

Clinical Science and Humanization: The Needed Synthesis to Promote Thriving in Youth and Families

Stephen P. Hinshaw

University of California, Berkeley

University of California, San Francisco

American Psychological Association/SCCAP

8/4/23

Aims

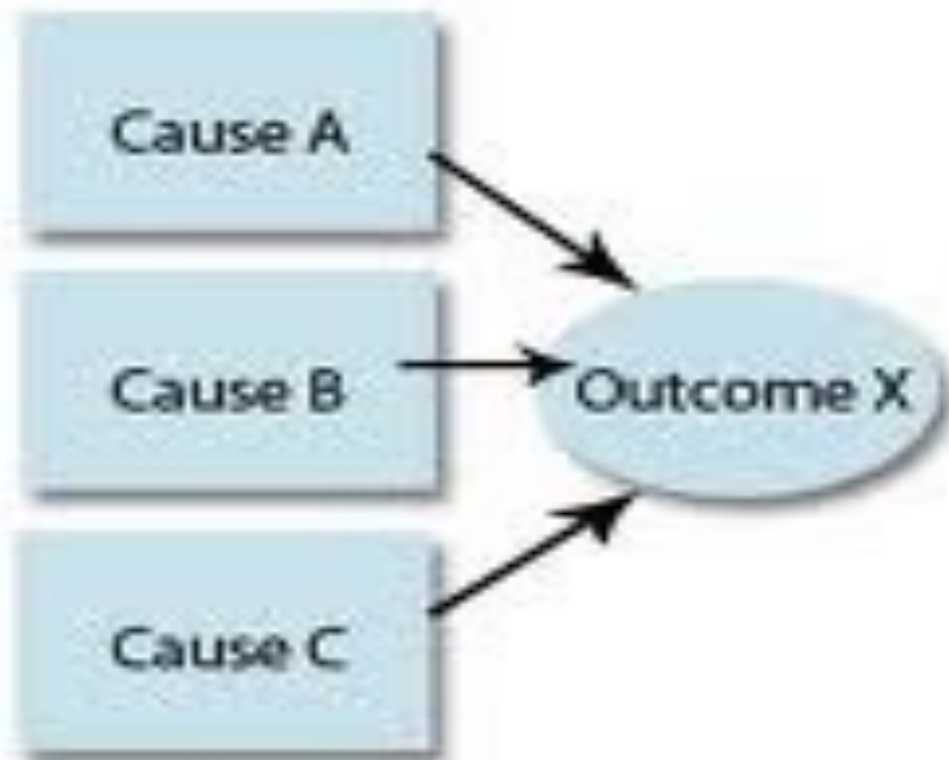
- Thanks to SCCAP (APA Div. 53) for Dist. Career Award
- Developmental psychopathology
 - Especially related to ADHD, girls, self-harm
 - Multilevel mechanisms--and solutions
- Stigma re: mental/neurodevelopmental conditions
 - How to reduce it, taking into account sociocultural factors
- A truncated 'career' review
- Science <and> humanization crucial to encounter the true crisis of youth/young adult mental health, worldwide

DP Principles

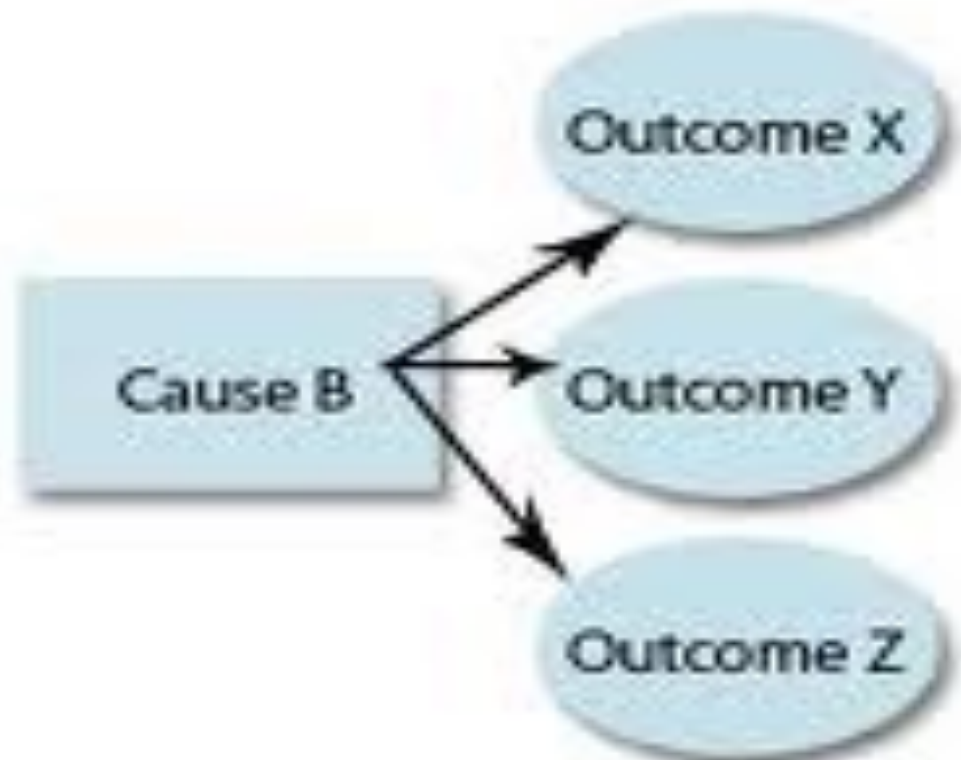
Hinshaw (2017), *Child and Adolescent Psychopathology*, 3rd ed.

- 1. Normal and atypical development: mutually informative
- 2. Multiple levels of analysis: genes to cultures
- 3. Developmental continuities and discontinuities
 - **Homotypic vs. heterotypic continuity
 - **Multifinality and equifinality
- 4. Reciprocal, interactive, transactional models
- 5. Protection/resilience?

Equifinality



Multifinality



As applied to ADHD

- Fortuitous work in this area....but great appeal. Why?
 - A classic exemplar of a category applied to a continuum
- Convergence: large heritability/major socio-cultural influences
- “Revealed” by compulsory education
 - Astoundingly similar prevalence rates internationally
 - Except for subsistence societies vs. US/Israel
- For long time, source of major controversy
 - Fair use: Direct-to-consumer ads



I see Jason.

*Not his **ADHD**.*

*I see a big difference in my son - better test scores at school
more chores done at home - an independence I try to encourage
a smile I always can count on.*

If your child has been diagnosed with **ADHD**, talk to your doctor about your choices of medication.

Medical studies support the unique benefits of **CONCERTA®**

- ✓ 96% of patients did not report loss of appetite or sleep
- ✓ Fewer conflicts among adolescents with family members and friends
- ✓ Higher scores when solving math problems and an overall improved classroom focus
- ✓ Patented OROS® delivery system controls symptoms consistently for 12 hours with a single dose

The Makers of **CONCERTA®** believe in the importance of proper diagnosis and treatment of **ADHD**. Only a doctor can decide whether medication is right for you or your child. **CONCERTA®** should not be taken by patients with: significant anxiety, tension or agitation; allergies to methylphenidate or other ingredients in **CONCERTA®**; glaucoma; Tourette's syndrome, tics or family history of Tourette's syndrome; current/recent use of monoamine oxidase inhibitors (MAOI). **CONCERTA®** should not be taken by children under 6 years of age. Abuse of methylphenidate may lead to dependence. Tell your healthcare professional if your child has had problems with alcohol or drugs. In the clinical studies with patients using **CONCERTA®**, the most common side effects were headache, stomach pain, sleeplessness and decreased appetite.

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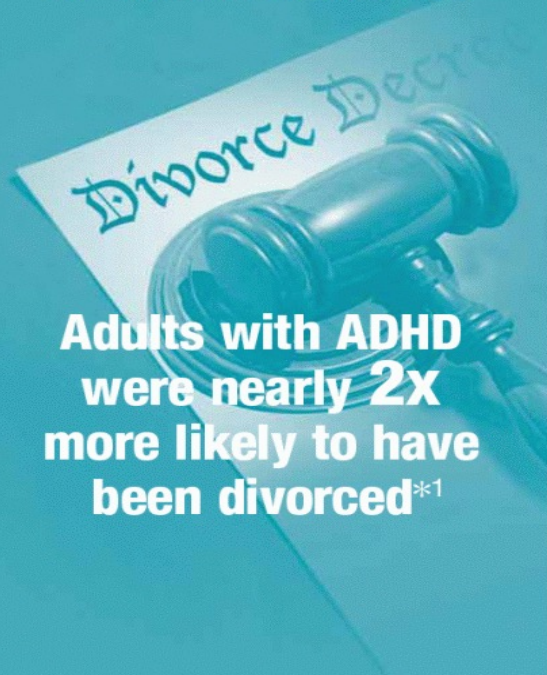


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WXM-030002CC-R November 2003

BROKEN PROMISES



**Adults with ADHD
were nearly 2X
more likely to have
been divorced*¹**

**The consequences may be serious.
Screen for ADHD.**

Find out more at
www.consequencesofadhd.com
and download patient support materials,
coupons, and adult screening tools.

*Results from a population survey of 500 ADHD adults and 501 gender- and age-matched non-ADHD adults which investigated characteristics of ADHD and its impact on education, employment, socialization, and personal outlook.

Reference: 1. Biederman J, Faraone SV, Spencer TJ, et al. Functional impairments in adults with self-reports of diagnosed ADHD: a controlled study of 1001 adults in the community. *J Clin Psychiatry*. 2006;67:524-540.

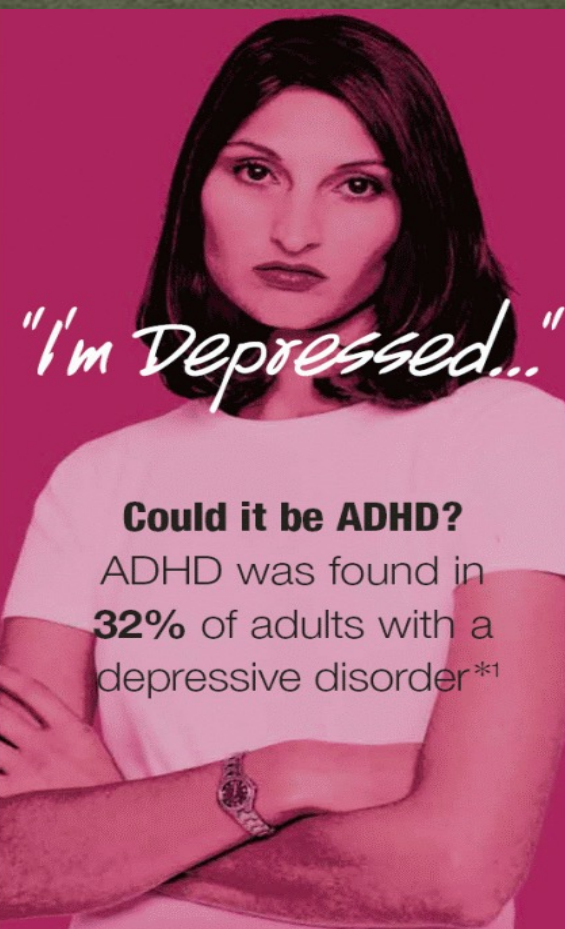


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A1410

11/06



"I'm Depressed..."

Could it be ADHD?
ADHD was found in
32% of adults with a
depressive disorder*¹

**Look for ADHD in
patients who present with
depression.**

Visit www.depressionandadhd.com
for patient education kits
and adult screening tools.

*From a retrospective survey assessing the prevalence, comorbidity, and impairment of adult ADHD in 3199 adults, age 18 to 44. Depressive disorder includes major depressive disorder and dysthymia.

Reference: 1. Kessler RC, Adler L, Barkley R, et al. The prevalence and correlates of adult ADHD in the United States: results from the National Comorbidity Survey Replication. *Am J Psychiatry*. 2006;163:716-723.



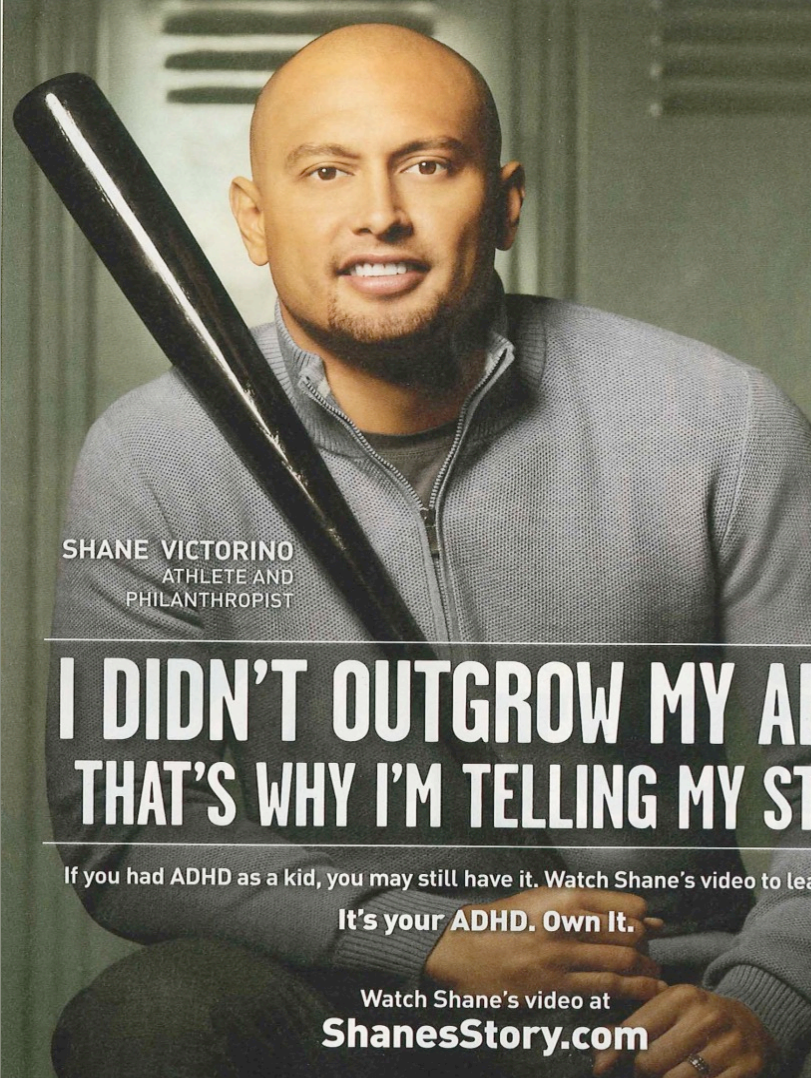
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A1411

11/06

A third ad, more recently

A portrait of Shane Victorino, a bald man with a goatee, wearing a grey zip-up sweater. He is holding a black baseball bat diagonally across his chest. The background is a blurred indoor setting with green walls and white vents.

SHANE VICTORINO
ATHLETE AND
PHILANTHROPIST

**I DIDN'T OUTGROW MY ADHD
THAT'S WHY I'M TELLING MY STORY**

If you had ADHD as a kid, you may still have it. Watch Shane's video to learn more.
It's your ADHD. Own It.

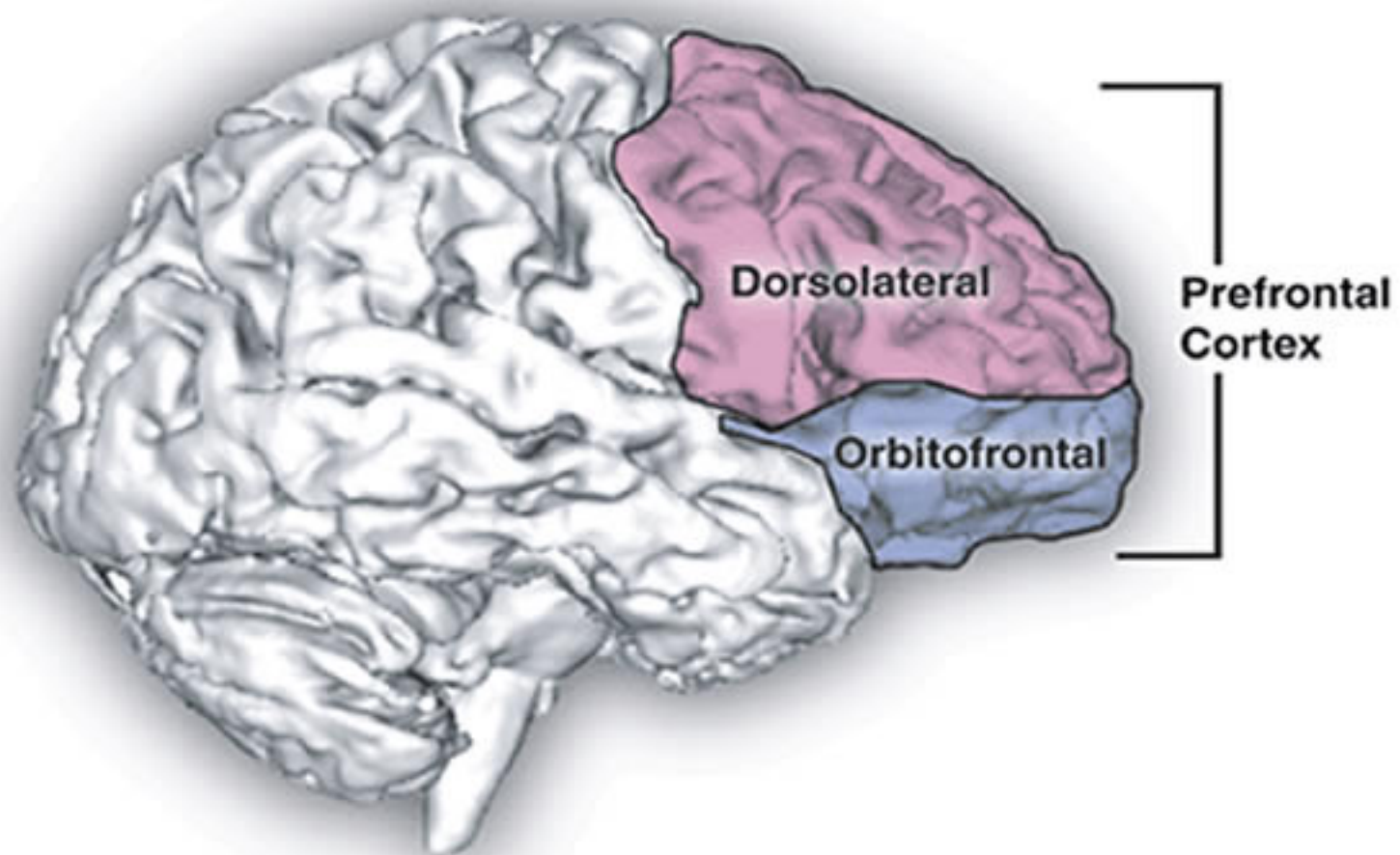
Watch Shane's video at
ShanesStory.com

Definition/Assessment

- 9 symptoms of inattention
- 9 symptoms of hyperactivity/impulsivity
 - Must be impairing and cross situational
 - And present since < 12 yrs
 - But problematic for girls/women
 - Controversy over 'adult onset' ADHD
- To assess...must get
 - informant-based information
 - thorough developmental history
 - normed rating scales
 - objective measures? Not mandatory
- Role of sex/gender/culture?

Themes

- Clearly a syndrome, not a disorder
 - Multiple causal pathways; risk factors transact
- Sex differences: 2.3-2.5 in rep. samples
 - Male predominance for neurodevelopmental conditions
 - Girls relatively more likely to show Inattentive type
- Major impairments across development
 - Financial, social, academic, accidental/self-inflicted injury
- Strong heritability (but NOT) destiny
- Models: Attention deficit (no!), EF, inhibition, motivation
 - Largest ES re: ADHD vs. NT: intra-individual variability



Straight Talk about ADHD in Girls

How to Help Your
Daughter *Thrive*



Stephen P. Hinshaw, PhD

Punishment

Rigid

High

standards

enabling

flexible

autocratic

Obedience

Because

I said so

Status

guidelines

supportive

Authoritarian

Authoritative

I'm the

Boss

Rules

Directive

Structure

assertive

Democratic

Self-regulation

Low

responsiveness,

warmth, supportiveness

High

distance

uninterested

*You're
the Boss*

appeasement

no guidelines

Uninvolved

Permissive

neglectful

absent

passive

Non-directive

Over-involved

lenient

blurred roles

indulgent

Low

Behavioural control: demandingness

Parenting Influences on Positive Peer Status

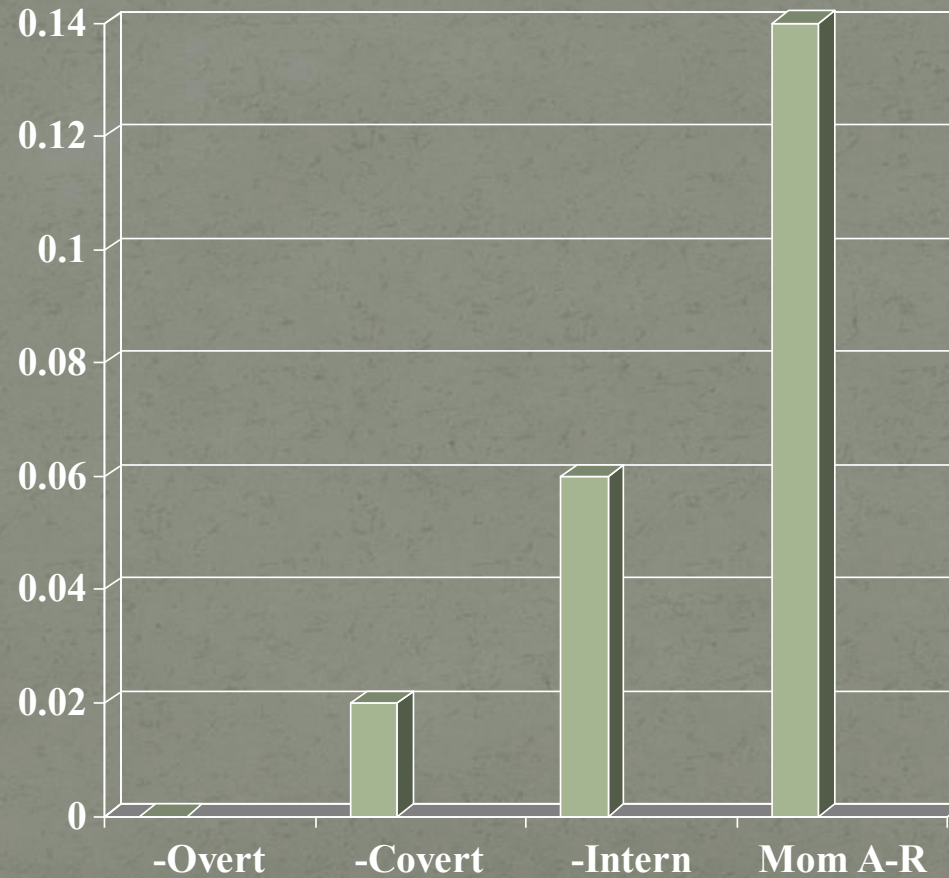
Hinshaw (1997), *Child Development*

- Aim: Predict peer acceptance from parenting
 - Ideas About Parenting (Heming et al., 1989)
 - 3 factors = Authoritarian, Authoritative, Permissive
- Authoritative Factor: 15 items
 - *Warmth, Limits, Autonomy Encouragement--e.g.,*
 - “I encourage my child to be independent of me”
 - “I expect a great deal of my child”
 - “I have clear, definite ideas about childrearing”
 - “Raising a child is more pleasure than work”
 - “When I am angry with my child, I let him know”
 - “I reason with my child regarding misbehavior”

Findings

- Mothers of ADHD boys: lower on Authoritative (ES = .75)
 - Yet variance in ADHD group equivalent to neurotypicals
- Tested predictive power of parenting factors, observed overt and covert behavior, and internalizing score (CDI, observed withdrawal) via hierarchical regressions
 - Neither Authoritarian nor Permissive beliefs predicted peer nominations, but Authoritative beliefs did so

Explained Variance in Positive Nominations



Moderation and Implications

- Prediction applies only to ADHD group ($\beta > .35$); for comparisons, $\beta = .00$.
- Key theme: “firm yet affirming” parenting style

Important Newer Findings

Harold et al. (2013a, 2013b); Sellers et al. (2021)

- Adoption study in UK
 - Controls for biological relatedness
- Even in adoptive families, kids' levels of ADHD elicit overcontrolling parenting from parents
- AND, levels of harshness predict further ADHD symptoms, over time
- It's not all in the genes!

Sex Differences/Female Presentation

- ▣ Longstanding myth: ADHD affects only boys!
- ▣ Ascertain a large, diverse, viable female sample
- ▣ Assess carefully/conduct summer programs
 - ▣ Told families at outset “Aim to study daughters for the rest of their lives”
- ▣ Our sample (BGALS):
 - Largest in existence of preadolescent girls with ADHD (140, with 88 matched comparison girls)
 - Diverse racially/ethnically/socioeconomically
 - Baseline: marked impairments across symptoms, impairments, neuropsych measures
 - Impairments maintained at 5-year follow-up
 - ▣ 11/11 domains, with widening gap in math
 - ▣ Hinshaw (2002, 2006, 2012), *Journal of Consulting and Clinical Psychology*

Childhood
(Ages 6-12)
 $M = 9.5$

W1

Adolescence
(Ages 11-17)
 $M = 14.2$
Retention: 92%

W2

Early Adulthood
(Ages 17-24)
 $M = 19.6$
Retention: 95%

W3

Adulthood
(Ages 21 - 29)
 $M = 25.6$
Retention: 94%

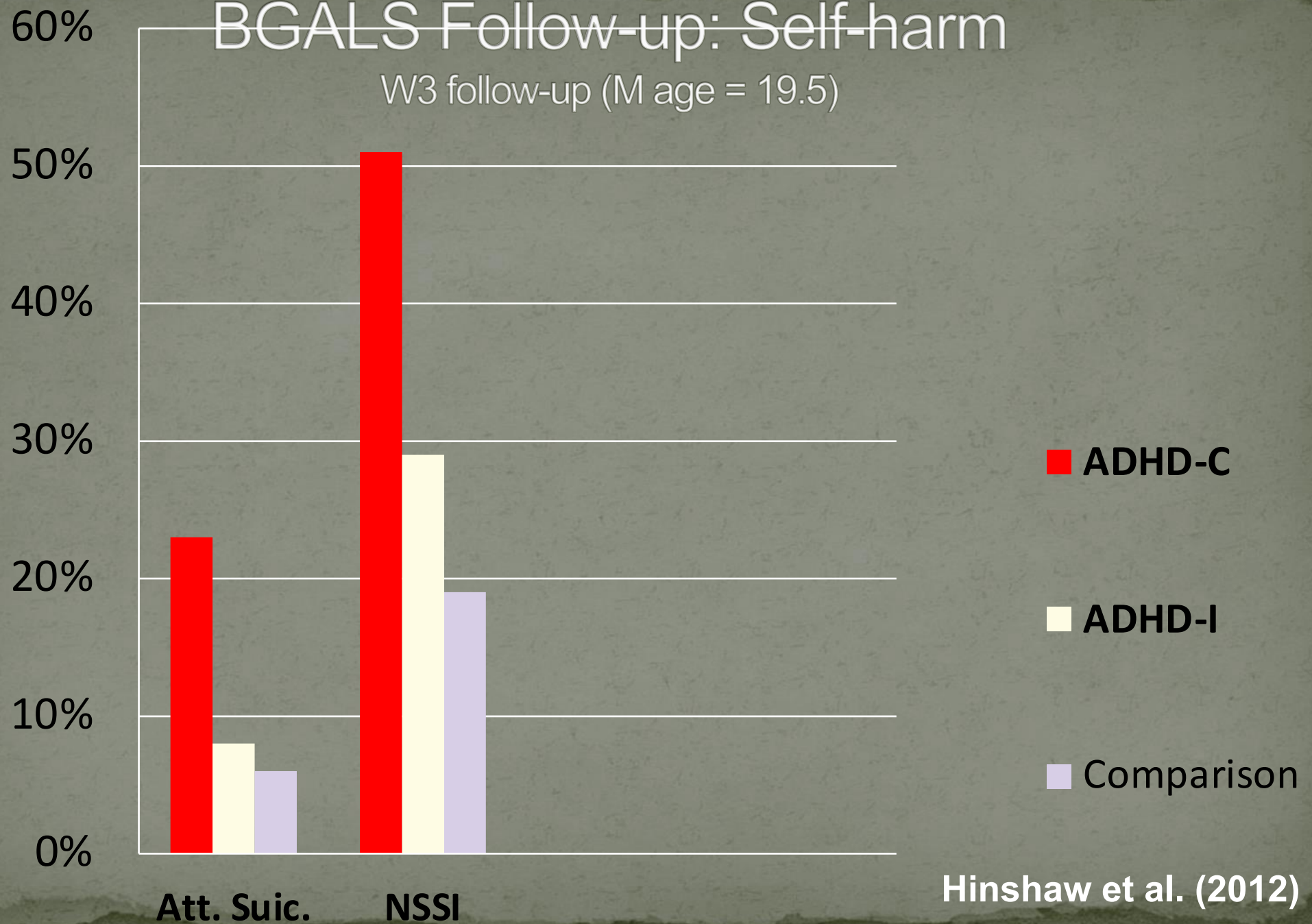
W4

Added measures: Self-harm

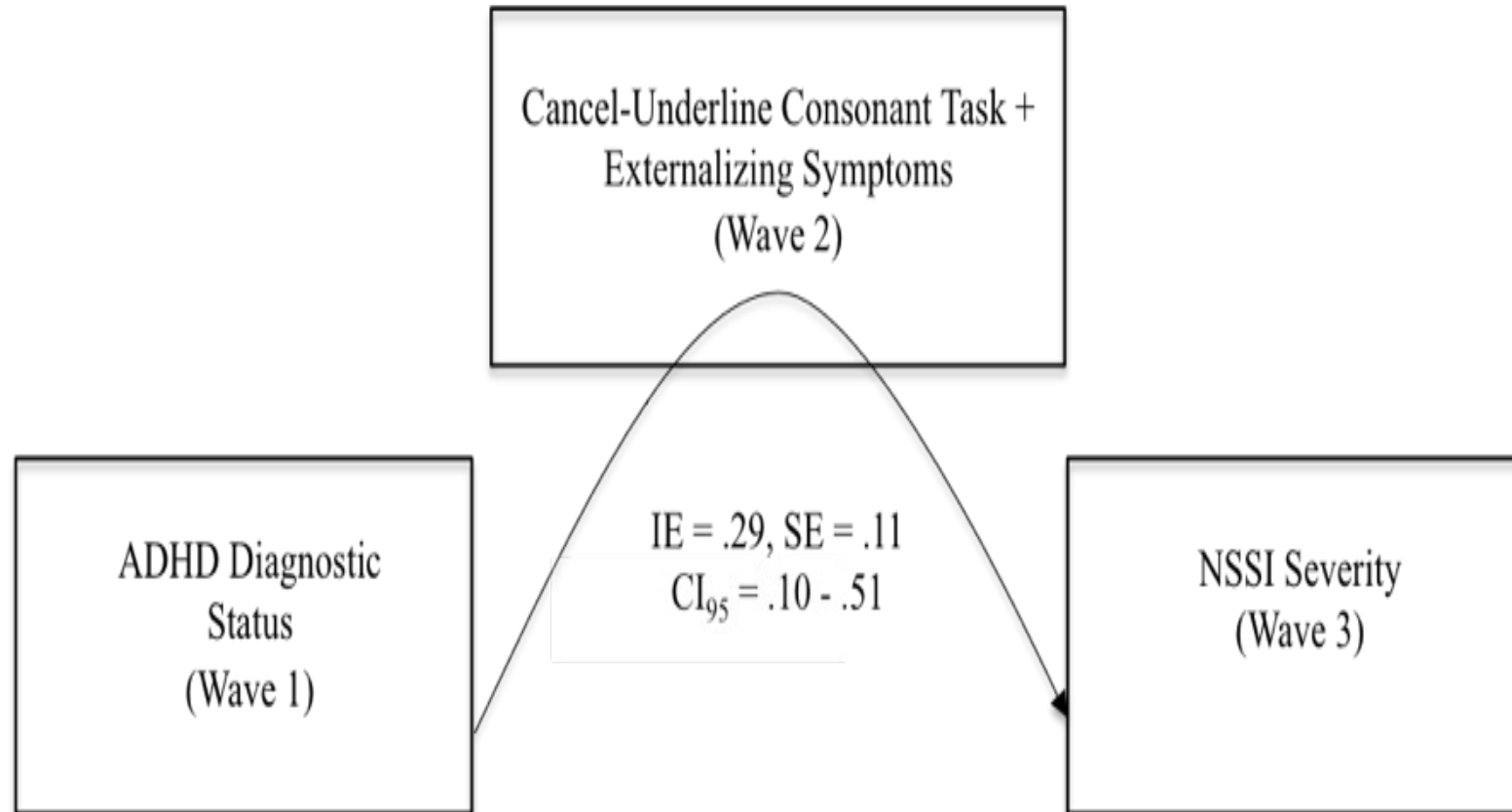
- **Suicidal behavior: intent is to die**
 - Suicidal ideation (common)
 - Suicide attempt (rarer)
- **Non-suicidal self-injurious behavior (NSSI)**
 - No express intent to die, but to express (or ease) intense psychological pain
 - Linked to poor emotion regulation
 - Wide range—cuticles to cutting/burning
- **But many suicide attempters have history of NSSI**
 - NSSI in teens a better predictor of later suicidality than earlier suicide attempts per se; may be lethal

BGALS Follow-up: Self-harm

W3 follow-up (M age = 19.5)



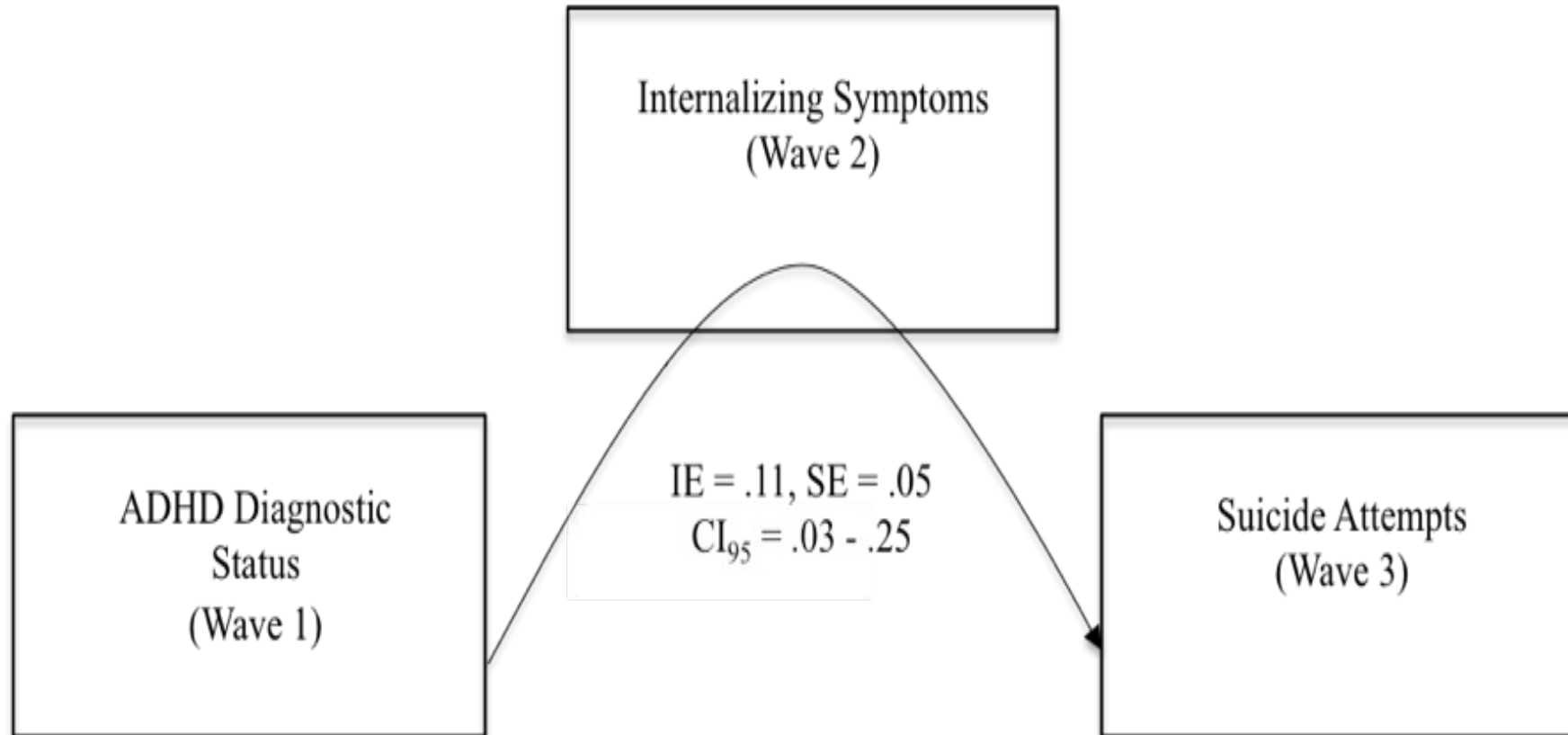
Hinshaw et al. (2012)



MEDIATION: WAVE 1 ADHD STATUS TO WAVE 3 NSSI

Data represent indirect effect and standard errors using 10,000 bootstrap samples to obtain bias-corrected and accelerated 95% confidence intervals.

Swanson, Owens, & Hinshaw (2014), *Journal of Child Psychology and Psychiatry*



MEDIATION: WAVE 1 ADHD STATUS TO WAVE 3 SUICIDE ATTEMPTS

Data represent indirect effect and standard errors using 10,000 bootstrap samples to obtain bias-corrected and accelerated 95% confidence intervals

Meza, Owens, & Hinshaw (2015)

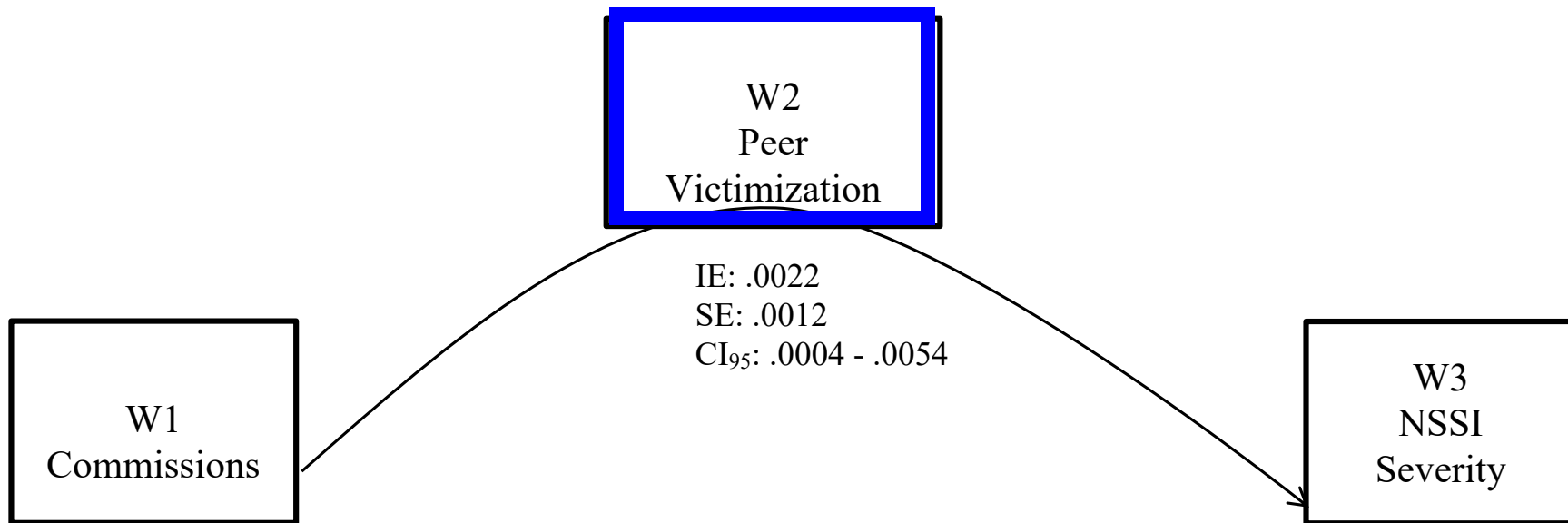


Figure 3. The relationship between W1 Commissions and W3 NSSI was partially mediated by W2 Peer Victimization over and above: WISC Full-Scale IQ, mother's education, household income, and age at W3. Data represent indirect effect and standard errors using 10,000 bootstrap samples to obtain bias-corrected and accelerated 95% confidence intervals.

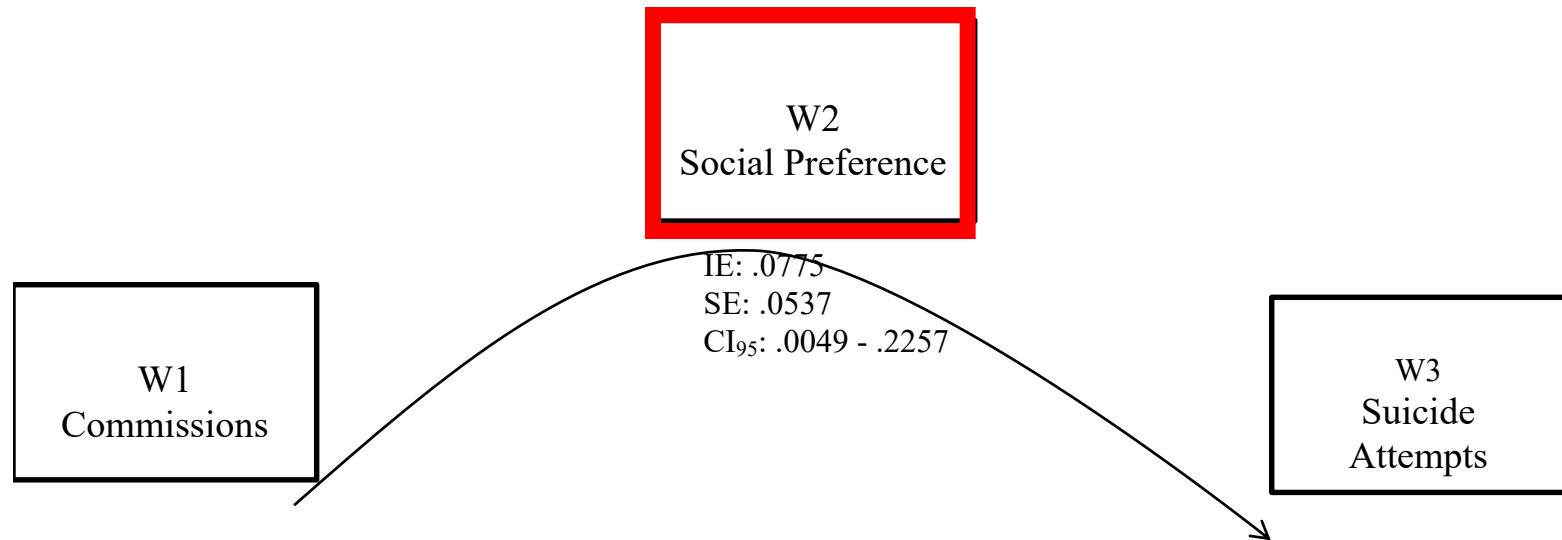


Figure 2. The relationship between W1 Commissions and W3 Suicide Attempts (y/n) was partially mediated by W2 social preference scores over and above: WISC Full-Scale IQ, mother's education, household income, and age at W3. Data represent indirect effect and standard errors using 10,000 bootstrap samples to obtain bias-corrected and accelerated 95% confidence intervals.

Trauma and relationships

- Guendelman et al. (2016a):
 - Physical/sexual abuse, +/- neglect, higher in ADHD than comps
 - Within ADHDers, the maltreated subgroup far more likely to show depression and suicide attempts (not externalizing behavior)
 - *Girls with early ADHD AND maltreatment: suicide att. rate = 34%*
 - *Girls with early ADHD but NO maltreatment: suicide att rate = 14%*
- See parallels with another heritable condition:
 - Bipolar disorder
- **Girls with ADHD 3x more likely to be victims of intimate partner violence (Guendelman et al., 2016b)

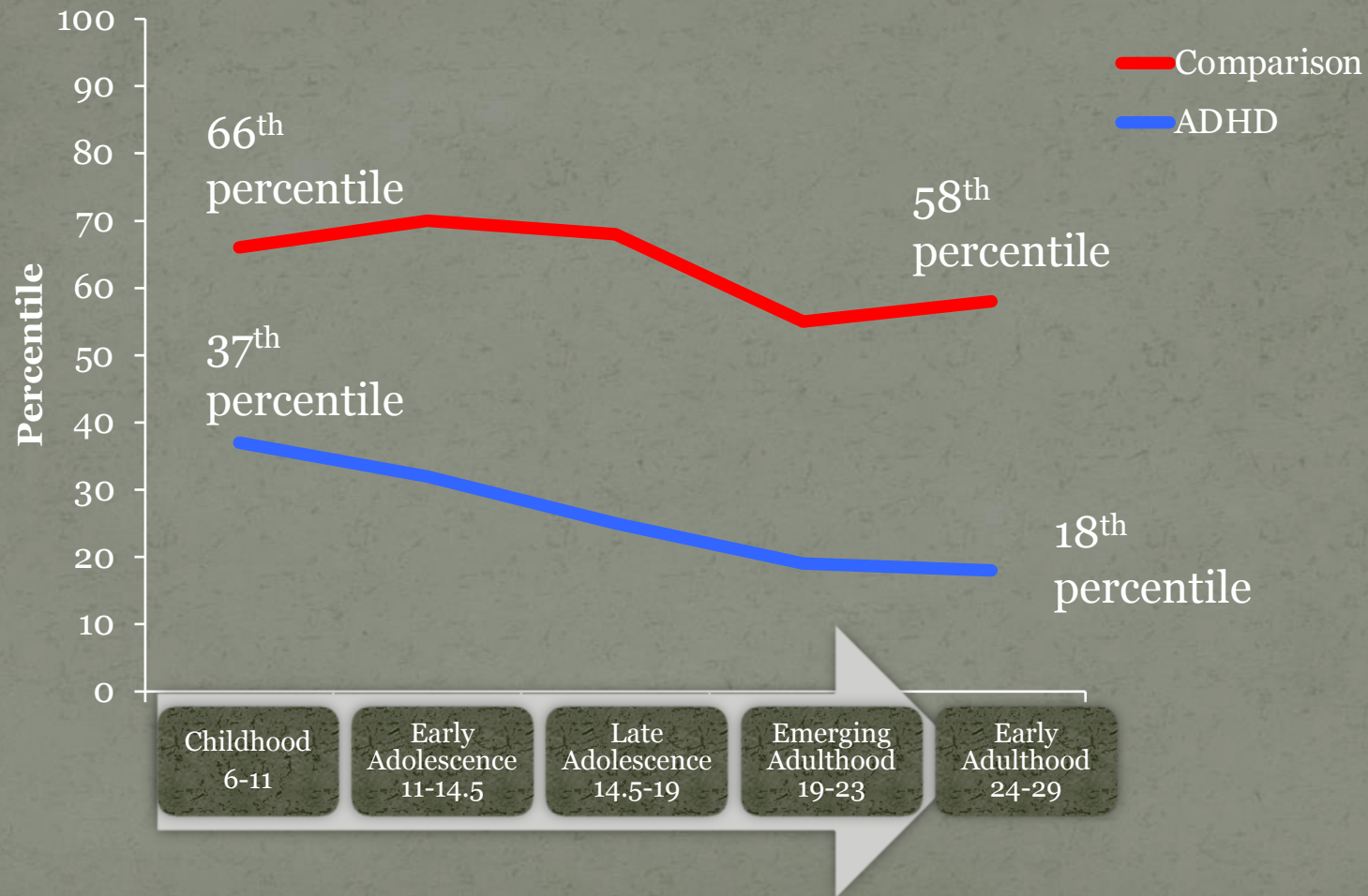
By Wave 4 (mid-late 20s)

Owens, Zalecki, Gillette, & Hinshaw, *JCCP* (2017)

- **Unplanned pregnancy rates:**
 - **Neurotypical: 11%** **ADHD: 44%**
 - **REGARDLESS** of persistence of ADHD symptoms across time
 - **What mediates? ADOLESCENT ACADEMIC ACHIEVEMENT**

Developmental Trajectories: Math

Gordon & Hinshaw (2020); Henry et al. (2022)



THE ADHD EXPLOSION

Myths, Medication, Money and
Today's Push for Performance

Stephen P. Hinshaw and
Richard M. Scheffler

Tidal Wave/ADHD Explosion

National Survey of Children's Health (Visser et al., 2014)

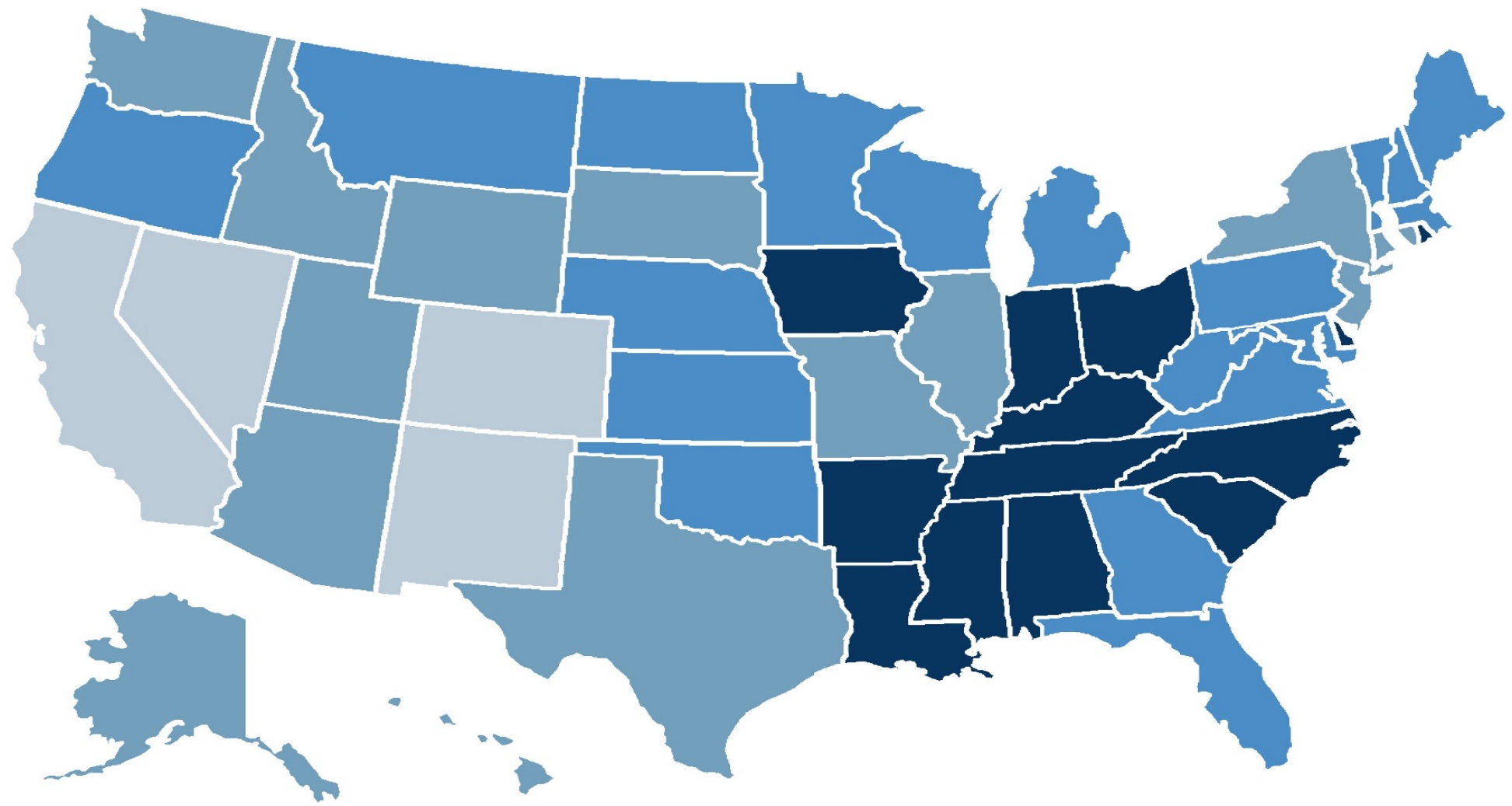
Journal of the American Academy of Child & Adolescent Psychiatry

- **Parent-reported ADHD 'ever diagnosed'**
 - **2003: 7.8%**
 - **2007: 9.5%**
 - **2012: 11.0%**
 - **41% INCREASE IN 9 YEARS, for all 4-17 year-olds**
 - **Low-income rates now = middle-class; Black = White**
 - **Hispanic lower (but fast growing)**
- **Medication rates higher, too:**
 - **Ca. 70% of those 'currently diagnosed' receive meds**
 - **Largest medication increases: adolescents, adults**

Diagnostic Prevalence:

5.62-7.53% (4) 7.54-10.13% (15) 10.14-13.07% (19) 13.08-18.71% (13)

United States Average: 10.98%



Source: 2011-2012 NSCH, Children Aged 4-17

What does *not* explain variation

- **Demographics**

- Hispanic population clearly higher in California, and traditionally the lowest rates of diagnosis
- Eliminated a little of the CA-NC difference but not most
- **Hispanic rates growing FAST, esp. in California

- **Rates of health-care providers**

- Explains other disorders, but not here

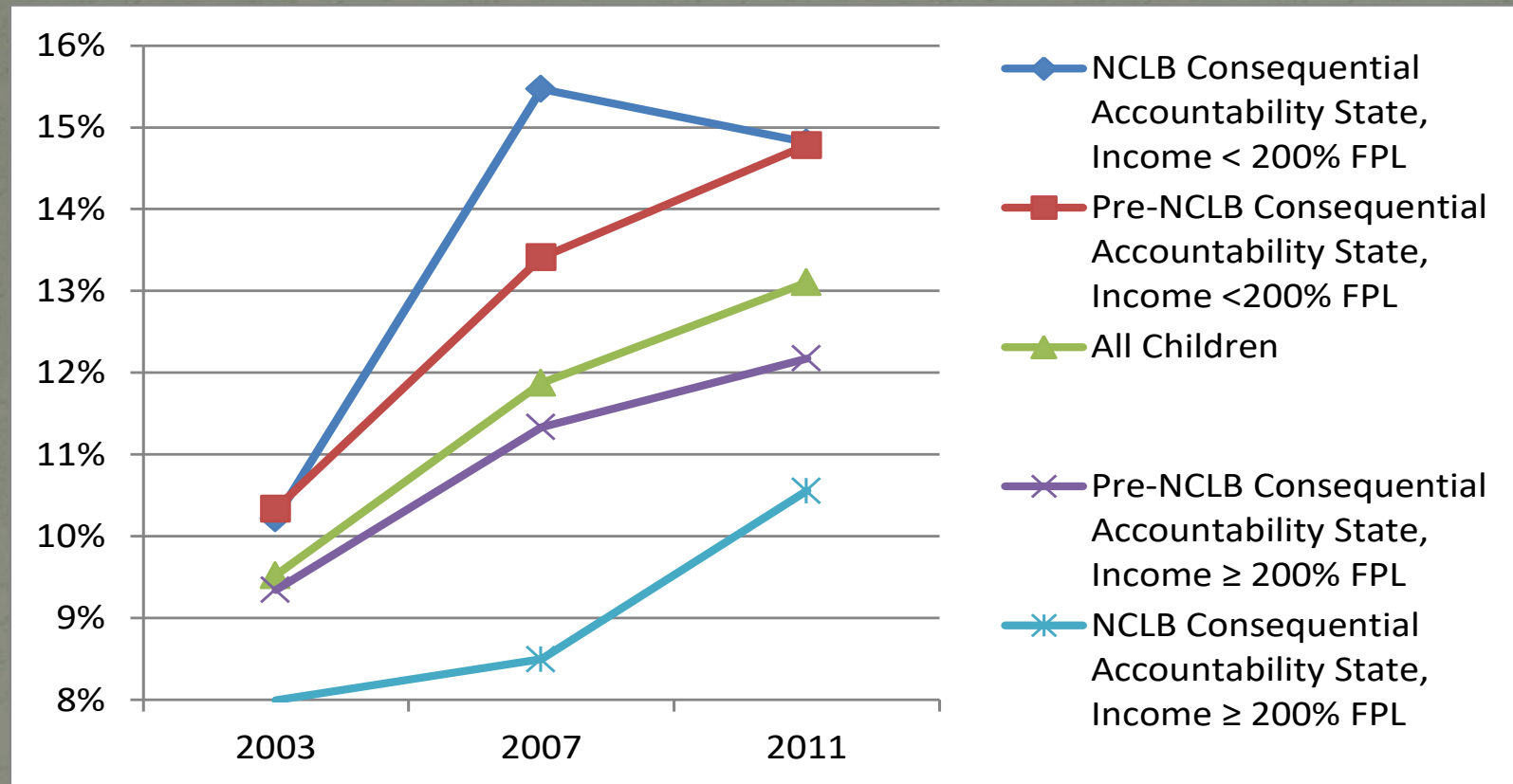
- **State “culture”**

- May explain regional differences within state -- but not state-by-state per se

****Consequential Accountability**

- 1970s-80s: public school reforms “input focused”
 - Reduce class size, pay teachers more, etc.
- Results not consistent; shift in 1990s to “output focused”
 - I.e., incentivize test score improvements per se
- Consequential accountability—districts get ‘noted’ or even cut off from funds, unless test scores go up
 - 30 states implement such laws <2000
- Then, becomes law of the land for all states with No Child Left Behind (takes effect 2002-3)

Consequential accountability introduced via NCLB was associated with higher ADHD diagnostic prevalence increases among low-income children aged 8-13 from 2003-2007, but there was no association from 2007-2011 (unadjusted results)



District of Columbia is included within the 21 No Child Left Behind consequential accountability states.

NCLB: No Child Left Behind; FPL: Federal poverty level

N=24,982 (2003), 22,467 (2007), 24,426 (2011)

Sources: 2003, 2007, and 2011 National Survey of Children's Health

“Unintended effect”

○Accountability laws encourage ADHD diagnosis for at least two reasons:

- #1: Diagnosis may lead to treatment, which may help boost achievement test scores

- Scheffler et al. (2009), Zoega et al. (2012)

- #2: In some states/districts, diagnosed youth are excluded from the district's average test score!

- Gaming the system, although NCLB eventually outlaws this

○Why poorest kids? NCLB targets Title I schools

Stigma

Hinshaw (2007), *The Mark of Shame* (Oxford U. Press)

- **Ancient Greece: Literal ‘mark of shame’**
 - Brands placed on slaves or traitors
 - Today, usually psychological /social “branding”
- **Which groups are stigmatized?**
 - Racial minorities, sexual minorities, women, left-handers, physical disabilities, adoptees, obese, delinquent youth, many more...
 - Can things change? See attitudes re: gay marriage
 - Thus, hope for optimism—malleability of social/cultural views
- **Most stigmatized today:**
 - *People with mental illness, homelessness, substance abuse*



THE MARK OF SHAME

*Stigma of
Mental Illness and
an Agenda for Change*

STEPHEN P. HINSHAW

Models of Stigma Processes

- Sum of stereotypes, prejudice, discrimination:
 - Global: Everything about the individual linked to flaw
- Link & Phelan (2001, *Ann. Review of Sociology*)
 - Labeling, Stereotyping, Separation, Status loss, Discrimination
 - Social/political power
 - Major effects on earnings, housing, criminal involvement, health
- FINIS (Pescosolido et al., 2008, *Social Science & Medicine*)
 - Framework Integrating Normative Influences on Stigma
 - Individual level (disease, affect, motivation, social psychological)
 - Community level (media, national policy)
 - Treatment system level (access, funding, evidence-based tx)

Evidence for MI Stigma/Discrimination

- Studies of overt attitudes
 - The most stigmatized attributes
 - Mental illness, substance abuse, homelessness
 - S. Fiske: “*lowest of the low*”
 - Perceived as lacking in both warmth and competence
 - Insula--‘lights up’ with relevant images (disgust)
- Studies of covert/implicit attitudes
 - Rejection occurs at unconscious level
- Examination of U.S. laws and everyday practices
 - In many states, no vote/jury/driving/run for office/child custody
 - Media portrayals (still dominated by school shootings)

A. Self-stigma (internalized stigma)

- Nearly all members of stigmatized groups are aware of the culture's stereotypes/beliefs/practices
 - Thus, likelihood (though not certainty) that such individuals will internalize these beliefs
 - Antidotes: identity, group solidarity
 - Black power, women's movement
 - Double whammy:
 - Disorders themselves likely to fuel demoralization, but self-stigma multiplies the risk
- Important research findings:
 - Even taking into account initial levels of symptoms, self-stigma predicts (a) lack of treatment seeking and (b) early termination from treatment

B. Courtesy Stigma

- Goffman (1963):
 - If society has stigmatized a given class of people, it's common courtesy to stigmatize those *associated* with such individuals, particularly family members
- Parents of youth with mental disorders: Directly blamed for offspring's problems for decades
 - Even genetic transmission leaves blame on parents
- Objective burden and subjective burden
 - Subjective burden usually experienced as worse
- Mental health professionals/scientists 'in the shadow'

C. Structural stigma (law, policy)

- Almost completely neglected in most work on MI stigma
- Effects of legal mandates on public attitudes, personal well-being, and treatment response
- See Hatzenbuehler (2016), *American Psychologist*
 - *E.g., Hinshaw & Scheffler, educational policies and ADHD*
 - *E.g., Hatzenbuehler: state policies on LGBTQ protections and mental health status of sexually minoritized youth*

MI Stigma is Decreasing, Right??

- Public knowledge of MI far greater than 50-60 years ago
- But no fundamental change in stigma levels from 50s
 - ▣ Knowledge does not necessarily translate to empathy
- *Higher* rates of violence beliefs in 2005 than 1955
 - US public 3x more likely to believe that MI linked to violence
 - Involuntary commitment: 'danger'; homelessness
- Signs of change?
 - Pescosolido et al. (2021) , *JAMA Network Open*



Another Kind of Madness

*A Journey Through the Stigma
and Hope of Mental Illness*

Stephen P. Hinshaw



Language

- **Dad told me he wished he'd had cancer**
 - A 'real' illness, not imaginary
 - Identity shaped during initial treatments
- **Are labels dehumanizing or empowering?**

Family Silence and communication: What to tell children?

- Anything better than nothing, than silence
- Child's tendencies:
 - Internalize; blame self; caretake?
- Beardslee's approach for families in which a parent is depressed: Family Talk
 - Family tx in which narrative constructed
 - Beardslee et al. (2003), *Pediatrics*: Short and longer-term effects on offspring
 - Communication cuts risk for depression by 50%

Stigma Reduction: Adolescents

- High school club model
- Let's Erase the Stigma: Murman et al. (2014)
- Bring Change to Mind: Ahmad et al. (2020)
- “Cohort replacement”

Thanks

- SCCAP
- You, the audience
- UC Berkeley, UC San Francisco, NIH, Bring Change to Mind
- Oxford U. Press, St. Martin's Press, Guilford Press
- Students, colleagues