

Unmet Needs for Prevention and Intervention in Three Examples: Prematurity, Infant Regulatory Problems and Bullying

Dieter Wolke PhD Dr rer nat h.c.



Overview or the “Freakonomics” of Common Problems

- **Prematurity** – Long term effects and changing Demography
- **Infant Regulatory Problems:** Crying, Sleeping and Feeding
- **Bullying:** The long term impact of peer bullying
- **Why it is important to do something about “normal” problems**



Overlooked Long term Effects

1. Preterm Birth

- Immaturity: Organ Development
- Complications

Impact

Immediate

- Parents
- PTS

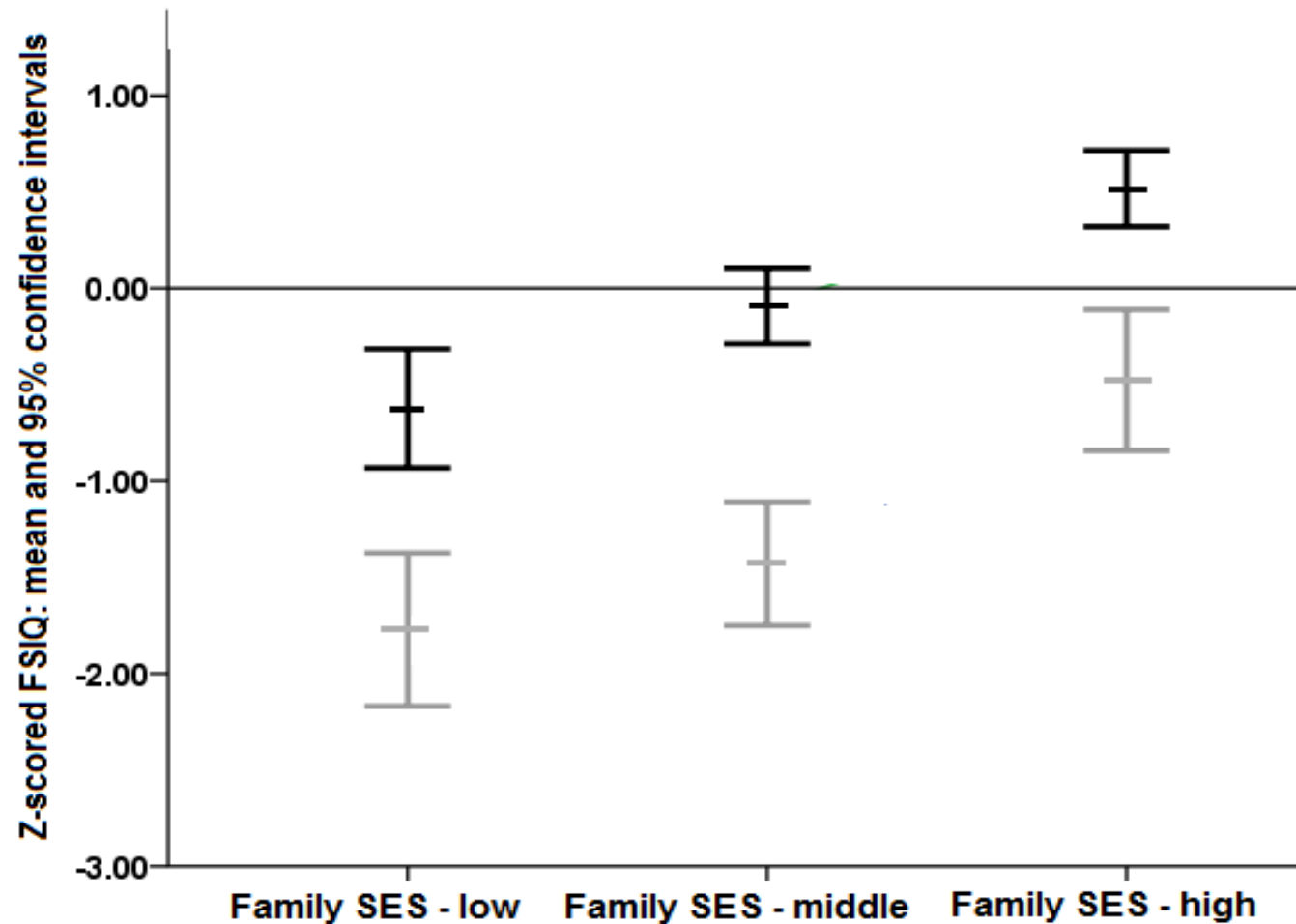
Longterm

- Preterm Phenotype





Social Class and IQ at 26 years of Age

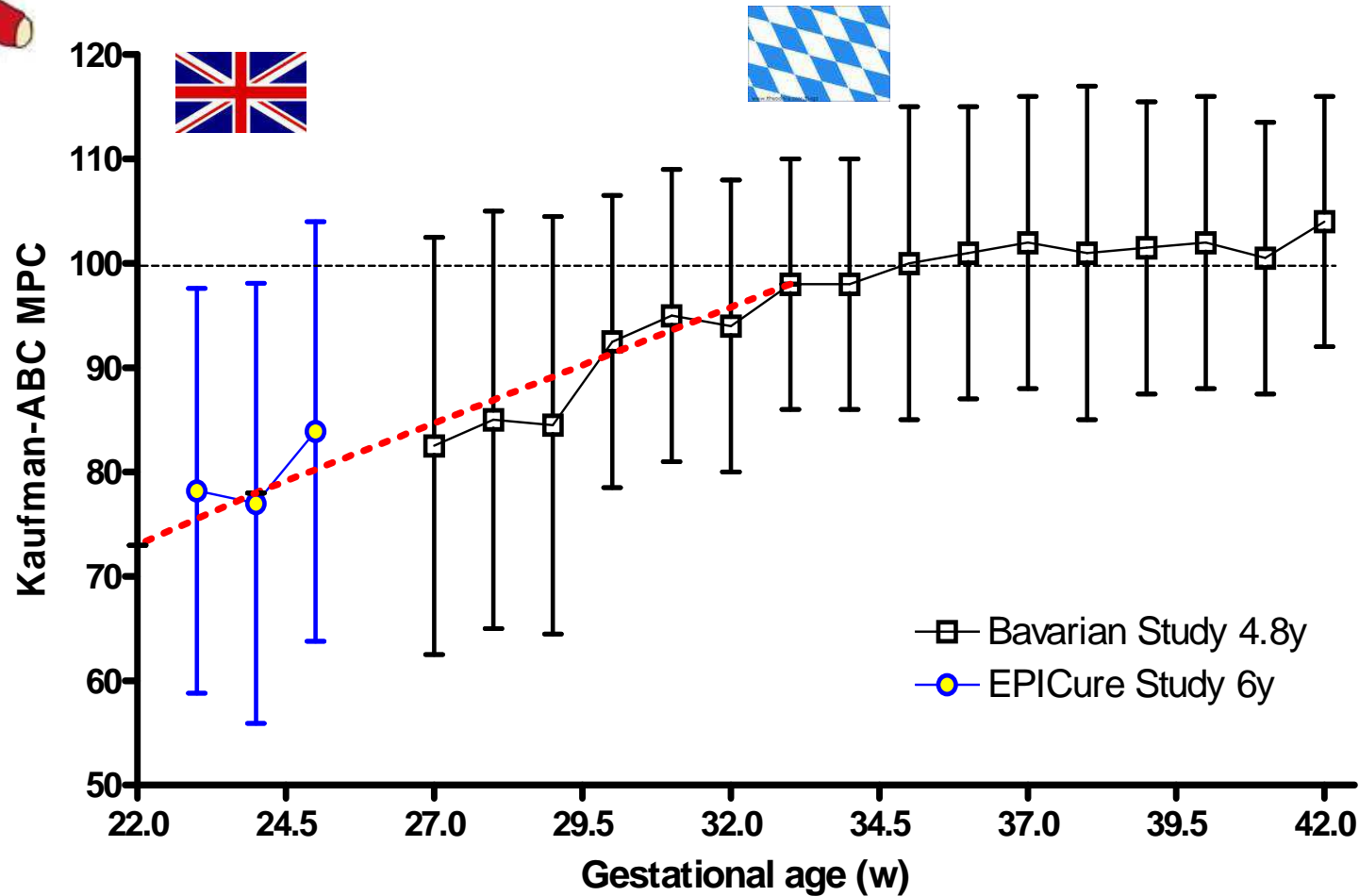


Eryigit Madzwamuse, S., Baumann, N., Jaekel, J., Bartmann, P., & Wolke, D. (2014). Neuro-cognitive performance of very preterm or very low birth weight adults at 26 years. *Journal of Child Psychology and Psychiatry*, n/a-n/a.

doi: 10.1111/jcpp.12358

The Whole Gestation Range: Cognitive

Relationship of IQ and GA





How the brain develops
from 24 weeks gestation to
term

40% less cortical folding
than intrauterine

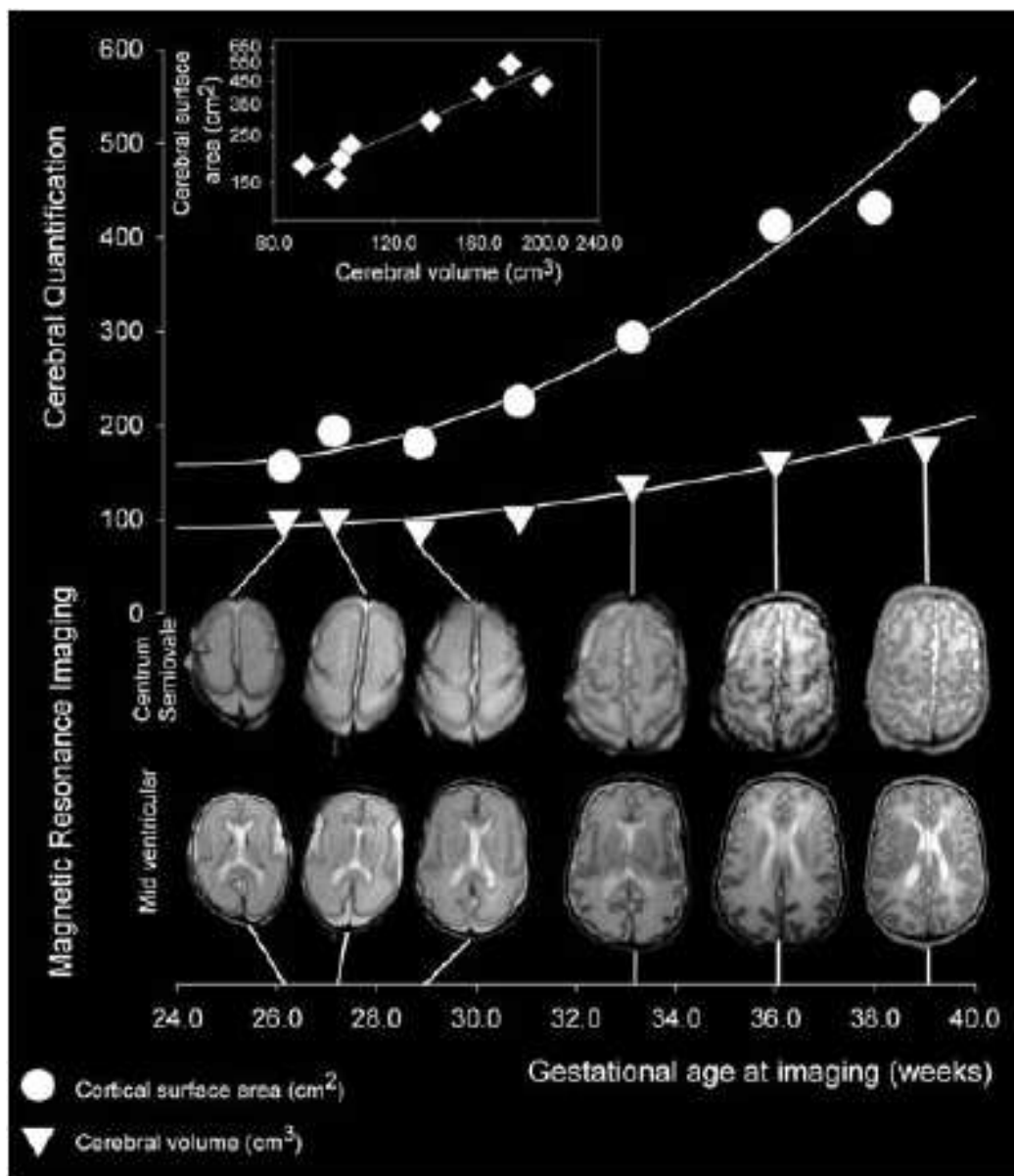


Figure 2. Serial MR Imaging of Brain Growth in a Normal Female Preterm Infant



Kapellou et al.,(2006)
PLOS Medicine,
2006, 3(8), e264

Building a different Brain

Cerebral Cortex Advance Access published June 16, 2014

Cerebral Cortex
doi:10.1093/cercor/bhu133

Correspondence Between Aberrant Intrinsic Network Connectivity and Gray-Matter Volume in the Ventral Brain of Preterm Born Adults

Josef G. Bäuml^{1,3,†}, Marcel Daamen^{4,5,†}, Chun Meng^{1,3}, Julia Neitzel^{1,3}, Lukas Scheef⁴, Julia Jaekel^{6,8}, Barbara Busch⁵, Nicole Baumann⁶, Peter Bartmann⁵, Dieter Wolke^{6,7}, Henning Boecker⁴, Afra M. Wohlschläger^{1,3} and Christian Sorg^{1,2,3}

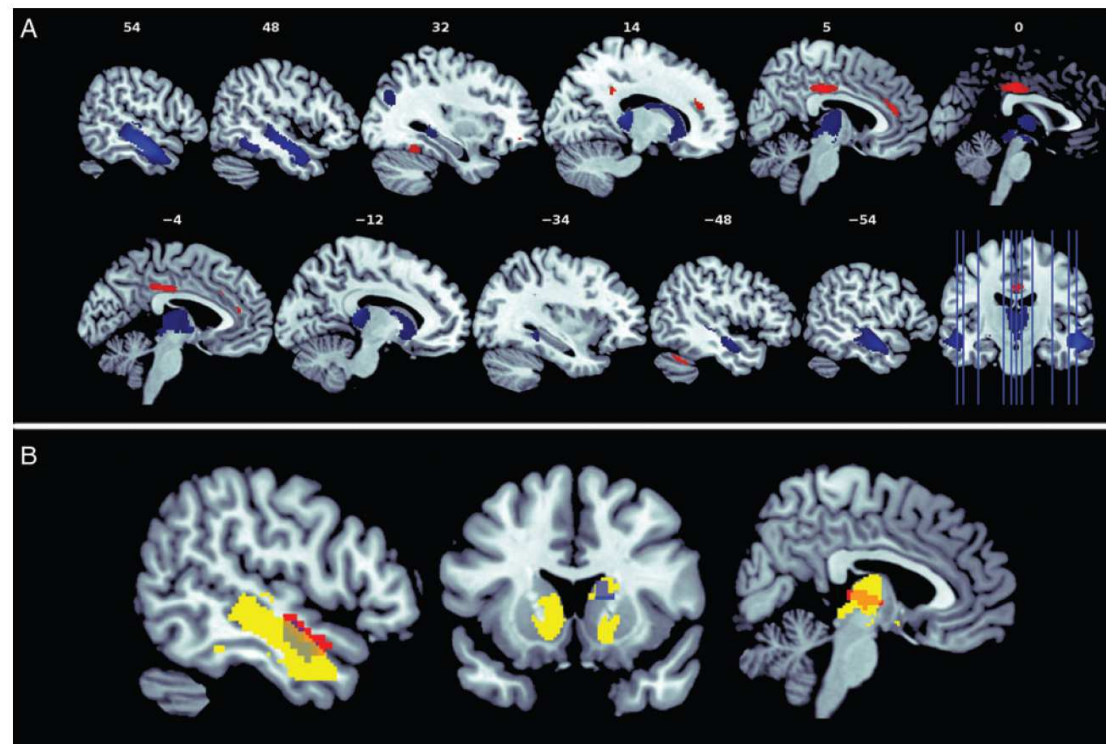


Figure 2. Aberrant gray matter in preterm born adults revealed by voxel-based morphometry overlaps with aberrant intrinsic functional connectivity in the ventral brain. (A) Based on structural MRI, differences in VBM were calculated by a two-sample t -test thresholded at $P < 0.05$, FWE-corrected for multiple comparisons, cluster extent > 20 voxels (blue: PT $<$ FT; red: PT $>$ FT); White numbers on top of each slice represent the x -coordinates in MNI space (MNI, Montreal Neurological Institute). (B) Overlapping VBM and iFC changes (see Fig. 1). Networks with overlapping iFC and VBM changes are the thalamus network, basal ganglia network, right ventral attention, and salience network II of Figure 1. Aberrant iFC is presented by blue (PT $<$ FT) and red (PT $>$ FT), aberrant VBM by yellow (FT $<$ PT) clusters.



Psychiatric diagnosis: Childhood/ Adolescence

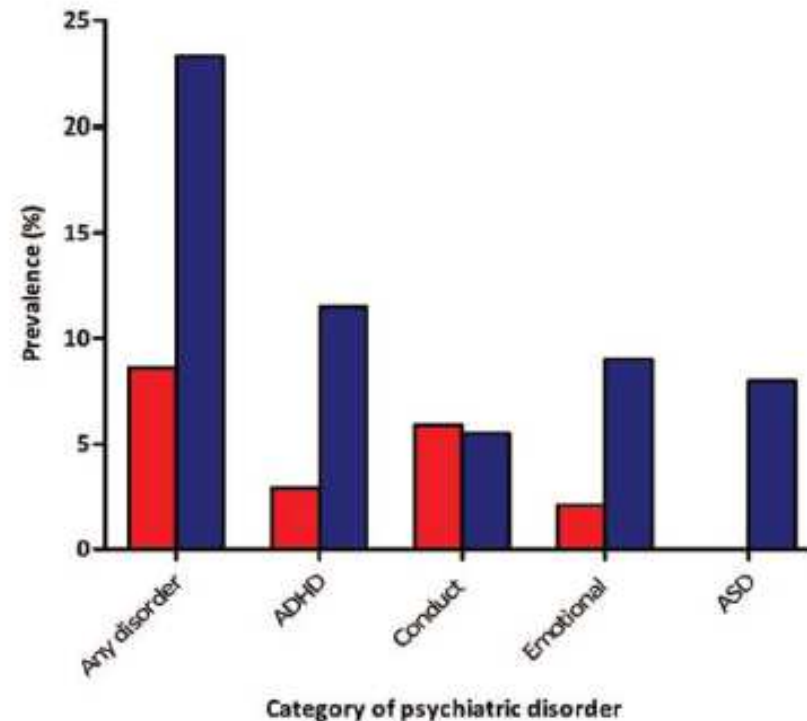


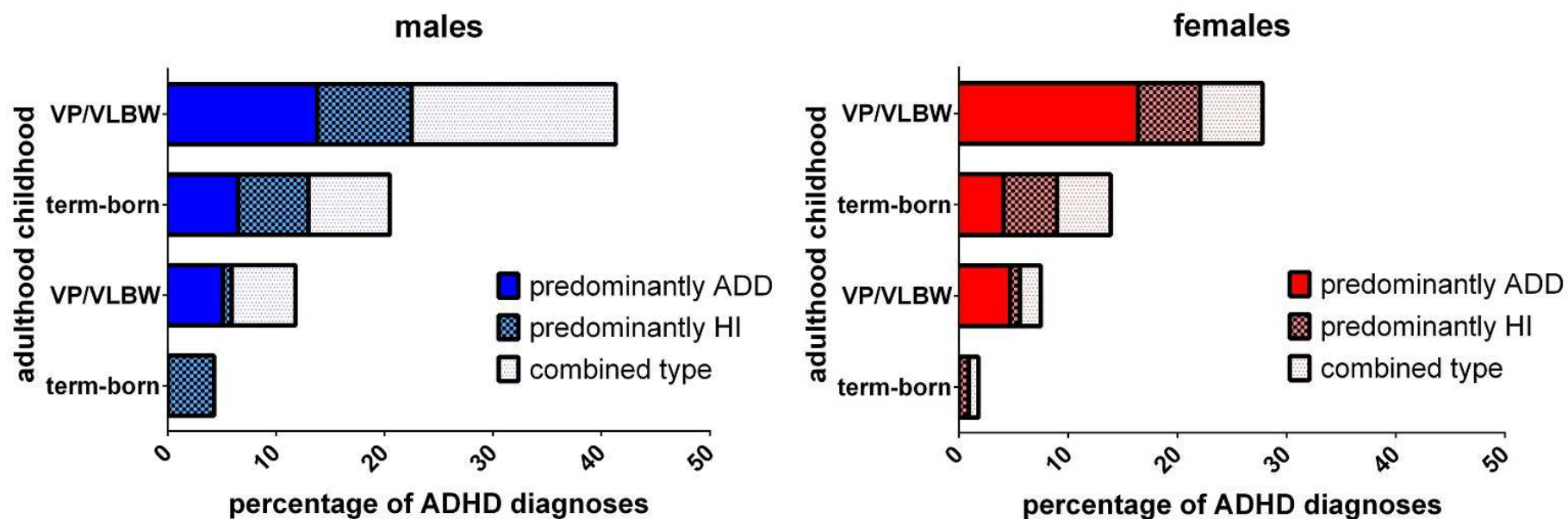
Figure 1. Prevalence of psychiatric disorders at 11 y of age in a whole population-based cohort of 219 EPT (<26 wk) children (*blue columns*) and 152 term-born classmates (*red columns*) in the UK EPICure Study.



Johnson, S., Hollis, C., Kochhar, P., Hennessy, E., Wolke, D., & Marlow, N. (2010). Psychiatric Disorders in Extremely Preterm Children: Longitudinal Finding at Age 11 Years in the EPICure Study. [doi: DOI: 10.1016/j.jaac.2010.02.002]. *Journal of the American Academy of Child & Adolescent Psychiatry*, 49(5), 453-463.e451.

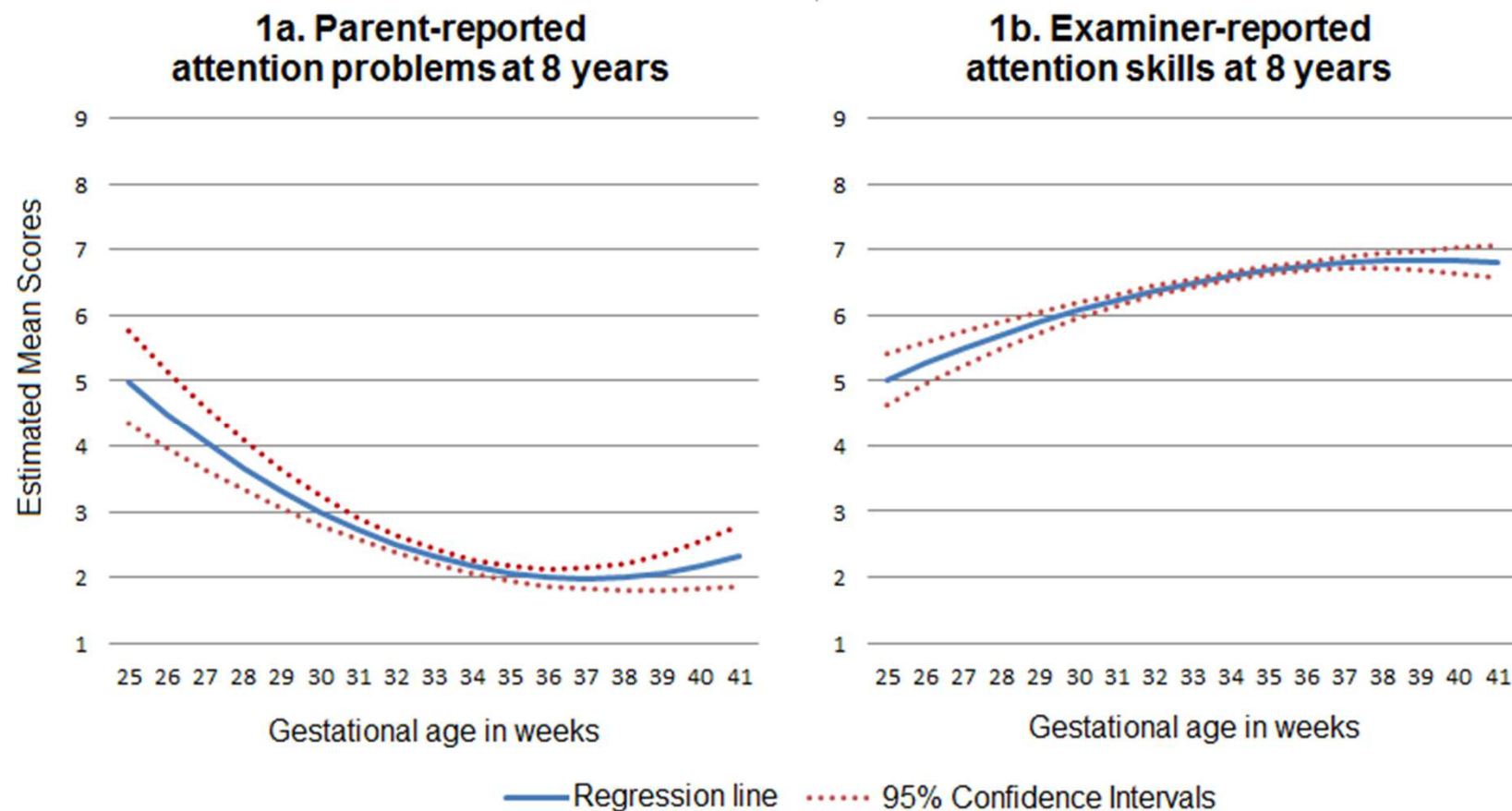


ADHD diagnoses in Childhood and Adulthood



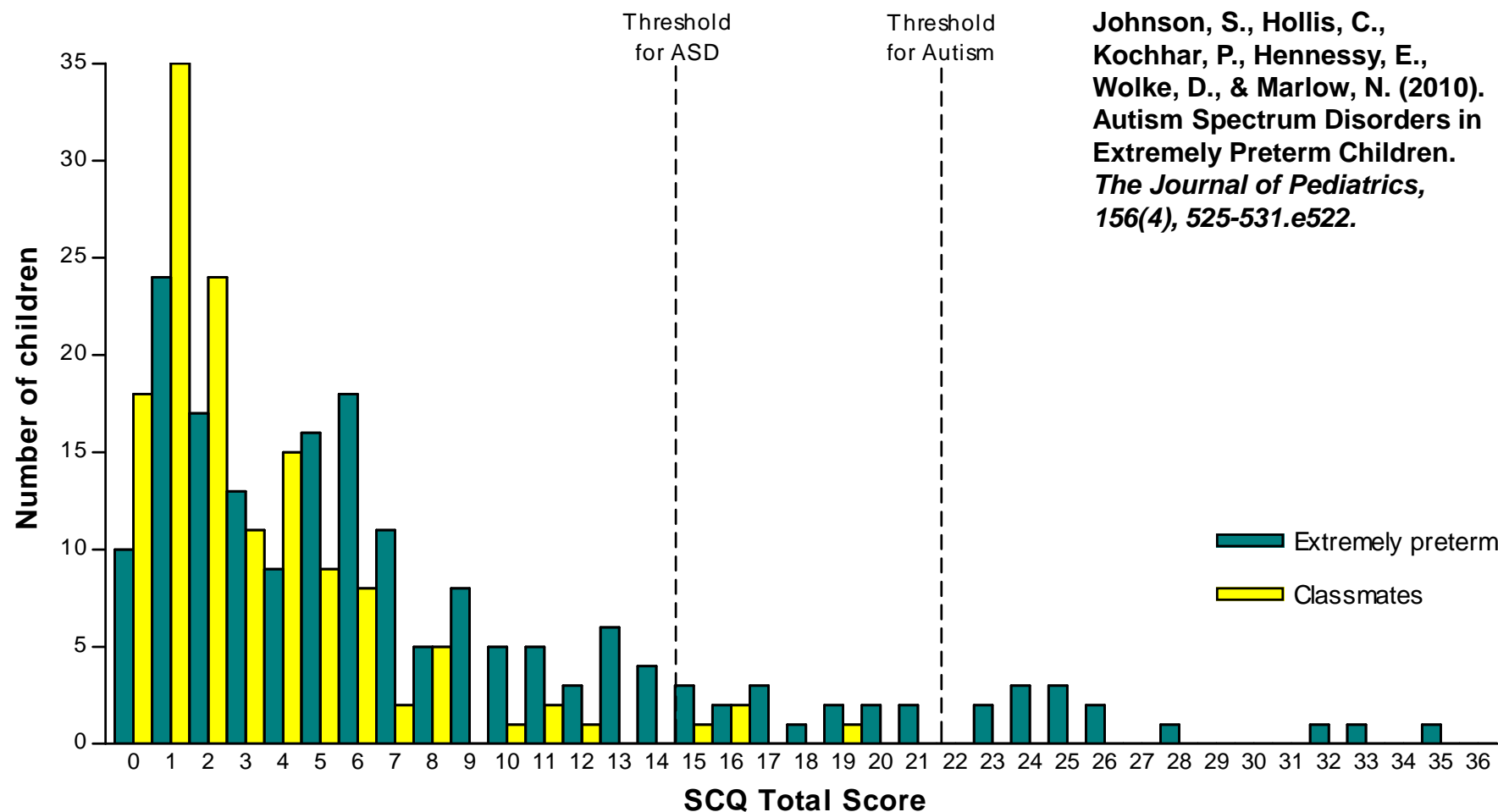


Attention Problems/Skills across the Gestation Spectrum





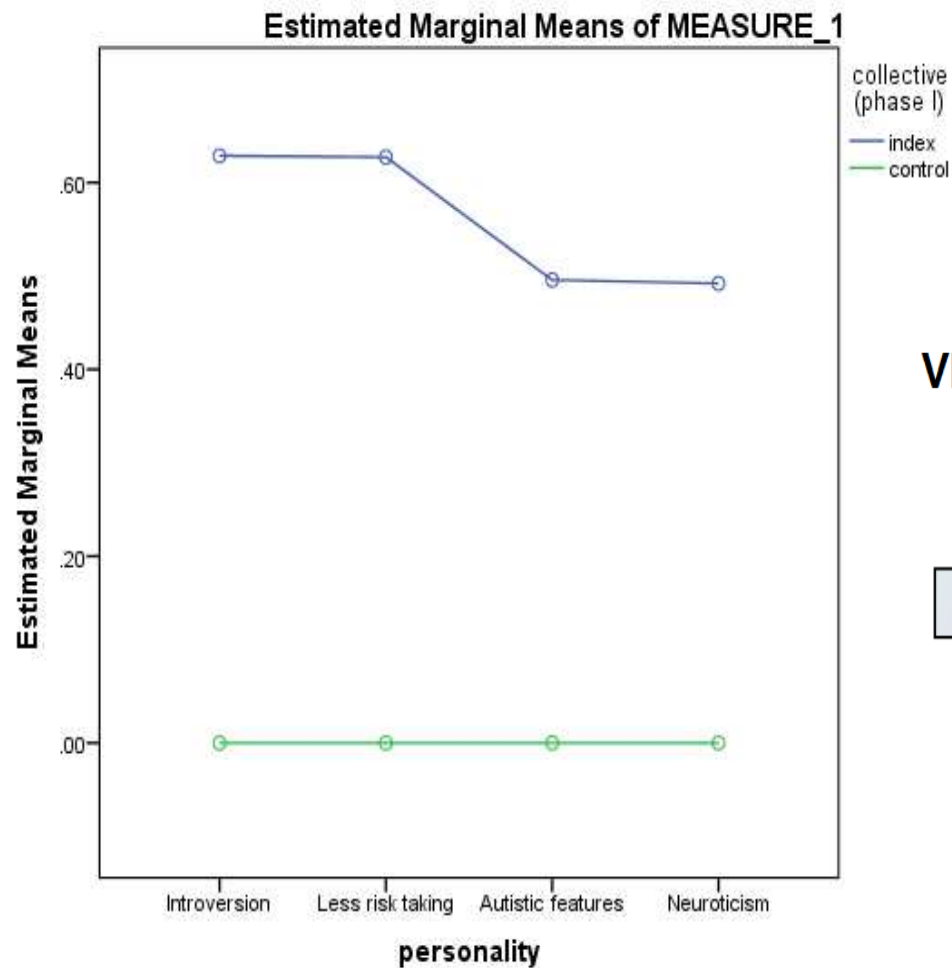
Frequency distribution of SCQ Autism scores



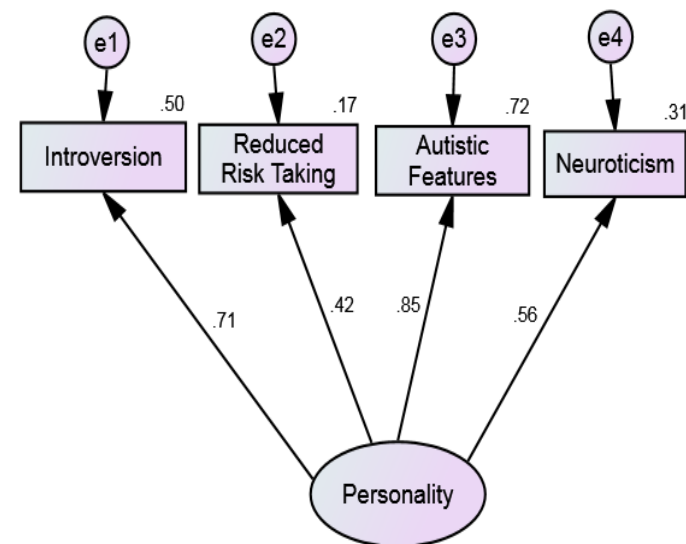
Extremely preterm children were 6 times more likely to have ASD than classmates (OR 6.3, 95% CI 2.1 to 18.3).



Personality Profile of VP/VLBW



VP/VLBW



How does VP/VLBW birth affect “real” life outcomes?

- Less Risk Taking and Crime
- Lower Wealth
- Poor Social Relationships

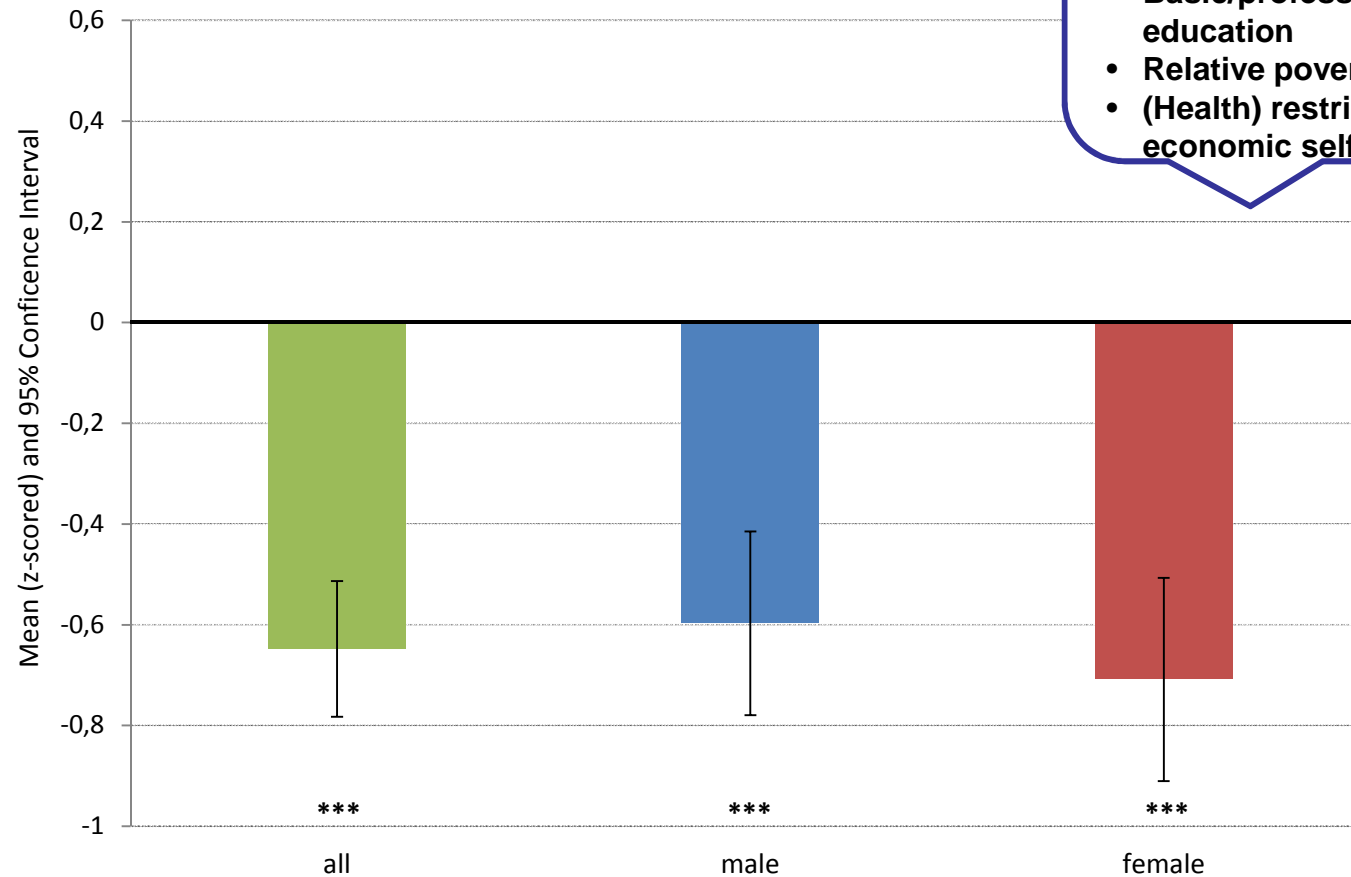




Wealth

Main contributing problems:

- Low income
- Unemployment
- No own home
- Basic/profession oriented education
- Relative poverty
- (Health) restrictions: occupation, economic self-sufficiency



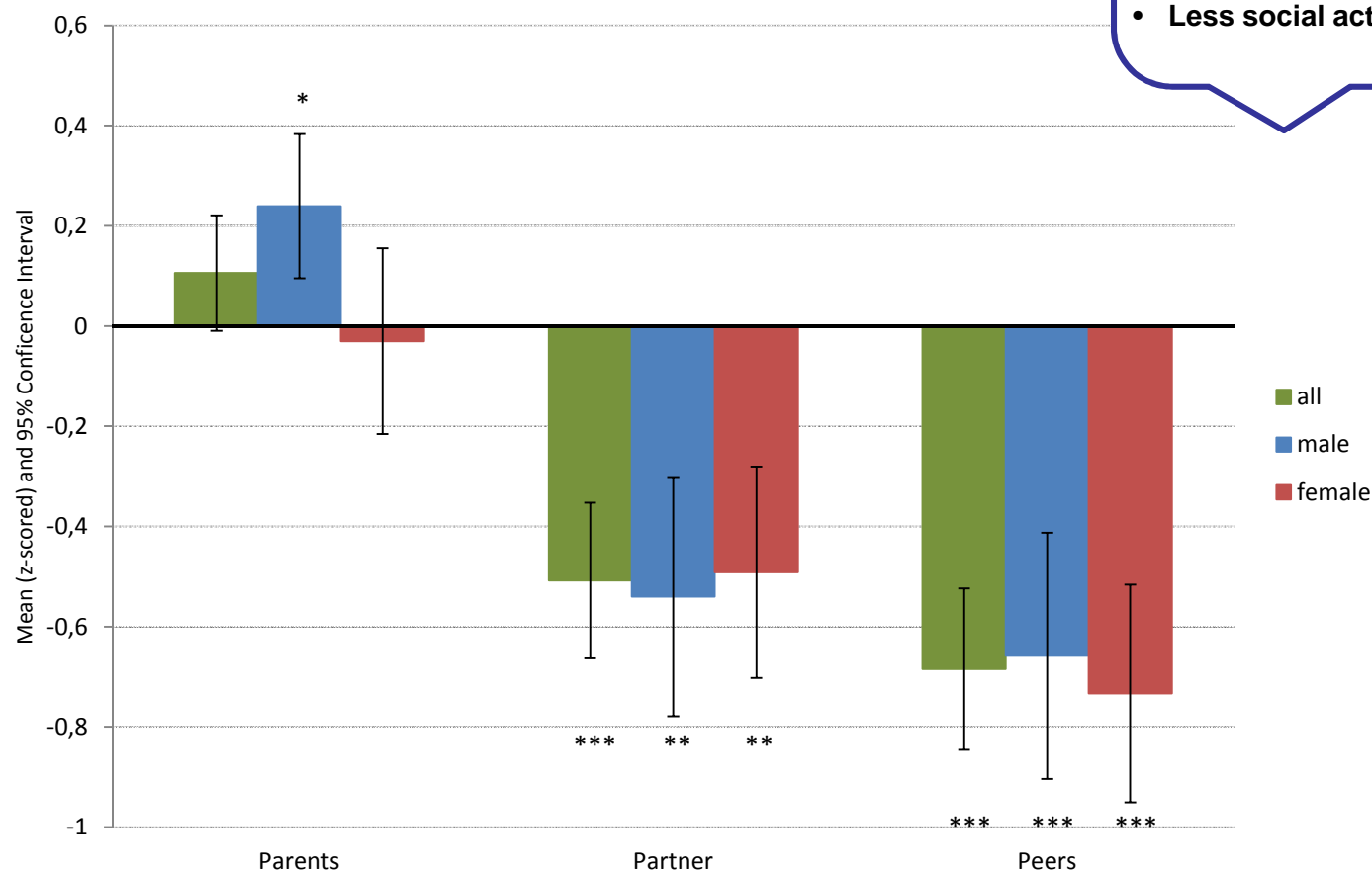


Social Functioning (subscales)

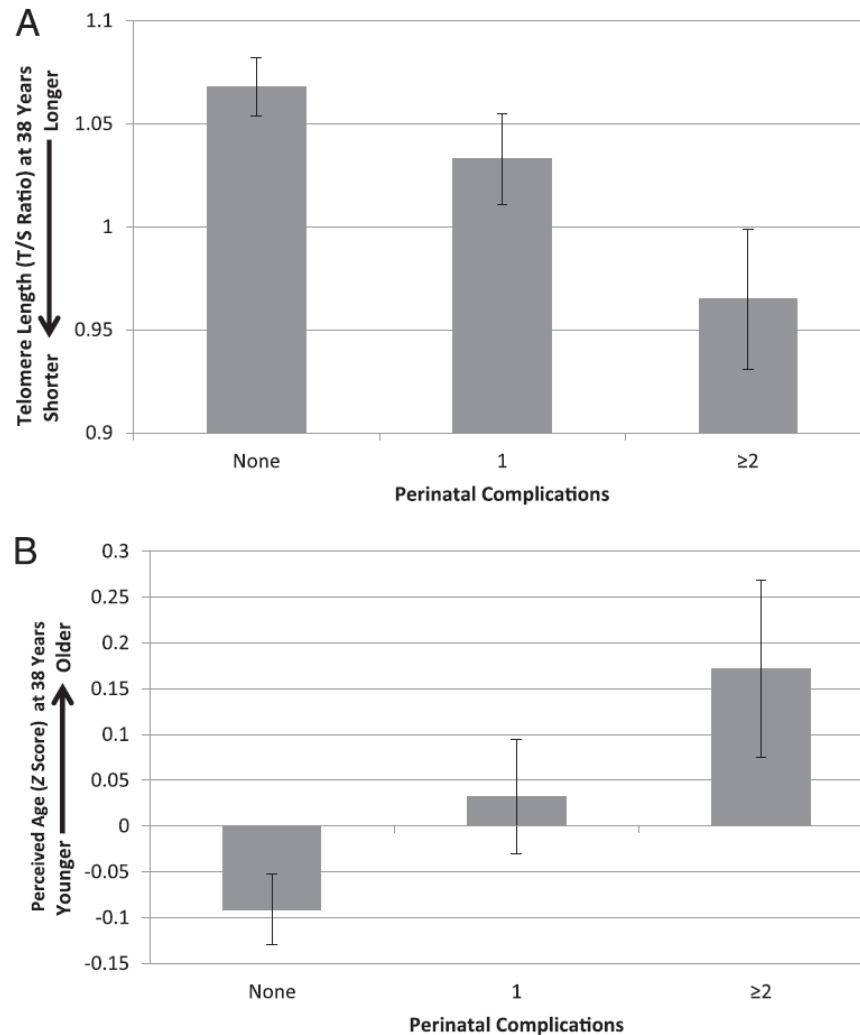
Parent, Partner and Peer Relationships

Main contributing problems:

- Less romantic/sexual relationships
- No best friend/confidante
- Problems making/keeping friends
- Contact & support of friends
- Being bullied
- Less social activities

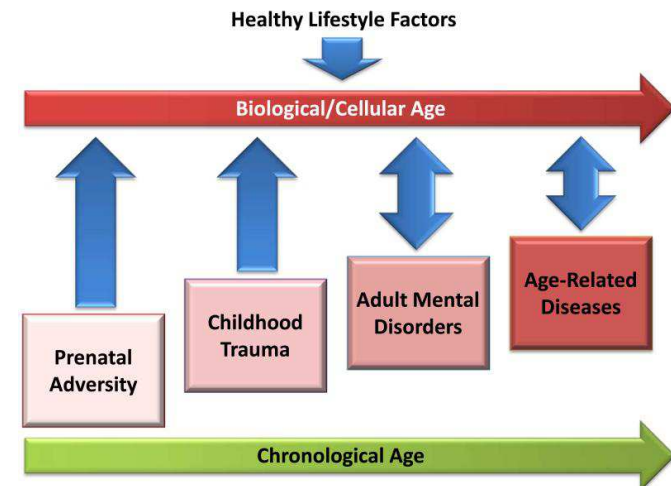


Perinatal Complications and Ageing



PEDIATRICS®
OFFICIAL JOURNAL OF THE AMERICAN ACADEMY OF PEDIATRICS

Perinatal Complications and Aging Indicators by Midlife
Idan Shalev, Avshalom Caspi, Antony Ambler, Daniel W. Belsky, Simon Chapple, Harvey Jay Cohen, Salomon Israel, Richie Poulton, Sandhya Ramrakha, Christine D. Rivera, Karen Sugden, Benjamin Williams, Dieter Wolke and Terrie E. Moffitt
Pediatrics; originally published online October 27, 2014;
DOI: 10.1542/peds.2014-1669



Conclusions and Implications

- VP/VLBW have a characteristics phenotype relating to cognitive problems, personality, attention, mental health, risk taking and social relationships

Follow-up Care

Doyle et al. *BMC Pediatrics* 2014, **14**:279
<http://www.biomedcentral.com/1471-2431/14/279>

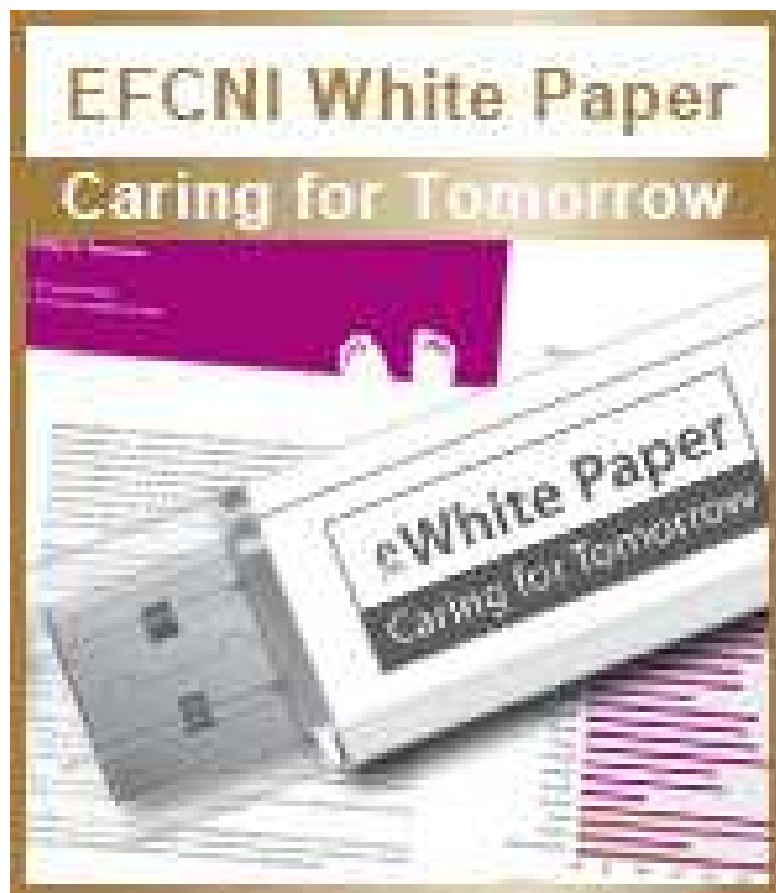


COMMENTARY

Open Access

Long term follow up of high risk children: who, why and how?

Lex W Doyle^{1,2,3,4,19*}, Peter J Anderson^{2,3,4}, Malcolm Battin⁵, Jennifer R Bowen⁶, Nisha Brown^{1,2,7}, Catherine Callanan⁴, Catherine Campbell¹⁰, Samantha Chandler¹⁹, Jeanie Cheong^{1,3,4}, Brian Darlow⁸, Peter G Davis^{1,4}, Tony DePaoli⁹, Noel French¹⁰, Andy McPhee¹¹, Shusannah Morris¹⁹, Michael O'Callaghan¹², Ingrid Rieger^{13,14}, Gehan Roberts^{2,3,15}, Alicia J Spittle^{3,16}, Dieter Wolke¹⁷ and Lianne J Woodward¹⁸



European Minimal Standards of Care and Follow-up

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Implications

Education

- Delayed school entry?
- Teaching the teachers about prematurity
- Instruction methods

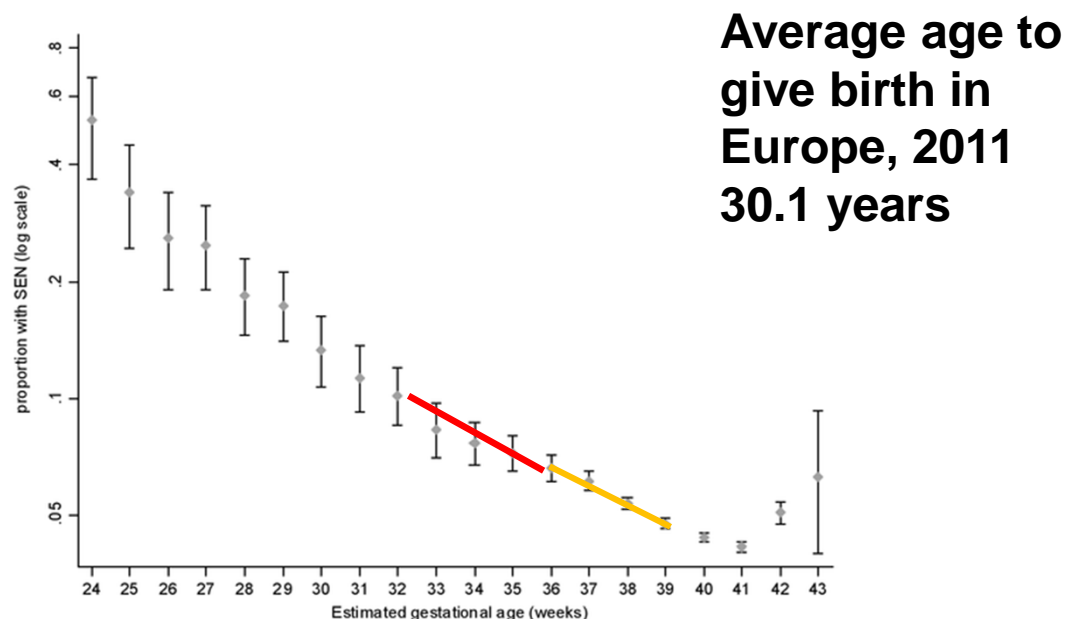


Ageing and Social Care

Mental Health Services

- into adulthood (e.g. Adult ADHD, anxiety, psychotic symptoms, social integration)

Changes in Demography and Reproductive Medicine: Prematurity rates are rising!



Last 20 years

- **increase of preterm birth 2%: 2000 more cases of any SEN/yr**
- **increase in near term births 6.2%: 1200 cases more of any SEN/yr**

Dieter Wolke

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Competing interests None.

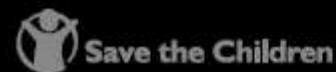
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1. **Johnson S**, Hennessy E, Smith R, *et al*. Academic attainment and special educational needs in extremely preterm children at 11 years of age: the EPICure study. *Arch Dis Child Fetal Neonatal Ed* 2009;**94**:F283–9.
2. **Wolke D**. Psychological development of prematurely born children. *Arch Dis Child* 1998;**78**:567–70.
3. **Saigal S**, Doyle LW. An overview of mortality and sequelae of preterm birth from infancy to adulthood. *Lancet* 2008;**371**:261–9.
4. **Department for Education**. DfE: Special Educational Needs in England: January 2010. London: Department for Education. 2010. <http://www.dcsf.gov.uk/rsgateway/DB/SFR/s000939/index.shtml> (accessed 12 August 2010).
5. **Orton J**, Spittle A, Doyle L, *et al*. Do early intervention programmes improve cognitive and motor outcomes for preterm infants after discharge? A systematic review. *Dev Med Child Neurol* 2009;**51**:851–9.

COMMENTARY

Born Too Soon

The Global Action Report on Preterm Birth



Chapter 1. Preterm birth matters

Chapter 2. 15 million preterm births: priorities for action based on national, regional and global estimates

Overlooked Long term Effects

2. Regulatory Problems in Infancy

- Persistent Crying
- Sleep Problems
- Feeding Problems

Impact

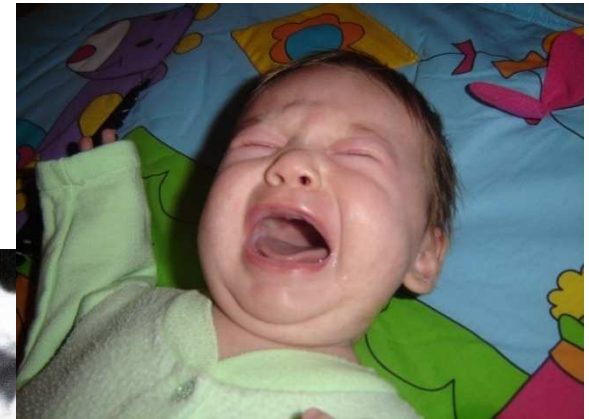
Immediate

- Depression
- Parenting
- SBS
- FTT

Longterm

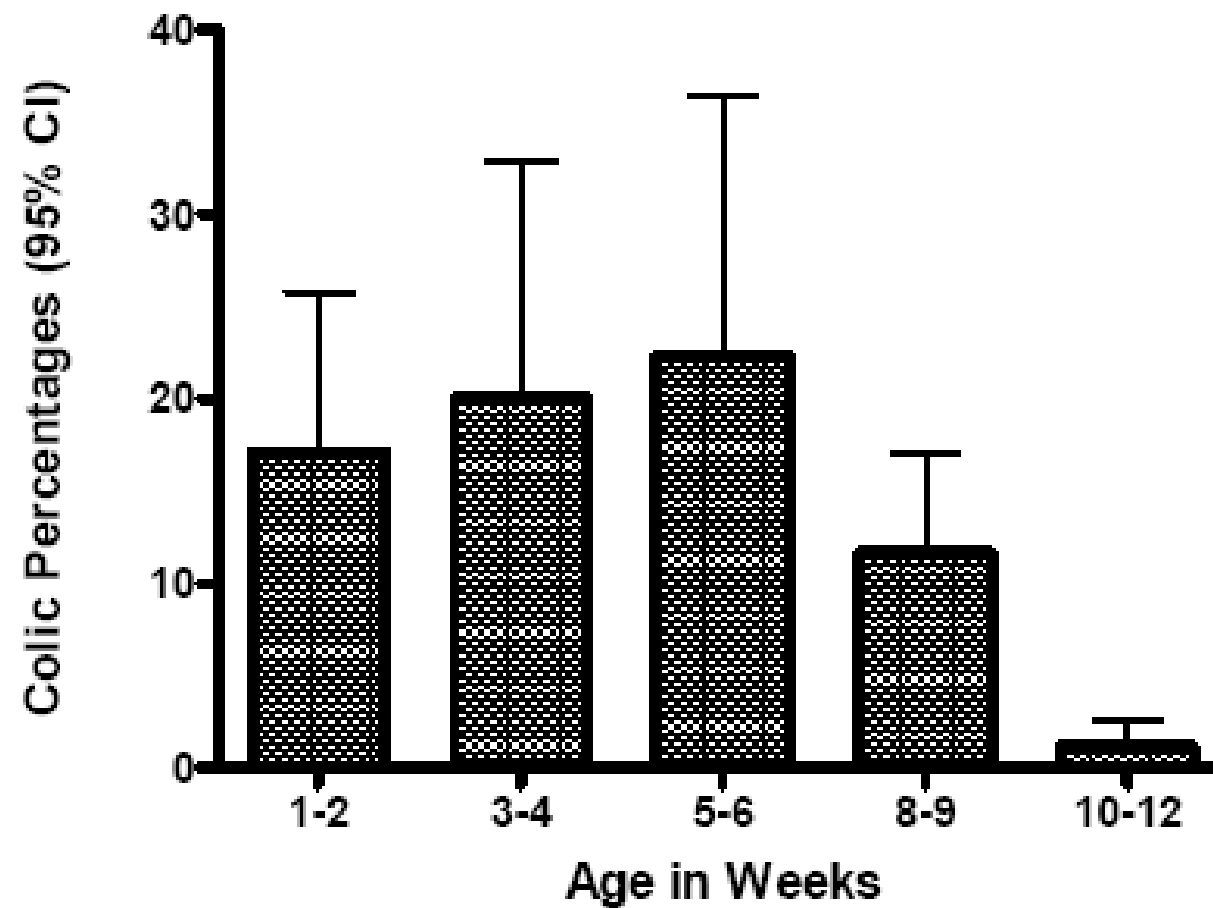
- Behaviour Problems
- Cognition

CRYING



WARWICK

Overall colic percentages combined across studies



Wolke, D, Samara, M & Alvarez Wolke, M (in preparation)

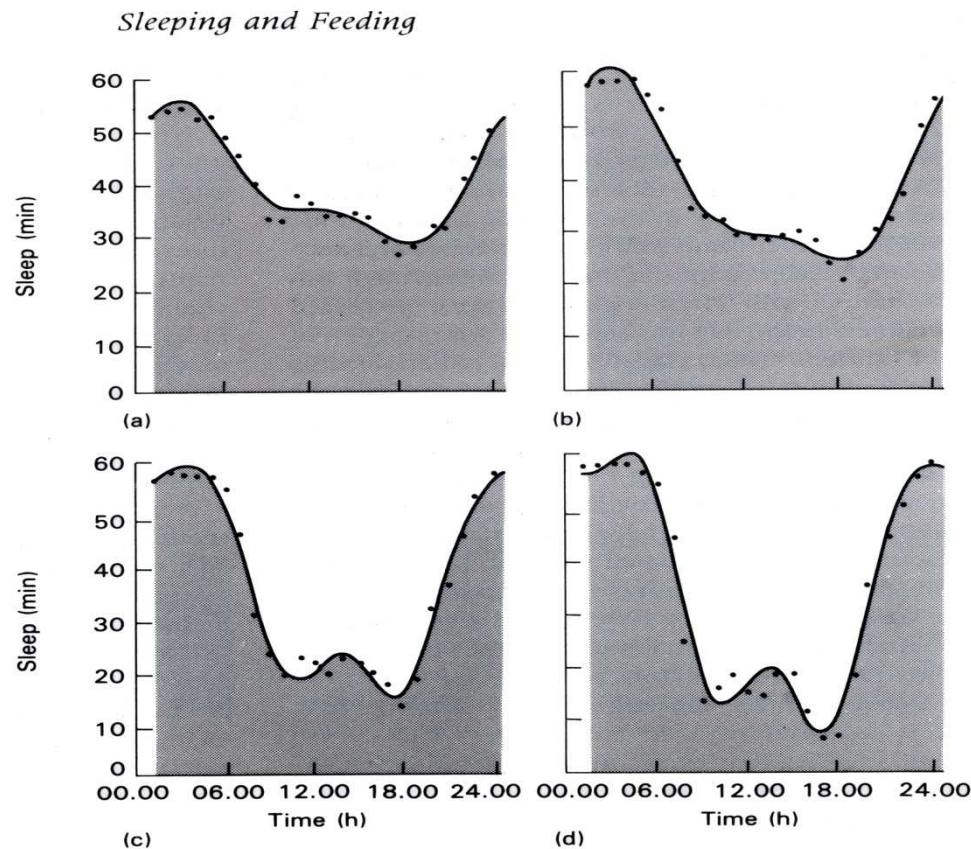
Shaken Baby Syndrome

- Weak Neck Muscles
- Normal Large Head to Body ratio
- ***Violent, sustained*** shaking



Sleeping: Principles

- **Babies are not born with the ability to sleep through the night**



Sleeping: Principles

- **All babies wake up at night**



Feeding & Eating Problems

Human infant depends completely on social relationship for intake of nutritional requirements



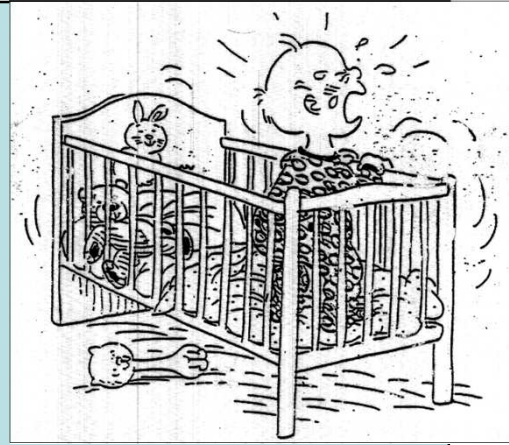
The prerequisites for successful feeding are:

- Anatomical maturation of the nervous system and muscular structures
- The development of appropriate oral motor skills
- Appropriate positioning and body posture during feeding
- Appropriate parent-child interaction

(see Wolke et al., 2006; Reilly et al., 2006)

- VIDEO Food Refusal





Core Concept: reduced inhibition/self-regulation



- **Crying**: cannot stop crying
- **Sleeping**: cannot fall asleep alone or fall back to sleep when awoken
- **Feeding**: cannot overcome neophobia
- Can have differences in Reactivity
- Must have differences in Regulation



Meta-analysis of 22 Studies of Crying, Sleeping and Feeding Problems and Later Behaviour Problems

Associations	K	ES	SE	Variance	95% Confidence Interval	
Any Regulatory Problem						
General BP	22		0.412	0.067	0.004	0.281 0.544
Externalizing	15		0.507	0.097	0.009	0.318 0.697
Internalizing	11		0.342	0.073	0.005	0.200 0.484
ADHD	13		0.363	0.119	0.014	0.130 0.596

Hemmi, M. H., Wolke, D., & Schneider, S. (2011). Associations between problems with crying, sleeping and/or feeding in infancy and long-term behavioural outcomes in childhood: a meta-analysis. *Archives of Disease in Childhood*, 96(7), 622-629. doi: 10.1136/adc.2010.191312

Conclusions and Implications

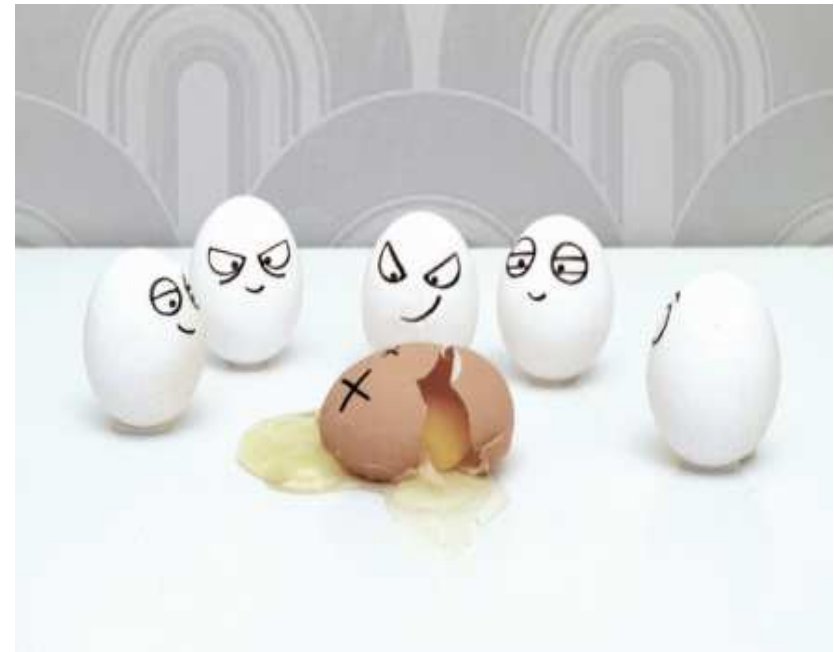


- Infant regulatory problems have long term cascading effects on mental health
Winsper, C., & Wolke, D. (2014). Infant and Toddler Crying, Sleeping and Feeding Problems and Trajectories of Dysregulated Behavior Across Childhood. *Journal of Abnormal Child Psychology*, 42(45), 831-843.
- There are prevention strategies: dealing with crying, sleep training, managing feeding - Why not in antenatal classes?
- Primary care providers are insufficiently trained to provide preventative actions – behavioural management techniques – infant clinics, parent support
Excessive Infant Crying: A Controlled Study of Mothers Helping Mothers
Dieter Wolke, Pat Gray and Renate Meyer
Pediatrics 1994;94;322-332
- Infant regulatory problems are frequent, expensive (repeat physician visits) and in the long term costly for mental health services.

Bullying

Bullying is defined as

1. aggressive behaviour or **intentional** harm-doing by an individual or group that
2. is carried out **repeatedly** over time in
3. an interpersonal relationship characterized by an **imbalance of power**



Types of bullying

•Direct/Overt

- Name calling, teasing, racial slurs
- Obscene gestures
- Hitting, kicking, pushing
- Threatening, stealing

•Relational

- Leaving out on purpose
- Spreading nasty rumours
- purposeful damage to social relationships



Perpetrator Type and Victimization: NSPCC- Study

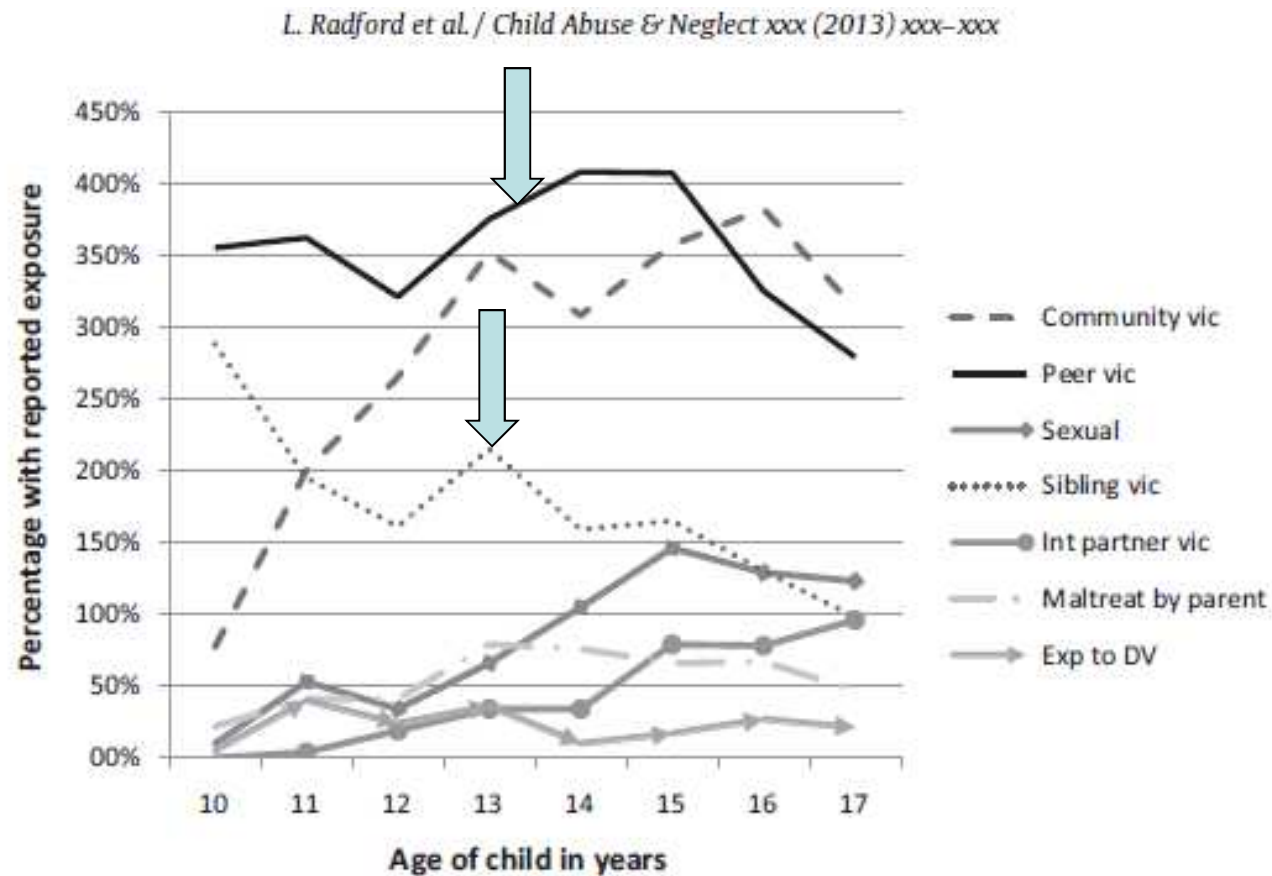



Fig. 1. Past year rates of child victimization by perpetrator type and selected victimization types, ages 10–17 years (weighted data).

Prevalence of Bullying Victimisation in Europe

Variable	Total (N = 16210), n (%) ^a	Country, n (%)										
		AU	CZ	FR	DE	EL ^b	HU	NL	PL	ES	CH	UK
Gender												
Male	8308 (51.3)	731 (51.0)	819 (51.5)	520 (51.1)	882 (51.3)	600 (51.4)	999 (51.0)	947 (51.2)	854 (51.2)	447 (51.4)	866 (51.4)	640 (51.3)
Female	7901 (48.7)	703 (49.0)	773 (48.5)	497 (48.9)	837 (48.7)	567 (48.6)	960 (49.0)	903 (48.8)	816 (48.8)	423 (48.6)	819 (48.6)	607 (48.7)
Age, y												
8–11	5584 (34.4)	526 (36.7)	557 (35.0)	360 (35.4)	596 (34.7)	NA	690 (35.2)	696 (37.6)	536 (32.1)	295 (34.0)	622 (36.9)	468 (37.5)
12–15	6982 (43.1)	601 (41.9)	599 (37.7)	436 (42.9)	723 (42.0)	804 (68.9)	818 (41.8)	761 (41.1)	703 (42.1)	367 (42.2)	728 (43.2)	557 (44.7)
16–18	3643 (22.5)	308 (21.5)	435 (27.3)	221 (21.7)	400 (23.3)	363 (31.1)	450 (23.0)	393 (21.3)	431 (25.8)	207 (23.8)	335 (19.9)	222 (17.8)
												
Bullying												
→ Yes (score < 1 SD)	3293 (20.6)	343 (25.1)	320 (20.2)	117 (11.7)	297 (17.7)	143 (12.4)	206 (10.5)	485 (26.6)	382 (23.0)	202 (23.7)	365 (22.0)	367 (29.6)
No	12698 (79.4)	1027 (74.9)	1263 (79.8)	884 (88.3)	1384 (82.3)	1018 (87.6)	1748 (89.5)	1341 (73.4)	1281 (77.0)	650 (76.3)	1298 (78.0)	874 (70.4)

Analitis, F., Velderman, M. K., Ravens-Sieberer, U., Detmar, S., Erhart, M., Herdman, M., et al. (2009). Being Bullied: Associated Factors in Children and Adolescents 8 to 18 Years Old in 11 European Countries. *Pediatrics*, 123(2), 569-577.

Being Bullied: will Kids grow out of it? - - Adolescence and Adulthood -



National news

Schoolboy 'hanged himself after bullying'

Council investigates claims that death followed intimidation

Laura Smith

A 12-year-old schoolboy who was found hanged in the bathroom of his home in Romford, Essex, is thought to have been a victim of bullying, it emerged yesterday.

Nathan Jones, described by his mother as "warm, loving and sensitive", was found hanging after he returned from school nine days ago.

In a statement released by Scotland Yard, his mother, Maria Window, said: "Nathan will be sorely missed by his family and friends. We are proud of his achievements. He always put others first. We are distraught. Our family has been devastated and we will miss him terribly."

School officials are investigating a claim that Nathan, who was in his second year at King's Wood school in Harold Hill, Essex, was being bullied by fellow pupils.

Councillor Geoff Starns, cabinet member for children's services on Havering council, said: "There have been rumours of bullying and we are looking into that, as we would look into all aspects of this tragic event. We cannot say at this stage one way or another if he was being bullied."

"I do know that he has been described as a popular boy and sharp lad. The focus right now is on the poor family and the school pupils." The school was unavailable for comment.

around 6pm on April 7. Officers from a passing police car were on the scene within minutes and tried to resuscitate him before paramedics arrived.

The attempt to save him continued for more than an hour, but he was confirmed dead at Oldchurch hospital, Romford. Flowers were placed at the school gates yesterday as word of Nathan's death spread among pupils and parents.

One mother, who did not want to be named, said her daughter had told her Nathan was being bullied. She said: "You send your kids to school and expect them to be looked after. This poor boy should never be forgotten. We have to put a stop to bullying."

Traumatized pupils at the school are being offered counselling. Some have set up an internet forum to mourn his death with links to anti-bullying campaigns.

One message reads: "You made a young boy take his own life, just for fun. Selfish-hearted people did this to Nathan and now no one's life will ever be the same."

Jeff Stafford, a school governor, said: "Many rumours are being spread at the moment, but we will not know the circumstances in which Nathan died until the inquest is completed. It is a shock."

"He was on the school council, a drama group member and an active fundraiser – that's what makes his death so mystifying."



Nathan Jones, described by his mother as 'warm, loving and sensitive', was found hanging after he returned from school nine days ago.

Overdose: Thomas Thompson

Bullied boy, 11, dies after pills overdose

A BULLIED schoolboy has died after taking an overdose of painkillers in his bedroom, Thomas Thompson, 11, swallowed 12 pills and was discovered on the floor by his mother, Sandra, when she arrived home from work. Despite paramedics trying to revive him, he died at home of a heart attack. Mrs Thompson, 33, said her son was a victim of bullying at Walsley School in Warrack, Merseyside, where he was a pupil.

"I have no words to describe those people who persecuted and taunted him other than I hate them," she said. "He was a good kid, a good laugh but a bit different from other kids of his age." She said Thomas was picked on for working hard at school and campaigning against the Iraq war. His headteacher, Martin Pope, claimed Thomas was picked on by children from a different school and teachers had seen no bullying.

Modern bullies are seeking victims through cyberspace

Bullying via the internet is on the rise in schools, making and punish those responsible, Alexandra Blair and Andy



Little monster Lord of the Flies, right, is the classic of the horror novel. But modern bullies are not content with the classroom. They use the internet to bully their victims. The illustration is by David Almond.

THEY'RE not anonymous and widely available as the new breed of cyber bullies, who have emerged for the first time in the form of the internet. They are not anonymous and widely available as the new breed of cyber bullies, who have emerged for the first time in the form of the internet. They are not anonymous and widely available as the new breed of cyber bullies, who have emerged for the first time in the form of the internet.

Boy 'beaten up' in lesson on bullying

A TEENAGER needed hospital treatment after he was attacked by eight other pupils – during a school lesson to combat bullying, his family claimed yesterday. Liam Kirk, 14, was allegedly attacked at Paignton Community College in Devon when the teacher left the class to make a cup of tea.

His father said the boy was "beaten up" and "hurt in the head" when he was attacked by eight other pupils during a lesson on bullying. The teacher left the class to make a cup of tea.

Liam Kirk: 'Hurt in bully class'

forced him to the ground. As he was trying to get up they jumped on his arm.' Mr Kirk also claims Liam did not receive medical attention at school and he was left to take his son to hospital himself. He may sue education officials.

The IT consultant added: 'If the school does not revise its bullying policy, I do not see that I can

By Nicola Woolcock

A 13-YEAR-OLD girl who died in a suspected suicide pact was the victim of school bullies, her parents said.

Police had ruled out bullying as the cause of Laura Rhodes's death, but her family said that she was terrified of daily taunts about her weight. The teenager died on Saturday after apparently taking an overdose of painkillers with her friend Rebecca Ling, 14, who is recovering in hospital.

'Zombie' suicide of bullied girl, 13

cousin, Jackie Thomas and Mandy Birt, at the family home in Neath, South Wales, Laura's parents Michael and Yvonne Rhodes said that they wanted to "put the record straight". They said that Laura had been extensively picked on at Cefn Saeson school.

Mrs Thomas said that her niece had suffered a "small amount" of bullying at primary school, but when she started secondary school, the bullying became much worse.

"We did try to tackle these

Years of bullying drove our son to kill himself

BY SARAH GETTY

A SHY schoolboy traumatised by a lifetime of bullying killed himself after carefully planning his own funeral.

Karl Peart, 16, was taunted at primary school and routinely attacked at secondary school.

On trips to local shops, he would wear a hood over his head to avoid being recognised and beaten up.

Two weeks ago, Karl endured a court case in which another youngster was ordered to pay him compensation for an attack in the street.

Still fearing reprisals in the wake of the hearing, the teenager could not face returning to school after the half-term break.

Last Sunday, he went to bed and put a picture of his mother on his pillow. He left notes for his parents, detailing funeral arrangements – including a request to play the song I'm With You by chart star Avril Lavigne.

Karl then took a fatal overdose of painkillers, washed down with alcohol.

His horrified mother found his body the next morning.

Yesterday, she said: "He was just different, his mother added. "He was a soft touch."

News of his death was broken to pupils at Hirst High School.



Carefree: Before the trouble started



Bullied: Karl Peart shortly before he took his

Boy killed by train 'as he fled bullies'

A BOY of 12 was hit by a commuter train while fleeing bullies at a station platform, an inquest heard yesterday.

David Ben-Hagin, 12, died for being taller than

Overdose girl, 13, was 'terrified of bullies'

had attendance problems and was seen as vulnerable and 'quite isolated'.

A boy with learning difficulties reported seeing eight boys chase



Bullies took pics as they broke arm

A BULLY stamped on a boy's arm and broke it while others took photographs of the attack with mobile phones.

The 11-year-old victim, Michael, was in a school playground when he was attacked by eight other boys. The attack was filmed on a mobile phone.

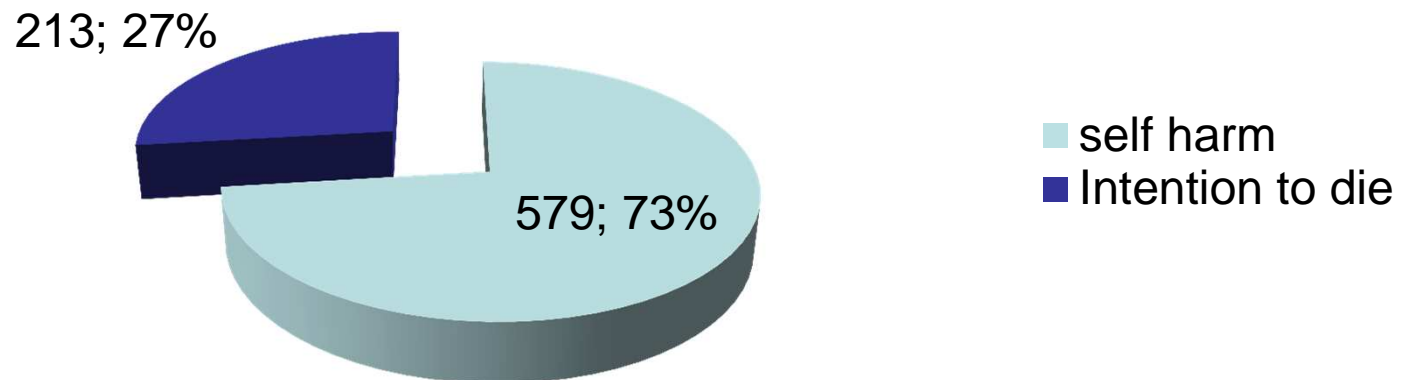
They dropped the victim on the ground and stamped on his arm with their feet. The victim was taken to hospital with a broken arm.

Cowardly

Being Bullied <11 yrs & Self-harm at 17 yrs

- Self-harm → defined as when somebody intentionally damages or injures their body
- Typical self-harm behaviour → cutting, burning or swallowing pills

Self Harm 16.5%





Being Bullied During Childhood and the Prospective Pathways to Self-Harm in Late Adolescence

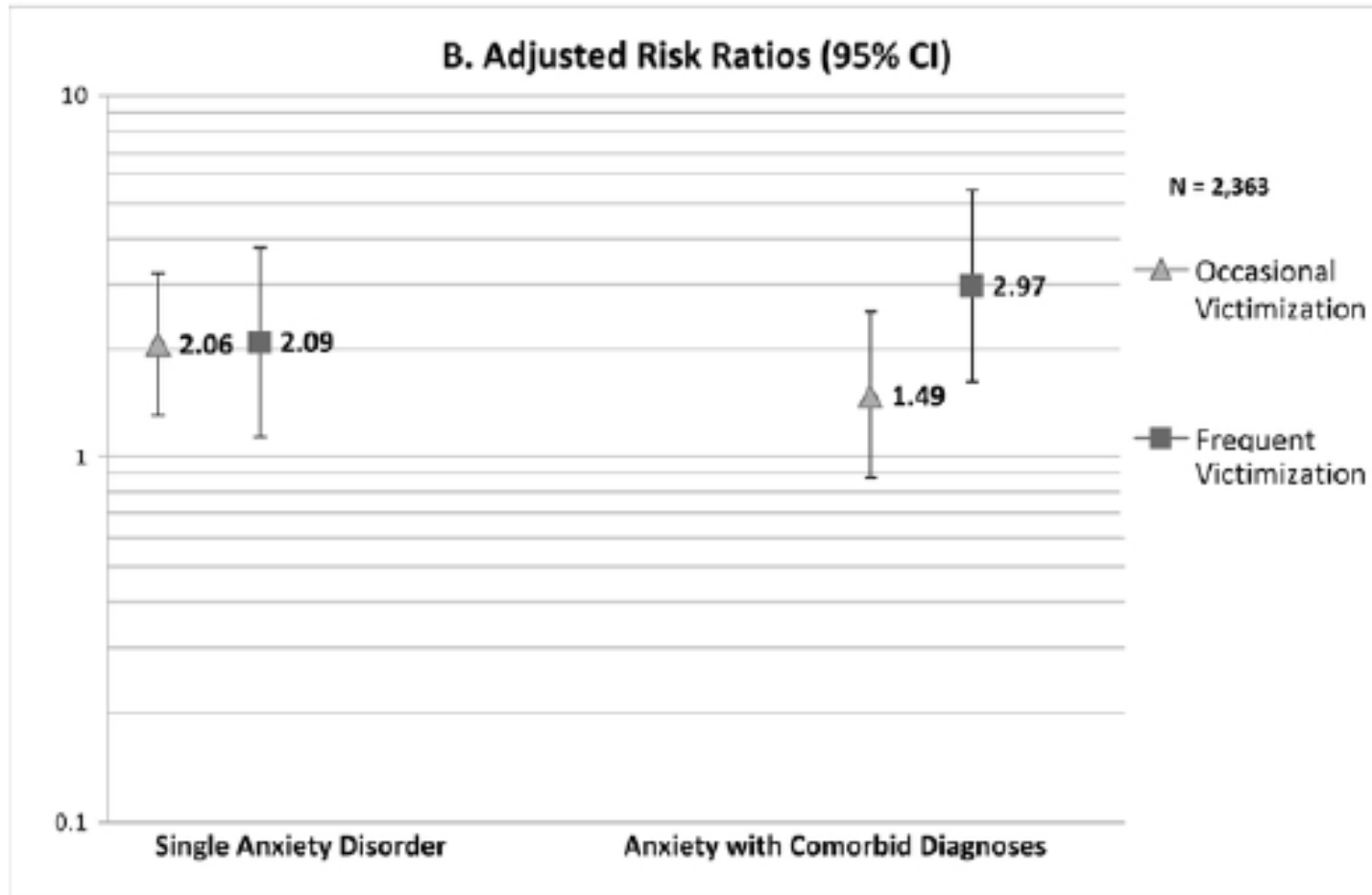
Suzet Tanya Lereya, Ph.D., Catherine Winsper, Ph.D., Jon Heron, Ph.D., Glyn Lewis, Ph.D.,
David Gunnell, D.Sc., Helen L. Fisher, Ph.D., Dieter Wolke, Ph.D.

JOURNAL OF THE AMERICAN ACADEMY OF CHILD & ADOLESCENT PSYCHIATRY
VOLUME 52 NUMBER 6 JUNE 2013

- Being bullied directly increased the risk of self-harm (Population attributable Fraction (PAF) > 20%)
- It means: if bullying could be eliminated (and everything else stays the same) 20% of self-harm cases could be prevented!
- Compare this to obesity (BMI > 30) - it occurs in 15% of the population - but accounts for only 2.8% of all myocardial infarctions

Yusuf S, Hawken S, Ôunpuu S, et al. Obesity and the risk of myocardial infarction in 27000 participants from 52 countries: a case-control study. *The Lancet*. 2005;366(9497):1640-1649.

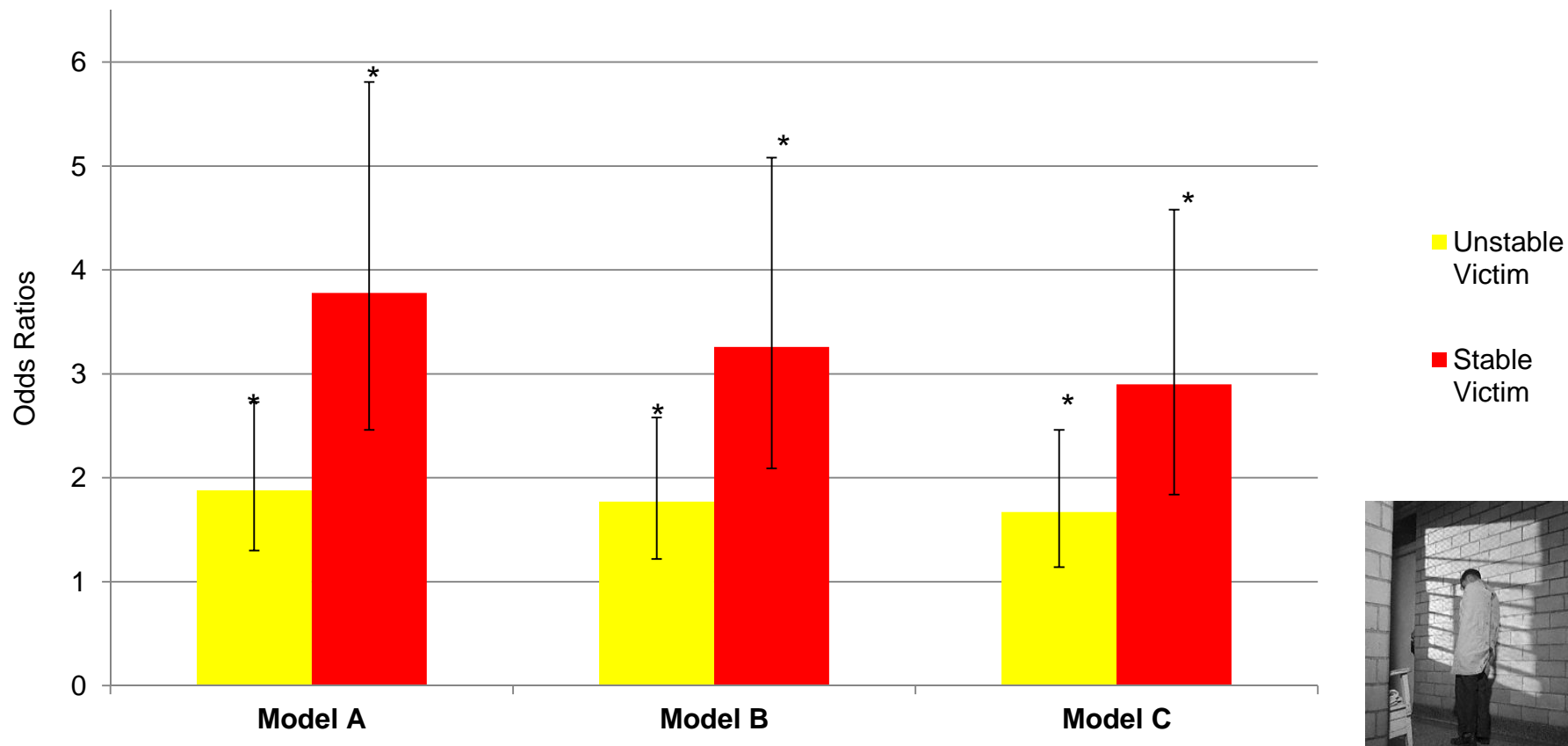
Peer victimisation at 12 years and Anxiety Disorders at 18 years



Stapinski, L. A., Bowes, L., Wolke, D., Pearson, R. M., Mahedy, L., Button, K. S., . . . Araya, R. (in press (2014). Peer victimization during adolescence and risk for anxiety disorder in adulthood: A prospective cohort study. *Depression and Anxiety*



Chronicity of Victimization (Child Report) & Psychotic Experiences at 18 years



Model B: Adjusted for Sex, any DSM-IV diagnosis, IQ, internalizing/externalizing behaviour

Model C: Adjusted for Sex, any DSM-IV diagnosis, IQ, internalizing/externalizing behaviour, depression symptoms at 12, 13 or 14 years and psychotic experiences at 12 years

Wolke, D., Lereya, S. T., Fisher, H. L., Lewis, G., & Zammit, S. (2014). Bullying in elementary school and psychotic experiences at 18 years: a longitudinal, population-based cohort study. *Psychological Medicine*, 44(10), 2199-2211. doi:10.1017/S0033291713002912

Adult Psychiatric Outcomes of Bullying and Being Bullied by Peers in Childhood and Adolescence

William E. Copeland, PhD; Dieter Wolke, PhD; Adrian Angold, MRC Psych F; Jane Costello, PhD

JAMA Psychiatry. 2013;70(4):419-426.

Published online February 20, 2013.

doi:10.1001/jamapsychiatry.2013.504



Impact of Bullying in Childhood on Adult Health, Wealth, Crime, and Social Outcomes

Psychological Science
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DOI: 10.1177/0956797613481608
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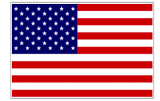
William Copeland



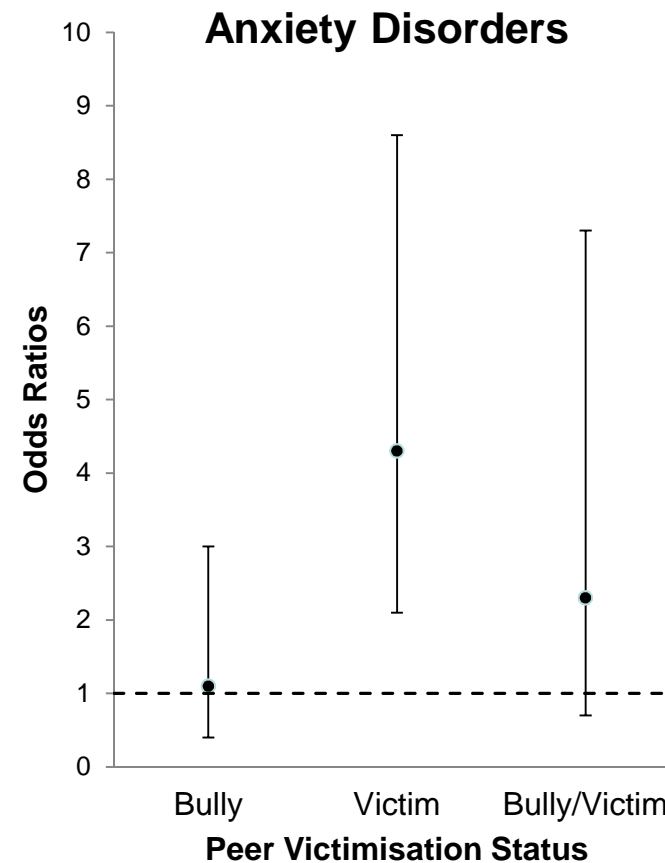
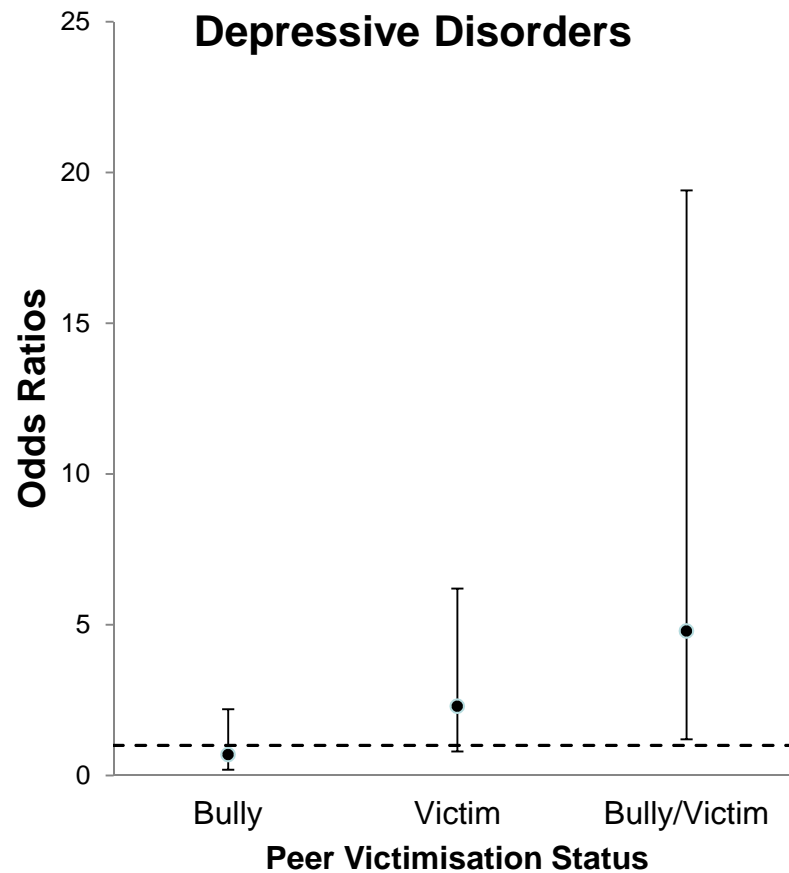
Jane Costello



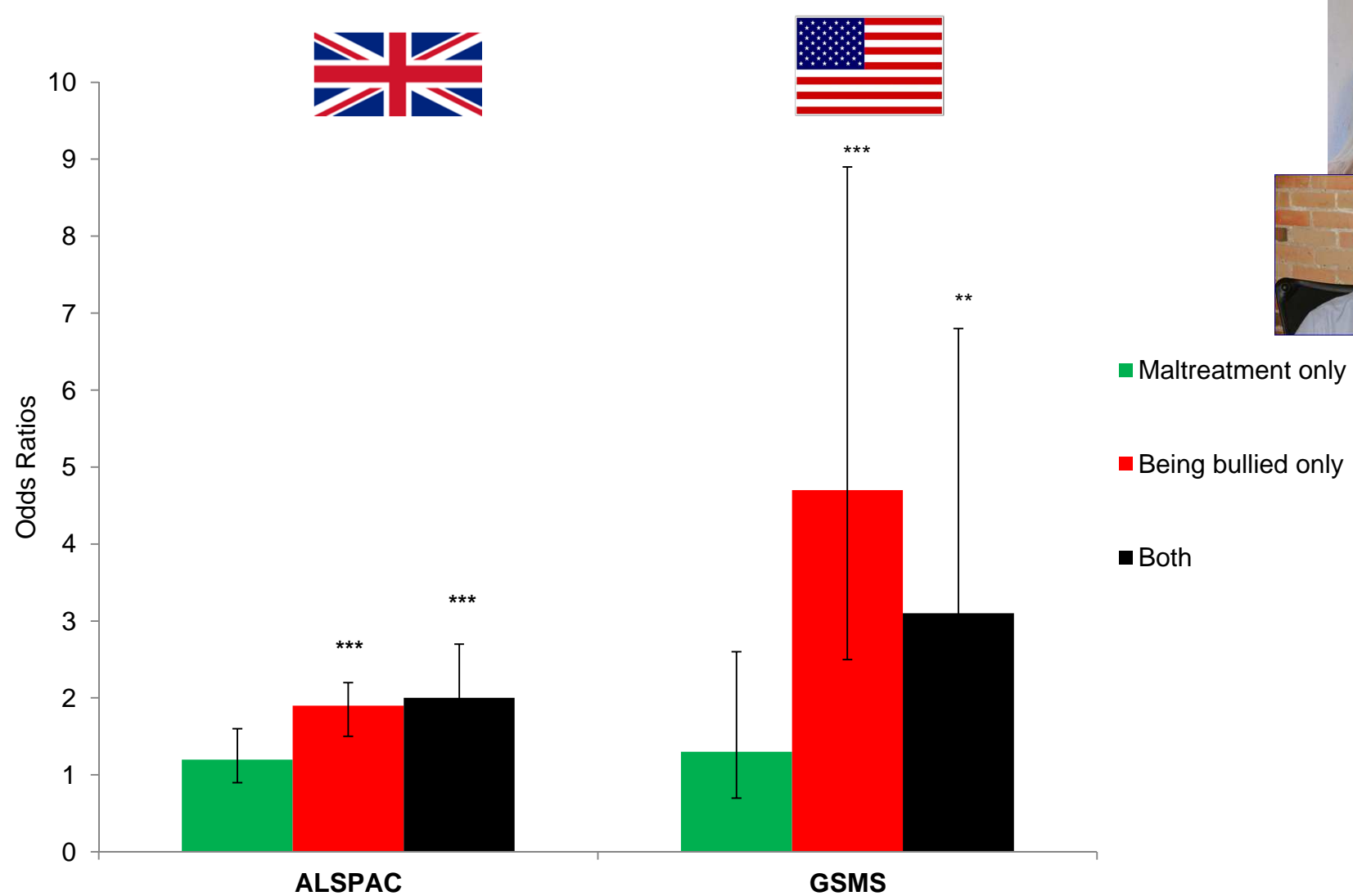
Adrian Angold



Bullying involvement at 9-16 years and early adult psychiatric outcome (controlled for childhood psychiatric problems and family factors)

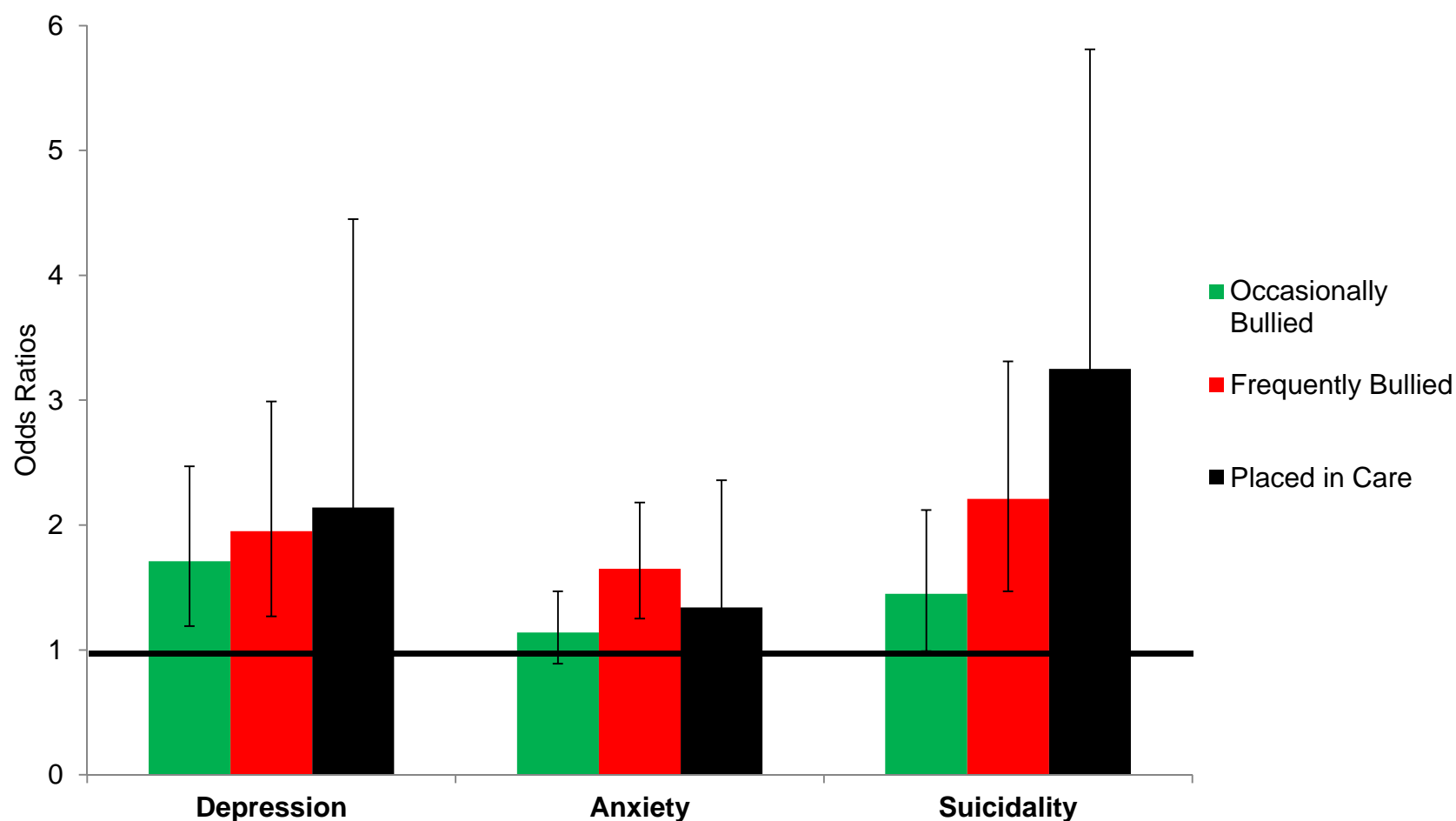


Mental Health Consequences of Maltreatment &/or Being Bullied: Two Cohorts in Two Countries

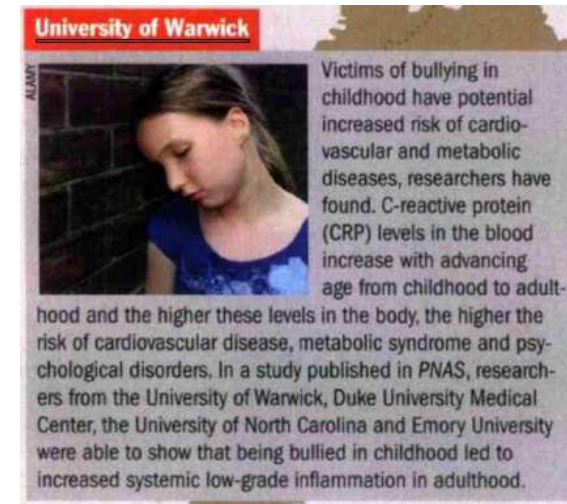




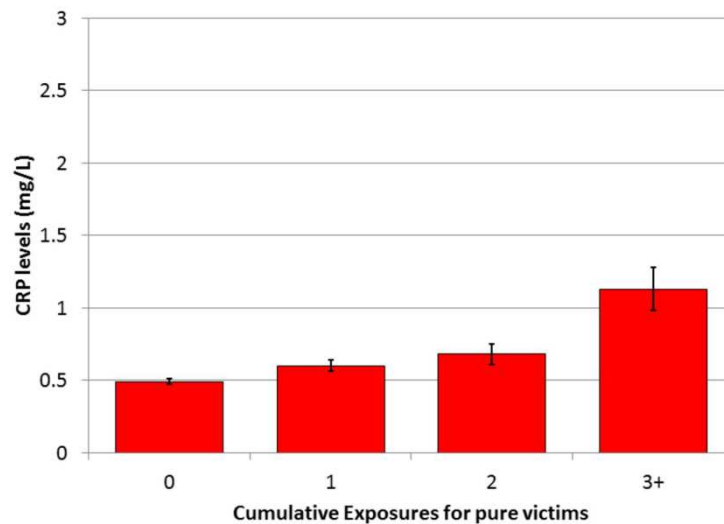
Being Bullied at Ages 7 & 11 and Psychiatric Outcomes at Age 45



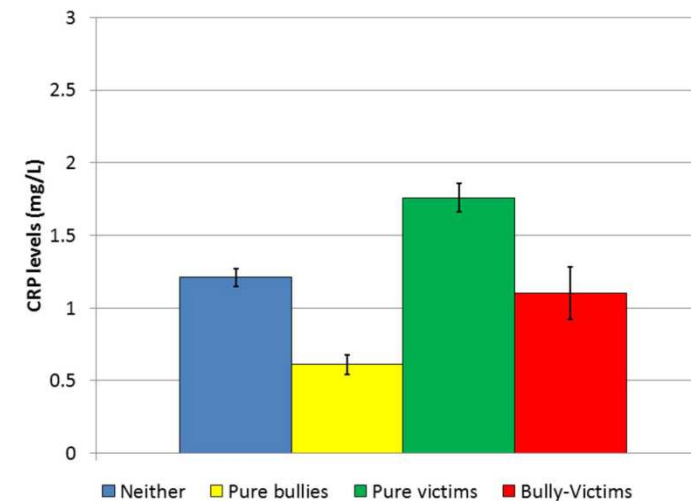
Bullying gets under the skin: Roles in Bullying and chronic low grade inflammation (c- reactive protein levels changes in blood)



In Childhood

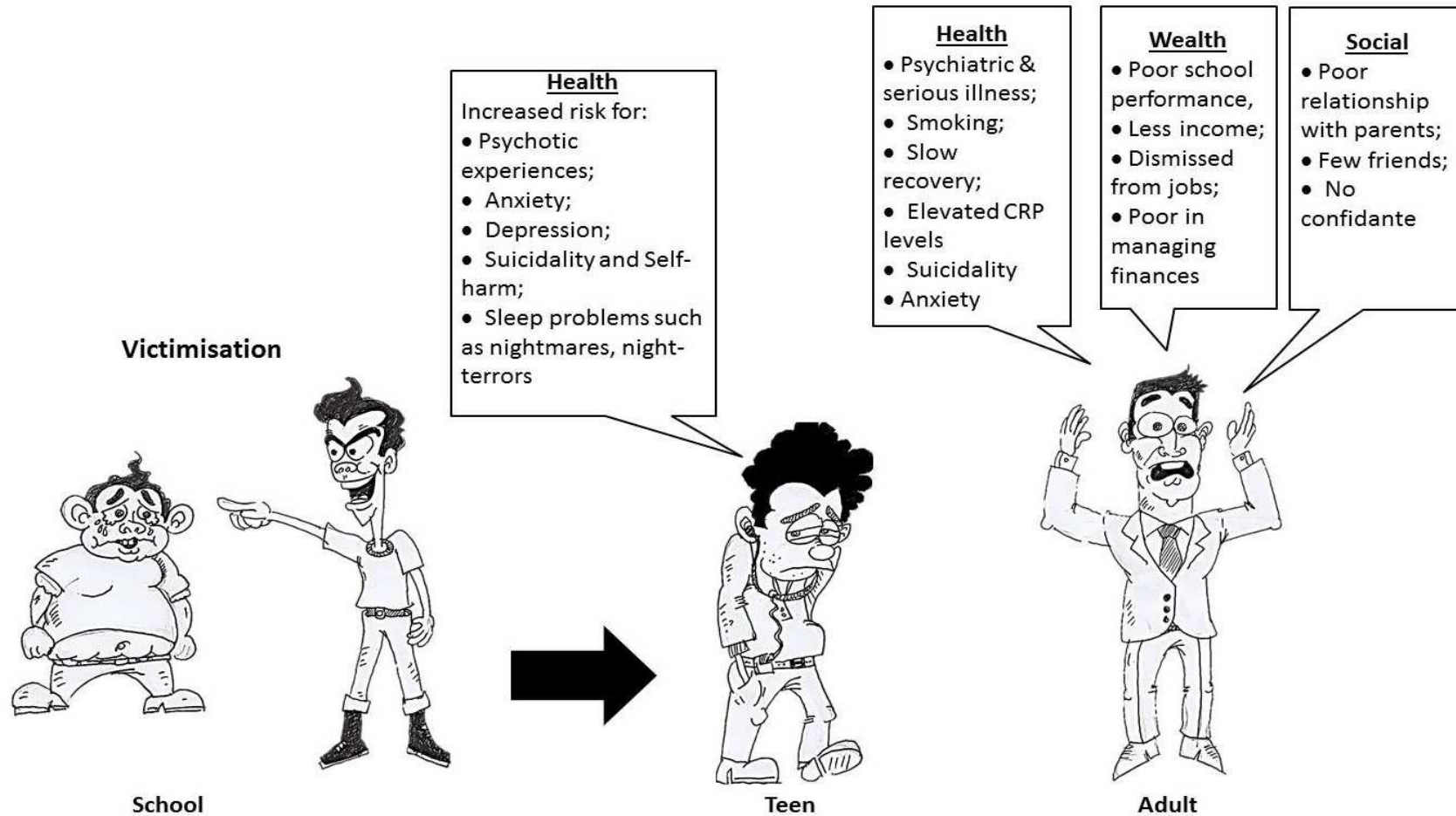


From Child to Adulthood



Copeland, W. E., Wolke, D., Lereya, S. T., Shanahan, L., Worthman, C., & Costello, E. J. (2014). Childhood bullying involvement predicts low-grade systemic inflammation into adulthood. *Proceedings of the National Academy of Sciences*. doi: 10.1073/pnas.1323641111

Summary of Adverse Outcomes of Bullying



Implications

If we want to improve the Health and Wealth of the Nation – we need to address bullying

Doubters: but so many children are affected – it is just normal.....

Answer: Just because it is frequent it does not mean it does not matter!

Example: Most people break a bone in their life – it is normal – do we leave them with hanging arms or stumps of legs – we treat them – we assess, set and provide them with a cast.



HIGHLIGHTING RESEARCH FINDINGS AND
THEIR RELEVANCE IN KEY POLICY AREAS

The long-term cost of bullying

Being bullied as a child is a cause of long-lasting and significant damage. Victims of childhood bullying are at increased risk of poorer health, wealth

the bullying problem. It is a public health and community problem that requires parents, GPs, other community agencies and schools to work together.

Worked with All Party Parliamentary Group on bullying:

**Definition of Bullying in the new Family and Child Bill –
Depression as a special Need**

26 April 2013 Last updated at 02:57

Overprotected children 'more likely to be bullied'

By Hannah Richardson
BBC News education reporter

Children who have overprotective parents are more likely to be bullied by their peers, research suggests.

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29. April 2013 11:26 Psychologie

Erziehungsstil erhöht Mobbing-Risiko



Overprotective Parents Can Make a Kid a Target of Bullies

By Charlene Laino, Senior Writer, Gupta Guide

Published: April 25, 2013

Reviewed by Zalman S. Agus, MD; Emeritus Professor, Perelman School of Medicine at the University of Pennsylvania and Dorothy Caputo, MA, BSN, RN, Nurse Planner

NHS choices Your health, your choices

Health A-Z

Live Well

Care and support

Negative parenting linked with kids being bullied

Share: Save: Subscribe: Print:

"Children who have overprotective parents are more likely to be bullied by their peers," BBC News explains.

The news correctly presents the findings of a major study on the effects of parenting on a child's risk of being bullied, but it focuses on the weakest finding of the research.

The study did suggest that overprotective parents may increase a child's risk of being bullied

Friday April 26 2013



Children of overprotective parents were more likely to be bullied

Aggression Between Siblings: Associations With the Home Environment and Peer Bullying

Neil Tippett* and Dieter Wolke

Department of Psychology, University of Warwick, Coventry, UK

Journal of Child Psychology and Psychiatry 45:5 (2004), pp 1015–1029

Int J Adolesc Med Health 2012;24(1):xxx-xxx © 2011 by Walter d

Bullying among siblings

Bullied by siblings: association with peer victimisation and behaviour problems in Israeli lower secondary school children

Dieter Wolke^{1,2,*} and Alexandra J. Skew^{1,2}

Dieter Wolke, and Muthanna M. Samara

University of Bristol, Division of Child Health, ALSPAC, UK

Sibling Bullying and Risk of Depression, Anxiety, and Self-Harm: A Prospective Cohort Study

AUTHORS: Lucy Bowes, PhD,^a Dieter Wolke, PhD,^b Carol Joinson, PhD,^c Suzet Tanya Lereya, PhD,^b and Glyn Lewis, PhD^d

^aDepartment of Social Policy and Intervention, University of Oxford, Oxford, United Kingdom; ^bDepartment of Psychology and Division of Mental Health & Wellbeing, University of Warwick, Coventry, United Kingdom; ^cCentre for Mental Health, Addiction and Suicide Research, School of Social & Community Medicine, University of Bristol, Bristol, United Kingdom; and ^dDivision of Psychiatry, Faculty of Brain Sciences, University College London, London, United Kingdom

KEY WORDS



WHAT'S KNOWN ON THIS SUBJECT: Recent reviews suggest that children bullied by siblings are at increased risk of internalizing symptoms. It is not known whether being bullied by a sibling increases risk of psychiatric disorders such as depression, anxiety, and self-harm.



WHAT THIS STUDY ADDS: Using a large, community-based birth cohort, we found that being bullied by a sibling is prospectively associated with a doubling in the odds of both depression and self-harm at 18 years in young adults.



Pediatrics, September, 8, 2014

Common Problems with Serious Mental Health and "Real" Life Consequences

2. Regulatory Problems in Infancy

Ignored – normal –
some do grow out of
it
High Prevalence

Impact

Immediate

- Depression
- Parenting
- SBS
- FTT

Longterm

- Behaviour Problems
- Cognition

1. Preterm Birth

Freakonomics
Increasing numbers
unnoticed by mental
health provisions

Impact

Immediate

- Parents
- PTS

Longterm

- Preterm Phenotype

3. Peer and Sibling Relationships

It starts at home
Need a community
approach
Ignored by Health
Professionals

Impact

Longterm

- Psychological Sequelae
- Health

Thanks for listening



D.Wolke@warwick.ac.uk