



**NATIONAL
LOTTERY FUNDED**

EBPU
Evidence Based
Practice Unit

A partnership of



Anna Freud
National Centre for
Children and Families

Evidence Briefing #1: 11 January 2018

Mental health problems in young people, aged 11 to 14: Results from the first HeadStart annual survey of 30,000 children

Dr Jessica Deighton, Dr Tanya Lereya, Dr Praveetha Patalay,
Dr Polly Casey, Professor Neil Humphrey & Professor Miranda Wolpert

HeadStart annual survey

Executive summary

Context

- HeadStart is a major five-year programme set up and funded by Big Lottery Fund which aims to explore and test ways to improve the mental health and wellbeing of 10- to 16-year-olds.
- HeadStart partnerships in Blackpool, Cornwall, Hull, Kent, Newham and Wolverhampton are piloting different approaches to build young people's emotional resilience.
- The HeadStart Learning Team works alongside the HeadStart partnerships to help evaluate impact using both qualitative and quantitative methods. A core aspect is a year-on-year school-based survey that asks children and young people in specific year groups in participating schools to complete the online Wellbeing Measurement Framework. The Framework asks young people questions that give

indications of their mental health and wellbeing.

- In 2017, 30,843 children and young people in Years 7 (age 11–12) and 9 (age 13–14) completed the Wellbeing Measurement Framework in 114 participating HeadStart schools.
- This report explores the data related to the prevalence of mental health problems in young people. It investigates how this varies by demographics such as gender, ethnicity, special educational needs status, free school meal eligibility and child in need status.

Findings

- The schools involved in HeadStart are located in less socially and economically advantaged areas than typical schools nationally. They also differ from national averages in terms of proportions with special

educational needs and proportions of white pupils, so all results must be understood in this context.

- 18.4% indicated they were experiencing emotional problems, and this was more common for girls (24.9%) than boys (10.9%)
- 18.8% indicated they were exhibiting behavioural problems, and this was more common for boys (23.1%) than girls (15.1%)
- The odds of experiencing mental health problems (whether emotional or behavioural) were significantly and consistently increased for children who:
 - were eligible for free school meals
 - had special educational needs
 - were categorised as a 'child in need'.

For definitions of these terms, see **page 5**.

- The odds of experiencing a mental health problem were greater for older children than younger children.
- In many instances, being of an ethnic group other than White reduced the odds of experiencing a mental health problem. Specifically, being Asian, Black, mixed or 'any other ethnic group' reduced the odds of experiencing emotional difficulties. Being Asian, Chinese or 'any other ethnic group' reduced the odds of experiencing behavioural difficulties.

Implications and recommendations

1. High rates of mental health problems in this population highlight the importance of finding the best means to promote positive wellbeing, and to prevent and address mental health problems.
2. Tackling mental health problems may involve tackling social inequalities due to the consistent association between deprivation and mental health problems which was evident in the results of this survey.
3. It should not be assumed that young people from minority ethnic groups are at greater risk of mental health problems; this is not the case based on current evidence. In addition, those from different minority ethnic backgrounds should not be grouped together in analysis of the prevalence of mental health.



Main report

Child mental health: what we know from the literature

That 1 in 10 children experiences mental health problems is a well-cited statistic, and forms the basis for the estimation that around 800,000 children and young people in Britain suffer from mental health problems at any one time.ⁱ This estimate is drawn from the 2004 ONS Survey of the Mental Health of Children and Young People.ⁱⁱ While the next prevalence study is imminent, this 13-year lag has left a gap in the current understanding about the level of need in the population.

There have been some indications in recent years that mental health problems may be increasing, particularly in the case of adolescent girls.^{iii,iv} For instance, a recent report based on the latest survey data from the Millennium Cohort Study, which used a measure consistent with the one used in the current study, indicated that as many as 1 in 4 adolescent girls reports high levels of depressive symptoms, with rates in boys being closer to 1 in 10.

Alongside gender differences, a number of factors are often associated with higher risk for mental health problems. These include deprivation,^v learning difficulties^{vi} and chaotic or disrupted family life.^{vii}

However, the role of other factors is less well understood. For example, understanding of the association between ethnicity and prevalence of mental health problems is limited, largely due to the small proportions of some ethnic groupings in previous studies.^{viii} Other groups, such as 'looked after children', are often under-researched for similar reasons.^{ix}

This briefing report draws on the strengths of the large-scale baseline data collection from the HeadStart Learning Programme in order to explore prevalence of mental health problems in participating school cohorts. It also considers the odds of experiencing a mental health problem for a range of subgroups within this population.

About HeadStart

HeadStart is a five-year programme set up by Big Lottery Fund which aims to explore and test ways to improve the mental wellbeing of 10- to 16-year-olds and prevent serious mental health issues before they develop.

Using National Lottery funding, HeadStart partnerships in Blackpool, Cornwall, Hull, Kent, Newham and Wolverhampton are piloting new approaches to build young people's emotional resilience.

A wide range of interventions is being trialled in schools and in the community at each site. School interventions include whole-school, year-group and class-level support, such as education around what mental health is and what to do when experiencing a mental health problem.

Other interventions, such as one-to-one counselling sessions, are for particular groups of young people e.g. those who are at higher risk of developing a mental health problem.



The HeadStart Learning Programme: overview, methods and sample characteristics

HeadStart has placed evaluation and learning at the centre of its approach and, as such, has an extensive evaluation component (known as the HeadStart Learning Programme). This learning programme incorporates a range of qualitative and quantitative research.

One core aspect is a year-on-year school-based online survey, known as the Wellbeing Measurement Framework, that asks children and young people in specified year groups in participating schools about their mental health and wellbeing.^x

In spring/summer 2017, 30,843 children and young people in Years 7 (age 11–12) and 9 (age 13–14) completed these surveys as part of establishing a baseline for HeadStart. Survey data were collected using a secure online system as part of a teacher-facilitated session during a usual school day. Consent for participation in the research was sought from parents prior to and from children and young people at the outset of the survey sessions.

Sample

Analysis presented here is based on surveys completed by 30,843 adolescents (47% male, 52% female), 51.1% of whom were in Year 7 (age 11–12) and 48.9% of whom were in Year 9 (age 13–14) in 114 schools across England. Comparisons with national datasets show that the sample:

- is slightly more deprived than the national average, based on free school meal (FSM) eligibility (study sample FSM: 4,934 (16.0%); national figures:^{xi} 12.9%)
- has a lower proportion of children with a statement of special educational needs (study sample: 3,429 (11.9%) either has a statement of SEN or SEN support; national figures:^{xii} 14.4% with either a statement of SEN, an EHC plan or SEN support)
- has a greater proportion of young people classified as White (study sample: 22,685 (78.1%); national figures: 75.2%).^{xiii}

Measures

Mental health problems were measured with the child self-report version of the Strengths and Difficulties Questionnaire,^{xiv} a 25-item measure comprising four problem scales covering emotional symptoms, behavioural problems, peer problems, attention problems; and a prosocial behaviour subscale. Findings presented here relate only to emotional symptoms and behavioural problems. The following fields were derived from the national pupil database (NPD):

- Special educational needs (SEN): SEN data are based on school records. Children identified by their school as having SEN, whether with or without statement/EHC plan, were considered to have SEN for the purpose of this analysis.
- Eligibility for free school meals (FSM): FSM is frequently used as an indicator of low family income since only families on income support are entitled to claim free school meals.
- Looked after child status: refers to children who are under the care of the local authority. This can mean that they are in foster care or a children's home or placed with another adult, or they are subject to a care order.
- Child in need status: according to the 1989 Children Act, a child in need is a child who either a) is unlikely to achieve/maintain a reasonable standard of health and development without local authority provision; b) is likely to be impaired without local authority provision; c) is disabled.
- Ethnicity: ethnicity based on the NPD's major ethnic groupings: Asian, Black, Chinese, Mixed, White or any other ethnic group.

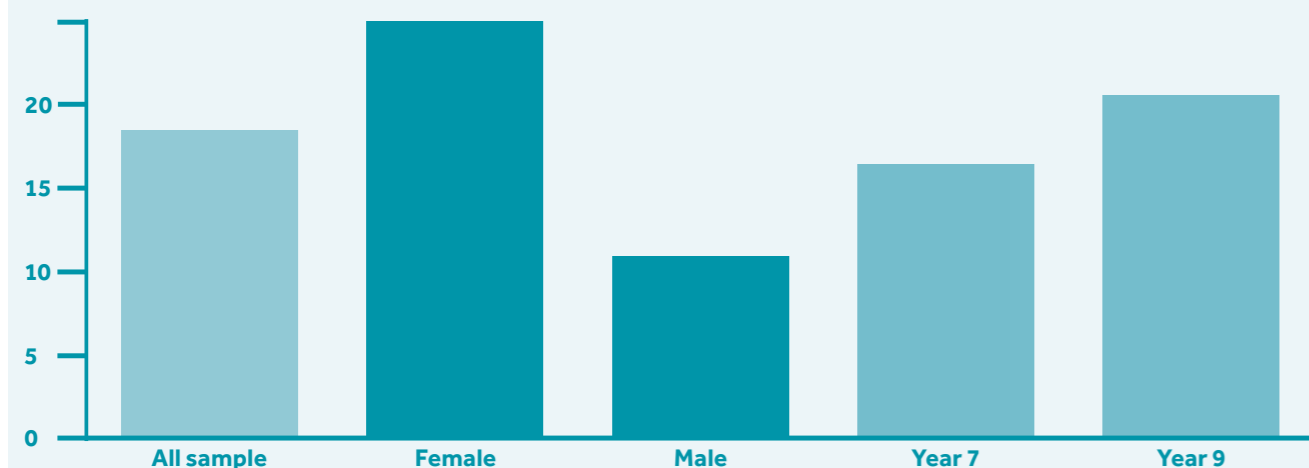
Findings: what can 30,000 children tell us?

Prevalence of mental health problems in the HeadStart cohort

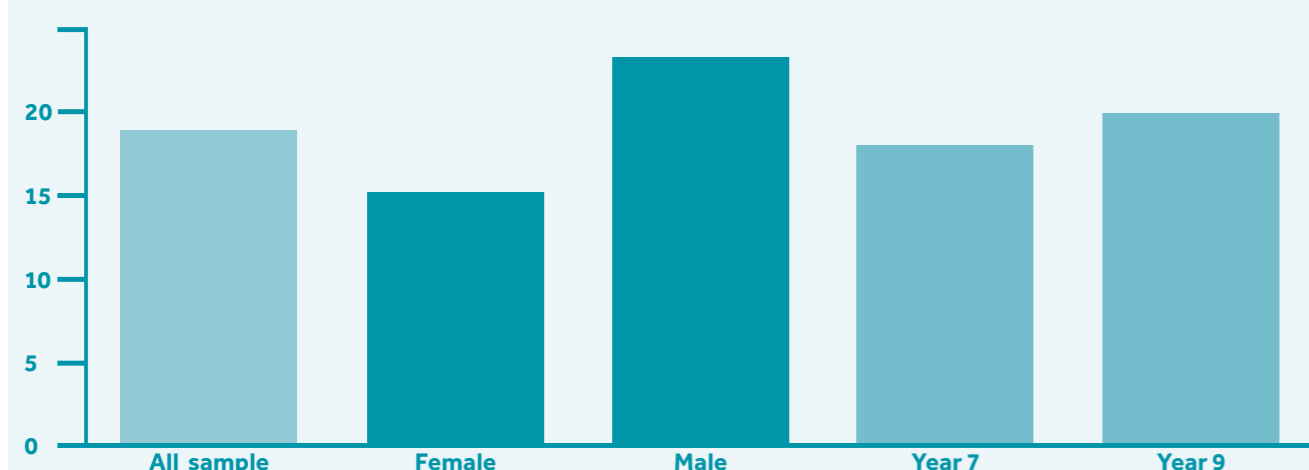
The findings from analysis show that just under 1 in 5 children and young people indicated they were experiencing emotional problems and the same can be seen for behavioural problems. Rates of problems increase with age. There is also an impact of gender, with boys indicating they were experiencing more behavioural problems relative to girls and girls indicating they were experiencing more emotional problems relative to boys.

Figure 1: Sample characteristics

Percentage above the 'high' threshold for emotional difficulties
n = 30,129



Percentage above the 'high' threshold for behavioural difficulties
n = 30,145



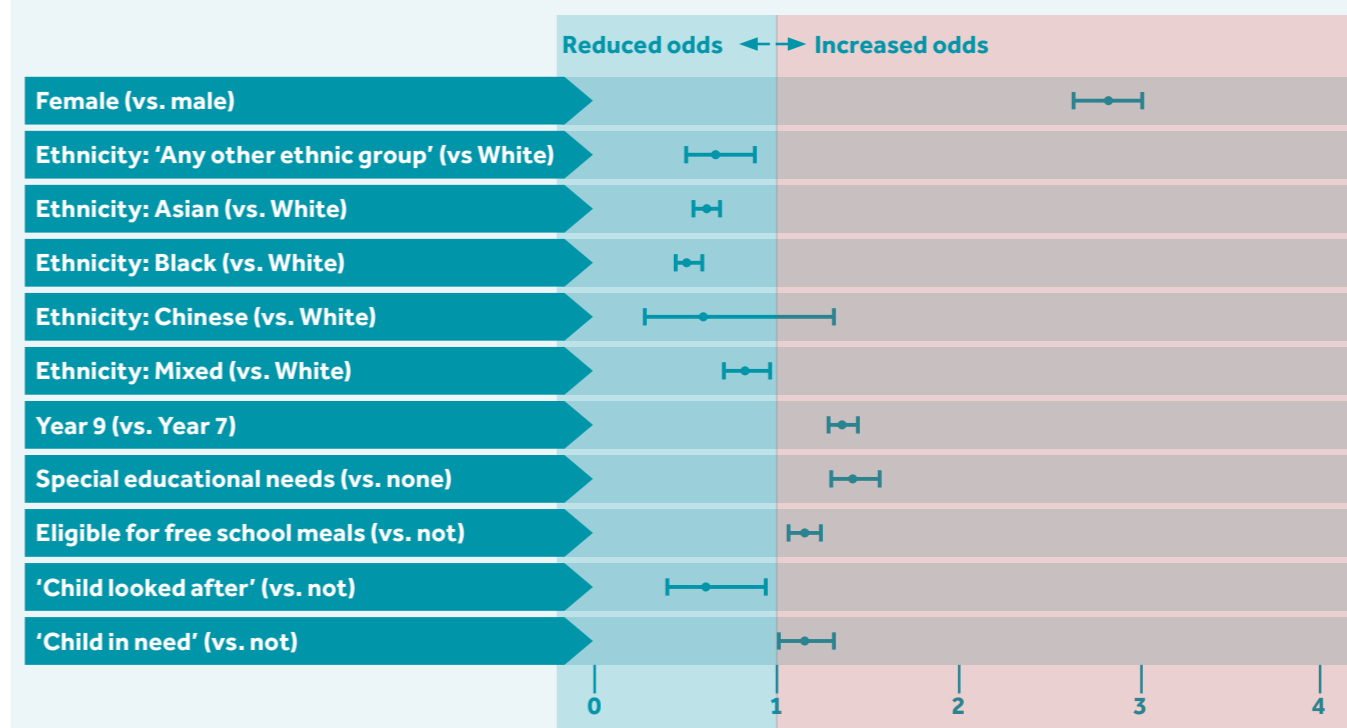
The odds of experiencing mental health problems for different subgroups

To explore whether the odds of experiencing mental health problems differ for subgroups within the sample, odds ratios (ORs) were calculated in SPSS using binary logistic regression models (see Figures 2 and 3). This analysis allows the unique effects of each predictor to be assessed whilst controlling for the other predictors. Odds ratios report the odds that an outcome will occur for a target group relative to a contrast group (e.g., females versus males or Year 9 versus Year 7).^{xv} In this instance, this refers to the odds of a child indicating they are experiencing a mental health problem based on a range of characteristics (e.g. gender, ethnicity). Scores (and accompanying confidence intervals)¹ greater than 1 indicate greater odds of experiencing mental health problems; scores less than 1 indicate reduced odds of experiencing mental health problems.

¹ Indicates a range of scores that if multiple samples were surveyed and the odds-ratio estimated, in 95% of the times the odds would fall in this range. If the confidence interval does not include 1, the odds ratio is significant (unlikely that it is due to chance). If the confidence interval does include 1 then there is no discernible increase or decrease that can be attributed to the variable of interest.

Figure 2: Emotional problems

Odds ratios for young people indicating they are experiencing emotional problems, based on a range of characteristics



Emotional problems

Figure 2 shows that young people with the following characteristics were more likely to experience emotional difficulties:

- Girls in comparison to boys (OR 2.85)
- Older students (Year 9) in comparison to younger students (Year 7) (OR 1.37)
- Children with special educational needs in comparison to those without (OR 1.43)
- Children classified as a 'child in need' in comparison to those not classified as in need (OR 1.16)
- Children eligible for free school meals in comparison to those not eligible (OR 1.16).

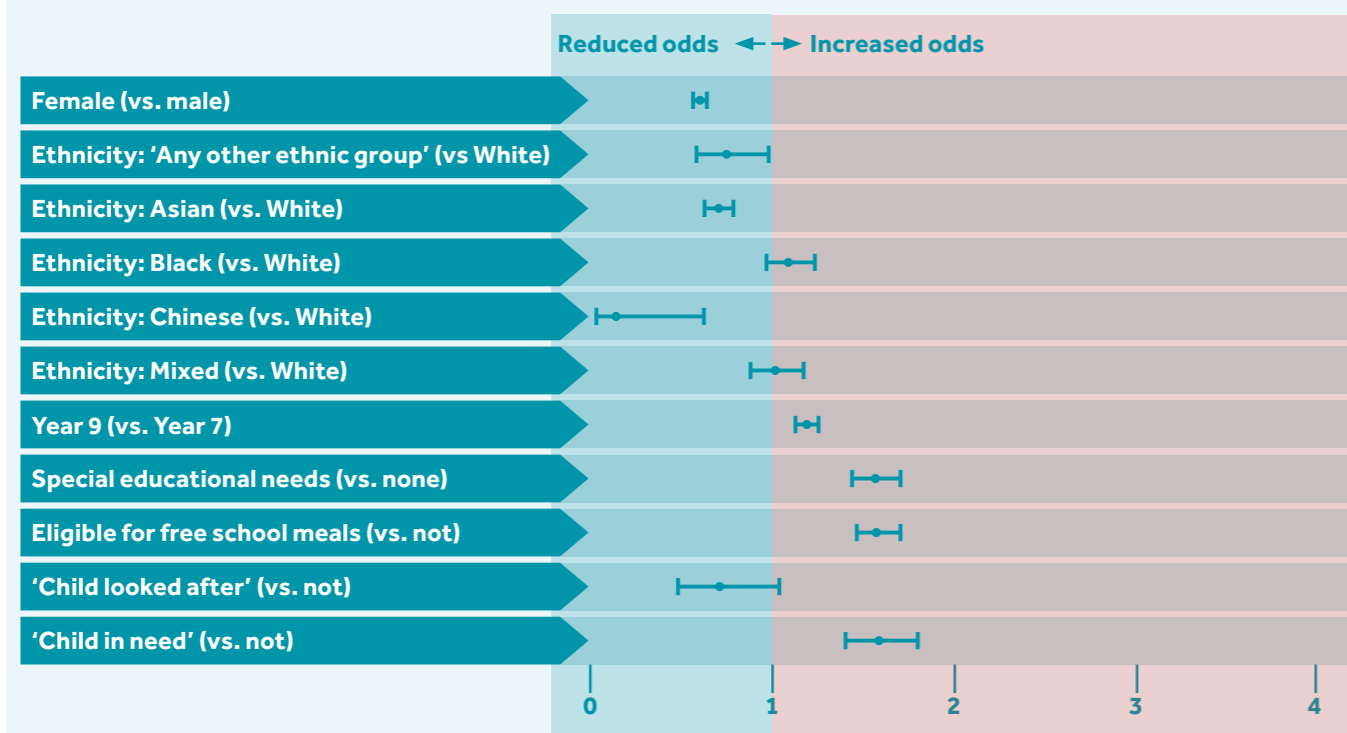
Conversely, young people with the following characteristics were less likely to experience emotional problems:

- Those belonging to Asian, Black, Mixed, 'any other' ethnic groups in comparison to those in the White ethnic group (ORs 0.62, 0.51, 0.83, 0.67 respectively)
- Looked after children in comparison to those who were not looked after (OR 0.61), but a small sample size made this finding less certain.

There was no discernible difference in levels of emotional problems for the Chinese (in comparison to White) ethnic grouping.

Figure 3: Behavioural problems

Odds ratios for young people indicating they are experiencing behavioural problems, based on a range of characteristics



Behavioural problems

Figure 3 shows that young people with the following characteristics had significantly greater odds of experiencing behavioural problems:

- Older students (Year 9) in comparison to younger ones (Year 7) (OR 1.18)
- Children with special educational needs in comparison to those without (OR 1.55)
- Children classified as a 'child in need' in comparison to those not classified as in need (OR 1.57)
- Children eligible for free school meals in comparison to those not eligible (OR 1.56)

Conversely, young people with the following characteristics had significantly lower odds of experiencing behavioural problems:

- Girls in comparison to boys (OR 0.61)
- Those belonging to Asian, 'any other ethnic group' and Chinese ethnic groups in comparison to the White ethnic group (OR 0.71, 0.75 and 0.15 respectively).

No difference in levels of behavioural problems were discernible for those from the Black or Mixed ethnic grouping, in comparison to the White ethnic group. Also, there was no difference for those classified as looked after children in comparison to those who are not.

Conclusion

Findings presented in this report are drawn from the largest population-based survey of child mental health and wellbeing in England. While the sample is not entirely representative of children and young people nationally, with marginally greater levels of deprivation and marginally lower special educational needs, it corroborates other recent cohort findings which point to potential escalation in emotional problems, particularly in adolescents.^{iv} The findings also indicate similar escalations in behavioural problems. Across emotional and behavioural problems, being a child in need, being eligible for free school meals and having special educational needs were all associated with higher levels of mental health problems, whereas being Asian or 'any other ethnic group' was associated with lower levels of mental health problems. Other risk factors varied as a function of the type of mental health problem.

Implications and recommendations

1. High rates of mental health problems in this population highlight the importance of finding the best means to promote positive wellbeing, and to prevent and address mental health problems.
2. Tackling mental health problems may involve tackling social inequalities due to the consistent association between deprivation and mental health problems which was evident in the results of this survey.
3. It should not be assumed that young people from minority ethnic groups are at greater risk of mental health problems; this is not the case based on current evidence. In addition, those from different minority ethnic backgrounds should not be grouped together in analysis of the prevalence of mental health problems, as important differences exist.



References

- i. The Children's Commissioner. (2017). Report on measuring the number of vulnerable children. London: Children's Commissioner for England
- ii. Green, Mcginnity, A., Meltzer, Ford, T., Goodman, R. (2005). Mental Health of Children and Young People in Great Britain: 2004. Office for National Statistics.
- iii. Fink, E., Patalay, P., Sharpe, S., Holley, S., Deighton, J., Wolpert, M. (2015). Mental health difficulties in early adolescence: A comparison of two cross-sectional studies in England from 2009 to 2014. *Journal of Adolescent Health, 56*, 502–507.
- iv. Patalay P & Fitzsimons E. (2017). Mental ill-health among children of the new century: trends across childhood with a focus on age 14. September 2017. Centre for Longitudinal Studies: London.
- v. McLeod, J. D., & Shanahan, M. J. (1996). Trajectories of Poverty and Children's Mental Health. *Journal of Health and Social Behavior, 37*, 207–220.
- vi. Emerson, E. & Hatton, C. (2007). Mental health of children and adolescents with intellectual disabilities in Britain. *British Journal of Psychiatry, 191*, 493–499.
- vii. Repetti, R. L., Taylor, S. E., & Seeman, T. E. (2002). Risky families: Family social environments and the mental and physical health of offspring. *Psychological Bulletin, 128*, 330–366.
- viii. Goodman, A., Pattel, V., & Leon, D. A. (2008). Child mental health differences amongst ethnic groups in Britain: a systematic review. *BMC Public Health, 8*:258.
- ix. Richardson, & Lelliott, P. (2003). Mental health of looked after children. *Advances in Psychiatric Treatment, 9*, 249–251.
- x. <http://www.corc.uk.net/headstart-resources/>
- xi. https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/650547/SFR28_2017_Main_Text.pdf
- xii. https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/633031/SFR37_2017_Main_Text.pdf
- xiii. https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/650547/SFR28_2017_Main_Text.pdf
- xiv. Goodman, R., Meltzer, H., and Bailey, V. (1998). The strengths and difficulties questionnaire: A pilot study on the validity of the self-report version. *European Child and Adolescent Psychiatry, 7*, 125–130.
- xv. Szumilas, M. (2010). Explaining Odds Ratios. *Journal of the Canadian Academy of Child and Adolescent Psychiatry, 19*, 227.



About the HeadStart Learning Team

The **Evidence Based Practice Unit** at the Anna Freud National Centre for Children and Families and UCL is working with Big Lottery Fund and the HeadStart partnerships to collect, evaluate and share evidence about what does and doesn't work locally to benefit young people now and in the future.

Partners working with the Evidence Based Practice Unit on this evaluation include the **Child Outcomes Research Consortium (CORC)**, **Common Room**, **London School of Economics** and the **University of Manchester**.

For more information, visit:
www.ucl.ac.uk/evidence-based-practice-unit/HeadStart



Citation for this briefing: Deighton, J., Lereya, T., Patalay, P., Casey, P., Humphrey, N., & Wolpert, M. (2018). *Mental health problems in young people, aged 11 to 14: Results from the first HeadStart annual survey of 30,000 children*. London: CAMHS Press.

Press
CAMHS

ISBN: 978-0-9933436-6-7
© CAMHSPress 2018

Evidence Based Practice Unit (EBPU)
Jordan House, 47 Brunswick Place, London N1 6EB
Tel: 020 7794 2313

www.ucl.ac.uk/ebpu

EBPU is a partnership of UCL and Anna Freud National Centre for Children and Families. Anna Freud National Centre for Children and Families is a company limited by guarantee, company number 03819888, and a registered charity, number 1077106.