

Why is it so hard to learn to do things differently? On not being able to learn from experience

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Progress in the treatment of physical and mental illness

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Time

Prevalence

Progress in the treatment of physical and mental illness



Time



Why have we failed to bend the curve?

Diagnosis

➢ Imprecise Dx ← Co-occurrence and no biological validity → General psychopathology (p factor)

Treatment

- ➤ Lack of availability and delay in treatment ← 65% not receiving care ← DUP 74 weeks

The context of treatment

- Lack of measurement We can't manage what we can't measure. (Peter Drucker)
- ➢ Social contextual moderation of mental disorder ← low SES, white British, SEN, from disrupted homes (4x)



 The Diagnosis: A general psychopathology factor



Models of covariation of symptoms/diagnoses





From Caspi & Moffitt (2018)



Models of covariation of symptoms/diagnoses



From Caspi & Moffitt (2018)

BJPsych The British Journal of Psychiatry (2015) 206, 1–8. doi: 10.1192/bjp.bp.114.149591

A general psychopathology factor in early adolescence

Praveetha Patalay, Peter Fonagy, Jessica Deighton, Jay Belsky, Panos Vostanis and Miranda Wolpert

Background

Recently, a general psychopathology dimension reflecting common aspects among disorders has been identified in adults. This has not yet been considered in children and adolescents, where the focus has been on externalising and internalising dimensions.

Aims

Examine the existence, correlates and predictive value of a general psychopathology dimension in young people.

Method

Alternative factor models were estimated using self-reports of symptoms in a large community-based sample aged 11– 13.5 years (N=23477), and resulting dimensions were assessed in terms of associations with external correlates and future functioning.

Results

Both a traditional two-factor model and a bi-factor model with a general psychopathology bi-factor fitted the data well. The general psychopathology bi-factor best predicted future psychopathology and academic attainment. Associations with correlates and factor loadings are discussed.

Conclusions

A general psychopathology factor, which is equal across genders, can be identified in young people. Its associations with correlates and future functioning indicate that investigating this factor can increase our understanding of the aetiology, risk and correlates of psychopathology.

Declaration of interest

None.

Bi-factor model with the item-loadings



Patalay, Fonagy, Deighton, Belsky, Vostanis and Wolpert (2015)

Logistic regression predicting future caseness

Predictor	B	Wald	Odds-ratio
N=10,270		Chi-square	
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

Shared and specific effects of mental disorders and risk of suicide attempt during a 3-year follow-up period



P factor in PDs: the DSM factor structure N=966 inpatients

Sharp et al., 2015 Journal of abnormal psychology



P factor in PDs: the DSM factor structure N=966 inpatients

Sharp et al., 2015 Journal of abnormal psychology



P factor in PDS: does EFA replicate the DSM factor structure?



Sharp et al., 2015 Journal of abnormal psychology

P factor in PDs: Exploratory bifactor model



Only factor loadings >|30| are shown

Sharp et al., 2015 Journal of abnormal psychology



General and specific factors for personality disorders

Longitudinal relationships

- 4 measure waves: baseline, 2, 4, 6 and 10 years
- N = 733



Good fit ($\chi^2_{(26)}$ = 196.28, *p* < .001; RMSEA = .048; CFI = .96; TLI = .92; SRMR = .036)

Wright et al. (2016) JAP



Child Maltreatment and psychopathology: Comparing structural models



Caspi, A., et al. (2013)



Child Maltreatment and psychopathology: Comparing structural models



Caspi, A., et al. (2013)



General and specific factors for personality disorders Longitudinal relationships



The observed diagnostic instability and declines in **symptoms of PDs are largely driven by changes in general PD** rather than stylistic factors

Wright et al. (2016) JAP



2. The treatments:
A story of decline
and
generalisation

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The effect CBT for depression across time 1977-2014

A meta-analysis by Johnsen & Friborg, 2015

K= 70 published studies Within-group (pre-post) k=53 Between-groups with waiting list, k= 17 Average quality of studies (RCT-PQRS)= 28.4 (7.5)

N= 2,426 Average n(sd)= 34.6 (34.1) Males= 30.9% Patients with comorbidity= 43% Average CBT sessions= 14.6 (5.12) Mean baseline BDI= 26.1 (4.1) Males= 30.9% Patients with comorbidity= 43%







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The effect CBT for depression across time 1977-2014

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4,00

3,60

3,20

2,80

2,40

2,00

1,60

1,20

0,80

0,40

0.00

3

Hedges's

Average CBT sessions= 14.6 (5.12) Mean baseline BDI= 26.1 (4.1) Males= 30.9% Patients with comorbidity= 43%









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



Fonagy, Luyten & Bateman, 2017 JAMA Psychiatry

The effect psychological interventions across time in the treatment of anxiety (1970-2015) Anxiety



The effect psychological interventions across time in the treatment of ADHD (1970-2015) ADHD



Weisz et al. (2018) Perspectives on Psychological Science

The effect psychological interventions across time in the treatment of depression (1970-2015) Depression



Weisz et al. (2018) Perspectives on Psychological Science

The effect psychological interventions across time in the treatment of conduct problems (1970-2015) Conduct Problems



Weisz et al. (2018) Perspectives on Psychological Science





CBT equivalent to Psychodynamic Psychotherapy for MDD (N = 341)



Dreissen et al. (2013)





Zipfel, S. et al., (2014)





Dialectical Behaviour Therapy is equivalent to General Psychiatric Management for BPD (N = 180)





McMain. et al., (2009)



Group MEmory specificity training (MEST) and group psychoeducation and supportive counselling (PSC) are equivalent for adolescent in the treatment of recurrent depression (N = 67)







CBT, Short-term Psychodynamic Psychotherapy (STPP), and Brief Psychological Intervention are equivalent for adolescent depression (N = 497)

















(N = 307)

Prolonged Exposure Therapy vs Present-Centered Therapy



Foa et al., (2018)





CBT, Person-Centred Psychotherapy (PCT), and Psychodynamic therapies are equivalent in UK primary practice (N = 3,015)



What happens when you ask a room of psychotherapists whose approach is the most effective?



What can be done to end this unseemly behaviour?

What happens when you ask a room of psychotherapists whose approach is the most effective?



What can be done to end this unseemly behaviour?


Why are therapies equal and becoming apparently less effective?

- Paradigm has been shifting more and more towards addressing specific dysfunctions – therapies more and more specialized
 - Treatments addressing specific underlying pathologies while change process is likely to be transdiagnostic
- Same protocol for a range of disorders (e.g. Acceptance and Commitment Therapy or ACT: Hayes, 2015; MBT Bateman, 2016)
- Individually structured protocols for the same diagnoses (Chorpita & Daleiden, 2014).

3. The context:
A cultural reeducation:
(Very) Old dogs..... You will never amount to anything if you hold a ball like that!

I want to write my PhD on the "Use of low signal-tonoise ratio stimuli for highlighting the functional differences between the two cerebral hemispheres". Let the boy dream Ivan, He is a born dilettante!

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



Criticisms of attachment theory

From psychoanalysis: "mechanistic"



"reductionistic" "no real metapsychology" "broad classifications that lose the subtlety and detail of the original material"

From anthropology:



"culturally blind" "socially oblivious" "misses different family configurations, e.g., alloparenting" "empirically based on WEIRD people" WEIRD: Western, Educated, Industrialised, Rich & Democratic





Who is our knowledge based on?

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The WEIRD world: 12% of global population





The rest of the world: 88% of global population





WEIRD data



96% of the subjects in psychological samples come from WEIRD countries with only **12% of the world's population**



WEIRD data

*Henrich et al 2010, BBS



A randomly selected American undergraduate is more than 4,000 times more likely to be a research participant than is a randomly selected person from outside of the West



The cultural specificity of **sensitive responsiveness**



- Face-to-face interaction
- Infant's point of view is paramount
- Verbal and vocal exchange ('Serve & Return')
- Learns primarily about self as an independent agent
- Only learns secondarily about others



Caregiving beyond the WEIRD world



- Proximal caregiving
- Infant facing outward, seeing the world as others see it
- Supported to take the perspective of others
- Caregiver instructs, guides and directs the infant 'apprentice'
- Only learns secondarily about self





Secure attachment to an individual parent makes limited sense in certain evolutionary contexts...



Alertness and suspicion is more likely to ensure survival





- Dyadic, turn-taking, 'smoothly completed' interactions
- Supports the cultural ideal of the infant as an agent sensitized to use personal qualities and attributes as the primary referent of actions
- When infant recognises the mother's representation of him as the 'central agent'
- This creates the '*click*': **epistemic match**
- But perhaps this experience is e.g. of broader category



Sensitivity is biologically a group phenomenon

- Use of the sensitivity construct restricted to single-caregiver observations (predominantly mother-infant interactions)
- Non-Western communities have simultaneous multiple caregiving without clear place-bound or time-bound task division (Hrdy, 2011)
- Need to assess the caregiver network's sensitive responsiveness to the infant when simultaneous multiple caregiving is the norm (Mesman et al., 2016)





- Children and caregivers engage in multiple, simultaneous, ongoing activities
- Supports the cultural ideal of the infant as an agent sensitized to attend to others' wishes and interests, and use these as the primary referent of actions
- Infant recognises the specific other as an instance of the generic other characteristic of the community
- This creates the 'click' the epistemic match



Good caregiving is context dependent



- We cannot assume good caregiving is always and/or exclusively defined by sensitivity
- Cannot be defined adequately without reference to sociocultural context
- Depends on nature of this context

Accognising the role of the social context: A Copernican revolution?



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Where attachment was there trust shall be...





Understanding the 'p' factor as an absence of expected resilience







Formerly: Investigating the mechanisms that lead to stress-related illness

PSYCHO-PATHOLOGY







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'The universal socialization task for cultures regarding attachment concerns the learning of trust, not ensuring the "secure" attachment of an individual child to a single caregiver in a dyadic relationship. The question that is important for many, if not most, parents and communities is not, "Is [this individual] child 'securely attached?'", but rather, "How can I ensure that my child knows whom to trust and how to share appropriate social connections to others? How can I be sure my child is with others and situations where he or she will be safe."



Different Faces Attachment

> Cultural Variations on a Universal Human Need

EDITED BY HILTRUD OTTO and HEIDI KELLER

Thomas S. Weisner, 2014

The theory of natural pedagogy and epistemic trust (Gergely & Csibra, 2008; Fonagy & Allison, 2014) New form of evolution (late Pleistocene) based on learning and the transmission of cultural knowledge





As soon as you need to create tools to make tools the process of tool-making becomes, distanced from its ultimate function, opaque in its intent and necessitates communication





How do young humans learn to use the bewildering array of tools that surround them efficiently?



The theory of natural pedagogy and epistemic trust (Gergely & Csibra, 2008; Fonagy & Allison, 2014) New form of evolution (late Pleistocene) based on learning and the transmission of cultural knowledge The challenge of discerning of epistemic trustworthiness and the need for **EPISTEMIC VIGILANCE!** Epistemic Trust

The theory of natural pedagogy and epistemic trust (Gergely & Csibra, 2008; Fonagy & Allison, 2014) New form of evolution (late Pleistocene) based on learning and the transmission of cultural knowledge

- The challenge of discerning of epistemic trustworthiness and the need for ET= EPISTEMIC VIGILANCE!
- The pedagogic stance is triggered by ostensive communicative cues (E.G. turntaking contingent reactivity, eye contact)
- Ostensive cues have in common
 - Person recognized as a self
 - > Paid special attention to (noticed as an agent)



Triggering the Pedagogical Stance

- 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 channel for knowledge acquisition
- Mimicry may be protected by human evolution because it generates epistemic trust
 - Social smile (recognition of self) increases imitation because smile generates epistemic trust and opens channel to receive knowledge



Experimental illustration of ostensive cues

Gergely, Egyed et al. (2013) Subjects: 4 groups of 18-montholds 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

Percent Giving Positive Object





Non-Ostensive (Non-Communicative) Demonstration Requester: OTHER person (Condition 2)





LEARNING FROM ATTITUDE EXPRESSIONS





Condition 4: Non-Ostensive (Non-Communicative)

Demonstration Requester: SAME person





Percent Giving

Positive Object

**

71

40

77

LEARNING FROM ATTITUDE EXPRESSIONS

18-month-olds

Ostensive Expression - Generalization

Non-Ostensive Expression - No Generalization







Non-Ostensive Expression - Person-Specific Attribution









Egyed et al., in prep.

Social Cues that Create Epistemic Trust

- Attachment to person who responded sensitively in early development is special condition for generating epistemic trust → cognitive advantage of security → including neural development (Van Ijzendoorn et al.)
- 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 memory as relevant

Feeling contingently responded to (mentalized) is the quintessential ostensive cue and therefore the primary biological signal that it is safe to learn



Attachment links to learning via epistemic trust

- We all have a personal narrative
- The understanding of that narrative by another person creates a potential for epistemic trust
- The perception of the understanding by the other of the personal narrative generates epistemic trust
- As it is a perception genuine understanding may not be necessary and the illusion of understanding may suffice.





Individuals differ in the extent they are able to generate epistemic trust

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, therapist) explicable in terms of varying capacity to generate epistemic trust



Meta-analytic studies of teacher effectiveness (Hattie, 2014)

- What makes a **teacher** the most **effective**?
 - It is teachers seeing learning through the eyes of students
- 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



Individuals differ in the extent they are able to experience epistemic trust



Maltreatment and the failure of epistemic trust

- An abusive or neglectful caregiving environment (the child is not mentalized)
 - Ostensive cues are either absent or undermined by fear or confusion
 - Epistemic vigilance is not relaxed
- Epistemic mistrust (hypervigilance) develops
 - adults' mind is not considered as a benign or reliable source of knowledge (deferential source – Sperber)
 - ➢ possible adult hatred, sadism, fear or indifference → safer not to think about the caregiver's mental states at all → leads to failure to recognize when recognized
 - Oblivious to ostensive cues blocked

Maltreatment and the failure of epistemic trust

- Once epistemic trust is damaged and the mind is partially closed to processing new information
 - access to exploring different ways of behaving and responding becomes highly restricted:
- The presentation of fresh information cannot be internalized as personally relevant or meaningful
 - Knowledge (including social knowledge) is not updated as it is not trusted
 - A subjective sense of epistemic injustice (being misunderstood) is created → being 'stuck in isolation'.

Impaired epistemic trust serves to severely diminish learning and therefore also responsiveness to psychotherapeutic intervention

Early maltreatment hinders associative learning

The world is not a rewarding place

41 adolescents exposed to childhood physical abuse40 adolescents with no history of maltreatment



Hanson, JL., et al. (2017). The Journal of Child Psychology and Psychiatry





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Reasons behind not experiencing trust

- Deprivation and trauma → <u>chronic mistrust</u>
 Fear of mentalizing → avoidance of mental state and
 - ➢ Inadequate mentalizing → misrepresent how others represent the person → feel persistently misunderstood and experience intense and consistent epistemic injustice
 - Inaccurate view of self -> perception of personal narrative in others does not experienced as a match

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Reasons behind not experiencing trust

- Deprivation and trauma inappropriate trust
 - self-representation too diffuse → all things feels they fit
 - other's representations of self distorted of an illusory fit when none exists (I am accurately seen as bad)
 - ➢ Inaccurate view of self (defensively generated super-robust) → perception of personal narrative is calculated by informant to be experienced as a match by the learner (manipulation of the match)

The nature of severe psychopathology

- Social adversity (most deeply trauma following) neglect) 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
- Severe disorder is not disorder of personality but inaccessibility to cultural communication relevant to self from social context
 - Partner
 - **Epistemic Mistrust →Epistemic** Therapist Injustice

 Epistemic Isolation
 - Teacherr
 - Leader

Mentalization based definition of trauma

Adversity becomes traumatic when it is compounded by a sense that one's mind is alone: normally an accessible other mind provides the social referencing that enables us to frame a frightening and otherwise overwhelming experience.



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Loneliness and Trauma

240 female Trauma 240 female HC



Building a social network in childhood and adolescence





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



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...we **lose** our **learning network** and social expectations (**priors**) are not updated



Implications: The nature of psychopathology

- Epistemic mistrust which can follow perceived experiences of maltreatment or abuse leads to epistemic hunger combined with mistrust
- Persistent severe disorder is a failure of communication
 - It is not a failure of the individual but a failure of learning relationships (patient is 'hard to reach')
 - 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

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Implications for therapy



Therapist is greatest source of variance in psychotherapy outcome (Wampold et al. 2016)





Therapist is greatest source of variance in psychotherapy outcome (Wampold et al. 2016)

clinical episode in MBT by therapist "In the beginner's mind 8 there are many 9 possibilities, but in the expert's there are few" N Shunryu Suzuki 0 ສ Therapist A Therapist B of Therapist C Therapist D Odds Therapist E Therapist F



Revised model of psychological therapy



Patient creates a self narrative pertinent to setting

Therapist develops an image of patient's imagined self narrative

Patient detects therapist's narrative of patient's self narrative Patient makes a **match and epistemic trust** is generated Therapist is in a **position to modify** enduring **understandings**

Patient's hope of epistemic trustworthiness is changed

Reconceptualising **severe persistent** disorders in terms of communication failure...

...but as an absence of expected resilience or lack of epistemic trust...



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Vulnerability to **psychopathology**...





...can be buttressed by foundations of epistemic trust that build resilience

