

# **The British Child and Adolescent Mental Health Surveys 1999-2007**

Tamsin Ford

Peninsula Medical School,  
University of Exeter

# Acknowledgements

- Young people, parents and teachers participating in the surveys.
- Robert Goodman, Professor of Brain and Behaviour Medicine, Institute of Psychiatry
- Howard Meltzer, Professor of Epidemiology, Warwick (formally ONS).
- Bob Jezzard, former medical adviser to the English Department of Health.
- Helena Hamilton
- Fiona MacDiarmid

# The British Child and Adolescent Mental Health Surveys

- 1999 –survey of 10,438 5-15 year olds across Great Britain.
- 2002- three year follow up of all with disorder and 1/3 without
- 2002-3 Looked after children's surveys; separate for England, Wales and Scotland
- 2004 – second survey of 7977 5-16 year olds living in private households
- 2007 – three year follow up of all 2004 participants

# Methodology

- All were single phase
- Private households used child benefit register; estimated to cover 90%+ of the British population
- CLA survey used returns to DoH as sample frame.
- All used the Development and Well-being Assessment as measure of psychopathology

# What is the DAWBA

- Structured interview with semi-structured questions about problem areas
- Designed to generate ICD-10 and DSM-IV psychiatric diagnoses on 5-17 year olds.
- Covers emotional, behavioral, neuropsychiatric and rarer disorders
- Parallel version for different informants
  - =>An interview with the parents of 5-17 year olds.
  - =>An interview with 11-17 year olds themselves.
  - =>A questionnaire completed by teachers
- Can be administered in person or by computer

**see [www.dawba.com](http://www.dawba.com)**

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

	1999	2004
Any psychiatric disorder	9.5	9.6
Conduct disorder	5.3	5.9
Anxiety disorder	3.8	3.3
Hyperkinesia (~ ADHD)	1.4	1.5
Depression	0.9	0.9
Autistic spectrum disorders	0.3	0.9
	n=10,438	n=7977

# Autistic spectrum disorders

Detailed assessment in the 2004 survey  
(there was a much briefer assessment in the 1999 survey)

Estimated prevalence =0.9%  
adjusting for teacher non-response

This is much higher than previous prevalence estimates.

Were we over-inclusive?

# 1% of parents reported that an ASD diagnosis had been made or suggested

“Autistic”	0.6%
“Asperger”	0.3%
“Other”	0.1%

Definite	0.6%
Probable	0.1%
Possible	0.3%

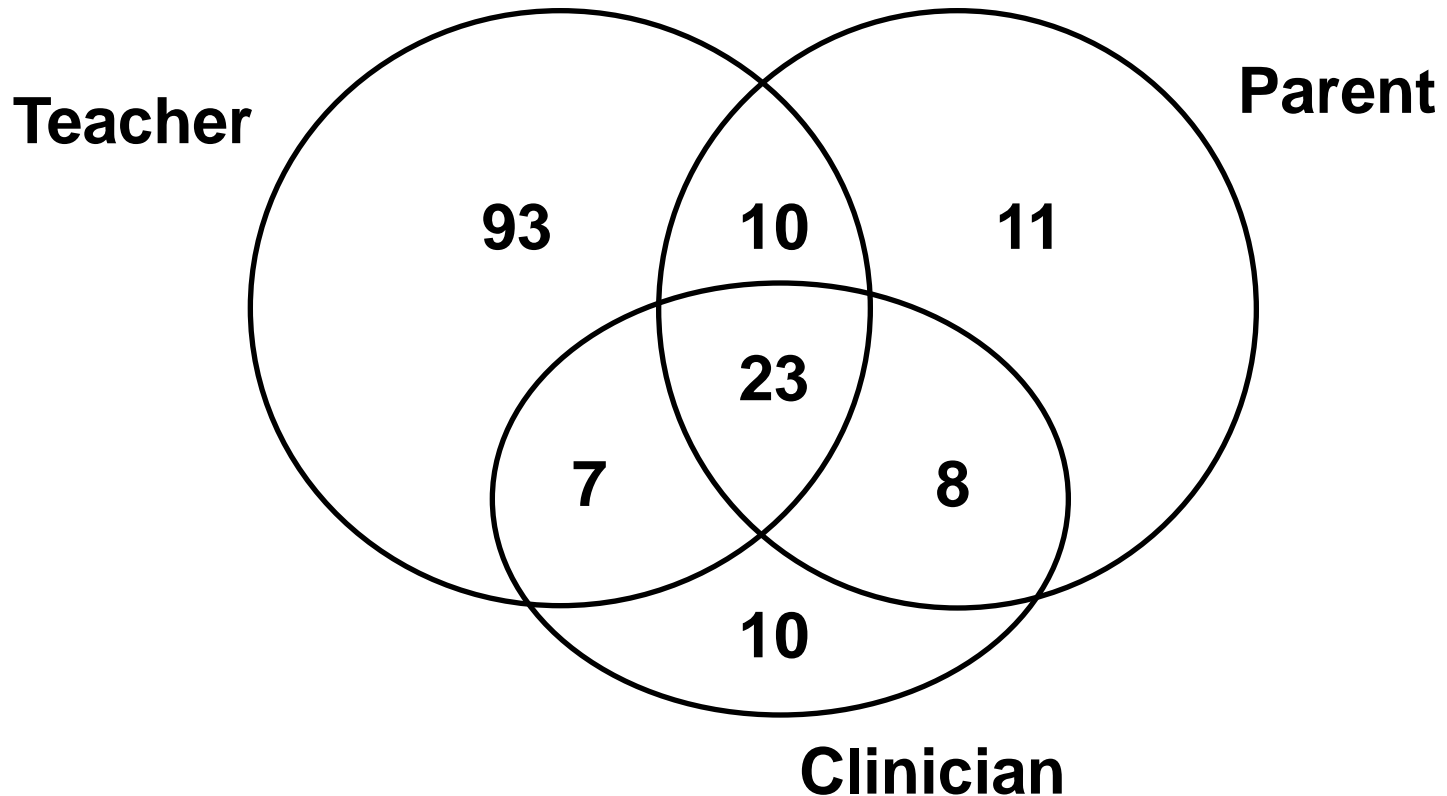
Teachers were asked:

“Has s/he been diagnosed with an autistic spectrum disorder, or do you have concerns that s/he may have one?”

**2.3% of teachers answered “Yes”**

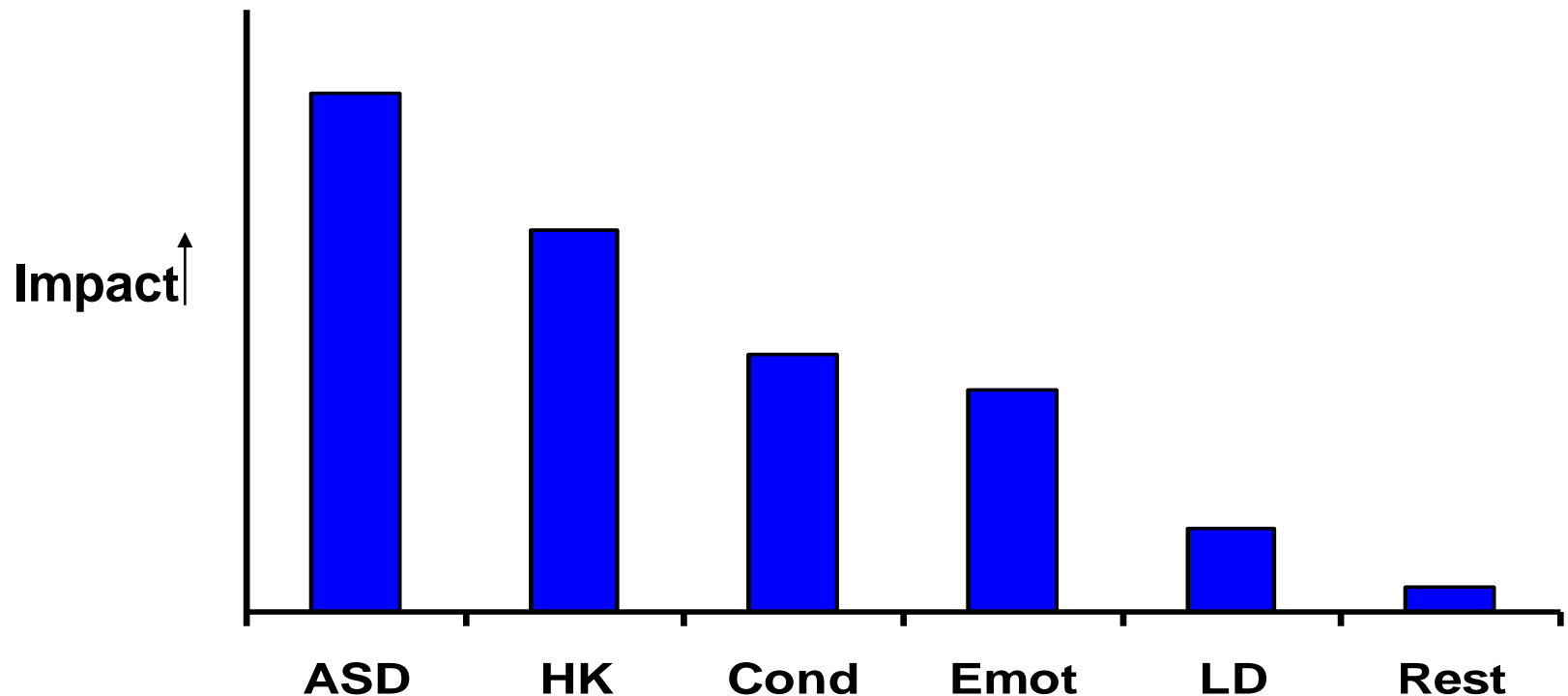
The estimated prevalence for the 2004 study is within the range set by the parent-based and teacher-based prevalence

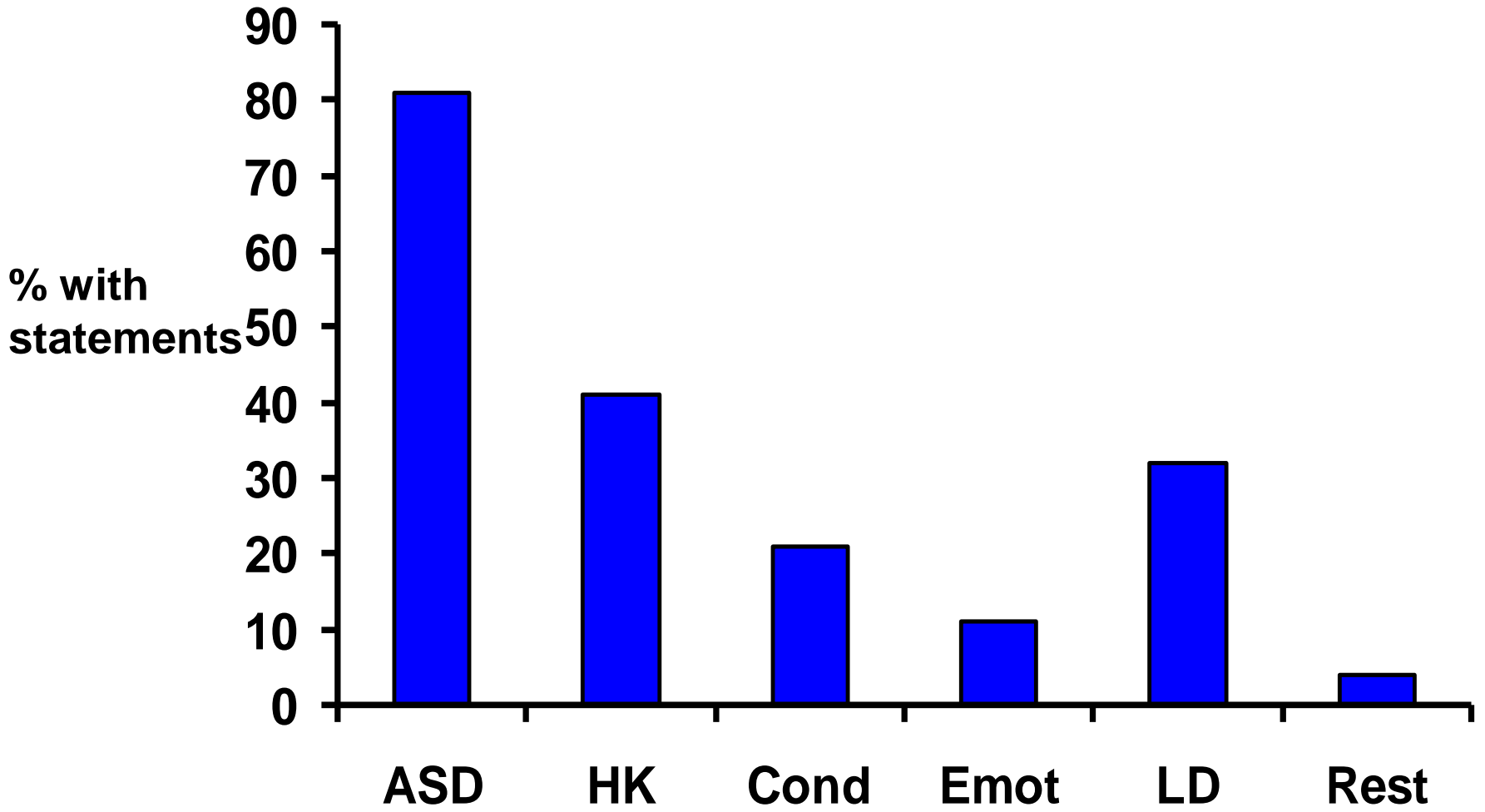
Parent reports a definite ASD diagnosis	0.6%
Teacher reports ASD diagnosis or concerns	2.3%
<b>Clinical rater assigns a definite ASD diagnosis</b>	<b>0.9%</b>



Did we get a high prevalence of ASDs by including a lot of slightly eccentric but generally well-functioning children?

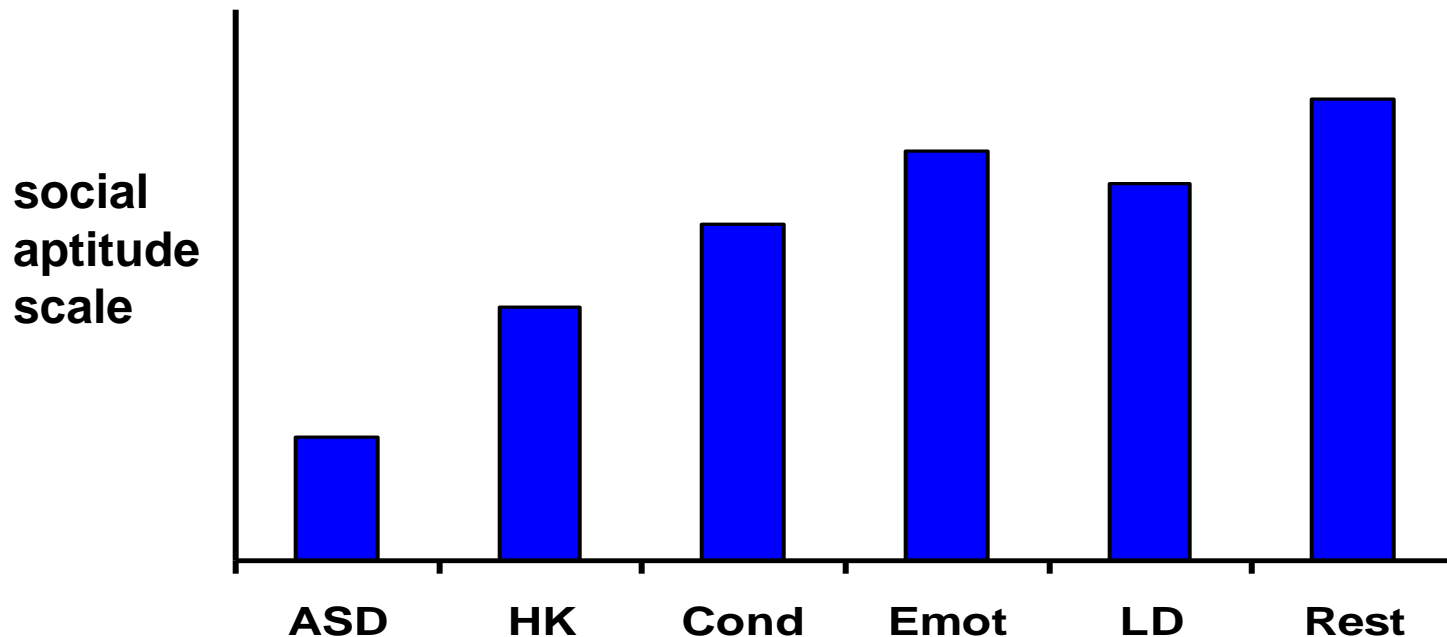
Check this by looking at overall impact  
(SDQ impact score reported by parent)

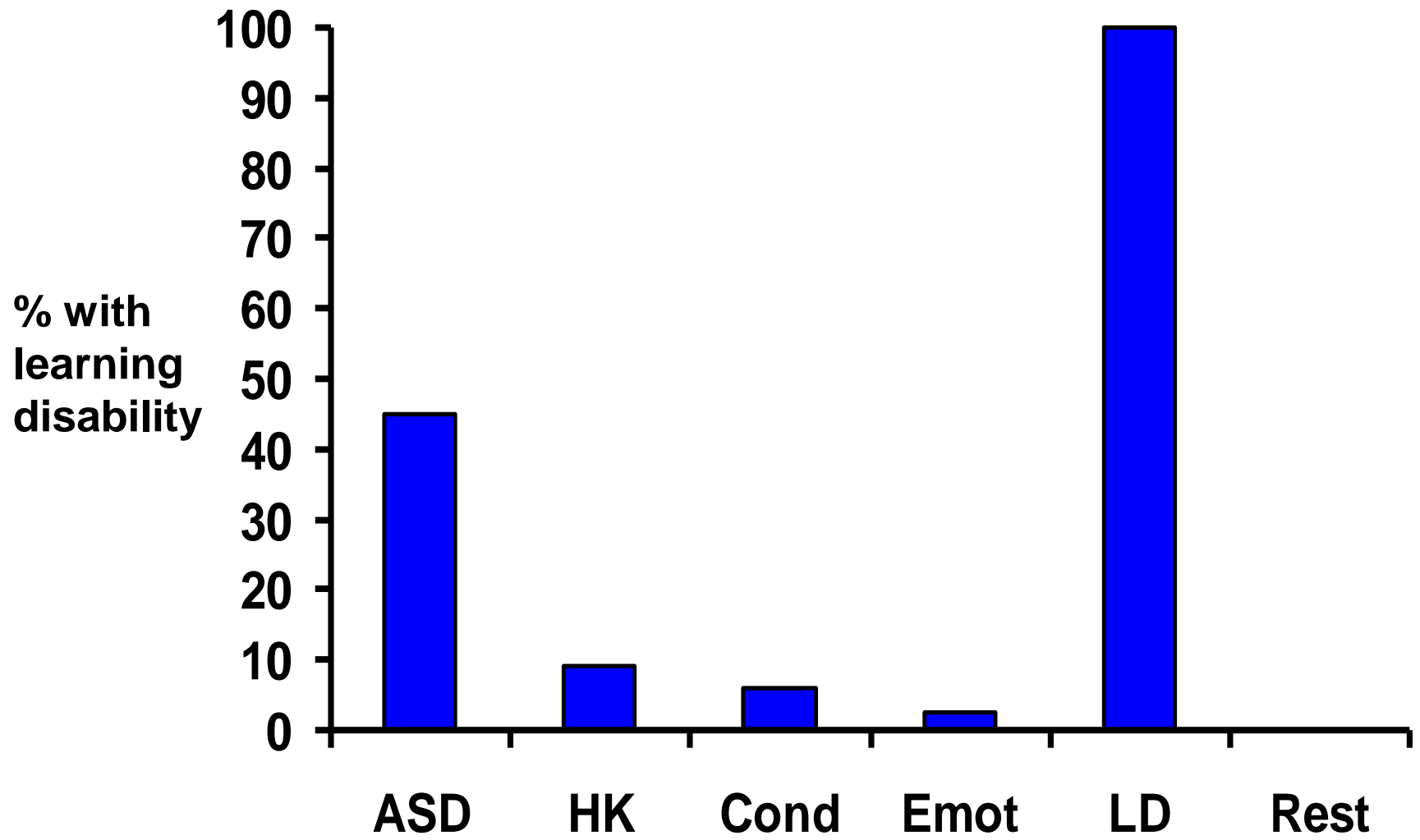


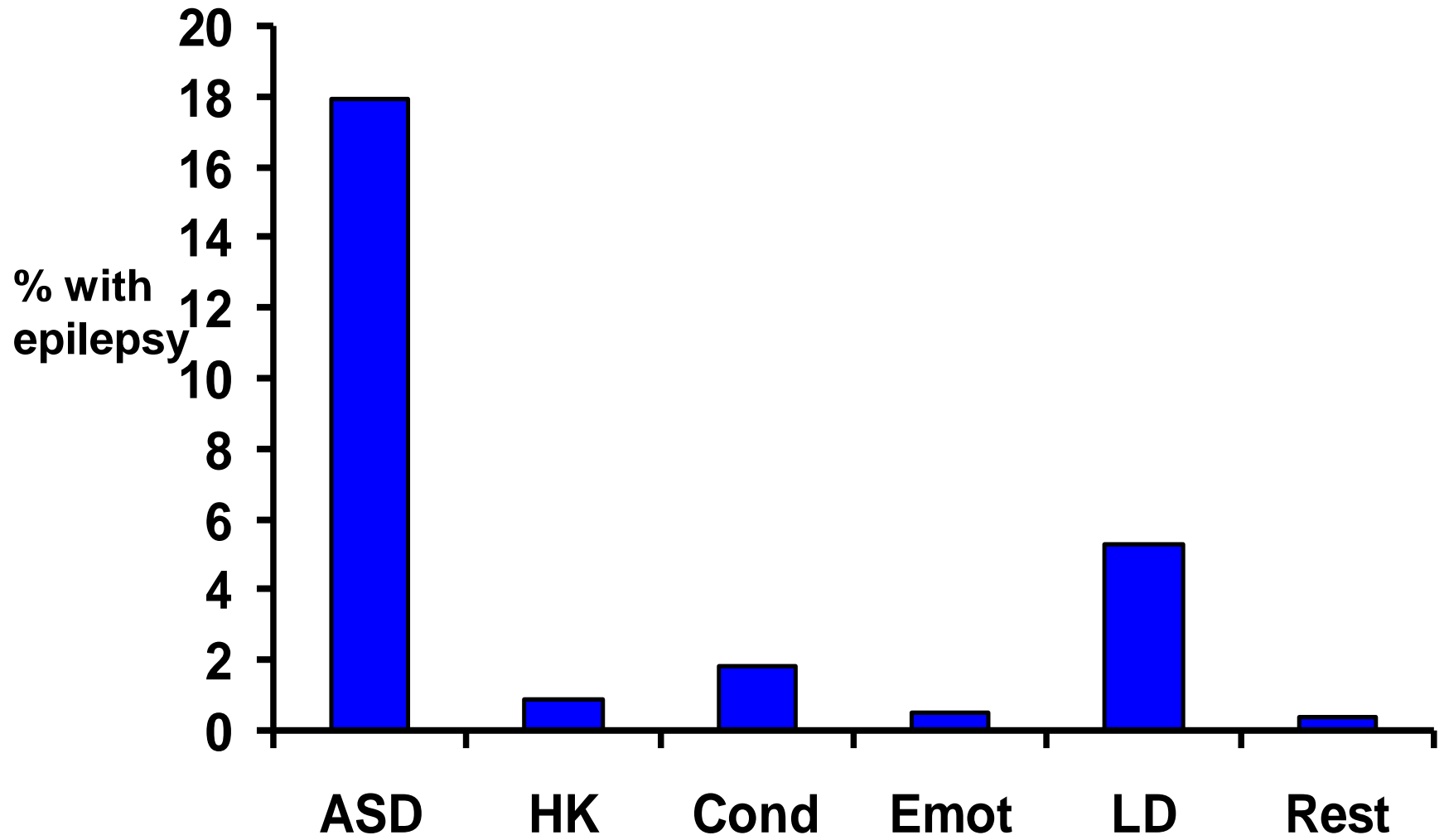


Did we get a high prevalence of ASD children by including many children who really had other disorders (hyperkinesia, conduct disorder etc).

Check this by looking for distinctive symptoms and background factors.







## **Conclusion on ASDs**

- Around 1% of children in the community are already being labelled or thought of as having an ASD
- This is probably justified since around 1% of children are significantly impaired by a distinctively autistic pattern of impairments



Thank you  
Thank you  
Thank you  
Thank you

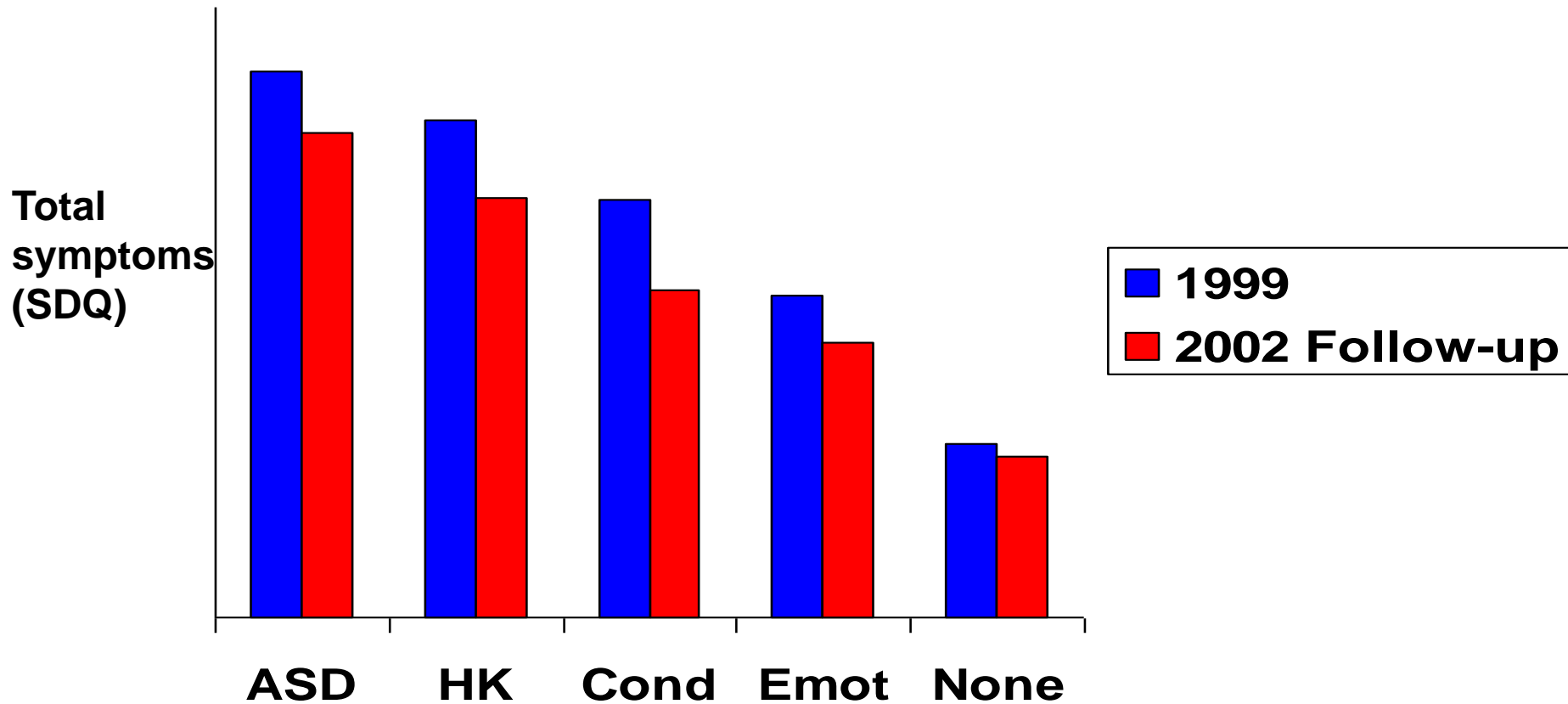


# T's history 1

- Referred to CAMHS with behaviour problems at home and at school aged 4.
- Seen once; mother told she “needed” to attend a parent training group, but did not attend enrolment session; “lost” to follow up.
- How worried should we be by this very typical scenario?

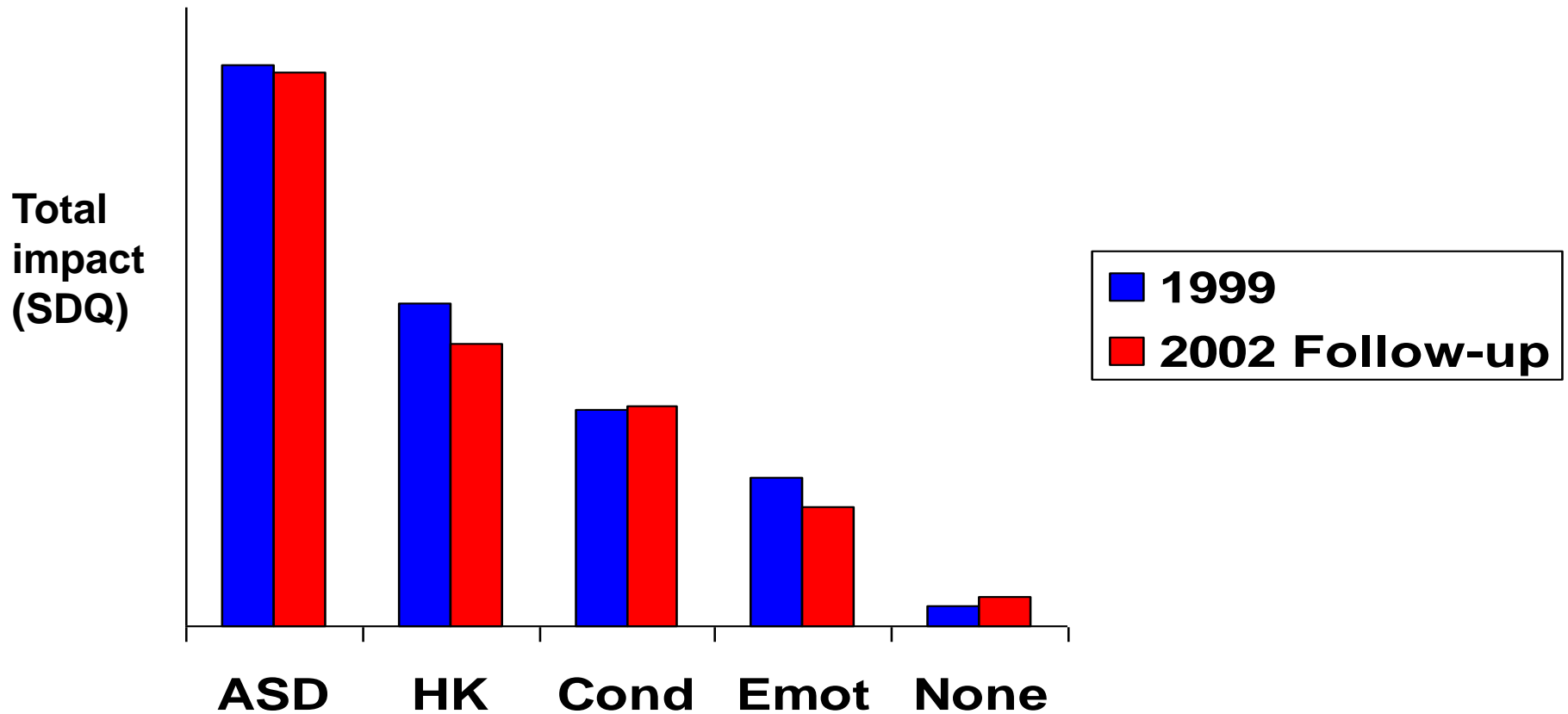
# 3 year follow-up of 1999 survey

a) Symptoms are persistent at a group level



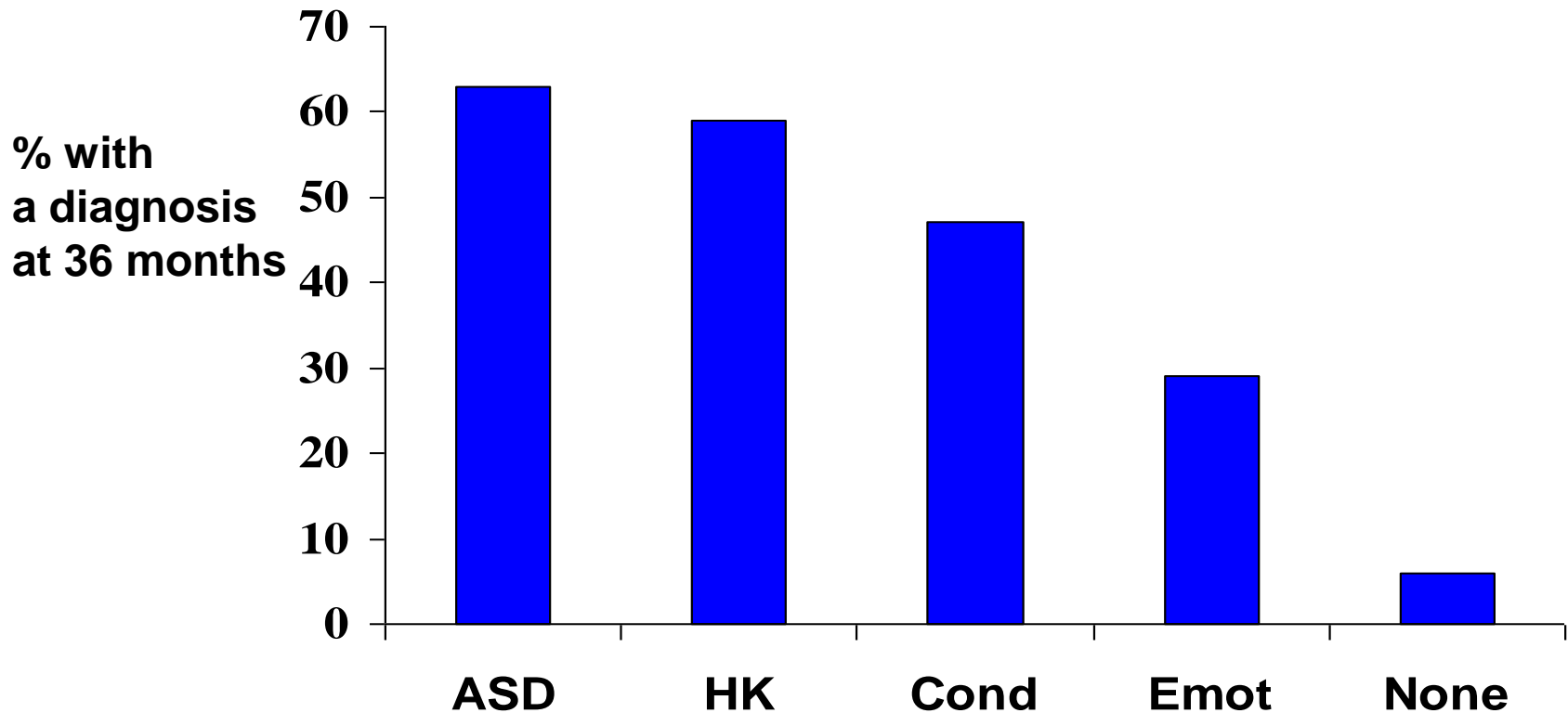
# 3 year follow-up of 1999 survey

b) Impact is persistent at a group level



## 3 year follow-up of 1999 survey

c) BUT individual variation in symptoms and impact often carry people across the fairly arbitrary diagnostic threshold



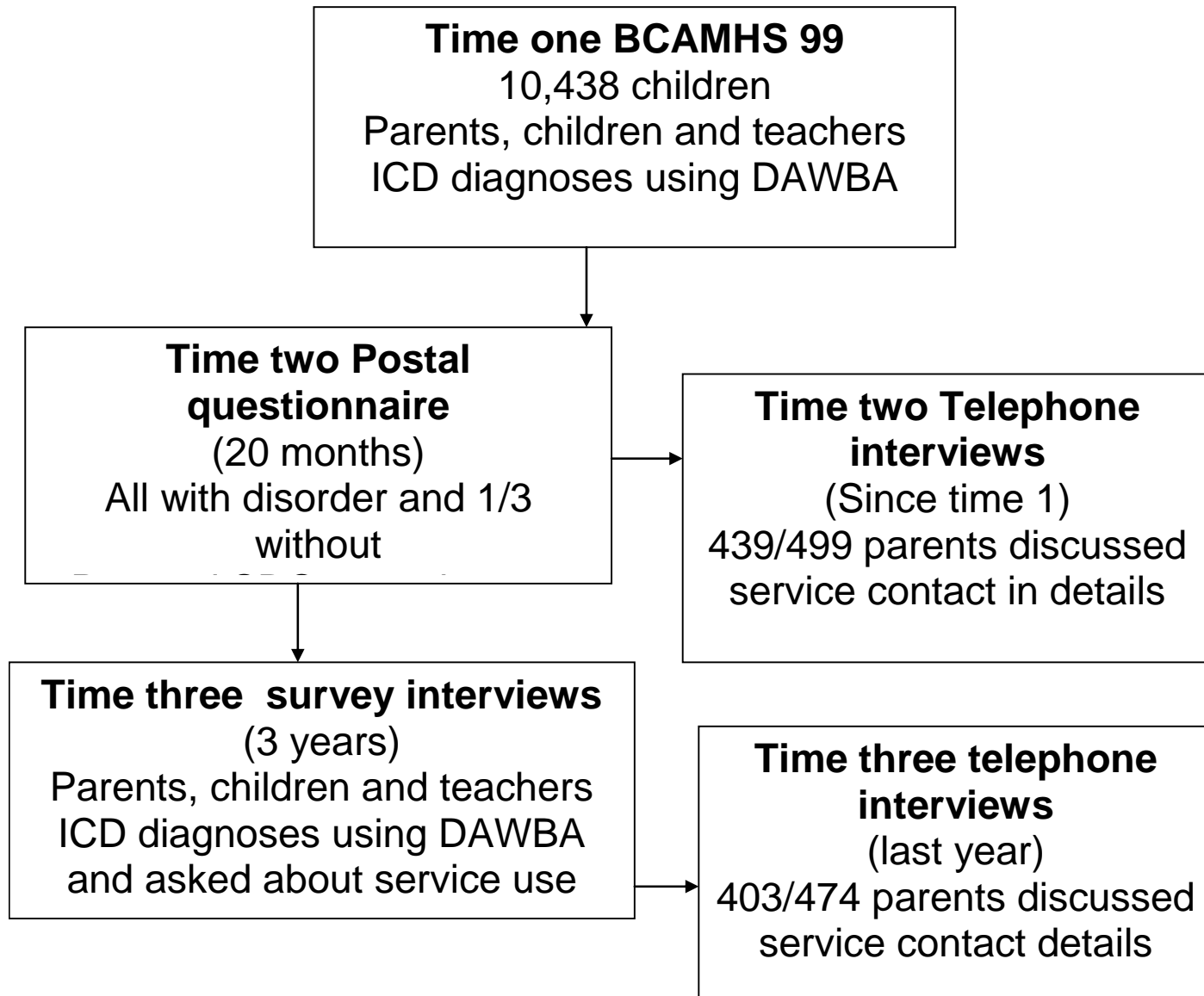
# Combined sample

- **26,544** children aged 5-16 sampled; 7% opted out, 6% ineligible
- **18,415** / 23405 eligible children participated at baseline (69% original sample, 80% of those approached)
- Unable to contact 3% and 17% refused (baseline)
- **10,754** families followed up stratified by diagnosis; 7912 responded (75%)
- **998** had a DSM IV diagnosis at baseline

**Persistence of the four broad diagnostic groupings at 3 year follow up: final multivariable results across predictor domains**

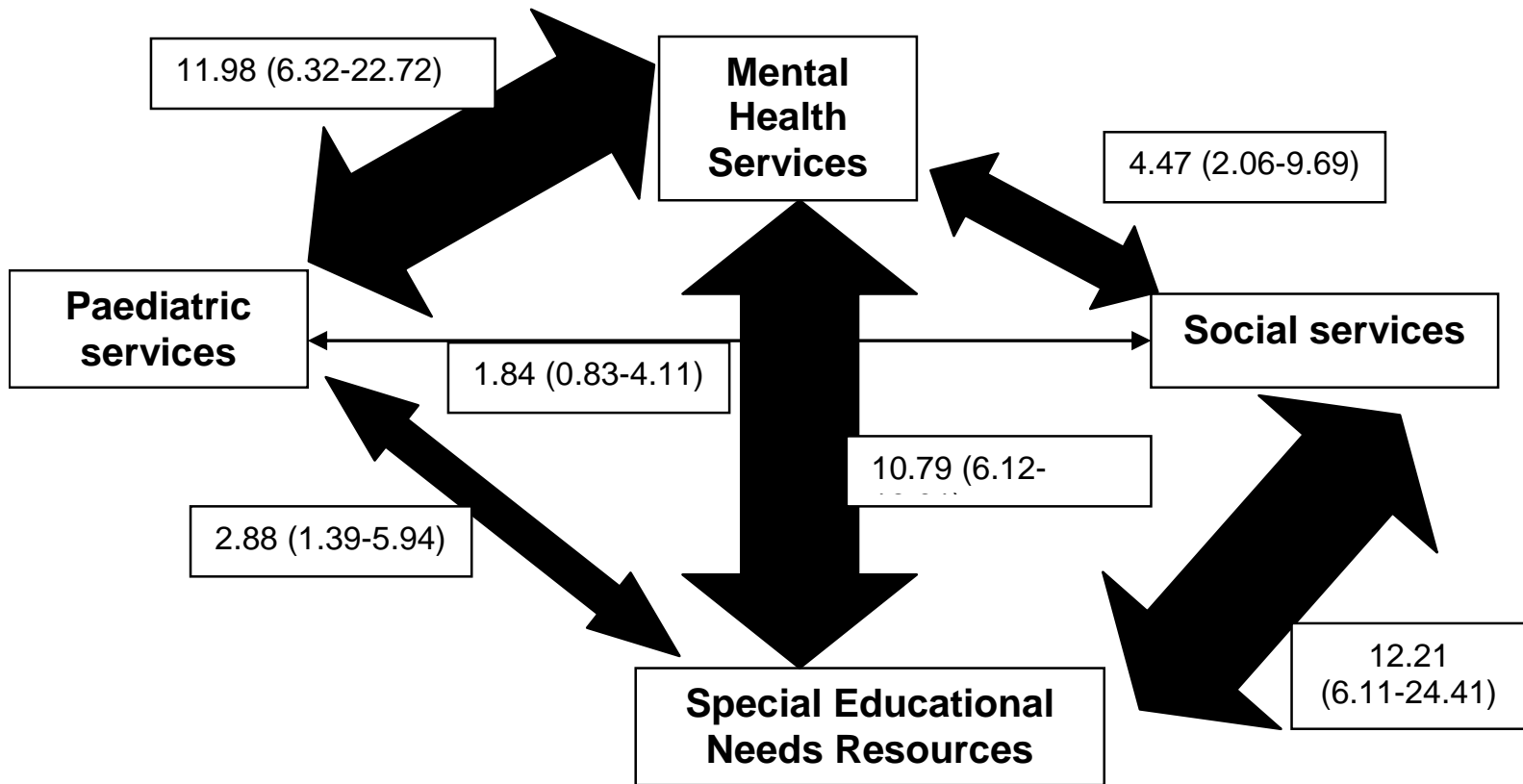
<b>Independent variable (at base-line)</b>	<b>ADHD</b>	<b>Behavioral Disorders</b>	<b>Anxiety Disorders</b>	<b>Depression</b>
Neurodevelopmental disorder	2.49 (1.26-4.92)			
Learning disability		1.75 (1.15-2.67)		
Rented housing		1.81 (1.21-2.70)		
Family income < \$300 per week			2.13 (1.14-3.97)	
GHQ parental anxiety/depression score 3+				3.38(1.12-10.22)
3+ siblings		1.81 (1.09-2.99)		
Burden on the SDQ		1.89 (1.22-2.94)	1.77 (1.07-2.94)	
SDQ total difficulties score		2.69 (1.71-4.23)		

So how many children with impairing psychopathology get to services?

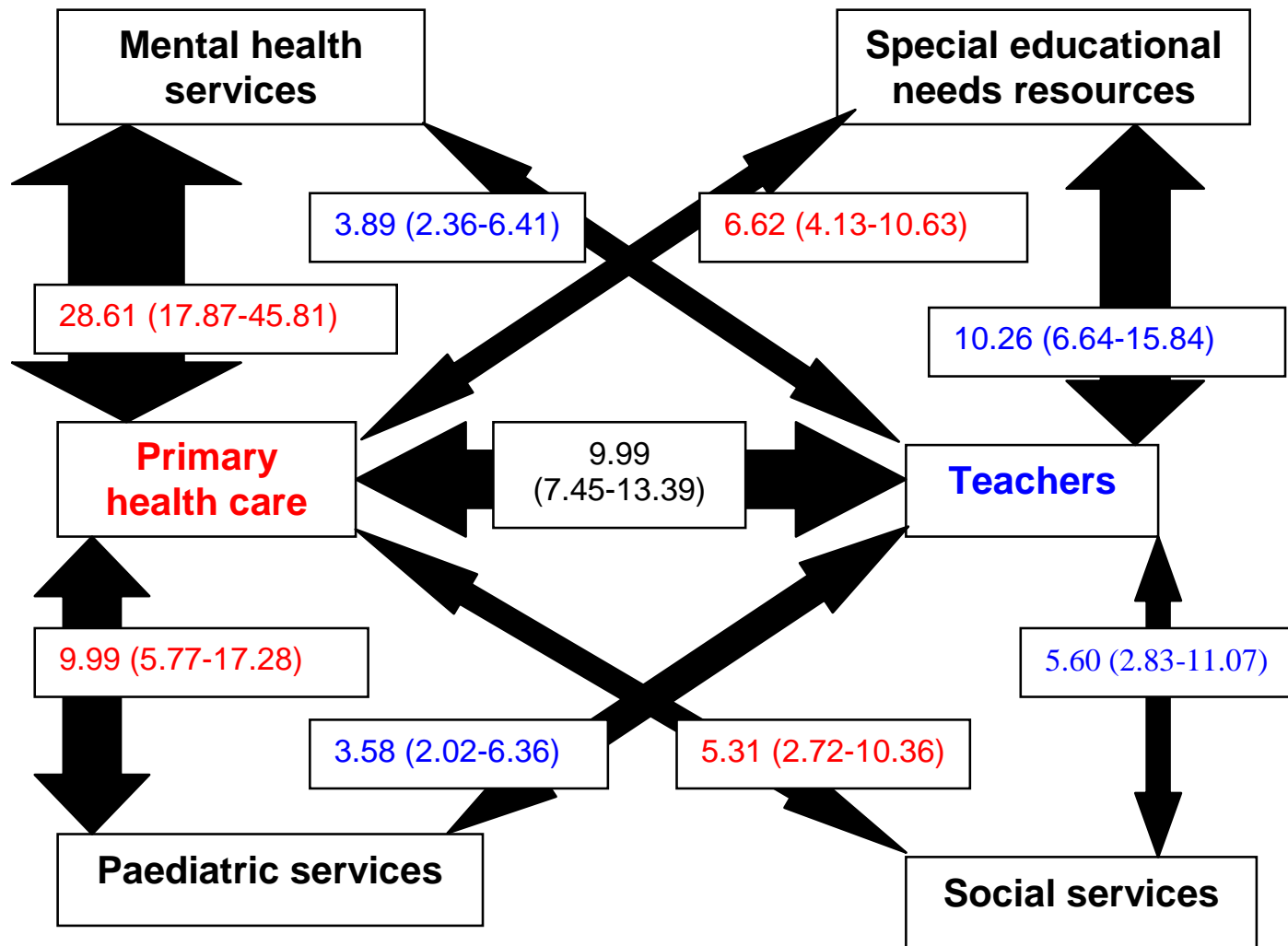


Type of service	% in contact in total sample (95% confidence interval)	% in contact amongst those with a psychiatric disorder (95% confidence interval)
Teachers	14.1 (12.7-15.5)	41.4 (36.7-45.9)
Primary health care	8.3 (7.2-9.4)	28.9 (24.5-33.3)
Either front line service	17.9 (16.4-19.4)	50.7 (45.9-55.4)
<b>Mental health services</b>	<b>4.9 (4.1-5.7)</b>	<b>25.1 (21.1-29.1)</b>
SEN Resources	4.9 (4.1-5.7)	25.0 (21.0-28.9)
Paediatrics	3.3 (2.7-4.0)	13.5 (10.4-16.7)
Social services	2.5 (1.9-3.0)	13.8 (10.5-17.2)
Any specialist services	10.1 (8.9-11.1)	42.5 (37.0-47.9)

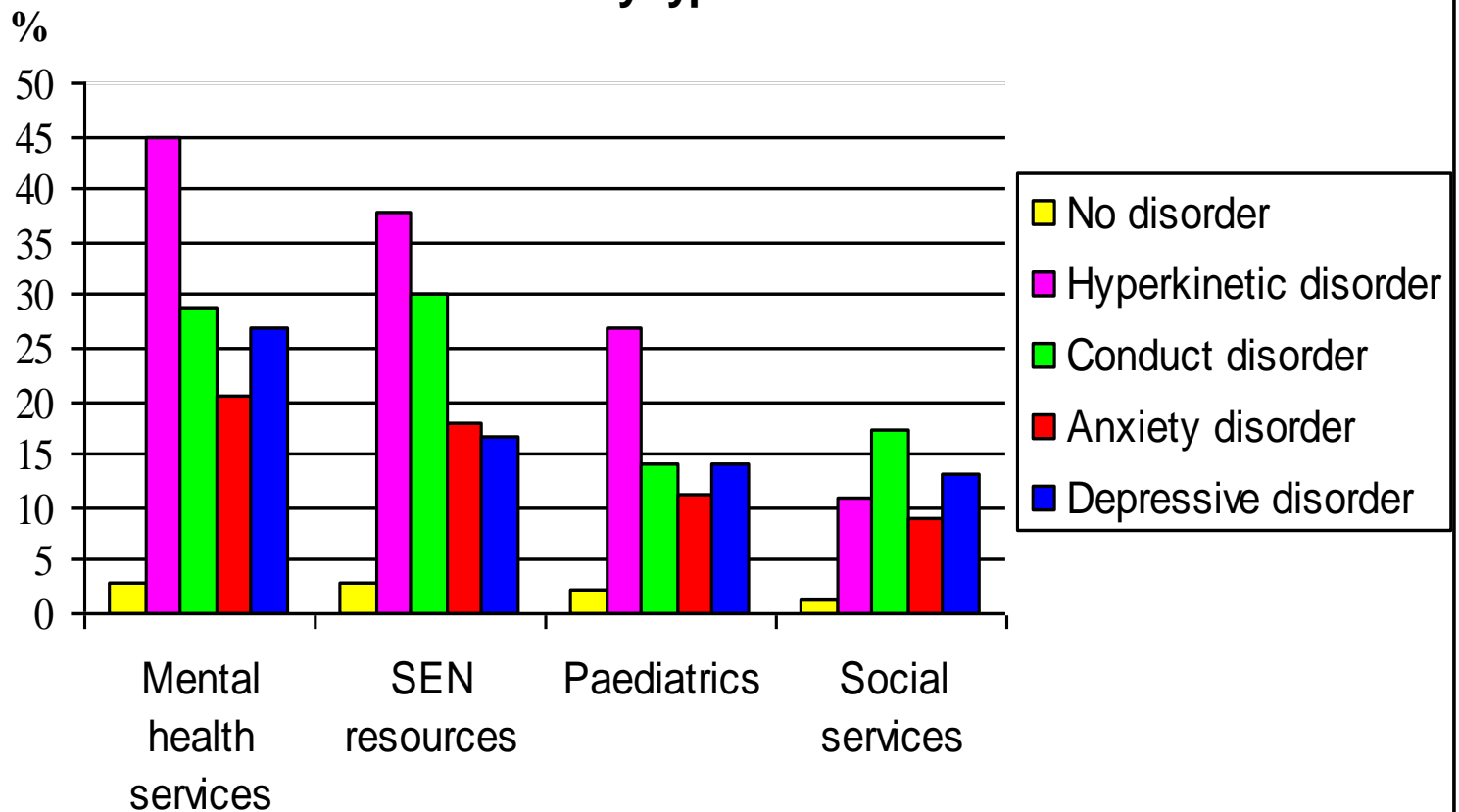
# Patterns of service use



# The overlap between contact with front line services and contact with specialist services, adjusted for contact with the other front line service

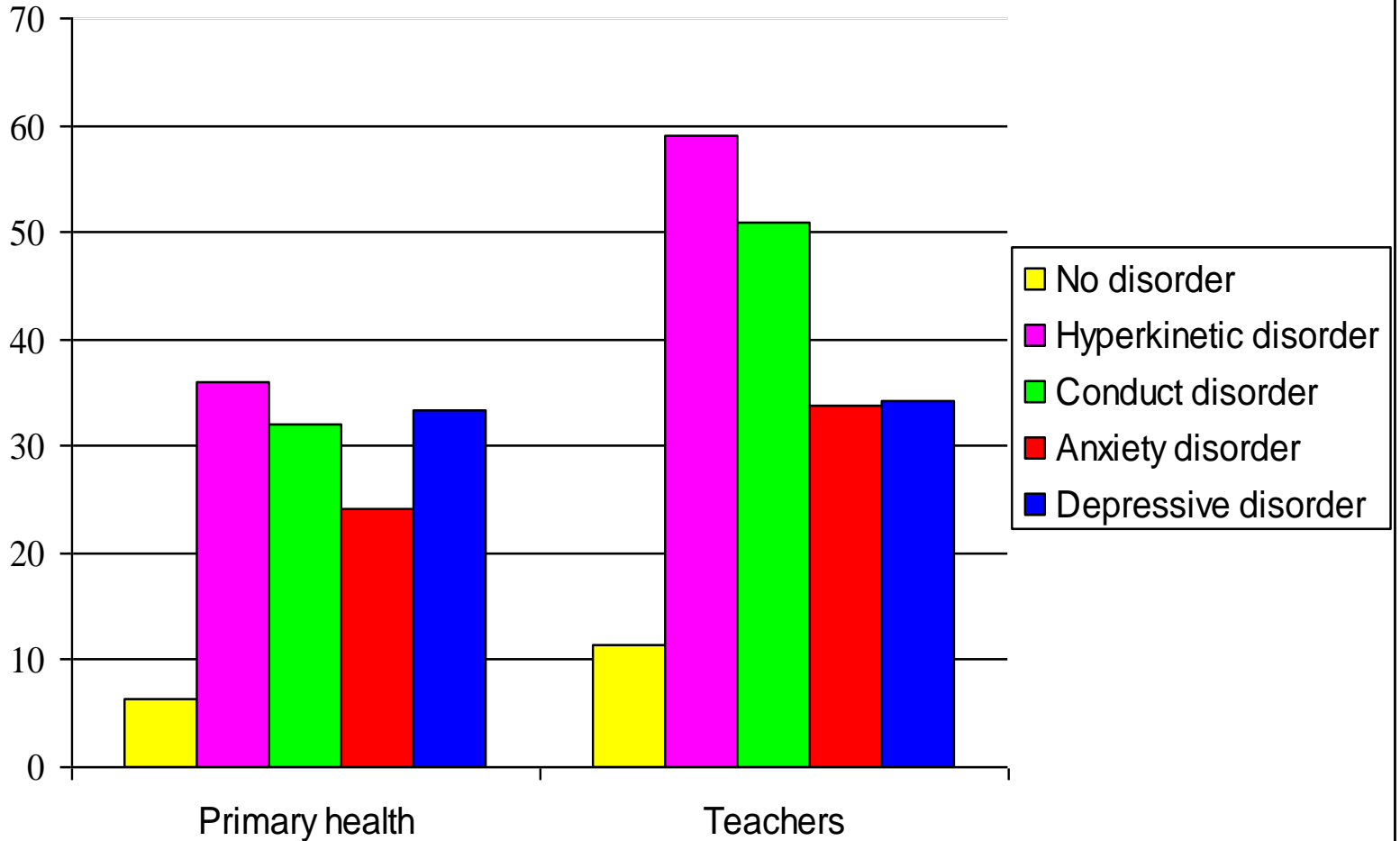


## The percentage of children attending specialist services by type of disorder



## The percentage of children attending front-line services by disorder

%



Predictor	Contact with primary care*	Contact with teachers
Impact on the child		<b>1.26</b> <b>(1.12-1.42)</b>
Impact on others	<b>1.89</b> <b>(1.51-2.50)</b>	<b>1.94</b> <b>(1.66-2.27)</b>
Parent recognition of child's difficulties (SDQ)		<b>1.65</b> <b>(1.06-2.58)</b>
Older (11-15 vs.5-10)	*	<b>0.51</b> <b>(0.39-0.67)</b>
Male gender	<b>0.53</b> <b>(0.33-0.86)</b>	
Poor physical health	<b>2.99</b> <b>(1.57-5.69)</b>	
Parental psychopathology	<b>1.35</b> <b>(1.11-1.62)</b>	<b>1.26</b> <b>(1.12-1.42)</b>

Predictor	Contact with mental health services	Contact with SEN resources	Contact with social services	Contact with paediatrics
Impact on the child	<b>1.40</b> <b>(1.07-1.84)</b>		<b>1.45</b> <b>(1.13-1.86)</b>	
Impact on others	<b>1.44</b> <b>(1.07-1.92)</b>	<b>1.59</b> <b>(1.18-2.13)</b>		
Parent recognition of child's difficulties				<b>1.81</b> <b>(1.28-2.57)</b>
Teacher recognition of child's difficulties		<b>1.53</b> <b>(1.03-2.28)</b>		
Neurodevelopmental disorder	<b>3.14</b> <b>(1.10-8.93)</b>			<b>2.49</b> <b>(1.07-5.79)</b>
3 or more life events	<b>2.23</b> <b>(1.19-4.20)</b>			
Low reading quotient			<b>1.71</b> <b>(1.23-2.39)</b>	
Single parent family			<b>3.17</b> <b>(1.32-7.58)</b>	
Rented housing			<b>2.24</b> <b>(1.00-5.02)</b>	
3 or more siblings				<b>6.07</b> <b>(1.29-28.59)</b>
Parental score on the GHQ		<b>1.37</b> <b>(1.10-1.71)</b>		
Contact with primary care	<b>24.24</b> <b>(13.54-43.40)</b>	<b>6.17</b> <b>(3.40-11.22)</b>	<b>6.85</b> <b>(3.06-15.36)</b>	<b>11.18</b> <b>(5.50-22.70)</b>
Contact with teachers	<b>2.11</b> <b>(1.15-3.85)</b>	<b>6.93</b> <b>(3.91-12.26)</b>		<b>2.41</b> <b>(1.24-4.66)</b>
Living in the north of Britain			<b>0.49</b> <b>(0.24-0.96)</b>	<b>1.87</b> <b>(1.03-3.38)</b>

# T's history 2

- Full care order aged 5 and placed with half siblings with a plan for adoption.
- 1<sup>st</sup> foster placement broke down due to T's behaviour problems; T also permanently excluded from school. Seen in CAMHS for a second assessment but moved placements (within borough) and “dropped out”.
- Referred to CAMHS age 6 as 2<sup>nd</sup> foster placement and 2<sup>nd</sup> school placement at risk of breaking down, but moved again prior to being seen (again within borough).

# Looked-after children do worse in all respects

	Looked after (2002)	Private household (1999)
Any ICD-10 disorder	46.4	9.5
Conduct disorder	38.9	5.3
Anxiety disorder	11.1	3.8
Hyperkinesis	8.7	1.4
Depression	3.4	0.9
Autistic spectrum disorder	2.6	0.3
	n=1543	n=10438

	Prevalence (%)		
	Children looked after by local authorities (n=1253)	Disadvantaged private household sample (n=761)	Remaining children from the private household sample (n=9677)
<b>Male</b>	<b>57.1</b>	<b>45.9</b>	<b>50.3</b>
<b>Older (11-15 versus 5-10)</b>	<b>59.0</b>	<b>41.9</b>	<b>43.5</b>
<b>White (versus black or ethnic minority)</b>	<b>91.6</b>	<b>89.8</b>	<b>91.5</b>
<b>Neurodevelopmental disorder</b>	<b>12.8</b>	<b>4.5</b>	<b>3.3</b>
<b>Statement of special educational need</b>	<b>23.0</b>	<b>4.5</b>	<b>2.9</b>
<b>Carer report of learning difficulties</b>	<b>36.9</b>	<b>12.2</b>	<b>8.3</b>
<b>Literacy or numeracy problems</b>	<b>34.3</b>	<b>20.4</b>	<b>10.4</b>
<b>Mental age 60% or less of chronological age</b>	<b>10.7</b>	<b>1.5</b>	<b>1.3</b>

**LAC significantly different to both private household groups**

# Looked after status was an independent correlate of:-

- Separation anxiety (1.92, 1.05-3.51)
- Depression (2.28, 1.34-3.88)
- Anxiety NOS (2.86, 1.86-4.39)
- Oppositional defiant disorder (3.60, 1.50-2.66)
- Hyperkinetic disorder (3.90, 2.80-5.42)
- Conduct disorder (9.34, 7.26-12.03 )
- Post traumatic stress disorder (11.76, 4.98-27.76)
  
- Exceptions: Autistic spectrum disorder and generalised anxiety disorder

# SDQ as a mental health screen

	Children who are looked after	Children living in private households
Sensitivity	85%	63%
Specificity	80%	95%

# Mental health screening for children looked after

- Sensitivity close to 100% for hyperkinetic disorder and less common disorders in LAC
- SDQ's to carers, teachers (if in school) and young people aged 11+
- SDQ algorithm suggests possible or probable disorder invite to DAWBA.
- Report with recommendations to social worker and carer.
- Evaluating uptake by each informant and at each stage, costs, and social workers perception of the child's mental health

# T's history 3

- **Age 7 referred to CAMHS as 3<sup>rd</sup> foster placement at risk and school pushing for special school place.**
- **Diagnosis ADHD (5 years after initial presentation) – responded well to methylphenidate.**
- **Every single professional from health, social services and education had noted restlessness, inattentiveness and impulsiveness; mum had raised question of ADHD. Family history of ADHD.**
- **Methylphenidate £120 - 420 per year + £310 for 2 outpatient attendances**
- **Special school £50,000 + per year**

# CAMHS multi-disciplinary team

- From national studies, 90% families attending CAMHS see only 1 professional
- Different disciplines may hold different conceptualisations of the same child's difficulties.
- Tension between keeping the richness of each disciplines contribution while maintaining a core assessment that is acceptable to all.
- 30% reported that they hadn't had training specifically on children and adolescents, let alone specific training in assessment of children and adolescents

# RCT of standardised assessment prior to first appointment

- Intervention; the practitioner receives the DAWBA assessment prior to 1<sup>st</sup> appointment with family.
- Comparing access to evidence-based treatment agreement between practitioner and clinician rated DAWBA, utility to practitioners and acceptability for parents

	Mother		Teacher		Prediction	
	Symp	Imp	Symp	Imp	DSM	ICD
Autistic Spectrum	++	+++			++	++
Separation Anxiety	-				-	--
Specific Phobia	+				--	--
Social Phobia	-				-	-
Panic	-				--	--
Agoraphobia	-				--	--
PTSD	-				--	--
OCD	-				--	--
Generalised Anxiety	-				-	-
Depression	-				--	--
Deliberate Self Harm	-					
Emotions at school			+	+++		
Hyperactivity	+++	+++	+	+++	+++	++
Oppositional	+	+++	+	?+++	++	++
Conduct	-		-	?+++	--	--
Anorexia / Bulimia	-		-		--	--
Tics	-		-		--	--
Other concerns	++		++			

	Mother	Teacher
Any concerns?	Yes	
<b>Activity:</b>		
Fidgets	++	++
Can't remain seated	++	+
Runs or climbs when shouldn't	++	+
Can't play quietly	++	-
Can't calm down	+	+
<b>Impulsiveness:</b>		
Blurts out answers	-	-
Can't wait for a turn	+	-
Butts into conversations or games	++	-
Unstoppable talk	++	-
<b>Attention:</b>		
Time on task in mins		20+
Careless mistakes/inattentive	++	+
Loses interest	++	++

>> **Open-ended comments: Mother**

**Description of the problem**

He will play with his hair, flap his hands, make a general low pitched noise, or glaze over and zone out instead of doing what he is asked. If he is frustrated about something tends to clench his fists, clenching them up and down make an angry noise and this can be just because someone has picked up his train.

**How often?**

Yes - esp in class; if he doesn't concentrate in class he gets told off

**How severe?**

He will sit in the classroom the entire day and not pick up a pencil

**First started?**

Since reception class, parents have always had complaints that he doesn't write when should be, and not saring

**Done anything about it?**

Tried marble boxes, star charts, instant rewards, the naughty step. The worst was when he started school.

>> **Open-ended comments: Teacher**

Ryan does not appear usually distressed - unless a routine has been upset, he is more often in his own world, where he seems frequently to be acting out a fantasy scene - like a cartoon or something, using his hands as if they are cars or spacehips, for example. He drifts off and therefore missing a lot of learning - he then often tries to bring in the other children, which frequently distracts/ + or upset / annoys them.

# T's history 4 in 2007

- Good response to medication after 18 months
- Remained with same foster carer and planned transfer to mainstream secondary school.
- With advice on sleep hygiene and behavioural approach to address difficulty settling at night.
- Offered individual work looking at problem solving, anger management etc, but did not want it- perhaps too young and can revisit
- Support for school and foster carer in managing behaviour; managing expectations and providing strategies.

# Summary

- Childhood psychiatric disorders are common and persistent
- Child mental health really is “everybody’s business”.
- Services are concentrating on children with the more severe difficulties, but many children with impairing difficulties are not seen.
- The use of standardised measures in clinical practice may improve the identification and management of children with impairing psychopathology

# Information

- [Tamsin.ford@pms.ac.uk](mailto:Tamsin.ford@pms.ac.uk)
- [www.dawba.com](http://www.dawba.com) for information about the DAWBA
- [www.sdqinfo.com](http://www.sdqinfo.com) for information about the SDQ
- [www.youthinmind.net](http://www.youthinmind.net) for scoring SDQ, and information about books and websites related to child mental health