


The mental health of children and adolescents in Great Britain

Summary report

Howard Meltzer
Rebecca Gatward
with
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The report of a survey carried out in 1999 by Social Survey Division of the Office for National Statistics on behalf of the Department of Health, the Scottish Health Executive and the National Assembly for Wales

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room B1/09, 1 Drummond Gate,
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fax: 020 7533 5685
e-mail: copyright@ons.gov.uk

Contact points

For enquiries about this publication, contact
the Editor, Howard Meltzer:

Tel: 020 7533 5391

E-mail: howard.meltzer@ons.gov.uk

For general enquiries, contact the National Statistics

Public Enquiry Service on **020 7533 5888**

(minicom: 01633 812399)

E-mail: info@ons.gov.uk

Fax: 020 7533 6261

Letters: room DG/18, 1 Drummond Gate,
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Focus of the survey

Background

The survey of the mental health of children and adolescents in England and Wales was carried out on behalf of the Department of Health, the Scottish Health Executive and the National Assembly for Wales to provide up-to-date baseline information about the prevalence of mental disorders among 5 to 15 year olds in order to inform policy decisions about the need for child and adolescent mental health services.

Aims of the survey

The primary purpose of the survey was to produce prevalence rates of the three main childhood mental disorders: conduct disorder, hyperactivity and emotional disorders (and their comorbidity).

The second aim of the survey was to determine the impact and burden of children's mental health problems in terms of social impairment and adverse consequences for others. Social

impairment is measured by the extent to which each particular mental problem interferes with relations with other family members, forming and keeping friendships, participation in leisure activities, and scholastic achievement. More broadly, impact reflects distress to the child or disruption to others as well as social impairment.

The third main purpose of the survey was to examine the use of services.

Coverage of disorders

This report uses the terms mental disorders as defined by the ICD-10 (International Classification of Diseases, tenth revision) to imply a clinically recognisable set of symptoms or behaviours associated in most cases with considerable distress and substantial interference with personal functions. The survey concentrated on the three common groups of disorders: emotional disorders such as anxiety, depression and obsessions;

hyperactivity disorders involving inattention and overactivity; and conduct disorders characterised by awkward, troublesome, aggressive and antisocial behaviours.

Assessment of mental disorders

The survey was designed to gather data from parents, children (aged 5-15) and teachers.

The measures devised for the present study were intended to combine some of the best features of structured and semi-structured measures. When health problems were identified by the structured questions, interviewers used open-ended questions and supplementary prompts to get parents and children to describe the problems in their own words.

A case vignette approach was used to assess the clinical significance of these descriptions. This involved clinician ratings based on a review of all the information of each subject, not only the questionnaires and structured interviews but also

any additional comments made by the interviewers, and the transcripts of informants' comments to open-ended questions particularly those which ask about the child's significant problems. The case vignette approach was extensively tested among community and clinical samples in the pre-pilot and pilot phases of the survey.

Interpretation of results

The findings described in this summary report focus on the prevalence of mental disorders among 5-15 year olds and on the associations between the presence of a mental disorder and biographic, socio-demographic, socio-economic and social functioning characteristics of the child and the family.

Causal relationships should not be assumed for any of the results presented in this report.

Further details on the survey can be found in the main report:

Meltzer H., Gatward R., Goodman R. and Ford T. (2000) *Mental Health of Children and Adolescents in Great Britain*, London: The Stationery Office.

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Sample design

The sample was drawn from Child Benefit Records held by the Child Benefit Centre. Using centralised records as a sampling frame was preferred to carrying out a postal sift of over 100,000 addresses and to sampling through schools. The postal sift would have been time consuming and expensive. We did not want to sample through schools because we wanted our initial contact to be parents who then would give signed consent to approach the child's teacher.

Table 2.1 shows that 14,250 opt out letters were despatched by the Child Benefit Centre on behalf of ONS: 30 letters for each of the 475 postal sectors. Nine hundred and thirty one of the sampled addresses (6.5%) contacted ONS via a free phone number to opt out and a further 790 addresses (5.5%) were found to be ineligible. The main reason for ineligibility was that the family had moved and could not be traced. This accounted for 629 of the 790 ineligibles - 4.4% overall. Other reasons for ineligibility were that the child was deceased, fostered

out, outside the age criteria, 5-15 or the family had emigrated. Therefore, just over twelve and a half thousand addresses were allocated to around 300 interviewers. (Table 2.1)

Table 2.1 Response to initial opt-out letter

	Number	%
Sampled children	14,250	100
Opt outs	931	6.5
Ineligibles	790	5.5
Children eligible for interview	12,529	88.0

Information was collected on 83% of the 12,529 children eligible for interview from up to three sources resulting in at least some data for 10,438 children. (Table 2.2)

Table 2.2 Response to interview

	Number	%
All interviews	10,438	83
Refusals	1,774	15
Non-contacts	317	2
<i>Base = set sample</i>	12,529	

Among the co-operating families, almost all the parents and most of the children took part. Four out of five teachers returned their questionnaires, based on an initial mail out and one reminder letter. (Table 2.3)

Table 2.3 Achieved by type of informant

	Number	%
Parent interviews	10,405	(99.7%)
Child interviews/assessments	9,347	(95.3%)
Teacher questionnaire	8,382	(80.3%)
<i>Base = achieved interviews</i>	10,438	

To improve the representativeness of the survey, the data were weighted (a) to take account of differential sampling of postal sectors by country, (b) to match the age/sex distribution of 5-15 year olds in the population at the time of the survey, and (c) to compensate for response variability by metropolitan and non-metropolitan regions, i.e. poorer response in inner cities. Finally, the data were adjusted to take account of the missing teacher data.

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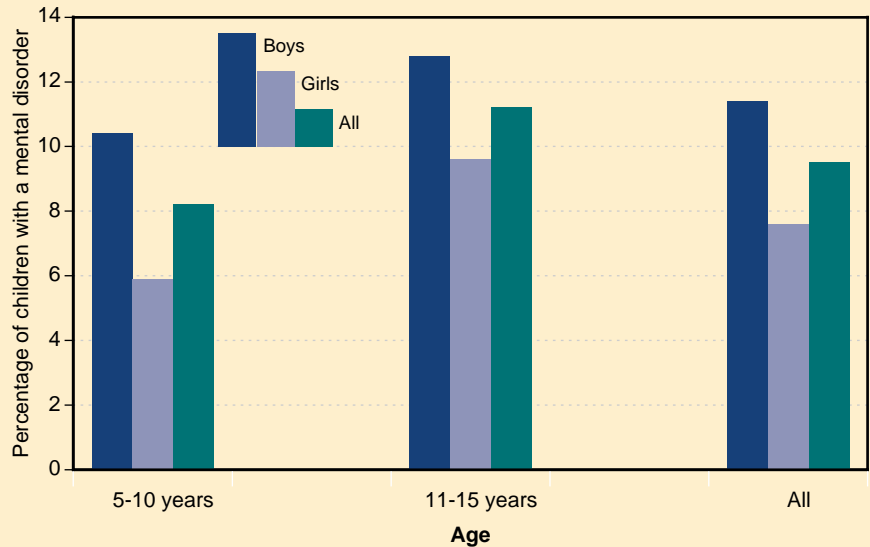
Child's personal characteristics

Among the surveyed children, there were roughly equal numbers of boys and girls, 56% were 5-10 year olds and 44% were aged 11-15; 91% were White, 3% Black, 2% Indian, 2% Pakistani and Bangladeshi and 3% from other ethnic groups.

In terms of their family's characteristics, about one quarter were in one-parent families and a tenth were in reconstituted families, i.e. with a step-child, step-mother or step-father. Eighty five per cent of the children in the survey had at least one parent who was working and 50% were in families assessed as being in Social Class I, II or III Non-manual.

Among children aged 5 -15 years, 5% had clinically significant conduct disorders; 4% were assessed as having emotional disorders - anxiety and depression - and 1% were rated as hyperactive. As their name suggests, the less common disorders (autistic disorders, tics and eating disorders)

Figure 3.1 Prevalence of any mental disorder by age and sex



were attributed to half a per cent of the sampled population. The overall rate of 10% includes some children who had more than one type of disorder.

These rates are based on the diagnostic criteria for research using the ICD-10 Classification of Mental and Behavioural Disorders with strict impairment criteria - the disorder causes distress to the child or has a considerable impact on the child's day to day life.

Sex and age

The proportion of children and adolescents with any mental disorder was greater among boys than girls: 11% compared with 8%. This disparity was evident in both younger and older children. Among 5-10 year olds, 10% of boys and 6% of girls had a mental disorder. In the older age group, the 11-15 year olds, the proportions of children with any mental disorder were 13% for boys and 10% for girls. (Figure 3.1)

Figure 3.2 Prevalence of emotional disorders by age and sex

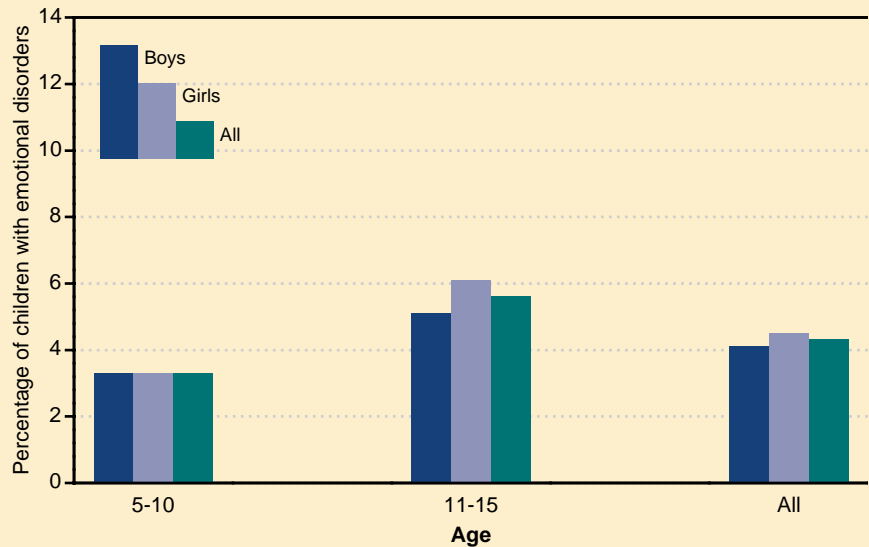
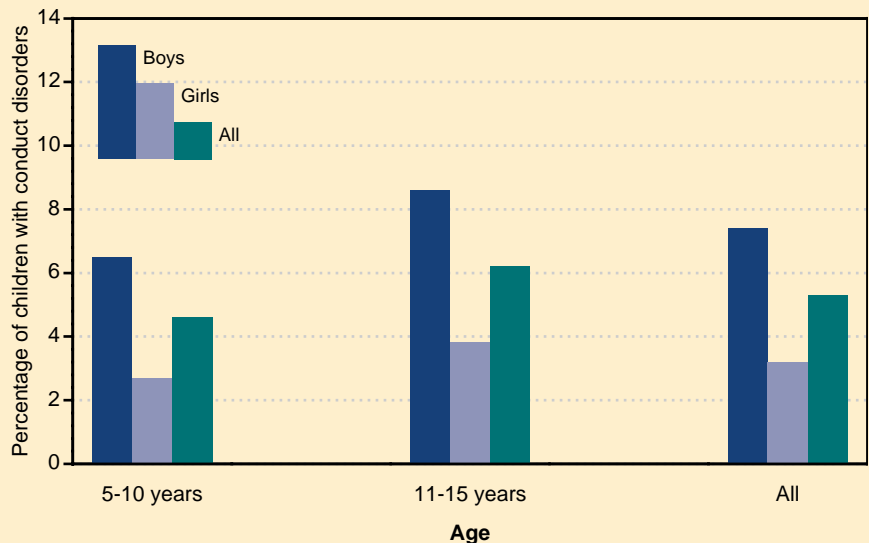


Figure 3.3 Prevalence of conduct disorders by age and sex



This pattern of age and sex differences was evident for both conduct and hyperkinetic disorders whereas the prevalence of emotional disorders showed hardly any difference by sex. (Figures 3.2 to 3.4)

Ethnicity

Nearly 10% of white children and 12% of black children were assessed as having a mental health problem whereas the prevalence rates among Asian children were 8% of the Pakistani and Bangladeshi and 4% of the Indian samples. (Figure 3.5)

Figure 3.4 Prevalence of hyperkinetic disorders by age and sex

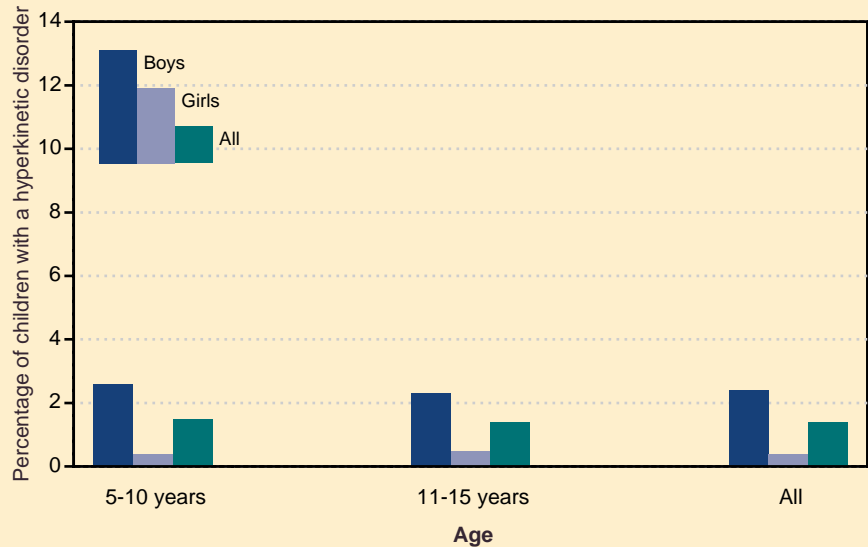
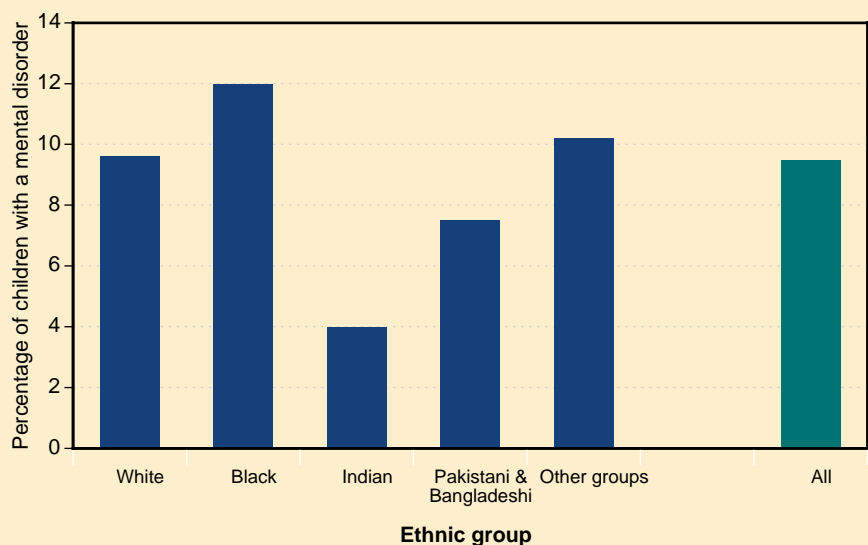


Figure 3.5 Prevalence of any mental disorder by ethnicity



4

Family characteristics

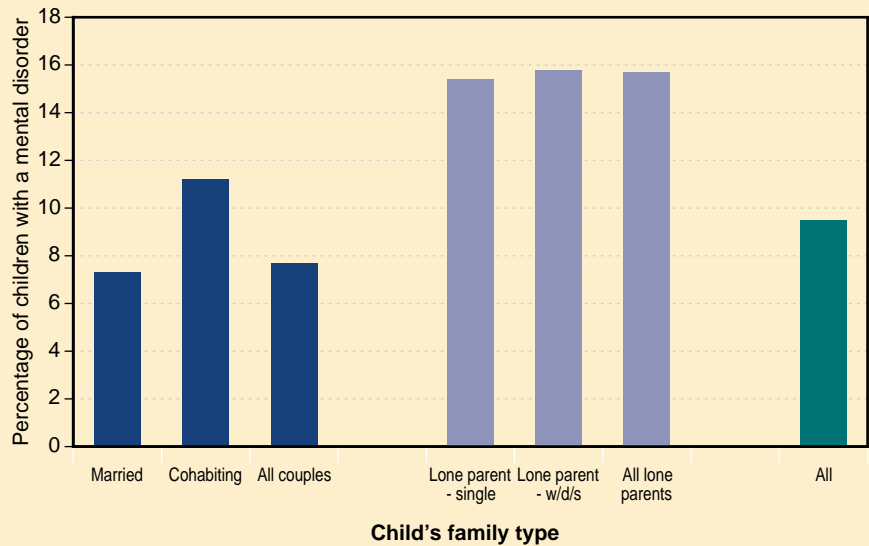
Family type and marital status

Children of lone parents were about twice as likely to have a mental health problem than those living with married or cohabiting couples: 16% compared with 8%. Within the sample of children of lone parents, the prevalence of mental disorders did not differ markedly by whether the lone parent was single or widowed, divorced or separated. As neither the stability of the relationship nor the length of the period of cohabitation were assessed, it is not possible to draw conclusions about cohabitation per se. (Figure 4.1)

Reconstituted families

The relationships between family members in the household were examined to see if any of the children were step-sons or step-daughters. This search was carried out for all children in the family not just the sample child. Thus, a family was regarded as reconstituted if a step-child was present. Overall, about 9% of the children in the survey lived in reconstituted families.

Figure 4.1 Prevalence of any mental disorder by family type



Mental disorders were more prevalent among children of reconstituted families than those without step children: 15% compared with 9%. *(No figure)*

Number of children in household

Among all the sampled children, those in two-children households had the lowest rate of mental disorder (8%) compared with those who were part of four- and five-children households - 13% and 18% respectively. *(Figure 4.2)*

Educational qualifications of parent

Among the 10,438 parents interviewed for the survey, 94% were the child's mother. Figure 4.3 shows a clear trend - the prevalence of mental disorders among children increases with a decrease in the educational level of the interviewed parent. Looking at the two extremes of the education level distribution, 15% of children of interviewed parents with no qualifications had a mental disorder compared with 6% of those whose parent had at least a degree level qualification. *(Figure 4.3)*

Figure 4.2 Prevalence of any mental disorder by number of children in household

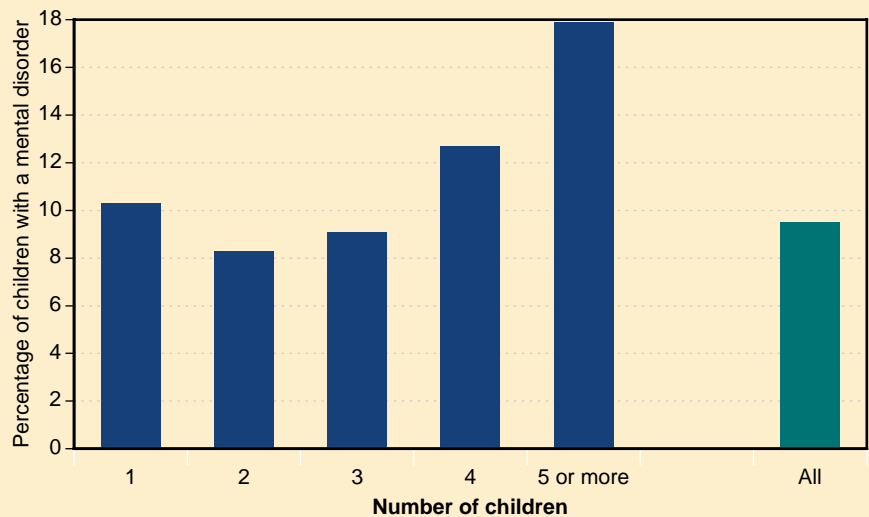
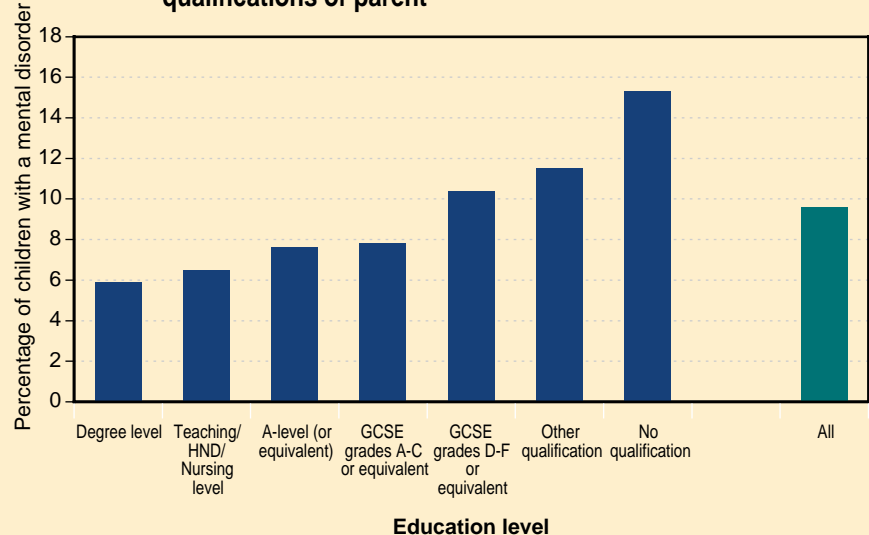


Figure 4.3 Prevalence of any mental disorder by educational qualifications of parent



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Household characteristics

Family's employment situation

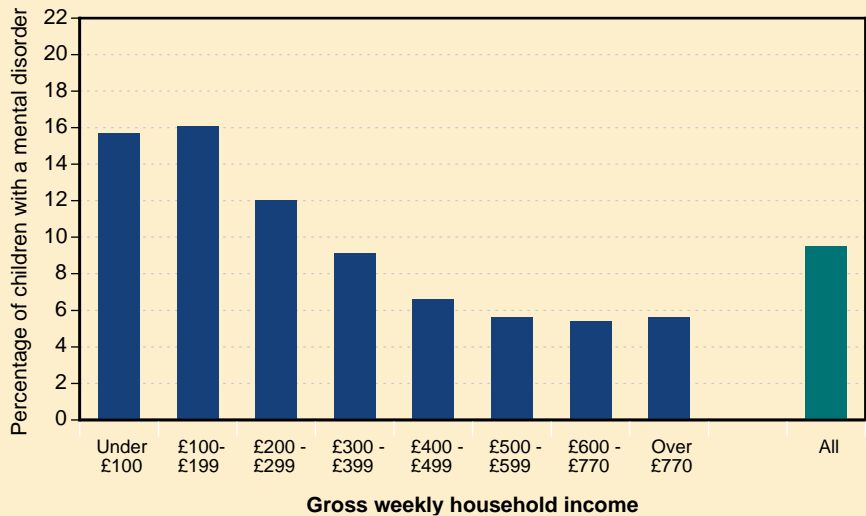
The family's employment situation seemed to be a major factor in understanding the differences in prevalence rates of mental disorders among children and adolescents. About one fifth of children in families without a working parent had a mental disorder, more than twice the proportion among children with at least one working member of the family: 20% compared with 8%.

(No Figure)

Household income

For most families, the majority of their income comes from paid work. Therefore, the relationship between mental disorders among children and household income to some extent reflects the association described above on the family's working situation. The prevalence of any psychiatric disorder ranged from 16% among children living in families with a gross weekly household income of under £100 to 9% among children of families

Figure 5.1 Prevalence of any mental disorder by gross weekly household income

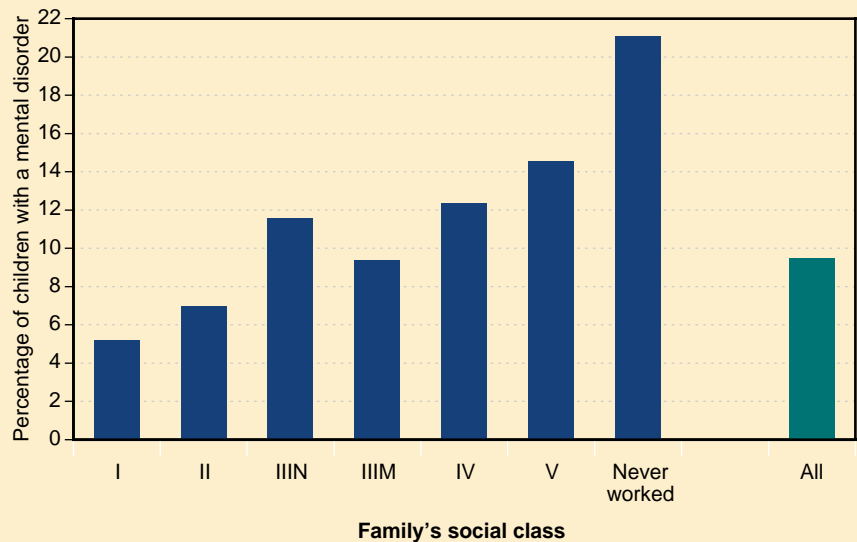


in the £300-399 weekly income bracket and around 6% in those families earning £500 per week or more. (Figure 5.1)

Social class

There were marked differences in the prevalence of mental disorders among children by social class (as measured by the occupation of head of household). Children of families in Social Class V (unskilled occupations) were approximately three times more likely to have a mental health problem than those in Social Class I (professionals): 14% compared with 5%, and about twice as likely as those in Social Class II (managerial and technical): 14% compared with 7%. (Figure 5.2)

Figure 5.2 Prevalence of any mental disorder by social class



Tenure

Just as there were clear social class differences in the prevalence of children and adolescents' mental health, so there was a marked difference between owner/occupiers and renters. The prevalence of any mental disorder rose from 6% among children in owner/occupier households to 13%

of those with parents in private rented accommodation to 17% of children of social sector tenants, i.e. renting from local authorities or housing associations. Thus, the principal difference in prevalence rates was between the owner/occupiers and those living in rented accommodation rather than between types of renter. *(No figure)*

Type of accommodation

The prevalence of mental disorders among children and adolescents by type of accommodation follow the pattern shown for social class, tenure and household income. The overall rate of mental disorder was highest among those living in terraced houses, flats and maisonettes, 12% and lowest among those in detached/semi-detached houses, 6% and 9% respectively. *(No figure)*

6

Regional and sub-regional characteristics

Country

There were no significant differences in the prevalence rates of any mental disorder or the three broad groups of mental health problems between England, Scotland and Wales nor between the metropolitan and non-metropolitan areas of England - rates ranged from 8% in Scotland to 11% in London. (*No Figure*)

This was an unexpected finding considering the variation in prevalence rates described above in terms of social class, tenure, type of accommodation and household income. The answer may lie in the fact that sociodemographic and socio-economic differences may be lost in the aggregated data. This suggests that ACORN (A Classification of Residential Neighbourhoods), a geodemographic classification, may be a better indicator of regional trends.

ACORN classification

ACORN is a geodemographic targeting classification, combining geographical and demographic characteristics to distinguish different types of people in different areas in Great Britain. Although the ACORN classification has various levels, 6 categories, 17 groups and 54 types, for the purposes of this report, the highest level, i.e. the six broad categories have been chosen for comparative analysis. The ACORN User Guide gives the following description of each category:

A Thriving

Wealthy achievers, suburban areas; affluent rural communities; prosperous pensioners, retirement areas.

B Expanding

Affluent executives, family areas; well-off workers, family areas.

C Rising

Affluent urbanites, town and city areas, prosperous professionals, metropolitan areas; better off executives, inner city areas.

D Settling

Comfortable middle agers, mature home owning areas; skilled workers, home owning areas.

E Aspiring

New home owners, mature communities; white collar workers, better-off multi-ethnic areas.

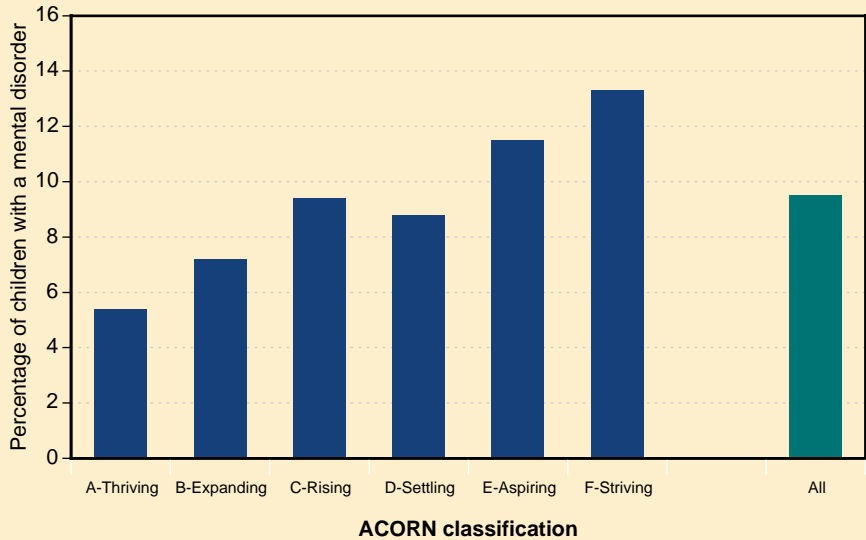
F Striving

Older people, less prosperous areas; council estate residents, better off homes; council estate residents, high unemployment; council estate residents, greater hardship, people in multi-ethnic, low-income areas.

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The highest proportion of children with any mental disorder was found among families living in areas classified as *striving*, 13%. This was about twice the rate associated with the *expanding* ACORN classification (7%) and two and a half times the proportion of those in the thriving category (5%). The overall trend of increased morbidity among children from *striving* to *thriving* families not unexpectedly, matches the social class, tenure and household income analysis described above. (Figure 6.1)

Figure 6.1 Prevalence of any mental disorder by ACORN classification



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Physical complaints

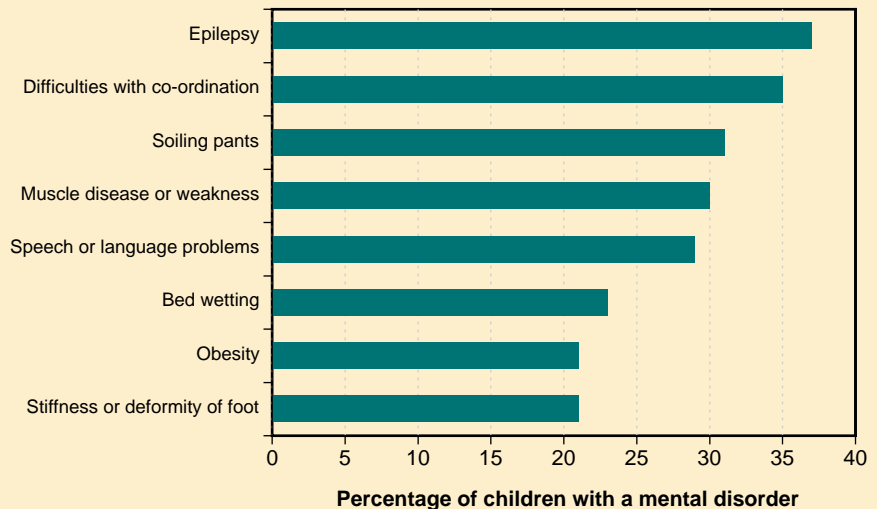
Particular physical disorders

Looking at the prevalence of mental disorders by particular physical complaints, children with neurological problems - epilepsy and co-ordination difficulties - were more frequently assessed as having a mental disorder. There were eight physical complaints where over 20% of sufferers had a mental disorder: epilepsy (37%), difficulties with co-ordination (35%), soiling pants (31%), muscle disease or weakness (30%), speech or language problems (29%), enuresis (23%) obesity (21%) and stiffness or deformity of foot.

(Figure 7.1)

Among children who had a life-threatening illness, about 1 in 6 were found to have a mental disorder. *(No figure)*

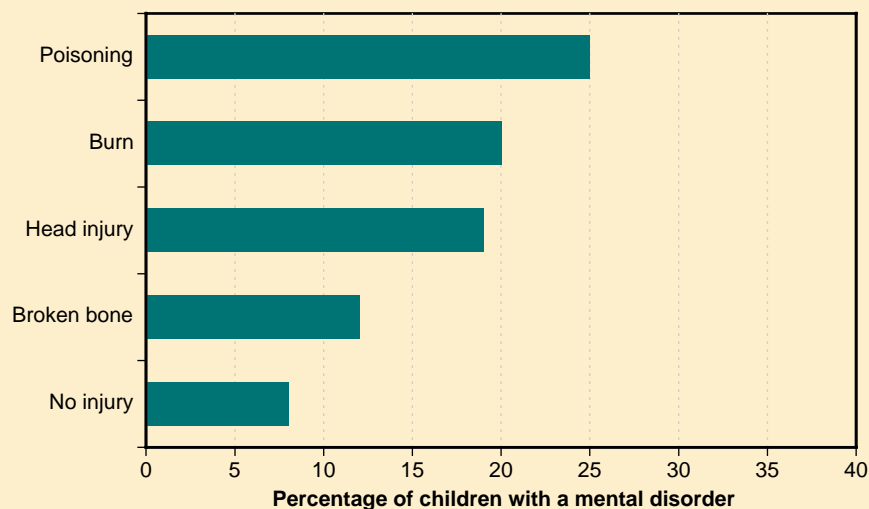
Figure 7.1 Prevalence of any mental disorder by type of physical complaint



Accidents and injuries

Higher rates of mental disorders were also found among children who had experienced accidents or injuries as well as among those with particular physical illnesses. Fourteen per cent of children who had any of four types of injury (broken bone, head injury, accidental poisoning or burn requiring hospitalisation) had a mental disorder compared with eight per cent of the sample with no disorder. Children who had accidental poisoning had the highest rate of mental disorder, 25%, whereas the prevalence among children who had a broken bone at 12% was just above the national average. (Figure 7.2)

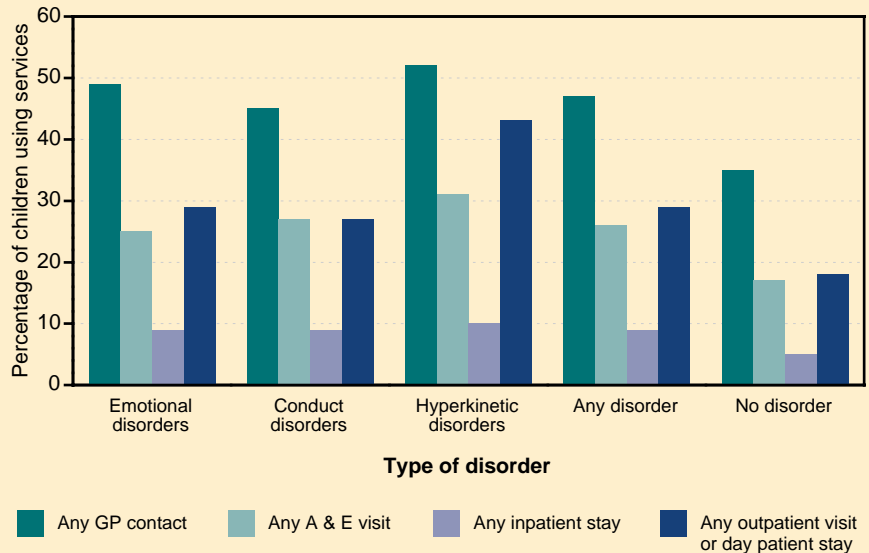
Figure 7.2 Prevalence of any mental disorder by type of accident or injury



GP contacts (for any reason)

Overall, 36% of children (or parents on behalf of their children) had been in contact with a GP in the past 12 months for any reason. Almost a half of the children with a disorder (assessed by the case vignette procedure in the survey) had been in contact with a GP in the past 12 months for any reason compared with just over a third of children with no disorder. The survey did not include questions on reason for consultation. There was little difference in GP contacts by type of disorder, with proportions ranging from 45% among children with conduct disorder to 52% of those with hyperkinetic disorders. (Figure 8.1)

Figure 8.1 Use of services (for any reason) by type mental disorder



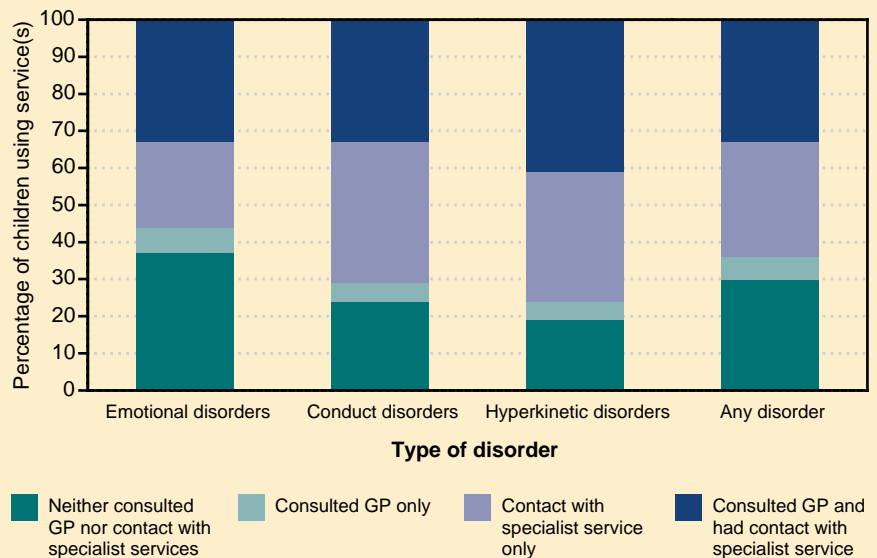
Accident and Emergency departments (for any reason)

Just under a fifth of children (18%) had visited an Accident and Emergency department in the past 12 months and most children needed to go on one occasion only. Children with a mental disorder were more likely to have been taken to an Accident and Emergency department than those without a disorder (26% compared with 17%). Children with a hyperkinetic disorder were almost twice as likely as those with no mental disorder to have visited an Accident and Emergency department in the last year: 31% compared with 17%. (Figure 8.1)

Inpatient stays (for any reason)

Inpatient stays were rare events for children aged 5-15 years. Only 5% had been in hospital in the past year. Inpatient stays were slightly more common among children with a mental disorder than those without a disorder: 9% compared with 5%. (Figure 8.1)

Figure 8.2 Contact with services by type of mental disorder



Outpatient or day patients (for any reason)

About 1 in 5 children had been to a hospital as an outpatient or as a day patient in the past year. These visits were in addition to the attendance at Casualty departments. Children with a mental disorder were more likely than other children to have visited an Outpatient department in the past year: 29% compared

with 18% and children with hyperkinetic disorders were the most frequent visitors. *(Figure 8.1)*

Use of services for significant mental health problems

Overall, 30% of children with mental disorder had not been seen by a GP or secondary health care services for children. Of the children

who had contacted services, most had seen a secondary service provider. *(Figure 8.2)*

Contact with services varied by type of disorder: 63% of children with any emotional disorder (that is, anxiety and depression) had been in contact with services increasing to about 76% of children with conduct disorders and to 81% of those with hyperkinetic disorders. *(Figure 8.2)*

9

Scholastic ability and education

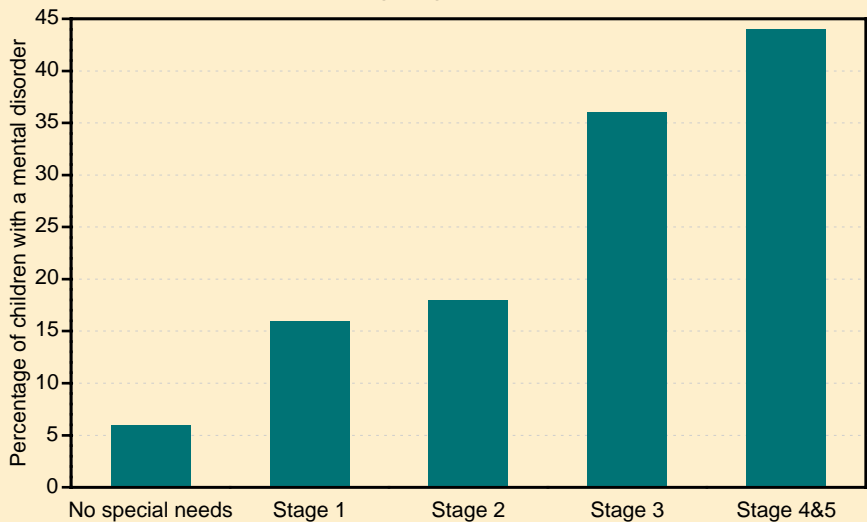
Special Educational Needs (SEN)

Teachers were asked whether the child had any officially recognised special needs, and if so, to rate the level of special needs according to the five recognised stages:

- Stage 1 - Class teacher or form/year tutor has overall responsibility
- Stage 2 - SEN co-ordinator takes the lead in co-ordinating provision and drawing up individual educational plans
- Stage 3 - External specialist support enlisted
- Stage 4 - Statutory assessment by Local Education Authority (LEA)
- Stage 5 - SEN Statement issued by LEA

Figure 9.1 presents data which allows the comparison of prevalence rates of mental disorders among children at different stages of officially recognised special educational

Figure 9.1 Prevalence of any mental disorder by level of special educational needs (SEN)



needs and with children with no special educational needs. The prevalence rate of mental disorders ranged from 6% among children who did not have special educational needs to 44% among children who were at stages 4 & 5 of the special needs scale.

(Figure 9.1)

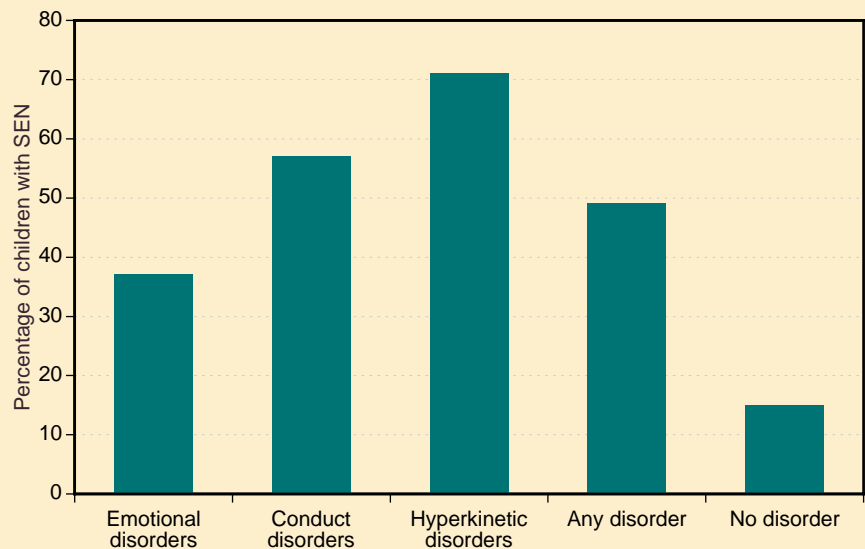
Whereas, about 1 in 5 children had officially recognised special educational needs, those with a disorder were three times more likely than other children to have special needs: 49% compared with 15%. The proportion of children with special educational needs also varied greatly by type of disorder. Children with a hyperkinetic disorder were twice as likely as those with an emotional disorder to have special educational needs 71% compared with 37%.

(Figure 9.2)

Specific learning difficulties (SpLD)

Among children with SpLD, 22% had any mental disorder. In terms of the broad groups of disorders 13% had conduct disorders, 9% emotional disorders and 5% had a hyperkinetic disorder. (No Figure)

Figure 9.2 Special Educational Needs (SEN) by type of mental disorder



Another way of examining these data is to look at the prevalence of SpLD among children with specific mental disorders. Given that the rate of specific learning difficulties (SpLD) was set at 5%, children with a mental disorder were three times more likely than those with no disorder to have SpLD: 12% compared with 4%. There was little difference in the proportions of children with SpLD by type of disorder. (Figure 9.3)

Absenteeism from school

Children with a disorder were about twice as likely as other children to have been absent from school for 11 days or more: 19% compared with 8%. There was some variation between the proportions of children who had been absent from school by type of disorder: 25% of children with emotional disorders had been absent from school for 11 days or more compared with 21% of children with conduct disorders and 14% with hyperkinetic disorders. (Figure 9.4)

Figure 9.3 Specific Learning Difficulties (SpLD) by type of mental disorder

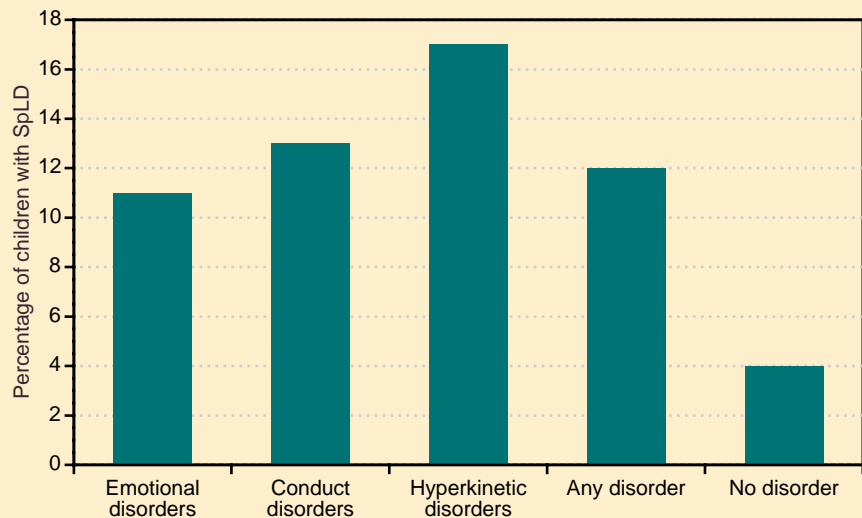
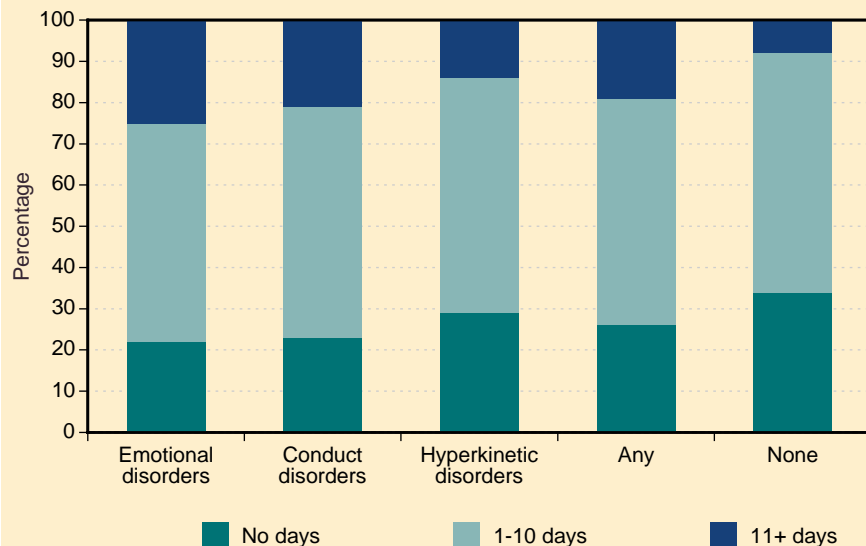


Figure 9.4 Absenteeism from school by type of mental disorder



Parent's mental health

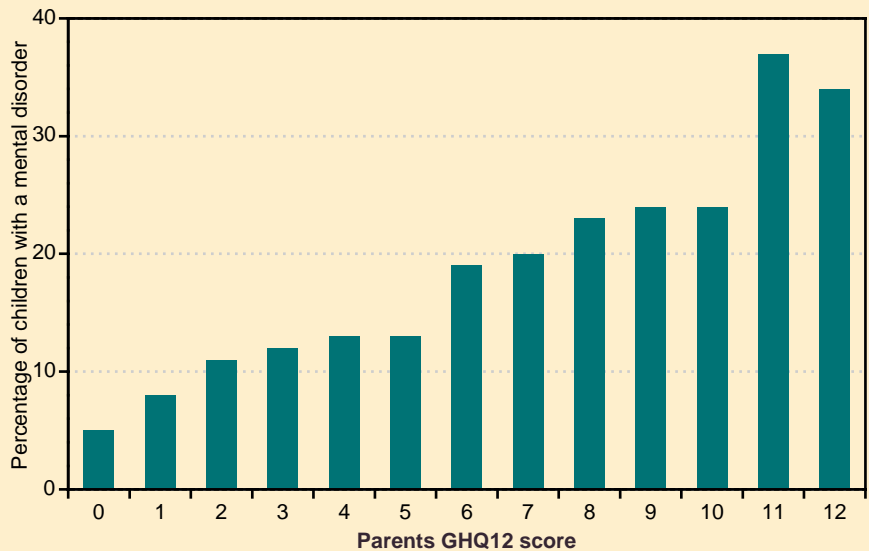
The association between the child's and the interviewed parent's mental health status can be seen most clearly in Figure 10.1. It shows that the proportion of children with mental disorders increased steadily by GHQ12 (12-item General Health Questionnaire) score increased. The minimum prevalence rate of any mental disorder was 5% among children whose parents scored zero. The maximum rate was 37% among children with parents who scored 11. (*Figure 10.1*)

In summary, children with parents who screened positive on the GHQ12 were three times more likely to have a mental disorder than those whose parents had sub-threshold scores -18% compared with 6%. (*No figure*)

Family functioning

Although the overall prevalence of mental disorders among children and adolescents was 10%, the rate

Figure 10.1 Prevalence of any mental disorder by parent's GHQ12 score



among children in well functioning families was 7% compared with 18% among poorly functioning families, as measured by the MacMasters Family Functioning Scale - General Activity Device.

(No figure)

Children with a mental disorder were about twice as likely to be part of discordant families than children with no disorder: 35% compared with 19%. Among children assessed as having a conduct disorder, 43% were part of a family with a high level of family discord. *(Figure 10.2)*

Stressful life events

Many children experienced more than one stressful event in the course of their lives. Among all the children in the sample, about a third had never had a stressful life event, a third had experienced one event and around a third had to cope with two or more stressful events. Although children with a mental disorder were more likely than other children to have had one stressful life event: 82% compared with 70%, they were far more likely to have experienced three or more events: 31% compared with 13%. The proportion of children who had had several stressful life events

Figure 10.2 Family functioning (FAD-GFS) by type of mental disorder

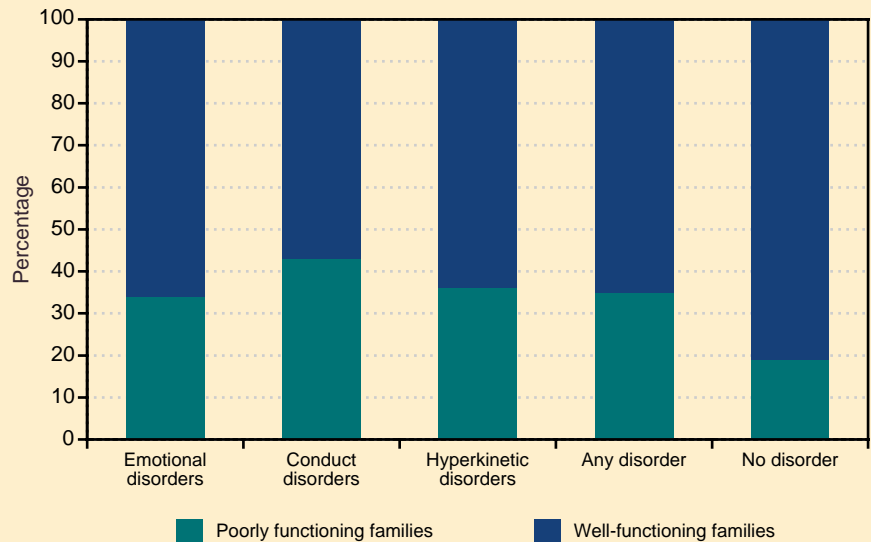
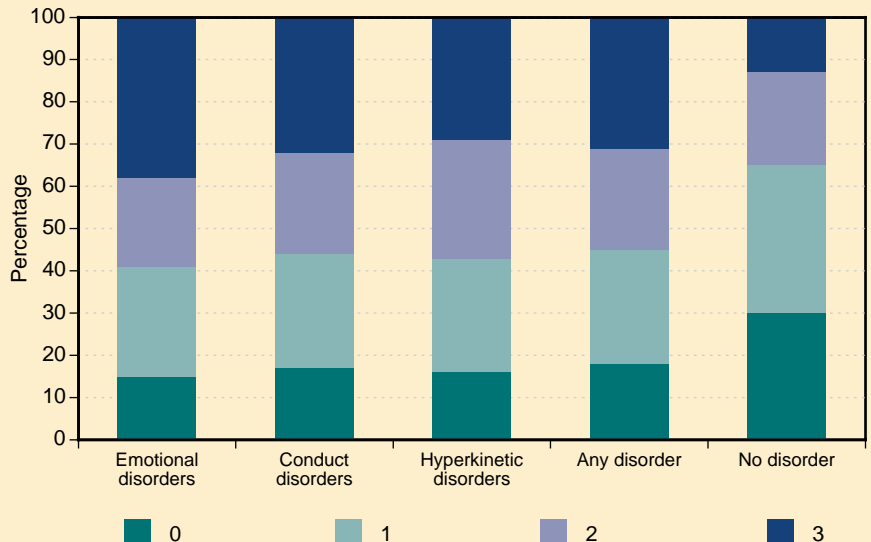


Figure 10.3 Number of stressful life events by type of mental disorder



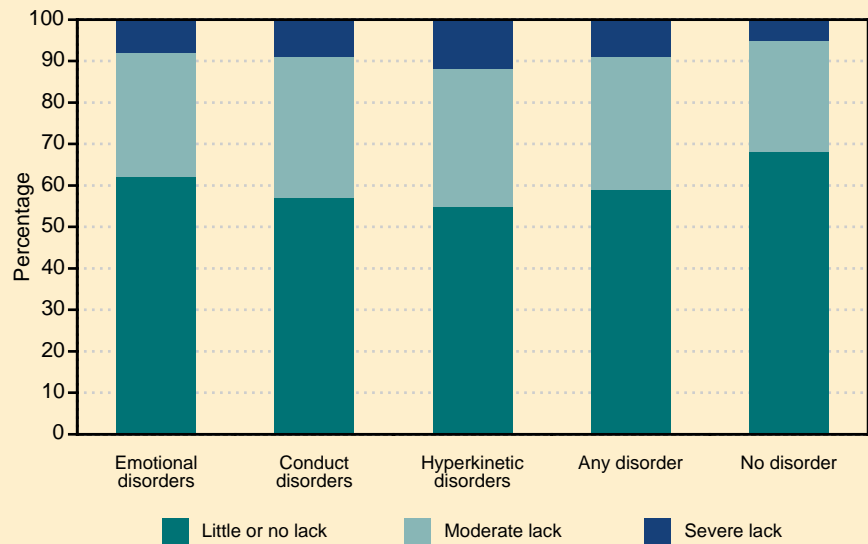
was very similar for those with emotional, behavioural and hyperkinetic disorders. (Figure 10.3)

Friendships

An overall friendship score was computed by allocating a score of one to the more positive responses and zero to the negative answers to the friendship questions. Thus children with no friends scored zero and those who; (a) had a best friend (b) spent some or all of their spare time with friends (c) frequently had friends visiting them in their home (d) went round to their friends home some or all of the time (e) confided in their friends and (f) were club members, scored six.

Across the whole population of 11-15 year olds, just 6% had a severe lack of friendship (a score of 0 - 2). However, this proportion was greater among those with mental disorders than those with no disorder: 9% compared with 5%. The group containing the largest proportion with severe lack of friendship, 12%, were children assessed as being hyperkinetic. (Figure 10.4)

Figure 10.4 Lack of friendship by type of mental disorder





The mental health of children and adolescents in Great Britain

Summary report

Requests for further information about the survey should be made to:

Howard Meltzer
Social Survey Division
DI/22, 1 Drummond Gate
London SW1V 2QQ

tel: 020 7533 5391

fax: 020 7533 5300

e-mail: howard.meltzer@ons.gov.uk

Copies of this report are also available from:

Howard Meltzer