

## Mental Health of Children and Young People in England, 2017

## **Behavioural disorders**

This topic report presents the prevalence of behavioural disorders in 5 to 19 year olds in England and the characteristics of children and young people with a behavioural disorder. The Development and Well-Being Assessment (DAWBA) tool was used to assess for a range of behavioural (or 'conduct') disorders.

About one in twenty (4.6%) 5 to 19 year olds had a behavioural disorder. Rates were higher in boys (5.8%) than girls (3.4%). Oppositional defiant disorder was the most common type, present in 2.9% of children.



Source: NHS Digital

Authors: Dhriti Mandalia, Katharine Sadler, Tim Vizard, Tamsin Ford, Anna Goodman, Robert Goodman, Sally McManus Responsible Statistician: Dan Collinson, Community and Mental Health Published 22 November 2018

# www.digital.nhs.uk

Copyright © 2018 Health and Social Care Information Centre. The Health and Social Care Information Centre is a non-departmental body created by statute, also know n as NHS Digital.

### Main findings

#### **Prevalence of behavioural disorders**

About one in twenty (4.6%) 5 to 19 year olds had a behavioural disorder. Rates were higher in boys (5.8%) than girls (3.4%). 5 to 16 year olds were more likely to be identified with a behavioural disorder than those aged 17 to 19.

Oppositional defiant disorder (ODD) was the most common type of behavioural disorder, present in 2.9% of 5 to 19 year olds. Other types all had a prevalence of less than one child in a hundred.

#### Characteristics of 5 to 19 year olds with a behavioural disorder

- Demographics: Alongside variation by age and sex, the prevalence of behavioural disorders varied between ethnic groups. Rates were highest in White British children (5.7%) and lowest in those who were Black/Black British (0.7%) or Asian/Asian British (0.8%).
- Educational needs: About one in four (23.1%) children with a recognised special educational need had a behavioural disorder. The survey did not establish whether the special educational need related to the disorder, but it is possible this was often the case.
- Health and family: Children with poor general health and those living with a
  parent with poor mental health or a parent in receipt of disability-related benefits
  were more likely to have a behavioural disorder than other children. Behavioural
  disorders were also more common among children living in households with less
  healthy family functioning.
- **Socioeconomics:** Children living in the most deprived neighbourhoods, in low income households, or with a parent in receipt of income-related benefits were more likely than other children to have a behavioural disorder.

## Contents

Main findings	2				
Acknowledgements	5				
Introduction					
Background	7				
Terminology	8				
Prevalence of behavioural disorders	9				
Behavioural disorders by age and sex	9				
Specific behavioural disorders by age and sex	9				
Children with a behavioural disorder	10				
Behavioural disorders by ethnic group	10				
Behavioural disorders by special educational needs	11				
Behavioural disorders by child's general health	12				
Behavioural disorders by parent's mental health	13				
Behavioural disorders by family functioning	14				
Behavioural disorders by household income	15				
Behavioural disorders by benefits	16				
Behavioural disorders by neighbourhood deprivation	17				
Behavioural disorders by region	18				
Trends in behavioural disorders in 5 to 15 year olds, 1999-2017	18				
Discussion	19				
Methods	21				
Definitions	23				
References	27				

## This is an Official Statistics publication



This document is published by NHS Digital, part of the Government Statistical Service.

All official statistics should comply with the UK Statistics Authority's Code of Practice for Official Statistics which promotes the production and dissemination of official statistics that inform decision making.

Find out more about the Code of Practice for Official Statistics at <a href="https://www.statisticsauthority.gov.uk/code-of-practice/">https://www.statisticsauthority.gov.uk/code-of-practice/</a>

This report may be of interest to people working with children and young people in mental health, social care or educational settings, as well as to policy officials, commissioners of health and care services, and parents, young people and the general public. The prevalence of behavioural disorders in 5 to 19 year olds and a profile of the children and young people most likely to be affected, are presented.

## **Acknowledgements**

First of all, we thank all the children, young people, parents and teachers who so generously gave their time to participate in this survey.

Running a national survey relies on the expertise of many people. We thank the professional and committed interviewers, operations department, computing, statistical, and survey and data management staff based at the National Centre for Social Research (NatCen) and the Office for National Statistics (ONS).

In NatCen, we would like to thank Franziska Marcheselli, Si Ning Yeoh, Laura Brown, Nikki Leftly, Helen Henderson, Emma Fenn, Susan Corbett, Matt Jonas, Sally Bridges, Rachel Craig, Richard Boreham and Gillian Prior.

In the ONS, this survey would not have taken place without the work of Ellie Brodie, Nicola Pearce, Nick Forbes, Jodie Davis, Charlotte Guinee, Steve Maurice, Simon Robinson, Mark Rowland, Adam White, Alexandra Pop, Salah Merad and Dean Fletcher.

We are also indebted to team of ONS and NatCen interviewers who spent countless hours interviewing participants who took part in this survey.

Clinical raters undertook the enormous task of reviewing information on all the children and young people who took part. From the University of Exeter College of Medicine and Health these included Carmen Apostu, Pamela Bowman, Tamsin Newlove-Delgado, Oana Mitrofan and Eva Wooding. From Kings College London: Sophie Epstein, Andrew McWilliams, Helena Hamilton, Christine Kuhn. Thanks to Bruce Clark and the Body Dysmorphic Disorder team from South London and Maudsley Hospital for independently rating the BDD diagnoses.

The survey benefited from an expert steering group, we would like to thank Miranda Wolpert, Peter Fonagy, Catherine Newsome, Lucy Heyes, Helen Duncan, Jessica Sharp, David Lockwood, Jeremy Clark, Alexandra Lazaro and Nilum Patel.

NHS Digital commissioned the survey series with funding from the Department of Health and Social Care. We are particularly grateful to Dan Collinson, Alison Neave, Steven Webster, Jane Town, Ben Osborne and Kate Croft for their thoughtful engagement throughout.

## Introduction

Major surveys of the mental health of children and young people in England were carried out in 1999 (Meltzer et al., 2000), 2004 (Green et al., 2005), and 2017. The latest survey was funded by the Department of Health and Social Care, commissioned by NHS Digital, and carried out by the National Centre for Social Research, the Office for National Statistics and Youth*in*mind.

In each of the three surveys, the Development and Well-Being Assessment (DAWBA) was administered to a stratified probability sample of children and young people and their parents and teachers (Goodman et al., 2000). Cases were reviewed by clinically-trained raters. While many surveys use brief tools to screen for nonspecific psychiatric distress or dissatisfaction, this series applied rigorous, detailed and consistent methods to assess for a range of different types of disorder according to International Classification of Disease (ICD-10) diagnostic criteria (WHO, 1992). Comparable data is available for 5 to 15 year olds living in England in 1999, 2004, and 2017. In keeping with broadening definitions of adolescence (Sawyer et al., 2018), the 2017 sample was the first in the series to include 17 to 19 year olds, as well as 2 to 4 year olds. Behavioural (or conduct) disorders were one of the types of child mental health conditions assessed on the survey. Information on the prevalence of behavioural disorders in 2 to 4 year olds can be found in the Preschool Children topic report.

This topic report examines the:

- Prevalence of any behavioural disorder and of specific types of behavioural disorder in 5 to 19 year olds, by age and sex.
- Health, social, and economic characteristics of children and young people with a behavioural disorder, compared to those without.

As well as a Summary Report, a series of other topic reports are available focusing on:

- Trends and characteristics
- Emotional disorders
- Hyperactivity disorders
- Autism spectrum, eating and other less common disorders
- Predictors of mental disorders (to be released at a later date)
- Multiple conditions and wellbeing
- Professional services, informal support, and education
- Behaviours, lifestyles, and identities
- Preschool children.

Further information about the survey and methods can be found in the Methods and Definitions sections at the end of this report, as well as in the Survey Design and Methods Report. All reports available at: <u>https://digital.nhs.uk/pubs/mhcypsurvey17</u>.

## Background

Behavioural disorders are the most common reason for referral of children and young people to child and adolescent mental health services (CAMHS) (National Institute for Health and Clinical Excellence, NICE 2013). The long term societal costs of severe behavioural problems are estimated to be in the region of £260,000 per child (Parsonage et al., 2014). The NICE guidelines (2013) outline early intervention strategies as preventative measures in alleviating the damaging effects conduct disorders could have in later life.

Behavioural disorders are generally only diagnosed in children and young people. They are characterised by repetitive and persistent patterns of disruptive and antisocial behaviour in which the rights of others and social norms or rules are violated (Pisano et al., 2017). Their presence in childhood is required for certain adult psychiatric diagnoses, such as antisocial personality disorder.

Different subcategories of behavioural disorder were examined in the survey. Typical symptoms vary by disorder type. While some of these symptoms may be present in many children, to count as a disorder they have to be sufficiently severe to cause distress to the child or impair their functioning:

• **Oppositional defiant disorder** (ODD): is characterised by temper outbursts, arguing with adults, disobedience, deliberately annoying others, passing on blame, being easily annoyed, resentful, spiteful and vindictive. The behaviour is severe and frequent enough to have caused complaints from parents and teachers. It is one of the most common clinical diagnoses in children and adolescents (Theule et al., 2016). Prevalence estimates around the world vary, and include 6.5% of adolescents aged 13 to 18 years in the United States (Merikangas et al., 2010).

Unsocialised and socialised conduct disorders have been found to be less common than ODD in other studies with, for example, an estimated prevalence among 13 to 18 year olds in the United States of 2.2%. Their behavioural symptoms are considered more severe than ODD (Merikangas et al., 2010). Typical behaviour includes telling lies, fighting, bullying, staying out late, running away from home, playing truant, being cruel to people or animals, and criminal behaviour such as robbery, rape, and using weapons. This type of behaviour would often have resulted in complaints from school staff or contact with the police, although there is an unusual form of this disorder where challenging behaviour is only manifest in the home environment (conduct disorder confined to the family).

- **Socialised conduct disorder**: the young person has friends (though usually antisocial friends). They may engage in antisocial behaviours such as shoplifting or stealing cars together
- Unsocialised conduct disorder: the young person lacks real friends and typically engages in solitary antisocial activities. These are the opposite ends of a spectrum, so dividing conduct disorder into these two categories is somewhat arbitrary.

A diagnosis of conduct disorder may follow a prior diagnosis of ODD (American Psychiatric Association, 2013). Conduct disorder and ODD in childhood has been found to predict the subsequent development of antisocial personality disorder, substance-related disorders, mood and anxiety disorders, and higher accident rates in adulthood (Theule et al., 2016). Conduct disorder and ODD are often comorbid with attention-deficit/hyperactivity disorder (ADHD) (Loeber et al., 2000). For examination of comorbidity, see the Multiple Conditions and Wellbeing topic report.

## **Terminology**

In this report, the words 'children', 'boys', and 'girls' are used, even when 17 to 19 year olds are included in the group. This is to avoid the text becoming cumbersome.

The term 'mental disorder' is also used, although we are mindful of the negative connotations this word can have. It is used because the survey did not screen for general mental health problems, but applied operationalised diagnostic criteria for specific behaviour disorders (see the Survey Design and Methods Report for detail).

## Prevalence of behavioural disorders

### Behavioural disorders by age and sex

About one in twenty (4.6%) 5 to 19 year olds were identified with a behavioural disorder. It is likely that if all children in the population had participated, the proportion identified with a behavioural disorder would have been between 4.1% and 5.2%. This range is referred to as the 95% confidence interval (CI). If the sample had been drawn twenty times, for nineteen of those we would expect the estimate to be in this range.<sup>1</sup> Behavioural disorders were more common in boys (5.8%) than girls (3.4%). Rates varied by age group, and were higher in children aged 5 to 10 (5.0%) and 11 to 16 (6.2%) than in 17 to 19 year olds (0.8%). (Figure 1; Table 1)

#### Figure 1: Any behavioural disorder by age and sex, 2017



### Specific behavioural disorders by age and sex

Of the different types of behavioural disorder assessed, ODD (characterised by temper outbursts and arguing with adults) was the most common. ODD was present in 2.9% of 5 to 19 year olds, and was more common in boys (3.6%) than girls (2.2%).

<sup>&</sup>lt;sup>1</sup> See the Methods section of this report and the Survey Design and Methods Report for further confidence interval information for the estimates presented in this report.

All the other types of behavioural disorder identified were less prevalent than ODD. Socialised conduct disorder (0.7%), unsocialised conduct disorder (0.4%), conduct disorder confined to the family (0.1%), and other types of conduct disorder (0.5%): each had a prevalence of less than one child in a hundred. Due to sample size limitations prevalence estimates for these disorders are likely to be imprecise.

In general, the different types of behavioural disorder tended to be more common in children aged 5 to 16 than in those aged 17 to 19. (Table 1)

## Children and young people with a behavioural disorder

The prevalence of any behavioural disorder was examined by a range of different social, economic, and health-related characteristics, to produce a profile of children and young people affected.

#### Behavioural disorders by ethnic group

The prevalence of behavioural disorders in 5 to 19 year olds varied between ethnic groups. Rates were highest in White British children (5.7%) and lowest in those who were Black/Black British (0.7%) or Asian/Asian British (0.8%). (Figure 2; Table 2). The pattern of association between ethnic group and behavioural disorder was similar for boys and girls.



Base: 5 to 19 year olds

Per cent



### Behavioural disorders by special educational needs

Nearly one in four (23.1%) children with a recognised special educational need had a behavioural disorder, compared with one in thirty (3.3%) children without a special educational need. 13.4% of children with special educational needs were identified with ODD; 3.2% with socialised conduct disorder; 1.9% with unsocialised conduct disorder; 0.1% with conduct disorder confined to the family; and 4.5% with another conduct disorder. (Figure 3; Table 3)



The survey did not establish whether the special educational needs that were recognised related directly to the disorder itself, but it is likely that this would sometimes have been the case. The kinds of disorders that can make it harder to cope in a school environment, like behavioural disorders, may be particularly likely to be recognised as special educational needs.

## Behavioural disorders by child's general health

There was a relationship between children's general health and whether they had a behavioural disorder. One in ten (10.1%) children with fair, bad or very bad general health had a behavioural disorder, compared with 3.1% of those with very good general health. The pattern of association was similar for boys and girls. (Figure 4)

This pattern was also evident among children with ODD (6.0% of those with fair, bad or very bad general health compared with 2.2% of those in very good general health). Similar differences were evident for socialised and unsocialised conduct disorders, and for other conduct disorders. (Table 4)



It should be noted that when children, young people and their parents assessed general health they are likely to have considered both the child's mental health and their physical health.

### Behavioural disorders by parent's mental health

Parental mental health, as assessed by the General Health Questionnaire (GHQ-12), was associated with whether a child had a behavioural disorder. Scores range from 0 (no psychological distress) to 12 (severe psychological distress). A score of 4 or more is indicative of the presence of a common mental disorder like anxiety or depression. Children whose parents had a high GHQ-12 score (9 to 12) were more likely to meet the criteria for a behavioural disorder than children whose parents had a low GHQ-12 score (0 to 2) (16.8% and 3.5% respectively). (Figure 5)

A similar pattern was observed for some of the specific behavioural disorders. For example, parental mental illness was associated with higher rates of ODD in children. 9.3% of children with a parent scoring 9 to 12 on the GHQ-12 had ODD compared with 2.4% of children with a score of 0 to 2. (Table 5)

## Figure 5: Any behavioural disorder by parent's mental health, 2017

Base: 5 to 19 year olds

Per cent



## Behavioural disorders by family functioning

Behavioural disorders were more prevalent in 5 to 19 year olds living in families with unhealthy family functioning (as indicated by a family function score of 2.01 or more). The rates of behavioural disorder ranged from 3.1% of children living in families with the healthiest functioning (a score of up to 1.50) to 18.2% of children living in families with the least healthy functioning (a score of 2.51 or more). (Figure 6)

This pattern was also seen for some of the specific behavioural disorders, such as ODD. (Table 6)

## Figure 6: Any behavioural disorder by family functioning score, 2017

Base: 5 to 19 year olds

As a cross-sectional survey, these associations cannot explain causality. While problems with family functioning or poor parental mental health may contribute to the onset of behavioural disorders, the presence of behavioural disorders could also lead to problems with family functioning and lead to deterioration in parental mental health.

See the Definitions section at the end of this topic report for details of how family functioning was assessed.

## Behavioural disorders by household income

Equivalised household income was associated with the presence of a behavioural disorder. 6.1% of children in the lowest income quintile had a behavioural disorder, compared with 1.7% of children in the highest income households.<sup>2</sup> (Figure 7)

This pattern was evident in some of the specific behavioural disorders. For example, ODD was present in 3.6% of children living in households in the lowest income quintile, and 1.0% of children in the highest quintile. A similar association with income was present for socialised conduct disorder and other conduct disorders. (Table 7)

## Figure 7: Any behavioural disorder by equivalised household income quintiles, 2017

#### Per cent

Base: 5 to 19 year olds

<sup>&</sup>lt;sup>2</sup> Although the rate for the fourth income quintile appears to be higher than that for the fifth (lowest) quintile, this was not significantly different.

### Behavioural disorders by benefits

The rate of behavioural disorder was higher in children whose parents received a low income benefit (8.2%) compared with children whose parents did not (3.6%). (Figure 8)

Among specific types of behavioural disorder, this pattern was also evident. For example, 5.0% of children living with a parent in receipt of income-related benefits had ODD, compared with 2.4% of children without such a parent.

Similarly, 14.9% of children living with a parent in receipt of disability benefits had a behavioural disorder, compared with 3.7% of children whose parents did not receive such benefits. (Figure 8)

A related pattern was observed for specific types of behavioural disorder. For example, the prevalence of ODD in children with a parent who received disability benefits was 9.3%, compared with 2.4% of other children. This pattern was also evident for unsocialised conduct disorder, socialised conduct disorder, and other conduct disorder. (Table 8)



### Behavioural disorders by neighbourhood deprivation

The prevalence of behavioural disorders was associated with neighbourhood-level deprivation. 5.8% of children living in the most deprived index of multiple deprivation (IMD) quintile had a behavioural disorder, compared with 3.1% of children living in the least deprived quintile. (Figure 9)

The prevalence of socialised conduct disorder was also associated with neighbourhood deprivation and was highest in the most deprived quintile (1.2%) and lowest in the least deprived quintile (0.3%). No significant variations were observed for the other specific types of behavioural disorder. (Table 9)

## Figure 9: Any behavioural disorder by index of multiple deprivation, 2017



Base: 5 to 19 year olds

Per cent

### Behavioural disorders by region

The proportion of children with a behavioural disorder varied with region. Rates were lowest in London (1.7%) and highest in the East of England (6.5%). This pattern was also evident for rates of ODD, which ranged from 1.0% in London to 4.9% in the East of England. (Figure 10; Table 10)





Source: NHS Digital

## Trends in behavioural disorders in 5 to 15 year olds, 1999-2017

The prevalence of any behavioural disorder in 5 to 15 year olds remained stable over time. This stability was evident both in boys and girls; and in younger (5 to 10 year olds) and older age groups (11 to 15 year olds).

For further information about trends in behavioural disorders see the Trends and Characteristics topic report.

## Discussion

Behavioural disorders have long been regarded as the most common form of mental health problem in childhood (Theule et al., 2016). That may no longer be the case, given that the prevalence of emotional disorders and behavioural disorders are now similar in 5 to 15 year olds in England. This equalising, however, stems more from an increase in emotional disorder prevalence rather than a reduction in behavioural disorder.

Over the last decade there have been falls among children in the prevalence of several types of antisocial and illicit behaviour. This includes declining rates of smoking (NHS Digital, 2017a), alcohol consumption (NHS Digital, 2017b), and violence (Youth Justice Statistics, 2015/16). Children now spend more time in school and more time with their parents (Nuffield Trust, 2014). Some of these changes in behaviour have been more evident in boys than girls, and provide an interesting context for understanding trends in behavioural disorder.

Certain groups of children are more likely than others to have a behavioural disorder. Boys remain more likely than girls, and rates peaked in 11 to 16 year olds and were lowest in those aged 17 to 19. Caution, however, is needed with interpretation of the tail off in rates in this older age group. A diagnosis of behavioural disorder ideally needs evidence of impairment in different settings: and valid reports of this are easier to achieve with parent and/or teacher reports. Teacher reports were not obtained for any 17 to 19 year olds on the survey, and about half of 17 to 19 year olds did not have a responding parent. Given non-compliance is an aspect of behavioural disorder, it is likely that survey non-response will also be higher in this group. Another feature of this analysis also impacts on the ability to compare 5 to 16 year old participants with those aged 17 to 19: prevalence in the younger group was uprated with a small adjustment factor (1.06) that took account of the fact that some in this age group did not have a teacher report. Adjustment factors – their rationale, calculation, and impact – are discussed more fully in the Survey Design and Methods Report.

Behavioural disorder rates varied with socioeconomic context. Children living in the lowest income households were three times more likely than the most affluent children to have a behavioural disorder. Higher rates were also found for those living in the most deprived neighbourhoods. These patterns were evident too in the previous survey.

The previous survey also found behavioural disorders to be linked with ethnicity, and more prevalent in White British children than in those who were Asian/Asian British. The current survey, however, now finds that children who are Black/Black British also have lower rates of behavioural disorder than their White British counterparts. Given differences in the ethnicity of populations in different areas, this may be a factor in the lower rate of behavioural disorders for London as a whole.

Behavioural disorders exist in a wider context of poor health and impairment. Not only do children with a behavioural disorder have poorer general health themselves, they

are also more likely to live with parents' who have poor mental health, and who receive disability-related benefits. Almost two-fifths of children in families that do not function healthily met the criteria for a behavioural disorder, as did a quarter of children with recognised special educational needs.

The information presented in this report allows us to build a detailed picture of children with behavioural disorders and better understand the complex interrelationships between health, family, and their socioeconomic and school context.

## **Methods**

The Mental Health of Children and Young People (MHCYP) survey was conducted with 5 to 15 year olds living in Britain in 1999 and 5 to 16 year olds living in Britain in 2004. The 1999 and 2004 surveys sampled from Child Benefit records. For the 2017 survey a stratified multistage random probability sample of 18,029 children was drawn from NHS Patient Register in October 2016. Children and young people were eligible to take part if they were aged 2 to 19, lived in England, and were registered with a GP. Children, young people and their parents were interviewed face-to-face at home using a combination of Computer Assisted Personal Interview (CAPI) and Computer Assisted Self Interview (CASI), between January and October 2017. A short paper or online questionnaire was completed by a nominated teacher for children aged 5 to 16 years old. Data collection varied with the selected child's age:

- 2 to 4 year olds: parent interview
- 5 to 10 year olds: parent interview and teacher interview
- 11 to 16 year olds: parent interview, child interview and teacher interview
- 17 to 19 year olds: young person interview and parent interview (if parent present at the same address)

Prevalence estimates for 5 to 16 year olds were adjusted slightly upwards with a factor designed to take account of the fact that only some of this age group had data from teachers. See the Survey Design and Methods Report for detail about the calculation and application of adjustment factors.

Productive interviews (involving one or more participants in each household) were achieved for 9,117 children (1,463 2 to 4 year olds; 3,597 5 to 10 year olds; 3,121 11 to 16 year olds; 936 17 to 19 year olds), and 3,595 teachers (54% of eligible children). The survey included the detailed and comprehensive Development and Well-Being Assessment (DAWBA). This allowed the assessment of emotional, hyperkinetic, behavioural and less common disorders, like autism. After interviews were complete, eleven trained clinical raters reviewed the data to reach disorder codings for each participant. Raters applied the diagnostic criteria for specific disorders set out in the tenth International Classification of Disease (ICD-10) (WHO 1992) and the Diagnostic and Statistical Manual of Mental Disorders (DSM–5) (APA 2013).

The 2017 survey was designed to be comparable with the 1999 and 2004 surveys. This included the continued use of the DAWBA, use of ICD-10, and consistent timing of data collection. However, some differences in design have taken place which may affect comparability with previous survey results, including that the 2017 survey:

- Sampled from the NHS Patient Register, whereas the 2004 and 1999 surveys sampled from Child Benefit records
- Included 2 to 4 and 17 to 19 year olds for the first time
- Response rate (52%) was lower than that for the previous surveys

• Covered England, while previous surveys in the series covered Britain. Analyses of 1999 and 2004 data presented in this report have been run on participants aged 5 to 15 years old living in England only to maintain comparability in trends.

The 2017 interviews and analyses are based on participants' age at 31 August 2017, with participants grouped with their peers in terms of school year.

Differences in data collection and analysis should be considered when comparing results between age groups, as these may affect comparability.

#### **Confidence intervals**

Information about confidence intervals are presented in the text and described as the range for which a value is likely to fall within had the whole population participated in this survey rather than a sample. This range was calculated based on 95% confidence interval and indicates the range we would expect estimates to fall within nineteen times in twenty, if the study was repeated with new samples.

For further information on methodology, confidence interval and standard error information, see the Survey Design and Methods Report.

## Definitions

#### **Mental disorder**

Mental disorders were identified on the survey according to the standardised diagnostic criteria in the tenth edition of the International Classification of Diseases (ICD-10). Specific mental disorders were grouped into four broad categories: emotional, behavioural, hyperactivity and other less common disorders. While some of the symptoms covered in this report may be present in many children, to count as a disorder they had to be sufficiently severe to cause distress to the child or impair their functioning (WHO, 1993).

Any mental disorder								
Disorder categories	Emotional disorders			Hyperactivity disorders	Behavioural (or 'conduct') disorders	Other less common disorders		
Disorder subgroups	Anxiety disorders	Depressive disorders	Bipolar affective disorder					
Specific disorders (included in trend measures)	Separation anxiety disorder Generalised anxiety disorder Obsessive compulsive disorder Specific phobia Social phobia Agoraphobia Panic disorder Post-traumatic stress disorder Other anxiety	Major depressive episode Other depressive episode		Hyperkinetic disorder Other hyperactivity disorder	Oppositional defiant disorder Conduct disorder confined to family Unsocialised conduct disorder Socialised conduct disorder Other conduct disorder	Autism spectrum disorder Eating disorder Tics Selective mutism Psychosis		
Specific disorders (added since 1999, so excluded from trend measures)	Body dysmorphic disorder (added in 2017) <sup>1</sup>		Bipolar affective disorder Mania (Both added in 2004)			Attachment disorder (added in 2004) Feeding disorder Sleep disorder Eliminating disorder (all added in 2017)		

## Figure 11: Disorders included and excluded in trend measures

<sup>1</sup>Body dysmorphic disorder was assessed using the Diagnostic and Statistical Manual of Mental Disorders (DSM) version 5 criteria.

#### **Trend measures**

Trends over time are based on samples, methods, and disorders that are as comparable as possible. The 1999 and 2004 samples have been reanalysed based on participants resident in England only, and the 2004 and 2017 samples are restricted to those aged 5 to 15 for these analyses. For each survey only those interviewed in English are retained. Some disorders (such as attachment disorder and body dysmorphic disorder) were only included after the 1999 survey had been completed. To ensure estimates are comparable across surveys these additional disorders were not included in the 2017 trend measures. See the Survey Design and Methods Report for details.

#### **Behavioural (conduct) disorders**

A group of disorders characterised by repetitive and persistent patterns of disruptive and violent behaviour in which the rights of others, and social norms or rules, are violated. The umbrella term used in ICD 10 is conduct disorders, in this report we have used the term 'behavioural disorders' to avoid confusion with the sub-types of disorder included in the survey.

#### **Oppositional defiant disorder (ODD)**

Oppositional defiant disorder (ODD) is more common among younger children, partly because of the types of behaviour involved. ODD is characterised by temper outbursts, arguing with adults, disobedience, deliberately annoying others, passing on blame, being easily annoyed, resentful, spiteful and vindictive.

#### Conduct disorder confined to family

In this condition, the challenging behaviour is entirely, or almost entirely, confined to the home and to interactions with members of the immediate family or household.

#### Unsocialised conduct disorder

A behavioural disorder characterised by the combination of persistent dissocial or aggressive behaviour with significant pervasive abnormalities in the individual's relationships with other children, such that they have no friends.

#### Socialised conduct disorder

Disorder involving persistent dissocial or aggressive behaviour occurring in individuals who are generally well integrated into their peer group.

#### Other conduct disorders

Any other type of behaviour (or 'conduct') disorder that is impairing, but does not fit the criteria for one of the other specific types reported on. Children often exhibit some of the characteristics of two or more of the sub-types of conduct disorder.

#### Analysis variables

#### Ethnic group

Ethnic group was self-reported directly by children and young people aged 11 or more, and by parents for children aged 10 or under.

#### **Special educational needs**

Presence of special educational needs was based on information provided by the interviewed parent for children aged 2 to 16 and for young people aged 17 to 19.

#### Child's general health

Young people aged 17 and over rated their own general health. For children aged 16 and under the interviewed parent rated their child's general health.

#### Parental mental health

The mental health of the interviewed parent or guardian (usually the mother), was assessed using the GHQ-12. Scores range from 0 (no psychological distress) to 12 (severe psychological distress). A score of 4 or more has been used to indicate the presence of a common mental disorder.

#### **Family functioning**

Family functioning was measured using the General Functioning Scale of the McMaster Family Activity Device (FAD). It comprises 12 statements that parent's rate on a four point scale. A score was derived. A score above 2 was considered to indicate 'unhealthy' family functioning.

#### Equivalised household income

An estimate of overall household income was established by means of a showcard, and was adjusted to reflect the number and ages of people living in the household. For further details please refer to the Survey Design and Methods Report.

#### Welfare benefits

A household was classified as in receipt of 'low income benefits' if any resident adult with parental responsibility for the child reported being in receipt of any of the following: Housing Benefit, Working Tax Credit, Income Support, Universal Credit (UC), Job Seekers' Allowance, or Pension Credit. Child Tax Credit did not count as the eligible income threshold for this is higher. While UC could be received for disabilityrelated reasons this was not distinguishable in the data collected.

A household was classified as in receipt of 'disability-related benefits' if an adult with parental responsibility for the sample child received any of: Disability Living Allowance, Carer's Allowance, Employment and Support Allowance, Personal Independence Payment, Industrial Injuries Disablement Benefit, Severe Disablement Allowance, Incapacity Benefit, Armed Forces Compensation Scheme, or Attendance Allowance.

#### **Neighbourhood deprivation**

The Index of Multiple Deprivation (IMD) 2015 combines a number of indicators, chosen to cover a range of economic, social and housing issues, into a single deprivation score for each small area (or as described here neighbourhoods) in England. This allows each neighbourhood to be ranked relative to others according to their level of deprivation. In this report quintiles of IMD are used to give an area-level measure of socioeconomic status, as opposed to a household-level measure. For further details about IMD please refer to the Survey Design and Methods Report.

#### Region

The regional measure in this topic report was based on the former <u>Government Office</u> <u>Regions</u>. They were identified as being the most local level of geography possible for statistical analysis due to the survey design.

## References

American Psychiatric Association. (2013) *Diagnostic and statistical manual of mental disorders* (5th ed.). Arlington, American Psychiatric Publishing.

Green H, Maginnity A, Meltzer H et al. (2005) *Mental health of children and young people in Great Britain*. London, TSO. <u>https://digital.nhs.uk/catalogue/PUB06116</u>

Goodman R, Ford T, Richards H et al. The Development and Well-Being Assessment: description and initial validation of an integrated assessment of child and adolescent psychopathology. *The Journal of Child Psychology and Psychiatry*, 2000; 41(5): pp. 645-655.

Huaqing Qi C & Kaiser AP. Behavior problems of preschool children from low income families: Review of the literature. *Topics in Early Childhood Special Education*, 2003; 23(4): pp. 188-216.

Kim-Cohen J, Caspi A, Moffitt TE et al. Prior Juvenile diagnoses in adults with mental disorder: development follow back of a prospective-longitudinal cohort. *Arch Gen Psychiatry*, 2003; 60(7); pp709-17.

Loeber R, Burke JD, Lahey BB, et al. Oppositional defiant and conduct disorder: a review of the past 10 years, part 1. *Journal of the American Academy of Child and Adolescent Psychiatry*, 2000; 39: pp. 1468–1484.

Meltzer H, Gatward R, Goodman R et al. (2000) *The mental health of children and adolescents in Great Britain*. London, The Stationery Office. http://www.dawba.info/abstracts/B-CAMHS99 original survey report.pdf

Merikangas KR, He J, Burstein M et al. Lifetime prevalence of mental disorders in U.S. adolescents: results from the National Comorbidity Study-Adolescent Supplement (NCS-A). *Journal of the American Academy of Child and Adolescent Psychiatry*, 2010; 49: pp. 980–989.

NatCen Social Research & UCL. (2017). 'Children's health' in *The Health Survey for England 2016*. Leeds, NHS Digital. <u>https://files.digital.nhs.uk/publication/m/c/hse2016-child-health.pdf</u>

National Institute for Health and Care Excellence. (2013). *Antisocial behaviour and conduct disorders in children and young people: recognition and management: March, 2013.* www.nice.org.uk/guidance/cg158

NHS Digital. (2017a) *Smoking, drinking and drug use among young people, England 2016.* Leeds, NHS Digital. <u>https://files.digital.nhs.uk/07/49FE46/sdd-2016-rep-cor.pdf</u>

NHS Digital. (2017b) *Health Survey for England 2016*. Leeds, NHS Digital. <u>https://digital.nhs.uk/data-and-information/publications/statistical/health-survey-for-england/health-survey-for-england-2016</u>

Parsonage M, Khan L, Saunders A. (2014). *Building a better future: the lifetime costs of childhood behavioural problems and the benefits of early intervention.* Centre for Mental Health.

Pisano S, Muratori P, Gorga C, et al. Conduct disorders and psychopathy in children and adolescents: aetiology, clinical presentation and treatment strategies of callous-unemotional traits. *Italian Journal of Pediatrics*, 2017; 43(84). <u>https://doi.org/10.1186/s13052-017-0404-6</u>

Sawyer SM, Azzopardi PS, Wickremarathne D, et al. The Age of Adolescence. *The Lancet: Child and Adolescent Health*, 2018; 2(3): pp. 223-228.

Theule J, Germain SM, Cheung K, et al. Conduct Disorder/Oppositional Defiant Disorder and Attachment: A Meta-Analysis. *Journal of Developmental and Life-Course Criminology*, 2016; 2(2): pp. 232-255. <u>https://link.springer.com/article/10.1007/s40865-016-0031-8</u>

World Health Organization. (1992). *International statistical classification of diseases and related health problems: tenth revision.* www.who.int/classifications/apps/icd/icd10online/?gf10.htm+f10

Youth Justice Board/Ministry of Justice Statistics Bulletin. (2017). Youth Justice Statistics, 2015/16: England and Wales.

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment\_data /file/585897/youth-justice-statistics-2015-2016.pdf

## Information and technology for better health and care

## www.digital.nhs.uk

## 0300 303 5678

## enquiries@nhsdigital.nhs.uk

У @nhsdigital

## This publication may be requested in large print or other formats.

## Published by NHS Digital, part of the Government Statistical Service

Copyright © 2018 Health and Social Care Information Centre. The Health and Social Care Information Centre is a non-departmental body created by statute, also known as NHS Digital.



You may re-use this document/publication (not including logos) free of charge in any format or medium, under the terms of the Open Government Licence v3.0.

To view this licence visit <u>www.nationalarchives.gov.uk/doc/open-government-licence</u> or write to the Information Policy Team, The National Archives, Kew, Richmond, Surrey, TW9 4DU; or email: <u>psi@nationalarchives.gsi.gov.uk</u>