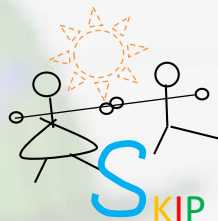


The interface between mental health and education



Professor Tamsin Ford @Tamsin_J_Ford

STARS was funded by the National Institute for Health Research Public Health Board (NIHR PHB) programme (project number 10/3006/07) and SKiP was supported by the NIHR Collaboration for Leadership in Applied Health Research and Care South West Peninsula (PenCLAHRC). Review findings will be published in full in Health Technology Assessment.

The views and opinions expressed are our own and do not necessarily reflect those of the HTA programme, NIHR, NHS or the Department of Health.



**UNIVERSITY OF
CAMBRIDGE**

<https://dev.psychiatry.cam.ac.uk/>

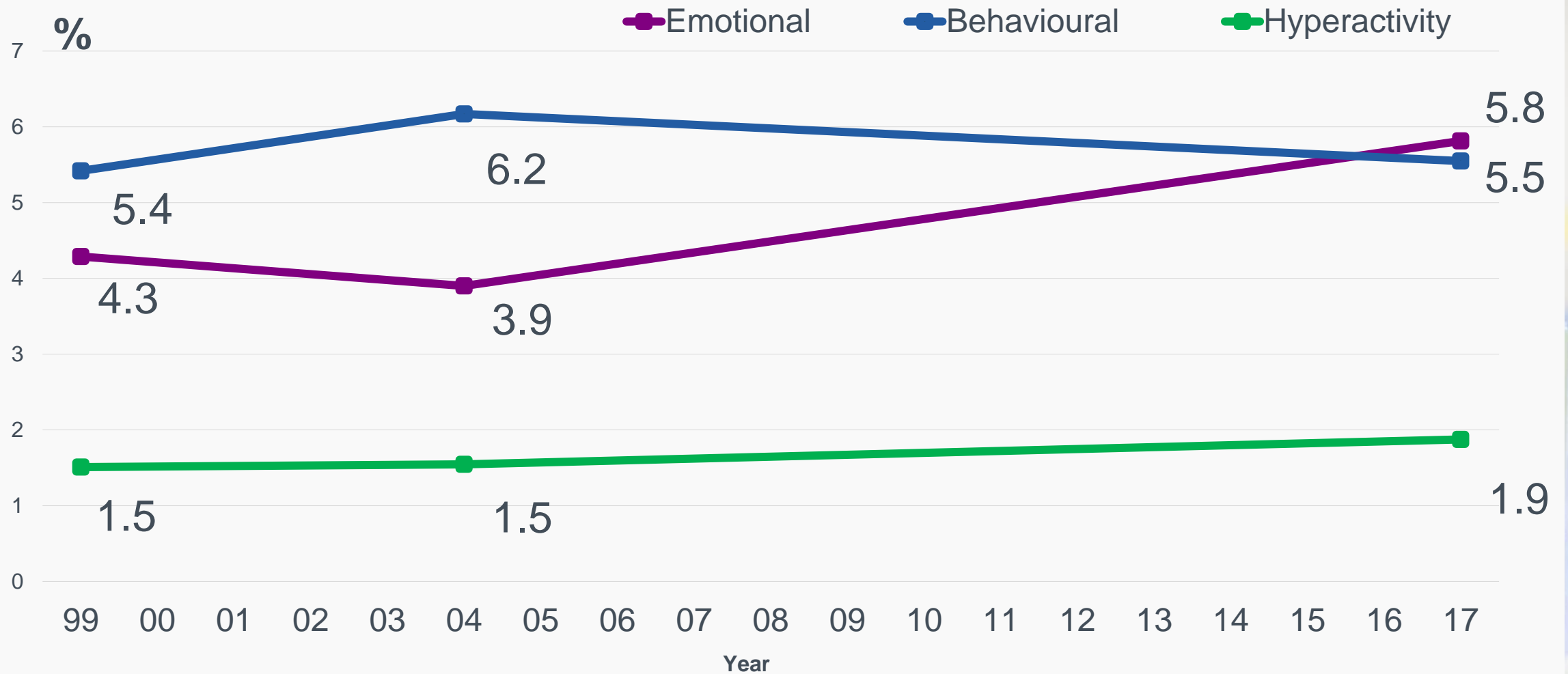


**National Institute for
Health Research**

Point prevalence of impairing psychiatric disorder among British 5-15 year olds

	1999	2004	2017
Any psychiatric disorder	9.7	10.1	11.2
Conduct disorder	5.4	6.2	5.5
Emotional disorder	4.3	3.9	5.8
Hyperkinesis (~ADHD)	1.5	1.5	1.9
Autistic spectrum disorders	0.3	0.9	1.2
	n=10,438	n=7977	n=6219

Trends in Disorders, 1999 to 2017

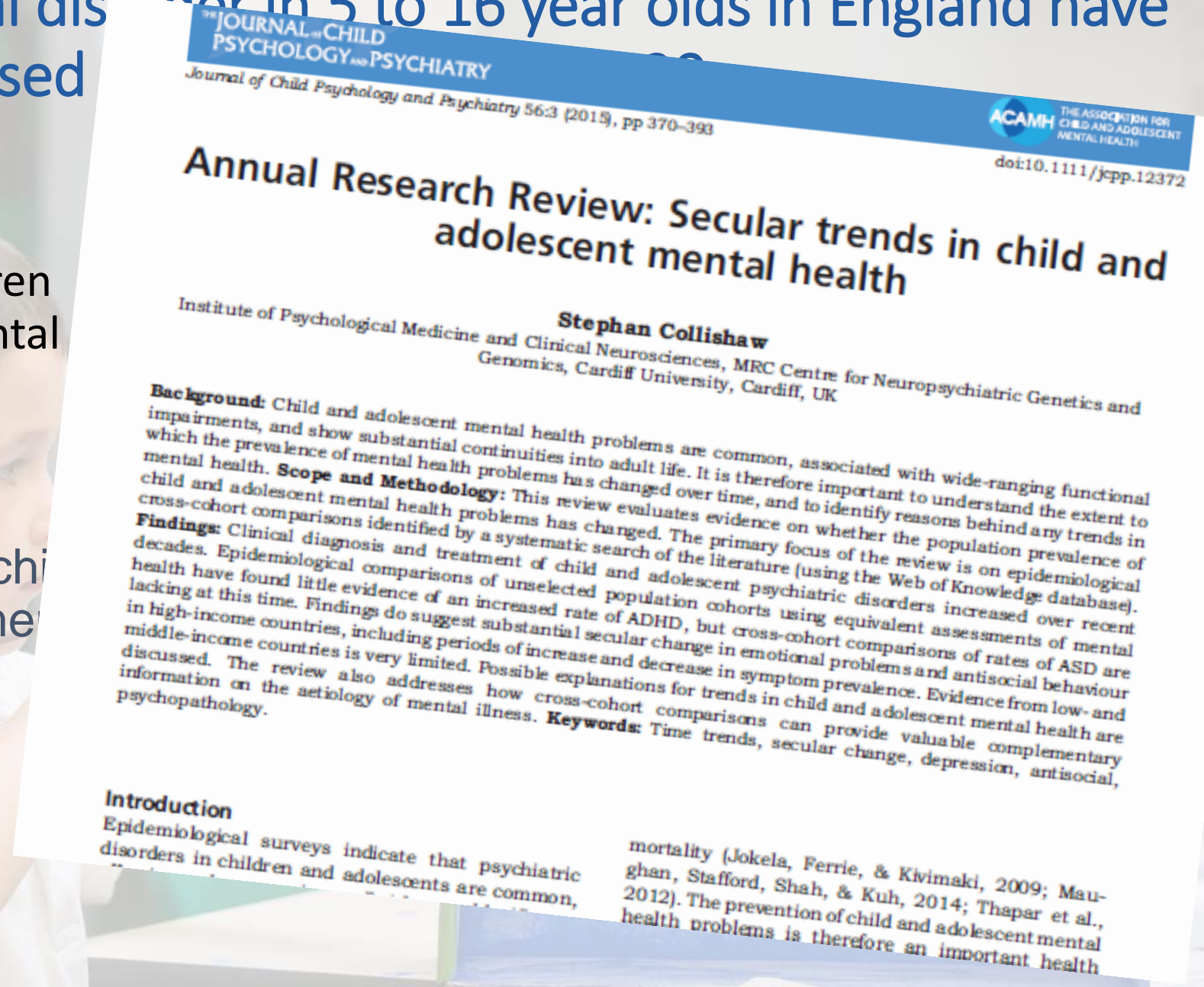


Rates of probable mental disorder in 5 to 16 year olds in England have increased

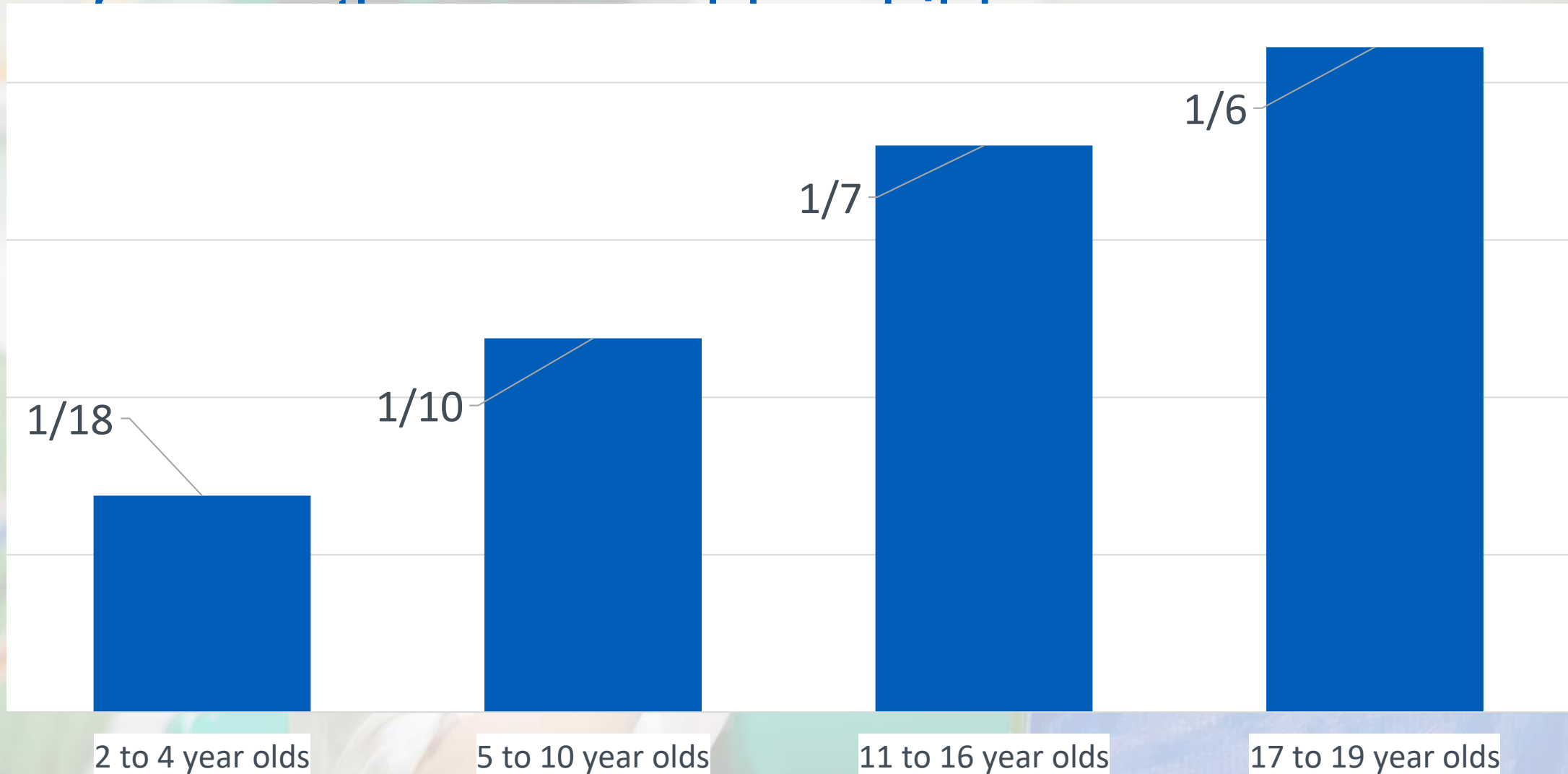
In 2020, **one in six** (16.0%) children aged 5 to 16 had a probable mental disorder.

In 2017, **one in nine** (10.8%) children aged 5 to 16 had a probable mental disorder.

Source: NHS Digital. 5 to 16 year olds, England.

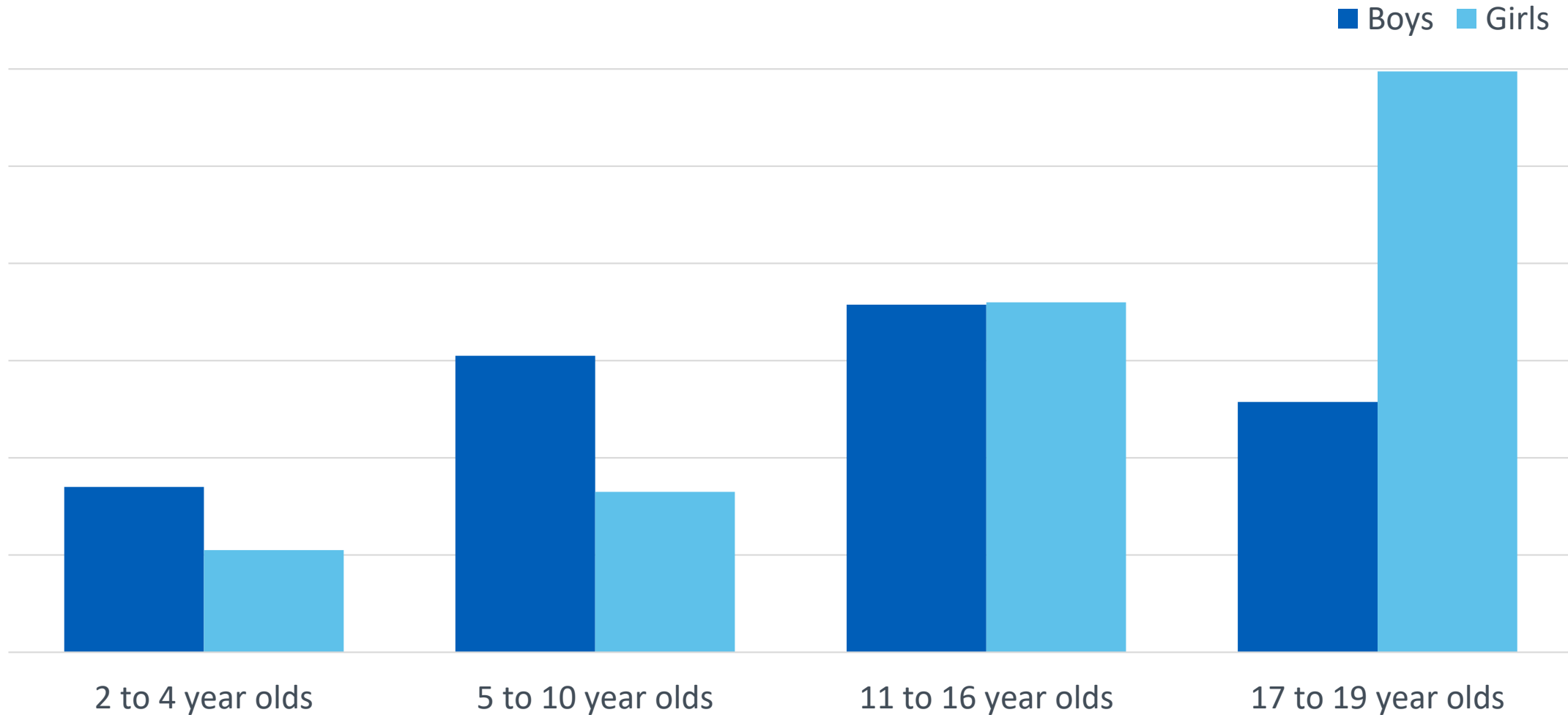


Mental disorders were detected more



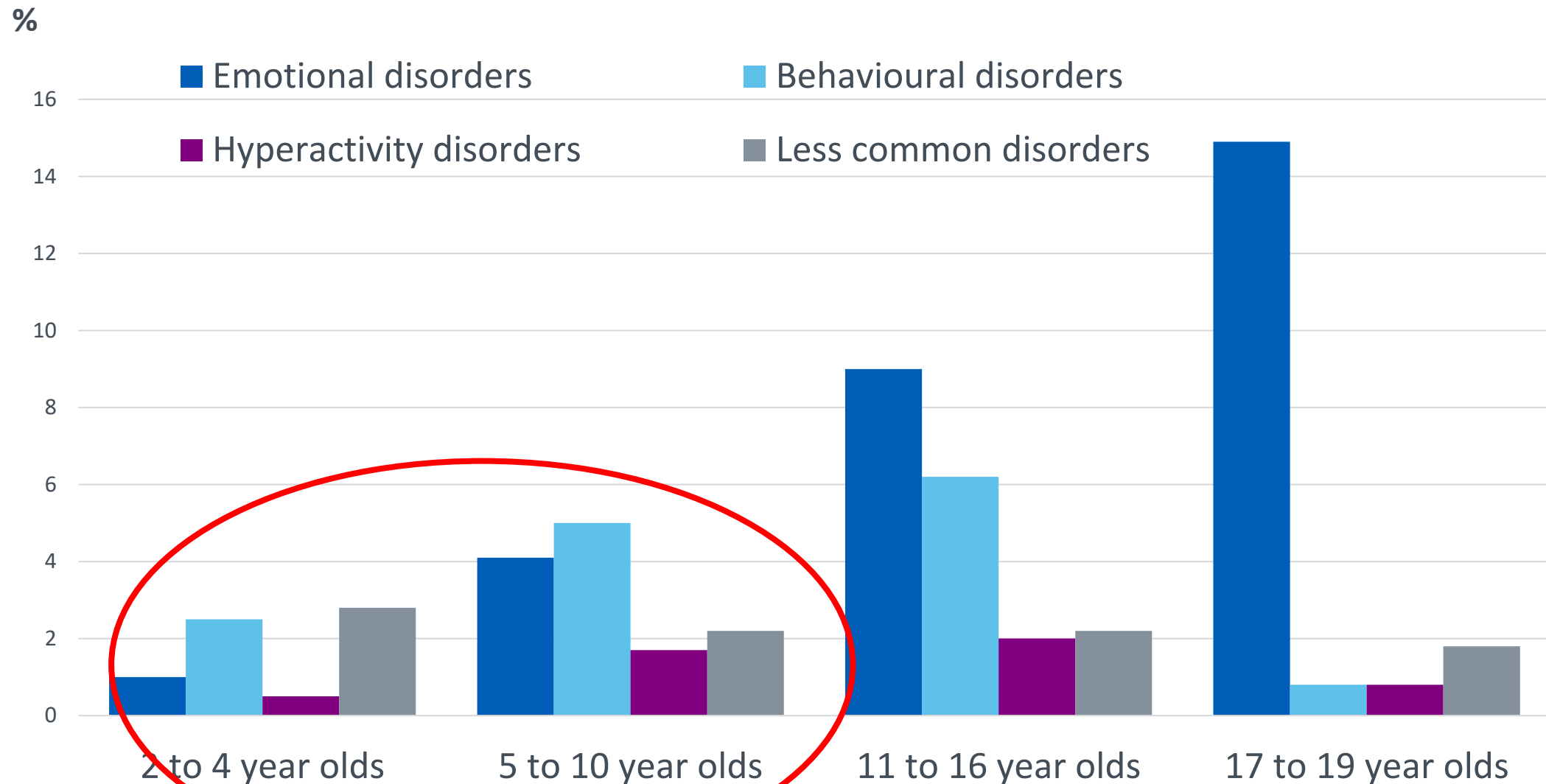
Source: NHS Digital. 2 to 19 year olds identified with any mental disorder, England.

Differences between boys and girls



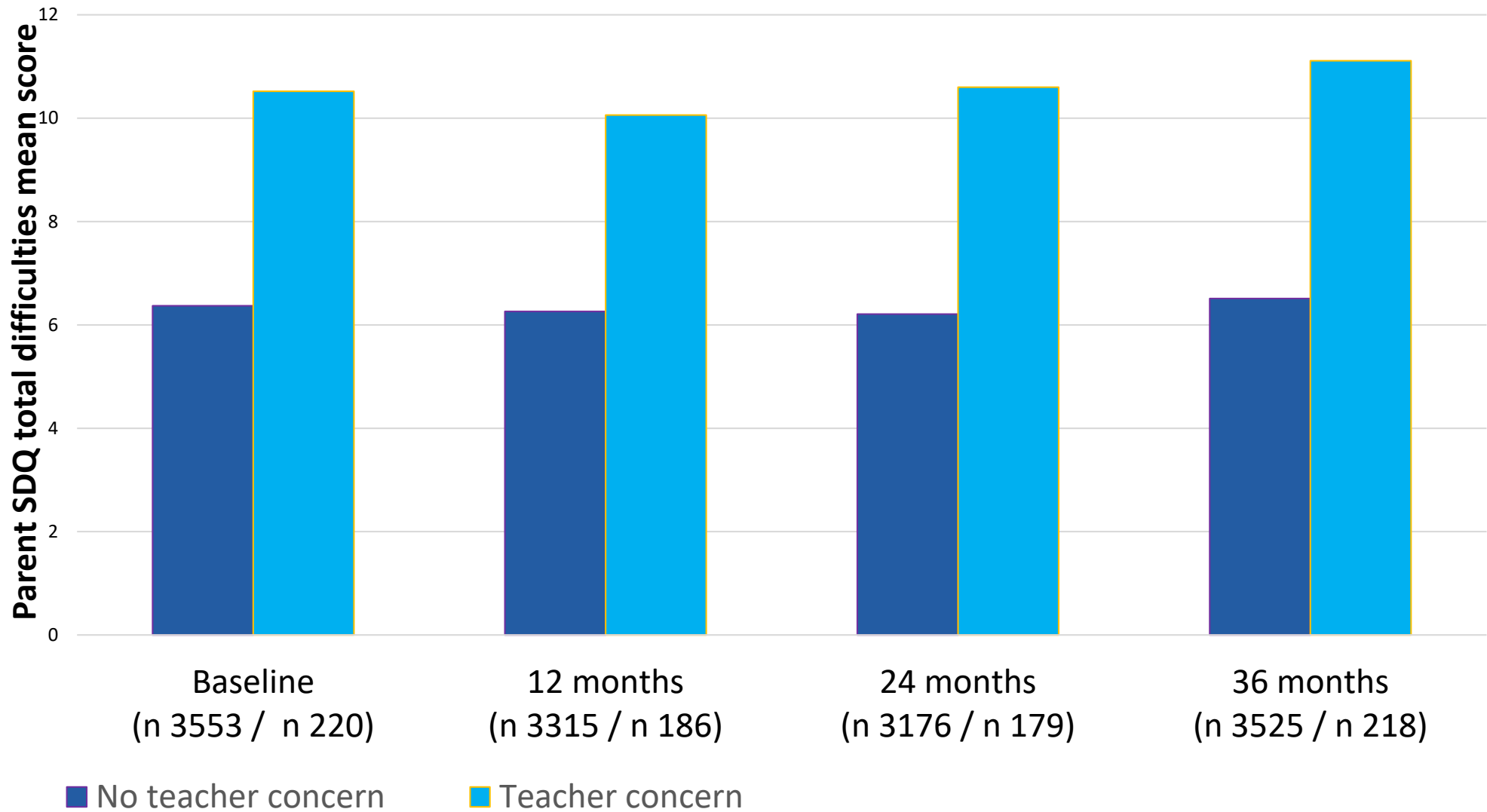
Source: NHS Digital. 2 to 19 year olds identified with any mental disorder, England.

Disorder types differed by age



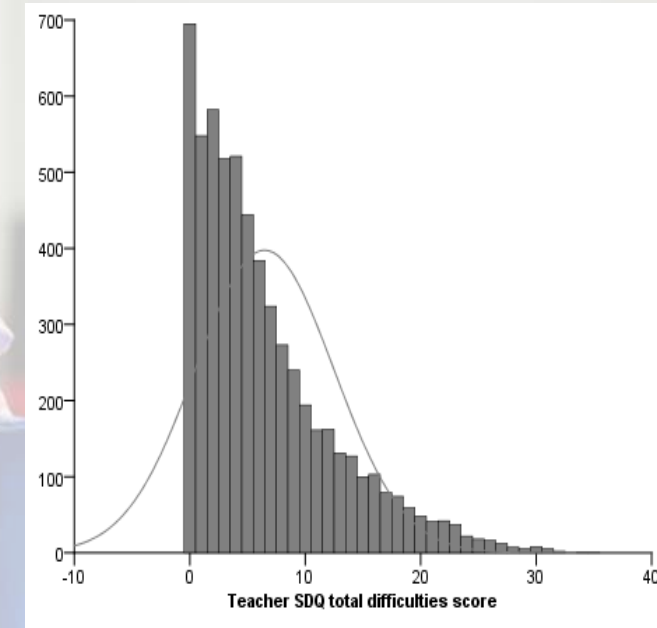
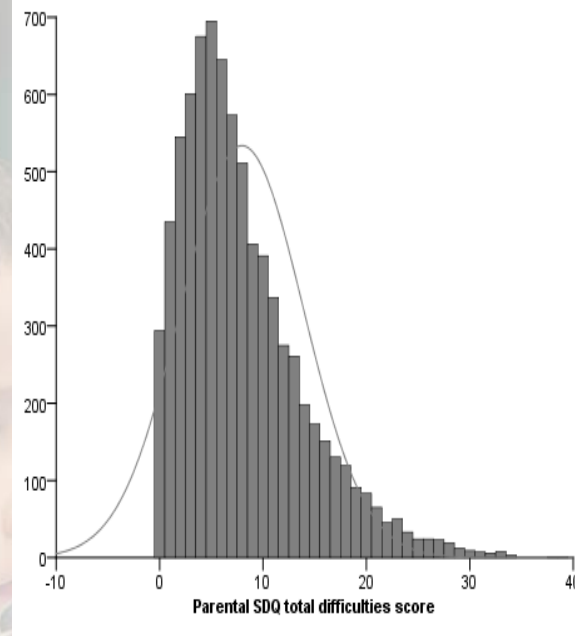
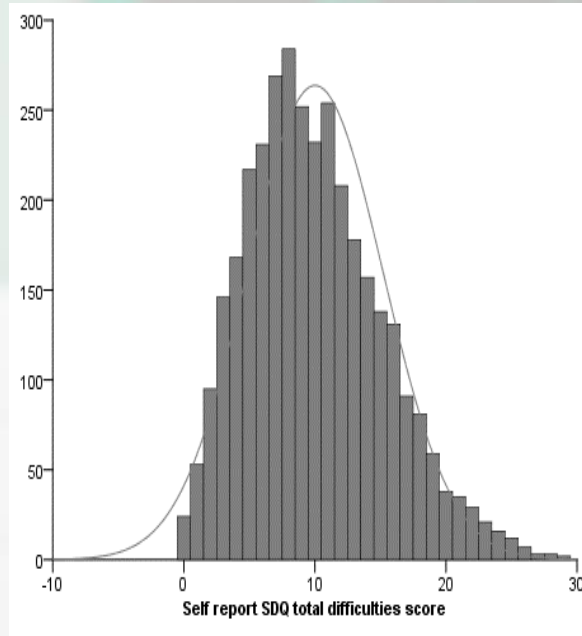
Source: NHS Digital. 2 to 19 year olds identified with a mental disorder, England.

	<i>Prevalence %</i>	<i>Positive predictive power</i>	<i>Negative predictive power</i>	<i>Sensitivity</i>	<i>Specificity</i>
Any MHC	9.5	49.2	95.6	58.9	93.6
ADHD	2.2	15.2	99.5	79.8	90.1
Conduct Disorder	5.4	34.9	98.4	74.3	92.2
Emotional Disorder	3.5	12.2	97.6	39.7	89.6
ASD	0.8	5.4	99.8	80.4	89.1



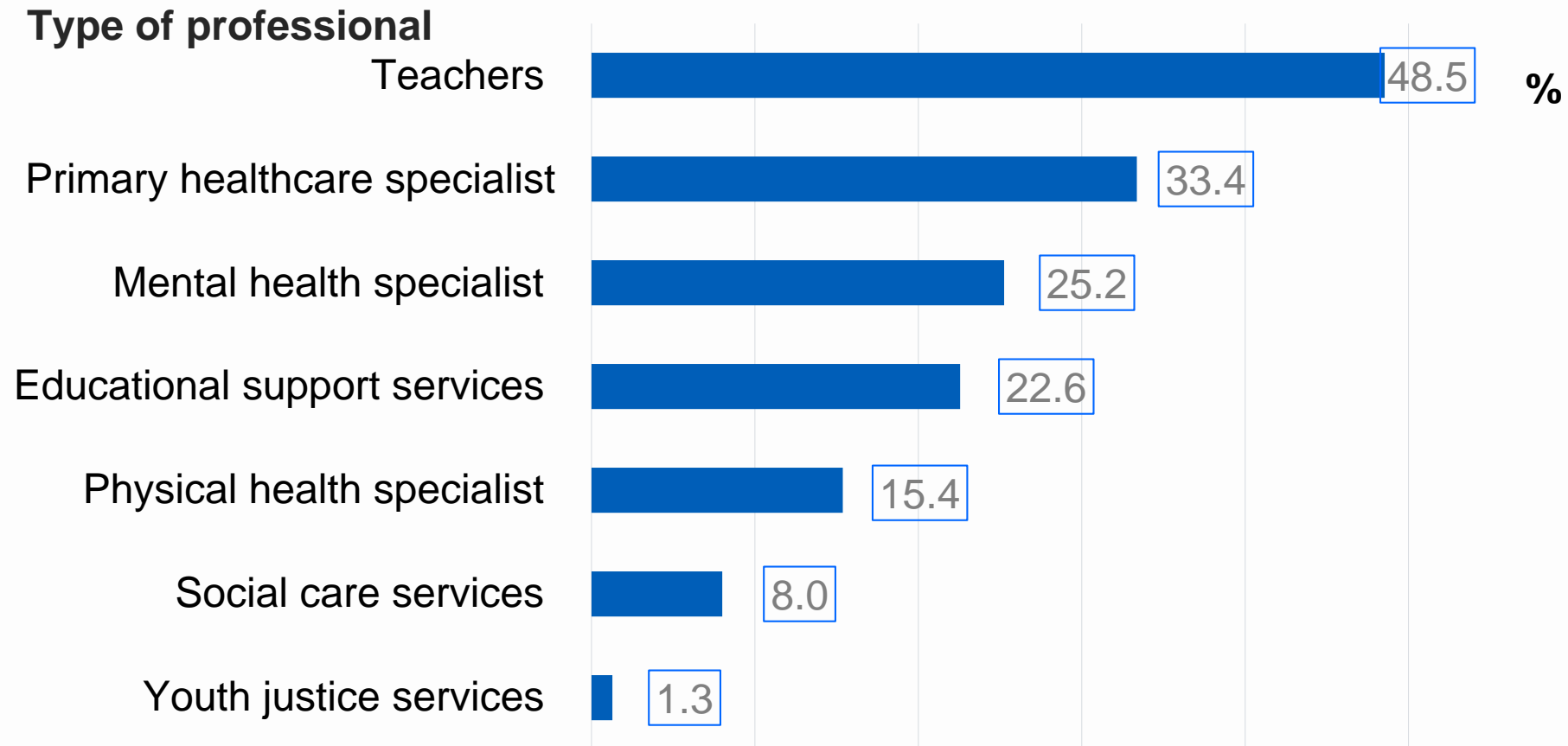
Among children with no mental health condition, teacher concern predicts poorer mental health

British Child and Adolescent Mental Health Survey 2004



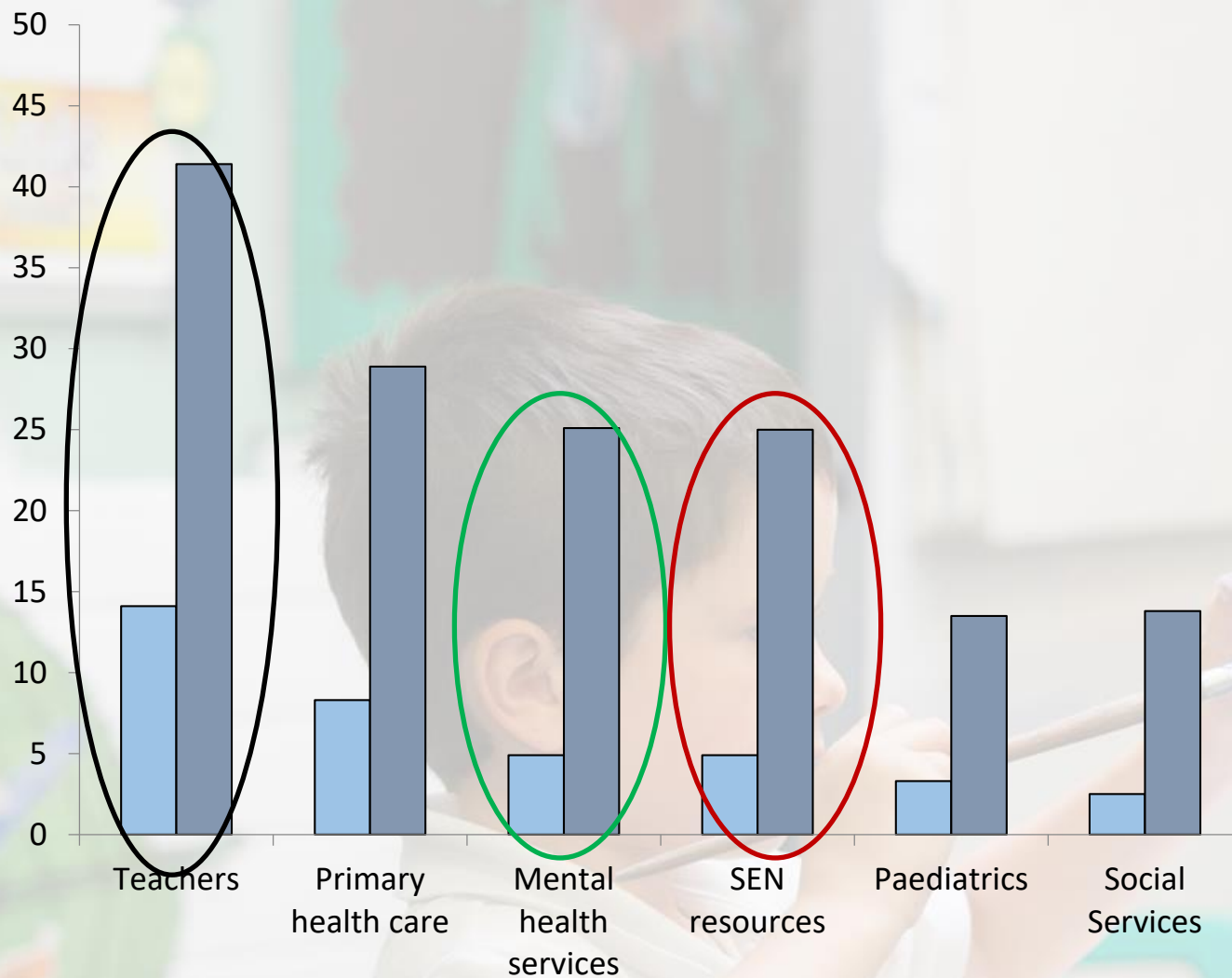
The potential benefits of universal interventions may be valuable for all children

Type of professional service contact in past year for mental health reason in 5 to 19 year olds with a disorder, 2017



Source: NHS Digital

Base: Parent report (5 to 16) and young person (17 to 19) in those with disorder



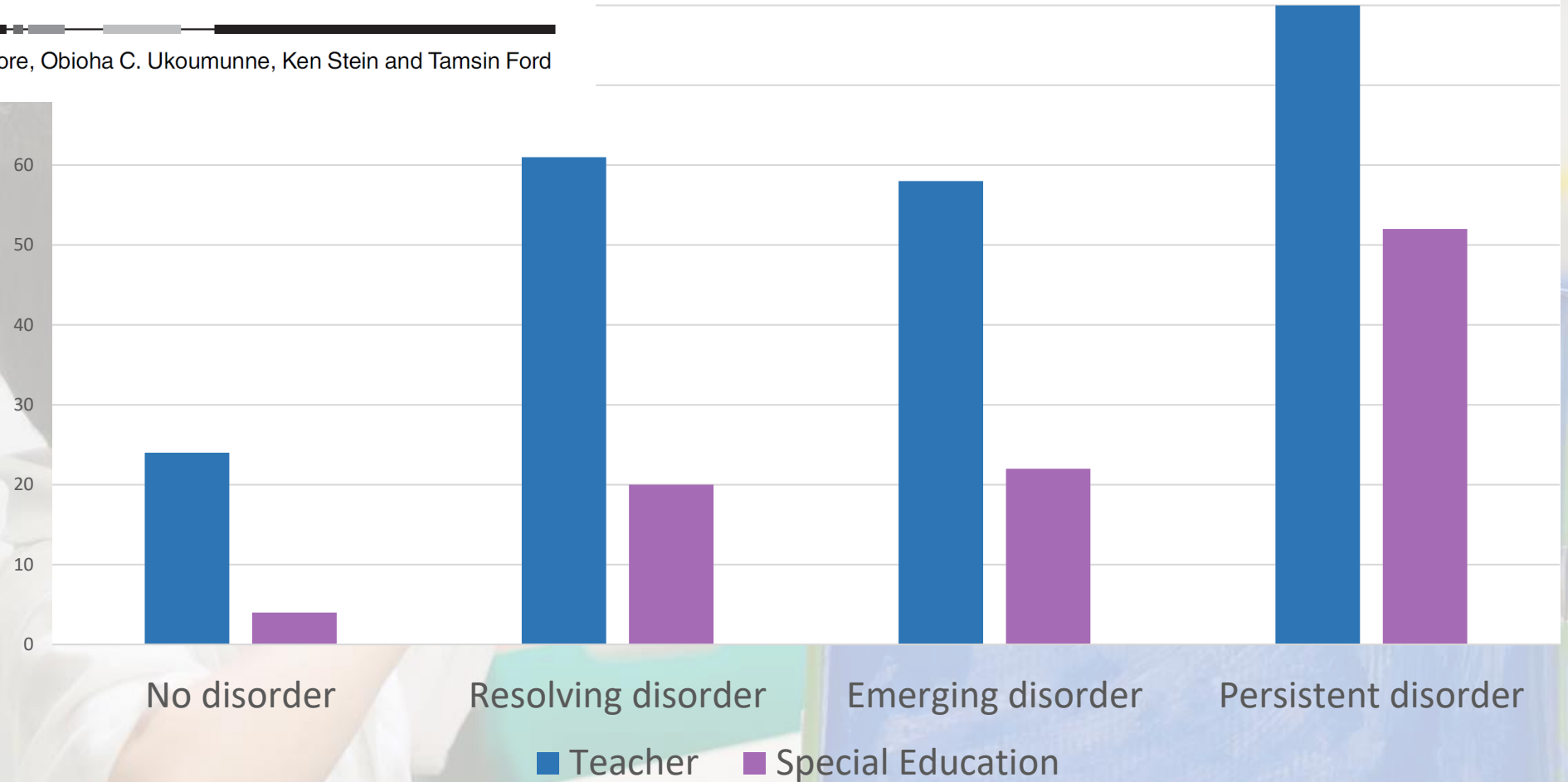
Proportion in contact with services 1999-2002

■ % in contact in total sample

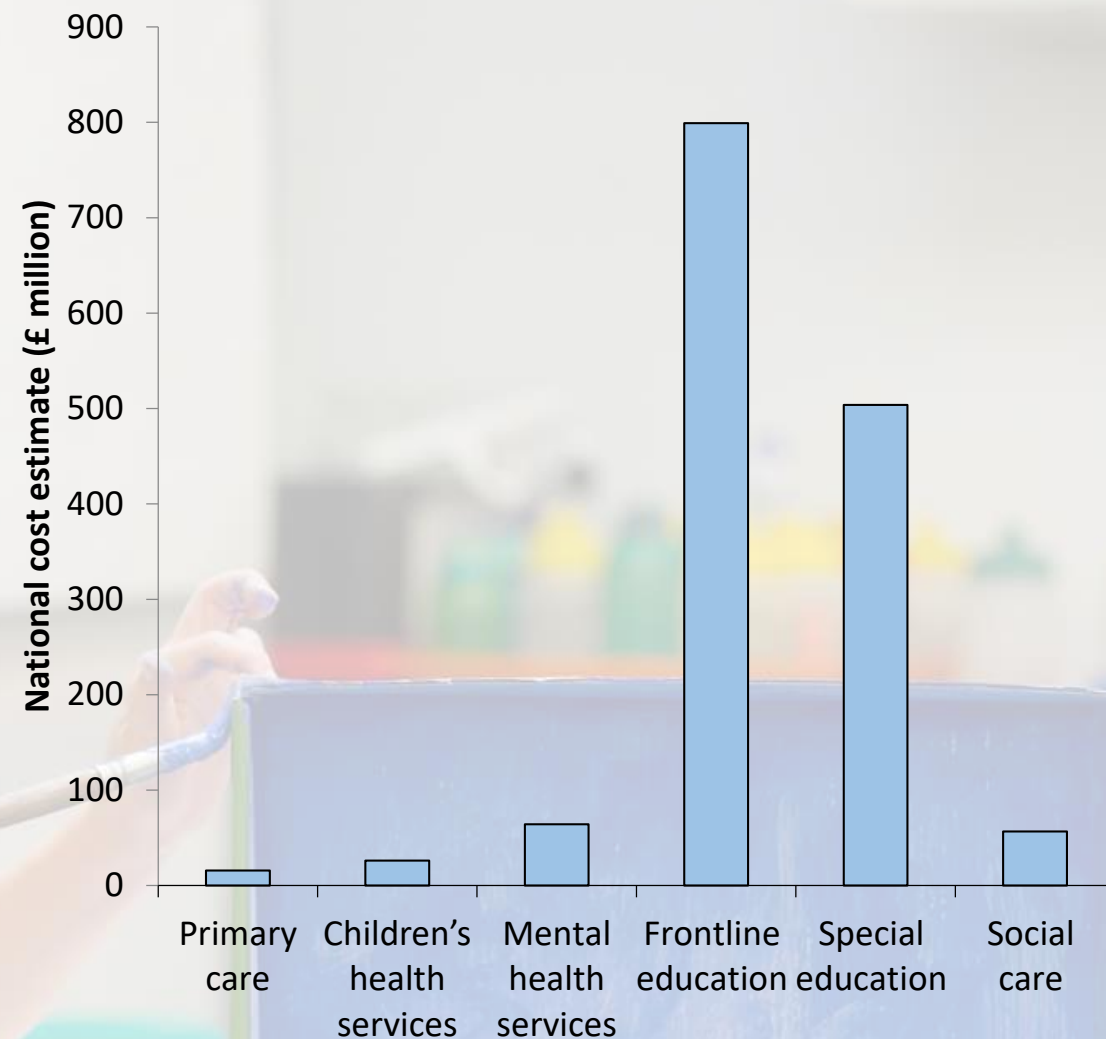
■ % in contact amongst those with a psychiatric disorder

Mental health related contact with education professionals in the British Child and Adolescent Mental Health Survey 2004

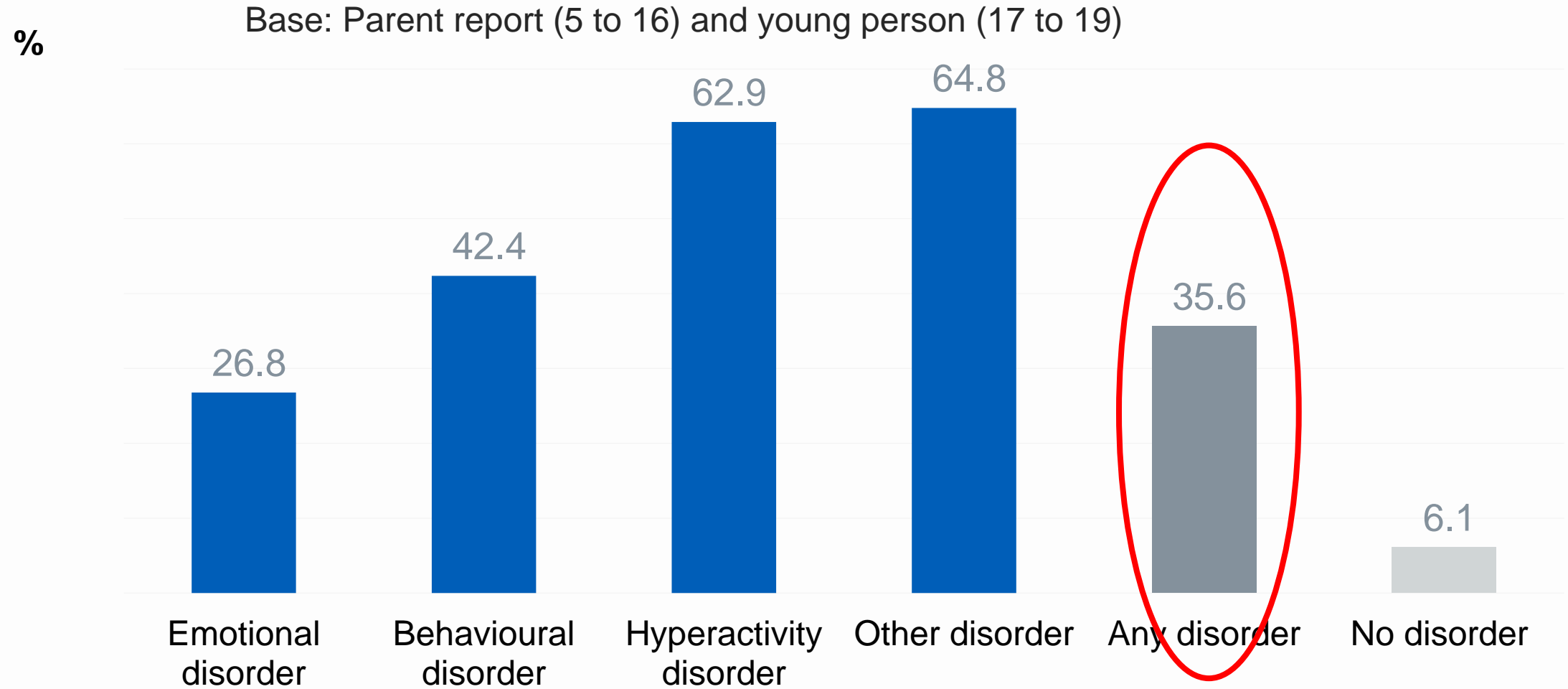
Tamsin Newlove-Delgado, Darren Moore, Obioha C. Ukoumunne, Ken Stein and Tamsin Ford



Annual national costs of
mental health service use for
population aged 5-15 with
emotional/behavioural
disorder



Recognition of special educational needs in 5 to 19 year olds by disorder, 2017



Source: NHS Digital

Exclusion from school

- One boy in ten with a disorder had been excluded from school



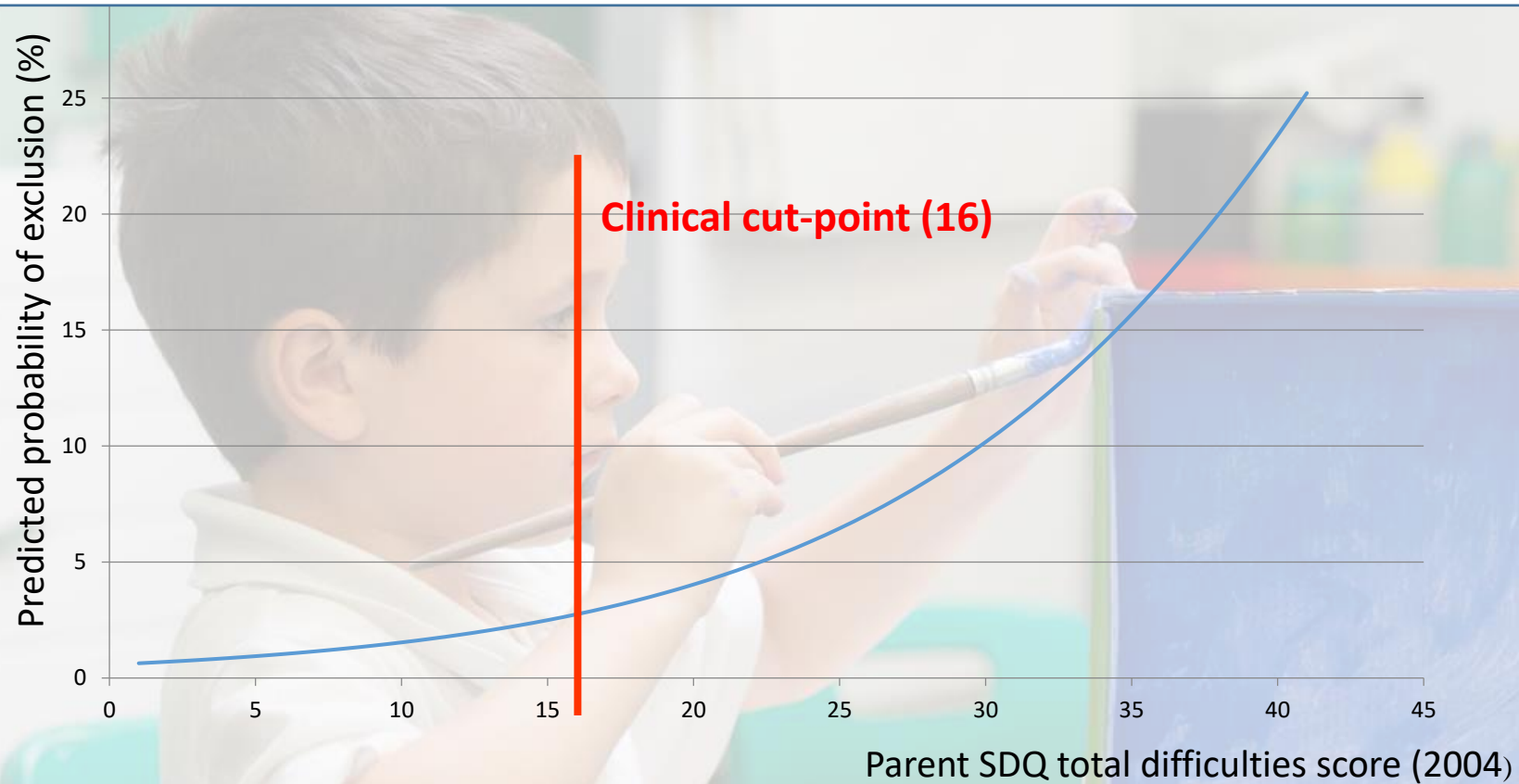
- One child in twenty with a hyperactivity or behavioural disorder had been excluded on three or more occasions.



...The thing is when a child gets excluded as a parent you feel as though you have failed, well I certainly did and I think a lot of people would think I've failed as a parent... I've brought up a child that can't go to school without being excluded so you don't necessarily want to talk to people about it and you don't necessarily want to talk to school about it because you feel they may judge you or whatever...

For us it was absolutely heartbreaking... it was um I think him being excluded felt as if we'd failed him as if school had failed him as if we'd let him down by not kind of either advocating for him enough in school or by not moving him really so he had a positive end to his primary schooling it was absolutely horrible really really horrible... exclusion as a word is quite negative um the connotations of it are quite negative... the fear as a parent is something of starting a journey of problems...

Predicted probability of exclusion by 2007 from parent SDQ total difficulties scores in BCAMHS 2004



- Recognition = Strengths and Difficulties Questionnaire Impact supplement asks Parents and Teachers : 'Has s/he problems with emotions, behaviour, concentration or getting along with people?'
- Disorder =DAWBA, DSM IV (Diagnostic and Statistical Manual of Mental Disorders)

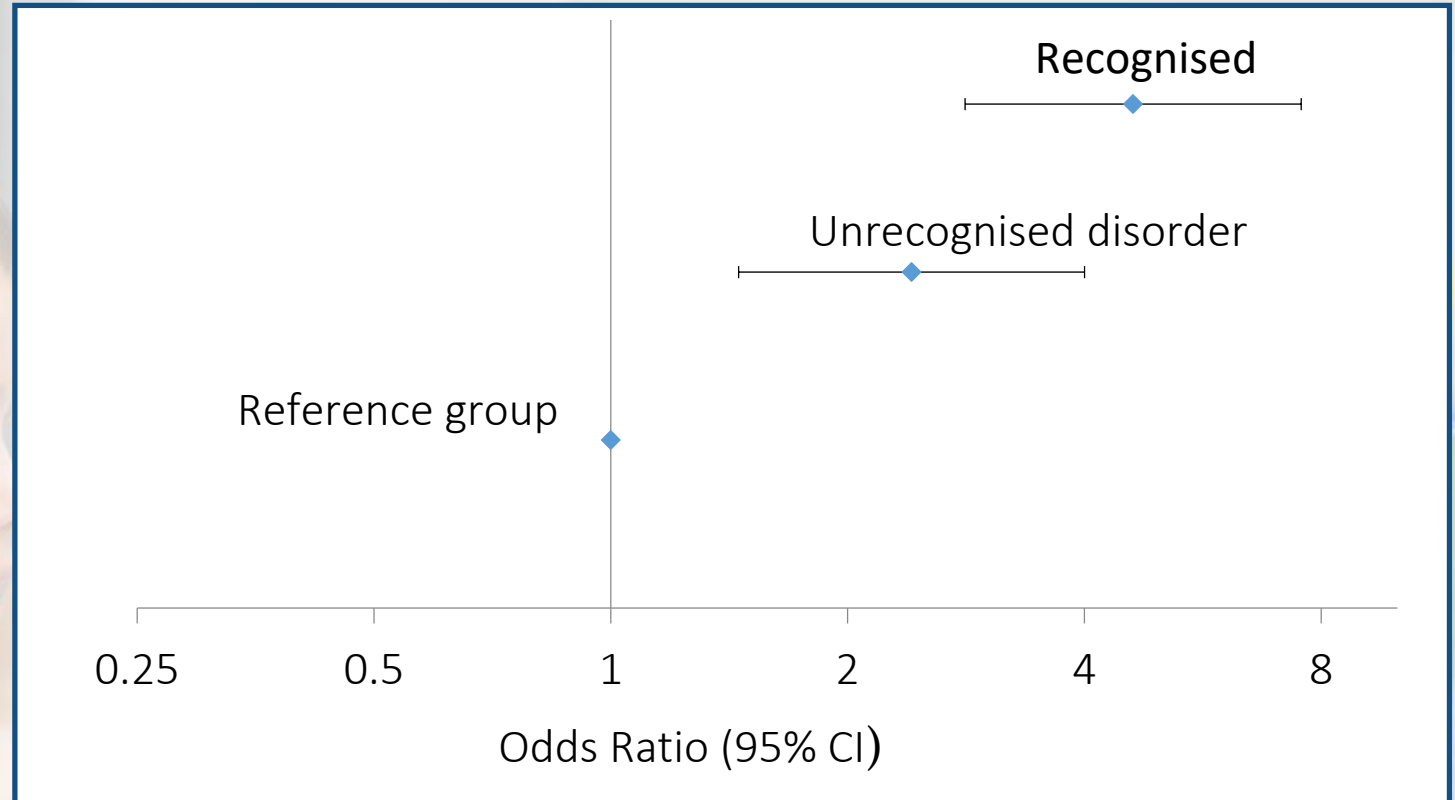


No disorder or difficulty recognised N= 66370	Subclinical group N= 576	Unrecognised disorder N= 213	Psychiatric disorder recognised N= 551
--	-------------------------------------	---	---

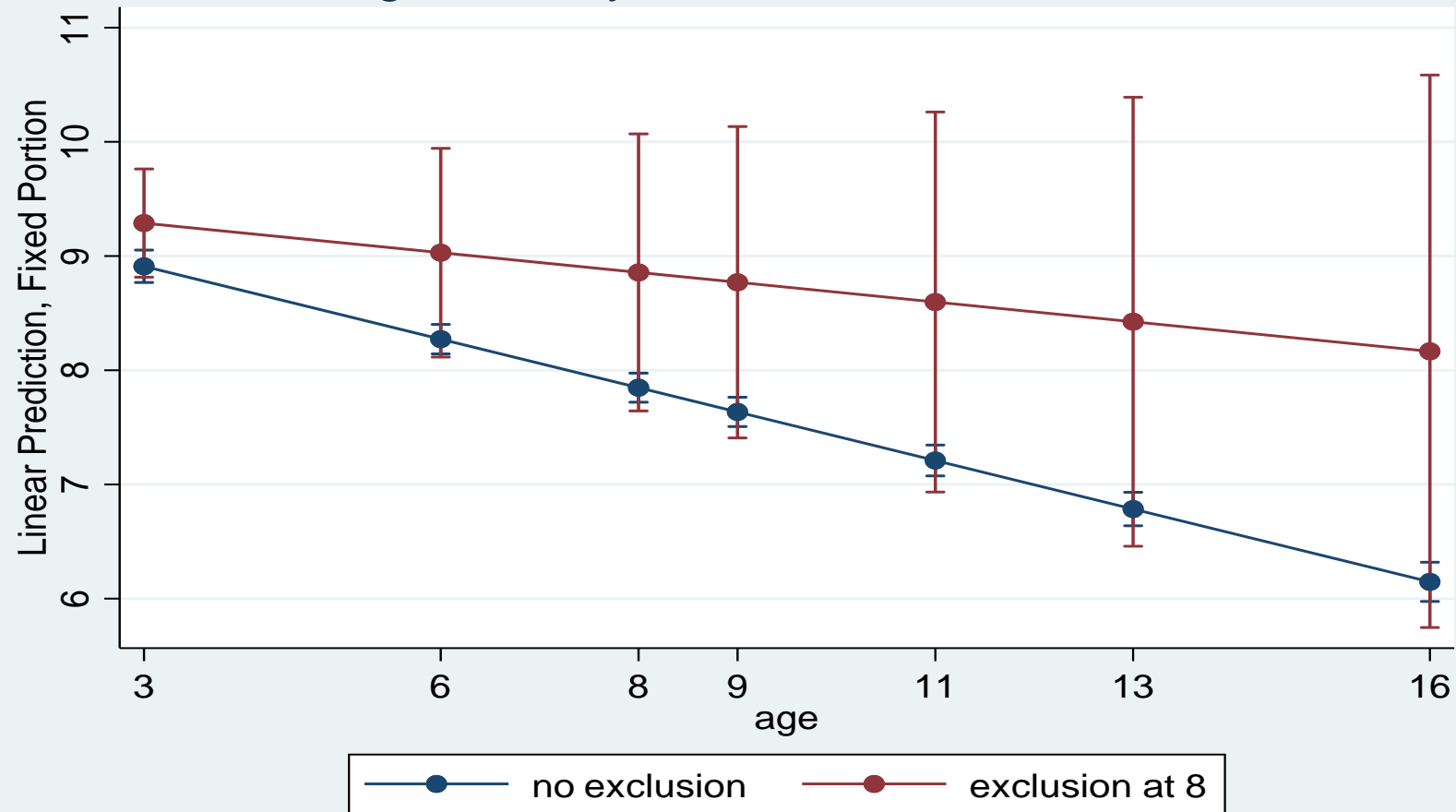
Exclusion in 2007 according to psychiatric disorder in 2004 among 5-16 year olds

Adjusted for:

age, gender, social class,
neighbourhood
deprivation, ethnicity,
general health (parent),
learning disability,
mothers highest
education, baseline total
difficulties score SDQ

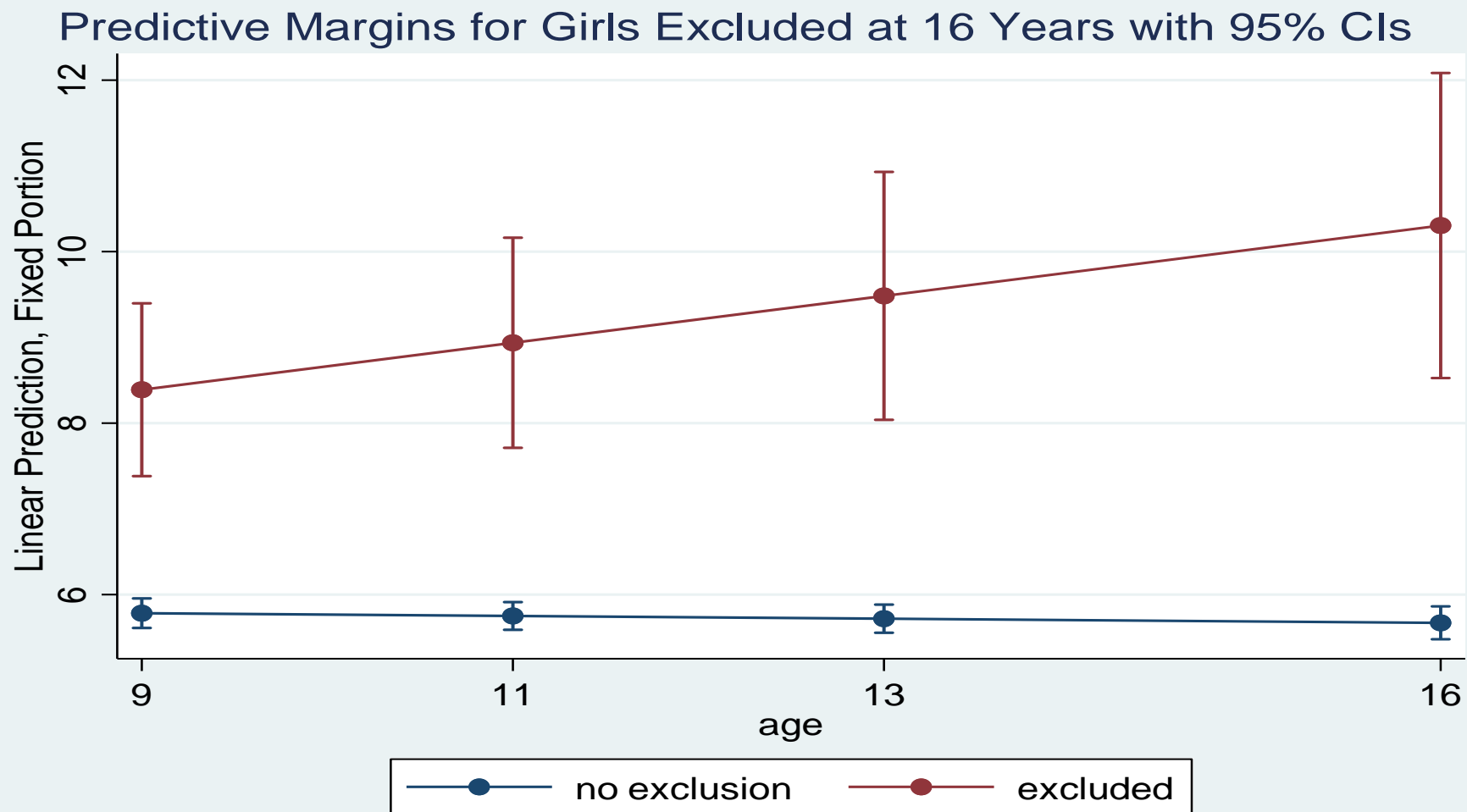


Predictive Margins for Boys Excluded at 8 Years with 95% CIs



<http://www.bristol.ac.uk/alspac/participants/>

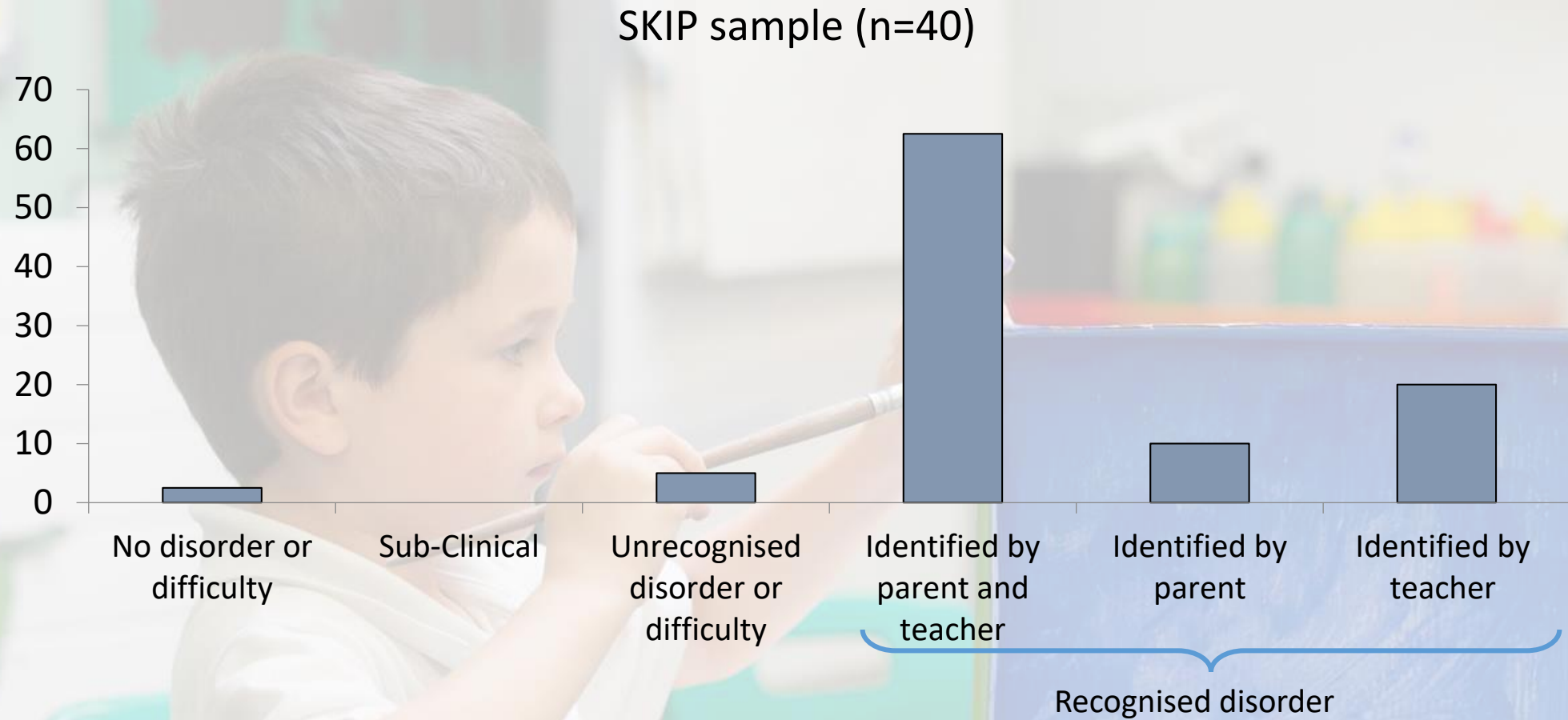
Mental health trajectory for children excluded by age 8 in the ALSPAC cohort



<http://www.bristol.ac.uk/alspac/participants/>

Mental health trajectory for children excluded by age 16 in the ALSPAC cohort

This was not a problem of recognition



When you're talking about that level of mental health issues or things that we didn't understand ... it doesn't come within our normal realm of how children behave and it's at that point that I think the frustration is there is no one there to turn to, and well you know it's almost the case well you have to just get on with it... you're in school you do it.. that sort of thing.

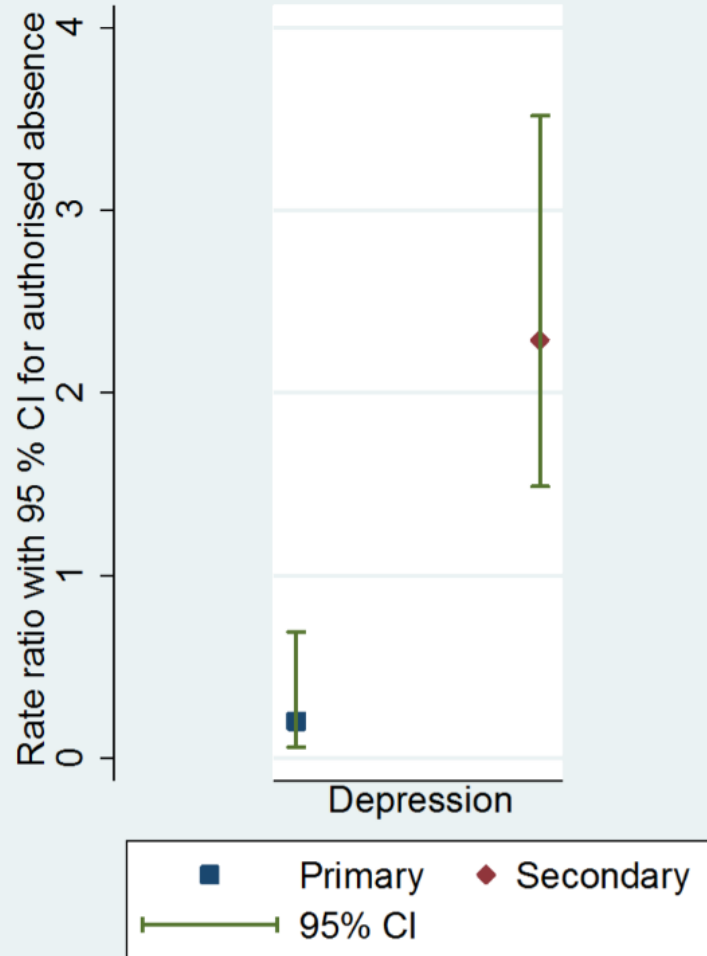
We know that things aren't right; we know that things need to be better but there doesn't seem to be the support there for that to happen

I think people sit up and take note when you have done an exclusion

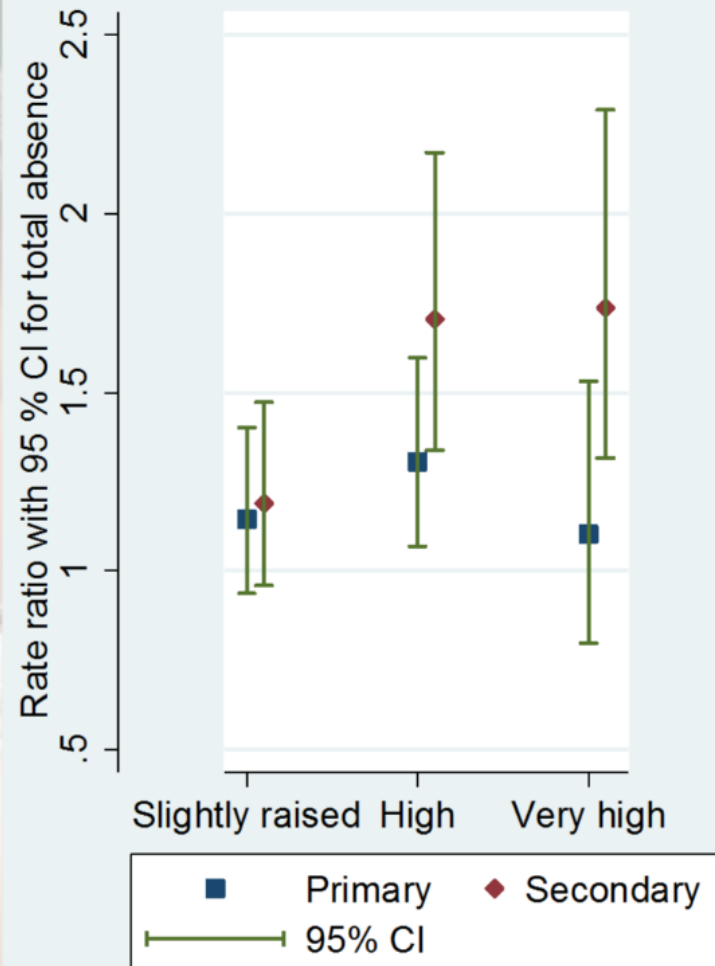
Having the support, timely support available and a network of people who can guide us...

The strong cross sectional association between emotional disorder and attendance at school is moderated by age BCAMHS 2004

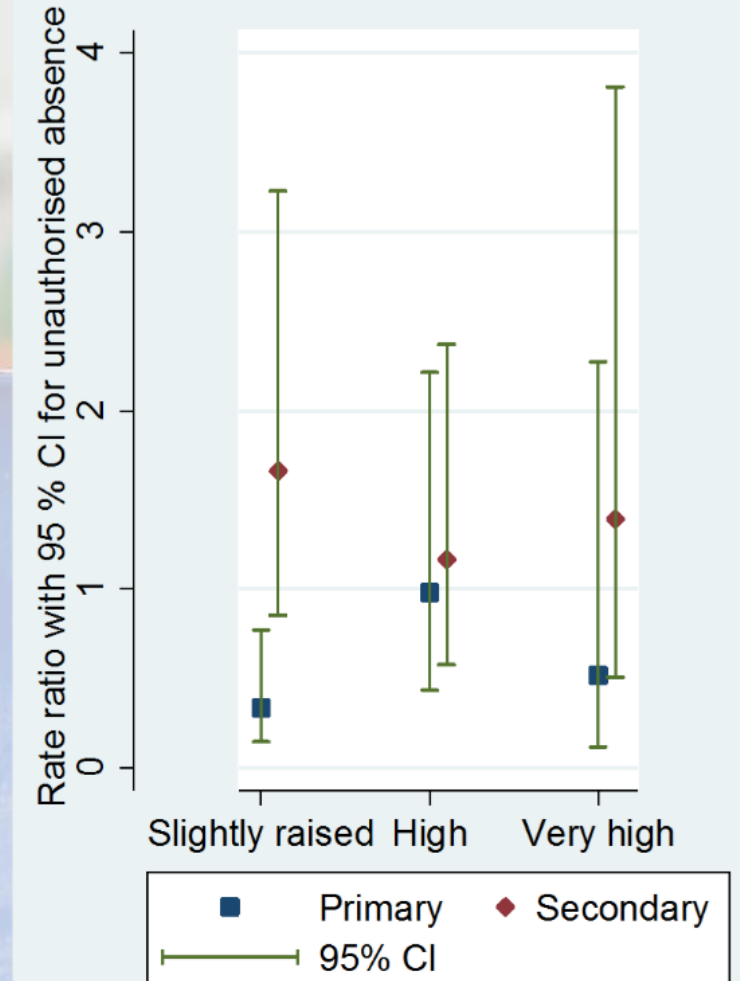
a.



b.



c.



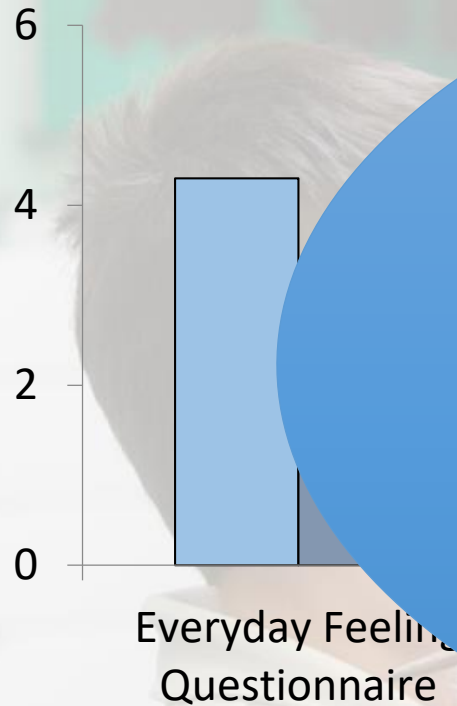
2.5% parents reported that their child had a very poor teacher pupil relationship among primary school children in 2004

Outcome in 2007		Poor TPR	Poor TPR with baseline SDQ TD controlled
Any Psychiatric Disorder	Baseline Psychiatric Disorder controlled	4.25 (2.20-8.22)	2.25 (1.20-5.45)
	Baseline Psychiatric Disorder excluded	2.78 (1.13-6.80)	1.69 (0.63-4.51)
Any Conduct Disorder	Baseline Conduct Disorder controlled	2.62 (1.08-6.34)	1.52 (0.58-3.97)
	Baseline Conduct Disorder excluded	3.27 (1.08-9.89)	2.01 (0.66-6.14)
Poor Family Function	Baseline Family Function controlled	2.17 (1.17-3.17)	1.83 (0.83-2.84)

6.6% parents reported that their child had a very poor teacher pupil relationships among primary school children in 2004

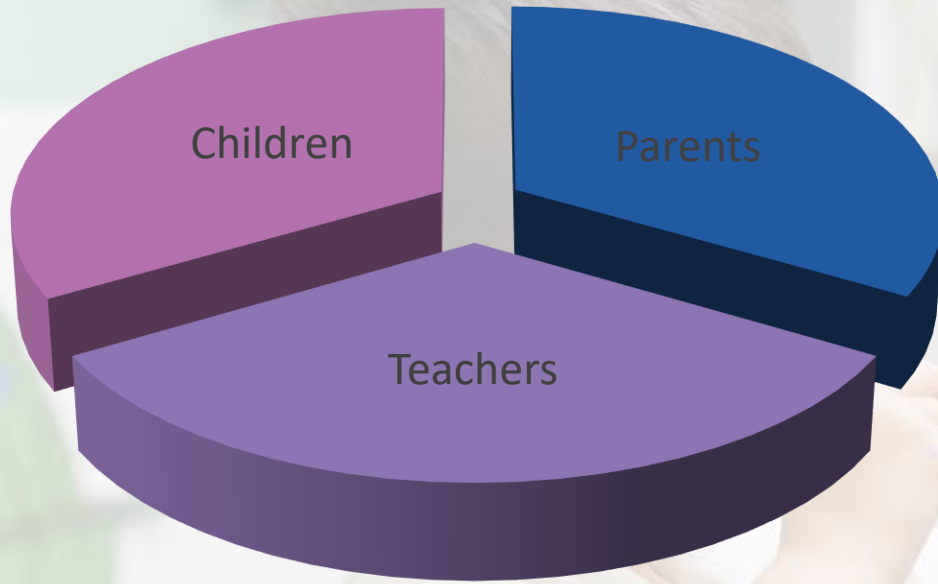
Outcome in 2007		Poor TPR	Poor TPR with baseline SDQ TD controlled
Any Psychiatric Disorder	Baseline Psychiatric Disorder controlled	2.15 <i>(1.26 to 3.67)</i>	1.54 (0.92 to 2.59)
	Baseline Psychiatric Disorder excluded	3.10 <i>(1.71 to 5.60)</i>	1.93 <i>(1.07 to 3.51)</i>
Any Conduct Disorder	Baseline Conduct Disorder controlled	3.10 <i>(1.46 to 6.59)</i>	2.22 <i>(1.11 to 4.48)</i>
	Baseline Conduct Disorder excluded	5.32 <i>(2.55 to 11.07)</i>	3.00 <i>(1.37 to 6.58)</i>
Exclusion	Baseline Exclusion controlled	3.12 <i>(1.30 to 7.48)</i>	2.40 <i>(0.99 to 5.82)</i>

Teacher depression



10% primary school teachers in STARS trial scores at all 4 time points over 30 months suggested moderate or severe depression on the EFQ

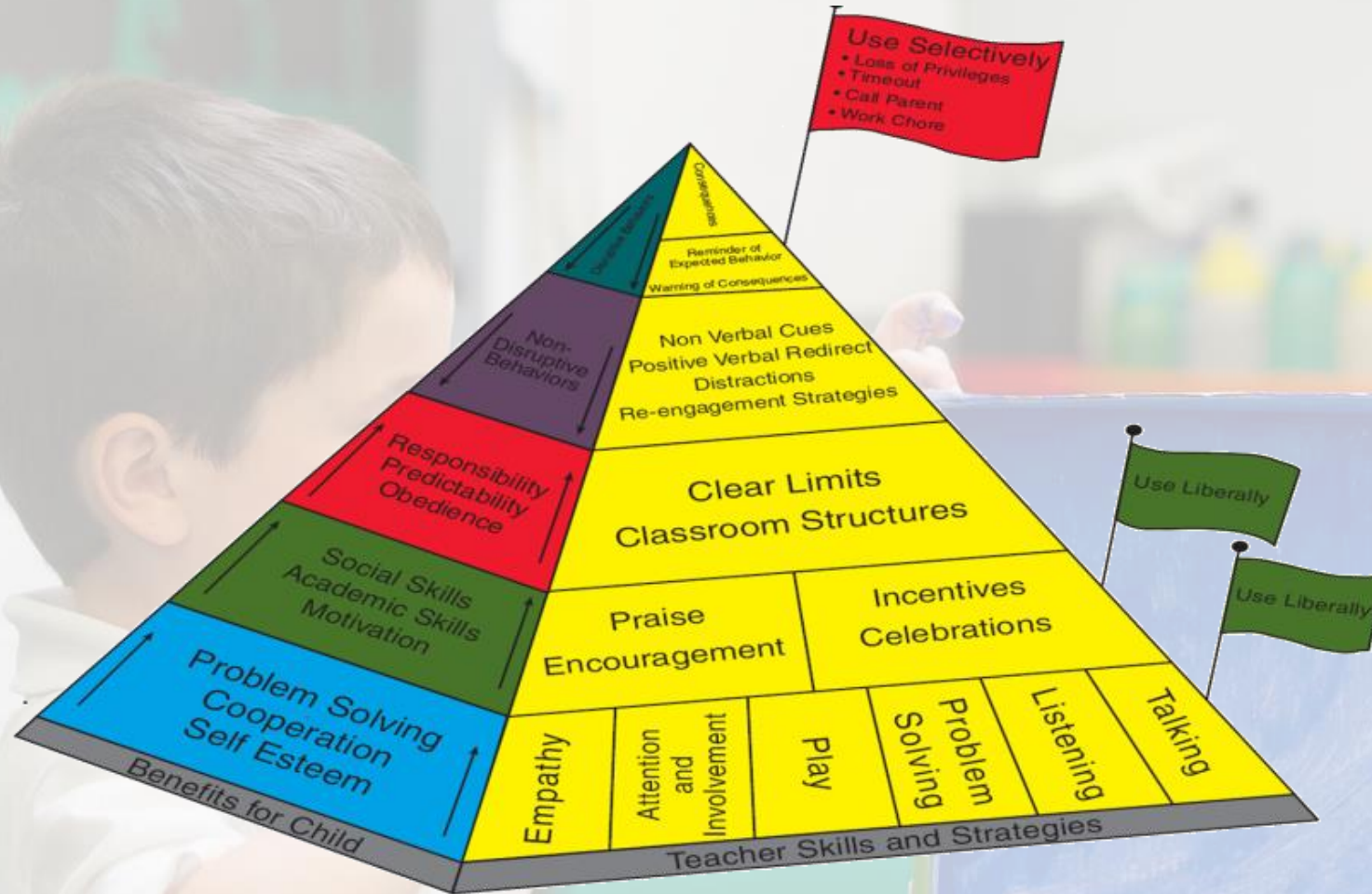
The solution?? The Incredible Years®?



- ★ Parenting Programme
- ★ Child Focussed Therapeutic and Classroom Based Programmes
- ★ **Teacher Classroom Management Programme**

www.incredibleyears.com

The Incredible Years® Teacher Classroom Management (TCM) Programme



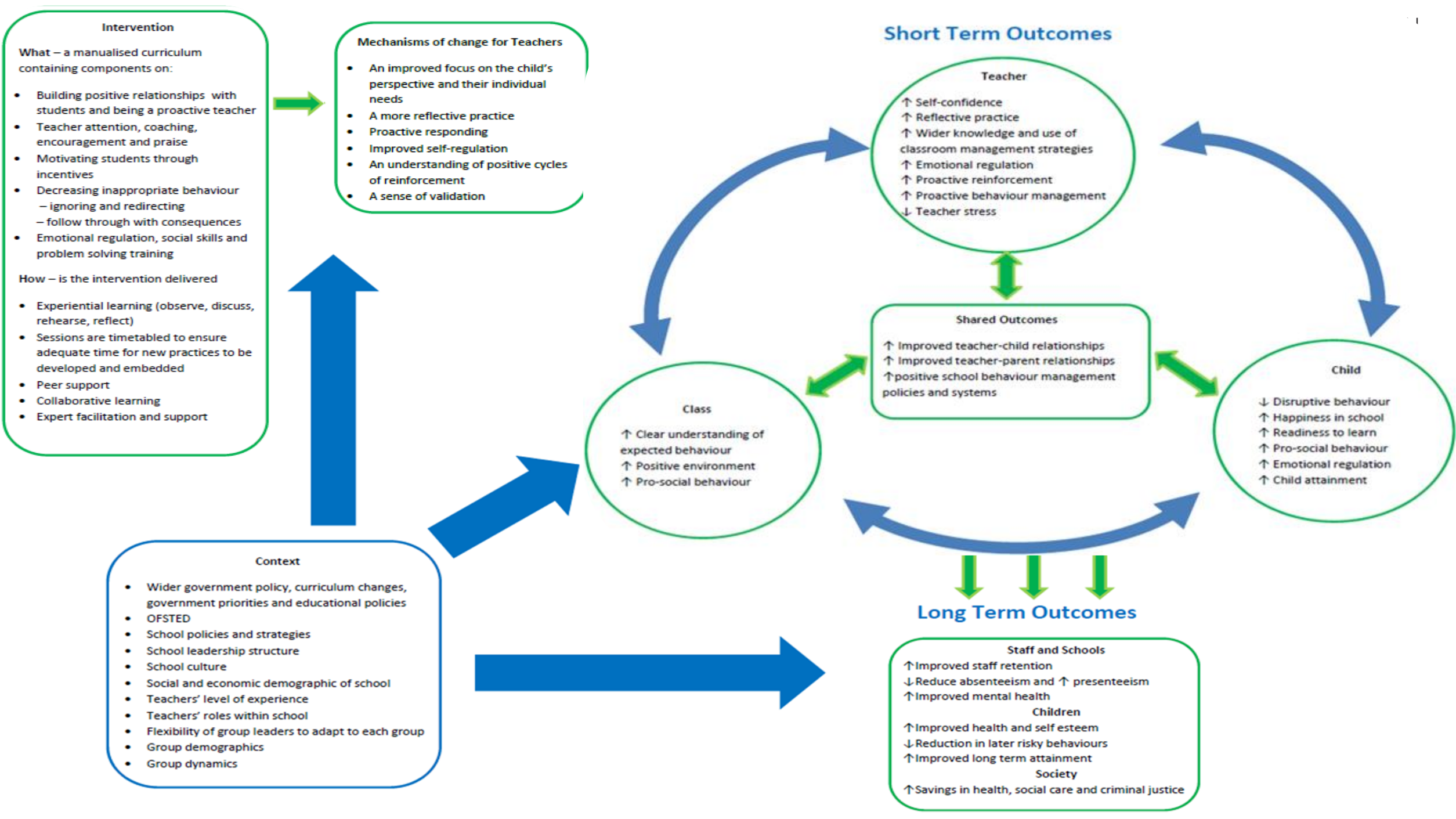
Teaching Pyramid

Content of the Incredible Years® Teacher Classroom Management (TCM) Programme

Workshop	Content
Workshop 1	Building positive relationships with students and the proactive teacher
Workshop 2	Teacher attention, coaching, encouragement and praise
Workshop 3	Motivating students through incentives
Workshop 4	Decreasing inappropriate behaviour – ignoring and redirecting
Workshop 5	Decreasing inappropriate behaviour – follow through with consequences
Workshop 6	Emotional regulation, social skills and problem solving training

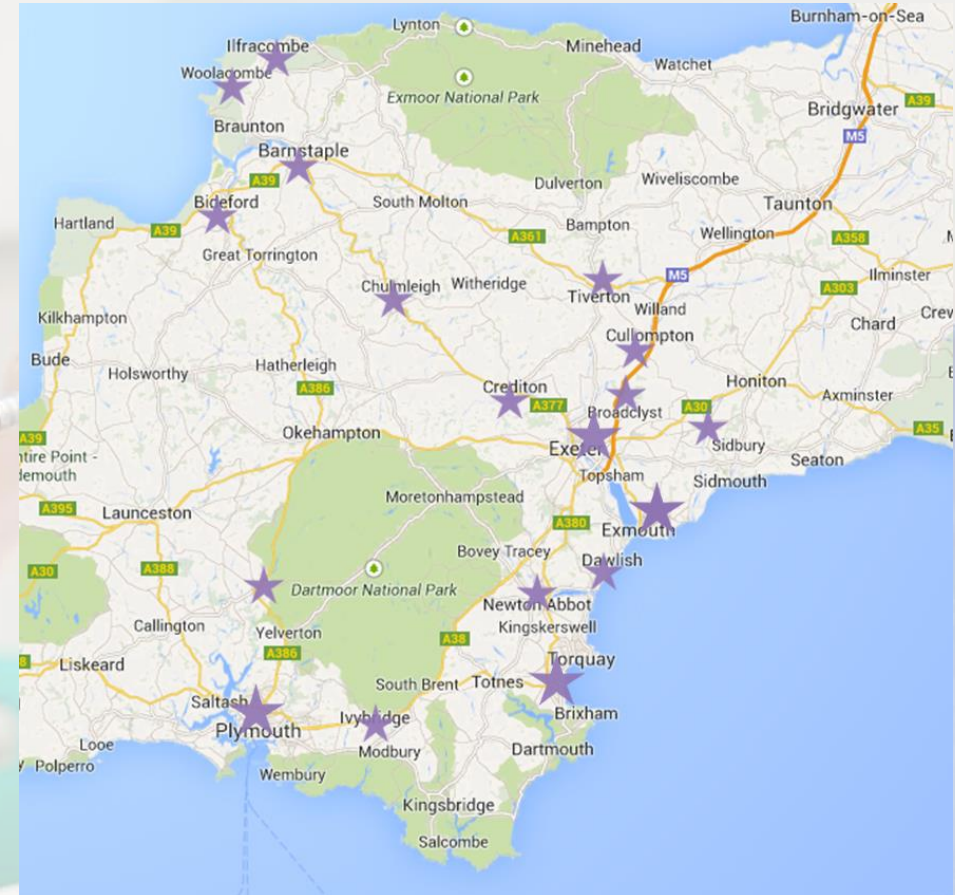
STARS trial – Qualitative data

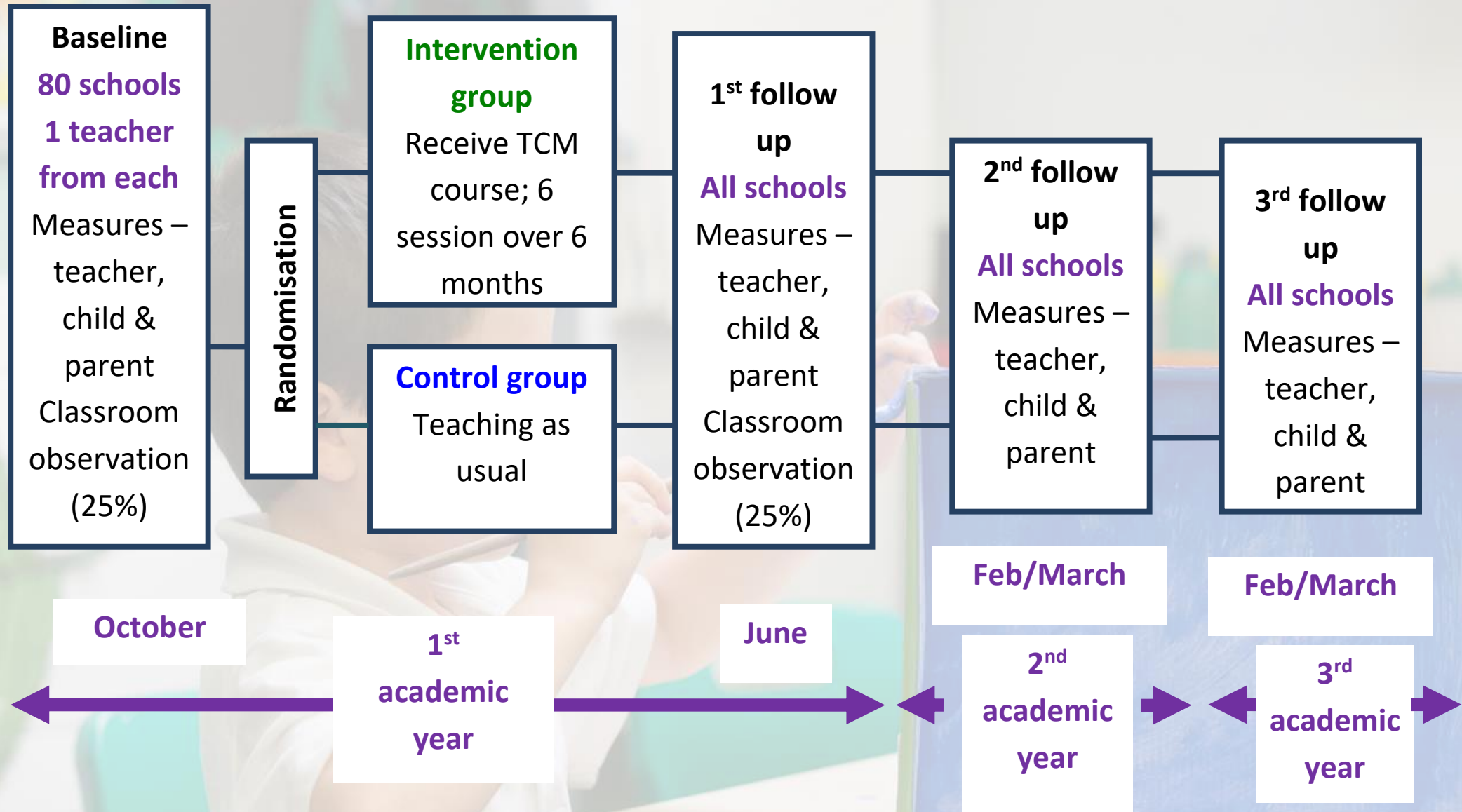




STARS main trial

- ★ Large cluster randomised controlled trial
- ★ 80 primary schools across Devon, Plymouth & Torbay
 - ★ Cohort 1 – 15 schools (Sep 2012)
 - ★ Cohort 2 – 30 schools (Sep 2013)
 - ★ Cohort 3 – 35 schools (Sep 2014)
- ★ 1 teacher per school
- ★ Foundation to Year 4 (children aged 4-9 years)





How I Feel About My School (HIFAMS)

On the way to school I feel...

When I am in the classroom I feel

When I am doing my work I feel

When I am in the playground I feel

When I think about the other children I feel

When I think about my teacher I feel

When I think about school I feel

Happy



OK



Sad



<http://medicine.exeter.ac.uk/hifams/>

Pupil Behaviour Questionnaire

	Never	Occasionally	Frequently
Talking out of turn (e.g. by making remarks, calling out, chattering)			
Interrupting other pupils (e.g. by distracting them from work)			
Making unnecessary (non-verbal) noise (e.g. by scraping chairs, banging objects)			
Verbal abuse towards other pupils (e.g. offensive or insulting remarks)			
Physical aggression towards other pupils (e.g. by pushing, punching, striking)			
Cheeky or rude remarks to the teacher			



STARS trial – What teachers say about the children...

"I think one thing I grasped is the idea that we are important, teachers, and how much we do mean to the children and how we can actually make a difference [...] it's changed me I think and my relationship towards the children, I take far more interest in them as individuals and far more interested in their personal lives as well" [C1, 05]

"It definitely has more impact and it leads to you know a happier classroom, the kids' self-confidence is up, they are more willing to do things and try really hard because they know if they're doing what you've asked them to do they're going to get the praise, they're going to get the rewards" [C2,23]

"my whole mindset has changed. Everything I've learnt at uni, it's not gone out the window but I think my mindset and my practice and the way I deliver and my lessons and my behaviour management has completely changed because of the things we've discussed, the way I've learnt from others here. And the Ed Psych said 'There's no way I would have said you were an NQT watching your behaviour management'" [C3, FGP]

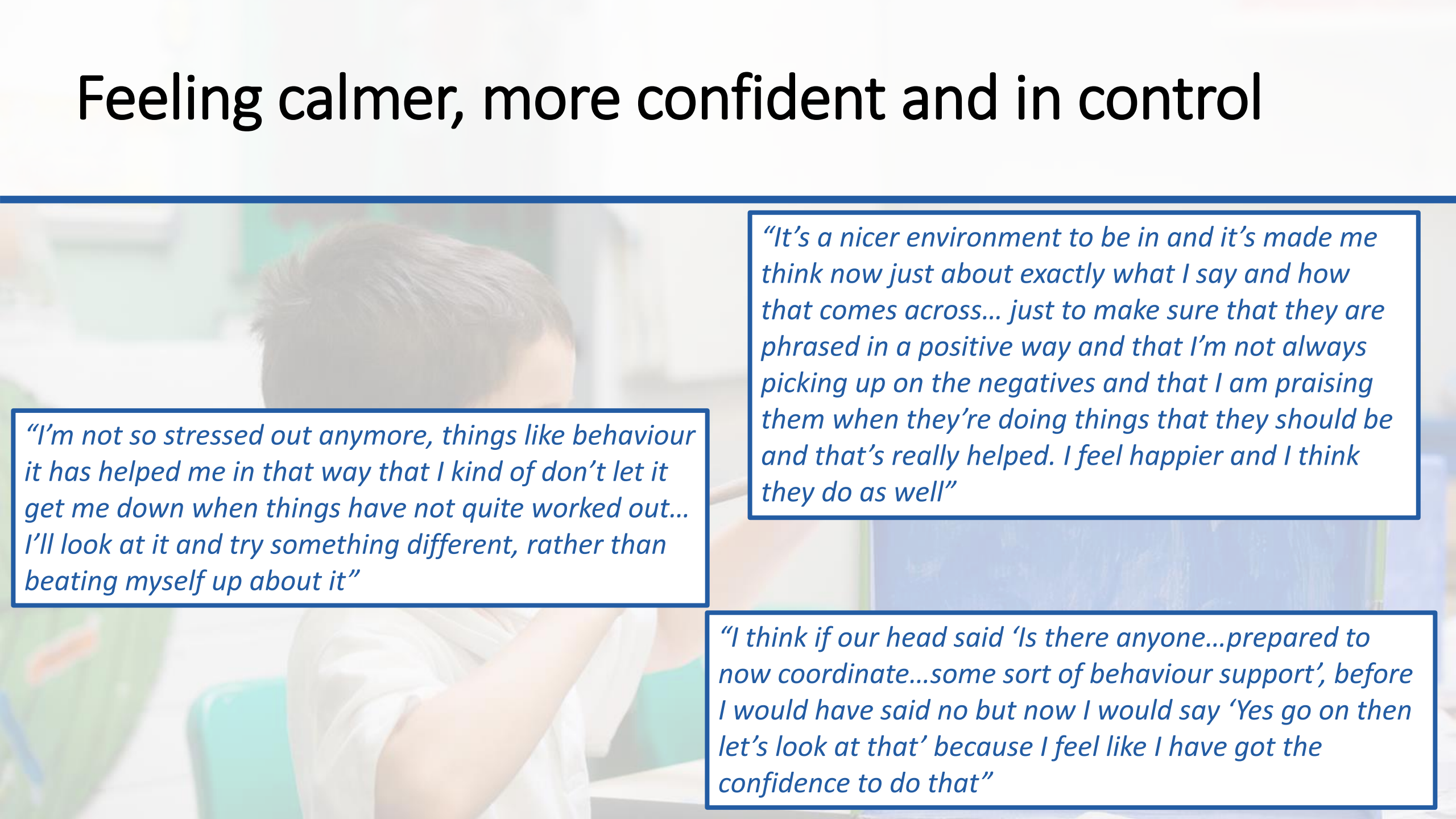
STARS trial Summary:

- **Small** but statistically significant improvement on **teacher reports of child mental health** at 9 months, also **peer relationships** and **prosocial behaviour**
- Those with **poorer mental health improve more** on teacher reported mental health: **sustained** over 30 months
- Better **classroom behaviour** and **concentration sustained** over 30 months
- **Cost-effective** in the short to medium term?
- Interaction between **baseline mental health** and **academic progress** but no impact overall
- Linkage to NPD going forwards

STARS trial Summary:

- Observations (only on 25%) suggest **changed teacher behaviour** and **improved child compliance**
- **No impact on teachers'** mental health, professional self-efficacy and burn out
- **No impact on parental reports** of child mental health or child reported **happiness** at school
- Process evaluation suggest main impact on **teacher pupil relationships** and effects might be amplified in **subsequent years** & by **training more staff, including TAs & SLT**

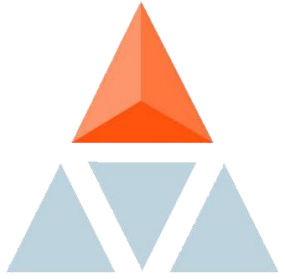
Feeling calmer, more confident and in control



"I'm not so stressed out anymore, things like behaviour it has helped me in that way that I kind of don't let it get me down when things have not quite worked out... I'll look at it and try something different, rather than beating myself up about it"

"It's a nicer environment to be in and it's made me think now just about exactly what I say and how that comes across... just to make sure that they are phrased in a positive way and that I'm not always picking up on the negatives and that I am praising them when they're doing things that they should be and that's really helped. I feel happier and I think they do as well"

"I think if our head said 'Is there anyone...prepared to now coordinate...some sort of behaviour support', before I would have said no but now I would say 'Yes go on then let's look at that' because I feel like I have got the confidence to do that"



Education
Endowment
Foundation



STARS 2

- 140 schools
- Year 1 and Year 2 teachers
- Children exposed to TCM for 2 years
- ~~Year 2 SATS as well as TPRs~~

IMPROVING BEHAVIOUR IN SCHOOLS


Guidance Report

<https://educationendowmentfoundation.org.uk/tools/guidance-reports/improving-behaviour-in-schools/>

- Know and understand your pupils and their influences
- Teach learning behaviours alongside the management of misbehaviour
- Use classroom management strategies to support good classroom behaviour
- Use simple approaches as part of your routine
- Use targeted approaches to meet the needs of individuals in your school
- Consistency is key



Universal Interventions: Fully Exploring Their Impacts and Potential to Produce Population-Level Impacts


Mark T. Greenberg  and Rachel Abenavoli*

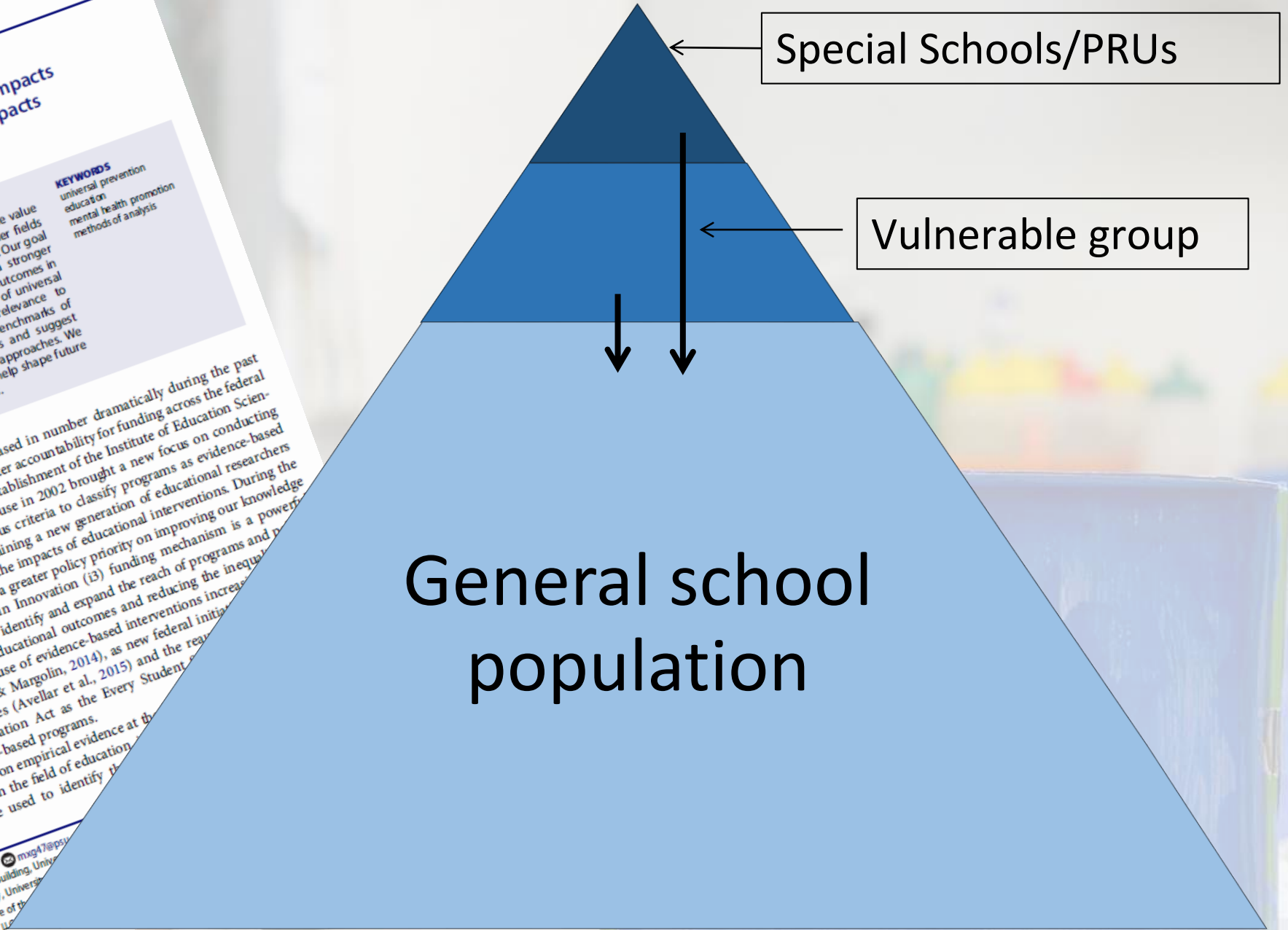
ABSTRACT

In this article we seek to promote a deeper understanding of the value of universal intervention research in education as well as other fields and to call for greater interdisciplinary learning and discourse. Our goal is to deepen the conversation regarding how to build a stronger research orientation toward longitudinal, population-level outcomes in education and mental health. After highlighting the value of universal approaches targeting entire populations and their relevance to education, we raise issues regarding the traditional benchmarks of efficacy when applied to universal intervention trials and suggest alternative metrics for judging the impact of universal approaches. We conclude with lessons based on exemplar studies to help shape future research and policy regarding universal interventions.

KEYWORDS
universal prevention
education
mental health promotion
methods of analysis

Trials of educational interventions have increased in number dramatically during the past two decades, driven in part by a push for greater accountability for funding across the federal and state governments (Cook, 2002). The establishment of the Institute of Education Sciences (IES) and the What Works Clearinghouse in 2002 brought a new focus on conducting experimental evaluations, applying rigorous criteria to classify programs as evidence-based (Slavin, 2002; Whitehurst, 2012), and training a new generation of educational researchers to learn and develop methods to study the impacts of educational interventions. During the Obama administration, there has been a greater policy priority on improving our knowledge of "what works," and the Investing in Innovation (I3) funding mechanism is a powerful example of government's attempt to identify and expand the reach of programs and practices that show promise in improving educational outcomes and reducing the inequities in academic outcomes. Further, the use of evidence-based interventions increased as encoded in legislation (Haskins & Margolin, 2014), as new federal initiatives visiting for low-resource families (Avellar et al., 2015) and the reauthorization of the Elementary and Secondary Education Act as the Every Student Succeeds Act. Given this new emphasis on empirical evidence in education, the need for rigorous outcome trials in the field of education is clear. Standards of rigorous outcome trials are used to identify

CONTACT Mark T. Greenberg  mxtg17@psu.edu
Studies, Biobehavioral Health Building, University Park, PA 16802
*Pennsylvania State University, University Park, PA 16802
Color versions of one or more of the figures in this article can be found at jre.sagepub.com
© 2017 Taylor & Francis Group, LLC



STARS trial – What teachers say (this teacher has not been to TCM....)





References

- CYP mental health survey 2017 <https://digital.nhs.uk/data-and-information/areas-of-interest/public-health/national-study-of-health-and-wellbeing-children-and-young-people>
- Ford, T., Hayes, R., Byford, S., Edwards, V., Fletcher, M., Logan, S., Norwich, B., Pritchard, W., Allen, K., Allwood, M., Ganguli, P., Grimes, K., Hansford, L., Longdon, B., Norman, S., Price A. & Ukoumunne O. C. (2018). The effectiveness and cost-effectiveness of the Incredible Years® Teacher Classroom Management programme in primary school children: results of the STARS cluster randomised controlled trial. *Psychological Medicine, On-line first*, 1-15. doi:10.1017/S0033291718001484
- Parker, C., Paget, A., Ford, T., & Gwernan-Jones, R. (2016). 'he was excluded for the kind of behaviour that we thought he needed support with...' A qualitative analysis of the experiences and perspectives of parents whose children have been excluded from school. *Emotional and Behavioural Difficulties*, 21(1), 133-151.
- Ford, T., Parker, C., Salim, J., Goodman, R., Logan, S., & Henley, W. (2018). The relationship between exclusion from school and mental health: a secondary analysis of the British Child and Adolescent Mental Health Surveys 2004 and 2007. *Psychological Medicine*, 48(4), 629-641
- Lang, I. A., Marlow, R., Goodman, R., Meltzer, H., & Ford, T. (2013). Influence of problematic child-teacher relationships on future psychiatric disorder: population survey with 3-year follow-up. *The British Journal of Psychiatry*, 202(5), 336-341
- Snell, T., Knapp, M., Healey, A., Guglani, S., Evans-Lacko, S., Fernandez, J. L., Meltzer H., & Ford, T. (2013). Economic impact of childhood psychiatric disorder on public sector services in Britain: estimates from national survey data. *Journal of Child Psychology and Psychiatry*, 54(9), 977-985
- Ford, T., Hamilton, H., Meltzer, H., & Goodman, R. (2007). Child Mental Health is Everybody's Business: The Prevalence of Contact with Public Sector Services by Type of Disorder Among British School Children in a Three-Year Period. *Child and Adolescent Mental Health*, 12(1), 13-20.
- Newlove-Delgado, T., Ukoumunne, O., Stein, K., & Ford, T. (2015). Trajectories of psychopathology in relation to mental health related service contacts over three years in the British child and adolescent mental health survey 2004. *European Psychiatry*, 30, 418.

References

- Moore, D, Ford T & Thompson-Coon J. (2018) optimising support for children with ADHD in schools <https://www.bera.ac.uk/blog/optimising-support-for-children-with-adhd-in-schools>
- Moore, D., Russell, A., Matthews, J., Ford, T., Rogers, M., Ukoumunne, O., Kneale, D., Thompson-Coon, J., Sutcliffe K., Nunns M., Shaw L. & Gwernan-Jones, R. (2018). Context and Implications Document for: School-based interventions for attention-deficit/hyperactivity disorder: a systematic review with multiple synthesis methods. *Review of Education*, 6. doi:[10.1002/rev3.3154](https://doi.org/10.1002/rev3.3154)
- Moore, D. A., Gwernan-Jones, R., Richardson, M., Racey, D., Rogers, M., Thompson-Coon, J., Stein, K., Ford, T.J. & Garside, R. (2016). The experiences of and attitudes toward non-pharmacological interventions for attention-deficit/hyperactivity disorder used in school settings: a systematic review and synthesis of qualitative research. *Emotional and Behavioural Difficulties*, 21(1), 61-82.
- Moore, D. A., Whittaker, S., & Ford, T. J. (2016). Daily report cards as a school-based intervention for children with attention-deficit/hyperactivity disorder. *Support for Learning*, 31(1), 71-83.
- Gwernan-Jones, R., Moore, D. A., Garside, R., Richardson, M., Thompson-Coon, J., Rogers, M., Cooper, P., Stein, K. & Ford, T. & Garside, R. (2015). ADHD, parent perspectives and parent–teacher relationships: grounds for conflict. *British Journal of Special Education*, 42(3), 279-300.