

Mental Health of Children and Young People in England, 2017

Preschool children

This topic report examines the prevalence of mental disorders in preschool children (2 to 4 year olds) in England in 2017 and the characteristics of preschool children with a mental disorder. The Development and Well-Being Assessment (DAWBA) tool was used to assess for a range of mental disorders.

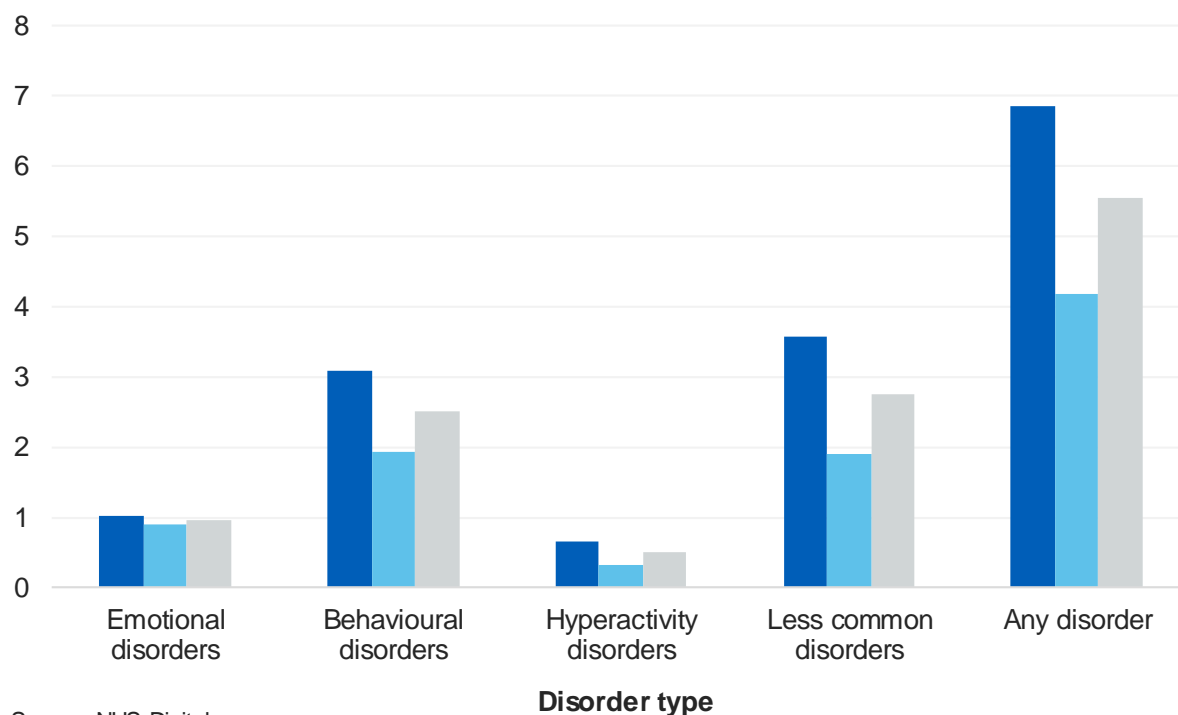
One in eighteen (5.5%) preschool children were identified with a mental disorder at the time of interview, with higher rates in boys (6.8%) than in girls (4.2%).

Prevalence of mental disorders in preschool children by sex, 2017

Base: 2 to 4 year olds

Per cent

■ Boys ■ Girls ■ All



Source: NHS Digital

Main findings

Prevalence of mental disorders

- One in eighteen (5.5%) preschool children were experiencing a mental disorder around the time of the interview in England in 2017. Boys (6.8%) were more likely than girls (4.2%) to have a mental disorder

Characteristics of children with a mental disorder

- **Demographics:** Mental disorders were more common in preschool boys of White ethnic backgrounds (8.4%) than boys of Black or other minority ethnic backgrounds (2.9%). Furthermore, mental disorders were more common in preschool children in the North of England (9.2%) than in other regions
- **Health:** One in five (21.6%) preschool children whose general health was reported as fair, bad or very bad were identified as having a mental disorder, compared to 3.2% of preschool children whose general health was reported as very good. It should be noted that the mental disorder may have been an aspect of the child's general health
- **Family:** Rates of mental disorders were higher in preschool children whose parents showed signs of a common mental disorder (14.9%) and in preschool children living in families with less healthy family functioning (10.2%)
- **Socioeconomics:** Preschool children living in the third of households with the lowest income were more likely to have a mental disorder (8.9%) compared to preschool children in households with higher income (4.0%). Rates of mental disorders were also higher in preschool children who lived with a parent in receipt of benefits related to low income and disability (10.4%)

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This report may be of interest to people working with preschool children in mental health, social care or early years settings, as well as to policy officials, commissioners of health and care services, and parents and the general public. A profile of preschool children who are most likely to be affected by mental health disorders is presented.

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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 Youthmind.

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 (for children aged 5 to 19) (Goodman et al., 2000). The 2017 survey was the first in the series to include 2 to 4 year olds, with interviews taking place with the child's parents only. This follows the adaptation of the DAWBA to include criteria for 2 to 4 year olds (Goodman, 2011).

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 the International Classification of Disease (ICD-10) diagnostic criteria (WHO, 1992).

Due to the challenges of measuring the rate of mental disorders in this age group, the figures presented in this topic report have been labelled as "Experimental Statistics". Experimental statistics are official statistics that are published to involve users and stakeholders in their development, and to introduce quality at an early stage.

This topic report examines the:

- Prevalence of mental disorders in 2 to 4 year olds, by age and sex
- Health, social, and economic characteristics of preschool children with a mental disorder, compared to those without

As well as a Summary Report, a series of other topic reports are available focusing on children and young people aged 5 to 19 years old. These are:

- Trends and characteristics
- Emotional disorders
- Behavioural 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

Further information about the survey and methods can be found in the Survey Design and Methods Report. All reports and associated tables are available at: [https://digital.nhs.uk/pubs/mhcypsurvey17](https://digital.nhs.uk/pubs/mhcypssurvey17).

Background

Early childhood is considered to be the most important developmental phase for children and is critical for a child's development and life course (Irwin et al., 2007). During this phase a child develops language, the capacity to form and maintain positive relationships with others, and emotional wellbeing. Identifying mental disorders in children at an early stage is therefore important as good mental health is a foundation for lifelong emotional and physical health as well as education and economic achievement (Wave Trust, 2013).

The presence of mental disorders in early childhood has been recognised as an important area of research which has not yet received sufficient attention (Gleason et al., 2010). Exploring mental disorders in preschool children is challenging because existing diagnostic systems are not necessarily appropriate given the rapid development that these children experience (Egger & Angold, 2006). This report makes use of the DAWBA, which accounts for the age appropriate symptoms that may vary according to the maturity of the child (Goodman, 2011).

Figures from NHS Digital reveal that of 271,998 children and young people (2 to 19 years old) in England who were in contact with mental health services, 6,483 were aged 2 to 4 years old¹. Whilst this provides an estimate of young children in contact with mental health services, it will be an underestimate of the number of preschool children experiencing mental disorders in England.

In this report, mental disorders are identified based on the tenth edition of the International Classification of Mental and Behavioural Disorders (ICD-10) (WHO, 1992). The disorder groupings used in this report are:

- **Emotional disorders:** These include a range of anxiety and depressive disorders that manifest themselves through fears or sadness which are in excess of the levels expected in preschool aged children. In addition, these fears and feelings of sadness impair the child's ability to function
- **Behavioural disorders:** These are characterised by repetitive and persistent patterns of disruptive and violent behaviour which exceed age-appropriate societal norms
- **Hyperactivity disorders:** These are characterised by developmentally inappropriate patterns of inattention, impulsivity, and hyperactivity. Children with hyperactivity disorders may find it hard to sit still, act without thinking first, and not finish the things they start. While most children behave like this sometimes, for those with hyperactivity disorders these symptoms are marked, persistent and

¹ Based on secondary analysis of the Mental Health Services Data Set (NHS Digital). Figures show the number of people in contact with NHS funded secondary mental health, learning disabilities and autism services at the end of the reporting period, 31 August 2017. Further information on coverage of these figures is available at <https://digital.nhs.uk/data-and-information/publications/statistical/mental-health-bulletin/mental-health-bulletin-2016-17-annual-report>

cause problems in more than one setting, such as at nursery, at home and in social situations

- **Less common disorders:** In addition to emotional, behavioural and hyperactivity disorders, a number of less common mental and neurodevelopmental conditions were also assessed. These included: autism spectrum disorders, eating disorders, tic disorders, and several very low prevalence conditions such as psychosis, stereotypic movement disorder, selective mutism, and attachment disorders. Feeding, sleeping, and toileting disorders are also included in this report as they are unique to children of preschool age

Terminology

In this report, the term 'preschool' is used to describe children who were aged 2 to 4 at 31st August 2017 and generally refers to the period prior to compulsory school age². Children aged 0 to 2 are not included in this report.

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

² A child reaches compulsory school age on the prescribed day following their fifth birthday (or on their fifth birthday if it falls on a prescribed day). The prescribed days are 31 December, 31 March and 31 August.

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/389388/School_Admissions_Code_2014_-_19_Dec.pdf

Prevalence of mental disorders

For a child to be classified with a disorder they had to meet diagnostic criteria for at least one emotional, behavioural, hyperactivity, or less common disorder around the time of the interview.

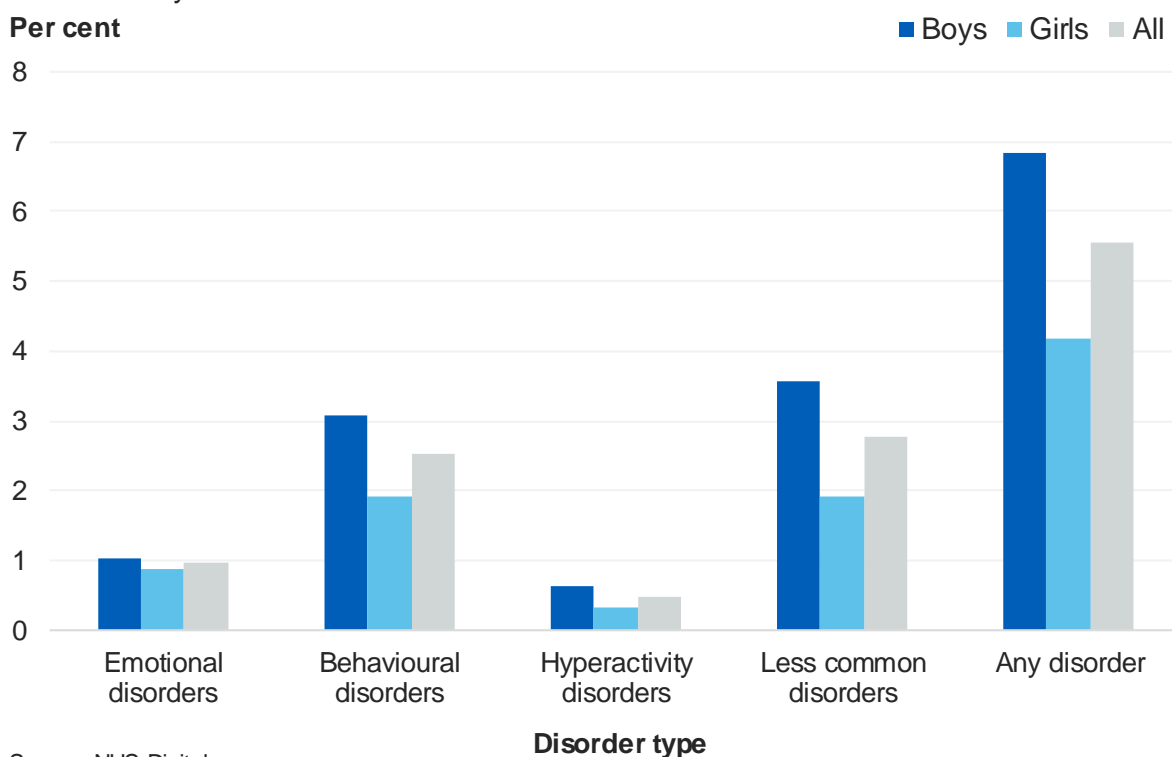
Mental disorders by age and sex

One in eighteen (5.5%) preschool children experienced a mental disorder around the time of the interview in England in 2017. This is an estimate based on a sample. If all preschool children in the population had participated, it is likely that the proportion identified with at least one disorder would have been between 4.3% and 6.8%. 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 range³.

Boys were more likely than girls to have any type of disorder, with 6.8% of boys and 4.2% of girls identified as having a mental disorder. Less common disorders and behavioural disorders were the most common disorder types in preschool children (2.8% and 2.5% respectively). (Figure 1; Table 1)

Figure 1: Prevalence of mental disorders in preschool children by sex, 2017

Base: 2 to 4 year olds



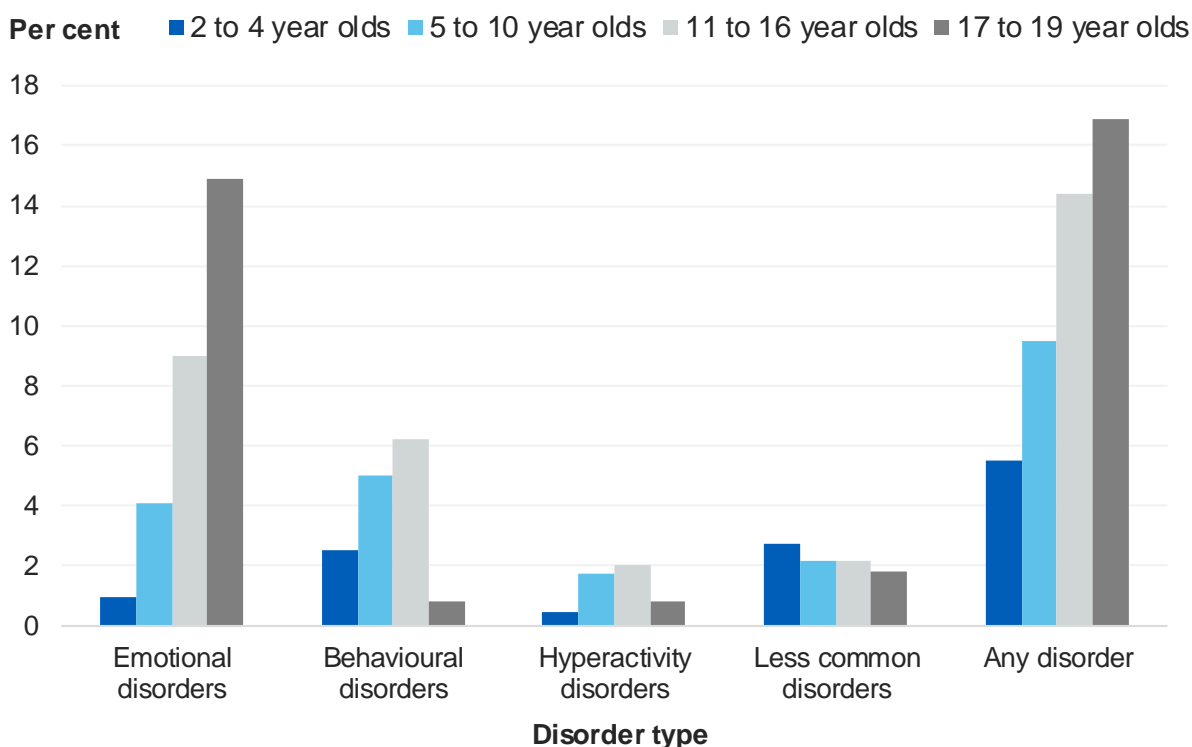
Source: NHS Digital

³ 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.

Overall, preschool children were less likely to have a disorder than older children. When looking at differences between preschool children (2 to 4 year olds) and children of primary school age (5 to 10 year olds), the rate of any mental disorder increased from 5.5% to 9.5%. This change was mainly a result of an increase in the rate of emotional disorders (from 1.0% to 4.1%), and behavioural disorders (2.5% to 5.0%). However, caution is advised when interpreting these results as this increase could also be attributed to the inclusion of a teacher assessment for 5 to 10 year olds. (Figure 2; Table 1)

Figure 2: Prevalence of mental disorders by age, 2017

Base: 2 to 19 year olds



Source: NHS Digital

Specific mental disorders

This survey also examined the prevalence rates of specific mental disorders⁴. Figure 3 presents the prevalence rates for some of the most common disorders identified in preschool children, alongside disorders which were unique to the preschool population (such as feeding, sleeping, and toileting disorders). Differences between boys and girls are not discussed, due to the small sample sizes in this age group.

The main disorders identified in preschool children were oppositional defiant disorder (1.9%)⁵, autism spectrum disorder (1.4%)⁶, sleeping disorder (1.3%)⁷, and feeding

⁴ See the Definitions section of this report for more information on the specific mental disorders.

⁵ The proportion of children with oppositional defiant disorder was likely to be between 1.2% and 2.5%.

⁶ The proportion of children with autism spectrum disorder was likely to be between 0.7% and 2.0%.

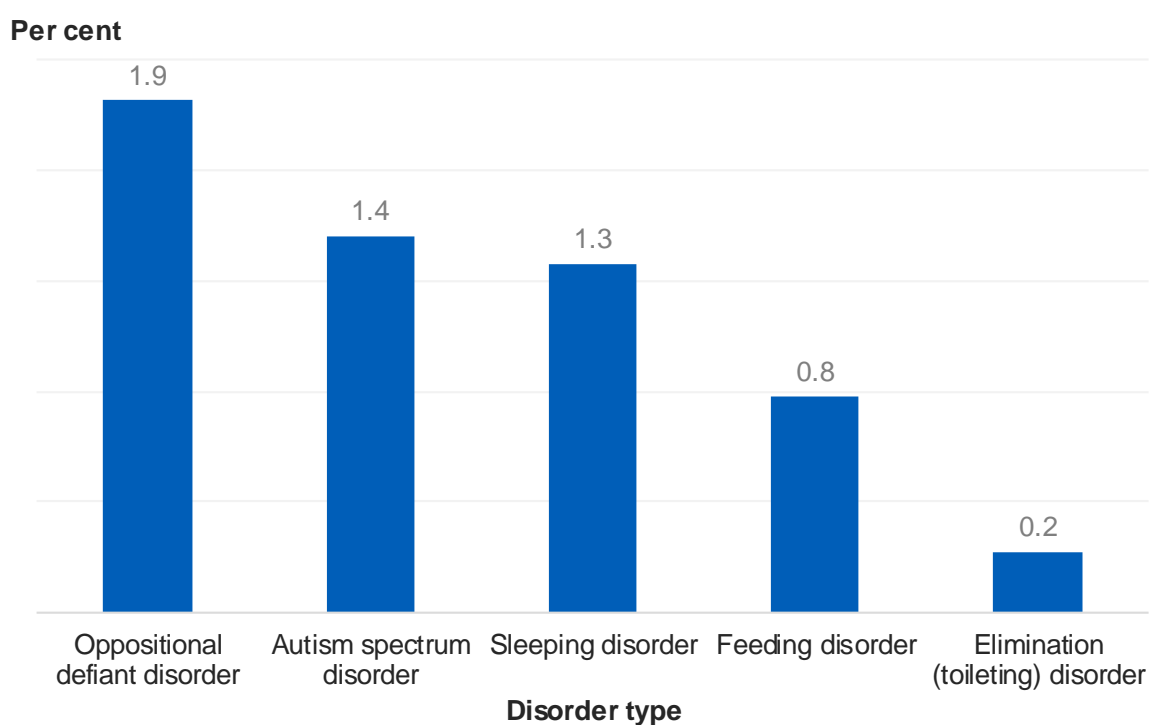
⁷ The proportion of children with sleeping disorder was likely to be between 0.7% and 1.8%.

disorder (0.8%)⁸. Elimination (toileting) disorder was present in about 0.2%⁹ of preschool children. (Figure 3; Table 2)

Due to the challenges associated with identifying the presence of feeding, sleeping and elimination (toileting) disorders in preschool children, diagnostic classification systems were not used for these disorders. Instead raters identified preschool children who would plausibly justify referral to specialist services. This was based on parents' reports of persistent and distressing difficulties experienced by the child which also impaired the child's ability to function.

Figure 3: Specific mental disorders in preschool children, 2017

Base: 2 to 4 year olds



Source: NHS Digital

⁸ The proportion of children with feeding disorder was likely to be between 0.3% and 1.2%.

⁹ The proportion of children with elimination (toileting) disorder was likely to be between 0% and 0.4%.

Preschool children with a mental disorder

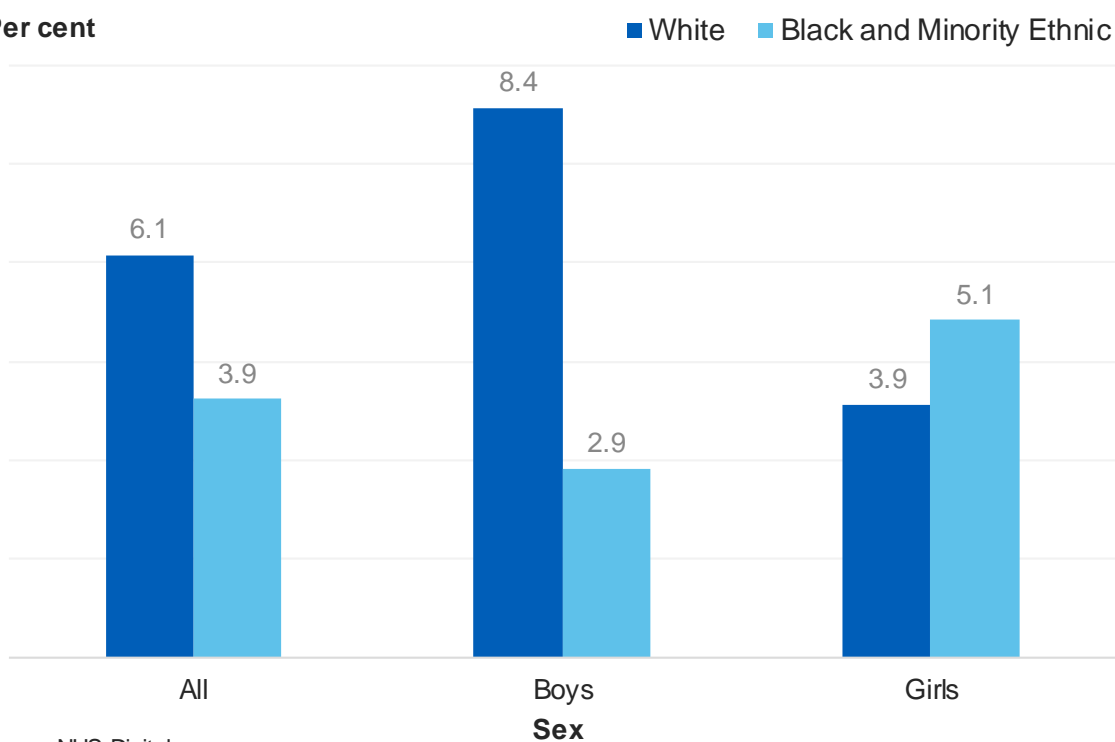
Any mental disorder by ethnic group

There was an association between ethnic group and the presence of a mental disorder in preschool children. Mental disorders were more common in boys of White ethnic backgrounds (8.4%) than boys of Black or other minority ethnic backgrounds (2.9%). Rates of mental disorders were similar in girls of white ethnic backgrounds and girls of black or other minority ethnic backgrounds. (Figure 4; Table 3)

Figure 4: Any mental disorder in preschool children by ethnic group and sex, 2017

Base: 2 to 4 year olds

Per cent



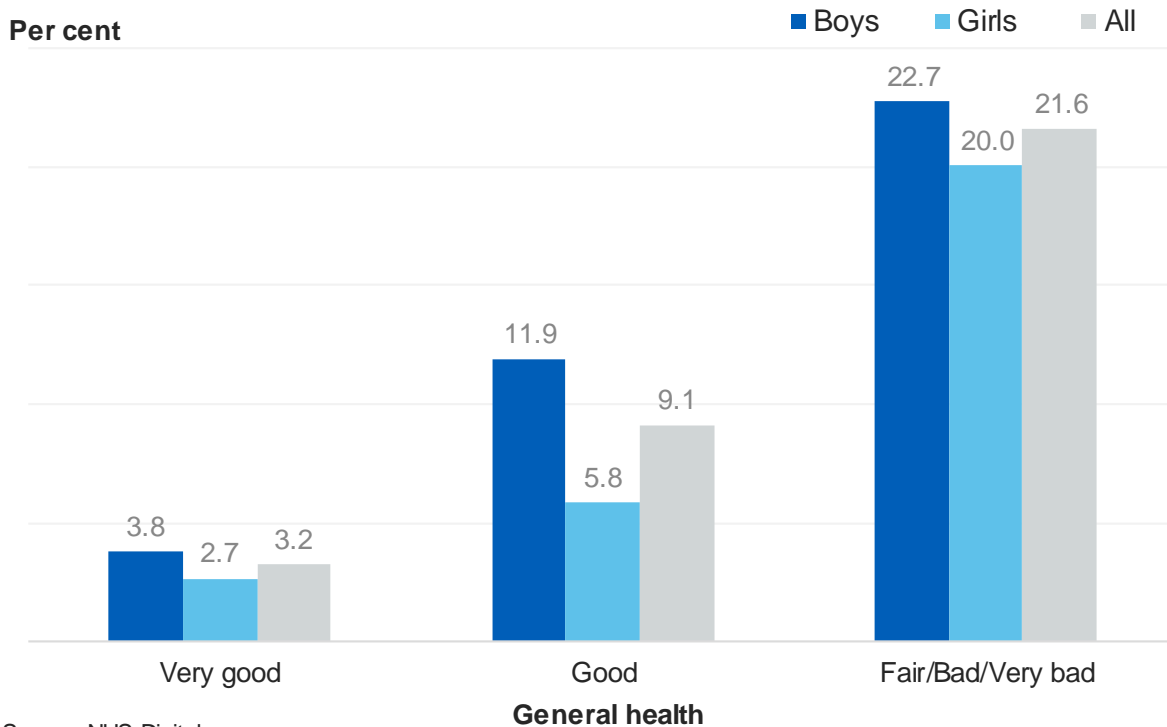
Source: NHS Digital

Any mental disorder by child's general health

A child's general health was associated with the presence of a mental disorder. Figure 5 shows that children with poorer general health had higher rates of mental disorders. One in five (21.6%) preschool children whose general health was reported as fair, bad or very bad were identified as having a mental disorder, compared to 3.2% of preschool children whose general health was reported as very good. (Figure 5; Table 4)

Figure 5: Any mental disorder in preschool children by child's general health and sex, 2017

Base: 2 to 4 year olds



Source: NHS Digital

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

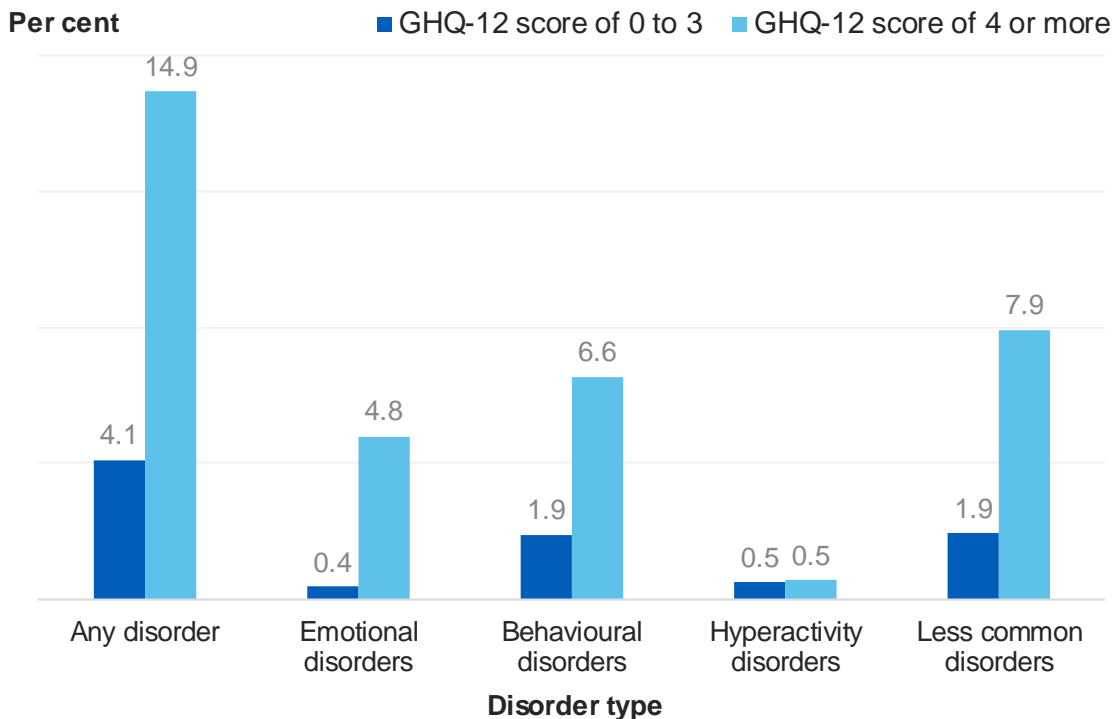
Any mental disorder by parent's mental health

Preschool children of parents who showed signs of a common mental disorder (indicated by a General Health Questionnaire (GHQ-12) score of 4 or more) were three and a half times more likely to be identified with a mental disorder (14.9%) than children whose parents were not considered to have a common mental disorder (GHQ-12 score between 0 and 3) (4.1%).

Children of parents who were likely to have a common mental disorder showed higher rates of emotional disorders, behavioural disorders and less common disorders, however the rate of children with hyperactivity disorder was not affected. Specifically, children of parents who showed signs of a common mental disorder were 12 times more likely to have an emotional disorder than children of parents who did not show signs of a common mental disorder (4.8% and 0.4% respectively). (Figure 6; Table 5)

Figure 6: Any mental disorder in preschool children by parent's mental health, 2017

Base: 2 to 4 year olds



Source: NHS Digital

As a cross-sectional survey, these associations cannot explain causality. While the presence of a mental disorder in parents may contribute to the development of mental disorders in preschool children, the presence of mental disorders in preschool children may affect the mental health of parents.

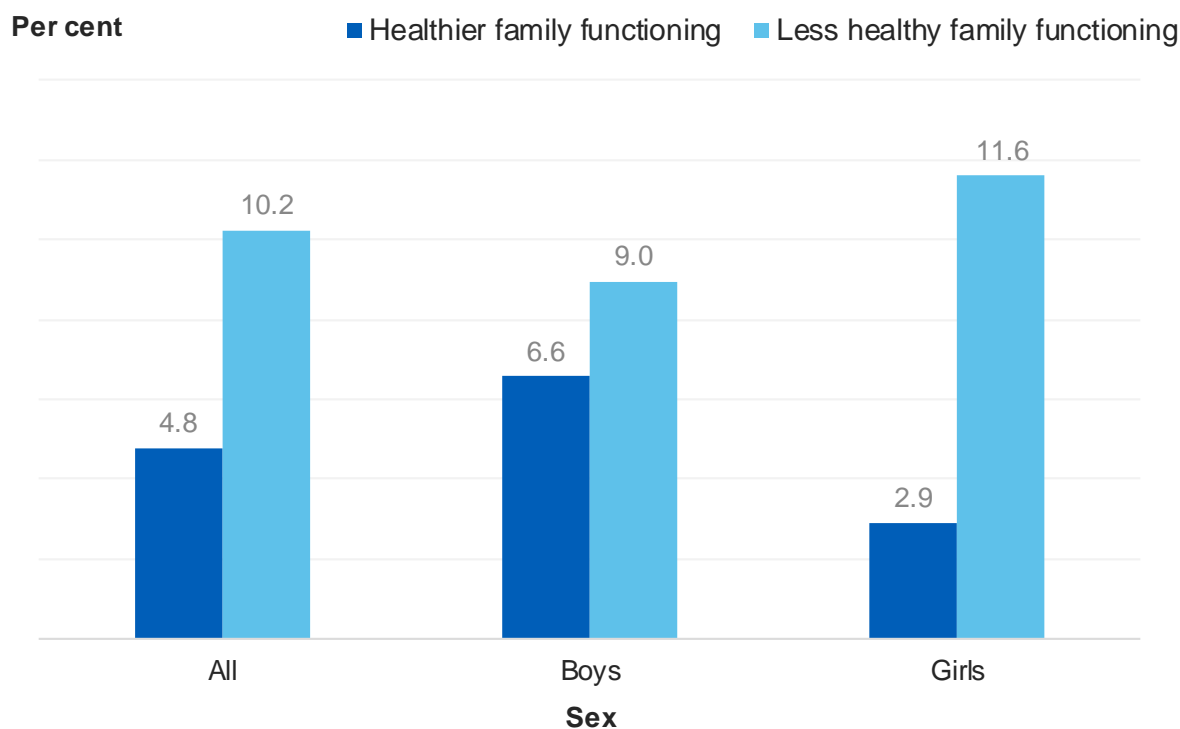
Any mental disorder by family functioning

Children living in families with less healthy functioning (a score of 2.01 or more) were more likely to have a mental disorder (10.2%) than children living in families with healthier functioning (a score of 2.00 and less) (4.8%).

Figure 7 shows that 11.6% of girls living in families with less healthy functioning had a mental disorder, compared to 2.9% of girls living in families with healthier functioning. Comparatively, 9.0% of boys living in families with less healthy family functioning had a mental disorder compared to 6.6% of boys living in families with healthier functioning. (Figure 7; Table 6)

Figure 7: Any mental disorder in preschool children by family functioning score and sex, 2017

Base: 2 to 4 year olds



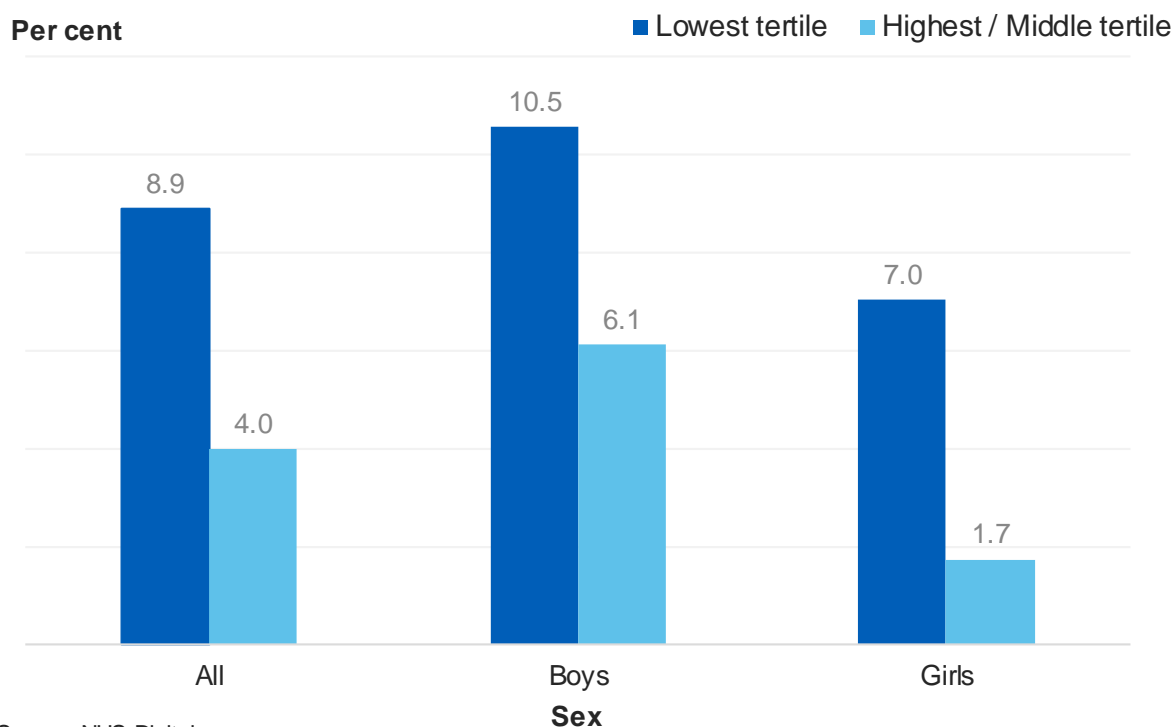
As a cross-sectional survey, these associations cannot explain causality. While problems with family functioning may contribute to the onset of a mental disorder, the presence of a mental disorder could also lead to problems with family functioning.

Any mental disorder by household income

Equivalised household income was associated with the prevalence of mental disorders in preschool aged children. Children living in the third of households with the lowest income had a mental disorder rate of 8.9% compared to 4.0% of children in other households. Girls living in households with the lowest income were four times more likely to have a mental health disorder (7.0%) than girls in households with the highest income (1.7%). (Figure 8; Table 7)

Figure 8: Any mental disorder in preschool children by equivalised household income and sex, 2017

Base: 2 to 4 year olds

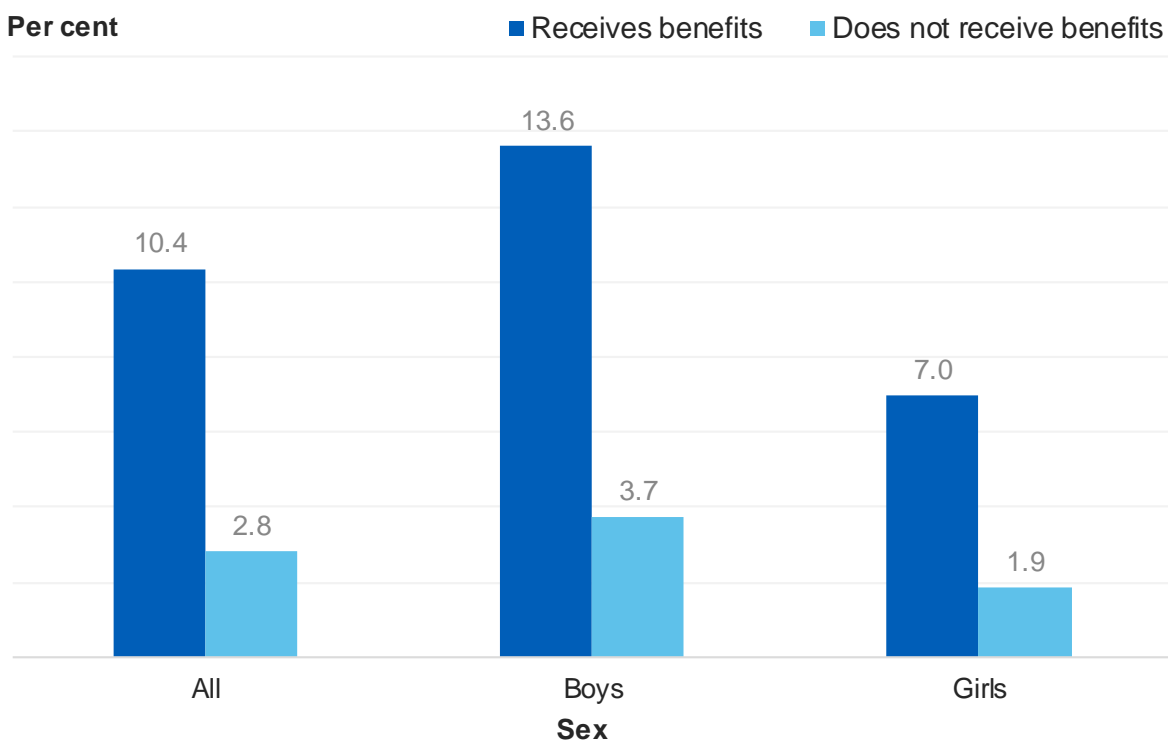


Any mental disorder by receipt of benefits

Preschool children who lived with a parent in receipt of benefits related to low income, and disability, were about three and a half times more likely to have a mental disorder (10.4%) than children whose parents were not receiving these benefits (2.8%). This same pattern was seen in boys and in girls. (Figure 9; Table 8)

Figure 9: Any mental disorder in preschool children by receipt of low income or disability related benefits, 2017

Base: 2 to 4 year olds



Source: NHS Digital

Any mental disorder by neighbourhood deprivation

There was no association between neighbourhood deprivation and the presence of a mental disorder in preschool children. (Table 9)

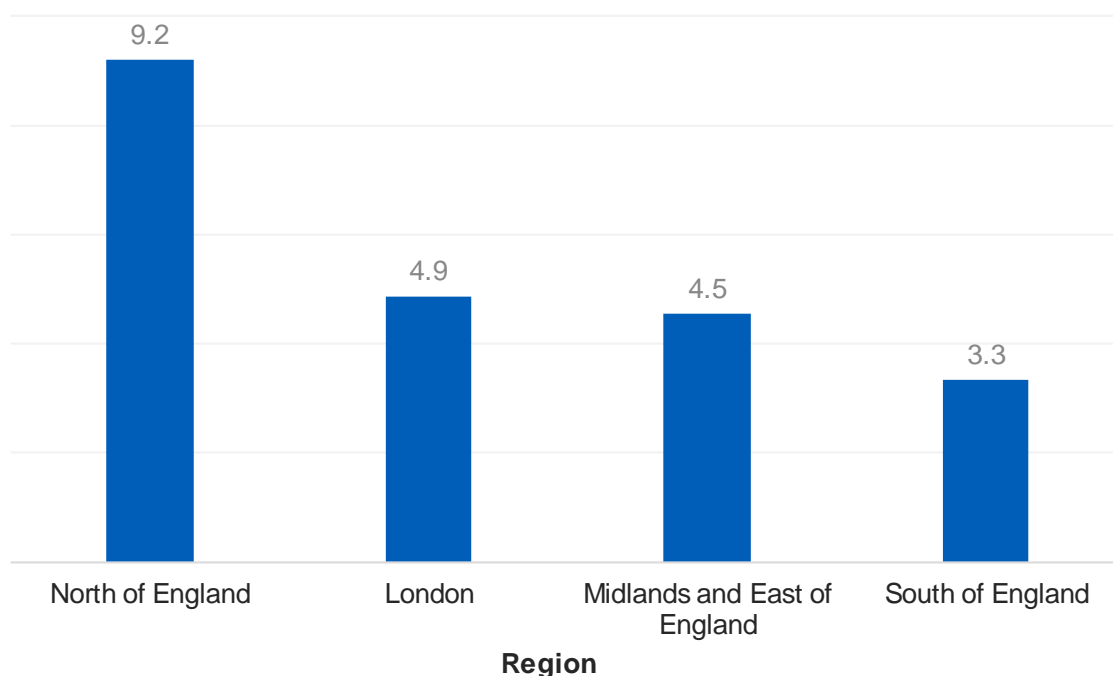
Any mental disorder by region

Region was associated with the presence of any mental disorder. Mental disorders were more common in preschool children in the North of England (9.2%) than in other regions. (Figure 10; Table 10)

Figure 10: Any mental disorder in preschool children by region, 2017

Base: 2 to 4 year olds

Per cent



Source: NHS Digital

Discussion

This topic report presents experimental findings on the rates of mental disorders in children aged 2 to 4, offering a rare insight into the prevalence and distribution of mental disorders in preschool aged children.

The presence of mental disorders in early childhood has been recognised as an important area which has not received sufficient attention (Gleason et al., 2010). The first few years of a child's life is critical to their future mental, social and emotional development (Stewart-Brown & Schrader-McMillan, 2011). Identifying mental disorders in preschool children is challenging due to the rapid developmental stage preschool children experience, and the appropriateness of existing diagnostic systems to account for this developmental variation (Egger & Angold, 2006).

This survey found that the rates of mental disorders were higher in primary school aged children (5 to 10 years old) compared to preschool aged children, with further increases in older age groups. This was partially a result of preschool children rarely meeting diagnostic criteria for some disorders, or difficulty in demonstrating long standing impairment or pervasiveness. However, a poll by the Anna Freud National Centre for Children and Families (AFNCCF, 2017) found that 92% of primary school teachers in England feel that primary schools have a crucial role to play in identifying pupils with mental health issues, highlighting the importance of understanding mental disorders in children at a young age.

The survey found that mental disorders were more common in boys than girls of preschool age. Gender role socialisation begins in the first months of life (Bronstein, 2006), with parent-child conversations about emotions often differing depending on gender from early on (Hamblin, 2016). The findings of this survey echo results from the Early Years Foundation Stage (EYFS) profile¹⁰ which showed that 90% of girls and 80% of boys reached the expected level in personal, social and emotional development by the time they turned 5 years old (DfE, 2017).

Children of parents who had poor mental health were three and a half times more likely to be identified with a mental disorder than children whose parents showed little to no evidence of a mental disorder. There is substantial evidence that maternal depression and anxiety increases the risk of mental disorder among children (Goodman et al., 2011). Research has shown that 3.9 per cent of new or expectant mothers in 2017¹¹ were in contact with secondary mental health services, with young mothers (particularly those aged 16 or under) most likely to be in contact with these

¹⁰ Early years foundation stage EYFS Profile is a teacher assessment of children's development at the end of the EYFS (the end of the academic year in which the child turns five). The assessment considered emotional wellbeing, positive relationships and self-confidence.

¹¹ For further information on the definition of perinatal period, see <https://digital.nhs.uk/data-and-information/publications/statistical/mental-health-services-monthly-statistics/mental-health-services-monthly-statistics-final-march-2018>

services (NHS Digital, 2018). The Government's Maternal Mental Health Pathway¹² sets out how, by 2021, specialist perinatal mental health services will support an additional 30,000 women each year to receive evidence-based treatment. Research also suggests an association between depressive symptoms in fathers and depressive symptoms in their adolescent children (Lewis et al., 2017), highlighting the importance of treating depression in both parents.

This report has also highlighted the relationship between higher rates of mental disorders in children living in families with unhealthy family functioning. Children who are exposed to negative parenting, relationships and other early-life adversities are at risk of mental health problems in later life (HM Government, 2011), highlighting the importance of good parent-child relationships in promoting positive outcomes in children.

This survey has shown children from low income households had the highest rates of mental disorders. By school age there are wide variations in children's abilities, with children from poorer backgrounds typically exhibiting worse cognitive and behavioural performance than children from more affluent homes (Field, 2010). Research has indicated that interventions targeting poorer children's outcomes are more likely to be successful if they target a wide range of issues (Field, 2010).

This report presents the rates of mental health disorders in preschool children based on an experimental method. They have been published to enable debate and further investigation into this area of children's mental health. The research presented in this report has shown the importance of early identification of issues in children, and this report provides a unique insight into the mental health of preschool children.

¹² <https://www.england.nhs.uk/publication/the-perinatal-mental-health-care-pathways/>

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)

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, hyperactivity, behavioural and less common disorders, like autism. The DAWBA was used for all age groups in the sample, however with special adjustments to ensure age-appropriate criteria were used for preschool children (Goodman, 2011). These included:

- Some sections of the 5 to 19 DAWBA were not included because relevant disorders are so rare in 2 to 4 year olds that they are almost never encountered in specialist clinics, let alone in general population samples
- Other sections have been added to cover disorders that are particularly relevant to 2 to 4 year olds, namely: feeding disorders; sleep disorders; and elimination disorders
- Adjustments were also needed for areas that are relevant both in the early years and in later childhood since the characteristic symptoms may vary according to the maturity of the child. In the early years, for example, evidence of post-traumatic stress disorder (PTSD) is more likely to include repetitive play or drawing related to the trauma
- In the early years, as in later childhood, it is relevant to consider social impairment in home life, friendships, learning and leisure (for example, lack of access to day care because of mental health problems)

After interviews were complete, a team of eleven trained clinical raters reviewed the data to reach disorder ratings 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). Diagnostic classification systems were not used to diagnose the feeding, sleeping and elimination disorders as this was experimental work to see what proportion of families have problems in these domains that sound as if they would plausibly justify referral to specialist services.

While this report covers the mental health of 2 to 4 year olds, this does still leave the period from 0 to 23 months uncovered. Ongoing research on “infant psychiatry” may one day allow this important developmental period to be covered by high-quality survey instruments, but at present this is an aspiration rather than something that can be delivered in the near future (Goodman, 2011).

Ratings for 2 to 4 year olds have been based on a single informant (the parent of the sampled child). Caution is advised when interpreting these results as the increases in rates by age could also be attributed to the inclusion of a teacher assessment for 5 to 16 year olds. More comprehensive multi-informant data increases the likelihood of clinical raters having enough information to identify a mental disorder. It is therefore plausible that a modest increase may be seen in the prevalence of disorders with the presence of a teacher assessment.

The 2017 analyses are based on participants’ age at 31st August 2017. This allowed for consistency, with participants grouped with their peers in terms of school year.

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).

Figure 11: Disorders included in 2017 survey

Any mental disorder						
Disorder categories	Emotional disorders			Hyperactivity disorders	Behavioural (or 'conduct') disorders	Other less common disorders
<i>Disorder subgroups</i>	<i>Anxiety disorders</i>	<i>Depressive disorders</i>	<i>Bipolar affective disorder</i>			
Specific disorders	Separation anxiety disorder Generalised anxiety disorder Specific phobia Social phobia Agoraphobia Post-traumatic stress disorder Other anxiety	Major depressive episode Other depressive episode	Bipolar affective disorder Mania	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 Tic disorder Selective mutism Psychosis Attachment disorder Feeding disorder Sleep disorder Eliminating disorder

Emotional disorders

Emotional disorders include a range of different types of **anxiety disorder** (characterised by fear and worry), **depressive disorder** (characterised by sadness, loss of interest and energy, and low self-esteem) and a small number of cases of **mania** and **bipolar affective disorder**.

Anxiety disorders

Anxiety disorders are a type of emotional disorder characterised by excessive feelings of fear and distress, often accompanied by physiological symptoms.

Separation anxiety disorder

The focus of the anxiety is on the fear of separation from attachment figures. Symptoms include clinging to parents, extreme and severe crying, refusal to do things that require separation, and physical illness such as headaches or vomiting. Some of these behaviours are normal among very young children, but if severe and persistent they impede the child's development and ability to cope.

Generalised anxiety disorder

Anxiety that is generalised and persistent which is not restricted to, or dominated by, any particular circumstance. Symptoms include persistent nervousness, trembling, sweating and dizziness. Symptoms must be present on most days for a period of at least six months.

Specific phobia

Specific phobias are incapacitating fears that are restricted to highly specific objects or situations, for example heights, thunder, darkness, or certain animals. A fear becomes phobic when the severity of difficulties stops the child from being able to cope with normal everyday activities.

Social phobia

Fear of scrutiny by other people leading to avoidance of social situations. More pervasive social phobias are usually associated with low self-esteem and fear of criticism. The symptoms may progress to panic attacks.

Agoraphobia

Fear of leaving the home or being in crowded and public places. Symptoms of agoraphobia can be physical (for example, rapid heartbeat), cognitive (for example, fear or psychological symptoms) or behavioural (for example, avoiding situations). They can occur when the young person thinks about going out, or travelling as well as in the actual situation.

Post-traumatic stress disorder

A delayed response to a stressful event or situation that was exceptionally threatening or catastrophic. Typical features include reliving the event including flashbacks, nightmares and night terrors, as well as avoidance of memories or situations that trigger memories of the event with emotional numbing and hypervigilance for danger.

Other anxiety disorder

Disorders where the main symptom is anxiety that causes significant distress or prevents the child from coping, but does not meet the diagnostic criteria for any of the other specific anxiety disorders reported on. Children often exhibit some of the characteristics of more than one sub-type of anxiety disorder and are very distressed or struggling with to cope.

Depressive disorders

Characterised by sadness, loss of interest or pleasure, feelings of guilt or low self-worth, disturbed sleep or appetite, feelings of tiredness, and poor concentration. Depression can be long lasting, recurrent and substantially impair functioning at school and in daily life (WHO, 2017).

Major depressive episode

Characterised by persistent feelings of sadness, anxiety or feeling 'empty', loss of interest or pleasure in hobbies, difficulty concentrating, loss of appetite and decreased energy. The number of symptoms present and the level of impairment to everyday functioning determines whether a child is diagnosed with a mild depressive episode, moderate depressive episode, or severe depressive episode based on the ICD-10 classification.

Other depressive episode

Depression which is not typical of a major depressive episode. Symptoms have not been present long enough or are not severe enough to be classified as a major depressive episode, but are causing significant distress or impairment.

Bipolar affective disorder and manic episode

Manic episodes (or 'mania') involve an upward swing of mood to one of excitement, euphoria but also irritability, combined with an increase in the quantity and speed of physical and mental activity. Bipolar affective disorders involve two or more episodes of disturbed mood and activity levels. Rarely, the affected person has repeated episodes of just mania, but more commonly experiences both manic and depressive episodes. Typically, people with this condition recover completely between episodes.

Behavioural 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.

Hyperactivity disorders

These are characterised by developmentally inappropriate levels of inattention, impulsivity, and hyperactivity.

Hyperkinetic disorder

In hyperkinetic disorder, children have levels of inattention, hyperactivity and impulsivity lead to impairment in several settings such as school/work, home life and leisure activities. Symptoms are evident by age seven years, and can be identified retrospectively.

Other hyperactivity disorders

Other hyperactivity disorders are diagnosed if a child or young person met nearly all the criteria for hyperkinetic disorder, but just miss the full diagnostic criteria and are unable to function. For example, they have display five rather than six difficulties with attention or an age of onset after the age of seven.

Less common disorders

A number of less common mental and neurodevelopmental conditions were also identified on the survey. These included: autism spectrum disorders (ASD), eating disorders, tic disorders, and a number of very low prevalence conditions such as psychosis, stereotypic movement disorder, selective mutism, and attachment disorders. Feeding, sleeping, and toileting disorders were also assessed in the preschool population.

Autism spectrum conditions (ASC) and autism spectrum disorder (ASD)

These terms are both used to indicate a number of disorders characterised by severe impairment in social interaction, communication, and the presence of stereotyped behaviours, interests, and activities. 'Pervasive developmental disorder' (PDD) is used in the ICD classificatory system, but was replaced in the Diagnostic and Statistical Manual (DSM-5) with ASD, the term used most in this report. The category as used here consists mostly of ICD-10 classifications of autism and Asperger's syndrome, but also some cases of other pervasive developmental disorders. Symptoms include: language problems, difficulty relating to other people, unusual forms of play, difficulty with changes in routine, and repetitive movements or behaviour patterns.

Tic disorder

Tics are fast, repetitive muscle movements that result in sudden and difficult to control body jolts or sounds. Tourette's syndrome involves vocal and motor tics that have persisted for over a year.

Feeding disorder

In preschool children feeding disorder generally involves food refusal and extreme faddiness in the presence of an adequate food supply, a reasonably competent caregiver, and the absence of organic disease.

Sleeping disorder

Sleeping disorder in preschool children covers a range of disorders including insomnia (difficulty falling asleep, difficulty staying asleep, early final waking), hypersomnia, sleepwalking, sleep terrors, and nightmares.

Eliminating (toilet) disorder

Although it is normal for children of preschool age to experience the occasional accident, toilet (elimination) disorders occur in children who repeatedly experience problems going to the bathroom - both defecating and urinating.

Other less common disorders

Psychosis involves a disturbed relationship with reality. A person who is experiencing psychosis may hear, see or feel things that are not really there or experience beliefs that are difficult to shake but are not grounded in reality. There are various different types of psychosis, including schizophrenia, which are extremely rare in children and young people.

Stereotypic movement disorder is diagnosed in children who undertake repetitive, purposeless movements that are distressing or impede functioning. This rare condition mostly occurs in children and young people who have intellectual disability or neurodevelopmental disorders such as ASC.

Selective mutism is a rare difficulty with social functioning with an onset in childhood in which a child who understands language and can speak when with family and close friends is unable to speak in almost all social situations.

Attachment disorders also involve impairing difficulty with social function that have their onset in childhood. They are believed to result from significant neglect and abuse from care-givers. Children with these disorders struggle to interact with others, displaying a range of abnormal social behaviours from inappropriate friendliness towards everyone they meet to highly withdrawn and hypervigilance. These behaviours occur across situations and with many people and should not be confused with attachment, secure or otherwise, which describes the relationship between a child and a particular care-giver.

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 is generally considered indicative of 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 parents 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: 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 disability-related 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 in England. This allows each area 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 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 Public Health England (PHE) regions:

- London (integrated region and centre)
- North of England
- Midlands and East of England
- South of England

This differs from the use of [Government Office Regions](#) in other topic reports. Regions were grouped in this way due to small sample sizes in each Government Office Region.

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