaps we have learned that splitting is not the best way forward in life



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