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A survey of the mental health of children and young people in care in England in 2020 and 2021

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The responsibility for the analysis, results and the views expressed ultimately rests with the authors.

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Executive Summary

Background

Recent research studies estimate that 1 in 8 children and young people in England are likely to be impacted by mental ill health, with this estimate rising to 1 in 6 during the Covid-19 pandemic [1, 2]. Evidence suggests a much higher prevalence of mental ill health in the population of children and young people living in State care in England [3].

Mental ill health experienced in childhood and adolescence not only impacts the short and long-term health, wellbeing, socioeconomic trajectories and family life of children and young people, but also exerts pressure and a financial toll on the health and social care systems and the State through its impact on mental health services, the cost of interventions and pressure on State benefits systems [4-6]. However, as the most recent national survey of the mental health of children and young people in care was carried out in 2002, little is known about recent trends [3]. In addition, there has been limited scope in recent research studies to explore how the Covid-19 pandemic has affected this vulnerable group of children. This report focuses on the findings from two surveys of children and young people in care which were conducted in 2020 and 2021 to address these gaps in knowledge.

Method

This report utilises self-reported data collected from young people in State care aged 11-18 years, via an online survey (MH-CAT: Mental Health Context Assessment Tool, developed by the research team), which was carried out to establish the prevalence of mental health concerns and to identify the key factors associated with the mental health of children and young people in care in England.

The MH-CAT survey was conducted in 2020 and repeated in 2021, collecting information from children and young people in care during the Covid-19 pandemic. The Wave 1 survey was completed by 930 children and young people in care from 18 local authorities (LAs) in England. The Wave 2 survey was completed by 688 children and young people in care from 14 LAs in England. Of these, 262 children and young people responded to both the Wave 1 and 2 surveys.

Findings and implications for policy and practice

Confirming findings from previous research, the results of the two surveys indicated that children and young people in care are significantly more likely to be impacted by mental ill health when compared with children and young people in the general population[1]. Scores on the Strengths and Difficulties Questionnaire showed that, of the 11-18 year old children and young people in care who responded to the survey, 22% in Wave 1 and 24% in Wave 2 were at high risk of experiencing mental ill health.

The results of the statistical analyses show that, after controlling for other factors, multiple individual characteristics and contextual factors are significantly associated with the mental health of children and young people in care.

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[1] The source of the general population data: Understanding Society COVID-19 Youth Survey.
(https://www.understandingsociety.ac.uk/topic/covid-19)

Mirroring trends seen in the general population, the regression analyses found that girls and children and young people who identified themselves as white were more likely to have higher total difficulties scores on the Strengths and Difficulties Questionnaire (SDQ), indicative of a higher risk of experiencing mental ill health.

The results indicated that children who lived with their siblings and kin were more likely to have better mental health. This supports the current statutory guidance to place children and young people who need a placement in State care with relatives (or friends/other connected persons) and siblings where possible (Section 22, Children Act 1989).

The results also showed that children and young people in care who had positive relationships with their carer(s), friend(s) and social worker(s) were more likely to have better mental health, irrespective of the length of time they had spent in care or the number of previous placements they had had. This highlights the importance of ensuring the continuity, stability, and quality of relationships with key people throughout children and young people's time in care. These results have direct implications for addressing the high prevalence of placement instability and the ongoing high turnover rate of social work staff [7]. It also emphasises the importance of facilitating better matching of foster carers with the children and young people; ensuring that children and young people are supported to settle into new placements and schools; and ensuring the continuity of important relationships when changes in placements or schools are necessary.

Children and young people who were happy with the level of contact that they had with their social workers were also more likely to have better mental health. This highlights the importance of periodically consulting children and young people on their wishes and feelings about social work contact.

The regression analyses further highlighted that children who had positive feelings about their school were more likely to have better mental health, while those who had been excluded or bullied were negatively impacted. This has implications for how school exclusions of children in State care are managed and how children and young people who have been bullied are supported. Furthermore, younger adolescents in our sample were more likely to have mental health difficulties, which might have implications for how children in care are supported (more) during their primary to secondary school transitions.

The findings also emphasise the benefits of promoting healthy behaviours for better mental health, such as reducing screen time; not engaging in risky behaviours (smoking, drinking, taking drugs); and having opportunities to develop hobbies.

Children and young people who are impacted by multiple risk factors identified by this research would be more likely to be at risk of mental ill health than those who are impacted by fewer or no risk factors. This has implications for how these risks are monitored and managed by carers, schools/virtual schools and children's social care teams when assessing and supporting the mental health of children and young people in care.

Introduction and context

The family environment in which children and young people grow up can greatly influence their outcomes in terms of development and wellbeing [8]. The majority of children and young people in the UK still live with at least one parent [9]. However, at any given time, some 80,000 children and young people are being looked after by the State, 63% of these are looked after by foster carers [10].

The prevalence of mental ill health in the population of children and young people in State care in England is high, with statistics indicating that around 50% of children and young people in care might have a diagnosable mental health condition (for example, depression, anxiety, conduct disorder)[3, 11], compared with 12%-17% of children and young people in the general population [2, 12].

Just over 50% of mental health concerns start before the age of 14 years and 75% before the age of 18 years [13]. Unaddressed childhood mental ill health not only impacts the short and long-term health, wellbeing, socioeconomic trajectories and family life of children and young people, but also exerts pressure and a financial toll on the health and social care systems and the State through its impact on mental health services, the cost of interventions and pressure on the State benefits systems [4-6, 14]. Long-term impacts of mental ill health in childhood include low academic achievement, reduced productivity and adult mental ill health [13, 15].

As stipulated in Section 22(3)(a) of the Children Act 1989, State Care has a protective role and a duty to safeguard and promote the welfare of children and young people by facilitating their recovery from previous adverse childhood experiences, whilst promoting their physical, emotional and mental health. In recent years, there has been a renewed focus on the mental health needs of children and young people, aided by the efforts of the UK Government, to provide more streamlined and early support to reduce the impact on the individual, society and the State. This is evidenced in initiatives and guidance such as, *Achieving Better Access to Mental Health Services by 2020 [16], Promoting the health and well-being of looked-after children [17], Future in mind [18], NHS Five Year Forward View [19], and the Evaluation of the Mental Health Assessment Pilots for looked after children [20].* However, as has been highlighted by the House of Commons Education Committee [21], the most recent, self-reported, national survey of the mental health of children and young people in care in England was carried out in 2002 [12], so there is a lack of up-to-date evidence on the prevalence and characteristics of the mental health and wellbeing of children and young people in care.

Furthermore, although the impact of the Covid-19 pandemic on the mental health of children and young people in the general population has been noted, including increased levels of distress, worry and anxiety along with loneliness [2, 22, 23], there remains limited understanding of how the pandemic has affected this vulnerable group of children and young people in State care. Despite concerns about the disruption to social work practice during the Covid-19 pandemic, there have been positive instances of innovative practice, for example, the use of online communication to support children and young people in care [24]. Based on feedback from foster carers, it has also been hypothesised that the period of lockdown might have acted as a protective factor for some children and young people in care who found school challenging, while at the same time facilitating more positive relationships with their carer(s) and improved mental health [24]. However, there is limited research published to date on the impact of the Covid-19 pandemic on this vulnerable population [25].

From a policy and practice viewpoint, it is important not only to establish the prevalence of mental ill health, but also to understand the risks and protective factors that influence the mental health of children and young people in care. For example, an understanding of *how* care experiences can

positively influence the mental health trajectories of children and young people in care (what works, for which groups of children and young people, when and in which context) can potentially enable the identification of good practice and a starting point for reducing the prevalence of mental ill health in this population.

This report focuses on the findings from two surveys of 11–18-year-old children and young people in State care, which were conducted in 2020 and 2021 to collect information from children and young people directly, to start addressing these gaps in knowledge. This research was funded by the Economic and Social Research Council (ESRC) via grants ES/R006482/1 and ES/V015699/1[2].

Method

The research report uses data from a survey of children and young people in care conducted in 2020 and 2021.

Ethics

This research study has ethical approval from the Faculty of Social Sciences and Law Ethics Committee at the University of Bristol (REF: 85682). It has also been granted research approval by The Association of Directors of Children's Services (ADCS) (REF: RGE200212). The research further complied with research governance requirements of the specific local authorities taking part in the research.

Survey

An online survey (MH-CAT: Mental Health Context Assessment Tool), was created by the research team to collect data on the status of the mental health of children and young people in care as well as on contextual factors that have been shown to be associated with mental health outcomes, such as children and young people's characteristics [26-30]; strength of relationships [31, 32]; placement characteristics [30, 33-37]; school characteristics [1, 38-40]; social work support [41]; health and lifestyle factors [42, 43], and sense of agency [44, 45]. The structure of the survey was influenced by Bronfenbrenner's bioecological model to capture influences on mental health at individual, interpersonal, organisational, community, and policy levels [46].

The survey consists of questions created by the research team; questions from other surveys such as the Mental Health of Children and Young People in England 2017 (MHCYP 2017)[3] [1], Health Behaviours in School Children (HBSC)[4] [47]; and standardised measures of mental health, wellbeing, and social support. The mental health of children and young people in care was measured using the Strengths and Difficulties Questionnaire (SDQ)[5] [48], which is one of the most widely used screening

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measures for mental health disorders in children and young people[6]. Research indicates that children and young people who are assessed to be in the 'cause for concern' range in the SDQ are significantly more likely to have subsequent clinical diagnoses of mental health disorders [49, 50][7,8].

The children and young people's wellbeing was measured using the 7-item child self-report Short Warwick-Edinburgh Mental Wellbeing Scale (SWEMWBS) [51][9].

The quality of relationships with carer(s), social worker and friends, and children and young people's views on the level of support that they receive from their teachers were measured with questions adapted from the Multidimensional Scale of Perceived Social Support (MSPSS) [52].

The draft MH-CAT survey was reviewed and edited in consultation with and feedback from experts in the field (project advisory group); a group of young adults with experience of being in care; and an expert survey designer. The survey was then built online by the survey designer to ensure that it was user friendly for the age group completing it.

In the second wave of the MH-CAT survey, a few more questions were included to measure additional dimensions of children and young people's mental health and the impact of the Covid-19 pandemic, which included anxiety, depression, self-harm and anxiety about the Covid-19 pandemic. Anxiety and depression were measured with the General Anxiety Disorder-2 (GAD-2) scale [53] and Patient Health Questionnaire-2 (PHQ-2) scale [54] respectively. Children and young people's anxieties about the pandemic was measured using the Pandemic Anxiety Scale (PAS) [55].

No questions that could identify the children and young people were asked and the online surveys could be completed on a mobile phone, tablet or computer. The MH-CAT survey was conducted in 2020 (Wave 1) and then repeated in 2021 (Wave 2), during the Covid-19 pandemic.

Sample, recruitment, and respondents

The sampling frame was restricted to children and young people between the ages of 11-18 years as children over the age of 11 years have been shown to be proficient at completing self-completion online surveys [56, 57]. The sample was also limited to children who have been in care for at least one year, enabling exploration of the impact of specific contextual factors linked to the care experience, such as relationships with carers.

Local authorities (LAs) that participated in the survey were recruited across different regions in England[10] to avoid geographical response bias. A unique survey link was created for each child in the

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[6] The SDQ is a 25-item questionnaire comprising of five sub-scales (emotional difficulties; conduct difficulties; hyperactivity/inattention difficulties; difficulties with peers; and prosocial behaviours).

[7] The SDQ total difficulties score is derived from summing scores of four subscales (emotional difficulties; conduct difficulties; hyperactivity/inattention difficulties; difficulties with peers). Higher scores on the SDQ indicate higher levels of mental health difficulties.

[8] The SDQ scores allow us to assess the mental health of children in care and indicate whether the scores are:
- 'Normal' (scores between 0-15, indicative of a low risk of mental ill health): Scores are in the 'normal' range when compared with children and young people their age in the general population.
- 'Borderline' (scores between 16-19, indicative of medium risk of mental ill health): Scores indicate a somewhat greater level of difficulties. Children and young people scoring in this range may need additional support.
- 'Cause for concern' (scores between 20-40, indicative of high risk of mental ill health): Scores indicate a high level of difficulties. Children and young people scoring in this range are likely to need significant additional support.

[9] With license to use from Warwick University. Higher scores on the SWEMWBS indicate higher positive mental wellbeing.

[10] Number of local authorities that participated from each region: South East, 4; Outer London, 3; East Midlands, 3; West Midlands, 2; North East, 2; North West, 2; South West, 1; East of England, 1; Yorkshire & the Humber, 1.

sampling frame, linked to their local authority ID number, and was distributed via the children's social care teams in each local authority.

Between September and December 2020, Wave 1 of the MH-CAT survey was sent out to 7,347 children and young people in care in 19 different LAs across England. The survey was completed by 930 children and young people in care from 18 LAs in England (13% response rate).

Fourteen of these 18 local authorities opted in for the second wave of the MH-CAT survey, which was carried out between June and September 2021. The Wave 2 survey was sent out to 4,589 children and young people and was completed by 688 children and young people (15% response rate). A total of 262 children and young people responded to both Wave 1 and Wave 2 surveys.

Data cleaning and missing values

Age, date of birth and gender information provided by each participant was cross-checked against LA provided data for data validity and reliability. Unmatched cases were excluded from analyses (25 from Wave 1, and 7 from Wave 2). Following data cleaning, 905 of Wave 1 and 681 of Wave 2 survey responses were included in the final analyses.

The proportion of missing values for each survey item was relatively small (0.1%-7.5%). Participants with missing data were excluded from the final regression models.

Data analyses

A comparison of mental health change over time between 2020 and 2021 for the same cohort of children and young people in care was not possible as only 262 children and young people responded to both Wave 1 and Wave 2 surveys. This number does not provide enough statistical power to accommodate all the explanatory variables that the authors wanted to include in the regression model. Therefore, data from MH-CAT Wave 1 and Wave 2 survey were analysed separately.

First, bivariate analyses (chi square analyses and correlations) were conducted to explore associations between mental health and contextual variables (children and young people's characteristics; strength of relationships; placement characteristics; school characteristics; social work support; health and lifestyle factors; and sense of agency). The variables that were significantly associated with mental health in bivariate analyses were included in the linear regression models, with SDQ total difficulties score as the outcome variable. The analyses were carried out using statistical software STATA 16.

Characteristics of the children and young people who responded to the survey

Table 1 shows the demographic characteristics of MH-CAT survey respondents (Wave 1 and 2) who had been in care for at least one year in comparison with the national population of children in care in England who had been in care for at least one year[11] [58]. The MH-CAT survey respondents were on average 14.6 years old (Range: 11-18 years old) at the time of the survey.

The ethnic distribution of children and young people in care who responded to the MH-CAT surveys was proportionately similar to that of children growing up in care nationally.

The national population had proportionately more male children in care, whereas the gender of the MH-CAT survey respondents in Wave 1 and 2 was evenly distributed. These differences between the national distribution and the survey samples were statistically significant[12].

Table 1. A comparison of the socio-demographic characteristics of the national MH-CAT survey samples in Wave 1 and 2 with all children in care in England

Socio-demographic characteristics of children and young people	MH-CAT		National population of children in care in England (2020)[13]
	Wave 1 (n=905)	Wave 2 (n=681)	(n=56,780)
Age at the time of survey (mean, in years)	14.6	14.6	-
Gender	*	**	
Male	50%	51%	56%
Female	50%	49%	44%
Ethnicity			
White	80%	80%	77%
Mixed	8%	10%	10%
Asian	6%	6%	4%
Black	4%	4%	7%
Other	2%	1%	2%

Note

*, ** Chi-square tests comparing MH-CAT survey data with national data on children in care were statistically significant at $p < .05$ level.

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[11] Children and young people in the Wave 1 and Wave 2 survey samples had been in care for at least one year, which was a sampling criterion for this research.

[12] Chi-square tests comparing MH-CAT survey data with national data on children in care were statistically significant at $p < .05$ level.

[13] The population of children and young people in care in England who had been in care for at least 1 year in the year until 31st March 2020.

Placement characteristics of children and young people

The placement characteristics of children and young people in care who responded to the Wave 1 and Wave 2 surveys are given in Table 2[14].

Table 2 . Placement characteristics of children and young people in care who responded to the MH-CAT Wave 1 and Wave 2 surveys

Care history and current placement	MH-CAT	
	Wave 1 (n=905)	Wave 2 (n=681)
Average length of time in State care (in years)	5.6	6.4
Average number of placements since entering care	3.4	3.3
Placement at the time of the survey		
Foster care with non-relative	60%	63%
Foster care with relative	13%	12%
Children's home or residential care	17%	15%
With birth parents	3%	4%
Independent living	5%	4%
Other[1]	2%	2%
Length of time in current placement (%)		
Up to 6 months	12%	11%
7 months - 2 years	31%	26%
More than 2 years	57%	63%
Have sibling(s) (%)		
Yes	94%	93%
Living with children including sibling(s) in current placement (%)		
Not living with any other children	20%	20%
Living with other (unrelated) children in care only	45%	40%
Living with sibling(s) only	20%	23%
Living with sibling(s) and other children	15%	17%
Going missing from placement (%)		
Yes - Once	10%	10%
Yes - More than once	15%	13%
No	75%	77%
Feelings about placement (% agreement)		
I feel safe in my placement	92%	94%
I feel safe in the area where I live	88%	88%
I feel happy where I live	85%	89%
I feel I can be myself in my placement	85%	88%
I feel that my views are listened to when adults make decisions	68%	72%
I feel that my life is better now that I am in care	63%	65%

1. The 'other' category in the type of placement at the time of the survey included (semi) independent supported living, placement with adoptive parents, secure unit or hospital.

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[14] Due to rounding, percentages within this report might not add up to 100%.

Around 60% of children and young people in care who responded to the Wave 1 and 2 surveys lived in foster care with a non-relative and slightly over one in ten lived with a relative foster carer. Around one in six lived in a children's home or in residential care.

Generally, children and young people reported positive feelings about being in State care. In both surveys, the majority of respondents reported that they felt safe in their placement and in the area where they lived.

The majority also felt happy and thought they could be themselves in their current placement. Around 70% of children and young people in care felt their views were listened to when adults made decisions and around two-thirds of them felt that their life was better now that they were in care. It should be noted that due to the sampling criteria, children and young people who responded to the survey had been in care for at least one year. It is possible that the response distribution to these questions might have been different if the samples also included those who had entered care recently.

While over 90% of children and young people in care reported that they had a sibling in both waves, only around 35-40% of them were living with a sibling at the time of both surveys.

Children and young people's views on school and education

The educational characteristics of children and young people in care who responded to the Wave 1 and Wave 2 surveys are given in Table 3.

The majority of the children and young people who responded to the survey reported that going to school would help them in the future and that they felt safe at school. Around two-thirds of children and young people indicated that they liked going to school (Wave 1: 67%; Wave 2: 61%).

Also, almost four in five children and young people in care reported that their teacher(s) really tried to help them at school (Wave 1: 77%; Wave 2: 78%). Less than two-thirds of them indicated that they could talk about their problems with their teacher(s) (Wave 1: 61%; Wave 2: 65%).

Around one in ten children and young people reported truanting at least once a month and 34% of Wave 1 and 24% of Wave 2 respondents had been previously excluded from school on a fixed-term or permanent basis.

Over a third of children and young people in care reported that they had stopped going to school or college during the Covid-19 pandemic, and around one in ten (9%) reported that they had changed school at least once in the last six months during the pandemic.

Table 3. Educational characteristics of children and young people who responded to the MH-CAT Wave 1 and Wave 2 surveys

Educational characteristics	MH-CAT	
	Wave 1 (n=905)	Wave 2 (n=681)
Average number of school changes linked to placement change(s)	1.1	0.9
Type of school (%)		
Secondary school	54%	51%
Post-16 college or sixth form	28%	25%
Special school/ alternative provision (including PRU[1])	5%	9%
Don't attend a school or college	6%	5%
Other[2]	7%	10%
Impact of the coronavirus pandemic on schooling (%)		
Stopped going to school/college due to COVID-19 pandemic	39%	36%
Went to school/college for some days	30%	31%
Went to school every weekday	31%	33%
Truanting (%)		
At least once a month	10%	13%
1 to 2 times a year	11%	9%
Never	79%	78%
School exclusion (including fixed or permanent exclusion) (%)		
Yes	34%	24%
Access to a laptop (%)		
Yes	86%	93%
Feelings about school (%)		
I think going to school will help me in the future	87%	85%
I feel safe at school	78%	79%
I like going into school	68%	67%
Teacher support (%)		
My teacher(s) tries to help me	77%	78%
I can talk about my problems with my teacher(s)	61%	65%

1. PRU: Pupil Referral Unit.

2. The 'other' category includes independent school; boarding/residential school; home schooling; or apprenticeship /training/work experience.

Children and young people's views on relationships and support

Information on the quality of relationships that children and young people in care reported to have with their carer(s), social worker, and friend(s), and their views on life story work and their contact with their birth family and are given in Table 4.

Most children and young people who responded to the MH-CAT Wave 1 and 2 surveys indicated that they had positive relationships with their carer(s) and friend(s).

In both survey Waves, nearly three-quarters (72%) of the children and young people reported that their social worker really tried to help them.

Less than two-thirds of children and young people in care reported that they trusted their social worker; they could talk about their problems with their social worker; or that they felt they received the emotional help and support they needed from their social worker.

In both Wave 1 and 2, around 70% of children and young people in care reported that they were satisfied with the level of contact with their social worker but around 16-17% felt that they would like to have more contact with them.

Most children and young people in care reported that they were in contact with their birth family and indicated that they were in contact with their mother most frequently. More children and young people had contact with their mothers and siblings compared with their fathers, grandparents and other family members.

Table 4. Relationships and support of children and young people who responded to the MH-CAT Wave 1 and Wave 2 surveys

Relationships and support	MH-CAT	
	Wave 1 (n=905)	Wave 2 (n=681)
The average number of days that children and young people have had meals with the people they live with over the previous seven days	5.5	5.5
Relationship with carer(s) (% positive answers)		
My carer(s) really tries to help me	91%	93%
My carer(s) is willing to help me make decisions	89%	92%
I get the emotional help and support I need from my carer(s)	83%	87%
I trust my carer(s)	84%	89%
I can talk about my problems with my carer(s)	78%	84%
Relationship with social worker (% positive answers)		
My social worker really tries to help me	72%	72%
My social worker is willing to help me make decisions	69%	70%
I trust my social worker	65%	65%
I can talk about my problems with my social worker	61%	64%
I get the emotional help and support I need from my social worker	59%	59%
Relationship with friends (% positive answers)		
I have friends with whom I can share my joys and sorrows	83%	86%
My friends really try to help me	81%	84%
I can count on my friends when things go wrong	78%	82%
I can talk about my problems with my friends	76%	78%
Satisfaction with the level of contact with social worker (%)		
Would like more contact	17%	16%
Have enough contact	73%	70%
Would like less contact	11%	14%
Have a trusted adult (%)		
Yes	94%	95%
In contact with birth family (%)		
Yes	82%	82%
Contact with birth family members (%) (multiple options)		
Mother	75%	65%
Father	47%	37%
Sister(s)	64%	52%
Brother(s)	61%	51%
Grandparent(s)	51%	40%
Extended family member(s)[1]	25%	40%
Have a life story book (%)		
Yes	52%	58%
No	31%	26%
I don't know	17%	16%

1. Extended family includes aunts, uncles, cousins, and other relatives.

Children and young people's lifestyles and health

The children and young people's responses to questions about lifestyle and health are given in Table 5.

High screen usage (such as playing games and watching TV or videos) in children and young people has been associated with lower levels of wellbeing and higher levels of depressive symptoms in children and adolescents [59]. Children and young people in care who responded to the MH-CAT surveys reported that they spent, on average, 6 to 7 hours per day on screens (see Table 5).

Children and young people in care reported that they were physically active (at least for 1 hour per day), on average, 4 days over the week prior to the survey. The UK guidelines for children and young people in this age group are to engage in moderate to vigorous physical activity for an average of at least 60 minutes per day across the week [60].

In terms of engaging in risky behaviours, the majority of children and young people reported that they had never smoked cigarettes (including electronic cigarettes), drunk alcohol, or used drugs. In particular, the proportion of children and young people in care who reported drinking alcohol or using drugs every week was very low (below 5%). Linked to this, those who reported receiving medical help over the past 12 months due to alcohol or drug misuse was also low (around 5% in both waves).

Most children and young people in care stated that they had a hobby and 63% in Wave 2 reported that they had a pet.

Nearly a quarter (24%) of Wave 2 MH-CAT survey respondents[15] reported that they had been bullied in the previous six months [16] and 11% reported that they had been cyber bullied.

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[15] Questions regarding bullying were newly introduced in the Wave 2 survey.
[16] No national data are available for comparison.

Table 5. Lifestyle and health of children and young people who responded to the MH-CAT Wave 1 and Wave 2 surveys

Lifestyle and health	MH-CAT	
	Wave 1 (n=905)	Wave 2 (n=681)
Average no. of days physically active in the past 7 days (at least 1 hour per day)	4.2	4.5
No. of hours on screen per day (average)	7.1	6.0
Going out to a 'green space' over the past 7 days (%)		
Not at all	15%	7%
1-2 days	27%	20%
3-4 days	20%	24%
5-6 days	12%	14%
Every day	26%	36%
Have a hobby (%)		
Yes	88%	85%
Smoking cigarettes (%)		
Never	71%	78%
Have tried once or twice	11%	6%
Sometimes but not every week	4%	6%
At least every week	12%	10%
Smoking electronic cigarettes (%)		
Never	77%	80%
Have tried once or twice	13%	9%
Sometimes but not every week	5%	5%
At least every week	4%	5%
Drinking alcohol (%)		
Never	67%	72%
Have tried once or twice	18%	12%
Sometimes but not every week	15%	13%
At least every week	1%	3%
Using drugs (%)		
Never	85%	86%
Have tried once or twice	7%	6%
Sometimes but not every week	4%	4%
At least every week	4%	4%
Needed medical help over the past 12 months due to alcohol or drug use (%)		
Yes	6%	5%
Have a physical disability (%)		
Yes	5%	3%
Frequency of being bullied over the past six months (%)		
Never been bullied in the past six months	-	76%
Happened once or twice	-	14%
Happened at least 3 times or more	-	10%
Frequency of being cyber bullied over the past six months (%)		
Never been bullied in the past six months	-	89%
Happened once or twice	-	9%
Happened at least 3 times or more	-	2%
Have a pet (%)		
Yes	-	63%

Mental health and wellbeing of children and young people in care

Overall mental health

The mental health of children and young people in care was measured using the Strengths and Difficulties Questionnaire (SDQ) [48]. Research indicates that children and young people who have scores that are high and in the 'cause for concern' range in the SDQ are significantly more likely to have subsequent clinical diagnoses of mental health disorders [49, 50][17].

The self-reported SDQ scores of children and young people who responded to both the Wave 1 and Wave 2 MH-CAT surveys indicated that around one in four (22%-24%) had scores that were in the 'cause for concern' range and that these children and young people might be in need of mental health support (See Figure 1). These proportions did not change significantly between the two waves of data collection in 2020 and 2021.
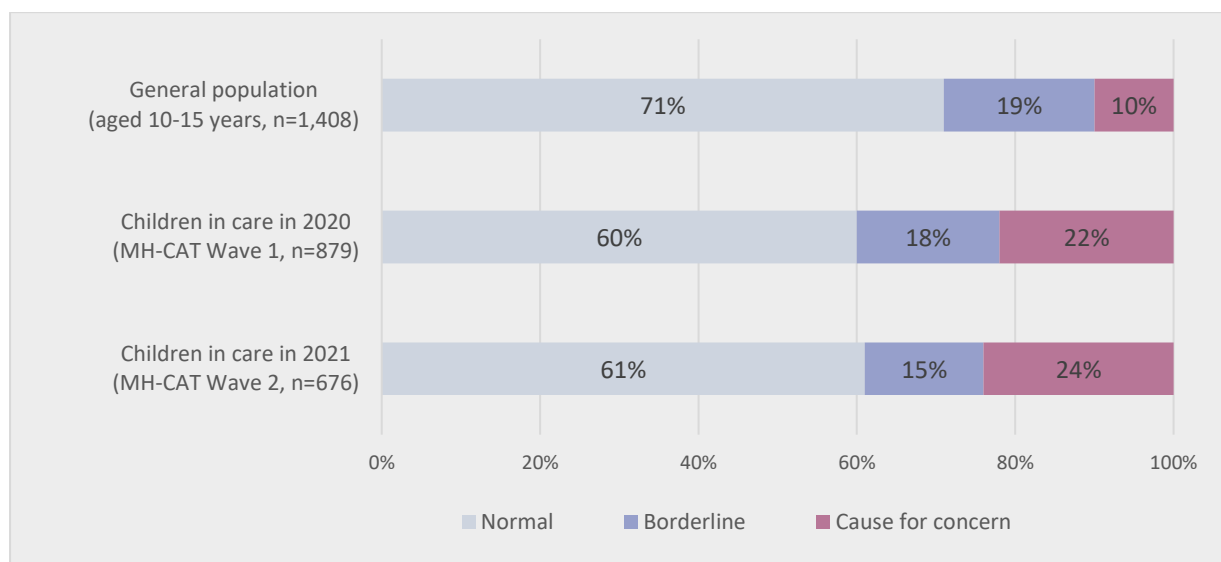
Figure 1. Overall mental health of children in care in 2020 and 2021 surveys (SDQ total difficulties score)
Source of general population data: Understanding Society COVID-19 Youth Survey (https://www.understandingsociety.ac.uk/topic/covid-19)

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[17] The SDQ total difficulties score is derived from summing the scores of four subscales (emotional difficulties; conduct difficulties; hyperactivity/inattention difficulties; difficulties with peers). Higher scores on the SDQ indicate higher levels of difficulties.

As can be seen in Figure 2, significantly more children and young people in care who responded to the Wave 1 and Wave 2 MH-CAT survey were at risk of experiencing behavioural; attentional/ hyperactivity difficulties; or problems with peer relationships, when compared with children and young people in the general population[18].

Significantly more children and young people in care who responded to the Wave 1 MH-CAT survey were at risk of experiencing emotional difficulties when compared with children and young people in the general population [19].
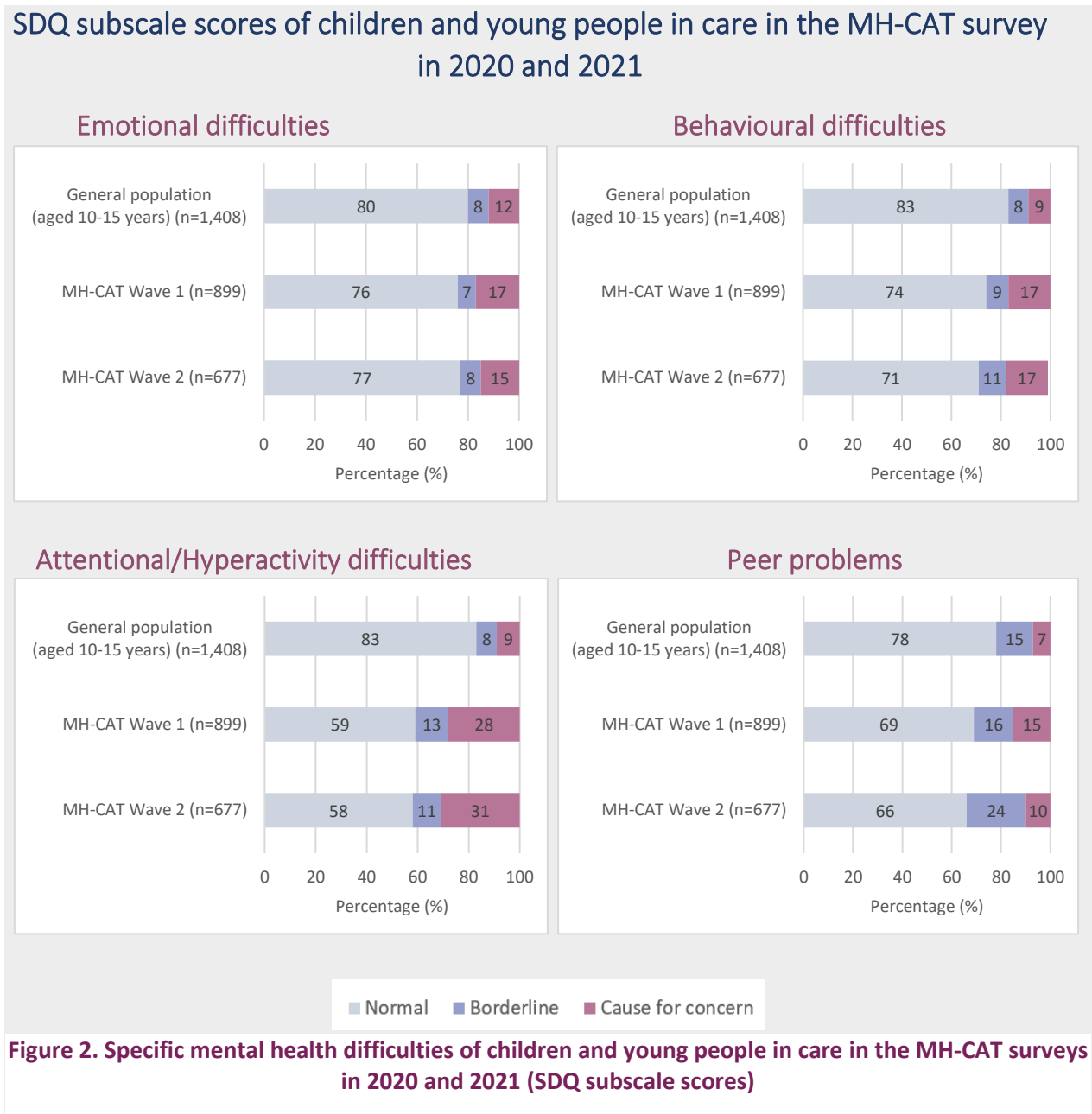
SDQ subscale scores of children and young people in care in the MH-CAT survey in 2020 and 2021

Figure 2. Specific mental health difficulties of children and young people in care in the MH-CAT surveys in 2020 and 2021 (SDQ subscale scores)

Source of general population data: Understanding Society COVID-19 Youth Survey
(https://www.understandingsociety.ac.uk/topic/covid-19)

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[18] Chi-square tests were statistically significant compared to the general population at *p* < .05 level.
[19] Chi-square tests were statistically significant compared to the general population at *p* < .05 level.

Anxiety and depression

The General Anxiety Disorder-2 (GAD-2) scale [53] and the Patient Health Questionnaire-2 (PHQ-2) scale were newly introduced in the MH-CAT Wave 2 survey to measure the propensity for anxiety disorders and depressive disorders in children and young people in care.

While there are no national statistics available yet for comparison for use with the GAD-2 questionnaire, a recent National Institute for Health and Care Excellence (NICE) report indicated that GAD-2 could be used to screen people with suspected anxiety disorders [61][20]. As can be seen in Figure 3, around one in five (22%) of children and young people who responded to the Wave 2 survey were at risk of anxiety disorders.

The Patient Health Questionnaire (PHQ-2) [54] is commonly used in primary care [62] as a screening tool for depression[21]. The proportion of children and young people in the UK general population, who meet the threshold for depression on the PHQ-2, has not been established. However, as can be seen in Figure 3, the PHQ-2 scores indicated that 20% of the children and young people in care who responded to the Wave 2 survey were likely to be at risk of depression.
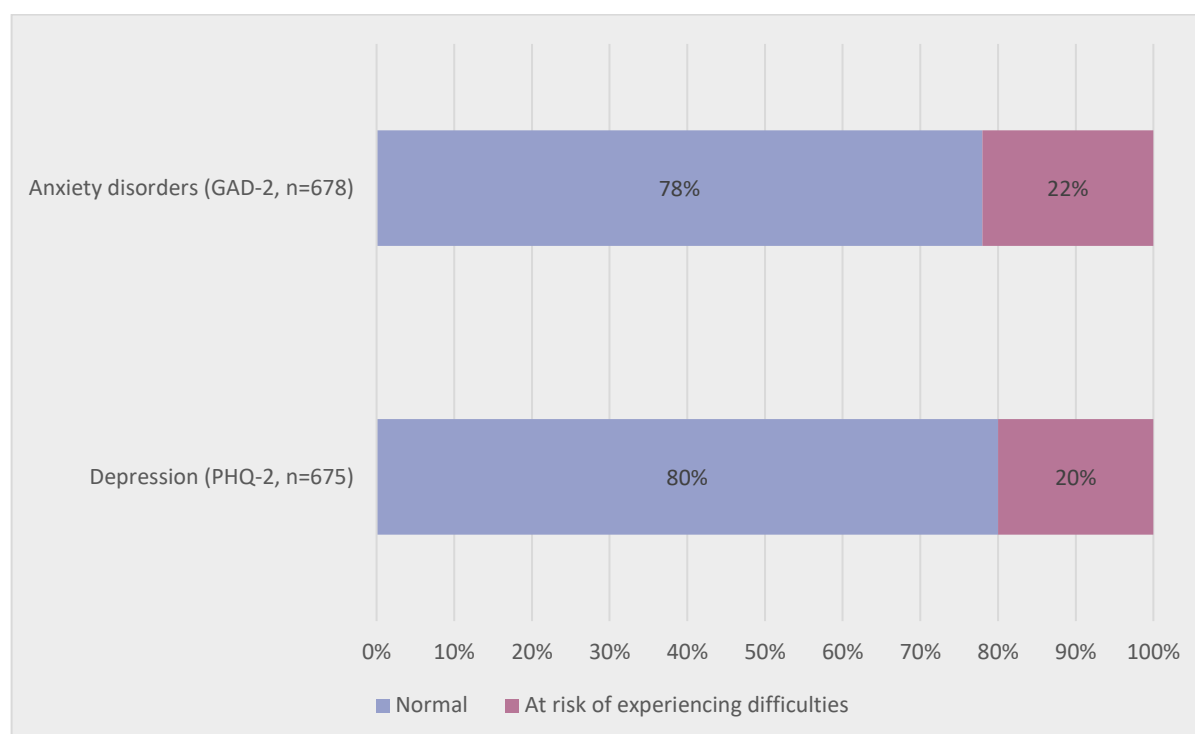
Figure 3. Children and young people in care at risk of anxiety disorders (GAD-2 score) and depression (PHQ-2 score)

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[20] A GAD-2 score ranges from 0-6. A score of 3 points is the most used cut-off point for needing further identifying evaluation. For detailed information please see: Screening for generalized anxiety disorder in Spanish primary care centers with the GAD-7. Muñoz-Navarro R, Cano-Vindel A, Moriana JA, et al. *Psychiatry Res.* 2017;256:312–317.

[21] A PHQ-2 score ranges from 0-6. The authors identified a score of 3 as the cut-off point when using the PHQ-2 to screen for depression. For detailed information please see: Kroenke, K., Spitzer, R. L., & Williams, J. B. (2003). The Patient Health Questionnaire-2: validity of a two-item depression screener. Medical care, 41(11), 1284–1292.

Self-harm

Recent research in England indicates that around one in six (15%) adolescents (12-16 years old) engaged in self-harming behaviour at least once over a one year period [63]. Multiple studies have suggested that children and young people in care are at greater risk of self-harm than children and young people in the general population [64-68].

To capture the prevalence of self-harm in children and young people in care, the MH-CAT Wave 2 survey introduced two questions on self-harm (Figure 4). It is concerning to note that 20% of the children and young people in care reported that they had self-harmed before the pandemic, with 18% indicating that they had self-harmed during the pandemic, in the 6 months prior to the survey.
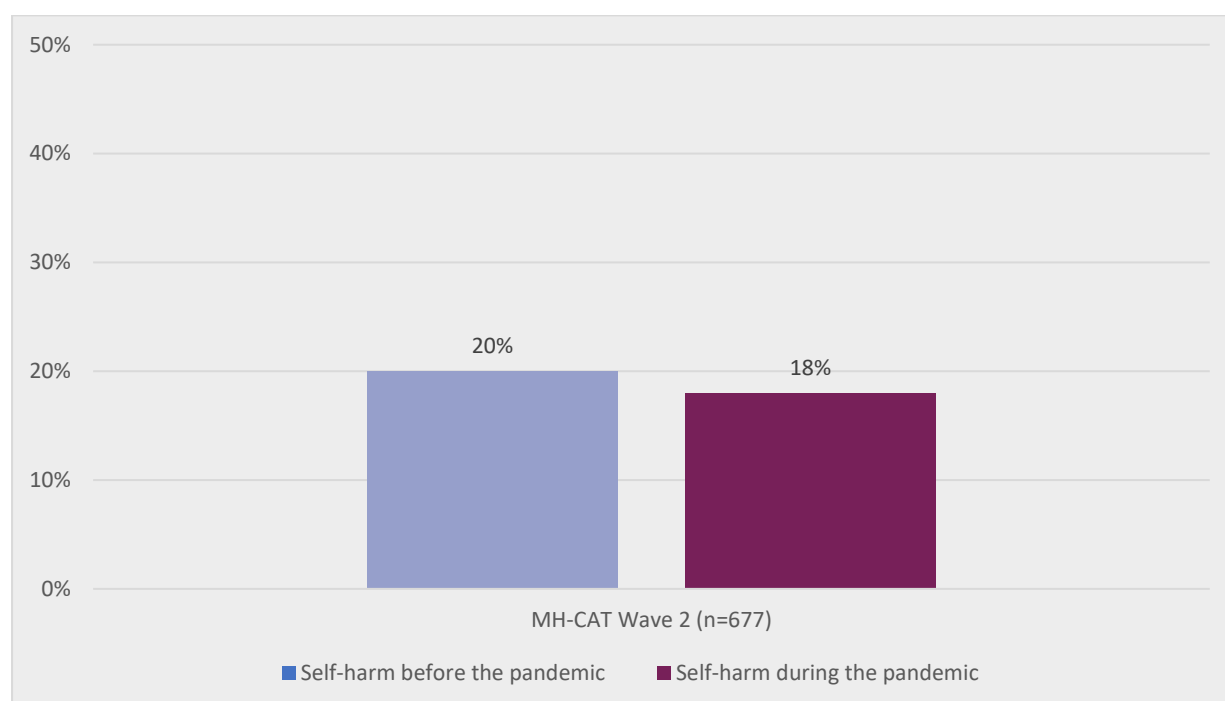
Figure 4. Prevalence of self-harm in children and young people in care

Wellbeing

Wellbeing is closely linked to children and young people's mental health [69] and covers two perspectives; firstly, the subjective experience of happiness and life satisfaction and secondly, positive psychological functioning, good relationships with others and self-realisation [70, 71]. Research consistently indicates that children and young people in care have lower levels of wellbeing when compared with their peers in the general population [72, 73].

In this study, the wellbeing of children and young people in care was measured using the Short Warwick-Edinburgh Mental Wellbeing Scale (SWEMWBS), which focuses on wellbeing over the two

weeks prior to the survey[22]. Research indicates that children and young people who are assessed as having very low wellbeing in the SWEMWBS are likely to be experiencing depression or anxiety [74].

Figure 5 shows that 70% of Wave 1 respondents were experiencing high or average wellbeing; 21% of respondents were experiencing low wellbeing; and another 10% were experiencing very low wellbeing. In the Wave 2 survey, 21% of children and young people were experiencing low wellbeing and another 6% were experiencing very low wellbeing.

When compared with children and young people in the general population[23], the average wellbeing scores of children and young people in care were significantly lower in both waves[,24]. However, it is important to note here that the wellbeing score of children and young people in the general population is only accessible in average or median format[25]. Therefore, the result of the comparison with the general population might need to be interpreted with caution.
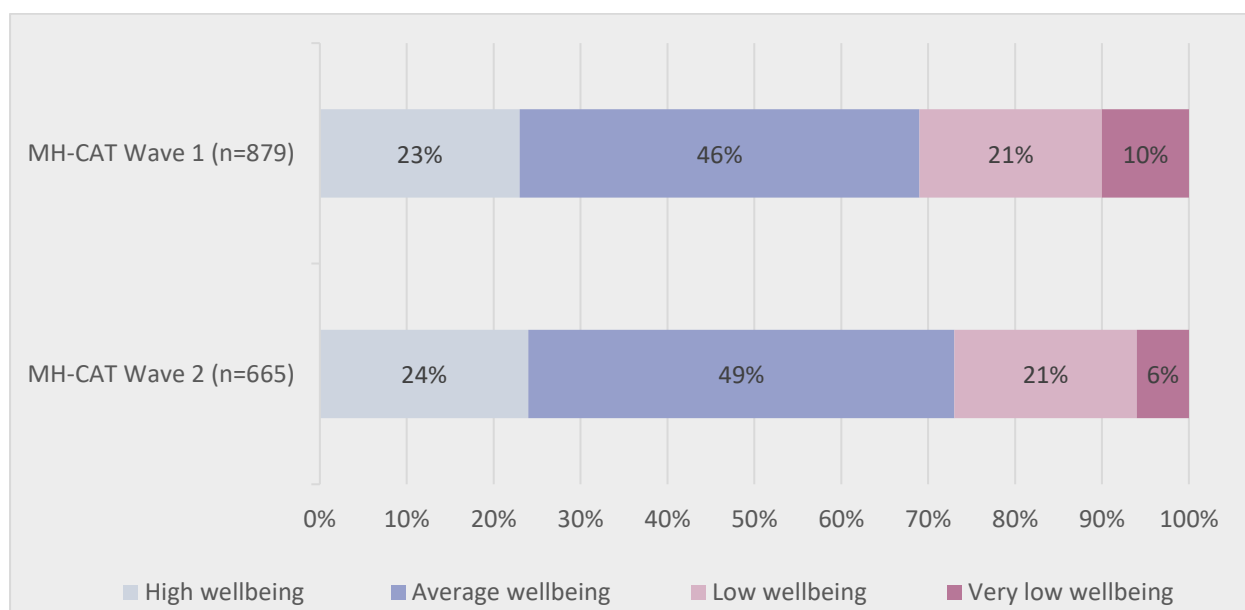
Figure 5. Wellbeing of children and young people in care based on SWEMWBS scores

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[22] This scale allowed us to measure children and young people's wellbeing and divide total scores into:
- **High** wellbeing: scores indicate high mental wellbeing.
- **Average** wellbeing: scores indicate average mental wellbeing.
- **Low** wellbeing: scores indicate possible depression or anxiety.
- **Very low** wellbeing: scores indicate probable depression or anxiety.

[23] Average wellbeing scores: MH-CAT national Wave 2 survey: 23.9, MH-CAT national Wave 1 survey: 23.4, general population: 24.6 (aged 11-16 years old). Higher scores on SWEMWBS indicate greater positive wellbeing.

[24] The t-test was statistically significant compared to the general population at $p < .05$ level.

[25] See more details here: http://digital.nhs.uk/pubs/mhcypsurvey2020w1

Access to mental health support

Children and young people were asked whether they had ever felt the need for mental health support. Around two in five (39%) children and young people in care who responded to the Wave 1 survey and 35% of children and young people in care who responded to the Wave 2 survey indicated that they had previously felt the need to talk to someone or receive support for their mental health.

Those who indicated a need for mental health support were asked what support they had received. The survey respondents were able to choose multiple options. Children and young people in care indicated that they had received support from carer(s), a counsellor/therapist, their school teacher, social worker, friend(s) and/or parent(s) (see more details in Figure 6).

However, 6%-8% of children and young people who indicated a need for mental health support in the MH-CAT Wave 1 and Wave 2 survey reported that they had asked for support but had not received any and a further 3% indicated they had not asked for support.
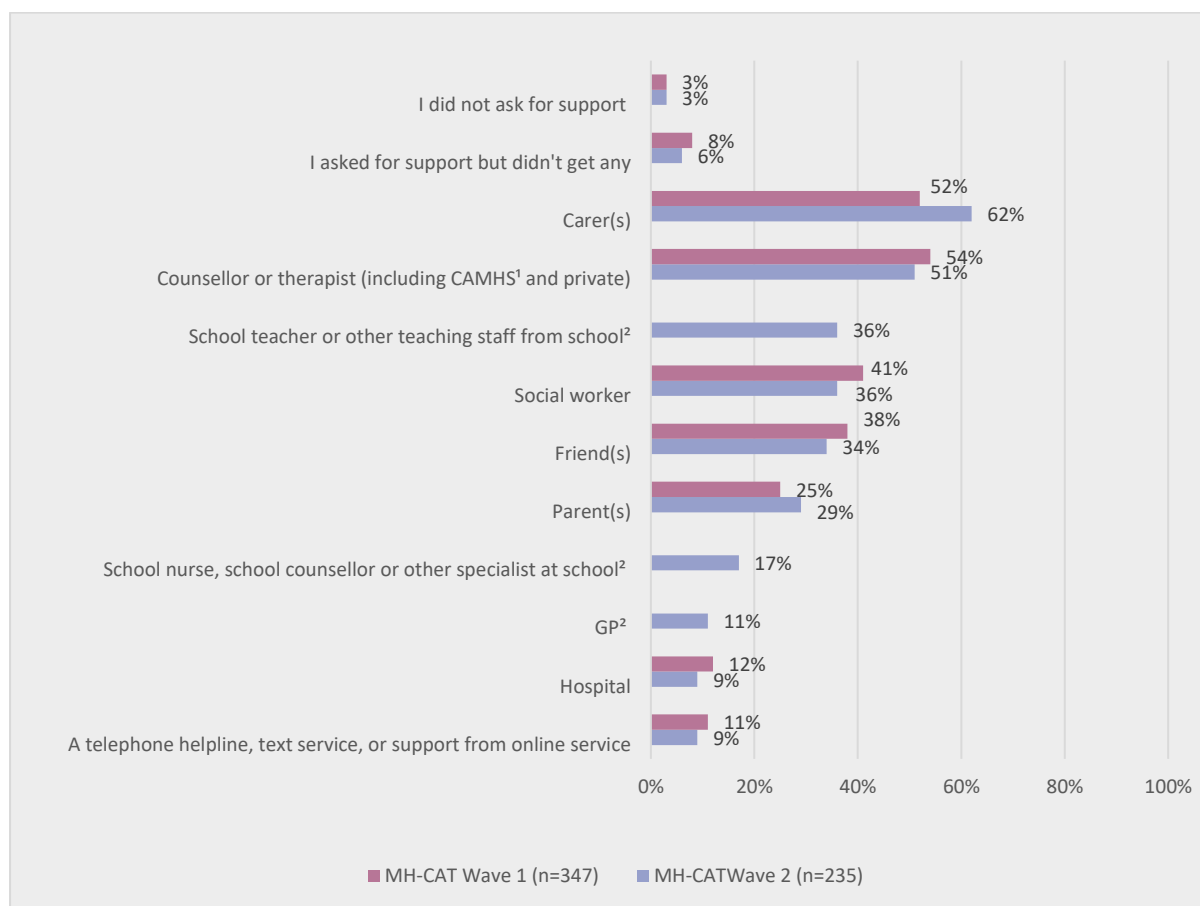
Notes:
1. CAMHS: Child and Adolescent Mental Health Services.
2. The categories of support from school (school teacher or other school teaching staff; school nurse, school counsellor or other specialist at school) and support from GP were newly introduced in the Wave 2 survey.

Figure 6. Sources of mental health support accessed by children and young people in care who had previously felt the need for mental health support

Changes to mental health support during the Covid-19 pandemic

Children and young people who were accessing mental health support services just before the Covid-19 pandemic were asked whether there had been any change in the frequency of support that they were receiving. Their responses are shown in Figure 7.
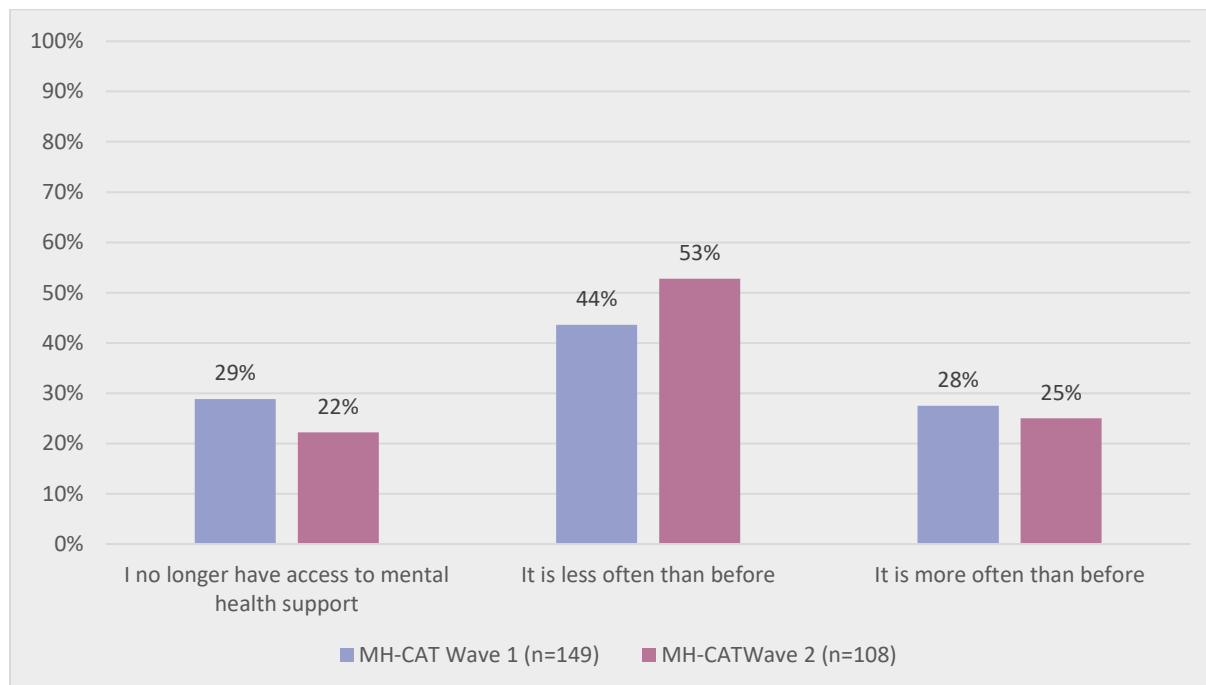
Figure 7. Changes to mental health support service frequency during the Covid-19 pandemic

Although around a quarter (28% in Wave 1 and 25% in Wave 2) had seen an increase in support frequency, 29% of Wave 1 and 22% of Wave 2 respondents who were receiving support just before the Covid-19 pandemic indicated that they no longer had access to the mental health support that they were previously receiving. The rest indicated that the support frequency was less than before.

Access to mental health support in the month preceding the survey

As some children and young people who had felt the need for support with their mental health previously in their lives (as shown in Figure 6), may not have felt the need for support during the Covid-19 pandemic, they were asked whether they had felt the need for mental health support in the month prior to the Wave 1 and 2 surveys.

A quarter (25%) of Wave 1 and a one in five (19%) Wave 2 respondents indicated that they had felt the need for mental health support in the previous month.

They were then asked what support services they had accessed (see Figure 8), and many respondents indicated that they had received support from their carer(s), friend(s), social worker, and/or parent(s). Of the children and young people who felt the need for mental health support in the month preceding the survey 31% in Wave 1 and 39% in Wave 2 had received support from a counsellor/therapist.

However, 5%-7% indicated that they had not asked for support, while 13%-20% indicated that they had asked for support but had not received any support. This suggests room for improvement.
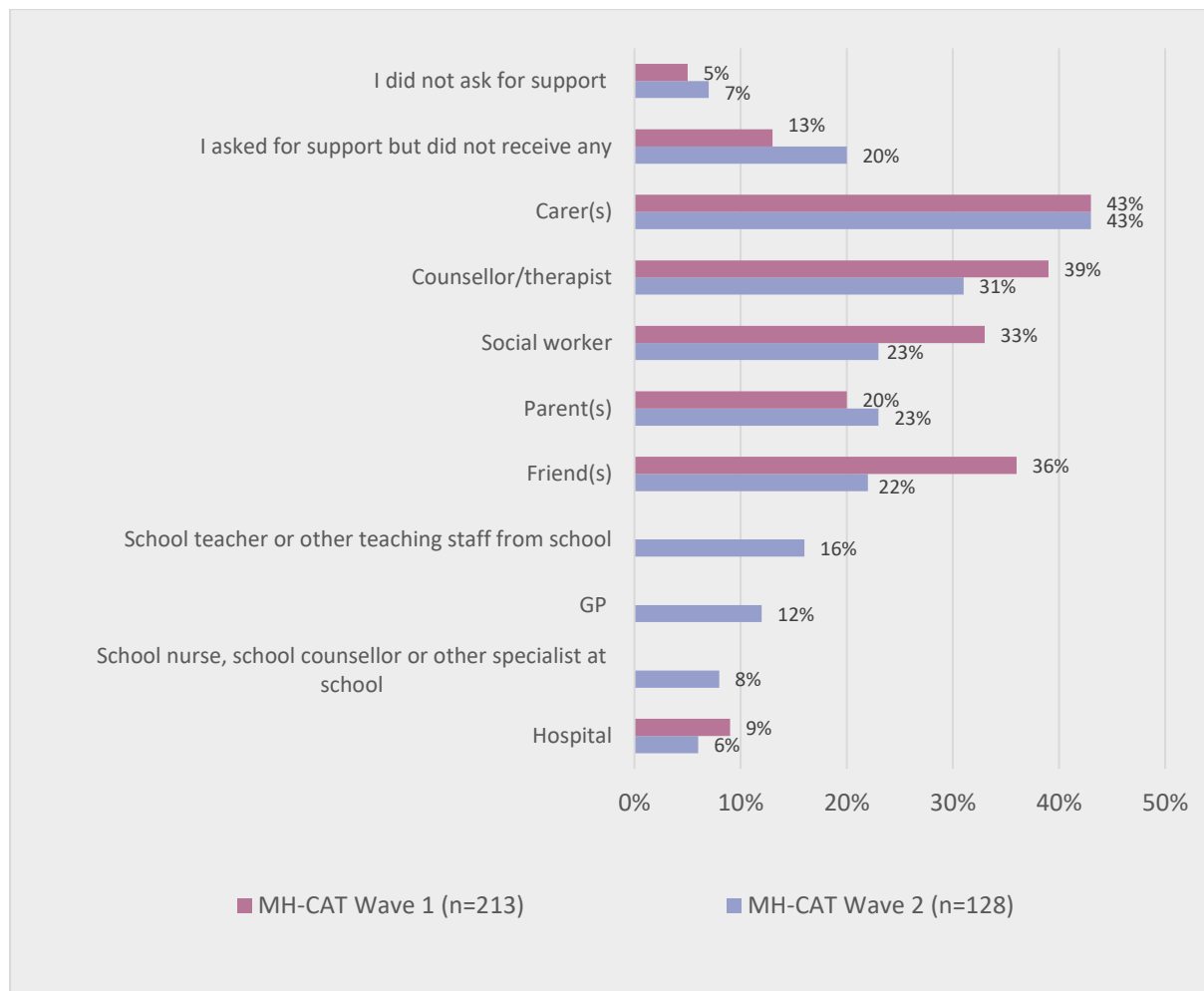
Note:
1. The categories of support from school (school teacher or other school teaching staff; school nurse, school counsellor or other specialist at school) and support from GP were newly introduced in the Wave 2 survey.

Figure 8. Sources of mental health support acccessed by children and young people in care in the month preceding the MH-CAT survey

Key factors associated with the mental health of children and young people in care

The large number of responses to the MH-CAT survey in 2020 and 2021 enabled us to robustly and statistically explore if and how individual characteristics; placement and school characteristics; strength of relationships with key people; social work support and involvement in key social work decisions; and health and lifestyles factors were independently associated with the mental health of children and young people in care. We first explored the data, utilising bivariate analyses, to establish whether individual factors within these domains were significantly associated with the mental health of children and young people in care. The factors which were positively and significantly associated with the mental health of children and young people and which were subsequently included in the regression analyses[26] are given in Figure 9.

Children's Characteristics
- Gender (Male)
- Age (older adolescents)
- Ethnicity (All ethnicities other than white)

Placement Characteristics
- Being placed with kin
- Living only with sibling(s)
- Living with sibling(s) and other children
- Length of time in placement
- Fewer number of placements in care
- Not going missing from placement
- Positive feelings about placement
- Positive relationship with carer(s)

School Characteristics
- Positive feelings about school
- Not being excluded from school
- Not truanting
- Fewer number of school changes linked to placement changes
- Teacher support

Social work support
- Optimum contact frequency with social worker
- Positive relationship with the social worker
- Involvement in social work decision making

Friends
- Positive relationship with friend(s)
- Not being cyber-bullied
- Not being bullied

Health and lifestyle
- Access to green space
- More physical activity
- Less Screen time
- Not having a physical disability
- Having a hobby
- Not engaging in risky behaviours

Figure 9. Factors positively associated with better mental health in bivariate analyses and subsequently included in the final regression models[27]

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[26] Linear regression analysis was carried out using the STATA statistical software package (version 16). This analysis allowed the measurement of the unique effect of each factor included in the regression while controlling for other factors. However, some factors such as duration of being in care; having a life story book; changes to schooling during the Covid-19 pandemic; contact with birth family; and whether they had a sibling or not, were not included in the models as they were not significantly associated with the children and young people's mental health in the bivariate analyses. As the majority of respondents had access to a laptop and had a trusted adult, these two variables were excluded. As 'having a meal with the people I live with' showed a high correlation with 'feeling about placement' and the 'relationship with carer(s)', it was also omitted from the regression analyses.

[27] All these factors were shown to be associated with the mental health of children and young people in care in bivariate analyses (Chi-square analyses and correlations significant at $p<.05$ level).

While establishing the association of individual factors with the mental health of children and young people is useful for preliminary data exploration, it is important to examine if these factors would still retain their influence on mental health when all factors are considered at the same time. Statistical methods called multiple regression analyses allow this. Therefore, two multiple regressions were carried out, including all variables that were significant in the bivariate analyses of Wave 1 and Wave 2 data (seen in Figure 9). These regressions models were run hierarchically, adapting Bronfenbrenner's bioecological model of child development [46], to consider the influence of children's characteristics; placement characteristics; school; social work support; friends; and health and lifestyle factors, on the mental health of children and young people in care.

Tables 6 and 7 show the individual characteristics and other contextual factors that were significantly and positively associated (when all other factors were statistically controlled for) with better mental health of children and young people who responded to the survey in 2020 and 2021. Detailed regression output for Wave 1 and Wave 2 data can be found in Appendix A. The statistical models were able to explain 37% of the variation in the mental health of children and young people who responded to the Wave 1 and Wave 2 survey. This is an acceptable level for a research study exploring mental health [75].

Having a positive relationship with friend(s); being satisfied with the contact frequency with their social worker; having positive feelings about school; and having less time on screens, were significantly associated with the mental health of children in care in both survey waves. Other factors that were associated with the mental health of children and young people in care were slightly different between the Wave 1 and 2 surveys, which might be linked to the differences in the sample characteristics of those children and young people in care who chose to respond to each. Only 28% of Wave 1 respondents took part in the Wave 2 survey.

Table 6. Factors associated with better mental health in children and young people in care MH-CAT Wave 1 survey, 2020 (n=711)

MH-CAT Wave 1 survey	Protective factors associated with better mental health
Children's characteristics	• Being male • Being older • Being from all ethnic groups other than white
Placement characteristics	• Living only with sibling(s) • Living with sibling(s) and other children • Positive relationship with carer(s)
School and educational characteristics	• Not being excluded from school • Having positive feelings about school
Social work support	• Positive relationship with social worker • Being satisfied with contact frequency with social worker
Friends	• Positive relationship with friend(s)
Health and lifestyle factors	• Spending less time on screens

Table 7. Factors associated with better mental health in children and young people in care MH-CAT Wave 2 survey, 2021 (n=501)

MH-CAT Wave 2 survey	Protective factors associated with better mental health
Children's characteristics	• No demographic characteristics were statistically significant
Placement characteristics	• Living with a relative foster carer
School and educational characteristics	• Having positive feelings about school
Social work support	• Being satisfied with contact frequency with social worker
Friends	• Positive relationship with friend(s) • No experience of bullying in the past six months • No experience of cyber-bullying in the past six months
Health and lifestyle factors	• Spending less time on screens • Not engaging in risky behaviours (such as smoking, drinking, taking drugs) • Having a hobby

Factors that were significant in the two regressions and were associated with better mental health of children and young people in care are pictorially shown in Figure 10.

Children's Characteristics
•Gender (Male)
•Age (Older adolescents)
•Ethnicity (All ethnicities other than white)

Health and lifestyle
•Spending less time on screens
•Having a hobby
•Not engaging in risky behaviours

Placement Characteristics
•Living with kin
•Living only with sibling(s)
•Living with sibling(s) and other children
•Positive relationship with carer(s)

Friends
•Positive relationship with friend(s)
•Not being bullied
•Not being cyber-bullied

School Characteristics
•Positive feelings about school
•Not being excluded from school

Social work support
•Being satisfied with contact frequency with social worker
•Positive relationship with the social worker

Figure 10. Factors associated with better mental health of children and young people in care

[Regression output from MH-CAT Wave 1 survey, 2020 (n=711) and MH-CAT Wave 2 survey, 2021 (n=501)]

The impact of risk factors on the mental health of children and young people is cumulative. Therefore, children and young people who are impacted by multiple risk factors identified by this research (and shown in Figure 10) would be more likely to be at risk of mental ill health than those who have no or fewer risk factors. This has implications for how these risks are monitored and managed by carers, schools/virtual schools and children's social care teams when assessing and supporting the mental health of children and young people in care.

Limitations of the analyses

Although the large sample sizes enabled robust statistical analyses, and the characteristics of children and young people who responded to the MH-CAT Wave 1 and Wave 2 survey were similar to the national population of children and young people in State care, there are some limitations to the current findings as is common in survey research. As social work teams were asked not to send the survey links to any children or young people who might find it distressing to participate in the survey, it is possible that the survey underestimates the prevalence of mental ill health in this group of children and young people. With self-reported data, there is also the possibility of recall bias. Furthermore, the survey did not ask questions about any previous trauma the children and young people may have experienced as it was felt to be too intrusive and potentially harmful. The inclusion of such information in the statistical models might have given different results. Finally, the results presented in this report are from cross-sectional analyses, therefore we cannot establish the temporal direction of the associations found. Longitudinal analysis or randomised controlled trials would be needed to further understand the direction of the associations.

Children and young people's thoughts and feelings about what would improve their mental health and happiness

In the survey, we asked children and young people what they thought could improve their mental health or happiness. Eight hundred and forty seven out of the 930 children and young people who responded to the Wave 1 survey, and 575 out of the 681 who responded to the Wave 2 survey responded to this question. In both surveys, the majority (60%-66%) of children and young people responded that they could not think of anything that could improve their mental health or happiness.

Of those who responded affirmatively to the question, many children and young people mentioned that changes to contact arrangements with their birth families would make them happy. While contact with birth families was not a significant factor in the analyses of mental health of children and young people in care, some of the children and young people reported that having better or more contact with their birth family, being able to live with their birth parents, or knowing their parents were doing better, would improve their mental health and happiness. Some examples were:

"Go and live with my mum and family"

"Going home to my mum"

"If I could see my family more"

"Seeing my dad. He would always make me happy when I was young and then he stopped visiting"

Supporting the quantitative analyses results on the importance of positive relationships with friends, some children and young people indicated that having more friends, having more contact with friends or having more support retaining their friends would improve their mental health and happiness.

"I don't know because I keep losing friends which is really difficult. So help to keep friends would be good"

"Be able to stay calm and have some friends"

"Feeling lonely so better friends I guess"

"Seeing my friends more often"

Some respondents were very aware of their need for mental health support: to be able to talk about their mental health difficulties and get help coping with them; get assessed for their mental health; get access to school support or counselling; talk more to friends; receive timely support; or just a desire to change their own behaviour.

"Make it easier and clearer how to access mental health services"

"Would like to be able to manage my anger better"

"Being able to talk to a professional about my feelings although would find it difficult to talk to someone I don't know"

"More counselling. for myself to open up more"

"Go to a specialist about my mental health and about my self harm "

"A therapy dog"

"To have someone to talk online to, like an online friend who's always there"

"I used to have play therapy but it stopped when I left primary school. I would like someone like that to talk to"

Again supporting the findings from the quantitative analyses, the children and young people described how changes in relation to their social worker could improve their mental health and happiness: they either wanted less or more contact, a different social worker, or their social worker to listen to them more.

"If my social worker would listen to me"

"More contact with social worker underlying future plans in detail"

"Better opportunities and a genuine care for the young people often people just do it because it is Thier [sic] job and you don't feel valued"

They also provided many answers about how fun activities and hobbies (dancing, singing, sports, listening to music) and having certain things (e.g., a mobile phone) or having a pet could improve their mental health and happiness. Having a hobby was significantly associated with better mental health in the quantitative analyses.

"Having a phone would make me happy so that I can get in contact with my friends and if I'm lost I can contact my foster carers"

"Playing football more often and getting to play professionally"

"Riding motorbikes would be good but not possible"

"Maybe every week I could have a girly day out and have a meal out"

Some children and young people indicated that changes to their current living arrangements (living independently, living closer to friends or moving to a different placement) and having more freedom (in general, in their home, more independence or more 'alone' time) could improve their mental health and happiness.

"More stable home and not a short term. I want to live here"

"Being able to live at home and things becoming easier"

"If I could be more free instead of the living under the extreme restrictions of the foster system"

Some also mentioned how receiving more financial and other types of support from the local authority could improve their mental health and happiness.

"Get paid more pocket money so we can buy things that we want. Our current pocket money isn't enough for what makes me feel good about myself, and makes me happy"

*"If we had more money in our house.
I can't do a lot of things my friends can do because we are poor"*

"Plenty of money and not having to worry"

"More security for life after 18, including housing, financial and emotional support"

"Have better support instead of pushing things to the side or being told to deal with it"

Impact of the Covid-19 pandemic on children and young people in care

Many 11-16 year old children in the general population in England felt that their life was worse because of the Covid-19 pandemic [2], with those assessed within the 'cause for concern' range of the SDQ[28] more likely to feel anxious and feel that the pandemic had made their lives worse, compared to those scoring in the 'normal' range [2]. Other studies involving children and young people in the general population suggested an increase in stress, loneliness and worry amongst children and young people during the lockdowns [76]. Some children and young people also struggled with not having the routine and social environment of school [77].

There is some research evidence to suggest that some children in care liked being home-schooled and getting more personal attention from their carer during the Covid-19 pandemic [77]. Research also suggests that the changes to schooling might have improved the relationship between the children

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[28] The Mental Health of Children and Young People in England 2020 report used the Strengths and Difficulties Questionnaire (SDQ) to assess the mental health of children and young people. From the responses, the mental health of the child or young person was assessed as either normal, borderline or cause for concern.

and young people in care and their foster families, leading to reduced anxiety and increased wellbeing in the children and young people in foster care [77-79]. It must be noted that these studies looked only at children and young people in foster care and not at those in other types of care (such as residential care)[77-79].

Anxieties about the Covid-19 pandemic

The Wave 2 survey measured children and young people's anxieties about the pandemic using the Pandemic Anxiety Scale (PAS)[29]. The PAS produces two scores: 'disease anxiety', related to worries about catching or transmitting COVID-19; and 'consequence anxiety', related to concerns about its impact (e.g. on jobs, missing school) [55]. Higher scores on the scale indicate greater levels of anxiety due to the pandemic.

Figure 11 shows the PAS scores for children and young people in care who responded to the MH-CAT survey and for children and young people in the general population. Overall, the pandemic anxiety scores of children and young people in care were significantly higher when compared with the scores of children and young people in the general population[30] indicating that children and young people in care worried more about catching or transmitting COVID-19 and the impact of the pandemic on their lives [55].
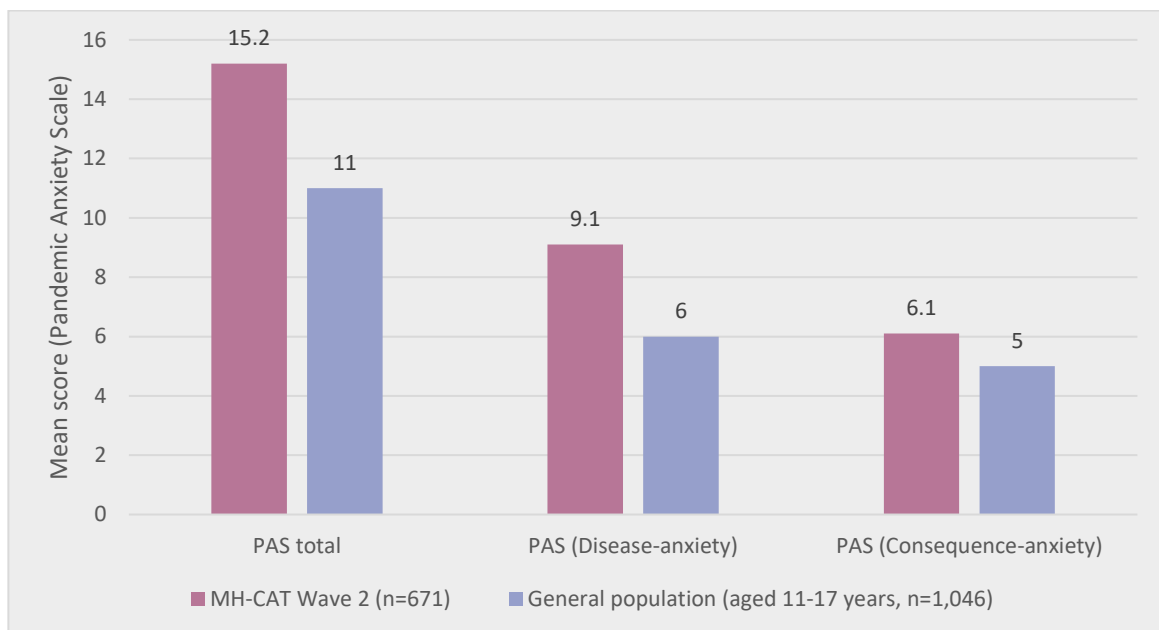
**Figure 11. Pandemic Anxiety in children and young people
(measured with the Pandemic Anxiety Scale)**

Source of general population data: NHS Digital (2020)
http://digital.nhs.uk/pubs/mhcypsurvey2020w1

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[29] The PAS scale (a brief 7-item measure) was developed to capture the specific aspects of the pandemic that provoke anxiety and to explore how these vary by health and demographic factors.
See more here: https://bpspsychub.onlinelibrary.wiley.com/doi/full/10.1111/bjhp.12470.
[30] The t-tests were statistically significant compared to the general population at *p* < .05 level.

The impact of the Covid-19 pandemic on the lives of children and young people in care

The MH-CAT survey also sought to capture the impact of the Covid-19 pandemic on the lives of children and young people in care and on the lives of the people around them.

Table 8 shows whether the children and young people who responded to the MH-CAT surveys had had Covid-19, whether someone important to them had become ill or died of Covid-19, or whether anyone around them (where they lived) had had Covid-19. The proportion indicates the percentage of children and young people that provided positive answers (i.e. agree/ strongly agree). Multiple options could be selected. By Wave 2 in 2021, around one in 10 children and young people (11%) had contracted Covid themselves and the same proportion had experienced either the death or serious illness of someone close to them.

Table 8. Impact of Covid-19 pandemic on children and young people who responded to the Wave 1 and Wave 2 MH-CAT surveys

Impact of Covid-19 pandemic (%)	MH-CAT	
	Wave 1 (n=905)	Wave 2 (n=681)
I have had Covid-19 (either suspected or formally diagnosed)	4%	11%
Death/Serious illness of someone important to me	7%	11%
Someone where I currently live has had suspected or diagnosed Covid-19	11%	17%

In addition, we statistically explored whether there was an association between the impact of the Covid-19 pandemic on the lives of children and young people in care and their score on the Pandemic Anxiety Scale (PAS). The results indicated that children and young people who had experienced either the death or serious illness of someone close to them had significantly higher pandemic anxiety scores compared to those who had not experienced these adverse impacts of the pandemic[31].

Implications for policy and practice

Confirming findings from previous research, the results of the two surveys indicated that children and young people in care are significantly more likely to experience mental ill health when compared with those in the general population. Scores on the Strengths and Difficulties Questionnaire showed that of the 11–18-year-old children and young people in care who responded to the survey, 22% in Wave 1 and 24% in Wave 2 were at high risk of experiencing mental ill health.

The results of analyses also showed that, controlling for other factors, various individual characteristics and contextual factors were significantly associated with the mental health of children and young people in care. These findings have implications for policy and practice.

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[31] t-test was statistically significant at $p < .05$ level.

Promoting placements with siblings and kin

As seen in previous research [30, 36, 37, 80], the results of the surveys indicate that being placed with siblings and kin generally acts as a protective factor for the mental health of children and young people in care. This supports the current statutory guidance to place children and young people who need a placement in State care with relatives (or friends/other connected persons) and siblings where possible (Section 22, Children Act 1989).

Importance of positive relationships: carers, friends, and social workers

The results also showed that children and young people in care who had positive relationships with their carer(s), friend(s) and social worker(s) were more likely to have better mental health, irrespective of the length of time they had spent in care or the number of previous placements they had had. This highlights the importance of ensuring the continuity, stability, and quality of relationships with key people throughout children and young people's time in care [29, 31, 33, 81-83]. These results have direct implications for addressing the high prevalence of placement instability and the ongoing high turnover rate of social work staff [7]. It also emphasises the importance of facilitating better matching of foster carers with the children and young people; ensuring that children and young people are supported to settle into new placements and schools; and ensuring the continuity of important relationships when changes in placements or schools are necessary.

Optimum contact with social worker/s

This research also highlights the importance of maintaining optimum contact levels with social workers, which requires stability of the social worker workforce and has direct implications for addressing the current and ongoing high turnover rate of social work staff [84-86]. It also shows the importance of periodically consulting children and young people on their wishes and feelings about social work contact.

Positive school environments

The results from the survey analyses have some implications for school-related practices. Children who have positive feelings about their school were more likely to have better mental health; while, as has been seen in the general population and other research studies [87-90], those excluded and those who had been bullied at school were negatively impacted. This has implications for how school exclusions of children in State care are managed and how children and young people who have been bullied are supported. Furthermore, younger adolescents in secondary education were more likely to have mental health difficulties, which might have implications for how children in care are supported (more) during their primary to secondary school transitions.

Healthy behaviours

The research findings also highlight the benefits of promoting healthy behaviours [91] for better mental health, such as reducing screen time [92]; not engaging in risky behaviours (smoking, drinking, taking drugs) [93]; and having opportunities to develop hobbies.

Other risk factors

Complex structural issues around risk factors affect children and young people in care as well as their peers in the general population. This research found that, when all other factors are held constant, girls and children and young people who identified their ethnicity as white were more likely to be at higher risk of mental ill health. This mirrors trends in the general population, where for example, it has been shown girls were more than twice as likely as boys of the same age to experience mental ill health [2] and that children and young people who were white were most likely to experience mental ill health compared to those from all other ethnic groups [2].

Impact of multiple risk factors

Children and young people who are impacted by multiple risk factors identified by this research would be more likely to be at risk of mental ill health than those who are impacted by fewer or no risk factors. This has implications on how these risks are monitored and managed by carers, schools/virtual schools and children's social care teams when assessing and supporting the mental health of children and young people in care.

References

1. NHS Digital, *Mental Health of Children and Young People in England, 2017*. 2018, NHS Digital.
2. NHS Digital, *Mental Health of Children and Young People in England, 2020*. 2020, NHS Digital.
3. Ford, T., Vostanis, P., Meltzer, H., and Goodman, R., *Psychiatric disorder among British children looked after by local authorities: comparison with children living in private households.* The British Journal of Psychiatry, 2007. **190**(4): p. 319-325.
4. NICE, *Children's attachment: attachment in children and young people who are adopted from care, in care or at high risk of going into care*. 2015.
5. Murphy, M. and Fonagy, P., *Mental health problems in children and young people.* Annual report of the chief medical officer, 2012: p. 1-13.
6. Friedli, L. and Parsonage, M., *Mental health promotion: building an economic case*. 2007: NIAMH.
7. GOV.UK, *Children's social work workforce*, E. statistics, Editor. 2022: GOV.UK.
8. de Vaus, D.A. and Gray, M., *The Changing Living Arrangements of Children, 1946-2001.* Journal of Family Studies, 2004. **10**(1): p. 9-19.
9. ONS, *Statistical Bulletin: Families and households in the UK, 2001 to 2010*, O.f.N. Statistics, Editor. 2011: Newport.
10. Department for Education, *Children looked after in England including adoption: 2020 to 2021*, Department of Education, Editor. 2021.
11. Department for Education, *Outcomes for children looked after by local authorities in England, 31 March 2019*. 2020.
12. Meltzer, H., Gatward, R., Corbin, T., Goodman, R., and Ford, T., *The mental health of young people looked after by local authorities in England*. 2003, Office for National Statistics: London.
13. Murphy, M. and Fonagy, P., *Mental health problems in children and young people.*, in *Annual Report of the Chief Medical Officer* 2012, Department of Health: London.
14. NICE, *Children's attachment: attachment in children and young people who are adopted from care, in care or at high risk of going into care*. 2015.
15. Friedli, L. and Parsonage, M., *Mental Health Promotion: Building an Economic Case.* 2007, Northern Ireland Association for Mental Health: Northern Ireland.
16. Department of Health and NHS England, *Achieving Better Access to Mental Health Services by 2020*. 2014.
17. Department for Education and Department of Health, *Promoting the health and well-being of looked-after children: Statutory guidance for local authorities, clinical commissioning groups and NHS England*, a.D.o.H. Department for Education, Editor. 2015: London.
18. Department of Health and NHS England, *Future in Mind: Promoting, protecting and improving our children and young people's mental health and wellbeing*. 2015, Department of Health.
19. NHS England, *Five year forward view*. 2014: London.
20. Brown, S., Thom, G., Rhona, Murray, R., Davies, K., Mistry, S., and Hampton, I., *Evaluation of the Mental Health Assessment Pilots for looked after children*. 2021, Department for Education: London.
21. House of Commons Education Committee, *Mental health and well-being of looked after children*. 2016, House of Commons: London.
22. Millar, R., Quinn, N., Cameron, J., and Colson, A., *Impacts of lockdown on the mental health and wellbeing of children and young people. Considering evidence within the context of the individual, the family and education*. 2020, Glasgow: Mental Health Foundation.
23. YoungMinds, *Coronavirus: Impact on young people with mental health needs: Survey 4: Feburary 2021* 2021, YoungMinds: London.
24. ADCS, *Building a country that works for all children post covid-19*. 2020, The Association of Directors of Children's Services Ltd.

25. Kiss, K. and Hine, S., *Protecting Children at a Distance*, in *A multi-agency investigation of child safeguarding and protection responsesconsequent upon COVID-19 lockdown/social distancing measures: Looked After Children (LAC) and Care Leavers*. 2021 King's College London

26. Fusco, R.A. and Cahalane, H., *Socioemotional Problems Among Young Children in Out-of-Home Care: A Comparison of Kinship and Foster Care Placement.* Journal of family social work, 2015. **18**(3): p. 183-201.

27. Hukkanen, R., Sourander, A., Bergroth, L., and Piha, J., *Psychosocial factors and adequacy of services for children in children's homes.* European Child & Adolescent Psychiatry, 1999. **8**(4): p. 268-275.

28. Tarren-Sweeney, M., *Rates of meaningful change in the mental health of children in long-term out-of-home care: A seven- to nine-year prospective study.* Child Abuse Neglect, 2017. **72**: p. 1-9.

29. Tarren-Sweeney, M. and Hazell, P., *Mental health of children in foster and kinship care in New South Wales, Australia.* Journal of Paediatrics and Child Health, 2006. **42**(3): p. 89-97.

30. Xu, Y. and Bright, C.L., *Children's mental health and its predictors in kinship and non-kinship foster care: A systematic review.* Children and Youth Services Review, 2018. **89**: p. 243-262.

31. Salazar, A.M., Keller, T.E., and Courtney, M.E., *Understanding Social Support's Role in the Relationship Between Maltreatment and Depression in Youth With Foster Care Experience.* Child Maltreatment, 2011. **16**(2): p. 102-113.

32. Fossum, S., Vis, S.A., Holtan, A., and Duregger, C., *Do frequency of visits with birth parents impact children's mental health and parental stress in stable foster care settings.* Cogent Psychology, 2018. **5**(1).

33. Konijn, C., Admiraal, S., Baart, J., van Rooij, F., Stams, G.-J., Colonnesi, C., Lindauer, R., and Assink, M., *Foster care placement instability: A meta-analytic review.* Children and Youth Services Review, 2019. **96**: p. 483-499.

34. Newton, R.R., Litrownik, A.J., and Landsverk, J.A., *Children and youth in foster care: Disentangling the relationship between problem behaviors and number of placements.* Child abuse & neglect, 2000. **24**(10): p. 1363-1374.

35. Rubin, D.M., O'Reilly, A.L., Luan, X., and Localio, A.R., *The impact of placement stability on behavioral well-being for children in foster care.* Pediatrics, 2007. **119**(2): p. 336-44.

36. Vanschoonlandt, F., Vanderfaeillie, J., Van Holen, F., De Maeyer, S., and Andries, C., *Kinship and non-kinship foster care: Differences in contact with parents and foster child's mental health problems.* Children and Youth Services Review, 2012. **34**(8): p. 1533-1539.

37. Winokur, M., Holtan, A., and Batchelder, K.E., *Kinship Care for the Safety, Permanency, and Well-being of Children Removed from the Home for Maltreatment: A Systematic Review.* Campbell Systematic Reviews, 2014. **10**(1): p. 1-292.

38. Sinclair, I., Luke, N., Fletcher, J., O'Higgins, A., Strand, S., Berridge, D., Sebba, J., and Thomas, S., *The education of children in care and children in need: Who falls behind and when?* Child & Family Social Work, 2020. **25**(3): p. 536-547.

39. Sebba, J., Berridge, D., Luke, N., Fletcher, J., Bell, K., Strand, S., Thomas, S., Sinclair, I., and O'Higgins, A., *The educational progress of looked after children in England: Linking care and educational data*. 2015: University of Oxford Department of Education/University of Bristol.

40. Trout, A.L., Hagaman, J., Casey, K., Reid, R., and Epstein, M.H., *The academic status of children and youth in out-of-home care: A review of the literature.* Children and Youth Services Review, 2008. **30**(9): p. 979-994.

41. Walker, S., *Social work and child and adolescent mental health*. 2003: Russell House Pub.

42. Patalay, P. and Gage, S.H., *Changes in millennial adolescent mental health and health-related behaviours over 10 years: a population cohort comparison study.* International Journal of Epidemiology, 2019. **48**(5): p. 1650-1664.

43.   Goodyear-Smith, F., Martel, R., Darragh, M., Warren, J., Thabrew, H., and Clark, T.C., *Screening for risky behaviour and mental health in young people: the YouthCHAT programme.* Public Health Reviews, 2017. **38**(1): p. 20.

44.   Kiecolt, K.J., Hughes, M., and Keith, V.M., *Can a high sense of control and John Henryism be bad for mental health?* The Sociological Quarterly, 2009. **50**(4): p. 693-714.

45.   Bruskas, D., *Children in foster care: A vulnerable population at risk.* Journal of Child and Adolescent Psychiatric Nursing, 2008. **21**(2): p. 70-77.

46.   Bronfenbrenner, U. and Morris, P.A., *The Bioecological Model of Human Development*, in *Handbook of child psychology: Theoretical models of human development, Vol. 1, 6th ed.* 2006, John Wiley & Sons Inc: Hoboken, NJ, US. p. 793-828.

47.   Aarø, L.E., Wold, B., Kannas, L., and Rimpelä, M., *Health behaviour in school children A WHO cross-national survey: A presentation of philosophy, methods and selected results of the first survey.* Health Promotion International, 1986. **1**(1): p. 17-33.

48.   Goodman, R., Renfrew, D., and Mullick, M., *Predicting type of psychiatric disorder from Strengths and Difficulties Questionnaire (SDQ) scores in child mental health clinics in London and Dhaka.* European child & adolescent psychiatry, 2000. **9**(2): p. 129-134.

49.   Muris, P., Meesters, C., and van den Berg, F., *The strengths and difficulties questionnaire (SDQ).* European child & adolescent psychiatry, 2003. **12**(1): p. 1-8.

50.   Hall, C.L., Guo, B., Valentine, A.Z., Groom, M.J., Daley, D., Sayal, K., and Hollis, C., *The validity of the Strengths and Difficulties Questionnaire (SDQ) for children with ADHD symptoms.* PloS one, 2019. **14**(6): p. e0218518.

51.   NHS Health Scotland, *Short Warwick Edinburgh Mental Wellbeing Scale (SWEMWBS)*. 2008, NHS Health Scotland, University of Warwick and University of Edinburgh.

52.   Zimet, G.D., Dahlem, N.W., Zimet, S.G., and Farley, G.K., *The multidimensional scale of perceived social support.* Journal of personality assessment, 1988. **52**(1): p. 30-41.

53.   Kroenke, K., Spitzer, R.L., Williams, J.B., Monahan, P.O., and Löwe, B., *Anxiety disorders in primary care: prevalence, impairment, comorbidity, and detection.* Annals of internal medicine, 2007. **146**(5): p. 317-325.

54.   Kroenke, K., Spitzer, R.L., and Williams, J.B., *The Patient Health Questionnaire-2: validity of a two-item depression screener.* Medical care, 2003: p. 1284-1292.

55.   McElroy, E., Patalay, P., Moltrecht, B., Shevlin, M., Shum, A., Creswell, C., and Waite, P., *Demographic and health factors associated with pandemic anxiety in the context of COVID-19.* British Journal of Health Psychology, 2020. **25**(4): p. 934-944.

56.   Goodman, R., Meltzer, H., and Bailey, V., *The Strengths and Difficulties Questionnaire: A pilot study on the validity of the self-report version.* European child & adolescent psychiatry, 1998. **7**(3): p. 125-130.

57.   Melendez-Torres, G.J., Hewitt, G., Hallingberg, B., Anthony, R., Collishaw, S., Hall, J., Murphy, S., and Moore, G., *Measurement invariance properties and external construct validity of the short Warwick-Edinburgh mental wellbeing scale in a large national sample of secondary school students in Wales.* Health and Quality of Life Outcomes, 2019. **17**(1): p. 139.

58.   Department for Education, *Statistical First Release: Children looked after in England (including adoption) year ending 31 March 2020*. 2020, Department for Education: London.

59.   Stiglic, N. and Viner, R.M., *Effects of screentime on the health and well-being of children and adolescents: a systematic review of reviews.* BMJ Open, 2019. **9**(1): p. e023191.

60.   Department of Health and Social Care, *UK Chief Medical Officers' Physical Activity Guidelines*. 2019.

61.   The National Institute for Health and Care Excellence. *Individual research recommendation details. Generalized Anxiety Disorder scale (GAD-2).* 2011; Available from: https://www.nice.org.uk/researchrecommendation/generalized-anxiety-disorder-scale-gad-2-for-people-with-suspected-anxiety-disorders-in-people-with-suspected-anxiety-disorders-

what-is-the-clinical-utility-of-using-the-gad-2-compared-with-routine-case-identification-to-accurately-identify-different-anxi.

62. Levis, B., Sun, Y., He, C., et al., *Accuracy of the PHQ-2 alone and in combination with the PHQ-9 for screening to detect major depression: systematic review and meta-analysis.* Jama, 2020. **323**(22): p. 2290-2300.

63. Stallard, P., Spears, M., Montgomery, A.A., Phillips, R., and Sayal, K., *Self-harm in young adolescents (12–16 years): onset and short-term continuation in a community sample.* BMC Psychiatry, 2013. **13**(1): p. 328.

64. Doyle, L., Treacy, M.P., and Sheridan, A., *Self-harm in young people: Prevalence, associated factors, and help-seeking in school-going adolescents.* International journal of mental health nursing, 2015. **24**(6): p. 485-494.

65. Madge, N., Hewitt, A., Hawton, K., Wilde, E.J.d., Corcoran, P., Fekete, S., Heeringen, K.v., Leo, D.D., and Ystgaard, M., *Deliberate self-harm within an international community sample of young people: comparative findings from the Child & Adolescent Self-harm in Europe (CASE) Study.* Journal of child Psychology and Psychiatry, 2008. **49**(6): p. 667-677.

66. Wadman, R., Clarke, D., Sayal, K., Armstrong, M., Harroe, C., Majumder, P., Vostanis, P., and Townsend, E., *A sequence analysis of patterns in self-harm in young people with and without experience of being looked after in care.* British journal of clinical psychology, 2017. **56**(4): p. 388-407.

67. Stanley, N., Riordan, D., and Alaszewski, H., *The mental health of looked after children: matching response to need.* Health & social care in the community, 2005. **13**(3): p. 239-248.

68. Furnivall, J., *Understanding suicide and self-harm amongst children in care and care leavers*. 2013, CELCIS.

69. Public Health England, *Measuring Mental Wellbeing in Children and Young People*. 2015.

70. Ryan, R.M. and Deci, E.L., *On happiness and human potentials: a review of research on hedonic and eudaimonic well-being.* Annu Rev Psychol, 2001. **52**: p. 141-66.

71. Stewart-Brown, S. and Janmohamed, K., *Warwick-Edinburgh mental well-being scale.* User guide. Version, 2008. **1**.

72. Anthony, R., Moore, G., Page, N., Hewitt, G., Murphy, S., and Melendez-Torres, G., *Measurement invariance of the short Warwick-Edinburgh Mental Wellbeing Scale and latent mean differences (SWEMWBS) in young people by current care status.* Quality of Life Research, 2021: p. 1-9.

73. Wood, M. and Selwyn, J., *Looked after children and young people's views on what matters to their subjective well-being.* Adoption & Fostering, 2017. **41**(1): p. 20-34.

74. Warwick Medical School. *Collect, score, analyse and interpret WEMWBS*. Available from: https://warwick.ac.uk/fac/sci/med/research/platform/wemwbs/using/howto/.

75. Minitab, *Regression Analysis: How Do I Interpret R-squared and Assess the Goodness-of-Fit?* 2013, Minitab Blog Editor.

76. Barnardo's, *Generation lockdown: a third of children and young people experience increased mental health difficulties*. 2020, Barnardo's.

77. Allen, K., Andrews, A., Preston, O., and Trend, L., *Impact of COVID-19 on care and contact: Evaluation Report (2020)*, in *Impact of COVID-19 on care and contact: Experiences in the first COVID-19 lockdown on foster carers and young people in their care*. 2020, Dartington: Research in Practice.

78. The Fostering Network, *Education during the Covid-19 pandemic and transitioning back to school: Experiences of the fostering sector*. 2020.

79. Baginsky, M. and Manthorpe, J., *Managing through COVID-19: the experiences of children's social care in 15 English local authorities.* NIHR Policy Research Unit in Health and Social Care Workforce, The Policy Institute, King's College London, 2020.

80. Tarren-Sweeney, M. and Hazell, P., *The mental health and socialization of siblings in care.* Children and Youth Services Review, 2005. **27**(7): p. 821-843.

81. Tarren-Sweeney, M., *Retrospective and concurrent predictors of the mental health of children in care.* Children and youth services review, 2008. **30**(1): p. 1-25.

82. Goswami, H., *Social relationships and children's subjective well-being.* Social Indicators Research, 2012. **107**(3): p. 575-588.

83. Chu, P.S., Saucier, D.A., and Hafner, E., *Meta-analysis of the relationships between social support and well-being in children and adolescents.* Journal of social and clinical psychology, 2010. **29**(6): p. 624-645.

84. Curtis, L., Moriarty, J., and Netten, A., *The Expected Working Life of a Social Worker.* The British Journal of Social Work, 2010. **40**(5): p. 1628-1643.

85. Department for Education. *Experimental statistics: Children and family social work workforce in England, year ending September 30 2020*. 2021; Available from: https://explore-education-statistics.service.gov.uk/find-statistics/children-s-social-work-workforce.

86. Turley, R., Roberts, S., Foster, C., et al., *Promoting the retention, mental health and wellbeing of child and family social workers: a systematic review of Workforce interventions.* 2020.

87. Kidger, J., Araya, R., Donovan, J., and Gunnell, D., *The effect of the school environment on the emotional health of adolescents: a systematic review.* Pediatrics, 2012. **129**(5): p. 925-949.

88. Mori, Y., Tiiri, E., Khanal, P., Khakurel, J., Mishina, K., and Sourander, A., *Feeling unsafe at school and associated mental health difficulties among children and adolescents: a systematic review.* Children, 2021. **8**(3): p. 232.

89. Tejerina-Arreal, M., Parker, C., Paget, A., Henley, W., Logan, S., Emond, A., and Ford, T., *Child and adolescent mental health trajectories in relation to exclusion from school from the Avon Longitudinal Study of Parents and Children.* Child and Adolescent Mental Health, 2020. **25**(4): p. 217-223.

90. Sadler, K., Vizard, T., Ford, T., et al., *Mental Health of Children and Young People in England, 2017: Summary of Key Findings*. 2018,, NHS Digital: London.

91. Monshouwer, K., ten Have, M., van Poppel, M., Kemper, H., and Vollebergh, W., *Possible mechanisms explaining the association between physical activity and mental health: findings from the 2001 Dutch Health Behaviour in School-Aged Children Survey.* Clinical Psychological Science, 2013. **1**(1): p. 67-74.

92. Twenge, J.M. and Campbell, W.K., *Associations between screen time and lower psychological well-being among children and adolescents: Evidence from a population-based study.* Preventive medicine reports, 2018. **12**: p. 271-283.

93. Verdurmen, J., Monshouwer, K., Van Dorsselaer, S., Ter Bogt, T., and Vollebergh, W., *Alcohol use and mental health in adolescents: interactions with age and gender-findings from the Dutch 2001 Health Behaviour in School-Aged Children survey.* Journal of studies on Alcohol, 2005. **66**(5): p. 605-609.

Appendix A

Table A1. Regression results with SDQ total difficulties: MH-CAT Wave 1 (n= 711)

VARIABLES	Model 1 B	Model 1 95% CI	Model 2 B	Model 2 95% CI	Model 3 B	Model 3 95% CI	Model 4 B	Model 4 95% CI	Model 5 B	Model 5 95% CI	Model 6 B	Model 6 95% CI
Female (ref. Male)	0.85	-0.22 - 1.91	0.74	-0.24 - 1.72	0.88	-0.076 - 1.84	0.88	-0.066 - 1.84	1.07*	0.14 - 2.00	0.99*	0.061 - 1.92
Age	0.14	-0.13 - 0.42	-0.35*	-0.63 - -0.081	-0.46**	-0.72 - -0.19	-0.44**	-0.70 - -0.18	-0.39**	-0.64 - -0.13	-0.56**	-0.83 - -0.30
Ethnicity (ref. All other ethnic groups)												
White	2.72**	1.36 - 4.08	2.63**	1.37 - 3.90	1.91**	0.70 - 3.12	1.89**	0.69 - 3.10	1.75**	0.58 - 2.93	1.75**	0.59 - 2.91
Type of placement (ref. Foster care with non-relative)												
Foster care with relative			1.18	-0.36 - 2.73	1.04	-0.44 - 2.51	1.05	-0.42 - 2.52	1.17	-0.26 - 2.60	1.31	-0.098 - 2.72
Residential care			1.36	-0.25 - 2.97	1.15	-0.38 - 2.69	0.85	-0.72 - 2.41	0.25	-1.29 - 1.78	0.14	-1.38 - 1.67
Other			-0.047	-2.02 - 1.93	-1.01	-2.91 - 0.89	-1.09	-2.98 - 0.80	-1.16	-2.99 - 0.68	-1.05	-2.87 - 0.76
Length of time in current placement (ref. Up to 6 months)												
7 months to 2 years			0.17	-1.79 - 2.13	-0.26	-2.13 - 1.62	-0.21	-2.08 - 1.66	-0.014	-1.84 - 1.81	-0.15	-1.95 - 1.66
+ 2 years			0.52	-1.48 - 2.52	0.11	-1.82 - 2.03	0.18	-1.73 - 2.10	0.32	-1.54 - 2.19	0.44	-1.41 - 2.28
No. of placements since entering into care			0.21*	0.041 - 0.38	0.087	-0.085 - 0.26	0.085	-0.086 - 0.26	0.11	-0.054 - 0.28	0.081	-0.085 - 0.25
Living with other children (ref. Living with no children)												
Living with other children only			-1.58*	-3.00 - -0.16	-1.42*	-2.79 - -0.054	-1.34	-2.70 - 0.018	-0.99	-2.32 - 0.34	-0.77	-2.09 - 0.55
Living with sibling(s) only			-3.43**	-5.04 - -1.82	-3.05**	-4.60 - -1.51	-2.93**	-4.47 - -1.38	-2.32**	-3.83 - -0.80	-2.32**	-3.83 - -0.82
Living with other children and sibling(s)			-4.80**	-6.55 - -3.04	-3.93**	-5.63 - -2.23	-3.83**	-5.52 - -2.14	-3.19**	-4.84 - -1.53	-2.94**	-4.58 - -1.29
Missing from placement (ref. No)			-1.58*	-3.00 - -0.16	-1.42*	-2.79 - -0.054	-1.34	-2.70 - 0.018	-0.99	-2.32 - 0.34	-0.77	-2.09 - 0.55
Feelings about placement			-0.005	-0.17 - 0.15	0.036	-0.12 - 0.19	0.079	-0.10 - 0.26	0.086	-0.088 - 0.26	0.10	-0.069 - 0.28
Relationship with carer(s)			-0.45**	-0.61 - -0.28	-0.30**	-0.47 - -0.13	-0.25**	-0.43 - -0.079	-0.22*	-0.39 - -0.052	-0.20*	-0.37 - -0.032

	M1		M2		M3		M4		M5		M6	
Missing school (ref. Never)												
1 or 2 times a year					1.20	-0.38 - 2.78	1.02	-0.57 - 2.60	0.97	-0.57 - 2.51	0.57	-0.98 - 2.12
At least once a month					2.09*	0.28 - 3.89	1.85*	0.056 - 3.65	1.84*	0.095 - 3.59	1.48	-0.27 - 3.24
School exclusion (ref. No)					1.86**	0.68 - 3.03	1.85**	0.68 - 3.02	1.79**	0.65 - 2.93	1.35*	0.18 - 2.52
No. of school changes due to placement changes					0.12	-0.23 - 0.47	0.090	-0.26 - 0.44	0.086	-0.25 - 0.43	0.083	-0.26 - 0.42
Feelings about school					-0.78**	-1.02 - -0.54	-0.74**	-0.98 - -0.50	-0.57**	-0.81 - -0.33	-0.52**	-0.76 - -0.29
Teacher support					0.13	-0.19 - 0.45	0.23	-0.092 - 0.56	0.25	-0.068 - 0.57	0.27	-0.040 - 0.59
Wish to have more contact with social worker (ref. No)							1.21	-0.07 - 2.48	1.30*	0.056 - 2.54	1.34*	0.11 - 2.57
Relationship with social worker							-0.14*	-0.25 - -0.032	-0.10	-0.21 - 0.003	-0.11*	-0.21 - -0.0052
Involvement in social work decision making (ref. No)							-0.20	-0.83 - 0.44	-0.23	-0.85 - 0.39	-0.19	-0.80 - 0.42
Relationship with friend(s)									-0.38**	-0.50 - -0.26	-0.39**	-0.51 - -0.27
No. of days access to green space over the past 7 days											-0.090	-0.45 - 0.27
No. of days of being physically active over the past 7 days											-0.20	-0.43 - 0.025
No. of hrs of being exposed to screen over the past 7 days											0.19**	0.096 - 0.29
Having a physical disability (ref. No)											1.33	-1.08 - 3.74
Having a hobby (ref. No)											-0.17	-1.68 - 1.35
Risky behaviour											0.19	-0.027 - 0.40
Constant	8.65**	4.38 - 12.9	24.1**	18.8 - 29.5	29.3**	23.9 - 34.6	28.9**	23.5 - 34.3	29.4**	24.1 - 34.7	30.7**	24.6 - 36.8
Observations	711		711		711		711		711		711	
R-squared	0.027		0.21		0.29		0.30		0.34		0.37	
Log Likelihood	-2408		-2335		-2296		-2289		-2270		-2256	

** p<0.01, * p<0.05

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Table A2. Regression results with SDQ total difficulties: MH-CAT Wave 2 (n= 501)

VARIABLES	Model 1 B	Model 1 95% CI	Model 2 B	Model 2 95% CI	Model 3 B	Model 3 95% CI	Model 4 B	Model 4 95% CI	Model 5 B	Model 5 95% CI	Model 6 B	Model 6 95% CI
Female (ref. Male)	1.72**	0.46 - 2.98	1.79**	0.56 - 3.01	1.50*	0.29 - 2.72	1.28*	0.071 - 2.49	1.50*	0.34 - 2.66	0.94	-0.21 - 2.10
Age	0.12	-0.20 - 0.44	-0.20	-0.53 - 0.13	-0.19	-0.52 - 0.14	-0.14	-0.47 - 0.18	0.10	-0.21 - 0.42	-0.096	-0.42 - 0.23
Ethnicity (ref. All other ethnic group)												
White	1.50	-0.11 - 3.12	1.44	-0.11 - 2.99	1.19	-0.32 - 2.71	1.37	-0.12 - 2.87	1.12	-0.28 - 2.53	0.86	-0.52 - 2.25
Type of placement (ref. Foster care with non-relative)												
Foster care with relative			-1.60	-3.53 - 0.34	-1.81	-3.69 - 0.079	-1.70	-3.55 - 0.16	-1.85*	-3.59 - -0.11	-1.94*	-3.64 - -0.24
Residential care			0.50	-1.59 - 2.59	-0.31	-2.40 - 1.78	-0.61	-2.69 - 1.47	-0.74	-2.69 - 1.22	-1.30	-3.22 - 0.63
Other			-2.00	-4.60 - 0.60	-2.20	-4.75 - 0.35	-1.84	-4.36 - 0.67	-1.61	-3.97 - 0.75	-1.87	-4.18 - 0.43
Length of time in current placement (ref. Up to 6 months)												
7 months to 2 years			-1.63	-4.10 - 0.84	-0.92	-3.35 - 1.51	-1.03	-3.44 - 1.37	-1.54	-3.80 - 0.72	-0.73	-2.96 - 1.50
+ 2 years			-1.63	-4.09 - 0.83	-1.02	-3.43 - 1.40	-0.51	-2.91 - 1.89	-0.85	-3.11 - 1.40	-0.092	-2.31 - 2.12
No. of placements since entering into care			0.042	-0.14 - 0.22	-0.084	-0.28 - 0.11	-0.10	-0.29 - 0.085	-0.072	-0.25 - 0.10	-0.055	-0.23 - 0.12
Living with other children (Ref. living with no children)												
Living with other children only			-0.98	-2.72 - 0.76	-0.87	-2.58 - 0.84	-0.89	-2.57 - 0.79	-0.83	-2.41 - 0.75	-0.71	-2.26 - 0.85
Living with sibling(s) only			-1.74	-3.66 - 0.17	-1.73	-3.62 - 0.15	-1.67	-3.53 - 0.18	-0.81	-2.57 - 0.94	-0.62	-2.34 - 1.09
Living with other children and sibling(s)			-2.49*	-4.52 - -0.46	-2.65**	-4.64 - -0.65	-2.76**	-4.72 - -0.79	-1.74	-3.60 - 0.12	-1.39	-3.21 - 0.43
Missing from placement (ref. No)			3.10**	1.33 - 4.87	2.07*	0.27 - 3.87	1.84*	0.052 - 3.63	2.01*	0.31 - 3.71	1.19	-0.55 - 2.93
Feeling about placement			-0.038	-0.22 - 0.14	0.047	-0.14 - 0.23	0.15	-0.058 - 0.36	0.099	-0.098 - 0.30	0.050	-0.14 - 0.24
Relationship with carer(s)			-0.34**	-0.54 - -0.14	-0.27**	-0.48 - -0.067	-0.25*	-0.46 - -0.038	-0.18	-0.38 - 0.025	-0.12	-0.32 - 0.075
Missing school (ref. Never)												
1 or 2 times a year					2.27*	0.10 - 4.44	1.97	-0.17 - 4.11	1.77	-0.25 - 3.80	1.55	-0.45 - 3.55
At least once a month					0.30	-1.70 - 2.31	0.46	-1.51 - 2.44	0.31	-1.55 - 2.16	-0.39	-2.26 - 1.48
School exclusion (ref. No)					1.52	-0.10 - 3.14	1.59	-0.0089 - 3.19	1.60*	0.10 - 3.10	1.09	-0.39 - 2.57
No. of school changes due to placement changes					0.60*	0.13 - 1.07	0.56*	0.100 - 1.03	0.38	-0.060 - 0.82	0.38	-0.048 - 0.81
Feelings about school					-0.50**	-0.80 - -0.20	-0.50**	-0.80 - -0.21	-0.42**	-0.70 - -0.14	-0.35*	-0.63 - -0.073
Teacher support					0.078	-0.37 - 0.52	0.033	-0.41 - 0.48	0.17	-0.25 - 0.59	0.26	-0.15 - 0.68
Wish to have more contact with social worker (ref. No)							3.18**	1.53 - 4.83	2.05*	0.48 - 3.62	1.77*	0.24 - 3.31
Relationship with social worker							0.058	-0.084 - 0.20	0.099	-0.036 - 0.23	0.089	-0.042 - 0.22
Involvement in social work decision making (ref. No)							-0.67	-1.42 - 0.074	-0.52	-1.22 - 0.18	-0.32	-1.01 - 0.37

	(1)		(2)		(3)		(4)		(5)		(6)	
Relationship with friend(s)									-0.44**	-0.63 - -0.24	-0.48**	-0.67 - -0.29
Bullied over the past 6 months (ref. No)									3.49**	2.06 - 4.92	3.89**	2.48 - 5.30
Cyber bullied over the past 6 months (ref. No)									2.98**	1.03 - 4.93	2.63**	0.71 - 4.55
No. of days access to green space over the past 7 days											-0.25	-0.72 - 0.21
No. of days of being physically active over the past 7 days											-0.065	-0.25 - 0.12
No. of hrs of being exposed to screen over the past 7 days											0.17*	0.036 - 0.31
Have a physical disability (ref. No)											2.07	-0.97 - 5.11
Have a hobby (ref. No)											-2.56**	-4.18 - -0.93
Risky behaviour											0.35**	0.11 - 0.60
Constant	9.22**	4.20 - 14.2	22.7**	16.2 - 29.2	23.4**	16.8 - 30.0	21.3**	14.8 - 27.9	19.6**	13.3 - 25.9	23.1**	16.5 - 29.7
Observations	501		501		501		501		501		501	
R-squared	0.021		0.145		0.200		0.231		0.329		0.371	
Log Likelihood	-1697		-1663		-1646		-1637		-1603		-1586	

** p<0.01, * p<0.05