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HeadStart Evidence Briefing #7
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Learning from HeadStart: the mental health and wellbeing of adolescent boys and girls

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The HeadStart Programme

HeadStart is a five-year, £58.7m National Lottery funded programme set up by The National Lottery Community Fund, the largest funder of community activity in the UK. It aims to explore and test new ways to improve the mental health and wellbeing of young people aged 10 to 16 and prevent serious mental health issues from developing.

Six local authority led HeadStart partnerships in Blackpool, Cornwall, Hull, Kent, Newham and Wolverhampton are working with local young people, schools, families, charities, community and public services to make young people's mental health and wellbeing everybody's business.

The Evidence Based Practice Unit at the Anna Freud National Centre for Children and Families and UCL is working with The National Lottery Community Fund and the HeadStart partnerships to collect and evaluate 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. This collaboration is called the HeadStart Learning Team.

More information about the HeadStart Learning programme can be found at **https://www.ucl.ac.uk/evidence-based-practice-unit/headstart-learning-team/about-headstart-and-learning-team.**

Evidence Briefing #7

Executive summary

Background

Recent studies estimate that the prevalence of mental health problems in children and young people is 1 in 8, an increase on the previous estimate of 1 in 10[1]. Our own earlier HeadStart findings indicate that, when looking at children's self-reported difficulties, around 1 in 5 report high levels of mental health difficulties[2]. This earlier briefing also shows significant differences between boys' and girls' experiences of mental health problems, with boys more likely to experience behavioural difficulties and girls more likely to experience emotional difficulties. It also identifies adolescence as a period where mental health problems appear to spike, with those in mid or later adolescence showing higher levels of difficulty than those in earlier stages of adolescence or childhood.

Consistent with other research showing that as many as 1 in 4 girls in late adolescence/early adulthood experience mental health problems[1], this earlier briefing pointed to high levels of emotional difficulties in older girls. However, little is known about recent year-on-year time trends in mental health problems, and there has been limited scope in these recent studies to explore longitudinally the developmental trends in mental health problems and subjective wellbeing and how these vary for boys and girls.

Methods

In this report, we use data collected via the HeadStart Wellbeing Measurement Framework (WMF) in a number of ways:

a) Repeated snapshots: by looking at young people in the same age range (13-14) year-on-year, we aimed to establish whether mental health problems in young people are increasing, decreasing or staying the same over time.

b) Longitudinal investigation: by following a group of young people from early to mid-adolescence, we aimed to see whether there are any emerging developmental changes in mental health problems and subjective wellbeing during this period.

c) Gender differences: to explore any gender differences in the mental health problems and subjective wellbeing of the two groups described above.

Findings

Looking at the longitudinal group, overall there is a trend of increasing mental health problems from early to mid-adolescence and a trend of decreasing subjective wellbeing from early to mid-adolescence.

Looking at the results by gender reveals that this escalation in mental health problems and decline in subjective wellbeing for young people during early-mid adolescence is explained by overall deterioration for girls, but not for boys.

In particular, over the period of early to mid-adolescence, girls' emotional difficulties escalated while boys' emotional difficulties remained fairly stable, and girls' subjective wellbeing deteriorated while boys' subjective wellbeing remained at the same level over time. During early adolescence (age 11/12), behavioural problems were much more common in boys, but by mid-adolescence (age 13/14) the gap had closed significantly, with girls' levels of behavioural difficulties increasing to almost the same levels as boys.

In terms of the repeated snapshot group, there was no evidence of short-term increases in mental health problems or changes in subjective wellbeing in recent years, so the changes seen in the longitudinal group appear to be explained by developmental changes during adolescence rather than by increasing trends in mental health problems in recent years.

Implications

Findings point to worrying trajectories for girls as they progress through adolescence. They also highlight the transition between primary and secondary school, and the beginning of secondary school, as important periods of opportunity for prevention and early intervention. Providing support and guidance at home or in school may prevent problems from escalating during this critical period.

Background

Recent evidence estimates that 1 in 8 children and young people in the UK experience mental health problems at any one time[1]. This represents a rise from previous estimates dating back to 2004 of 1 in 10[3]. Looking at this recent prevalence data by age and gender, it seems that these higher estimates are mostly a result of higher levels of emotional disorders in young women aged 16-19, with 22% of young women in this age group experiencing some kind of emotional disorder, versus only 8% of young men. Looking at young people's self-reported mental health problems, rates appear higher at 1 in 5 young people experiencing problems. Nevertheless, the same gender differences are apparent, with boys more likely to experience behavioural difficulties and girls more likely to experience emotional difficulties, but girls experiencing more problems overall[2].

Often, gender differences in emotional difficulties are attributed to differences in the way that boys and girls express psychological distress. Boys are considered more likely to 'act out' in response to distress, leading to behavioural difficulties, with girls being more likely to internalise distress, leading to emotional difficulties[4]. However, looking at behavioural disorders, recent research does not show similar levels of distress for boys and girls. In fact, levels of behavioural disorders are comparable in young children (aged 5-10) and adolescents (aged 11-15) at around 7%, and reduce dramatically by early adulthood (aged 16-19) with a prevalence rate of only 1%[1].

These estimates are certainly food for thought, but differences in data collection mean that any conclusions reached using age-based comparisons should be tentatively drawn.

Furthermore, cross-sectional comparisons between different age groups are not as informative as tracking the same individuals as they progress through childhood and adolescence. As a result, it remains unclear when and how the divergences between boys and girls happen.

Another area which lacks clarity is whether the increases in prevalence shown by the two major studies conducted 10 years apart can be observed over a shorter period.

For the purposes of this briefing,mental health problems are defined as problems affecting our thoughts, feelings and behavior that cause distress and significantly impact on our ability to go about our daily lives. In this briefing we focus on four types of mental health problems: emotional difficulties, behavioural difficulties, hyperactivity/inattention and peer problems. Subjective wellbeing is defined, for the purposes of this briefing, as "Children and young people feeling good, feeling that their life is going well, and feeling able to get on with their daily lives."[5]

This briefing draws on data collected via the HeadStart Wellbeing Measurement Framework (WMF) between 2017 and 2019, to begin to address these previous shortcomings by a) exploring short term changes in experience of mental health problems and subjective wellbeing over time, and b) explore longitudinal changes in these domains for young people moving from early adolescence (11-12 years old) to mid-adolenscence (13-14 years old).

Methods

Sample

Analysis presented in this briefing is drawn from two samples of young people who completed the WMF between 2017 and 2019:

1. A longitudinal group of 10,889 young people (46% male and 54% female) who completed the WMF yearly, starting in 2017 when they were in year 7 (aged 11-12) and finishing in 2019 when they were in year 9 (aged 13-14). 76% of young people were classified as White, with 24% from Asian, Black, mixed or 'other' ethnic groups; 11% had a statement of special education needs (either a statement of SEN, an Education, Health and Care [EHC] plan or SEN support); and 15% of young people were eligible to receive free school meals (FSM).
2. A 'repeated snapshot' group. This sample focused on collecting data from the same year group (year 9) each year, meaning that different young people of the same age range (13-14 years old) completed the WMF every year between 2017 and 2019. A total of 43,794 young people were part of this repeated snapshot group (47% male and 53% female) across the three-year period. 77% of young people were classified as White, 11% with a statement of special education needs (either a statement of SEN, an EHC plan or SEN support) and 16% of young people were eligible to receive free school meals (FSM).

It was not possible in this research to identify non-binary and transgender young people. We acknowledge that understanding the mental health and wellbeing of transgender and non-binary children and young people and the challenges they may experience is an important area for future inquiry.

Measures

All data reported are drawn from the WMF (see Box 1). Mental health difficulties were measured using the child self-report Strengths and Difficulties Questionnaire, a brief emotional and behavioural screening questionnaire for children and young people. In this study we focus on four subscales: emotional difficulties, behavioural difficulties, hyperactivity/inattention difficulties and difficulties with peers (See Box 2)[6].

Subjective wellbeing was measured using the 7-item child self-report Short Warwick and Edinburgh Wellbeing Scale (SWEMWBS)[7].

Box 1: The Wellbeing Measurement Framework (WMF)

The WMF is a year-on-year school-based online survey that Headstart uses to measure wellbeing and resilience in children and young people. From 2017 to 2019, children and young people in years 7 (aged 11-12), 8 (aged 12-13) and 9 (aged 13-14) in participating schools completed this survey each year as part of exploring and evaluating their mental health and wellbeing.

The full framework can be found here: **https://www.corc.uk.net/media/1517/blf17_20-second-school-measuresbl-17-03-17b.pdf.**

Box 2: What aspects of mental health problems and subjective wellbeing are being explored?

Emotional difficulties include symptoms of anxiety and/or depression. One example from the WMF is the following statement:

I am often unhappy, down-hearted or tearful

Behavioural difficulties including aggressive behaviour and 'acting out'. An example statement from the WMF is:

I get very angry and often lose my temper

Young people experiencing these kind of difficulties who were interviewed as part of HeadStart described struggling to maintain control over their anger.

"

It feels bad because it's just like getting angry. I don't like doing it because, as much as it hurts me, it hurts the people around me like my mum, she doesn't like [seeing me] getting angry.

"

I get angry. And like then from sadness it turns up, ends up turning into rage, I get really angry.

"

Hyperactivity/inattention includes difficulties with staying still and concentrating. An example statement from the WMF is:

I am restless, I cannot stay still for long

Peer problems include feeling isolated and possibly being picked on or bullied. An example statement from the WMF is:

I am usually on my own. I generally play alone or keep to myself

Those interviewed as part of the HeadStart programme who experienced these peer problems described having few friends or being the target for bullying.

"

I haven't got many friends in school.

"

He mainly chose me. He pretty much ignored my friends but swore at me and called me names and stuff.

"

Subjective wellbeing is the subjective experience of positive wellbeing. Example statements from the WMF include:

I've been feeling optimistic about the future

I've been dealing with problems well

Analysis

In the data from schools, it is often seen that pupils from one school respond more similarly to one another than to pupils from different schools. This is often called a 'group' effect. In order to account for this 'group effect' in the evaluation of children and young people's mental health problems and level of subjective wellbeing, we used a multi-level modelling technique to explore the change in mental health problems over time[i]. For illustrative purposes, average percentage changes from year 7 (aged 11-13) to year 9 (aged 13-14) in the longitudinal group were also calculated.

[i] The analysis of the longitudinal and the 'repeated snapshot' groups was carried out using STATA statistical software package (version 15).

Findings

Findings for the longitudinal group

Overall, there is a trend of increasing mental health problems from early to mid-adolescence, and decreasing subjective wellbeing.

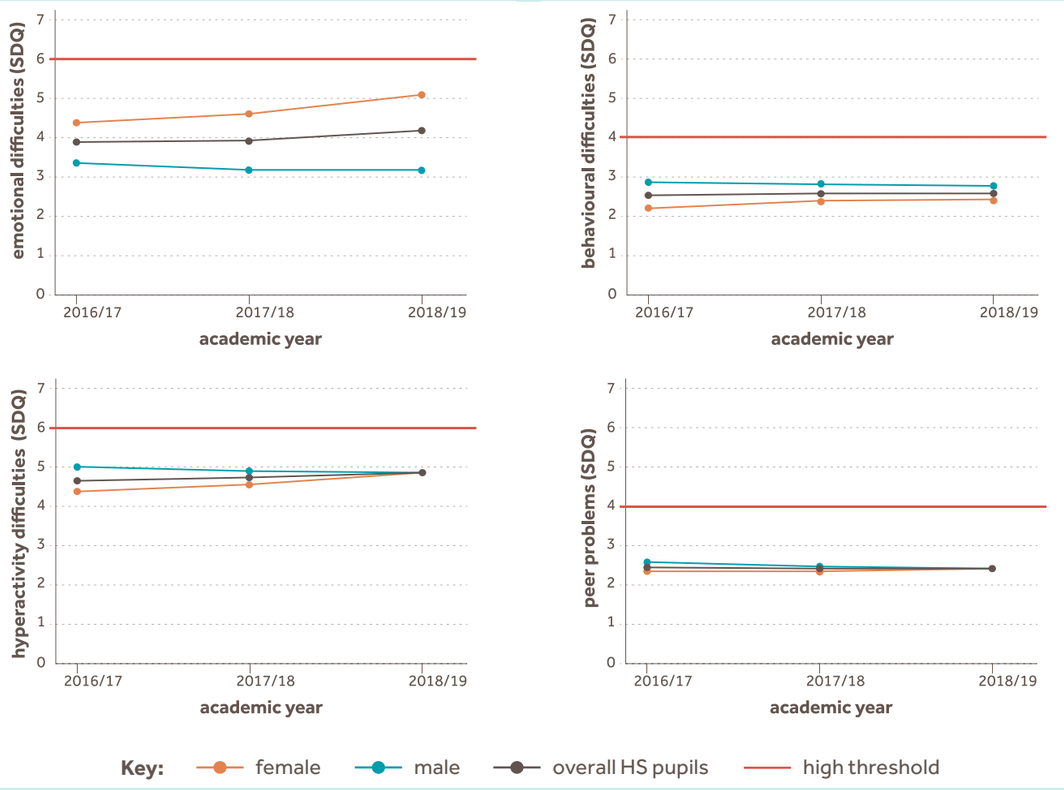
From the period of early to mid-adolescence covered by the survey responses, there was a small but steady increase over time in emotional difficulties, behavioural difficulties and hyperactivity, and a marginal increase in peer problems. Subjective wellbeing also decreased significantly over this period.

Splitting the data by gender reveals that this increase in mental health problems and decline in subjective wellbeing for young people during early-mid adolescence is explained by overall deterioration for girls, but not for boys.

Splitting the dataset by gender revealed quite stark differences between boys and girls, with boys on the whole reporting fairly stable levels of difficulties over time and girls reporting increases over the same period (see Figure 1 on the next page):

- Girls' emotional difficulties were higher than boys at age 11/12 and continued to escalate as they moved into mid-adolescence.On average, girls' emotional difficulties increased by 17% during this period. Boys' emotional difficulties remained fairly stable, even decreasing slightly (5% decrease) over time.
- During early adolescence (aged 11/12), behavioural difficulties were higher in boys, but by mid adolescence (aged 13/14) the gap had closed significantly, with girls' levels of behavioural difficulties increasing to almost the same levels as boys by the end of the period. This convergence over time corresponded to, on average, an 11% increase over the period in girls' behavioural difficulties and a 4% decrease in boys' behavioural difficulties.
- Although girls' hyperactivity scores were lower than boys at age 11/12, these increased over time (on average an 11% increase), while boys' hyperactivity showed a slight (but non-significant) decrease over time (on average a 3% decrease) leading to a convergence in boys and girls scores by age 13/14.
- While boys reported slightly higher levels of peer problems at age 11/12, they also showed a slight decrease in peer problems over time (3% on average). For girls, the opposite pattern was observed - a slight increase (4%) in peer problems over the same period, again leading to a convergence in boys and girls scores by year 9.

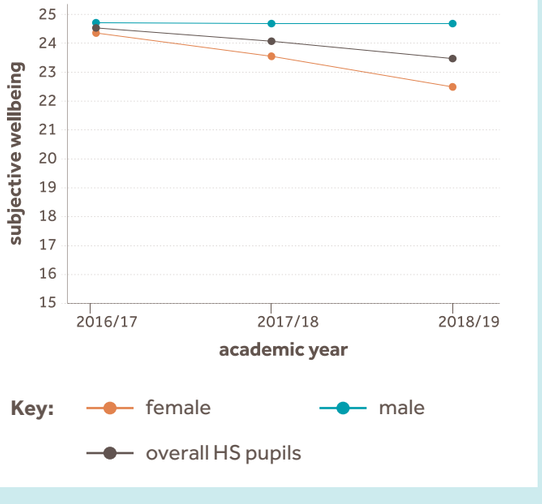
Figure 1: Change in mental health problems over time



In early adolescence, boys had slightly higher subjective wellbeing than girls, but by mid-adolescence the gap had increased significantly (see Figure 2).

This is because, while boys' subjective wellbeing stayed quite stable over time (no significant change on average), girls' wellbeing significantly deteriorated, with an overall decrease of 8% between scores at age 11/12 and age 13/14.

Figure 2: Change in subjective wellbeing over time



Findings for the repeated snapshot group

When looking at the same age group (age 13/14) year-on-year, there is no evidence of short-term increases in mental health problems or a decline in subjective wellbeing in recent years.

Comparing each year 9 group from 2017, 2018 and 2019, we could see very little difference year-on-year when it comes to their mental health and wellbeing. Emotional difficulties, peer problems and subjective wellbeing stayed the same across the three time points, whilst there were very minor decreases in hyperactivity and behavioural problems.

Looking at gender differences, girls' emotional difficulties were, on the whole, significantly higher than for boys, and boys' behavioural difficulties were significantly higher than for girls. Boys also reported significantly higher subjective wellbeing than girls.

Implications

Implications from the longitudinal group

The study does find evidence for developmental trends, which suggest that as young people move through adolescence, the levels/rates of difficulty they experience increase.

Early adolescence has long been described as a period of 'storm and stress' for young people, where a confluence of physical changes, social changes and environmental transitions occur. Such challenges can pose a threat to young people's mental health that, if not tackled, may endure into adulthood[8]. However, our findings indicate that the implications for this sensitive period on mental health and wellbeing are quite different for boys and girls.

Previous studies have noted that expressions of psychological distress are different for boys and girls, with girls more likely to internalise, experiencing more emotional difficulties and boys more likely to externalise leading to behavioural difficulties. **But the current findings demonstrate that the overall level of distress reported by girls across a range of mental health difficulties is higher than for boys.** In relation to emotional difficulties, recent prevalence data show that older adolescents (16-19) have very high rates of emotional disorders. **The longitudinal data presented here demonstrates that when it comes to mental health and wellbeing, divergence between boys and girls happens in early adolescence if not before.**

Findings presented in this report point to worrying trajectories for girls as they approach adolescence, suggesting that significant efforts should be invested in supporting girls during this period.

However, challenges for boys should still be acknowledged, especially because boys can sometimes struggle to articulate mental health difficulties, meaning many can go unidentified[9, 10] – something that may provide some explanation of the lower rates of difficulties reported by boys in the current study.

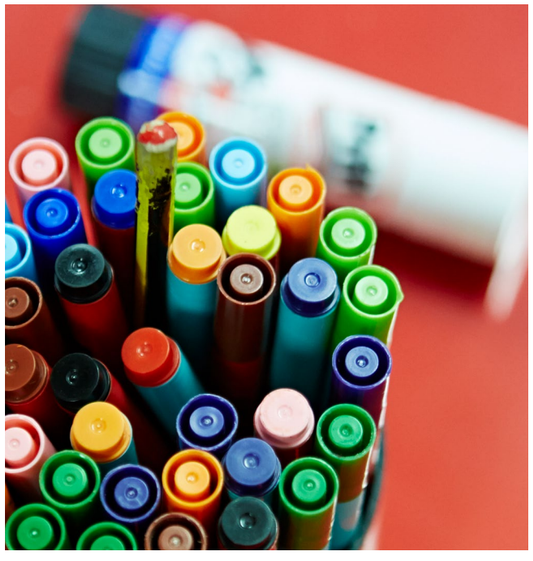
Findings also highlight the end of primary school and the beginning of secondary school as a period of opportunity for prevention and early intervention to prevent problems escalating.

Interventions tackling emotional difficulties and poor subjective wellbeing may be particularly beneficial, as may those which support young people across the transition between primary and secondary school. Examples of such approaches being taken within HeadStart include HeadStart Blackpool's Moving on Up programme and HeadStart Hull's Emotional Resilience Coaches and peer mentoring programme (See Box 3). With appropriate support and resources, parents of young people approaching the transition to secondary school may be well placed to engage with this period of opportunity and improve outcomes for young people. Schools would also be well placed to embed universal and targeted support for young people's mental health and wellbeing during this critical period.

Implications from the repeated snapshot group

This study finds no evidence from time trends to indicate that mental health difficulties are increasing for young people year-on-year.

In the repeated snapshot of 13-14 year-olds, scores for all mental health problems were either static over time or showed very slight decreases. This finding is not consistent with other studies comparing mental health problems over a longer time period. It's possible that the time period over which the snapshots in the HeadStart sample were taken was too short to detect incremental changes. Alternatively, it could be that changes noted over longer periods result from increases in the prevalence of mental health problems early in the period (e.g., between 2005 and 2012), and a subsequent plateau in the later period. It is likewise possible that differences between the findings of this study and previous ones may be accounted for by differences in methods and samples when comparing populations.



Box 3: Example interventions from HeadStart focusing on early adolescence

HeadStart Blackpool: Moving on Up

HeadStart Blackpool's Moving on Up support is for young people in year 6, age 10-11 years old and is delivered in two parts. The type of support received depends on whether a young person is identified as having low resilience or medium resilience: young people are identified through the student resilience survey and through discussions with school teachers.

Young people identified as having medium resilience were initially offered a 6-7 week group work programme, delivered in school for one hour per week. With sustainability in mind, schools are now being given the programme to deliver themselves, however schools can also buy the programme in and a resilience coach can deliver this for them. The topics looked at during the sessions include what support networks are available, friendship, and problem solving, to enable young people to ask questions and feel more confident and equipped about their transition to secondary school.

Young people identified as having low resilience are offered one-to-one support and are invited to participate in co-production groups. This support commences in year 6 and is offered until the young person is settled in their secondary school – normally before Christmas of year 7, this being a one-year support offer.

Box 3 continued

This aspect of Moving on Up support is offered for the whole family and works closely with schools, young people and their parents and carers.

The aim of the support is to help young people to feel more confident about their transition to secondary school. The support looks at reducing anxieties and helping young people to increase their confidence and self-esteem. Some sessions take place in the young person's identified secondary school where they are able to start forming positive relationships with other peers and also with staff, enabling them to ask questions and begin building a sense of belonging.

HeadStart Hull: Peer Mentoring across Transition and Emotional Resilience Coaches

Young People's Peer Mentoring is delivered by Cornerhouse; it offers one-to-one support to young people within secondary schools and in the community. It can also work with year 6 pupils to support transition from primary to secondary where a need is identified. In this case, a mentee is matched with a mentor from the school they will be transitioning to. This has been particularly useful for young people who struggle to manage change, who lack effective peer networks, who have experienced bullying, or who have low self-esteem and confidence. Peer mentors undergo extensive training and receive regular supervision to ensure they have the skills and knowledge necessary to support other young people identified as having an emotional health need.

They meet their mentees on a weekly basis within schools and in community settings such as youth clubs, offering regular low-level support to mentees who are experiencing issues which prevent personal growth and development. The mentor will help the young person to identify goals and will support them, with action planning and problem solving, to achieve these goals. More information on HeadStart Hull's peer mentoring support can be found at in this **video**[11].

Emotional Resilience Coaches are based in Hull Youth Development Service and provide one-to-one support to young people aged 10-16 at school, in the community or in the home.

Using a range of techniques such as motivational interviewing and cognitive behavioural therapy (CBT), they support young people on a number of issues including transition from primary to secondary, regular school to school transition (e.g. frequent school moves), and support those identified as at risk of becoming NEET (not in education, employment or training) in year 9. Emotional Resilience Coaches can also provide support where there are multiple emotional health issues (risks and symptoms) across the young person and their family.

Over several sessions, Emotional Resilience Coaches help the young person to develop skills to cope with challenges, as well as to improve their confidence and self-esteem. Young people have told HeadStart Hull that Emotional Resilience Coaches can help in a range of areas of their lives including low-level anxiety and depression, stress, identity/body image and transition between schools.

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About the HeadStart Learning Team

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