A radical shift in the treatment of child and adolescent depression Perhaps the time is ripe?

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With **Peter Fonagy** and **Liz Allison**

Overview

- **Have we hit the ceiling** in the treatment of youth depression?
- **A new take on treatment**:
  - P-factor
  - Epistemic trust and salutogenesis
  - Domains of functioning in youth depression
- Implications for clinical practice:
  - **How** we treat young people with depression
  - **Where** we treat young people with depression

Transtheoretical and transdiagnostic

Why have we forgotten about the environment???

Luyten, P., & Fonagy, P. (in press). The Stress–Reward–Mentalizing (SRM) Model of Depression: An Integrative Developmental Cascade Approach to Child and Adolescent Depressive Disorder Based on the Research Domain Criteria (RDoC) Approach. *Clinical Psychology Review*.

Fonagy, P., & Luyten, P. (2016). A multilevel perspective on the development of borderline personality disorder. In D. Cicchetti (Ed.), *Developmental Psychopathology* (3rd ed., pp. 726-792). New York: Wiley.

I didn’t know which stick you threw, so I got them all

"Failure: the essence of our profession"

- Between the lines of the interview, professor Luyten voices the psychotherapeutic attitude by commenting on *failure*: "This is actually the essence of our profession. We all fail on a daily basis. Instead of feeling like a failure constantly, we might want to start learning from our faults. If there is one thing that I have learned in the past decade or so, it is from my treatment failures. When we do well, it probably has more to do with the patient than with us. Patients often improve, even despite us. But if treatment fails, we can really learn what it entails to be more effective."

European Society for Child & Adolescent Psychiatry (ESCAP) KEYNOTE LECTURE ON CHILDHOOD DEPRESSION
Patrick Luyten www.escap.eu


Selective Trust!

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)

Fonagy, P., Luyten, P., Allison, E., & Campbell, C. (2017). What we have changed our minds about: Part 1. Borderline personality disorder as a limitation of resilience. *Borderline Personality Disorder and Emotion Dysregulation, 4(1),* 11.
Fonagy, P., Luyten, P., Allison, E., & Campbell, C. (2017). What we have changed our minds about: Part 2. Borderline personality disorder, epistemic trust and the developmental significance of social communication. *Borderline Personality Disorder and Emotion Dysregulation, 4(1),* 9.

What we increasingly realize

- **Different treatments** are **supported by evidence** that they produce change
- It is **unlikely** that these treatments "**cut nature at it joints**":
  - Common brain and psychosocial mechanisms
  - NIMH RDoC initiative
- If research on outcomes improves intervention techniques then therapies should have in general **increased** in **effectiveness**

Evidence-based treatments for depression in adults

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"

- Meta-analysis of **high quality RCTs** comparing PDT and CBT
- N=23 trials, totaling 2,751 patients
- Depression, anxiety, PTSD, eating disorders, substance-related disorders, personality disorders
- Equivalence tested using Two One-Sided Test (TOST) procedure with small effect size difference (*d*=.25) as equivalence margin
- No evidence for researcher allegiance

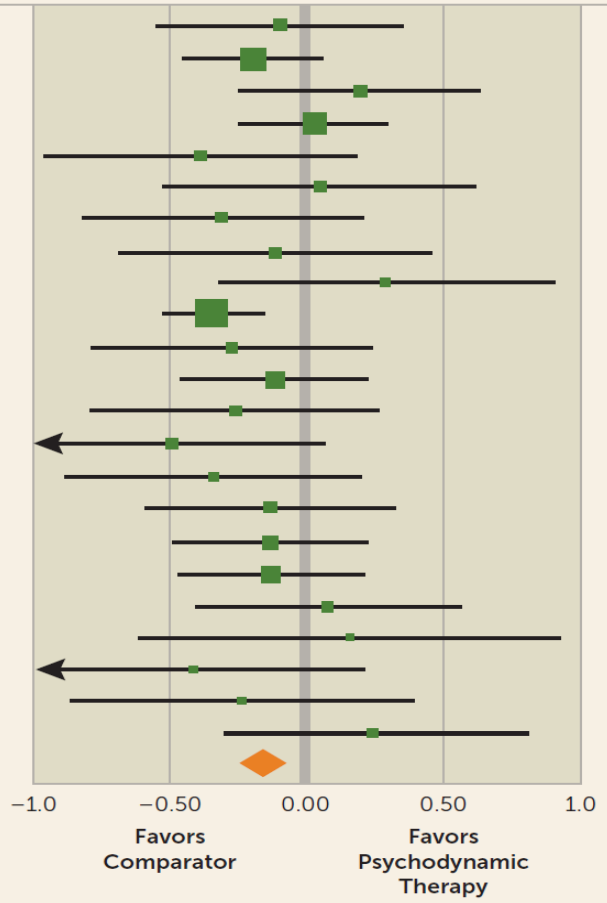
Steinert, C., Munder, T., Rabung, S., Hoyer, J., & Leichsenring, F. (in press). Psychodynamic Therapy: As Efficacious as Other Empirically Supported Treatments? A Meta-Analysis Testing Equivalence of Outcomes. American Journal of Psychiatry.

The "Dodo Bird Verdict"

Hedges g=-.15 (90% CI -.227 - .079) **at posttreatment**
Hedges g=-.049 (90% CI -.137 - .038) **at follow-up**

FIGURE 1. Analysis of Effects of Psychodynamic Therapy Relative to Established Comparators on Target Symptoms at Posttreatment[a]

Study	Comparison	Relative Weight (%)
Barber et al. (52)	PDT vs. Med	3.46
Connolly Gibbons et al. (51)	PDT vs. CBT	11.28
Cooper et al. (53)	PDT vs. CBT	3.69
Driessen et al. (46)	PDT vs. CBT	9.53
Gallagher-Thompson and Steffen (54)	PDT vs. CBT	2.17
Salminen et al. (55)	PDT vs. Med	2.17
Shapiro et al. (56)	Combined	2.75
Thompson et al. (57)	Combined	2.16
Bögels et al. (58)	PDT vs. CBT	1.96
Leichsenring et al. (59)	PDT vs. CBT	19.54
Leichsenring et al. (60)	PDT vs. CBT	2.76
Milrod et al. (61)	PDT vs. CBT	6.09
Brom et al. (62)	PDT vs. CBT	2.52
Garner et al. (63)	PDT vs. CBT	2.32
Poulsen et al. (64)	PDT vs. CBT	2.38
Tasca et al. (65)	PDT vs. CBT	3.54
Zipfel et al. (66)	PDT vs. CBT	5.30
Crits-Christoph et al. (67)	Combined	5.89
Woody et al. (68)	PDT vs. CBT	3.16
Clarkin et al. (69)	Combined	1.22
Emmelkamp et al. (70)	PDT vs. CBT	1.91
Muran et al. (71)	Combined	1.81
Svartberg et al. (72)	PDT vs. CBT	2.39
Overall		



Random effects Hedges' g=−0.153
Heterogeneity: χ^2=17.99, df=22; p=0.71, I^2=0%, tau^2=0.0018
(90% equivalence CI=−0.227 to −0.079)
Test for equivalence: z_1=2.15, z_2=−8.94; p=0.016

[a] CBT=cognitive-behavioral therapy; Med=pharmacotherapy; PDT=psychodynamic therapy.

Dodo Bird Verdict in Depression

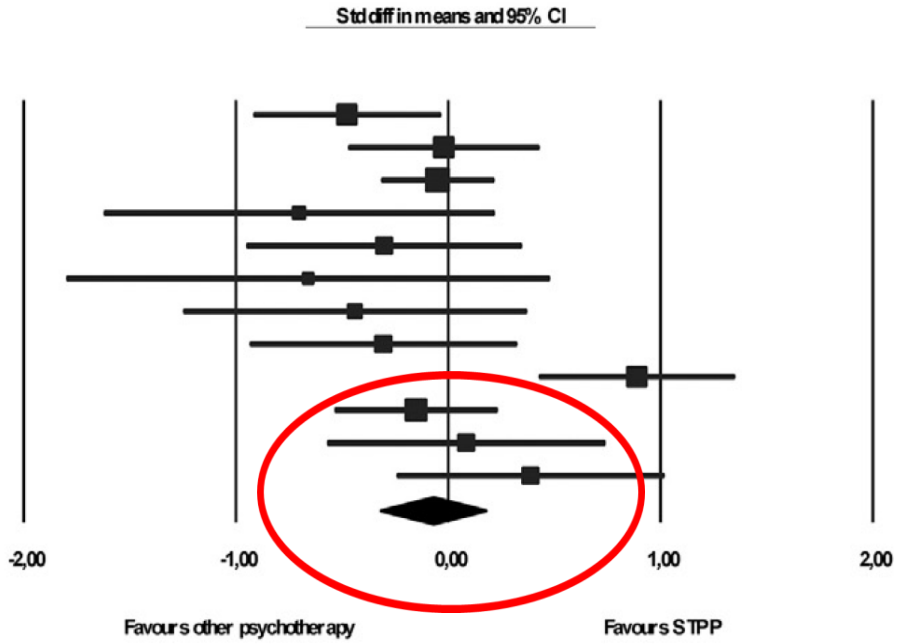
The “Dodo Bird Verdict” in depression

Short-term psychodynamic therapy for depression
META-ANALYSIS

N=54 studies, totaling 3,946 patients

No significant differences found between brief PDT and other therapies at post-treatment
(*d* = -0.14)

No significant differences found between brief PDT and other therapies at follow-up
(*d* = -0.06)

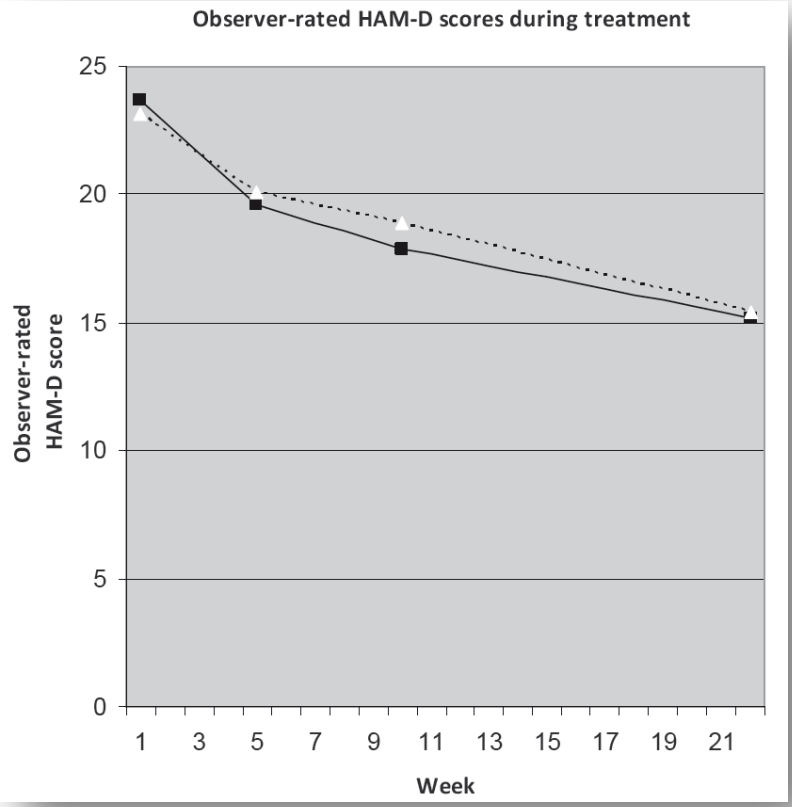


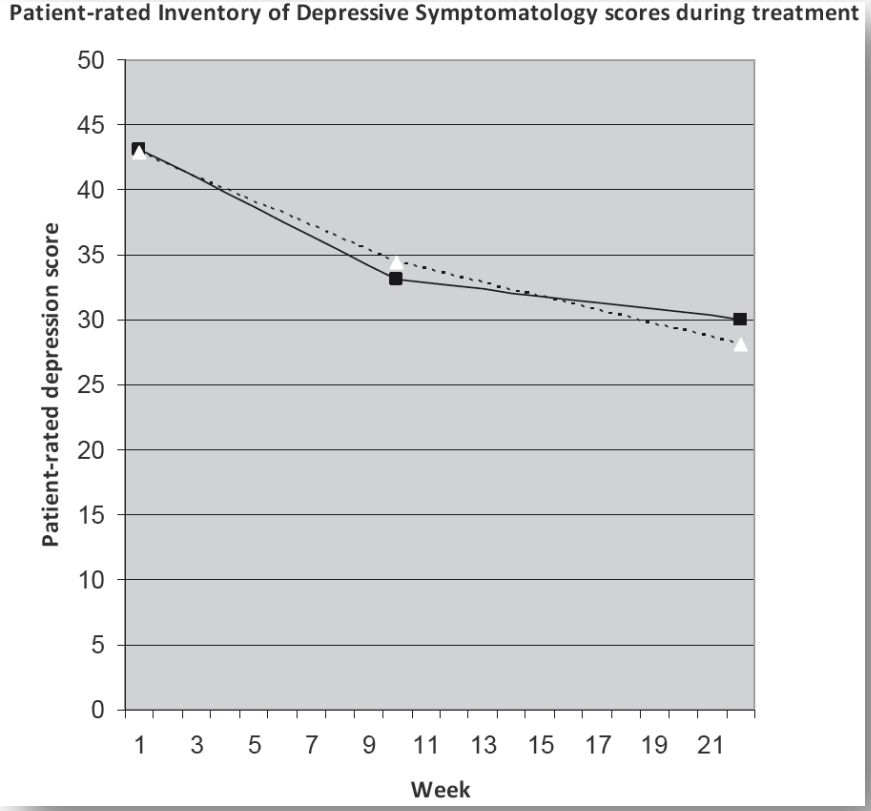
Driessen, E., Hegelmaier, L. M., Abbass, A. A., Barber, J. P., Dekker, J. J., Van, H. L., . . . Cuijpers, P. (2015). The efficacy of short-term psychodynamic psychotherapy for depression: A meta-analysis update. *Clinical Psychology Review, 42*, 1-15.

CBT vs. PDT for Major Depression (N=341)

- **CBT**
  - **16 individual sessions**
  - **Manualised** (Molenaar et al., 2009)
  - **N= 164**

- **Psychodynamic Therapy**
  - **16 individual sesisons**
  - **Manualised** (de Jonghe, 2005)
  - **N=177**



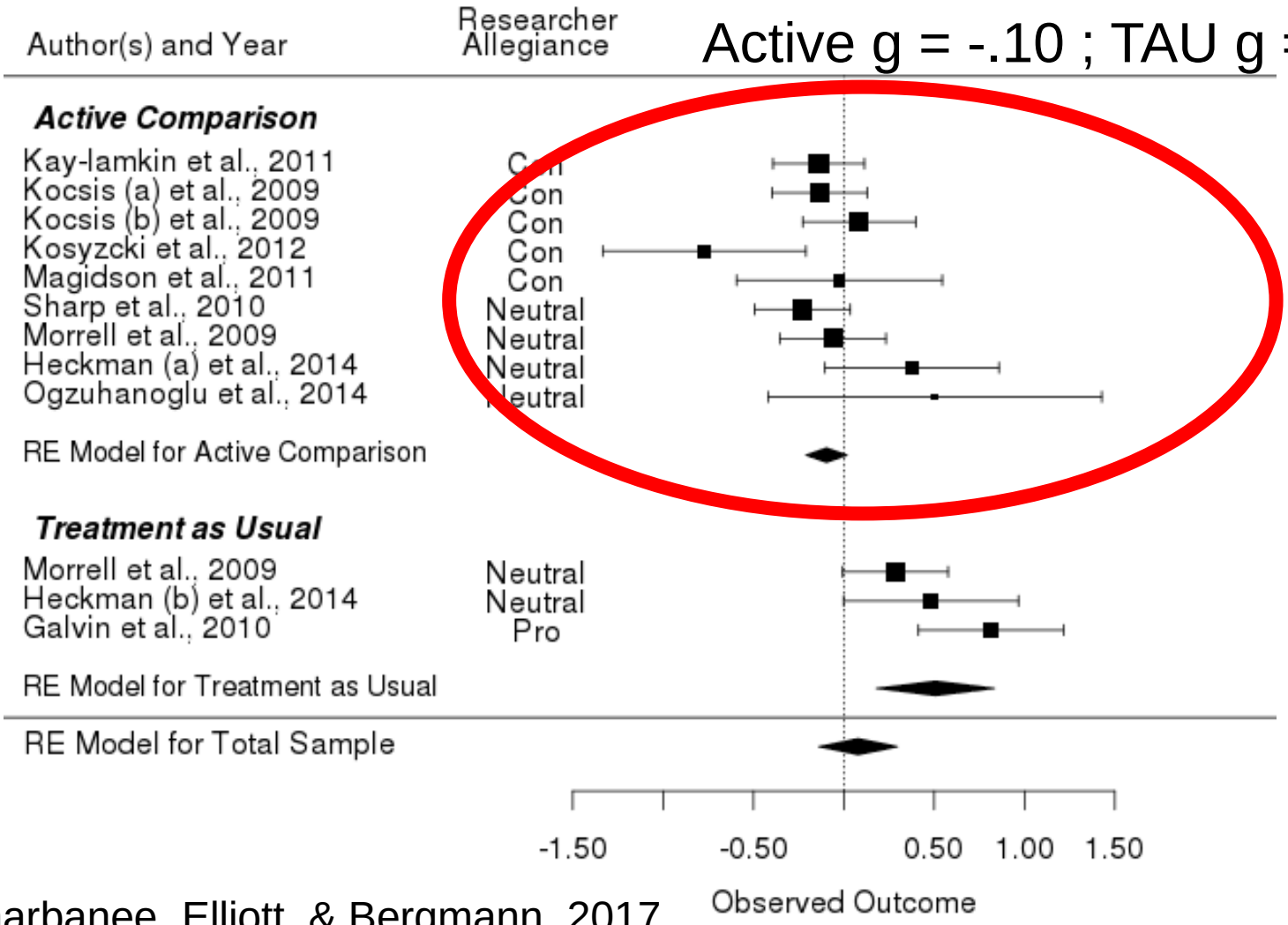


Driessen, E., Van, H. L., Don, F. J., Peen, J., Kool, S., Westra, D., . . . Dekker, J. J. (2013). The efficacy of cognitive-behavioral therapy and psychodynamic therapy in the outpatient treatment of major depression: a randomized clinical trial. *American Journal of Psychiatry, 170*(9), 1041-1050. doi: 10.1176/appi.ajp.2013.12070899

Humanistic-experiential therapies

Total: **g = .08**

Active g = -.10 ; TAU g = .51



Sharbanee, Elliott, & Bergmann, 2017

Improving Access to Psychological Therapies (IAPT)

April 2014 - March 2015:

1,267,193 referrals

815,665 referrals entered treatment;

for which 32.0 days was the average (mean) waiting time

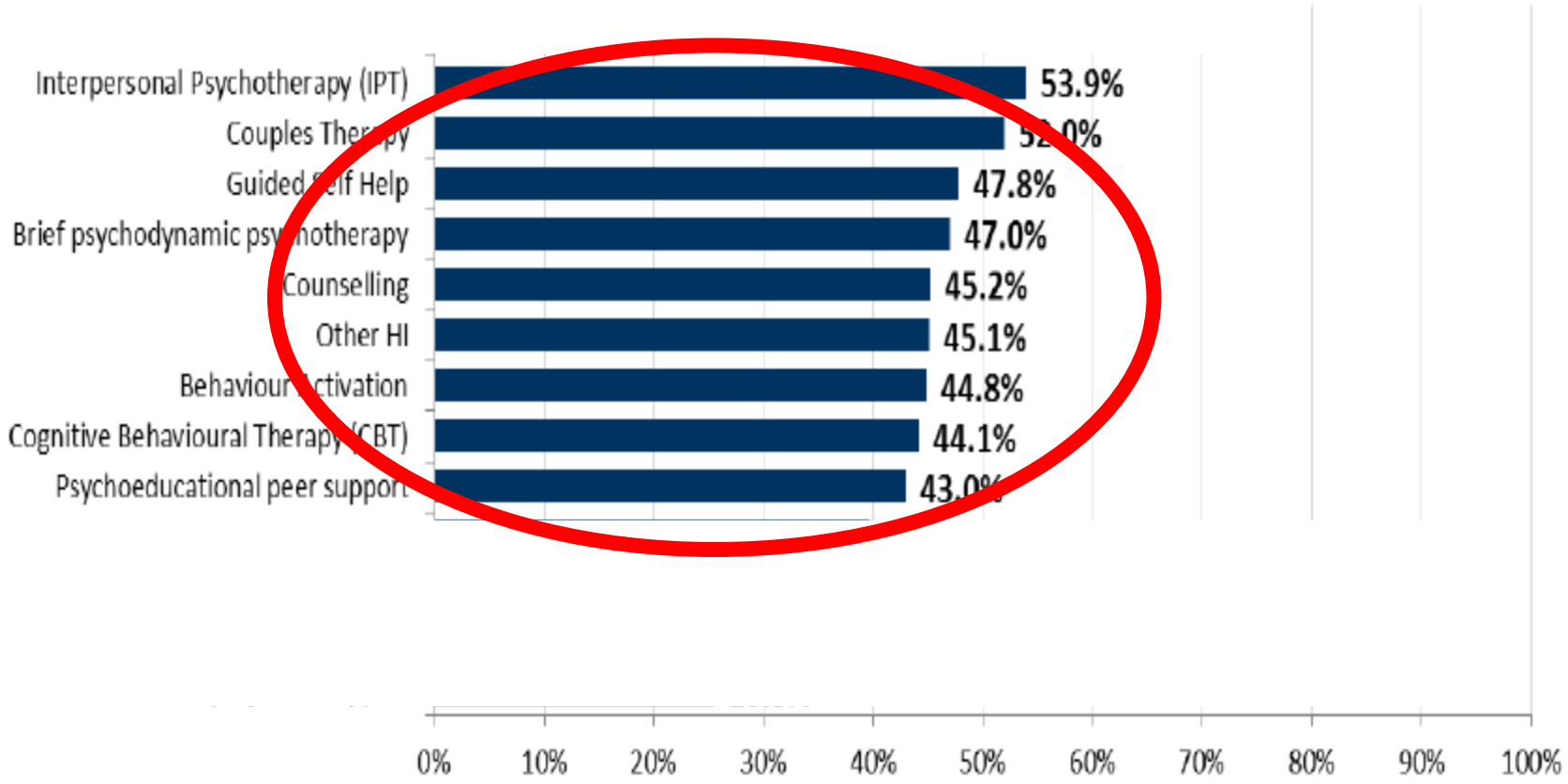
1,123,002 referrals ended;

of which 468,881 (41.8%) finished a course of treatment;

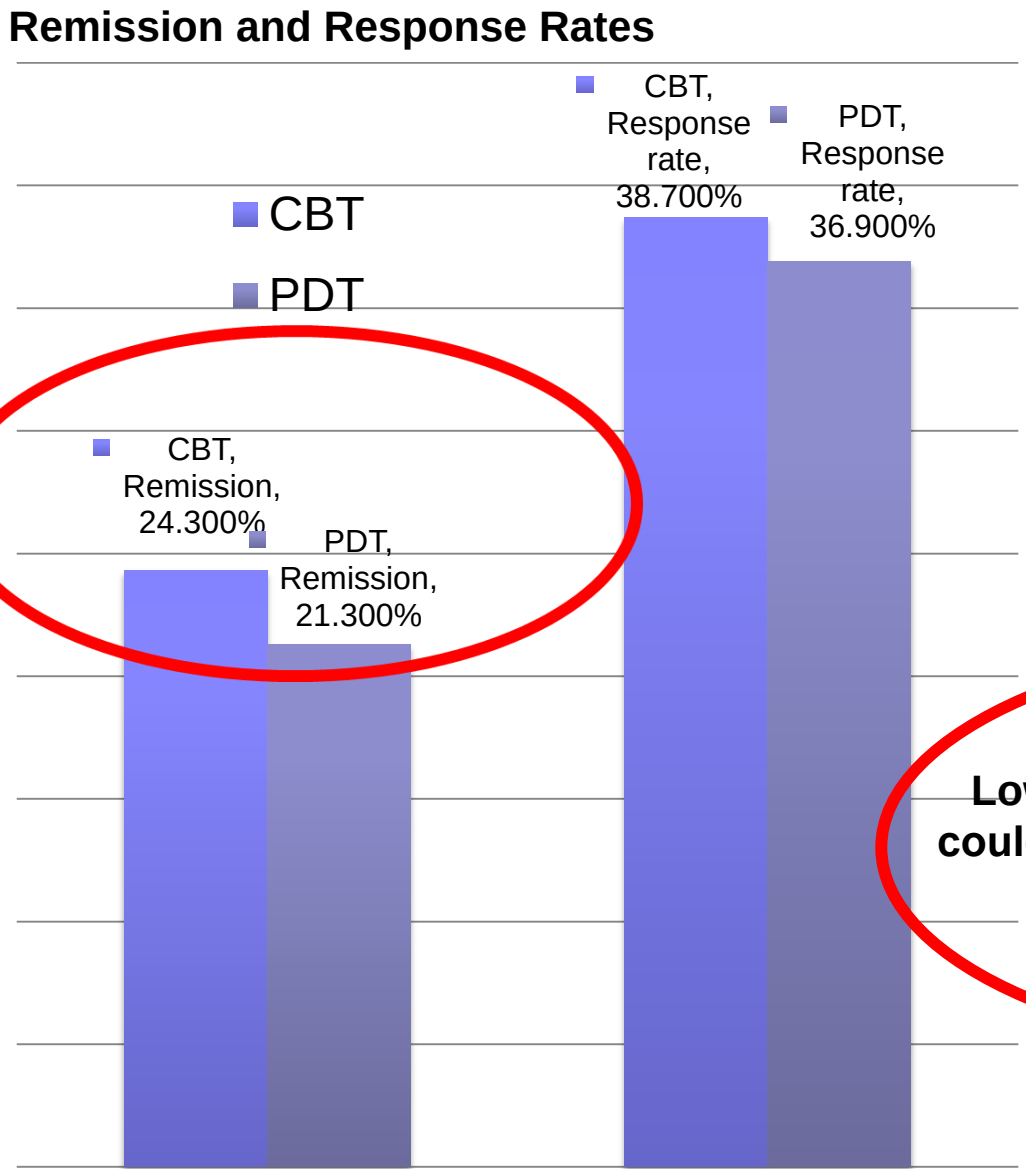
for which 6.3 was the average (mean) number of attended treatment appointments

Improving Access to Psychological Therapies (IAPT)

Figure 3: Recovery rates by therapy type for referrals with a problem descriptor of depression, 2014/15[23]



CBT vs. PDT for Major Depression (N=341)



Moderately depressed patients
No differences between therapies

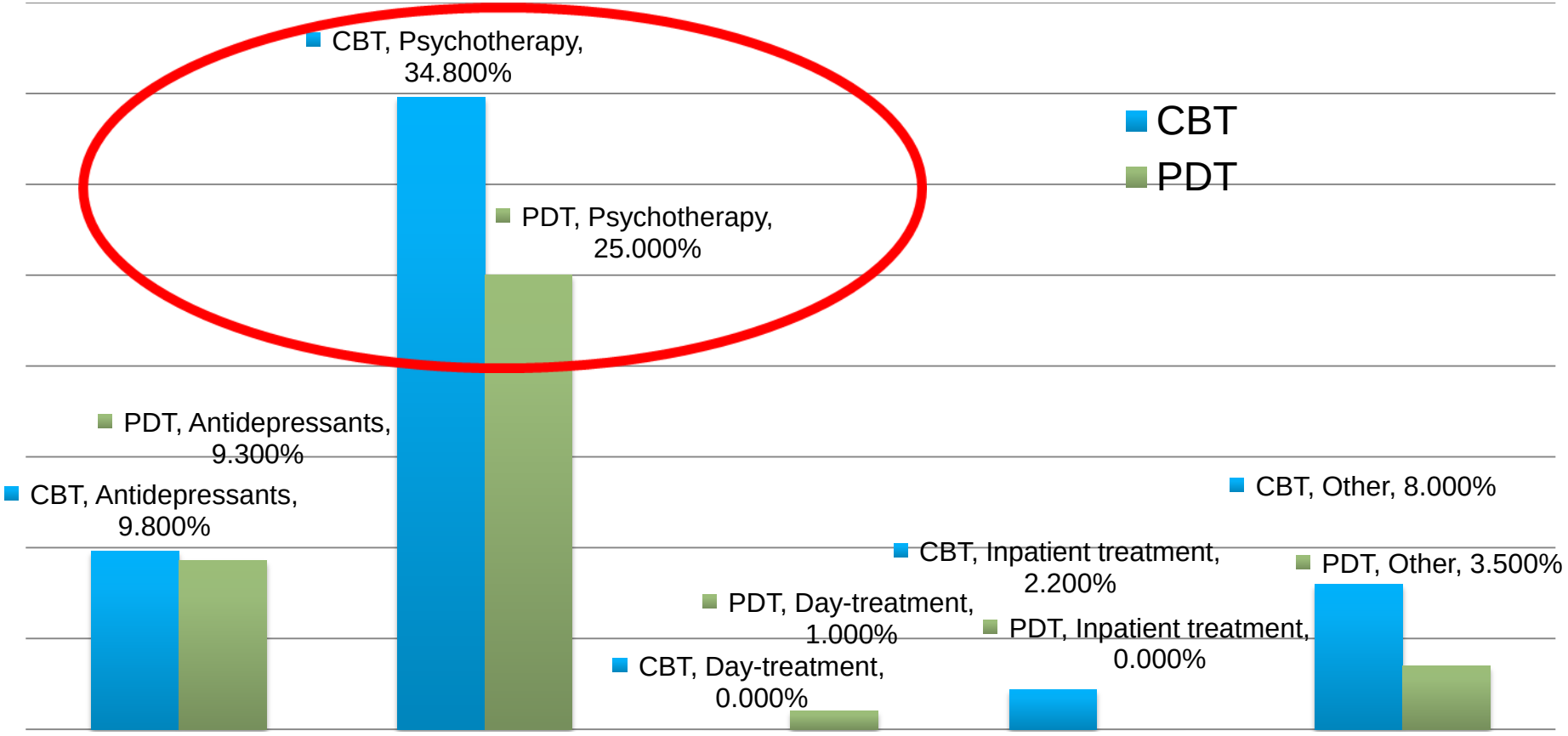
Severely depressed patients in dual therapy
No differences between therapies

Lower remission rates for both therapies could be explained by the sample's low SES and Axis I comorbidity!

Driesen et al., 2012

CBT vs. PDT for Major Depression (N=341)

Additional treatments during 1 year follow-up



Driesen et al., 2012

Publication bias?

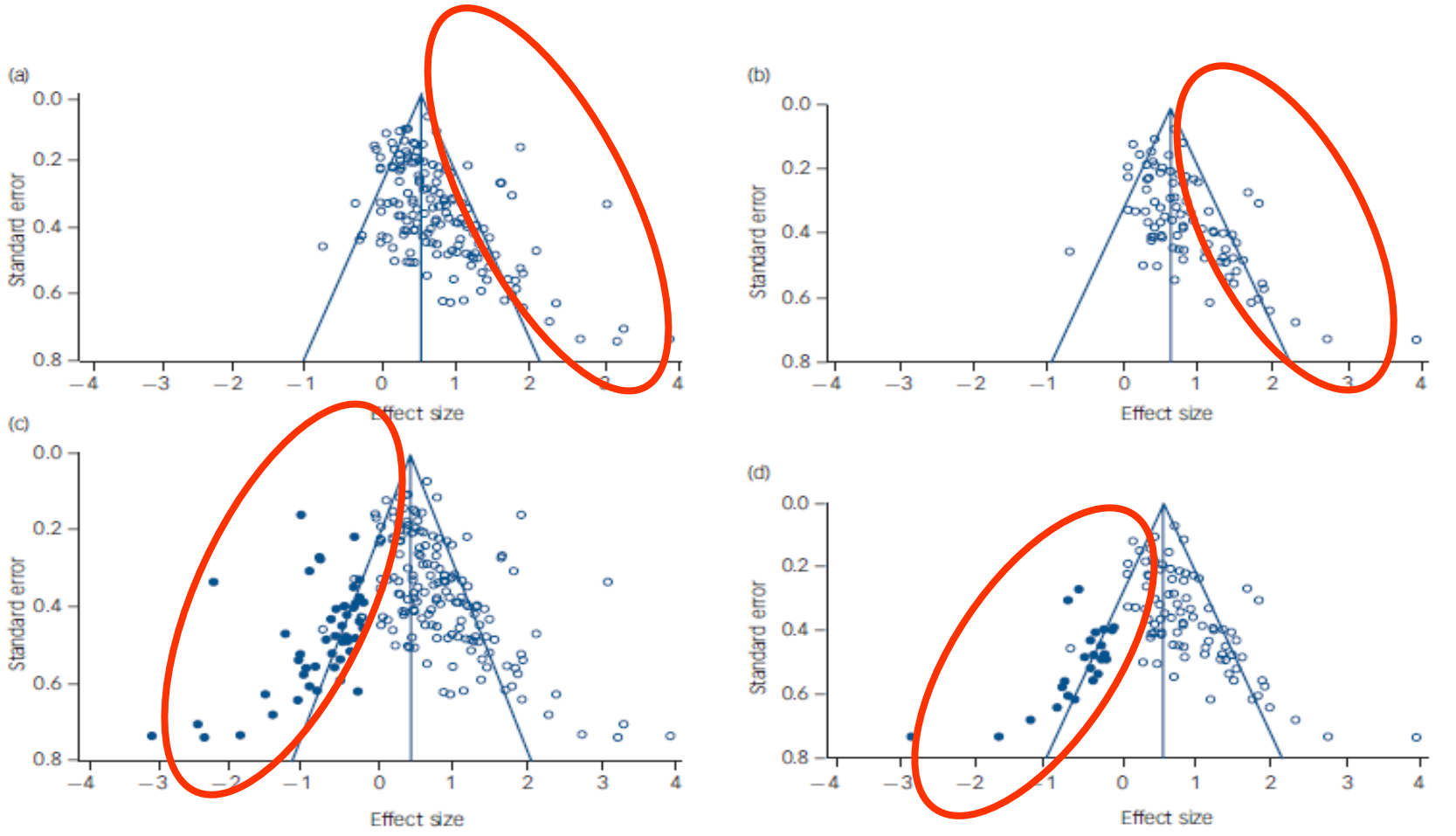


Fig. 2 Funnel plots. (a) All psychotherapy studies, without imputed studies; (b) studies of cognitive–behavioural therapy (CBT) only, without imputed studies; (c) all psychotherapy studies, with imputed studies (black circles); (d) CBT studies only, with imputed studies. Imputation according to Duval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

Effect sizes of CBT: flatlining or falling?

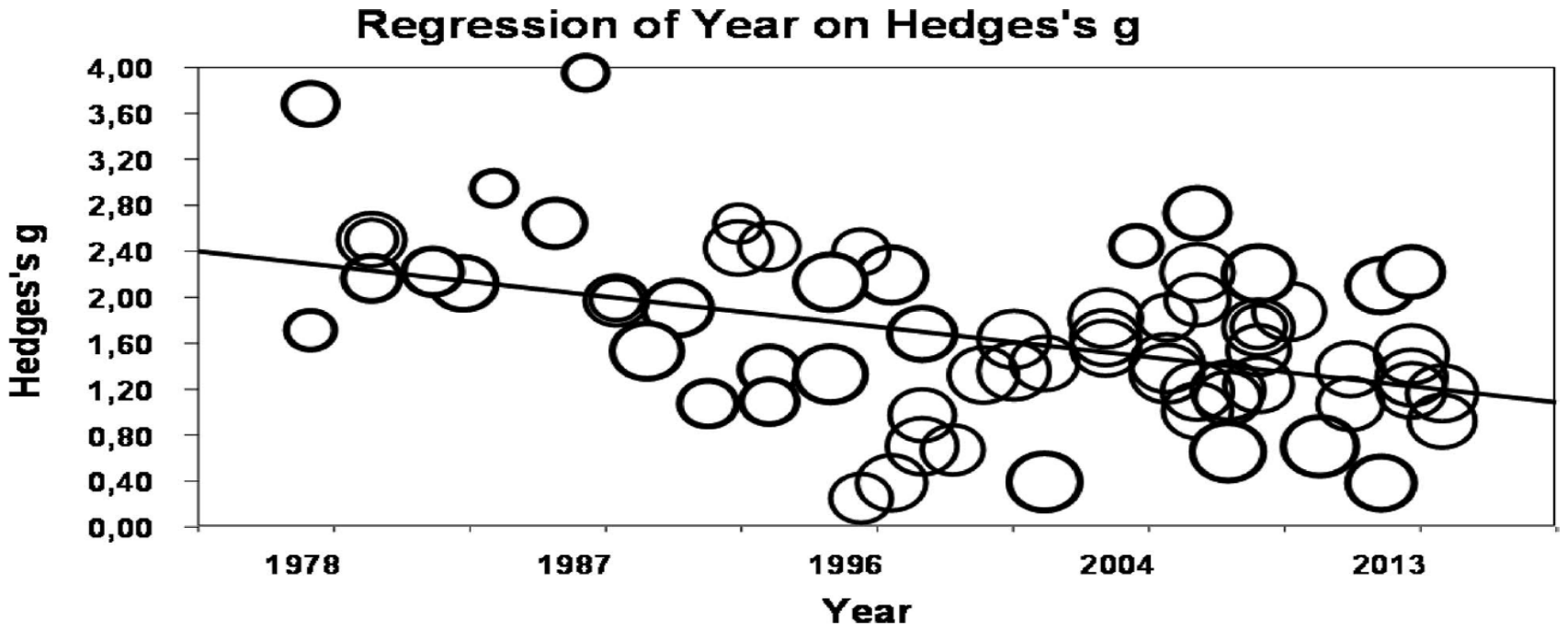


Figure 4. The plot portrays the negative change ($p < .001$) in Beck Depression Inventory effect sizes across time ($k = 61$). The size of the circles indicates the relative contribution (random weight) of each study to the analysis.

Johnsen, T. J., & Friborg, O. (2015). The effects of cognitive behavioral therapy as an anti-depressive treatment is falling: A meta-analysis. Psychological Bulletin, 141(4), 747-768. doi: 10.1037/bul0000015

Effect sizes of CBT: flatlining/falling?

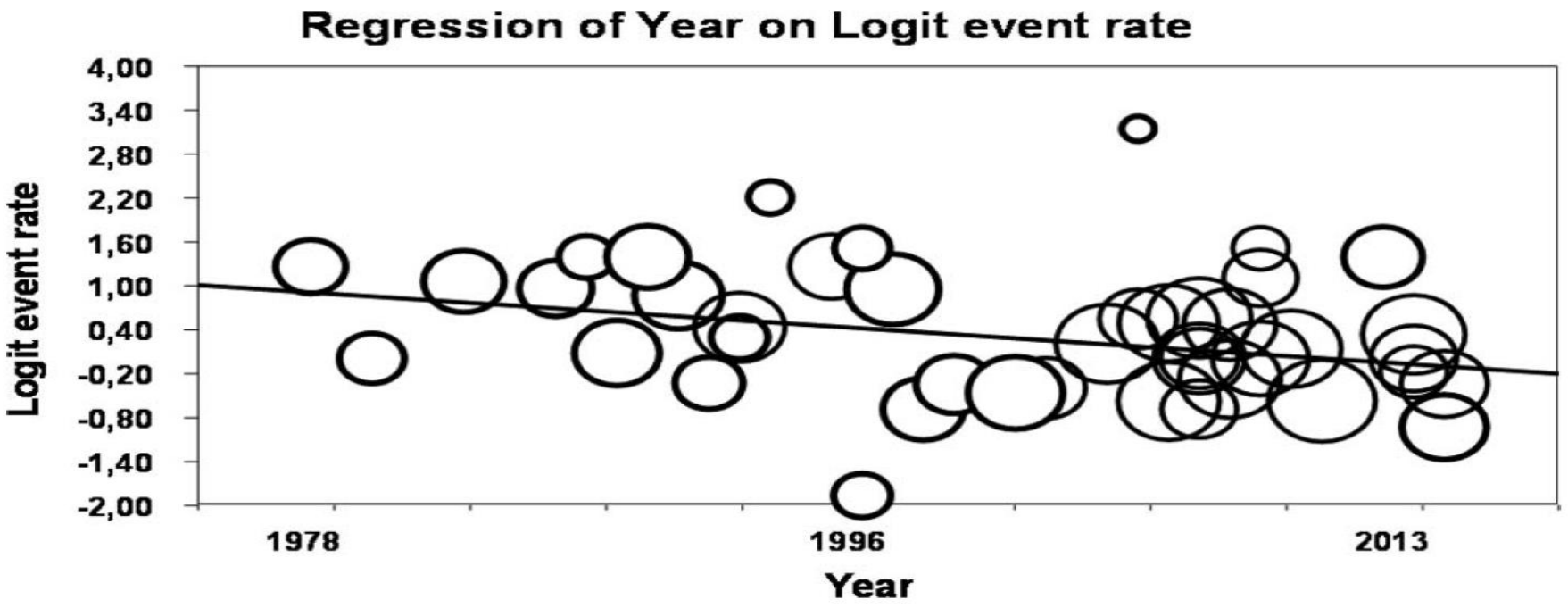
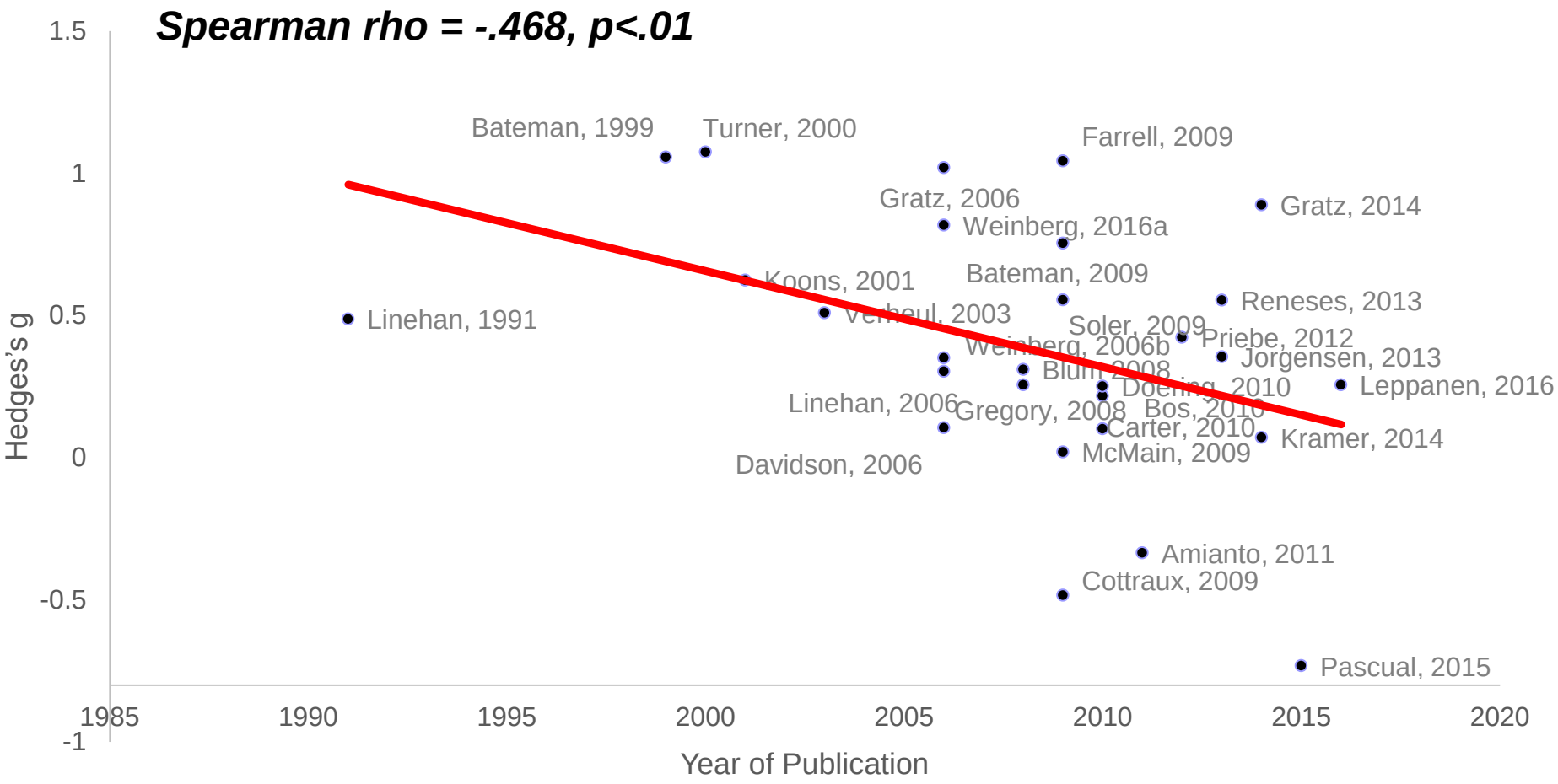


Figure 6. The plot portrays the negative change ($p = .03$) in the remission rates across time ($k = 42$). The size of the circles indicates the relative contribution (random weight) of each study to the analysis.

Johnsen, T. J., & Friborg, O. (2015). The effects of cognitive behavioral therapy as an anti-depressive treatment is falling: A meta-analysis. Psychological Bulletin, 141(4), 747-768. doi: 10.1037/bul0000015

Effect sizes in comparative studies of psychotherapy for BPD decrease by year of publication



Cristea, I. A., Gentili, C., Cotet, C. D., Palomba, D., Barbui, C., & Cuijpers, P. (2017). Psychotherapy for borderline personality disorder: A systematic review and meta-analysis. *JAMA Psychiatry*.

Fonagy, P., Luyten, P., & Bateman, A. (2017). Treating borderline personality disorder with psychotherapy: Where do we go from here? *JAMA Psychiatry*

Evidence-based treatments in young people

The “Dodo Bird Verdict”

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)

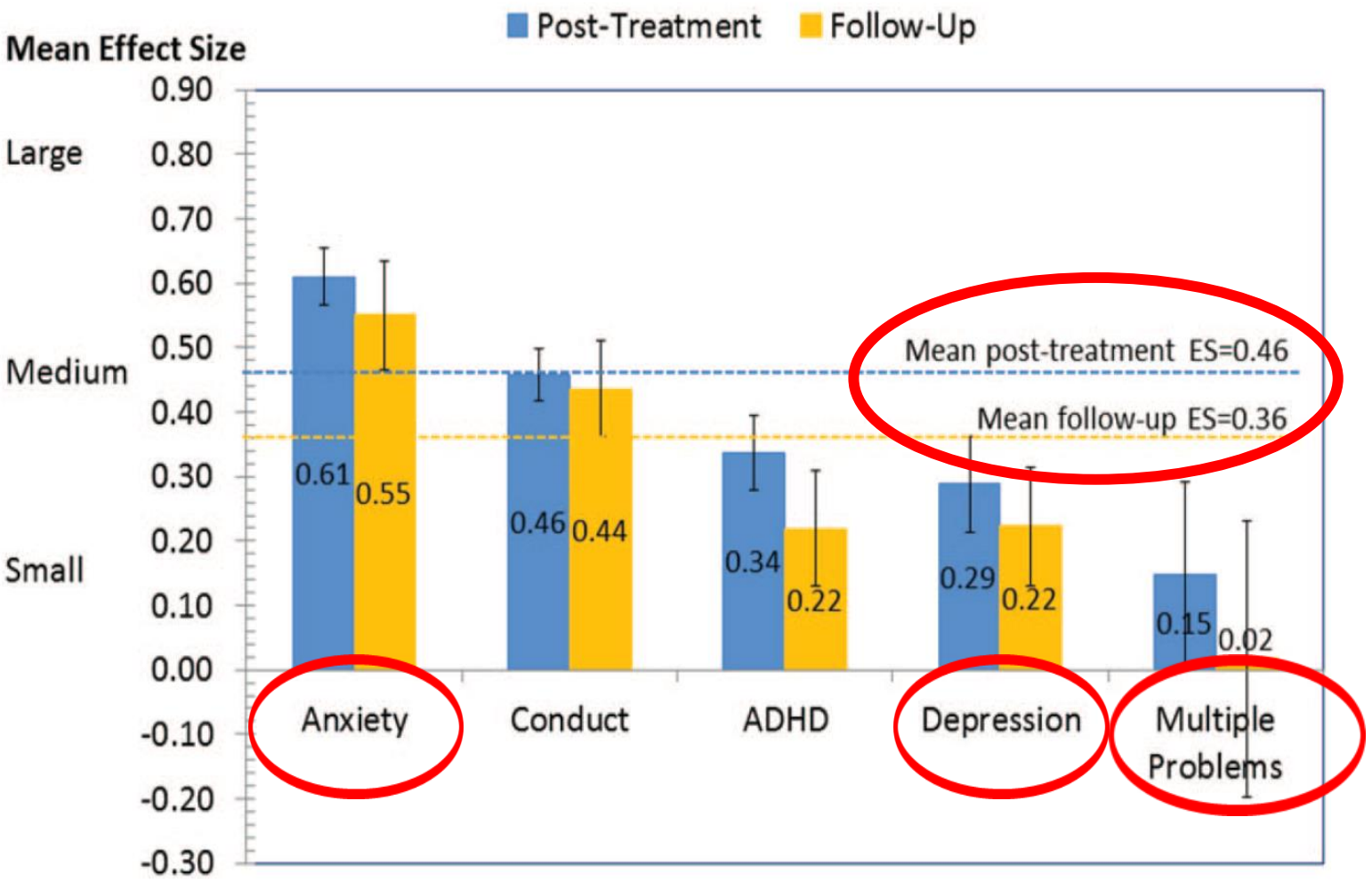
Benish et al, 2008; Imel et al., 2008; Miller et al., 2008; Spielmans et al., 2007

Effect sizes of interventions in youth: Five decades of research

- Multilevel meta-analysis: multiple outcomes
- N=447 studies, totaling 30,431 youths
- No evidence of publication bias
- No significant differences among treatment approaches = dodo bird verdict

Weisz, J. R., Kuppens, S., Ng, M. Y., Eckshtain, D., Ugueto, A. M., Vaughn-Coaxum, R., . . . Fordwood, S. R. (2017). What five decades of research tells us about the effects of youth psychological therapy: A multilevel meta-analysis and implications for science and practice. *American Psychologist, 72*(2), 79-117. doi: 10.1037/a0040360

Five decades of youth interventions



Weisz, J. R., Kuppens, S., Ng, M. Y., Eckshtain, D., Ugueto, A. M., Vaughn-Coaxum, R., . . . Fordwood, S. R. (2017). What five decades of research tells us about the effects of youth psychological therapy: A multilevel meta-analysis and implications for science and practice. *American Psychologist, 72*(2), 79-117. doi: 10.1037/a0040360

Target problem was the most important moderator of treatment benefit

- Better outcome: **less 'co-morbidity'**
- Not qualified by treatment type or control condition
- With regard to **depression**:
  - **ES=.22 at follow-up = only about 60% are better off than control condition**
- With regard to **multiple problems**
  - ES=.02 at follow-up = **not better than no treatment**

So where does this leave us?

- Most YP with **depression** in clinical practice present with '**multiple problems**'!
- Dearth of studies on '**multiple problems**'
  - n=10 in the Weisz et al. 2017 meta-analysis
  - Example: Recent review found only very few trials on treatment of BPD in adolescence (Fonagy et al., 2015)

Fonagy, P., Speranza, M., Luyten, P., Kaess, M., Hessels, C., & Bohus, M. (2015). ESCAP Expert Article: borderline personality disorder in adolescence: an expert research review with implications for clinical practice. *European Child and Adolescent Psychiatry, 24*(11), 1307-1320. doi: 10.1007/s00787-015-0751-z

THE IMPACT STUDY

Improving Mood With Psychoanalytic Psychotherapy And Cognitive Behaviour Therapy:

- Largest RCT of pediatric depression so far
- N=465 ITT, randomized to
  - Brief Psychosocial Intervention
  - CBT
  - PDT

Goodyer, I., Tsancheva, S., Byford, S., Dubicka, B., Hill, J., Kelvin, R., . . . Fonagy, P. (2011). Improving mood with psychoanalytic and cognitive therapies (IMPACT): a pragmatic effectiveness superiority trial to investigate whether specialised psychological treatment reduces the risk for relapse in adolescents with moderate to severe unipolar depression: study protocol for a randomised controlled trial. *Trials, 12*(1), 175.

Goodyer, I. M., Reynolds, S., Barrett, B., Byford, S., Dubicka, B., Hill, J., . . . Fonagy, P. (in press). Cognitive behavioural therapy and short-term psychoanalytical psychotherapy versus a brief psychosocial intervention in adolescents with unipolar major depressive disorder (IMPACT): a multicentre, pragmatic, observer-blind, randomised controlled superiority trial. The Lancet Psychiatry.

However…

- A substantial proportion of patients (approximately 25%) continued to meet diagnostic criteria for unipolar major depression by 86 weeks.
- A further 15% reported depressive symptoms higher than the cut-off score (> 26) for potential cases.
- Only 285 (60%) of the sample were available for full clinical assessment
- Treatment resistance or non-compliance in this cohort overall is relatively high

‘Hard-to-reach’?

Number of therapy sessions attended

	BPI	CBT	STPP
Median (IQR) [a]	6 (4,11)	9 (5,14)	11 (5,23)
Planned	12	20	28

- “Flatlining of ESs over time might suggest a **need to rethink** the very research strategy through which psychological therapies for youths have been developed across five decades” (Weisz et al., 2017, p. 95)

Is that all there is? Have we reached a ceiling

So where does this lead us…?

New Directions

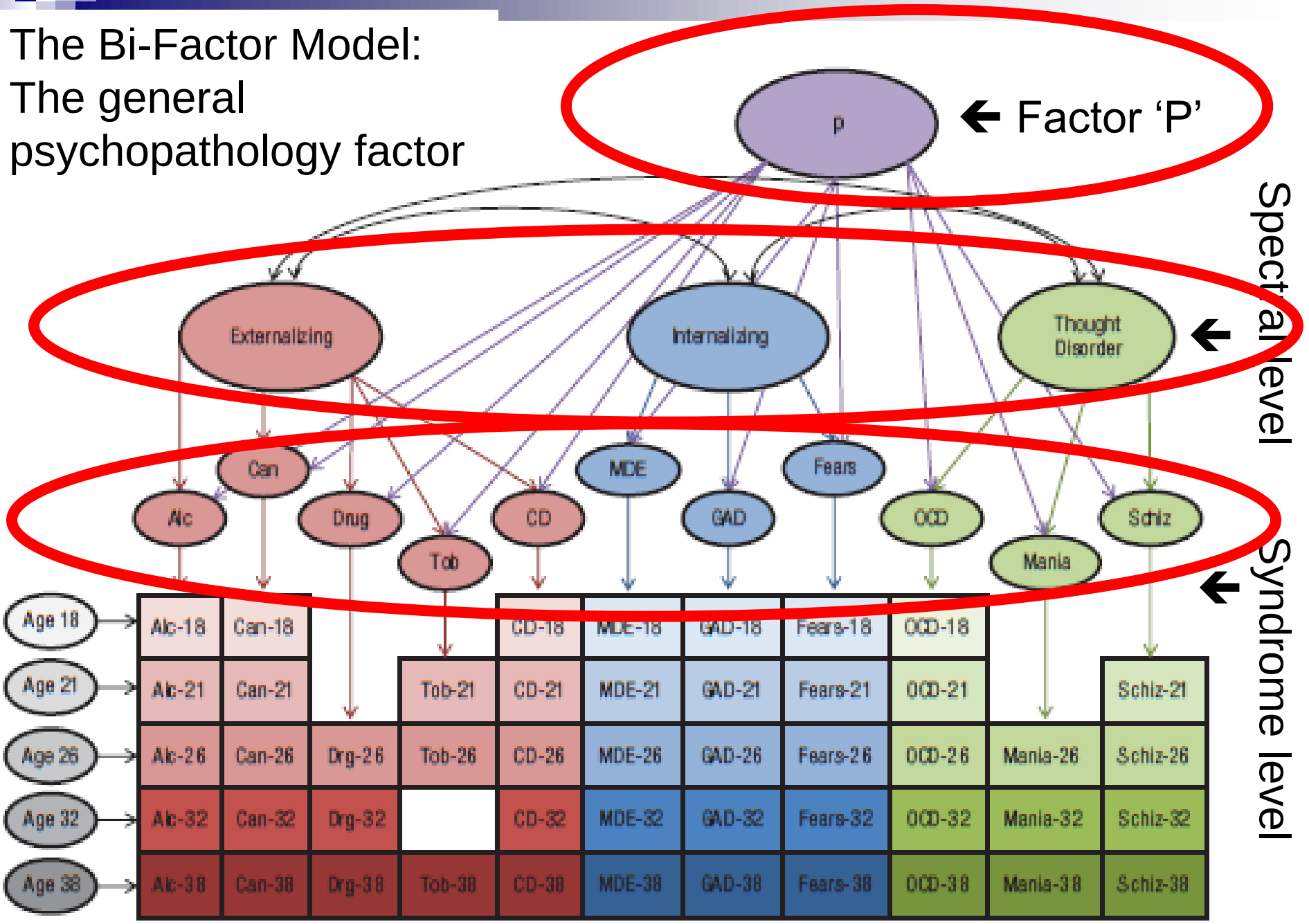
- A general psychopathology or ‘p’-factor
- An evolutionary informed view on salutogenesis
- The Research Domain Operating Criteria Initiative (RDoC)

The structure of psychopathology and the p-factor

- "Disorders" in psychiatry are highly comorbid
- Particulary depression and anxiety: very high ‘co-morbidity’
- P-factor?: one general psychopathology factor that explains
  - Comorbidity among disorders
  - "Change" of disorder over time

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). Interpersonal relatedness and self-definition in normal and disrupted personality development: Retrospect and prospect. *American Psychologist, 68*(3), 172-183.

The Bi-Factor Model: The general psychopathology factor



The p factor appears to capture an underlying propensity for any kind of psychopathology.

- Replicated across numerous samples
  - **Children** (Lahey et al., 2015; Murray, Eisner, & Ribeaud, 2016),
  - **Adolescents** (Blanco et al., 2015; Carragher et al., 2016; Laceulle, Nederhof, van Aken, & Ormel, 2015; Lahey et al., 2012; Murray et al., 2016; Noordhof, Krueger, Ormel, Oldehinkel, & Hartman, 2015; Patalay et al., 2015; Tackett et al., 2013)
  - **Adults** (Caspi et al., 2014; Lahey et al., 2012),

Logistic regression predicting future caseness

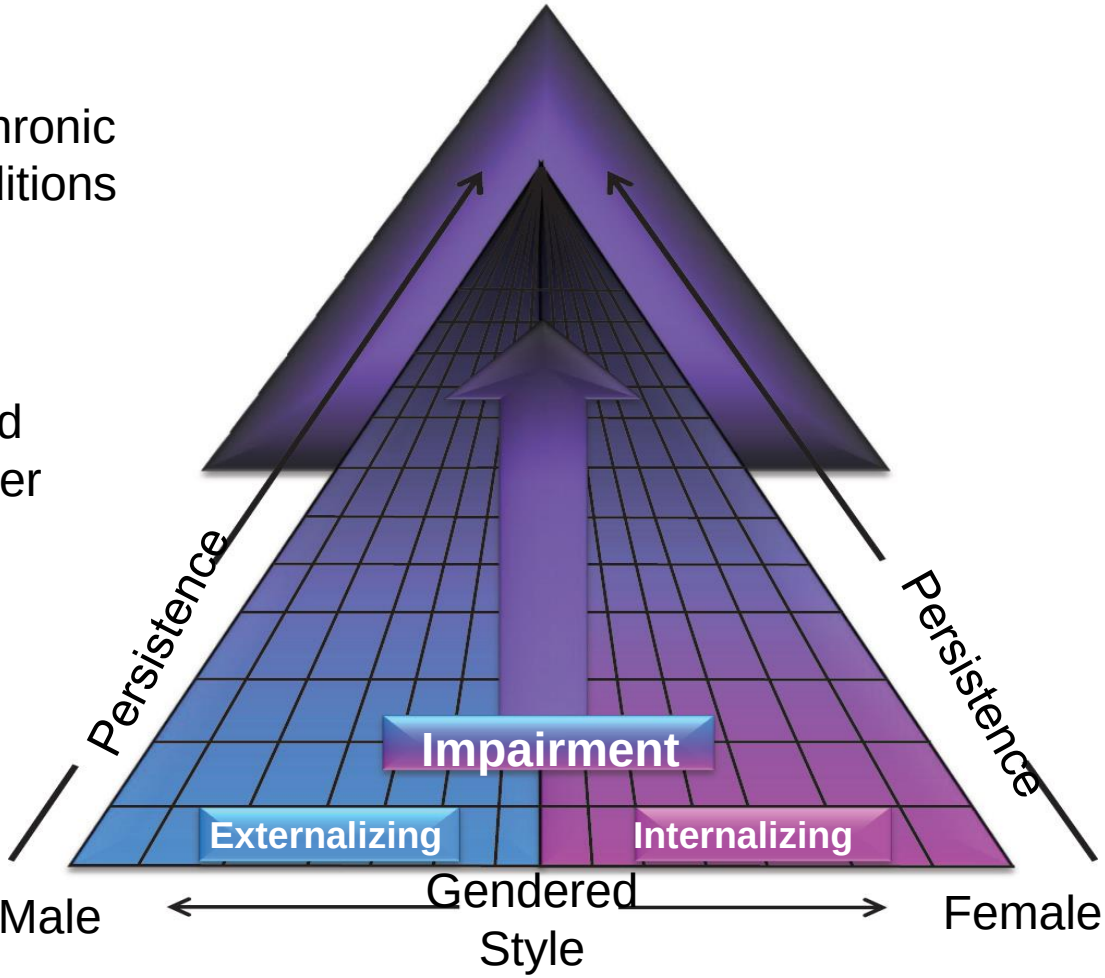
Predictor Patalay, Fonagy et al. 2015 Br J Psychiatry *community-based sample aged 11-14 years (N= 23, 477)*	B	Wald Chi-square	Odds-ratio
2-factor model			
Internalising	.49***	76.4	1.80
Externalising	1.41***	689.64	4.11
Bi-factor model			
Internalising	.22	4.43	1.25
Externalising	1.43***	413.74	4.16
P-Factor	2.33***	479.01	10.30

The ‘P’ Factor (Caspi et al., 2013)

Ungendered chronic
Psychotic conditions

Partially gendered
Personality disorder

Gendered
Neurotic’ conditions



Fonagy, P., Luyten, P., & Allison, E. (2015). Epistemic Petrification and the Restoration of Epistemic Trust: A New Conceptualization of Borderline Personality Disorder and Its Psychosocial Treatment. *Journal of Personality Disorders, 29*(5), 575-609.

Fonagy, P., & Luyten, P. (2016). A multilevel perspective on the development of borderline personality disorder. In D. Cicchetti (Ed.), *Developmental Psychopathology* (3rd ed.). New York: Wiley.

Elephant in the room

"I'm right there in the room, and no one even acknowledges me."

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

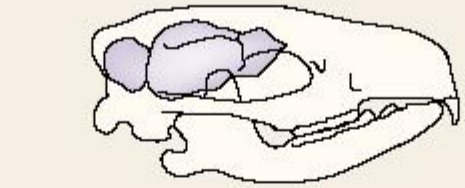
↓

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

↓

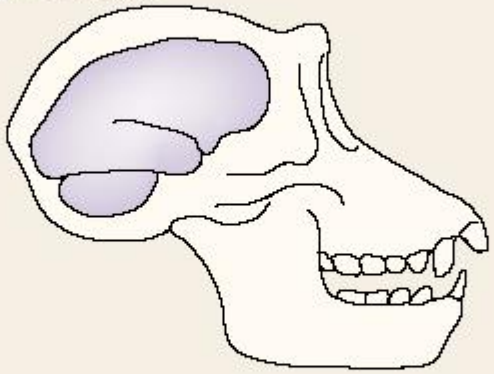
*Therefore **correlation** in mammals **between size of** social **group and** volume of **neocortex***

Hedgehog

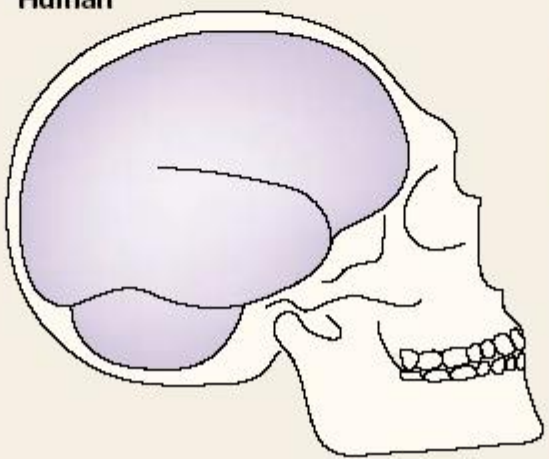


Courtesy of Laura Roberts

Chimpanzee



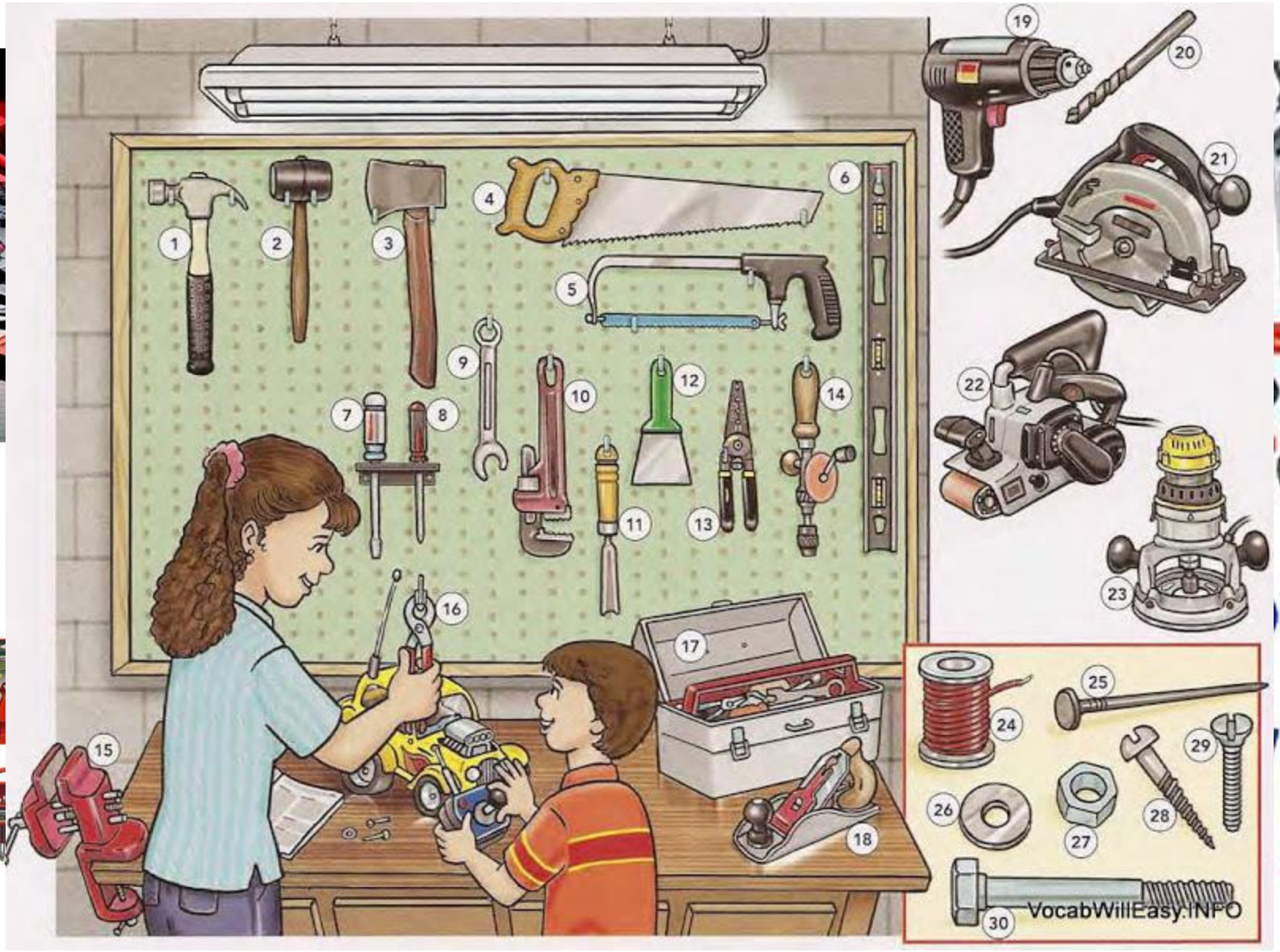
Human



Species-specific ways to acquire beliefs

- We can accept a culturally transmitted belief for **two reasons** (Sperber, 1997, 2001, Sperber et al., 2010)

- To accept because of **content**: deductive reasoning
- To accept on account of the **authority** (*'deferentially'* transmitted, Recanati, 1997)
  - The **source** is **known**, **remembered** and **judged** to be reliable (or trustworthy)
  - First in attachment relationships: **need to feel validated and understood first BEFORE epistemic trust can be developed**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40°C
P
Or give it to your mother.
She knows how to do it.

Domains in childhood/adolescent depression

Luyten, P., & Fonagy, P. (in press). The Stress–Reward–Mentalizing (SRM) Model of Depression: An Integrative Developmental Cascade Approach to Child and Adolescent Depressive Disorder Based on the Research Domain Criteria (RDoC) Approach. *Clinical Psychology Review*.

Figure 1. The Stress–Reward–Mentalizing (SRM) Model of Depression.

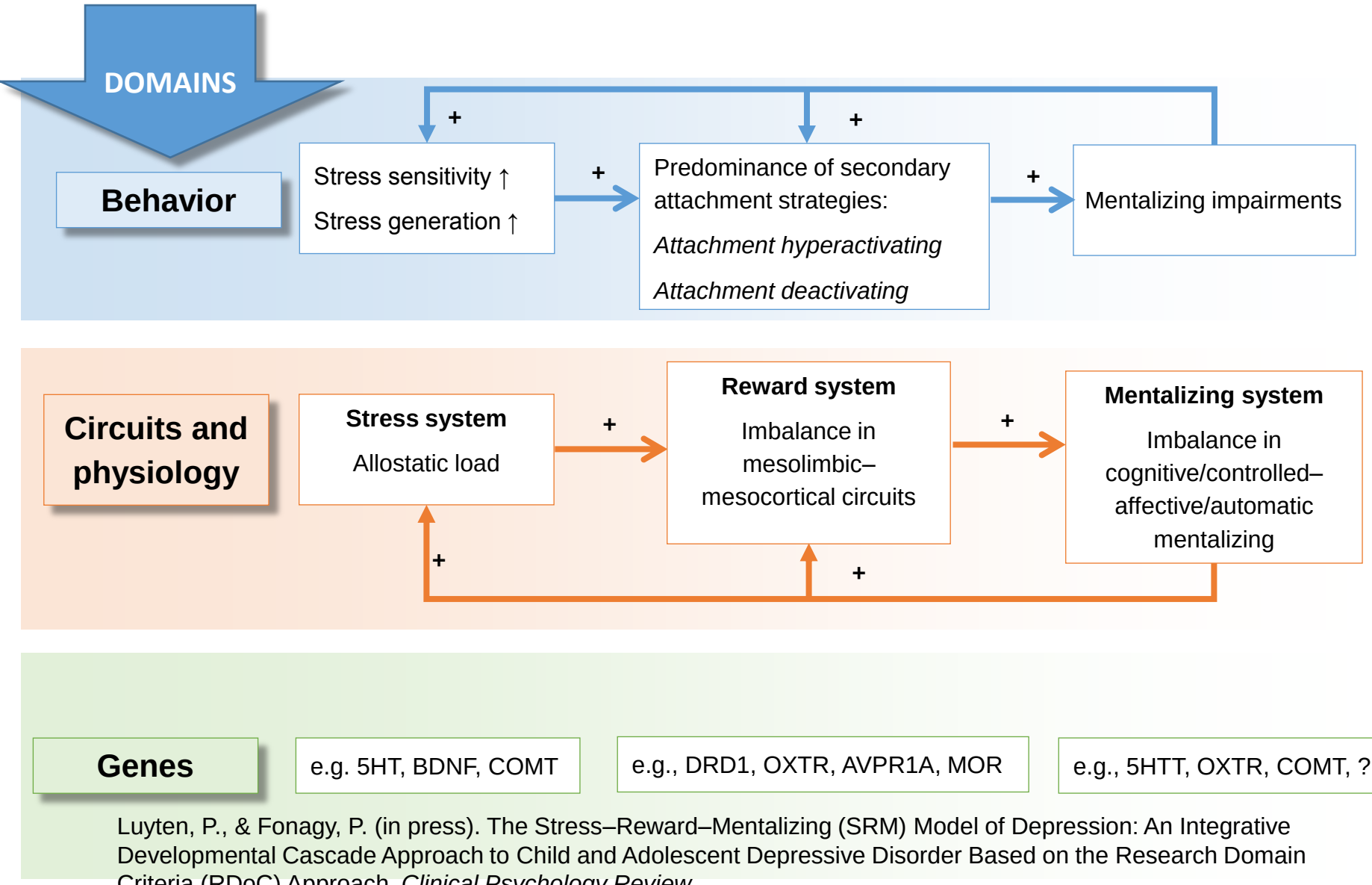

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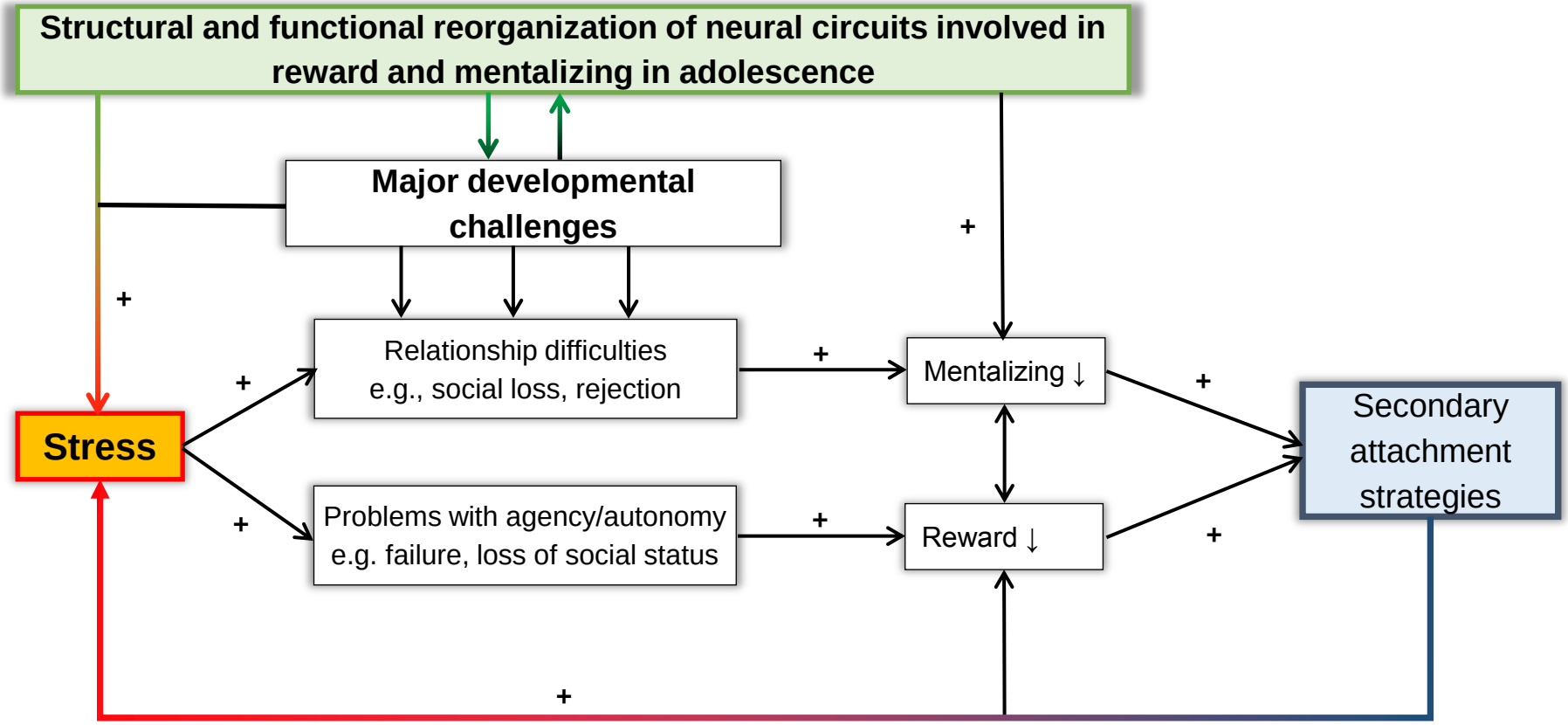
Figure 2. Adolescence and Major Pathways to Depression



Luyten, P., & Fonagy, P. (in press). The Stress–Reward–Mentalizing (SRM) Model of Depression: An Integrative Developmental Cascade Approach to Child and Adolescent Depressive Disorder Based on the Research Domain Criteria (RDoC) Approach. *Clinical Psychology Review*.

Luyten, P., & Blatt, S. J. (2013). Interpersonal relatedness and self-definition in normal and disrupted personality development: Retrospect and prospect. *American Psychologist*, *68(3),* 172-183.

Domains in childhood/adolescent depression

- To what extent do current treatments address the main **core domains** in youth depression?
  - Treatment are typically **underspecified**
- There is a need for a more **integrative treatment** approach that may **flexibly address** the different core domains in youth depression

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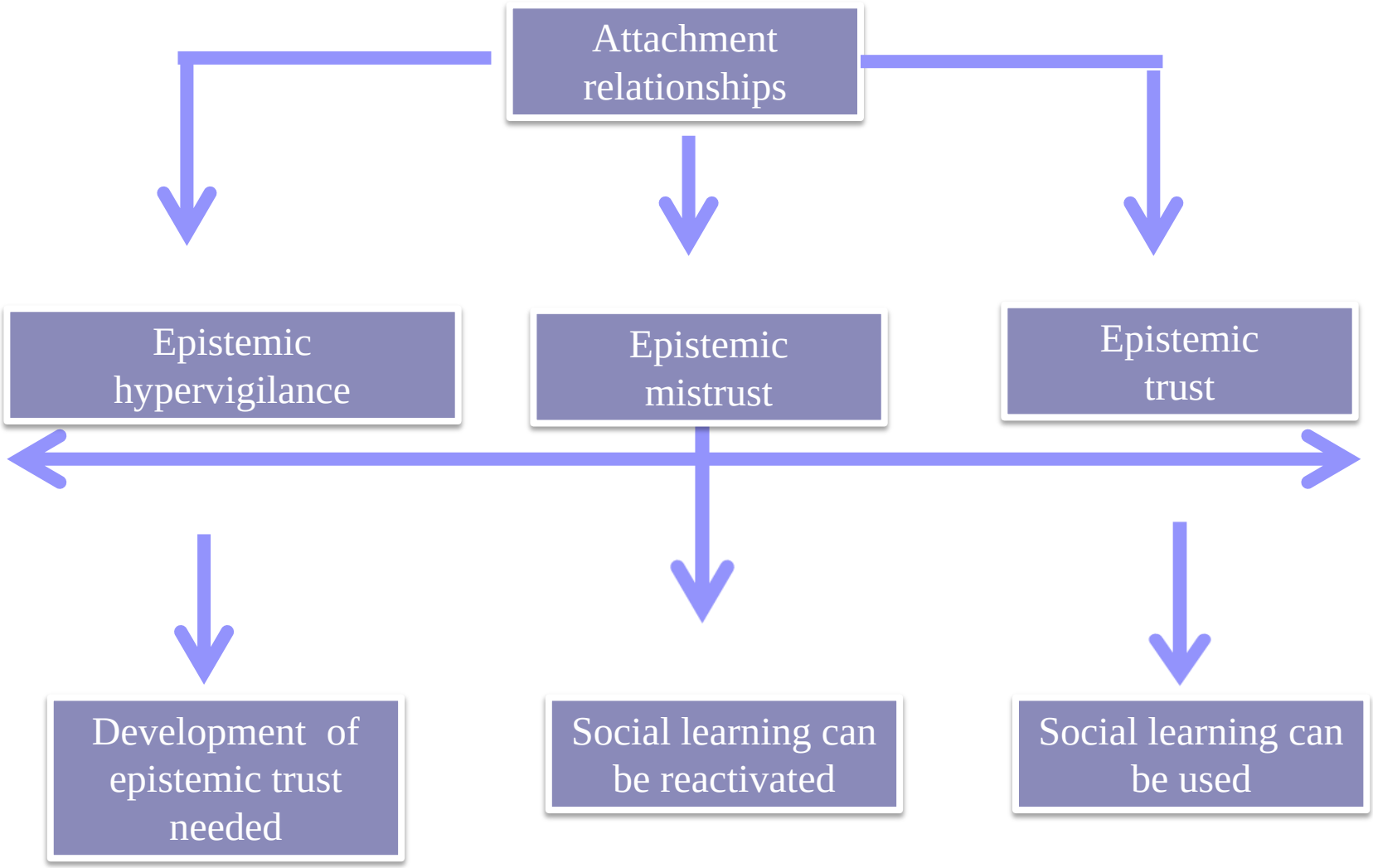
Treatment Implications

We may **need to change first** in order to be able to improve our ability to change depressed youth

- **HOW** we offer treatment
- **WHERE** we offer treatment

HOW we offer treatment

Three types of youth with depression?



WHERE we offer treatments

Building a social network begins early

When the capacity to form bonds of trust is shaky and tends to break down…

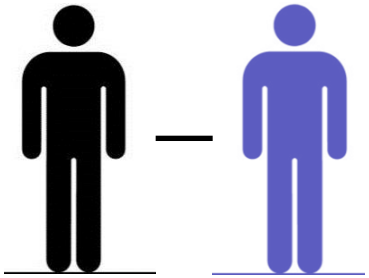
…we lose our safety net

Reconceptualising understanding not in terms of disease mechanisms…

…but as an absence of epistemic trust…

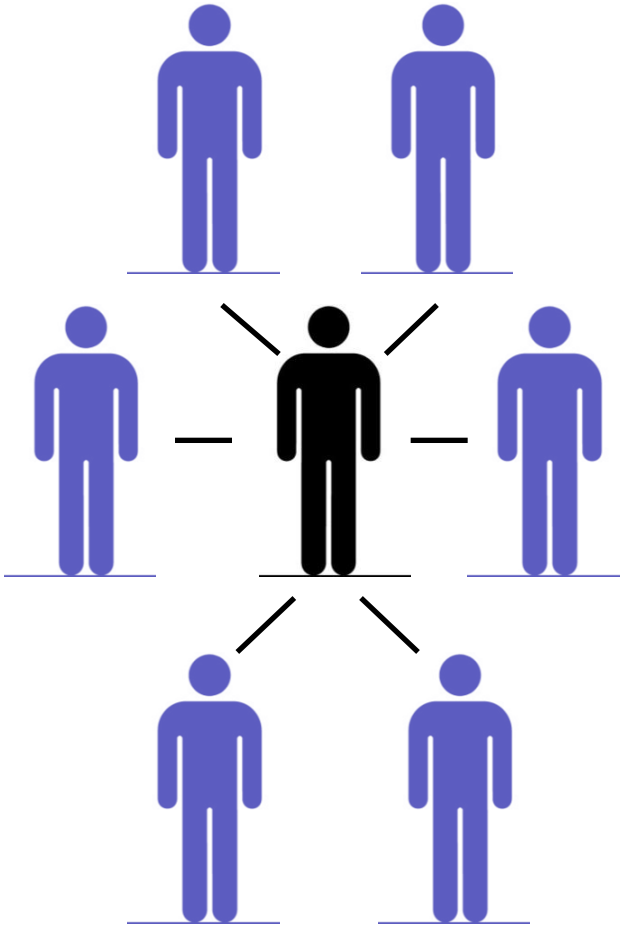
…which may once have been adaptive

Traditional therapeutic model



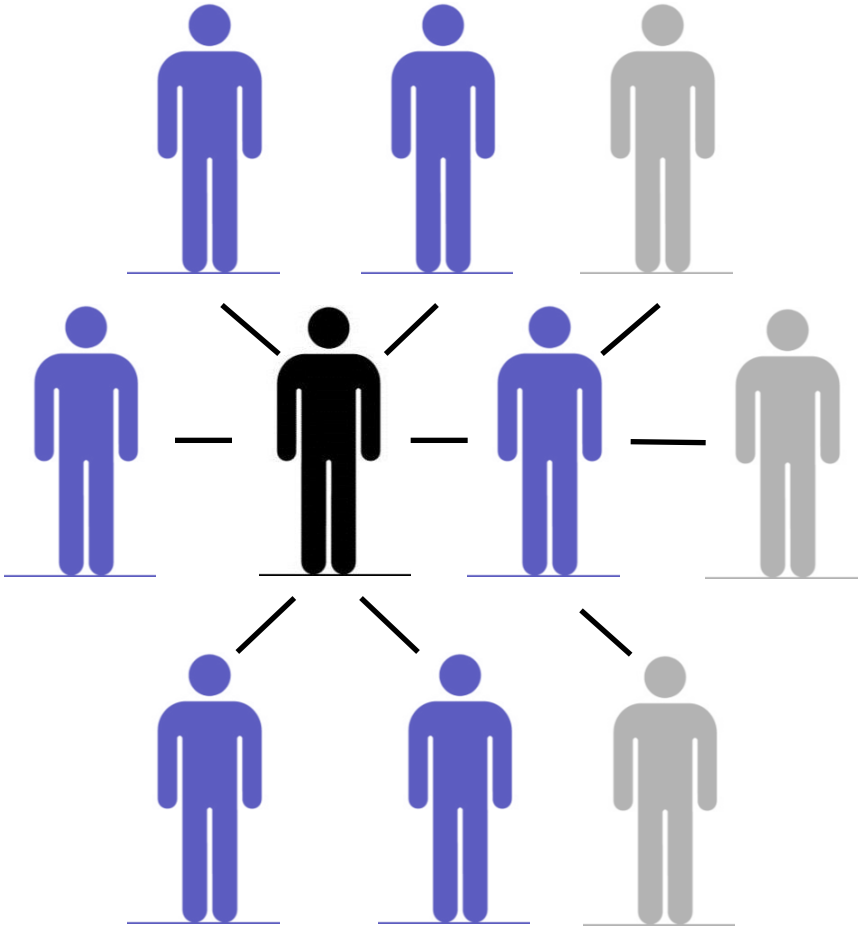
Patient and therapist are isolated in a room

Traditional therapeutic model



But the reality is that the therapist becomes part of the patient's (dysfunctional) social system, and systemic intervention may be required to address this

Systemic intervention needed



The therapist requires their own system of support relationships with other clinicians in order to scaffold their capacity to mentalize and facilitate epistemic trust

Conclusions

- We may have hit the **ceiling** with treatments for youth depression
- **However:** recent developments suggest we may improve treatments by:
  - **Tailoring treatment** to youth with depression both in terms of **types of domains** affected and **general severity or 'p-'factor**
  - This includes **leaving the secure base** of our office and **our ways of thinking** about young people with troubled minds

For more information:

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