The impact of adverse childhood experiences: challenges ahead

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who?

why?

what?
who?
why?
what?
WHO?
WHO?
Actual experience
Freud, S. (1896)
The Aetiology of Hysteria
- “Seduction theory”
WHO?

Subjective experience
Freud, S. (1906)
Three Essays on the Theory of Sexuality
“Oedipus’ complex”

Actual experience
Freud, S. (1896)
The Aetiology of Hysteria
“Seduction theory”
WHO?

Equivalence?

Subjective experience

Actual experience
WHO?

Equivalence?

Subjective experience
*Retrospective measures:*
(adult) self reports

Actual experience
*Prospective measures:*
Official records
Parental reports
(child) self reports
Figure 2. Overlap Between Individuals Identified by Virtue of Prospective or Retrospective Measures of Childhood Maltreatment

A. Childhood maltreatment
- R-P = 56%
- P-R = 52%
- Raw agreement, 76%; \( \kappa = 0.23 \)

B. Childhood sexual abuse
- R-P = 75%
- P-R = 55%
- Raw agreement, 86%; \( \kappa = 0.16 \)

C. Childhood physical abuse
- R-P = 58%
- P-R = 62%
- Raw agreement, 75%; \( \kappa = 0.17 \)

D. Childhood emotional abuse
- R-P = 85%
- P-R = 63%
- Raw agreement, 76%; \( \kappa = 0.09 \)

E. Childhood neglect
- R-P = 82%
- P-R = 77%
- Raw agreement, 84%; \( \kappa = 0.09 \)

F. Childhood separation from parent
- R-P = 14%
- P-R = 10%
- Raw agreement, 93%; \( \kappa = 0.83 \)

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### WHO?

Equivalence?

<table>
<thead>
<tr>
<th>Source</th>
<th>Cohen κ (95% CI)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Widom and Morris, 1997</td>
<td>0.19 (0.11-0.26)</td>
</tr>
<tr>
<td>Johnson et al, 1999</td>
<td>0.12 (0.01-0.23)</td>
</tr>
<tr>
<td>Tajima et al, 2004</td>
<td>0.25 (0.16-0.34)</td>
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<tr>
<td>White et al, 2007</td>
<td>0.34 (0.23-0.45)</td>
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<tr>
<td>Everson et al, 2008</td>
<td>0.09 (0.04-0.14)</td>
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<tr>
<td>Shaffer et al, 2008</td>
<td>0.36 (0.23-0.50)</td>
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<tr>
<td>Scott et al, 2010</td>
<td>0.18 (0.13-0.23)</td>
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<tr>
<td>Denholm et al, 2013</td>
<td>0.07 (0.04-0.09)</td>
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<tr>
<td>Elwyn and Smith, 2013</td>
<td>0.16 (0.09-0.23)</td>
</tr>
<tr>
<td>Patten et al, 2015</td>
<td>0.43 (0.34-0.52)</td>
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<tr>
<td>Plant et al, 2015</td>
<td>0.44 (0.17-0.72)</td>
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<tr>
<td>Mills et al, 2016</td>
<td>0.06 (0.04-0.08)</td>
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<tr>
<td>Reuben et al, 2016</td>
<td>0.11 (0.01-0.22)</td>
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<tr>
<td>Shenk et al, 2016</td>
<td>0.36 (0.29-0.43)</td>
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<tr>
<td>Naicker et al, 2017</td>
<td>0.05 (0.02-0.09)</td>
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<tr>
<td>Newbury et al, 2018</td>
<td>0.18 (0.14-0.22)</td>
</tr>
<tr>
<td>Random-effects model</td>
<td>0.19 (0.14-0.24)</td>
</tr>
</tbody>
</table>

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MOTIVATION
Intentionally withholding information (non-disclosure)
Intentionally fabricating information (false disclosure)

MEASUREMENT
Imperfect test-retest reliability
Systematic differences in sensitivity
Systematic differences in reporter, reporting period, definition

MEMORY
Encoding
Consolidation
Re-consolidation
Storage
Retrieval
Prospective and retrospective measures identify two largely different groups of individuals, both at-risk
> cannot use interchangeably

Inaccurate to assume same underlying risk mechanisms
> two groups may need different interventions
who?

why?

what?
WHY?

WHY?

Change?
WHY?

Change?
WHY?

Change?
WHY?
Change?
WHY?

Change?
WHY?

Change?

B. Standardized Effect Sizes

WHY?
WHY?

WHY?
WHY?
WHY?

WHY?

Beware of developmental theories based on cross-sectional data
> we need longitudinal studies from childhood with repeated measures

Non-causal mediation effects are important, too
> stable, pre-existing vulnerabilities can inform prevention, assessment, and treatment
who?

why?

what?
WHAT?

WHAT?

WHAT?
WHAT?
WHAT?

PTSD in 14% of trauma exposed

Accuracy?

Mental health service use in 26% of PTSD cases

Childhood trauma is a key risk factor for psychopathology, not a disorder
> *Use prediction modeling to identify individual risk (in unseen cases)*

There are obvious barriers to accessing clinical services
> *Develop public health interventions (MH education, reduce stigma)*
who?

why?

what?
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STRESS & DEVELOPMENT LAB

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wellcome trust
National Heart Lung and Blood Institute
NSPCC
MRC Medical Research Council
NARSAD
ESRC Economic & Social Research Council