youth futures FOUNDATION

Understanding drivers of recent trends in young people's mental health

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This work builds upon and integrates the systematic reviews conducted by the broader research community, and we gratefully acknowledge the contributions of the original review teams whose efforts made this synthesis possible.

Youth Futures Foundation's Mental Health Advisory Group

An independent advisory group was established to steer the project, bringing together clinicians, leading academics and policy stakeholders.

- **Baroness Luciana Berger**, Former Shadow Cabinet Minister for Mental Health (Chair)
- **Kadra Abdinasir**, Associate Director of Policy, Centre for Mental Health, Trustee for Race on the Agenda & Member of the NHS Race and Health Observatory Mental Health Working Group
- **Dr Rachel Bradley**, Consultant Clinical Psychologist, Children and Families Lead for Psychological Services at Midlands Partnership University NHS Foundation Trust & Chair of the Faculty for Children, Young People and their Families, Division of Clinical Psychology, British Psychological Society
- **Professor Jessica Deighton**, Director of the Evidence Based Practice Unit, UCL and Anna Freud
- **Professor Bernadka Dubicka**, Professor of Child and Adolescent Psychiatry, Hull York Medical School, University of York
- **Dr Lucy Foulkes**, Research Fellow in Psychology, University of Oxford
- **Olly Parker**, Head of External Affairs and Research, YoungMinds
- **Charlotte Rainer**, Coalition Manager, Children and Young People's Mental Health Coalition

Foreword

Baroness Luciana Berger

Chair, Youth Futures Foundation's Mental Health Advisory Group

This important research, commissioned by Youth Futures Foundation, and conducted by the University of Manchester and UCL, comes at a crucial stage in our national conversation about mental health, work, and young people. I have been pleased to chair the independent advisory group steering the project, drawing on the insights and experience of a phenomenal group of clinicians, academics and policy colleagues.

The result is a first-of-its-kind study which reveals the most likely factors driving a serious and seismic trend of rapidly deteriorating youth mental health. To solve this alarming challenge, first we must understand it.

It is clear that there is a toxic combination of factors, rather than a single, standout cause. The report reveals the burden of financial insecurity weighing on young people, against a bleak backdrop of insecure jobs, a lack of opportunity, rising rents and impossible mortgages. These are issues demanding urgent attention, with too many young people deprived of the wellbeing benefits that high-quality work can bring, or denied the stability of an affordable home.

The study suggests that declining sleep quality is another significant contributor, which although widely accepted as a cornerstone of living well, is largely missing from public policy conversations about mental health.

The role of social media and smartphone use while predictable is no less dispiriting. The myriad advantages of the digital age are mirrored by detrimental impacts. The race to protect young people from increasing volumes of harmful online content and extende d exposure to a smartphone, are a defining public health challenge of our time.

Then there is the reduction in children and youth services. The consequences of a 73% funding cut to youth services in England since 2010 has been felt by a generation, with the most marginalised young people paying the greatest price.

Some claim that soaring rates of poor mental health among young people are purely the result of increased awareness and reporting, or even a culture of declaring everyday distress as mental illness. This study stands as a clear, unequivocal rebuttal to that charge.

This generation of young people is no less resilient than their parents or grandparents; the fact is that their deteriorating mental health has societal and economic drivers. Understanding these drivers is a first, vital step in tackling the issue, which is why I commend this study to politicians, policymakers, and everyone with an interest in fashioning solutions.

Introduction

Barry Fletcher

CEO, Youth Futures Foundation

Over the past decade, mental ill health among young people has risen sharply, sparking widespread concern among health professionals, educators, policymakers, and families alike. Data shows us that this has also been a significant driver of increasing youth economic inactivity, contributing to the UK's already persistent youth employment challenge.

Although there is growing recognition that poor mental health can be both a cause and consequence of youth unemployment, the underlying drivers of this crisis remain poorly understood and less well-evidenced.

It's therefore crucial that we better understand what is causing the increasing rates of youth mental health issues; because if we don't, we can't meaningfully design and invest in interventions that we know will work for young people and which they so desperately need. This report plugs that evidence gap, offering the first study of its kind focused on England. It not only highlights that the rise in mental health problems among young people appears to be genuine but provides the most comprehensive analysis to date of the factors contributing to this trend.

In consultation with experts, the research purposefully took an agnostic approach, identifying ten potential drivers of rising anxiety and depression among young people, grouped into three categories: increased risk, reduced resilience, and changes in reporting. The report assesses each theory, drawing upon a combination of data analysis and literature review, to identify the most credible and influential drivers of the trend.

In addition to the urgent moral imperative to ensure we address this issue, there is an ever-increasing societal and economic imperative to act now. We know that being out of work and education can have a scarring effect on young people even decades later, impacting their future prospects. We must support more young people to build secure, fulfilling working lives, improving their wellbeing and the UK's long-term prosperity.

Thank you to the experts on our Mental Health Advisory Group, under the chairmanship of Baroness Luciana Berger, who helped to inform and shape this work we've conducted with the University of Manchester and UCL.

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Executive summary

What we did: This report investigates recent population level increases in mental health problems among young people (aged 14–24) in England. It provides a fresh understanding of theories behind these trends using data analyses and an extensive literature review.

What we found: The number of young people reporting symptoms of mental distress has risen sharply since 2010. Primary care contacts for mental health problems have also increased steadily since 2000, with a sharp acceleration in anxiety and self-harm since 2012.

Increases were particularly pronounced among girls and young women, and individuals from white British and mixed ethnic backgrounds, while less evident among Black and Asian young people.

We focus on low mood and anxiety, and general mental distress, as these are where increases are most evident. Our analyses indicate these trends reflect genuine increases in mental distress rather than shifts in the identification or reporting of symptoms. Additionally, young people's responses to common stressors, such as bullying or family discord, have remained stable, suggesting no overall decline in resilience, although there was an increasing effect of financial insecurity for more recent cohorts.

Out of ten theories considered, several emerged as likely contributors to these trends:

Declining sleep quality: Markers of young people's sleep quality have deteriorated, and robust evidence links poor sleep to higher rates of depression and anxiety symptoms.

Employment precarity and affordability pressures: Financial insecurity has increasingly impacted young people since 2010. This is likely driven by lower access to stable jobs and careers, and affordability pressures – in particular housing.

Social media and smartphone use: Evidence indicates that social media and smartphone use may have a small negative impact on mental health, contributing to recent trends given their widespread adoption since 2010. However, it is likely that social media includes a wide range of experiences, some positive.

Reduction in children and youth services: Funding for community services for children and young people in England has declined by 73% since 2010, and evidence suggests that they were positively affecting mental health.

Other factors, such as child poverty and discriminatory experiences, clearly influence youth mental health, though these have not substantially increased since 2010. This is somewhat true for academic pressure, though changes to happiness at school since 2021 may warrant further investigation. Some areas, such as societal attitudes towards

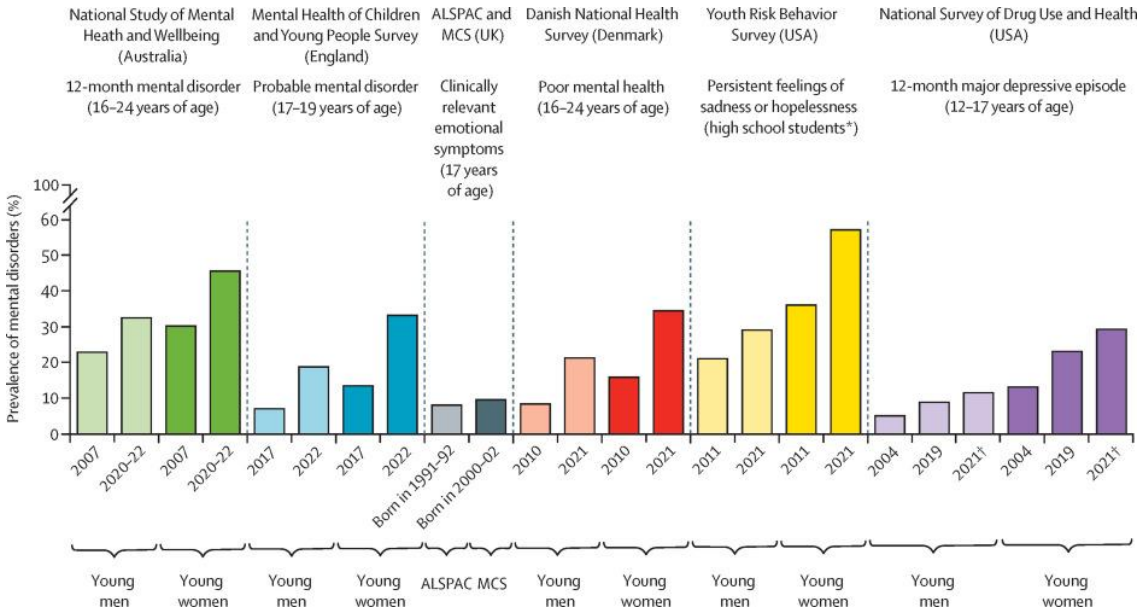
risk in childhood or climate change anxiety, lack robust evidence, highlighting key areas for future research.

Background

Multiple indicators suggest young people's mental health has recently deteriorated at a rate rarely seen outside of infectious disease outbreaks. For example, the most recent Adult Psychiatric Morbidity Survey reported that the proportion of young adults (aged 16 to 24) with a common mental health condition rose from 19% in 2014 to 26% in 2023/4 (NHS England Digital, 2025). The number of young people prescribed mental health medications has also been steadily rising since 2000 (Cybulski et al., 2021; Radojčić et al., 2023), and more recently, there have been sharp rises in the number of young people making work and mental health-related disability claims (Latimer et al., 2025). In England, during the 2022-23 financial year, almost one million under-18s (approximately one in twelve) had an active referral to specialist mental health services (Children's Commissioner, 2024).

These recent trends towards poorer mental health among young people are not confined to England (see Figure 1). Such trends are observed across multiple continents but are primarily observed in countries with high or high-middle Socio-Demographic Index (SDI) levels (Bie et al., 2024).

***Figure 1: International data on trends in young people's mental health*[1]**



Source: Lancet Psychiatry (P. D. McGorry et al., 2024), reprinted with permission from the copyright holder

There are two approaches to address this crisis in young people's mental health. One is to expand mental health services to meet demand (England & Mughal, 2019). However, this will meet significant financial and logistical challenges, and as services are stretched to accommodate increasing numbers, their capacity to deliver high-quality, timely care to those who need it most will diminish. The second is to provide preventative measures that address the root causes of poor mental health. If well-targeted, these are likely to have greater benefit at the population level (Fusar-Poli et al., 2021) and are consistent with the government's priorities for the NHS (NHS England, 2025). Optimising these interventions depends on a clear understanding of the drivers behind recent trends, so we can intervene where the benefit is likely to be greatest.

Aim of report

This report aims to understand *why* there have been increases in mental health problems in young people. Previous research has explored potential explanations for recent trends

[1] Note that the studies use different measures of 'mental disorder'; therefore, differences between studies should be interpreted with caution.

in young people's mental health (Armitage et al., 2024a; McGorry et al., 2024), typically offering narrative summaries or focusing on individual drivers. Our approach goes significantly further by systematically evaluating multiple theories in parallel, using a combination of data analysis and literature review. We describe specific theories for the trends and assess the strength of evidence supporting each one, highlighting where important gaps remain.

We intend to provide an accessible summary of our results, identifying where there is confidence and where there is uncertainty. We have a technical document with further information on the methods used and more detailed results, and the code used to complete the analyses is freely available at https://osf.io/k79pa.

We arrived at our conclusions through three results sections, each addressing a different aspect of the problem.

In the first results section, we provide up-to-date information on trends in young people's mental health symptoms and primary care service use. We highlight which groups of young people (by gender, ethnicity, deprivation, and English region) are experiencing the greatest increases and identify the specific types of mental health symptoms involved.

In the second results section, we outline theories proposed to explain these observed trends. We categorise these theories into explanatory types and discuss how each type can be evaluated. Using data analyses from a large household survey, we specifically aim to quantify:

i. Whether there is evidence that young people's resilience to specific stressors has declined over time.
ii. Whether young people have become more likely to report mental health symptoms at lower severity thresholds in recent years.

In the third analysis section, we describe and evaluate individual theories for the increase by critically examining the existing literature. We do this by addressing three key questions:

i. Is there robust evidence that the proposed factor has changed over the relevant period and can plausibly explain worsening mental health?
ii. Does evidence exist for a clear causal association between this factor and mental health outcomes?
iii. Does this factor help explain the mental health trends observed in specific subgroups?

Trends in young people's mental health

What did we do?

We examined trends in mental health symptoms and primary care presentations among young people aged 14–24 in England using two robust data sources: Understanding Society and the Clinical Practice Research Datalink (CPRD Aurum). We assessed overall trends, as well as differences across gender, ethnicity, deprivation, and region, using statistical analyses to evaluate subgroup differences.

What did we find?

Mental health symptoms among young people increased significantly from around 2010-2012, particularly low mood and anxiety symptoms, with pronounced increases among girls and young women, and among young people from white British and mixed ethnic backgrounds. Primary care contacts for anxiety, depression, self-harm, and eating disorders also rose notably from 2000 to 2019, with anxiety increasing especially sharply post-2012. There was no consistent variation in mental health trends by household deprivation, though increases in primary care presentations were somewhat higher in northern regions.

Data sources

We examine trends in mental health symptoms and service use using two data sources: a longitudinal survey to assess mental health symptoms, and primary care data to assess the reporting of problems to services. We have used these two data sources because they both provide population-level data on mental health that have been collected since at least 2009 and have large samples that allow us to investigate subgroups. Our focus is on young people aged 14 to 24 residing in England.

Understanding Society is an ongoing annual survey that collects data from approximately 40,000 UK households. Mental health data have been collected since 2011. For young people aged 10 to 15, mental health is assessed every two years using the Strengths and Difficulties Questionnaire (SDQ)[2]. For those aged 16 and above, it is

[2] The SDQ has five questions for each of its five subscales and was designed as a screening measure for young people's mental health problems.

assessed every year using the 12-item General Health Questionnaire (GHQ-12).[3] Understanding Society builds on the earlier British Household Panel Survey (BHPS), which began in 1991 and collected GHQ-12 data for individuals aged 16 and over, thereby providing relatively comparable data over time.

We focus on three domains of the SDQ: emotional symptoms (encompassing low mood and anxiety symptoms), hyperactivity, and conduct problems. The primary outcome is the annual proportion of individuals exhibiting 'high' levels of symptoms in each SDQ subdomain and in the overall GHQ-12, as defined by pre-specified cut-off scores (Youth in Mind, 2025). All estimates are presented after applying survey weights to account for non-response and the survey's complex sampling design (Understanding Society, 2025).

The Clinical Practice Research Datalink (CPRD Aurum) is a large primary care database containing symptom, diagnostic, and prescribing data, covering approximately 13% of the population in England. For this report, we present data on primary care contacts in which a general practitioner (GP) has recorded either a mental health symptom (e.g. "low mood") or a diagnosis (e.g. "eating disorder"). The outcome is the annual percentage of young people registered with a GP who have presented with a recorded mental health problem.

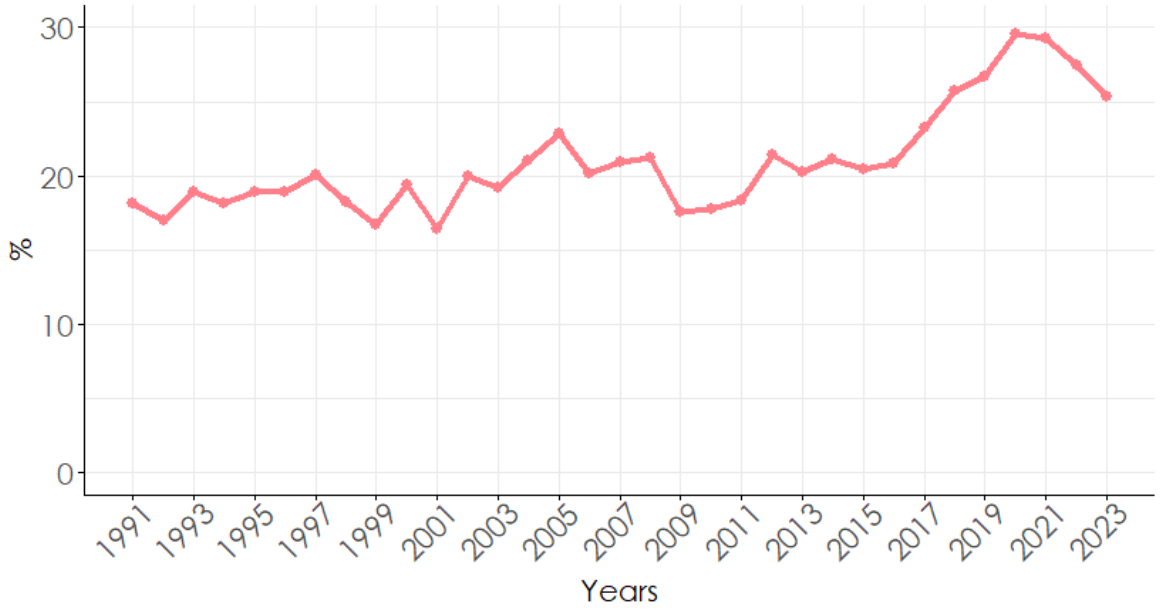
Overall trends in young people's mental health

The proportion of 16–24-year-olds reporting 'mental distress'[4] remained relatively stable from 1991 to 2014 (Figure 2). However, between 2015 and 2020, this rate rose sharply from 20.4% to 29.6%, before decreasing to 25.4% in 2023.

[3] Mental distress is measured using the GHQ-12, a brief and widely used tool for assessing general mental health, including symptoms such as anxiety, depression, and social dysfunction. For this study, 'mental distress' is defined as a high score on more than four of the 12 GHQ-12 items.

Figure 2: Rates of mental distress

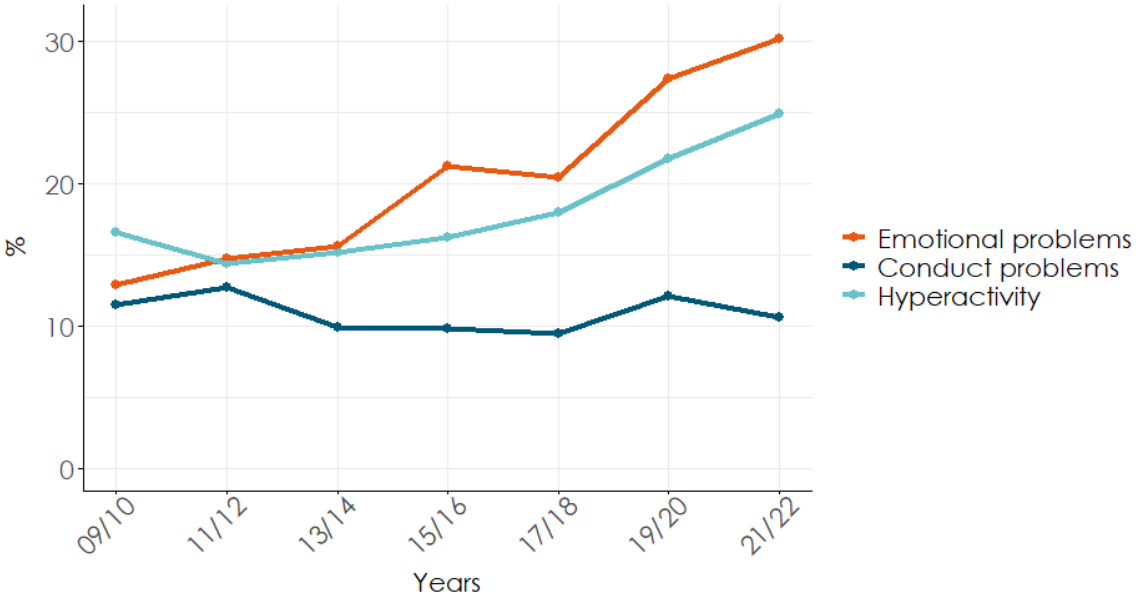
Young people aged 16 to 24 years, England, 1991 to 2023



Sources: Understanding Society and BHPS

Among those aged 14 and 15, the rate of 'emotional problems' (i.e. low mood or anxiety symptoms) more than doubled, rising from 13% in 2009/10 to 30% in 2021/22 (Figure 3). Increases were also observed in hyperactivity, from 17% in 2009/10 to 25% in 2021/22. Conversely, there was little change in the proportion of those reporting conduct problems (11.4% in 2009/10 and 10.6% in 2021/22).

Figure 3: Rates of emotional, hyperactivity, and conduct problems
Young people aged 14 to 15 years, England, 2009 to 2022



Source: Understanding Society

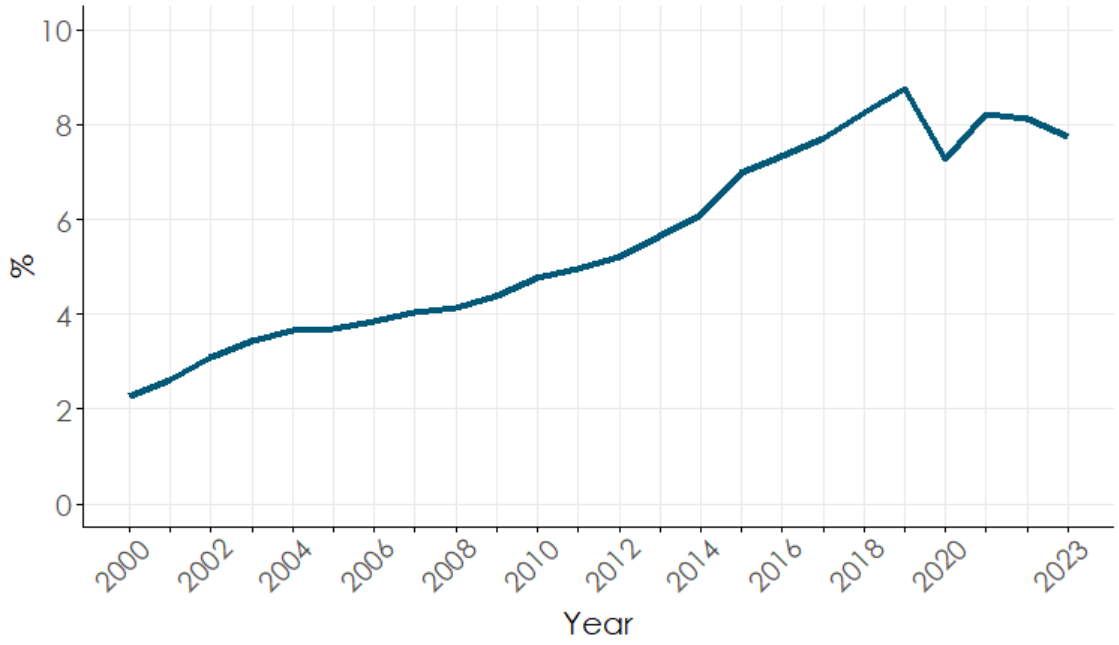
Trends in young people's primary care presentation

Analysis of a large primary care database indicates a consistent upward trend in young people's contact with primary care services for mental health problems from 2000 to 2019, contrasting with trends observed in survey data, where no apparent changes were observed between 2000 and 2012. We estimate that 1 in 11 young people were in contact with primary care for a mental health problem in 2019, compared to 1 in 44 in 2000 (Figure 4). There was a marked reduction in overall mental health contacts during the COVID-19 pandemic, and this had not reverted to pre-pandemic levels up to 2023[5].

[5] It is important to note that changes in healthcare use reflect several factors in addition to clinical need. A young person's attendance at primary care for a mental health problem is influenced by their own, their family's, and their community's cultural norms, beliefs about mental health, stigma surrounding mental illness, and perceptions of the acceptability of accessing mental health services. These will vary by ethnicity and social capital. In addition, the availability of care, waiting lists and healthcare policy affect how likely a person is to book and attend an appointment. Many of these processes were impacted by the pandemic.

Figure 4: Proportion of the population with a presentation to primary care for a mental health problem

Young people aged 14 to 24 years, England, 2000 to 2023



Source: CPRD-Aurum

When examined by type of mental health problem (Figure 5), the proportion of young people seeking primary care for anxiety or depression approximately doubled each decade, increasing from 1.9% in 2000 to 4.1% in 2010 and 7.6% in 2019. The rise was more pronounced for anxiety, which grew from 0.7% in 2000 to 4.9% in 2019, compared to depression, which increased from 1.4% in 2000 to 4.9% in 2019.

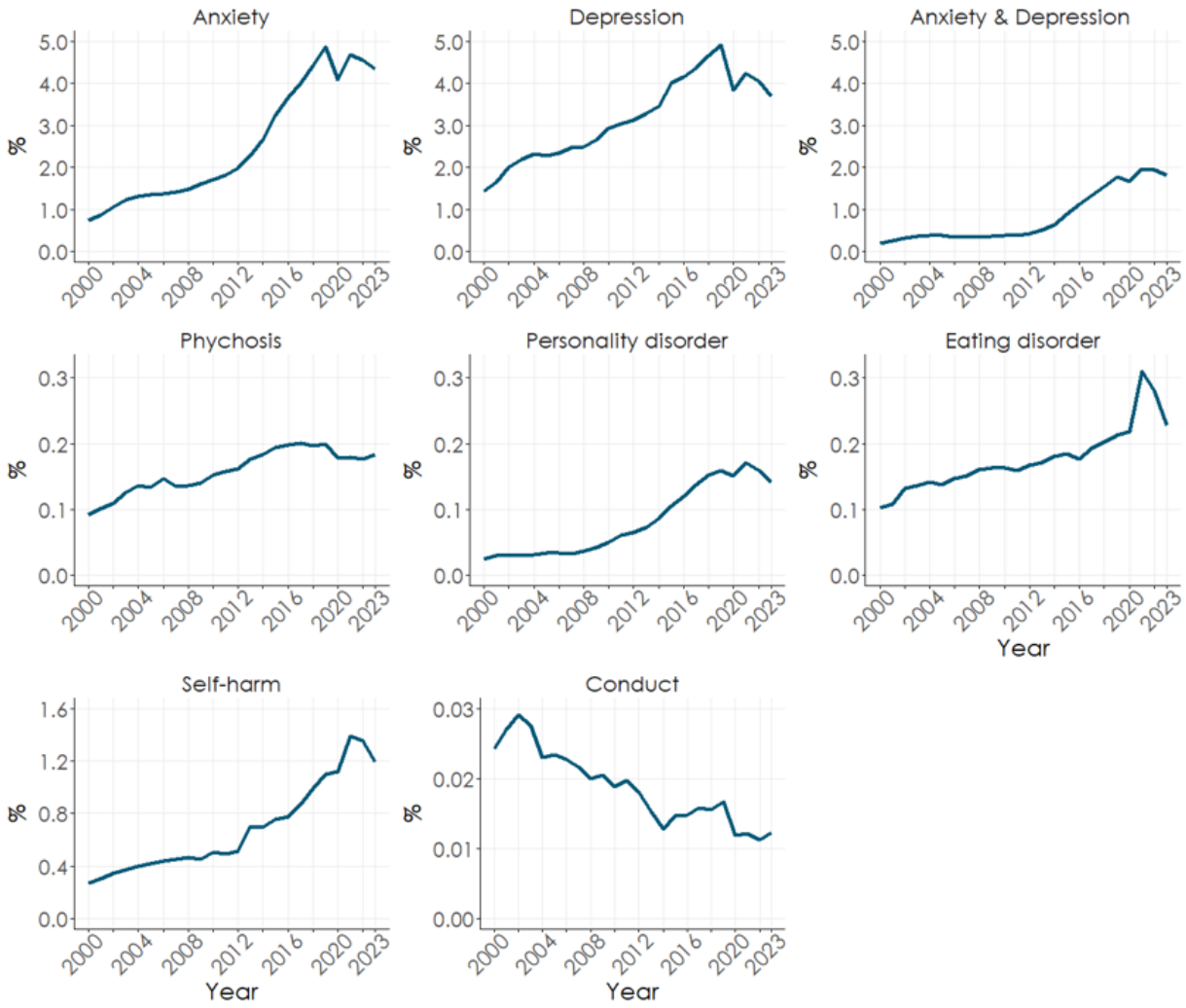
For anxiety, the rate of increase accelerated substantially after 2012 compared to 2000–2011, with annual contacts rising by 32 per 10,000 young people from 2012 to 2019, compared to 11 per 10,000 annually during 2000 to 2011. By contrast, primary care contacts for depression increased relatively steadily. However, the reduction in depression-related contacts during the COVID-19 pandemic was twice as large as the reduction for anxiety and by 2023, the rate of depression-related contacts had fallen below 2015 levels.

Contacts for self-harm showed a slower initial rise, increasing by an average of 2 per 10,000 annually from 0.3% in 2000 to 0.5% in 2012. However, the increase accelerated sharply from 2013, with rates jumping to 0.7% and increasing by 7 per 10,000 annually through to 2019 to 1.1%. There were increases in contacts for self-harm and eating

disorders during the pandemic, which peaked in 2021 before returning to pre-pandemic levels in 2023, to 1.2% for self-harm and 0.2% for eating disorders.

Figure 5: Proportion of young people with a presentation to primary care by type of mental health problem

Young people aged 14 to 24 years, England, 2000 to 2023



Source: CPRD-Aurum

Subgroup trends in young people's mental health

In this section, we examine trends in young people's mental health based on gender,[6] ethnicity and deprivation. Statistical analyses were conducted to assess whether observed differences in trends across these groups could be attributed to random chance or whether there is evidence to suggest genuine differences between groups.[7]

Gender differences

Among 14-15-year-olds, there were larger increases in low mood and anxiety symptoms in girls compared to boys: emotional symptoms increased by 0.11 per year on average among girls, compared to 0.06 among boys (Figure 6). These trends were backed up by the statistical analysis.[8] Similarly, primary care data show that mental health-related contacts were consistently higher for girls and young women (Figure 7). In 2000, approximately 1 in 30 girls and young women had contact with primary care for a mental health problem, rising to 1 in 9 by 2019. That was compared to 1 in 72 boys and young men in 2000 and 1 in 16 in 2019.

Ethnicity differences

Both survey and primary care data showed greater deteriorations in mental health for young people from white British backgrounds compared to other groups. Survey data show that mental health symptoms increased most among white and mixed ethnic backgrounds. For example, the average yearly mental distress symptom score for ages 16-24 increased by 0.24 per year for white British young people, 0.16 for those from mixed ethnic backgrounds, while much smaller changes in average score were observed for South Asian (0.10) and Black (0.06) young people.

Primary care data also highlight these ethnic differences in the change in mental health-related presentations. For example, in 2019 an additional 8.8% of white British young people presented to primary care for a mental health problem increasing from 2.9 in 2000 to 11.7% in 2019; whereas the increase for Black young people, whilst still substantial, was considerably smaller at 2.9% (from 1.4 to 4.3%). There was a negligible

[6] We were unable to investigate trends according to gender groups other than young women and men, due to data not being available or the numbers being too small.
[7] The statistical analysis was conducted by fitting a wave-by-subgroup interaction. To enhance the sensitivity of our analysis and improve the detection of subgroup differences, we used average mental health scores. Full results testing subgroup differences, including p-values can be found in the Technical Report (Section A).
[8] See Technical Report, section A.

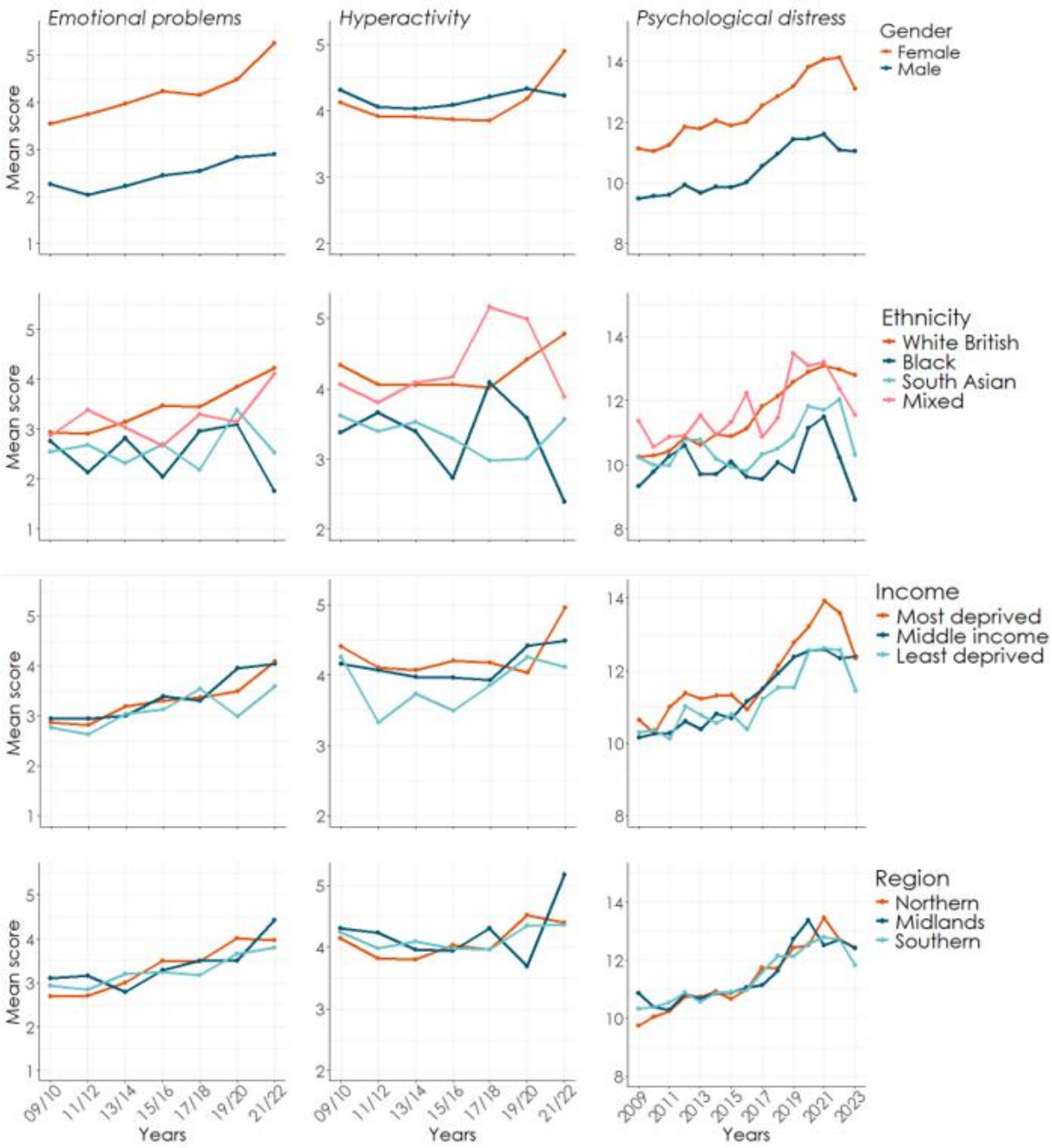
reduction in presentations to primary care for Black young people following the pandemic, whereas the reduction was marked for white British young people (Fig. 9).

Deprivation and regional differences

There was no evidence from our statistical analysis that trends in mental health symptoms varied by the level of deprivation of the household or region in England where the child lived. We do note, however, that mental distress in the survey data for 16–24-year-olds in the most deprived income groups appears higher between 2020 and 2022, although it was similar to other deprivation groups in 2023 (Fig 7). These data points may therefore represent random fluctuations. Changes in primary care contacts for mental health problems were comparable across income deprivation groups; however, greater increases in primary care contacts were observed in the North of England compared to other areas.

Figure 6: Mean score for emotional and hyperactivity problems for 14-15 year olds and mental distress for 16-24 year olds, by group

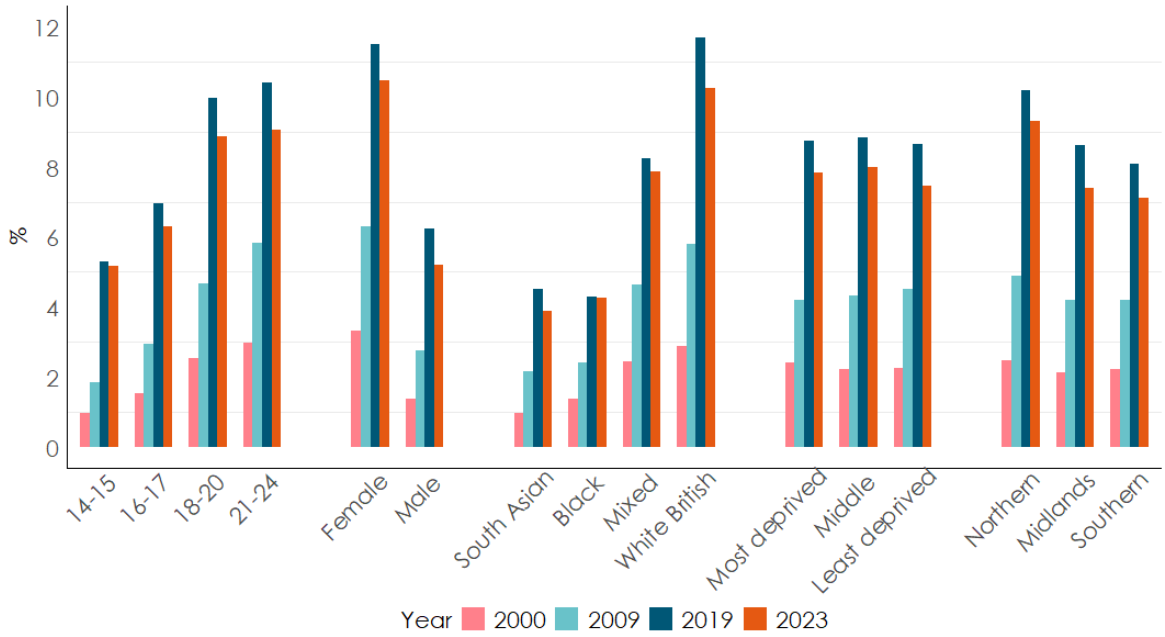
England, 2009 to 2023



Source: Understanding Society

Figure 7: Proportion of young people with a mental health presentation to primary care, by group and year

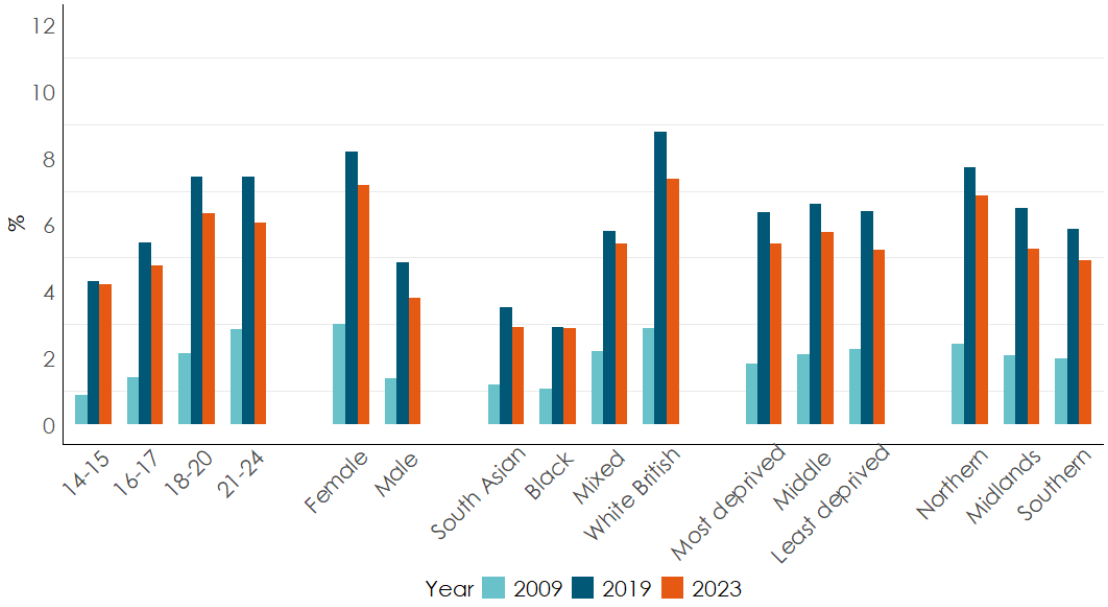
Young people aged 14 to 24 years, England, 2000 to 2023



Source: CPRD-Aurum

Figure 8: Absolute change in the proportion of young people with a mental health presentation to primary care compared to the year 2000[9]

Young people aged 14 to 24 years, England, 2000 to 2023



Source: CPRD-Aurum

Several questions arising from trends reported help direct us in examining the causes:

1. Why are the trends more pronounced among girls and young women and those from white British or mixed ethnic backgrounds?
2. Why are the trends particularly strong for low mood and anxiety symptoms?
3. What explains the sharp increase in mental health problems observed around 2012 in the primary care data, and in mental health symptoms around 2010 for 14–15-year-olds and 2014 for 16–24-year-olds?

[9] Change is measured here as 'absolute' change. For example, if the proportion of young people with a presentation increases from 1% to 2% then the change is 1 percentage point.

Theories for trends in young people's mental health

What did we do?

In consultation with experts, we identified ten theories which could explain the increasing rates of anxiety and depression among young people. These theories were grouped into three explanatory categories: increasing risk, declining resilience, and changing reporting. We then conducted analyses using data from the Understanding Society survey, examining whether there was evidence for changing resilience and whether there was evidence for changing reporting.

What did we find?

We found that young people's resilience to financial difficulties had declined, but not their resilience to other stressors such as bullying, being attacked, or family conflict. We found little evidence supporting the theory that young people report mental health symptoms at lower thresholds over recent years; instead, the consequences associated with poor mental health, such as not being in education, employment or training, appear to have worsened over time.

Theories for trends in young people's mental health

We sought to identify theories that may explain at least partly the increasing rates of mental health problems among young people, so we could examine evidence for each. We focused on those that had been proposed for the increases in low mood and anxiety symptoms, or in general mental distress, since this is where the greatest increases are observed.

A long list of potential theories was identified through our own expertise and in consultation with 19 external experts from psychology, education, psychiatry, epidemiology, and economics. We were unable to evaluate every theory, and we set aside changes in family structure, religiosity and value frameworks because either a) our group downgraded their importance in the trends because of knowledge about what

has changed substantially over the period; or b) they could not be mapped easily to individual factors that could be evaluated.

Table 1: the final ten theories in alphabetical order with a brief description.

Theory	Brief explanation of theory
Academic pressure	Growing emphasis on exams may have led to a reduction in beneficial activities in school, greater stress and performance expectations and, in turn, adversely affected mental health.
Children and youth services	Loss of services for children and young people (e.g. youth clubs and early years services) following periods of austerity may have led to the loss of protective and resilience factors for young people.
COVID-19 pandemic	Pandemic-related disruption meant young people lost their social contacts, while services became relatively inaccessible and there was significant uncertainty over the future. These factors could all lead to deteriorating mental health.
Discriminatory experiences	Experiences of discrimination may lead to distress and worsen mental health, especially in marginalised groups.
Economic factors	Economic instability since 2010 may have affected young people's mental health.
Environmental worry	Rising concern about the climate crisis may increase feelings of worry and low mood, especially among young people.

Health behaviours	Changing trends in sleep, diet, physical activity, and weight may help to explain mental health trends.
Mental health awareness	Greater mental health awareness may lead to increased symptom reporting and potentially cause harm through increased rumination.
Risk aversion	More risk-averse approaches to children and young people (by parents and in society as a whole) over time may have affected the development of skills that protect young people from developing mental health symptoms.
Social media and smartphone use	Social media and smartphone use may be a negative influence on young people's mental health through promoting social comparison, cyberbullying, exposure to harmful content and displacement of other potentially protective activities (e.g. physical activity).

Categories of theories

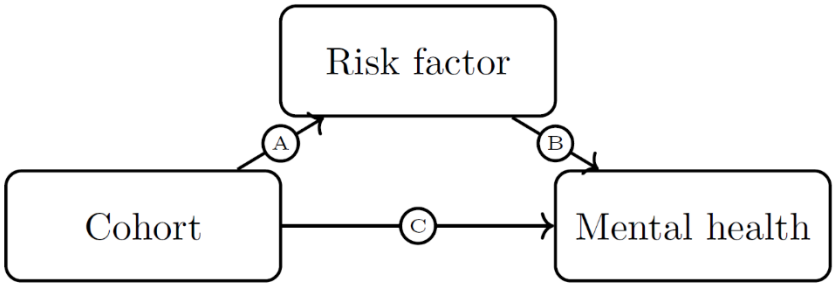
Different considerations are needed to assess different theories. To aid this, we highlight different types of theories: increasing risk, declining resilience, and changing reporting.

Theory category 1: Increasing risk

Trends of worsening youth mental health may be explained by factors that have both changed over time and have a direct effect on mental health. It may be that these 'risk factors' are new exposures (from our list, these include *the COVID-19 pandemic, social media and smartphone use*). Or it could be that they are existing ones that may have become more common or intensified over time of worsening youth mental health (*academic pressure, environmental worry, discriminatory experiences, and unstable*

economic context). Some of these 'risk factors' are represented by the removal of beneficial exposures and activities (*declining healthy behaviours and declining service for children and young people*). Although the impact of these may vary by individual, and could be harmless or even beneficial for some, if they affect more young people adversely than not, they could explain population-level declines.

Understanding whether a change in a factor explains declines in mental health outcomes requires two steps. The first is to examine whether the factor changes in the appropriate direction over time, between successive cohorts of young people. The second is to assess the effect that the factor has on young people's mental health. These are represented by pathways (A) and (B) in the figure below.



This figure highlights an important aspect of the problem: the amount that a risk factor has changed over time is equally as important to the size of its effect on the outcome. Therefore, a risk factor that generally has only a small effect on young people's mental health would have to change substantially in the appropriate direction over time for it to be an important contributor (and vice versa). It is likely that there are several such risk factors involved in the changes in mental health[10].

Theory category 2: Declining resilience

At some stage, most young people will experience life events they find stressful, such as family conflict, falling out with a friend, or romantic rejection (Foulkes, 2024). Resilience defines how somebody responds to adversity. If somebody has a negative experience, but this leads only to short-term disruption to how they feel or function, or even if they find themselves strengthened by the experience, they can be considered resilient to

[10] Modelling these would be a complex task, as it would involve adjusting for confounding pathways between the mediator and outcome, and separating out risk factor pathways and their interactions.

that stressor/adversity. If it has deeper or more lasting effects on mental health, they are not.

It is helpful to think of 'systems' of resilience, which include a young person's psychology and personality, their physiology, health, family, schools, communities, and the policy and economic landscape (Masten & Barnes, 2018). These systems may not have a direct impact on mental health but only affect it once a young person has experienced an adversity.[11] If one or more of these weaken over time, it could mean the young person becomes more vulnerable to adversity.

***Theories falling within this group**: Economic uncertainty, risk aversion, and loss of services for children and young people*

Modelling declining resilience

Different resilience systems may map to different stressors. For example, a more onerous benefits system might make job loss more damaging to mental health. Before isolating which resilience, the system may be diminishing over time (if any), we considered whether the effect of different stressors had been increasing over time. For example, does family conflict affect young people in 2025 more than it did in 2010?

To address this, we modelled the impact of various stressors on young people's mental health scores. This was done using data from 16–24-year-olds in Understanding Society (Table 2) and considering i) whether a stressor at a given wave was associated with poor mental health in a future wave, and ii) whether the size of this link changed over time[12].

Table 2: Description of stressors used to assess changing resilience

Stressor	Measure
Bullied	How often were you physically/other bullied at school?
Financial difficulty	How well would you say you yourself are managing financially these days?

[11] Healthcare services represent a classic example of a resilience system: a healthcare service only affects an individual once they have experienced poor health.
[12] We were limited to stressors that were measured in all USoc waves, and which did not change qualitatively over time. For example, 'exposure to harmful online content' may mean something different in 2010 compared to 2025.

Parent conflict	Have you quarrelled with your mother/father?
Victim of an attack	Were you attacked in the last 12 months?

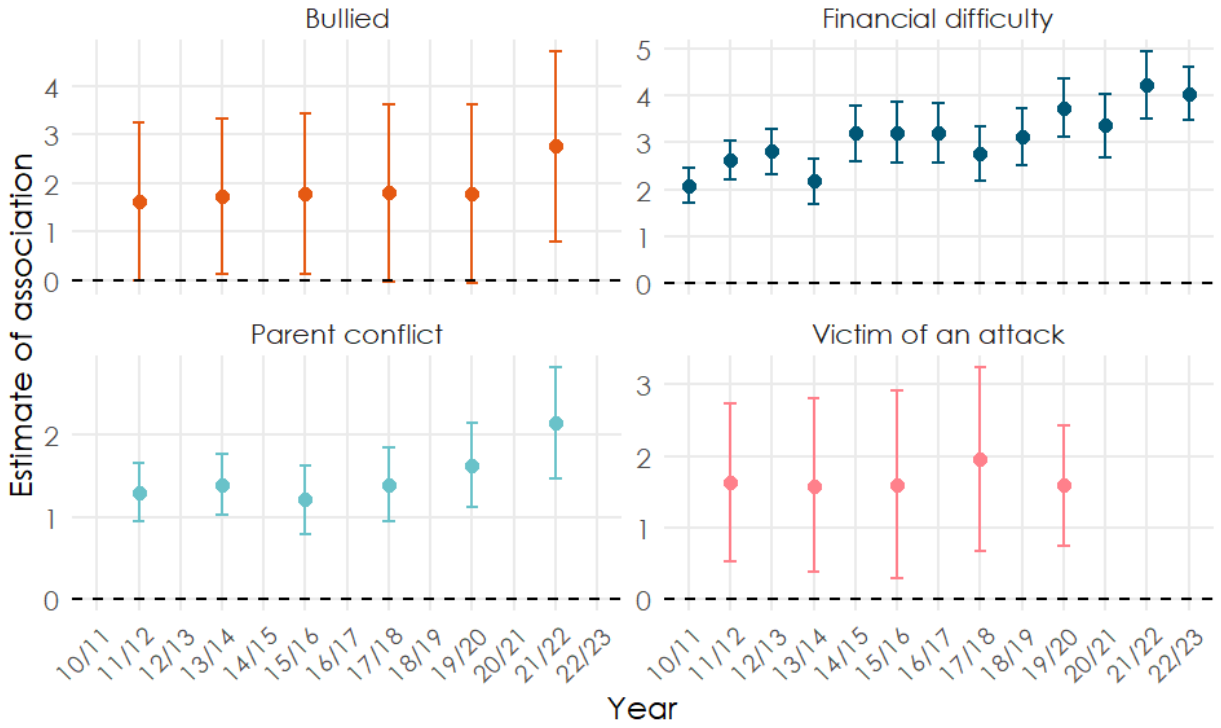
If young people became less resilient to a given stressor (over time), then the stressor should have a larger effect on mental health in later cohorts of young people. For example, if job loss was associated with an average 2-point increase in symptoms of anxiety or low mood in 2010, an average 4-point increase in symptoms in 2022 might lead us to conclude that young people are becoming less resilient to job loss.

This analysis uses regression models, controlling for baseline mental health, as well as gender, ethnicity, age, mental health measured in a previous year and region of England. We formally test for changes in resilience using a year-by-exposure interaction.[13]

[13] Further details of the analysis are available in the Technical Report (Section B).

Figure 10: Relationship between experiencing a stressor and subsequent mental health score[14]

Young people aged 16 to 24 years old, England, 2010 to 2023



Source: Understanding Society

Figure 10 shows clearly that self-reported financial difficulties were more associated with worse mental health in later cohorts of young people. For example, in 2010/11 it was associated with two more symptoms of mental distress, whereas in 2022/23 it was associated with four more symptoms. This indicates lowered resilience to this stressor. There is no evidence that the effect of either being bullied or attacked changed, and there is only marginal evidence that the effect of family conflict changed.

[14] The vertical lines represent 95% confidence intervals for each estimate. P-values were calculated to test whether the relationship between experiencing a stressor and subsequent mental health score varied across years, or whether differences could be due to sampling variability. P-values less than 0.05 were used to indicate statistical significance. The results from these were: bullied $p = 0.76$; financial difficulties $p < 0.001$; parent conflict $p = 0.10$; victim of an attack $p = 0.99$.

Theory category 3: Changing reporting

Much of what we know about young people's mental health comes from self-reported answers to survey questions which ask about specific symptoms. For example, the Strengths and Difficulties Questionnaire (SDQ) asks young people to rate whether statements like these are 'Not true', 'Somewhat true', or 'Certainly true':

I. I get a lot of headaches, stomach aches, or sickness
II. I worry a lot
III. I am often unhappy, downhearted, or tearful
IV. I am nervous in new situations. I easily lose confidence
V. I have many fears, and I am easily scared

It has been suggested that young people's increasing familiarity with mental health language could cause them to become more likely to agree with certain items. This could inflate the number of young people identified as having a 'high' level of anxiety and mood symptoms while lowering the amount of distress previously associated with developing symptoms.

Investigating changes in mental health reporting

Finding evidence for whether young people are reporting mental health symptoms at lower thresholds of distress is challenging. To address whether there have been changes in young people's reporting of symptoms, we examined existing data from Understanding Society to:

Approach 1: Look for changing patterns of responses to mental health surveys. Changes may indicate that young people are interpreting their mental health differently across time.

Approach 2: Examine whether young people's mental health has a similar impact on their functioning over time. If we find that this 'impact' has lessened over time, then we may conclude that what is being identified as mental ill health is less severe.

Approach 1: Looking at patterns in mental health surveys

We examined responses to mental health surveys in 2021–22 and compared them with responses in 2009–10, using Understanding Society. We used the SDQ emotional symptoms scale for 14–15-year-olds and the GHQ-12 for 16–24-year-olds.

We used Differential Item Functioning (DIF) (Choi et al., 2011) to check if patterns of responses to these surveys changed over time. DIF attempts to assess whether individuals

who answer an item in a similar way across time periods have similar underlying levels of mental health. We provide a summary of the results below; methodological details are available in the Technical Report[15].

Emotional symptoms (SDQ): Out of five items, only one — 'feeling nervous in new situations' — was flagged as changing in pattern between 2009-10 and 2021-22, with young people more likely to identify this symptom at underlying levels of emotional symptoms. The statistic measuring the impact of this change gives this a very low score, suggesting that it has a negligible effect on the overall trend.

General mental health (GHQ-12): Among 16–24-year-olds, we found consistent shifts in how young people answered 11 out of 12 of the GHQ-12 questions, with those in 2021–2022 more likely to report symptoms at the same underlying level of distress compared to those in 2009-10. However, the statistic that measures the influence of each of these changes was very small.[16] Considering their cumulative impact, we believe this would only explain a fraction of the overall change in score. This finding is in line with another study, using the same dataset, that concludes that, while there were detectable changes to how young people respond to the GHQ-12 across time, accounting for this does not substantially impact comparisons across time (Schlechter & Neufeld, 2024).

Approach 2: Examining changing impacts of mental health problems

Poor mental health and mental illness are linked to unhealthy behaviours like smoking and drinking (Jané-Llopis et al., 2006; Singhal et al., 2014). It also affects domains such as school achievement, employment prospects, and social relationships (Patel et al., 2007). Alongside the symptoms that young people are reporting, these secondary 'functional' impacts can help us, indirectly, to a better understanding of their mental health (Goodman & Scott, 2012).

If the threshold for a young person identifying mental distress is lower in one group than another, then, all else being equal, we may expect that these functional impacts associated with mental distress would be lower as well. For example, it might be that 10% of young people reporting mental distress in 2024 end up drinking heavily whereas in 2010 it was 20%. However, in this case, it could be argued that young people are becoming less likely to drink heavily anyway. Therefore, it makes more sense to consider how much 'mental distress' increases the risk of these outcomes, compared to a control

[15] Further details of the analysis are available in the Technical Report (Section C).
[16] Detection was performed using McFadden's R squared statistic, which was lower than 0.05 for all DIF items, indicating deviations due to an item explained only a very small proportion of the variance in the underlying trait.

group without mental distress, and to assess whether this difference diminishes over the years.

We examined whether the impacts associated with mental distress have changed over time using survey data to compare young people who report at least four symptoms of mental distress compared to those who do not, across a range of outcomes associated with poor mental health:

- Drinking alcohol daily
- Not being in education, employment or training (NEET status)
- Smoking

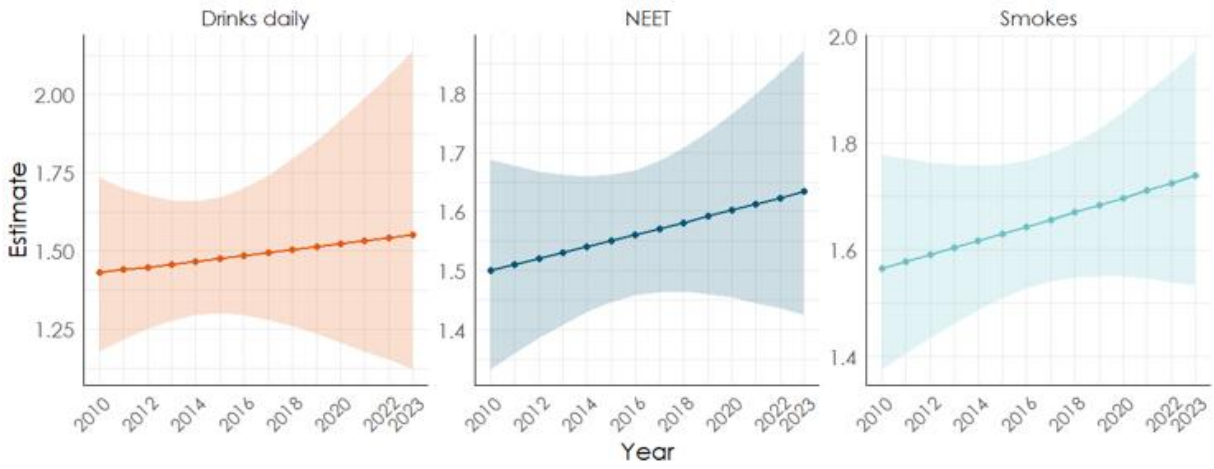
We investigated whether the association between reporting mental distress and these outcomes in one year's time has weakened over time, by fitting logistic regression models adjusting for age (as a continuous variable), sex and ethnicity. We fitted a year-by-exposure interaction (with year as a continuous variable) to test whether there was evidence that these were declining.[17]

The association between mental distress and several negative outcomes *did not* decrease over time. In fact, we find significant evidence that the association between mental distress and whether a young person reports drinking daily, smoking or is not in education, employment, or training was 'increasing' over time (see Fig. 1).

[17] Further details of these analyses are presented in the technical report (Section D).

Figure 11: Odds ratio for drinking daily, NEET status and smoking, comparing those with mental distress with those without

Young people aged 16 to 24 years, England, 2010 to 2023



Source: Understanding Society

Interpretation

Overall, we find little support for the notion that young people have been reporting mental health problems at substantially lower thresholds in recent years.

Among those aged 16–24, there were small changes in how young people responded to the surveys in the direction of a slight lowering in the threshold for identifying some symptoms. We did not detect much change in the younger age group of 14-15-year-olds. However, all changes were minor and are not considered meaningful enough to affect comparisons of average mental health across time. This finding is consistent with results from other studies that show mental health trends persisted when accounting for changes in how young people are responding to surveys (McElroy et al., 2023; Nilsen et al., 2024; Schlechter & Neufeld, 2024). We note that these analyses are not conclusive in providing evidence against inflation of a measure: these analyses would not identify situations in which all items were to change in the same way in relation to each other.

In our second analysis addressing this hypothesis, because having 'mental distress' was not associated with a reduction in smoking, drinking or NEET status over time (rather, there was a slight increase in the association detected), it suggests that symptoms are not being reported at lower thresholds. This aligns with other studies that show how the

functional corollaries of mental health symptoms appear to be staying the same or worsening over time (Armitage et al., 2025; Sellers et al., 2019; Thompson et al., 2023).

Evaluating theories using existing evidence

What did we do?

We systematically evaluated the ten theories which seek to explain rising low mood, anxiety symptoms, and mental distress among young people: academic pressure, the reduction in children and youth services, the COVID-19 pandemic, discriminatory experiences, economic factors, environmental worry, health behaviours, mental health awareness, risk aversion and social media/smartphone use. For each theory, we developed targeted questions to guide our assessment of existing literature and supplementary data across four core domains: theoretical clarity, evidence of trends over time, strength of causal relationships, and subgroup alignment. Our evaluation prioritised systematic reviews and evidence from robust research designs.

What did we find?

The strongest evidence supported worsening sleep quality, economic instability (particularly housing and insecure employment), reduced services for children and young people, and rising social media and smartphone use as contributing factors to the increase in rates of mental distress and anxiety and low mood. Academic pressure, physical activity, diet and discriminatory experiences showed weaker or inconsistent trends. COVID-19 had significant, though largely short-term, impacts. Risk aversion, mental health awareness initiatives, and environmental worry had limited causal evidence. Overall, these factors likely interact rather than operate in isolation, highlighting the complexity of mental health trends among young people.

Process for identifying evidence

Our first step was to clearly understand how each theory is specified, identifying the factors involved and clarifying how changes in these factors could potentially lead to increases in low mood, anxiety symptoms, and mental distress. To do this, we reviewed key theoretical literature, drawing on expert consultation and our own subject-specific knowledge. Sometimes, this resulted in multiple relevant factors being identified within a

single theory. For example, changing economic conditions are a multifaceted construct, comprising economic stagnation and rising house costs, child poverty, changes to the youth labour market, and increased income inequality.

Our second step was to assess the extent and timing of change in each identified factor over recent decades. We prioritised evidence from national statistics, supplemented by relevant published studies. If these sources were unavailable or insufficient, we attempted to map relevant factors onto variables available within the Understanding Society dataset. When direct measures were not available, we sought indirect proxy indicators (e.g. exploring 'awareness' of climate issues as a proxy for climate anxiety) or identified strong theoretical justifications for assuming change (e.g. educational policy shifts leading to increased academic pressure).

In the third step, our goal was to identify robust causal evidence linking each factor to mental health outcomes (i.e. low mood, anxiety symptoms, and mental distress). We initially searched for systematic reviews published within the past five years, capitalising on existing syntheses and critical appraisals. Eligible reviews were those including UK populations with a mean participant age of 10–24 years, although for theories involving risk aversion and service access, we broadened the age range to include younger populations to include developmental associations that are likely to be relevant. In instances where numerous systematic reviews existed, we prioritised recent reviews-of-reviews, supplemented by subsequent systematic reviews if relevant. Where recent or relevant review evidence was lacking or outdated, we expanded our search to include more recent individual studies.

To rigorously evaluate whether the factor causes low mood, anxiety symptoms, and mental distress, we prioritised high-quality research. We prioritised findings from randomised controlled trials (RCTs) because these are generally robust to problems of confounding and measurement. We also examined natural experiments, such as policy changes that can be considered robust to most confounding problems and can provide useful real-world evidence. We then considered high-quality longitudinal studies, paying special attention to whether they adequately controlled for key confounders, especially prior mental health status. Where possible we drew on evidence from the UK or countries with similar contexts. For each theory, we developed a targeted search strategy using tailored exposure and outcome terms aligned with our theory specification. Initially, we focused on systematic reviews indexed in Web of Science and from these reviews, we extracted relevant individual studies to support our assessment of whether a factor could operate as a cause of mental illness. The full search strategy is presented in the Technical Report (Section E).

Using the evidence to evaluate theories

To systematically evaluate each theory, we addressed the four domains outlined above: 1. theory specification, 2. evidence of trends, 3. strength of causal effects, and 4. subgroup alignment. We then provide questions that examine the limitations of the evidence. The most challenging domain involved assessing causality, i.e. determining whether a factor could *cause* low mood and anxiety symptoms, rather than simply being associated with them. To evaluate causality rigorously, we drew upon the Bradford Hill criteria for causation (Hill, 1965) and more recent advancements in this area (Fedak et al., 2015), carefully considering plausibility, temporality, consistency of timing between exposure and outcome changes, dose-response relationships, association strength, and experimental evidence.

Our questions were:

Theoretical Considerations

- Q1: How is the theory described, and what are the mechanisms by which a change in the factor would affect either general mental health or symptoms of low mood and anxiety?
- Q2: Does it also predict increases in mental health symptoms that are not increasing over time, in particular conduct disorder?
- Q3: Does the theory omit important biological, social, cultural, or contextual factors that affect its plausibility and/or limit its relevance to young people in England?

Trend Considerations

- Q4: Is there evidence that the level/prevalence of the factor has changed over the period during which we observe increases in mental health problems?
- Q5: If there is no direct evidence for Q4, is it plausible that either the level/prevalence of the risk factor has changed during the relevant period?

Effect on Mental Health

- Q6: Is there evidence that the risk factor is associated with young people's mental health?
- Q7: Is there evidence from longitudinal studies where the risk factor is measured before mental health?
- Q8: Where evidence comes from longitudinal studies, do those studies account for important confounding factors, such as socio-economic factors and particularly mental health measured before or at the same time as the exposure?

- Q9: Is there evidence from natural experiments (e.g. policy evaluation, sibling analyses, instrumental variable analysis)?
- Q10: Is there evidence from randomised controlled trials demonstrating that removing or reducing the risk factor improves young people's mental health?
- Q11: Does the evidence indicate that there is a strong association?
- Q12: Is there evidence of a dose-response relationship between the risk factor and mental health outcomes (i.e. does a change in the level of exposure lead to a change in the outcome variable)?

Subgroup Considerations

- Q13. To what extent does the evidence explain subgroup differences in mental health trends (i.e. largest increases among white British young people and girls)? Specifically:
    - Was there a steeper increase in the risk factor for these groups?
    - Is there evidence that the risk factor has a stronger effect on mental health in these groups?
    - Was there a greater increase in the risk factor or stronger effects of the risk factor in groups where we do not see diverging trends, for example, those in lower socio-economic groups?

Overall Strengths and Limitations

- Q14: Are there any strengths or methodological concerns (e.g. generalisability, sampling, or measurement issues) to consider when evaluating the quality of the evidence?

Other/unanticipated

- Q15: Is there anything else not covered in the above questions that is notable in relation to the theory or evidence base that might inform our evaluation of causality?

Challenges and complexities in evaluating theories

We encountered several challenges and complexities during this review, which readers should bear in mind when interpreting our findings and conclusions.

First, we aim to provide a qualitative judgement on three elements of each theory: trends, effects and subgroups. Using the evidence base, we have categorised our assessment of trends and effect into "small", "moderate" or "strong" and used more qualitative judgement against the subgroup findings. However, these assessments are limited by gaps in the evidence base. Therefore, where possible, we based our

judgment on the consistency of results across research designs. For example, RCTs showing that removing the factor results in a small improvement in symptoms and observational research showing a strong association may lead to a judgment of a moderate effect size.[18]

Second, after providing this assessment, we have made a judgment regarding our confidence in our evaluations. Consequently, the evidence might indicate that a particular factor strongly affects mental health, but our confidence in this may be limited due to methodological concerns or inconsistent findings. Conversely, some factors may have weaker effects but are supported by more robust evidence, leading to higher confidence. We considered a range of points here; for instance, how evidence was related to the construct of interest, available evidence sometimes only captures a partial, narrow, or indirect dimension of a broader construct.

Third, a central limitation of our approach is its reliance on these subjective 'best fit' judgements, and other researchers reviewing the same evidence might reasonably arrive at different conclusions. This is perhaps most likely in areas where the evidence is indirect or partial, rather than core constructs. These judgements are not only about the presence or strength of evidence, but also about how appropriately that evidence maps onto the broader theoretical claims under review. We did explore having a formulaic approach to reaching conclusions (e.g., a point for each answer on the Bradford-Hill) but found that this did not work well in practice and would have obscured nuanced insights. Instead, we worked through reaching judgments and drafting summaries as an interpretive and iterative process. We reviewed initially as a smaller team and then shared with the larger team to examine. We engaged in ongoing discussion about these judgments, including considering these collectively to compare, contrast, and work toward consistency across interpretations.

Fourth, there is a limit to our scope and remit. Some factors may have small effects at a population level, but these may be profound in a small number of cases, and we recognise the salience of such factors. Nevertheless, our remit is to examine the plausibility of a theory to provide explanations of population-level changes.

Finally, although we evaluate individual theories, factors influencing mental health are unlikely to operate in isolation. A focus on singular explanations risks oversimplifying the complexity and socially embedded nature of young people's experiences. Our approach aims to balance the need to examine individual theories (often investigated

[18] Our judgement was guided by Cohen's d thresholds of <0.2 = small, 0.2 to 0.5 = medium, and >0.5 = large. See Cohen (1992) "A power primer", *Psychological Bulletin*.

discretely in the evidence base) with an awareness that these factors may interact and reinforce one another. We later outline mechanisms that co-occur across many theories.

Summary of theory evaluation process

We developed a structured approach to evaluating theories that might help explain changes in youth mental health (i.e. low mood, anxiety symptoms, and mental distress). We refined a list of common theories (with input from cross-disciplinary experts); explored the theory in depth; examined available evidence of changes over time in the relevant factor; identified systematic reviews to scope evidence, with a focus on stronger study designs; and considered subgroup effects in available evidence in relation to our findings. We drew together this information to make pragmatic conclusions and examined gaps and complexities in our understanding.

Theory evaluation insights

In this section, we cover our evaluation of each theory in alphabetical order. For each, we provide an overview of the evidence and then a box summarising the core points from our evaluation. Full information underpinning this is contained in the Technical Report (Section E).

Academic pressure[19]

Theory: The UK government implemented national curriculum and assessment reforms throughout the 2010s, emphasising more rigorous content and final examinations, reinforcing the high-stakes nature of assessments, potentially leading more young people to feel academic pressure (Baird et al., 2019). Academic pressure may affect low mood and anxiety by heightening performance expectations, increasing stress, affecting sleep patterns, and exacerbating the use of maladaptive cognitive and behavioural responses (e.g. procrastination) (Hutchings, 2015).

Trends: There are strong theoretical reasons for expecting academic pressure to have increased, but there is no clear direct evidence from surveys of young people. A recent

[19] *For the full in-depth evaluation of this theory, see the Technical Report (Section E, subsection 1).*

World Health Organization cross-sectional study found no rise in self-reported school pressure in England (2002-2018) but did find an increase in Scotland (Löfstedt et al., 2020). We examined the proportion of young people who reported that their GCSEs were deemed 'important' and found that this fell. Whilst this indicates that academic pressure has not increased, young people could also feel *more* pressured *and* attach less value to this system. We also found an increase in the proportion of young people who were unhappy in school and with their schoolwork, indicating that something is being perceived as more negative within the school environment.

Effect of academic pressure: The evidence for academic pressure directly affecting young people's mental health was limited. One systematic review into academic pressure's effect on mental health was identified (Steare et al., 2023). This identified 52 studies that reported largely consistent associations between pressure and worsened mental health, including low mood and anxiety symptoms, and that this was increasing over time. However, many of these studies were cross-sectional.

Two studies reported that stress-related hospital admissions were highest during term time, supporting a connection between school attendance and mental distress (Blackburn et al., 2021; Slaunwhite et al., 2019). Other longitudinal studies did not include key confounders, for example, prior mental health difficulties, limiting our understanding of the direction of the relationship. Available longitudinal studies that controlled for confounders (e.g. prior mental health and socio-economic indicators) generally indicate a small association between academic pressure and worse mental health (Kaman et al., 2021; Torsheim et al., 2003). We are not aware of evidence from natural experiments or randomised controlled trials to provide more robust evidence.

Subgroup considerations: Evidence suggests that a sense of academic pressure is more pronounced in girls; girls in England and Scotland reported higher levels relative to boys between 2002 and 2018 (Löfstedt et al., 2020) and some evidence suggests the effect of academic pressure is greater for girls than boys (Blackburn et al., 2021). We did not find evidence for findings by ethnicity.

Challenges: Studies used varied instruments to assess pressure, ranging from single items to standardised questionnaires, limiting comparability. Most evidence is either not longitudinal or not consistently controlling for prior mental health or contextual features. A large proportion of studies are based in countries that are less comparable to England (e.g. 26 of 52 studies in the review were in Asia, with just three longitudinal studies in the UK), raising concerns about generalisability to the English context (Steare et al., 2023).

Summary: Available evidence suggests exam reforms might have increased academic pressure, but the limited evidence suggests this has not had a measurable impact on

perceived pressure. There is limited causal evidence from England, but other evidence suggests that academic pressure has a small but meaningful impact upon mental health and symptoms of low mood and anxiety.

Academic pressure	Assessment	Confidence
Trend: How much has the factor changed over the period that mental health has declined?	**Small change**	**Weak to moderate**
Effect on mental health: Does the factor negatively affect symptoms of anxiety and low mood?	**Small effect**	**Moderate**
Subgroups: Does the evidence align with trends observed within certain groups?	**Partly**	**Weak**

Changing economic conditions[20]

Theory: Following the 2008 financial crisis, the 2010s saw periods of volatility and change in economic conditions (UK Parliament, 2025). Four components of this economic change may explain declining mental health among young people:

Component 1: Economic stagnation and the rising cost of housing: Weak wage growth and rising costs, particularly of housing, have led to financial stress, pessimism about homeownership and future opportunities (Cribb et al., 2018; Zhang, 2021).

Component 2: Child poverty: Childhood poverty exposes young people to chronic stressors, material insecurity, family tensions and social exclusion, which can undermine emotional resilience (Hughes & Tucker, 2018).

Component 3: Youth labour market changes: Having access to temporary jobs, unstable (e.g. zero-hours contracts) or positions with limited career progression may lead to feelings of instability, lack of control, financial uncertainty and loss of the

[20] *For the full in-depth evaluation of this theory, see the Technical Report (Section E, subsection 2).*

psychological benefits of a stable career like routine, hope for the future and purpose (Irvine & Rose, 2022).

Component 4: Increased income inequality: Growing economic disparities between the wealthiest and least wealthy in society may lead to resentment and harmful social comparisons (Dierckens et al., 2020).

Trends: Economic conditions deteriorated significantly for young people after the 2008 financial crisis, notably through reduced employment opportunities (UK Parliament, 2025). Some of the trends during the 2010s do not appear to be strongly changing: rates of youth employment improved somewhat between 2010 and 2020, indicators such as child poverty (Component 2) and income inequality (Component 4) remained relatively stable rather than worsening significantly up to the cost-of-living crisis which began in 2022 (Bourquin et al., 2022; Henry & Wernham, 2024). However, housing costs (component 1) continued to rise markedly, exacerbating financial stress and reducing homeownership opportunities (Cribb et al., 2018). There have been strong shifts towards more unstable employment opportunities, such as zero-hours contracts, and this appears to be particularly affecting young people (Component 2).

Effect of changing economic conditions: A strong body of evidence suggests that adverse economic conditions have a negative impact on low mood and anxiety symptoms. Whilst the size of the evidence base is small, insecure employment (Component 3) consistently shows moderate associations with greater anxiety and depression, supported by more robust longitudinal evidence that remains significant when taking account of prior mental health and socioeconomic confounders (Bartelink et al., 2020; Virgolino et al., 2022). Macroeconomic shocks and income inequality (Component 4) also demonstrate moderate-to-strong associations with poorer mental health outcomes (Hiilamo et al., 2021). Childhood poverty (component 2) and housing insecurity (component 1) are clearly linked to increased mental health difficulties in parents and children, although effect sizes typically diminish when controlling for prior mental health or other family circumstances (Levesque et al., 2021; Zhang, 2021).

Subgroup considerations: Economic disadvantage affects certain groups in different ways (Myers, 2009): girls and young women appear more affected by low mood and anxiety, whereas in boys and young men the effects may be greater on behavioural symptoms (Devenish et al., 2017). Although economic stressors have the greatest impact on the poorest groups, macroeconomic factors, like national income inequality, can influence young people's mental health across the socioeconomic spectrum (Dierckens et al., 2020).

Challenges: Studies investigating economic factors and mental health face several methodological hurdles. They frequently fail to control for key confounders such as baseline mental health, family mental health, and individual differences in personality or abilities. International evidence may lack relevance to England e.g. studies from countries with higher welfare and youth programme spending may underestimate the effect of economic conditions in England. Additionally, research often isolates single economic factors, neglecting combined or intersecting factors like housing instability coincident with poverty.

Summary: From the economic factors considered, changes to housing costs and insecure employment are the most significant. There was economic disruption following the 2008 recession and again from 2021 during recent cost-of-living pressures. However, it is a challenge to map these changes to subgroup-specific changes we observe: notably, that increases in symptoms are similar across income and deprivation groups.

Changing economic conditions	Assessment	Confidence
Trend: How much has the factor changed over the period that mental health has declined?	**Moderate to large change in housing costs and secure employment. Others stable**	**Strong**
Effect on mental health: Does the factor negatively affect symptoms of anxiety and low mood?	**Small to moderate effect**	**Moderate**
Subgroups: Does the evidence align with trends observed within certain groups?	**Not really**	**Moderate**

Children and youth services[21]

Theory: We define 'children and youth services' as community-based, non-specialist services aimed at prevention and early intervention, including youth clubs, community centres, structured youth activities, and early intervention services like Sure Start and Family Hubs. During the 2010s, government austerity measures significantly reduced funding for these services, raising concerns about the erosion of their preventive and resilience-building benefits. Children and youth services are suggested to positively affect young people's mental health through preventive support, opportunities for social interaction, and (often informal) early intervention pathways. Cutting these services could potentially increase vulnerability to anxiety, depression, and social isolation.

Trends: Access to children and youth services in the UK has dramatically worsened since 2010. For example, between 2010-11 and 2023-24, local authority spending on these services fell by 73% in real terms, leading to the closure of at least 1,243 council-run youth centres and the loss of over 4,500 youth worker jobs across England and Wales (*Beyond the Brink?*, n.d.). Early intervention services such as Sure Start centres declined by 45.6%, often in the most deprived areas (Fahy et al., 2023).

Existing evidence on the effect of children and youth service participation: The evidence base generally supports a lowering of the risk of mental health problems resulting from participation in children and youth services and positive mental health. A large systematic review for the Department for Culture, Media and Sport (2024) identified robust evidence linking participation in open-access youth activities with improved mental health outcomes. Randomised controlled trials within this review, as well as a meta-analysis by Ciocanel et al. (2017) of randomised interventions of youth programmes, report small but significant improvements in mental health following structured youth programmes. Longitudinal analyses found associations between regular youth club participation and reduced emotional symptoms, greater prosocial behaviour, and decreased unhappiness across multiple UK cohorts (Department for Culture, 2024). Evidence from a natural experiment examining the opening of Sure Start centres estimated that they significantly reduced mental-health related hospital admissions (Cattan et al., 2021).

[21] *For the full in-depth evaluation of this theory, see the Technical Report (Section E, subsection 10).*

Subgroup considerations: More deprived areas were more likely to have larger cuts to services for children and young people, which do not clearly map to the mental health trends we observe.

Challenges: 'Children and youth services' as a catch-all term encompasses a large range of potential interventions that likely vary in effectiveness. Much of the available research comes from international contexts, which limits generalisability to service delivery in England. The timing of some of the disruptions to early-years provisions, for example Sure Start, does not clearly link to the declines in young people's mental health during the 2010s; however, we may see the impact of this in the current and future cohorts of young people.

Summary: Since 2010, there has been clear and direct evidence of substantial cuts to services for children and young people. There is some indirect evidence that participation in children and youth services has a positive effect on mental health outcomes.

Children and youth services	Assessment	Confidence
Trend: How much has the factor changed over the period that mental health has declined?	**Large change**	**Strong**
Effect on mental health: Does the factor negatively affect symptoms of anxiety and low mood?	**Small/moderate effect**	**Moderate**
Subgroups: Does the theory or evidence align with trends observed within certain groups?	**Conflicting**	**Weak**

COVID-19 pandemic[22]

Theory: During the pandemic, widespread concerns arose regarding its impacts on young people. Their lives were significantly disrupted due to lockdowns and school

[22] *For the full in-depth evaluation of this theory, see the Technical Report (Section E, subsection 3).*

closures, altering daily routines and reducing socialisation, while disruptions to peer relationships may have increased loneliness (Ford et al., 2021). Concerns also emerged regarding employment, disruptions to further education, and economic uncertainty, particularly affecting young people transitioning towards independence (Power et al., 2020). Additionally, diminished access to support services and beneficial community activities, parental stress, rising alcohol consumption, and domestic violence (Jost et al., 2023; Reynolds & Ni Charraighe, 2022). Specific anxieties related to COVID-19 health risks may have affected young people, as well as behavioural changes, including disrupted sleep patterns, poorer diet, reduced physical activity, and increased screen time, may have also had effects (Pfefferbaum & Van Horn, 2022).

Trends: The rise in low mood and anxiety symptoms clearly predated the COVID-19 pandemic. The pandemic, which reached the UK in early 2020, introduced significant disruptions, but evidence suggests that these occurred against a backdrop of already worsening youth mental health.

Effect if the COVID-19 pandemic: An extensive literature examines the impact of the pandemic on young people's mental health. We identified five umbrella reviews, which collectively indicated that the pandemic was associated with worsening mental health among young people, particularly increased low mood and anxiety symptoms (Bevilacqua et al., 2023; Bower et al., 2023; Duan et al., 2024; Harrison et al., 2022; Witteveen et al., 2023). Within these, six systematic reviews and meta-analyses exclusively focusing on longitudinal studies were identified, all of which examined low mood and anxiety symptoms, including UK-based research. These reviews generally found heightened symptoms of low mood and anxiety from pre-pandemic levels to the early stages of the pandemic, although these effects diminished over time and were predominantly tied to periods involving lockdown restrictions or school closures (Ludwig-Walz et al., 2023; Miao et al., 2023; Orban et al., 2023; Robinson et al., 2022). Newlove-Delgado et al. (2023) reported more mixed findings, with some meta-analyses indicating no significant change or only small effects; differences appeared partly dependent on symptom reporters, as children and adolescents generally reported more symptoms compared to parent reports. Additionally, Mansfield et al. (2022), using a robust longitudinal design, found significantly more depressive symptoms among young people during the COVID-19 pandemic compared to pre-pandemic control data.

Subgroup considerations: Focusing on the health concerns related to the pandemic, national data indicated that girls and young women reported higher COVID-19 infection rates than boys and young men, and certain UK ethnic minority groups experienced higher mortality than their white British peers (Statista, 2025). Several longitudinal studies suggested that the pandemic had a disproportionately negative effect on girls' mental

health, particularly low mood and anxiety symptoms (e.g. Hu & Qian, 2021; Mansfield et al., 2022), whereas evidence for ethnic differences was limited or showed no significant differences. Socioeconomic findings were mixed, with some studies highlighting greater deterioration in mental health among adolescents from lower-income or single-parent households (Hu & Qian, 2021; Knowles et al., 2022).

Challenges: Several methodological issues limit confidence in the current evidence. A key concern is accounting for pre-existing mental health trends, given that the rise in mental health problems among young people predates COVID-19 and has been increasing for more than a decade. Not accounting for these trends will overestimate the impact that the pandemic had. Also, it remains unclear whether the pandemic temporarily affected mental health or caused lasting harm. Furthermore, many studies, such as birth cohorts, cannot effectively separate the impact of the pandemic from the effects of ageing. There are also sampling issues: many studies relied on convenience samples (e.g. recruited via social media) or were geographically limited, which is problematic given the substantial regional and national variation in pandemic policies and public health responses.

Summary: The pandemic brought major disruption to young people's lives. For many, it appears that worsening of symptoms fluctuated with pandemic restrictions, and effect sizes were generally small. However, much of the evidence does not account for the rising rates of poor mental health before the pandemic. Finally, it is unclear whether any changes were temporary or long-lasting. While the pandemic may have exacerbated an existing mental health crisis, current evidence is insufficient to determine whether this impact is short-term or has lasting effects

COVID-19 pandemic	Assessment	Confidence
Trend: How much has the factor changed over the period that mental health has declined?	**Large change**	**Strong**
Effect on mental health: Does the factor negatively affect symptoms of anxiety and low mood?	**Small effect**	**Moderate**
Subgroups: Does the evidence align with trends observed within certain groups?	**Inconsistent**	**Moderate**

Discriminatory experiences[23]

Theory: Concerns have arisen that increasing political polarisation and online harassment have led to more discriminatory experiences in marginalised young people (Coyne-Beasley et al., 2024). Discrimination can affect young people's mental health through various pathways, including chronic stress, trauma, threats to identity and self-esteem, and diminished trust in institutions (Vines et al., 2017). Adolescents may be particularly vulnerable because they are developing their coping strategies and identities. These effects can be exacerbated or compounded by intersecting forms of discrimination, unequal access to support, and amplified through vicarious exposure, such as witnessing racism in the media or within families (Heard-Garris et al., 2018).

We focus on population-level trends; therefore, our evaluation primarily addresses racial and gender-related discrimination, with more limited consideration of discrimination experienced by LGBTQ+ youth, who constitute a much smaller proportion of the population. We recognise as a causal theory, discriminatory experiences do not correspond with observed mental health trends. Although it might partially explain steeper declines in mental health in girls, it does not match patterns observed by ethnicity.

Trends: There is limited direct evidence that experiences of discrimination have increased over the past decade. Police-reported incidents of discrimination have risen across five centrally monitored strands (race or ethnicity, religion, sexual orientation, disability, and transgender identity)(UK Home Office, 2024). However, these data, and the statistics surrounding them, can be unreliable and inflated by increasing awareness of discrimination law, willingness or confidence to report incidents, and changes in reporting practices over time.

Conversely, experiences of workplace discrimination have decreased over the past decade, and progress has been seen in public sector representation of minoritised groups (The Insolvency Service, 2025b, 2025a). However, youth-focused reports continue to highlight persistent and widespread discrimination against UK ethnic minority groups and girls (Plan International UK, 2020; YMCA, 2020). Emerging concerns also relate to the rise of the 'manosphere'. This is described as a network of extremist online content promoting misogyny, male supremacy, fostering sexist attitudes, encouraging negative

[23] *For the full in-depth evaluation of this theory, see the Technical Report (Section E, subsection 4).*

behaviour towards girls and women, and exacerbating school-based gender inequalities (Campbell et al., 2024).

Effect of discriminatory experiences: A substantial body of evidence consistently suggests there are harmful effects of discrimination. One umbrella review examined the association between racial discrimination and young people's mental health and reported a consistent link with poorer mental health outcomes (Williams et al., 2019). Among the 25 longitudinal studies identified, four controlled for demographic factors, 11 for socioeconomic indicators, but just three for baseline mental health. Two systematic reviews on gender-related discrimination—specifically sexual and intimate partner violence—also reported consistent links to depression and anxiety (Barbara et al., 2022; Klencakova et al., 2021). Four longitudinal studies on gender-related discrimination were identified, all of which adjusted for key confounders, including baseline mental health. For instance, Bentivegna and Patalay (2022), using UK cohort data, estimated that, in the absence of sexual violence, the prevalence of adverse mental health outcomes at age 17 would be 3.7–10.5% lower in boys and 14.0–18.7% lower in girls. Similarly, three systematic reviews (Argyriou et al., 2021; Dürrbaum & Sattler, 2020; Tankersley et al., 2021) and five longitudinal studies linked LGBTQ+ discrimination to poorer mental health among young people.

Subgroup considerations: This theory directly predicts subgroup effects and converges with our evidence that girls' and young women's mental health is in decline at a greater rate than boys' and young men's. However, it diverges from the evidence that young white British people are reporting the steepest declines in their mental health. This theory also inherently articulates LGBT+ phobia as a critical issue facing some young people, but we have not analysed trends by sexuality or gender diversity because the numbers are too small and the data collection is too poor on relevant variables.

Challenges: Existing evidence focuses on severe or direct forms of discrimination, such as abuse, which may not reflect the more diffuse or systemic exposures that could influence mental health more broadly. Additionally, many studies come from the US, where discriminatory experiences may be very different, meaning we may not be able to generalise findings from these studies to England.

Summary: Some forms of discrimination experience may have increased despite progress in certain areas. Based on the currently available evidence, it is not clear that discrimination has worsened in England over recent years. Some indicators, such as workplace equality data, suggest improvements. However, clear evidence of changes in the day-to-day experiences of young people is lacking. Even if the evidence did suggest a worsening trend, the direction of this change does not align with trends among UK ethnic minority groups, who have shown a slower or negligible increase in low

mood and anxiety symptoms compared to their white peers. There is good evidence indicating that discriminatory experiences have a negative effect on youth mental health and low mood, and anxiety symptoms.

Discriminatory experiences	Assessment	Confidence
Trend: How much has the factor changed over the period that mental health has declined?	**Small change**	**Moderate**
Effect on mental health: Does the factor negatively affect symptoms of anxiety and low mood?	**Moderate effect**	**Moderate**
Subgroups: Does the evidence align with trends observed within certain groups?	**Inconsistent**	**Strong**

Environmental worry[24]

Theory: It is suggested that worry about the environment affects young people's mental health through a sense of uncertainty about their future (Hickman et al., 2021), as well as concerns about their lack of control over climate change and society's inaction (Sanson et al., 2019).

Trends: Environmental worry and climate anxiety have become increasingly prominent in media reports. Available evidence focuses on contemporary data showing current rates of environmental worry or climate anxiety, with far less evidence assessing changing rates over time. One comparative study in Swedish high school students found significantly higher climate worry in 2019/2020 compared to 2010 (Wullenkord & Ojala, 2023). Climate change has been included in the UK National Curriculum since 1991, with more explicit references from 2013 (Department for Education, 2013). While empirical evidence tracking long-term changes in environmental worry and climate anxiety in the UK is limited, there does appear to be a trend of rising awareness and concern,

[24] *For the full in-depth evaluation of this theory, see the Technical Report (Section E, subsection 5).*

especially among young people, amplified by movements like 'Fridays for Future' and the growing media attention since the 2010s (Pihkala, 2020).

Effect of environmental worry: Two relevant systematic reviews were identified (Boluda-Verdú et al., 2022; Martin et al., 2023). These largely support moderate but significant associations between environmental worry and low mood and anxiety symptoms in young people. However, only one study (Sciberras & Fernando, 2022) was identified examining this longitudinally. Following young people in Australia over eight years from age 10-11 to 18-19, this study reported that those with high persistent worry (12.9%) exhibited the highest levels of depressive symptoms by age 18-19. However, this did not account for other factors that might influence the relationship between environmental worry and mental health (e.g. prior mental health, socio-economic factors). Moreover, the Australian context is not comparable to England, given Australia's greater direct and indirect risk of climate change impact. We are not aware of any evidence from natural experiments or randomised controlled trials that allow us to examine this further.

Subgroup considerations: Several studies highlight that environmental worry is more prevalent among girls and young women, perhaps due to heightened empathetic engagement with environmental issues (Pihkala, 2020). Gender or ethnic differences were not investigated in the single longitudinal study identified.

Challenges: There are numerous challenges in available evidence. There is only one longitudinal study in the two systematic reviews identified. This is particularly challenging not only in understanding whether there is a causal relationship, but also because of the overlap between the nature of the exposure and low mood and anxiety symptoms given the focus on worry. This makes it challenging to assess if there is a direct causal link, or whether both environmental worry and low mood and anxiety symptoms are simply overlapping constructs and/or experiences. Further longitudinal research is needed that controls for important variables (including baseline mental health). There is also variation in the conceptualisation of environmental worry across studies, and variety in the measures used in the evidence base, with studies variously using measures that vary in how established and validated they are, affecting confidence in the robustness of data.

Summary: Based on the available evidence, overall awareness about climate change and the environment has increased, and perhaps so too has environmental worry, though more evidence is needed. Though environmental worry and mental health outcomes are associated, there is extremely little causal evidence demonstrating the direction of this relationship, including in a UK population, and more research is needed to understand this.

Environmental worry	Assessment	Confidence
Trend: How much has the factor changed over the period that mental health has declined?	**Moderate change**	**Moderate**
Effect on mental health: Does the factor negatively affect symptoms of anxiety and low mood?	**Inconclusive**	**None**
Subgroups: Does the evidence align with trends observed within certain groups?	**Partially**	**Weak**

Health behaviours[25]

Theory: Some researchers suggest that changes in health behaviours among young people might contribute to observed trends (Blake et al., 2018). We focus on four key areas: (1) sleep, (2) physical activity and sedentary behaviour, (3) diet, and (4) being overweight or obese. Reduced sleep may disrupt cognitive functioning and emotional regulation, leading to impaired social interactions and increased social withdrawal (Blake et al., 2018). Reduced physical activity can lower endorphin levels and impair cognitive functioning, negatively influencing self-perception, self-efficacy, and coping skills (Lubans et al., 2016). Diet may impact mental health through the effects of specific micro- and macronutrients (e.g. the benefits of fatty acids for cognition (Marx et al., 2021), as well as indirectly through its influence on body weight. Being overweight or obese can affect mental health through body dissatisfaction, reduced self-esteem, weight stigma, and bullying (Lessard & Lawrence, 2022; Russell-Mayhew et al., 2012).

Trends: Through our own analysis and others, young people's reported quality of sleep appears to have been declining since around 2010 (Patalay & Gage, 2019). Physical activity trends are unclear: physical activity and sedentary behaviour in 16–24-year-olds appear largely unchanged between 2008 and 2016, but there is evidence of steady growth in activity levels among secondary-school-aged young people in England in recent years (Sport England, 2025b). Diet trends are also mixed; fruit and vegetable

[25] *For the full in-depth evaluation of this theory, see the Technical Report (Section E, subsection 6).*

intake in young people appears to have largely remained unchanged between 2008 and 2016, but there has been a reduction in intake of many key vitamins and minerals (State of the Nation, 2019). However, there has also been a reduction in consumption of red meat and ultra-processed foods across the same period. There is evidence of an increase in obesity (particularly in those aged 10-15)(NHS England Digital, 2024), but these trends predate the periods in which we have observed trends in worsening mental health (Broadbent et al., 2024).

Effect of health behaviours: Evidence linked all four identified factors to young people's low mood and anxiety symptoms:

Sleep: Two systematic reviews (Bacaro et al., 2024; Sun et al., 2019) found that greater weekday-weekend sleep discrepancies (e.g. duration, midpoint) were associated with increased depressive symptoms, whereas better sleep quality reduced these symptoms. Robust longitudinal studies controlling for key confounders, including baseline mental health, support a causal and dose-response relationship. One randomised controlled trial (RCT) aiming to improve sleep in school-aged children found no impact on depressive symptoms, but it also failed to demonstrate an effect on sleep (Moseley & Gradisar, 2009).

Physical activity and sedentary behaviour: Four umbrella reviews (Biddle et al., 2019; Cai et al., 2025; Dale et al., 2019; Purgato et al., 2024) consistently linked increased physical activity to reduced low mood and anxiety symptoms and increased sedentary behaviour to worsening symptoms. There is also robust causal evidence from randomised intervention studies (Cai et al., 2025; Contardo Ayala et al., 2024).

Diet: Five systematic reviews (Campisi et al., 2021; Orlando et al., 2022; Silva-Maldonado et al., 2022; Wang et al., 2022; Yang et al., 2024) associated 'healthy' diets (fruits, vegetables, oily fish, whole grains, Mediterranean diet) with lower symptoms, and 'unhealthy' diets (junk food, sugary snacks/beverages, processed foods, red meat) with increased symptoms. Evidence was mainly longitudinal with mixed results from RCTs (Campisi et al., 2021). One review highlighted energy drink as a potential risk factor, but evidence came from cross-sectional studies.

Overweight/Obesity: Four systematic reviews (Chen et al., 2024; Moradi et al., 2021; Rao et al., 2020; Sutaria et al., 2019) generally found that young people being obese (but not being overweight) was linked to depressive symptoms. More robust longitudinal evidence that controlled for key confounders was less likely to detect an association (Clark et al., 2007; Roberts & Duong, 2013).

Subgroup considerations: Our own analysis showed that boys and young men and young people from South Asian backgrounds had fewer problems falling asleep and better-quality sleep than their peers, but we did not find a significant association for Black young people; nor did we find that these relationships changed between 2010 and 2023.[26] Whilst physical activity has been increasing in all groups, girls and young women were seeing stronger growth in activity levels than boys and young men (from a lower level), thereby closing the gap (Sport England, 2025a).

Challenges: Most existing research assesses individual health behaviours and factors in isolation and does not consider how these factors interact. Also, most studies come from outside the UK, and there may also be issues with generalising findings to the English context. For example, only one of the sleep studies we identified was conducted in the UK, and much of the evidence on overweight and obesity is older and comes from the USA, where there is a much higher prevalence than in the UK. Because these health behaviours are often the consequence of having poor mental health (e.g. depression leads to overeating, which increases the risk of obesity), it can be challenging to separate cause from effect.

Summary: There was strong evidence of worsening sleep trends among young people, although evidence was less clear for declines in other health behaviours, and an indication that some (e.g. diet) was improving. Robust evidence consistently links health behaviours to young people's mental health. Some evidence indicated that sleep problems were more severe in subgroups experiencing the greatest declines in mental health; however, subgroup findings for other health behaviours were often inconsistent.

[26] See Technical Report, Section E, subsection 6.

Health behaviours	Assessment	Confidence
Trend: How much has the factor changed over the period that mental health has declined?	**Moderate change for sleep, not for others**	**Strong**
Effect on mental health: Does the factor negatively affect symptoms of anxiety and low mood?	**Moderate effect**	**Strong**
Subgroups: Does the theory or evidence align with trends observed within certain groups?	**Partially for sleep**	**Moderate**

Mental health awareness[27]

Theory: Public mental health awareness efforts over the past two decades have successfully reduced stigma and promoted help-seeking (Foulkes & Andrews, 2023). However, these initiatives may unintentionally contribute to poorer youth mental health or inflated reporting of symptoms among young people (Foulkes & Andrews, 2023). Greater awareness can lead young people to interpret normal emotional fluctuations as symptoms of mental disorder (Bonell et al., 2015). This overinterpretation may exacerbate distress by fostering unnecessary self-labelling, behavioural avoidance, and self-fulfilling negative beliefs (Foulkes & Stringaris, 2023). Further, increased awareness without adequate support can cause frustration and prolonged distress if young people cannot access timely and appropriate care (Foulkes & Andrews, 2023).

Trends: There is no direct evidence indicating whether young people specifically have become more aware of mental health issues, although data on adults show clear increases (Gagné et al., 2023). Indirectly, over the past two decades, the UK has seen multiple large-scale initiatives. Public campaigns include the Mental Health Foundation's Mental Health Awareness Week (launched 2001), Time to Change (2008) aimed at reducing stigma, and Heads Together (2016) by the Royal Foundation (Mental Health Foundation, 2025). Schools have also integrated mental health awareness into their curricula, notably within Relationships, Sex, and Health Education (RSE; Department for

[27] *For the full in-depth evaluation of this theory, see the Technical Report (Section E, subsection 7).*

Education, 2025). These initiatives have coincided with increased reporting of mental health symptoms among young people and presentations to services.

Effect of mental health awareness: We identified two systematic reviews examining the impact of mental health awareness efforts (Tam et al., 2024) and mental health literacy programmes (Zachik et al., 2024), which together encompassed a total of 11 studies assessing mental health outcomes in young people. The included studies predominantly assessed low mood, anxiety symptoms, and mental distress across various intervention types, including classroom-based curricula, digital media, and video-based campaigns. Findings from these studies were mixed, generally indicating either modest positive impacts on mental health or no significant differences. Several randomised controlled trials demonstrated modest, short-term improvements in mental health symptoms. For instance, the BRAVE SMS-based mental wellness programme (Craig Rushing et al., 2021) and a cognitive behavioural skills programme (Klim-Conforti et al., 2021) each showed significant reductions in symptoms of anxiety and depression.

However, recently, findings from a large-scale, UK Department for Education-funded trial evaluating school-based mental health awareness (the AWARE trial) interventions aimed at improving mental health literacy and help-seeking were reported. The trial assessed two interventions, all reporting small increases in emotional difficulties at the 9–12-month follow-up period for participants in both interventions compared to randomised controls.

Subgroup considerations: There is no direct evidence indicating that the increase in exposure to awareness-raising efforts was different across gender or ethnic groups. There is some evidence that different interventions may differently impact boys or young men, and girls or young women (Szeto et al., 2024).

Challenges: Whilst there were several randomised trials to draw on, several methodological issues were noted. First, it is not clear that any negative effects (e.g. of the recent Department for Education trial) are the result of changes in reporting or changes in actual distress. Second, the interventions were heterogeneous, and in some cases, awareness was a secondary component, making it difficult to isolate its specific effects. Third, few studies directly assessed changes in low mood and anxiety symptoms, limiting the availability and comparability of evidence needed to robustly evaluate this theory. Fourth, publication bias poses a concern, as many evaluations of these programmes are conducted by their developers, creating potential conflicts of interest and increasing the likelihood of overreporting positive outcomes while underreporting null or negative findings. Finally, the follow-up periods in most studies were relatively short, restricting our understanding of longer-term intervention impacts.

Summary: Over the past two decades, there have been many examples of public and school-based campaigns aimed at promoting mental health awareness among young people. These studies primarily focus on attitudes towards mental health. When mental health symptoms are reported, most studies show small improvements associated with awareness campaigns. Conversely, two recent UK, large trials reported small increases in emotional symptoms during follow-up for those randomised to receiving mental health awareness interventions. More research is needed to understand the mechanism for this and whether this is replicable to other settings and interventions.

Mental health awareness	Assessment	Confidence
Trend: How much has the factor changed over the period that mental health has declined?	**Moderate change**	**Strong**
Effect on mental health: Does the factor negatively affect symptoms of anxiety and low mood?	**Small effect**	**Weak**
Subgroups: Does the theory or evidence align with trends observed within certain groups?	**Not available**	**No evidence available**

Risk aversion[28]

Theory: It has been proposed that society has become increasingly risk-averse, both in the physical spaces available to children and in everyday caregiving and supervision practices (Harper, 2017). Adventurous and risky play during childhood is theorised to enhance cognitive and behavioural skills that contribute to psychological resilience against adversity and stress (Dodd & Lester, 2021). Such play also provides opportunities to navigate complex peer interactions, while spending time outdoors, particularly in green spaces, may have restorative effects and foster a beneficial connection with nature (Harper, 2017). Additionally, there is increasing attention on parenting styles, notably the tendency towards parents being more likely to be involved with, and protective during play and learning, which is theorised to negatively affect mental

[28] *For the full in-depth evaluation of this theory, see the Technical Report (Section E, subsection 8).*

health by restricting children's access to experiences that promote independence, general risk-taking, and self-confidence (Starcher & Child, 2019).

Trends: There is some evidence that risk-averse behaviours, particularly reduced outdoor play and independent mobility, have changed over the period during which symptoms of low mood and anxiety have worsened. The British Children's Play Survey (2020) found that children aged 5 to 11 played outdoors for about 1.5 hours daily, and the average age at which children were allowed out alone was 10.74 years, compared to 8.91 years when their parents were children, indicating a trend toward more supervised and less adventurous play (Dodd et al., 2021). Similarly, Natural England's 2009 report found that only 10% of children's play occurred in natural spaces, compared to 40% for their parents' generation, suggesting a long-term decline in outdoor, independent play.

Effect of risk aversion: We identified four systematic reviews examining associations between risk aversion, including overparenting ('helicopter parenting'), reduced independent mobility, and restricted risky play, and mental health outcomes in young people. Older reviews reported generally small associations between parental control and child anxiety, though evidence was primarily cross-sectional (McLeod et al., 2007; Wood et al., 2003). A recent review found significant associations between overprotective or intrusive parenting and symptoms of anxiety and low mood, although it did not distinguish between cross-sectional and longitudinal findings (Miano & Palumbo, 2021). Another recent review linked children's independent mobility with cognitive and socio-emotional development but did not specifically examine mental health (Ferreira et al., 2024). We found no suitable longitudinal evidence within these reviews focusing explicitly on mental health outcomes. One relevant modelling study (Janssen, 2016) indicated that replacing active outdoor play with active video games increased emotional problems, but its use of cross-sectional data and modelling limits robust causal interpretation.

Subgroup considerations: There is some evidence of gendered patterns, with research showing that girls and young women spend significantly less time outdoors and engage in fewer adventurous play activities than boys and young men (Dodd & Hesketh, 2024), potentially driven by safety concerns, parental restrictions, and societal expectations. There is also evidence of ethnic disparities, with children from UK minority ethnic backgrounds playing outdoors less than their white counterparts, partly due to differences in access to green spaces and cultural attitudes toward risk and supervision (Dodd & Hesketh, 2024).

Challenges: A critical limitation is that no longitudinal studies were identified that fall within the scope of this work, which focuses on low mood, anxiety symptoms, and mental distress for young people aged 10–24 years. This seriously limits the causal

conclusions that can be made. Most of the measures used in the literature do not exactly map to the theory that has been proposed: studies tend to focus on specific parenting behaviours, with less attention given to broader components, such as risky and adventurous play, which, while potentially influenced by parenting, represent a distinct area.

Summary: Based on the available evidence, it appears that some aspects of independent and outdoor play have declined over generations. There is evidence of a small association between overparenting behaviours, parental control, and reduced outdoor time with relevant mental health outcomes, but there is almost no longitudinal evidence, and available evidence also does not comprehensively reflect the various components of this proposed explanatory factor (e.g. reduced outdoor activities is just one narrow proxy indicator of risk aversion).

Risk aversion	**Assessment**	**Confidence**
Trend: How much has the factor changed over the period that mental health has declined?	**Moderate change**	**Weak**
Effect on mental health: Does the factor negatively affect symptoms of anxiety and low mood?	**Small effect**	**Weak**
Subgroups: Does the theory or evidence align with trends observed within certain groups?	**Conflicting**	**Weak**

Social media and smartphone use[29]

Theory: Use of smartphones and use of this technology to access social media has become widespread amongst young people. Social media has been proposed to affect youth mental health through social comparison, cyberbullying, and displacement of beneficial activities (e.g. sleep and exercise) (Twenge, 2019; Viner et al., 2019). Social

[29] *For the full in-depth evaluation of this theory, see the Technical Report (Section E, subsection 9).*

media use during adolescence may exacerbate vulnerabilities due to already heightened sensitivity to peer feedback and increased exposure to harmful content (Orben & Blakemore, 2023). Girls and young women, in particular, may face greater risks from image-based platforms, while boys and young men may experience harm through exposure to violent material (Kelly et al., 2018; Smith et al., 2024).

Trends: There have been steep increases in the number of young people on social media platforms since 2009. There has also been an increase in smartphone ownership amongst 12-15-year-olds, from 41% in 2011 to 83% in 2017 (Ofcom, 2011, 2017).

Effect of social media and smartphone use: Two 'umbrella' reviews-of-reviews (Sala et al., 2024; Sanders et al., 2024) highlight small and dose-responsive negative associations between social media use and mental health. A considerable number of longitudinal studies were identified through these umbrella reviews. For example, Li et al. (2022) conducted a meta-analysis combining results from 18 longitudinal cohort studies involving over 240,000 participants, finding that increased screen time was associated with a 10% rise in subsequent depressive symptoms. However, not all longitudinal studies account for factors that might influence the relationship between social media use and mental health, like pre-existing mental health and socio-economic factors. For those longitudinal studies, including in the UK context, that accounted for these factors, findings generally show a small or non-significant association between social media use on youth mental health (e.g. Kelly et al., 2018; Plackett et al., 2023).

Five randomised controlled trials were identified that randomised young people (mean age range 19 to 23) to either a reduction or abstinence intervention and compared these with a control group that were left alone. Of these, four detected a significant reduction in symptoms of depression or anxiety (Davis & Goldfield, 2024; de Hesselle & Montag, 2024; Hunt et al., 2018; Pieh et al., 2025). Of note, all trials were conducted with general population samples; only (Davis & Goldfield, 2024) recruited distressed undergraduate students, defined as those reporting at least two symptoms of depression or anxiety in response to the recruitment notice. In addition, a natural experiment found a significant link associated with Facebook rollout at US colleges and higher rates of anxiety and depression symptoms (Braghieri et al., 2022).

Subgroup considerations: Our analyses of Understanding Society showed that boys and young men reported spending less time on social media than girls, and young people from South Asian backgrounds reported lower use than those from other ethnic groups. However, Black young people did not report substantially different usage compared with their white peers. This partially matches some of the evidence on trends. Additionally, some studies find that exposure to social media is associated with a larger decline in girls' and young women's mental health (Kelly et al., 2018).

Challenges:

Most observational studies rely on self-reported measures of time spent on social media or smartphones, which have poor accuracy (Parry et al., 2021). It is unclear whether inaccuracies in reporting are related to mental health status; however, even if they are not, such measurement errors will mean reported results are biased. Furthermore, the specific activities measured (e.g. social media, smartphone use, or gaming) are often not clearly distinguished, potentially diluting effects attributable to particular activities (Orben & Przybylski, 2019). This is particularly true for studies using screen time as the primary exposure, where conflating distinct digital activities may further obscure specific effects. Also, few studies break down the nature of social media engagement, such as content type. While some distinguish between active and passive use, (Valkenburg et al., 2022) argue this distinction is conceptually weak, noting that the same activity can have both positive and negative effects depending on context and user characteristics.

The bidirectional relationship between poor mental health and social media use further complicates causal inference. Some studies control for mental health assessed concurrently with social media use, which risks 'overcontrolling' by removing any effect on future mental health that is due to its effect on current mental health. This will result in a biased estimate, towards the null. Conversely, other studies measure social media use simultaneously with mental health outcomes and control for prior mental health. Studies using this design will inflate observed effects due to reverse causality. A better approach would be to measure confounders prior to exposure and consider later mental health; however, few datasets provide this option.

Randomised trials overcome issues of measurement error and complexities associated with confounding by assigning participants randomly to well-defined interventions. However, existing trials have several limitations. All have small-to-medium sample sizes (ranging from 86 to 181 participants) and short follow-up periods (less than 3 months), restricting robust conclusions about long-term effects. Additionally, blinding of participants is not feasible, meaning participants assigned to abstinence may experience mental health improvements due to anticipation alone (a 'placebo effect'). This placebo effect could be particularly pronounced among volunteers in social media abstinence trials, who may already believe reducing social media use will benefit their mental health. Such self-selection further exaggerates treatment effects and limits the generalisability of findings.

Summary: The amount of time young people spend on social media and smartphones has increased considerably during the period in which their mental health has declined. More robust causal evidence from randomised trials, natural experiments, and well-controlled longitudinal studies suggests a small detrimental impact of social media and

smartphone usage on young people's mental health, particularly symptoms of low mood and anxiety. Although there are several limitations within the existing evidence base, the consistency of inference across research designs provides some confidence that a causal relationship exists. Additionally, the evidence aligns somewhat with observed subgroup trends, notably higher usage among girls and young women and lower usage among individuals from South Asian backgrounds.

Social media and smartphone use	Assessment	Confidence
Trend: How much has the factor changed over the period that mental health has declined?	**Large change**	**Strong**
Effect on mental health: Does the factor negatively affect symptoms of anxiety and low mood?	**Small effect**	**Weak/moderate**
Subgroups: Does the theory or evidence align with trends observed within certain groups?	**Some support**	**Moderate**

Shared mechanisms across theories

Several theories were noted to have shared mechanisms and processes:

Stress is widely acknowledged to be an important factor in the development and maintenance of symptoms of low mood and anxiety, and may be a particularly important component in gendered differences, with girls and young women generally reporting heightened symptoms (e.g. Andersen & Teicher, 2008; Compas et al., 1993). It may be that the accumulation of multiple sources of stress is an important factor in understanding worsening trends (McGorry et al., 2025), particularly the gendered differences observed in our own and others' analyses (McGorry et al., 2025).

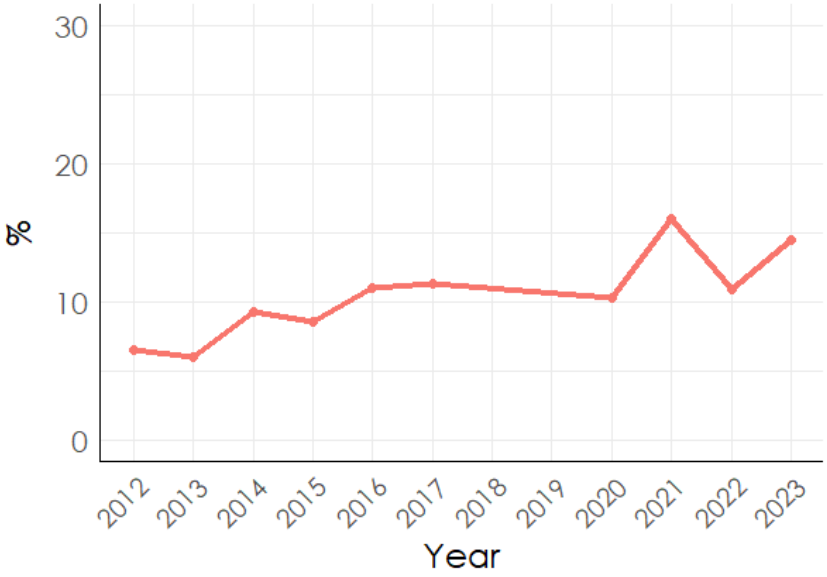
Uncertainty and concern about the future are thought to explain the mechanism behind why academic pressure, economic instability, environmental worry, and COVID-19 might have influenced youth mental health, while risk aversion (and behaviours associated with it) might be viewed as a coping mechanism to manage uncertainty. Schweizer et

al., (2023) suggest that the pandemic may have amplified young people's sense of uncertainty. We propose that longer-standing mechanisms associated with societal uncertainty, e.g. employment instability or environmental anxiety, merit further attention. Not only do they align well with the pre-pandemic decline in youth mental health, but if their effects are delayed, exposed cohorts will require much longer follow-up.

We examined a rising trend in the number of young people who answered, 'don't know', when asked: "Thinking of your own future, what would you like to be doing with your life in about ten years from now?"

Figure 12: Proportion of young people responding "Don't know" to a question about their future plans

Young people aged 16 to 24 years, England, 2012 to 2023



Source: Understanding Society

Social comparison and self-confidence have been suggested to explain how social media and smartphone use, health behaviours (particularly weight and physical activity), economic instability, academic pressure, and risk aversion influence youth mental health. 'Socially prescribed perfectionism' is also thought to be increasing and may be especially harmful to young women and youth mental health. Specifically, it has been proposed that young people in the UK, and comparable countries, face increasingly harsh and competitive social and economic conditions, intensified meritocratic expectations, more risk-averse parenting, and a visual culture promoting unrealistic ideals, which encourage the holding of oneself to increasingly high standards

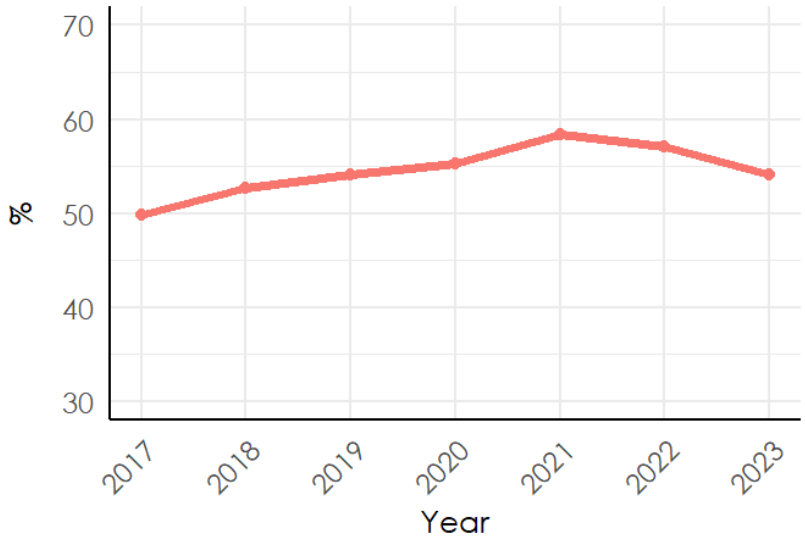
(Curran & Hill, 2019; Flett et al., 2022). Further examination of this among young people, and of whether some groups are more affected, is needed.

Social withdrawal and loneliness have also been proposed as mechanisms for how social media and smartphone use, the COVID-19 pandemic, sleep, and reduced access to services may affect youth mental health. Risk aversion has been suggested to reduce opportunities for social skills development and linked to youth mental health trends (e.g. social media and the pandemic Armitage et al., 2024; P. McGorry et al., 2025). Such issues warrant closer consideration, alongside understanding about whether interventions reducing *youth* loneliness would aid this (Alam & Bose, 2022; Cole et al., 2021).

This finding aligns with data we see amongst 16–24-year-olds, where the proportion that report feeling lonely has increased in recent years, although there has been a decrease since the COVID-19 pandemic.

Figure 13: Proportion of young people responding "Sometimes" or "Often" to a question about feeling lonely

Young people aged 16 to 24 years, England, 2017 to 2023



Source: Understanding Society

Family stress has been proposed as a mechanism within changing economic conditions, the COVID-19 pandemic, reduced access to services, discriminatory experiences, and, to a perhaps smaller degree, within academic pressure and environmental worry. Family stress theory (Conger et al., 2010; Conger & Donnellan, 2007) focuses on how external stressors – initially economic hardship and later expanded non-financial stressors – disrupt

family functioning by increasing parental distress and impacting upon parenting practices. These disruptions are suggested to in turn affect child and youth mental health and development, especially through strained parent-child relationships and reduced or inconsistent emotional support. Core to the theory is mediating family processes such as family environment, functioning, and support, which can buffer or exacerbate the impacts of stress on children's outcomes.

Conclusions

Key conclusions

- The number of young people experiencing mental distress, including symptoms of anxiety and low mood, has increased markedly since 2010.
- This increase has been particularly pronounced among adolescent girls and young women, and individuals from white British and mixed ethnic backgrounds.
- Trends appear to reflect genuine increases in mental distress rather than changes in reporting.
- Generally, young people's response to common stressors has remained stable over time, suggesting no overall decline in resilience.
- However, the negative impact of financial insecurity has intensified, indicating economic factors – particularly housing affordability and unstable employment – are significant contributors to worsening mental health.
- There is evidence for the role of deteriorating sleep quality, increased smartphone and social media usage, and reduced access to services for children and youth people in contributing to these mental health trends.
- More tentative evidence suggests a role for mental health awareness and the COVID-19 pandemic.
- Despite clear and in some cases very strong established links with symptoms of low mood and anxiety, factors including discriminatory experiences, physical activity, diet, child poverty, and income inequality do not show sufficient change over the period to explain the observed population-level trends.
- There is not clear evidence that academic pressure is increasing, though more recent declines in school satisfaction may warrant further consideration.
- Currently, there is insufficient evidence to make any conclusions on whether environmental worries or increased risk aversion significantly contribute to these mental health trends.

Rationale for conclusions

The declines in mental health appear to be genuine: It has been suggested that young people are more likely to identify symptoms of mental illness, such as 'worry' and 'low mood', at the same levels of actual distress. If so, this will have led to more young people being identified in surveys as having mental distress and contributing to the trends we see. We investigated this hypothesis using two analyses.

In our first study, we find that patterns of responses to mental health surveys had not changed significantly over time, suggesting that mental health symptoms are being interpreted similarly in 2022 as they were in 2009. In our second analysis, we examined whether mental distress had a smaller impact on functioning more recently, which might indicate identification at lower thresholds. We found that, counter to this, there was a greater link between mental distress and outcomes of NEET status, and smoking or drinking. Taken together, these two analyses (which are in line with the existing literature) do not support the notion that mental distress is being identified at significantly lower thresholds.

Declines in mental health were steeper among adolescent girls and young women, as well as among individuals from white British and mixed ethnic backgrounds: girls and young women have consistently reported higher levels of low mood and anxiety compared to boys and young men (Seedat et al., 2009); however, this disparity appears to be widening. Notably, many theoretical explanations for trends in youth mental health suggest that various risk factors may be more prevalent and/or have a greater impact among girls and young women.

Regarding ethnic differences, our analyses align with other UK findings that indicate recently that reported symptoms of low mood and anxiety is more prevalent among white British and mixed ethnicity young people compared with those from other ethnic backgrounds (Guan et al., 2024; Lewer et al., 2024; NHS England Digital, 2018). This pattern contrasts with several of the theories detailed in this report. For example, it is theorised that many economic factors have a greater effect on young people from ethnic minority backgrounds. At present, the reasons for this remain unclear. Potential explanations include cultural differences in how mental health is perceived, discussed, and addressed; and differences in resilience or protective factors, such as stronger community orientation in some cultures. Further research using contemporary groups of young people and their families is needed to better understand the ethnic and cultural determinants of youth mental health.

Changes to economic factors may partly explain these trends: Our analysis found that financial insecurity was associated with greater declines in mental health among recent cohorts of young people, possibly for several reasons. Notably, the 2010s saw significant shifts in employment, characterised by increased precarity and reduced opportunities for stable career progression. Additionally, stagnating living standards and declining access to home ownership – a key milestone for young adults – may have contributed to a more pessimistic outlook, negatively impacting young people's mental health.

Over the past three years, substantial increases in the cost of essentials, such as fuel and food, alongside declining living standards, have disproportionately affected those already experiencing high deprivation. Growing up in extreme poverty is clearly evidenced as a significant risk factor for future mental health problems and may influence longer-term outcomes. However, declines in mental health among young people began prior to recent inflationary pressures, during a period of relative economic stability, although marked by significant cuts to services for children and young people.

Furthermore, the observed decline in mental health since 2010 has affected young people across all income levels, weakening arguments that economic factors alone are primary drivers. For instance, attributing mental health trends to child poverty is inconsistent, as poverty-related impacts would not typically affect young people uniformly across the income distribution. This does not imply child poverty is unimportant for mental health outcomes, only that it does not appear to be a primary driver of recent worsening trends.

Increasingly poor sleep is a likely contributing driver of worsening youth mental health: Over the period where mental health has been declining, our and other data find that the quality of sleep reported has been declining in young people. There are some difficulties in separating cause from effect: worse sleep is often a consequence of poor mental health. However, there is high-quality evidence that allows us to conclude that sleep is causally linked to poor mental health, in particular, low mood and anxiety symptoms. Some have suggested that poor sleep during adolescence is more relevant than at other times because the brain is undergoing marked changes (Tarokh et al., 2016).

Smartphone and social media use is a likely contributor to worsening youth mental health. The role that smartphones and social media may play in young people's mental health has attracted considerable attention and controversy. Our conclusion that these technologies likely play some role in the observed mental health trends is based on several points:

First, the rapid increase in smartphone and social media use closely coincides with rising symptoms of anxiety and depression, suggesting even small effects could have substantial impacts at the population level. Several randomised controlled trials (considered the gold standard for causal evidence) indicate improvements in depression and anxiety symptoms among young people following periods of reduced or no social media use. While these trials have methodological limitations, their findings align with longitudinal studies, which, in large meta-analyses, report small negative associations between social media exposure and mental health symptoms.

Second, evidence that aligns with the subgroup trends we observe further strengthens our confidence. Girls and young women appear more negatively affected by social media use. Conversely, young people from South Asian backgrounds, whose mental health trends are less clear, report lower levels of social media usage. However, Black young people, who have experienced smaller declines in mental health, report similar levels of social media use to white and mixed-ethnicity groups, suggesting that the picture is incomplete.

We therefore conclude there is likely a small negative effect, and that strong increases in social media and smartphone use probably contribute to the mental health trends we observe. Our confidence in this assessment is only partial; based on existing evidence, we cannot rule out either a stronger or a null effect. Additionally, the precise mechanisms underlying any effect remain unclear. Improved understanding requires more detailed measurement of young people's online activities and more robust designs, such as well-designed randomised controlled trials[30] or evaluations of policies in countries or jurisdictions that have limited access to these technologies.

Reduced and unstable services for children and young people is a likely driver of worsening youth mental health: Over the past decade, access to children and youth services in the UK has declined markedly, with a 73% real-terms reduction in local authority spending between 2010–11 and 2023–24, leading to widespread closures of youth centres and early intervention programmes such as Sure Start. These reductions have disrupted protective systems that previously supported young people, potentially improving early identification of need, and timely access to help, particularly in the most deprived areas where service losses have been greatest (Fahy et al., 2023).

[30] The key challenge is designing an RCT that effectively accounts for anticipated placebo effects, e.g., using active control conditions (e.g., behavioural recommendations) to isolate therapeutic effects; measuring expectations of the intervention at baseline; and/or employing a sequential, cross-over design.

Evidence suggests that while the mental health benefits of services for children and young people are generally modest at the individual level, their loss may contribute to population-level changes in mental health by increasing exposure to risk factors such as social isolation, stress, and unmet need. Systematic reviews and longitudinal studies indicate small but consistent improvements in low mood and anxiety symptoms associated with participation in youth or community services, though many studies suffer from methodological limitations, including failure to control for key confounders. Subgroup evidence is limited, but some findings suggest that ethnic minority groups face greater barriers to access (Ellins et al., 2024). Although more robust evidence is needed, the overall pattern indicates that declining access to services for children and young people likely contributes to worsening trends in adolescent mental health. It is not clear, however, how these cuts map to the subgroup trends we have observed.

The COVID-19 pandemic may have partially contributed to recent mental health trends among young people. While the pandemic immediately disrupted young people's lives significantly, declines in mental health preceded this event. The evidence on the pandemic's overall impact on youth mental health remains inconclusive, though it generally suggests a small negative effect. Nevertheless, because this effect was experienced universally, it should not be disregarded. It remains uncertain whether the negative mental health responses observed during the pandemic represent temporary reactions to a distressing global event—from which young people have largely recovered—or whether those who lived through the pandemic (especially younger children) will continue to experience its longer-term effects.

There is not clear evidence that academic pressure is increasing, though more recent declines in school satisfaction may warrant careful consideration. The overall shift in the curriculum reforms in England towards a greater emphasis on high-stakes exams might be expected to increase academic pressure among young people.

We focused on academic pressure (rather than other educational experiences) in line with existing theoretical work linking pressure specifically to mental health declines. However, we note that school experiences are multifaceted and include belonging, engagement, and students' relationships with teachers and peers.

Evidence indicates an impact of academic pressure on young people's mental health. However, the evidence showed little or no change in reported academic pressure among young people in England from 2002 to 2018 (this was not the case in Scotland).

We hoped to examine more recent trends, but our data did not include a direct measure of academic pressure. As an imperfect proxy, we examined how happy young

people felt about school and schoolwork. This did not change between 2009 and 2021, at which point we observed a clear and sustained decline until 2024.

We cannot say which school experiences might shape this, including pressure. Potentially, this could be related to the volume of time on academically focused activities, rather than other activities that facilitate school satisfaction, and this is one potential mechanism through which pressure can impact mental health. However, it may reflect other changes in the school environment, or in the *perception* of that environment, particularly as it follows the COVID-19 pandemic. Updated information on school experiences, including pressure as well as overall school satisfaction and other aspects, would be beneficial.

The impact of increased mental health awareness is inconclusive: Young people are more fluent in the language of mental health than prior generations. This likely affects whether young people seek help from services and could explain a large portion of the increase in primary care contacts for a range of mental health conditions; however, it does not necessarily account for the acceleration in anxiety presentations around 2012.

Another proposed effect of greater mental health awareness is increased recognition of symptoms, potentially leading some young people to self-identify mental distress more readily. It could also be that those already vulnerable to anxious or depressive thoughts may be more likely to self-identify and subsequently focus on those symptoms, which becomes a downward cycle. Currently, empirical evidence supporting this hypothesis is limited. Most trials of mental health awareness interventions report short-term benefits. However, one notable exception was a large cluster RCT conducted in English schools, which found that participants randomised to mental health awareness interventions reported worse mental health outcomes at 12-month follow-up. This finding could be for several reasons: it could represent changes in symptom reporting, actual harm from these interventions, a mismatch between intervention delivery and the school environment or be a statistical anomaly (as it is noted that lower scores were not detected at other time points). This lack of clarity highlights the need for further investigation into potential unintended effects of mental health awareness interventions.

Limitations

This report draws on a substantial body of empirical evidence and a series of novel analyses. However, it is important to acknowledge several limitations that constrain the strength of conclusions we can draw.

First, although we synthesised and triangulated data from original analysis, systematic reviews, longitudinal studies, and randomised controlled trials, few studies were explicitly designed to explain changes in mental health over time. Many focused on cross-sectional associations, limiting causal inference in part because they cannot account for pre-existing mental health symptoms. Furthermore, for many theories, randomised trials were unavailable, longitudinal data were either sparse or methodologically weak, often failing to control for key confounders such as prior mental health, socio-economic status, or family factors.

Second, our approach to scoping the evidence concerning theoretical explanations was pragmatic, shaped by the breadth of existing literature and the limited timeframe available. While we were able to harness existing syntheses, we were not able to systematically review the literature, and some relevant evidence will likely be missed as a result. This also did not take the form of a formal meta-analysis; synthesising this evidence was a subjective process. It was a complex exercise to synthesise a diverse and evolving body of evidence, particularly where each area is affected by a range of complicated limitations. While we took steps to guard against inconsistency through team deliberation, iterative review, attention to the coherence and directness of evidence, and examining judgements across theories, our conclusions inevitably involve qualitative judgement and interpretation. There is no purely objective way to synthesise this kind of complex and uneven evidence, and reasonable reviewers may reach different conclusions based on the same material.

Third, our mapping of theories to factors often relied on broadly defined, indirect, poorly measured or proxy measures. For example, academic pressure was inferred through changes in school satisfaction, and economic uncertainty through self-perceptions of future financial prospects. Such measures may not capture the complexity or nuance of the underlying constructs, and pooling together research captured under each construct may belie some important heterogeneity.

Fourth, we were unable to evaluate all plausible theories because of limitations in data availability, time, or relevance to our remit. For instance, changes in religiosity and broader structural forces were not considered feasible but may be relevant to the trends considered.

Finally, there is an inherent challenge in disentangling the individual effects of overlapping factors. While we assessed theories separately, many operate through shared mechanisms (e.g. stress, social comparison, uncertainty), and may interact in complex, mutually reinforcing ways that are not captured through considering each theory in isolation.

Future directions

We identified several areas where the evidence is insufficient to draw firm conclusions.

There are challenges in identifying how certain aspects of young people's lives have shifted, or continue to shift, over time, particularly where data has been limited or inconsistent. Revisiting available data sources and comparisons would be valuable for areas such as academic pressure, discriminatory experiences, environmental concerns, and risk aversion. Future efforts should consider proactive approaches to data collection on key and emergent issues in young people's lives, including regular review of cohort study measures and the use of open-ended questions to allow natural mapping of emerging or unanticipated issues early.

In terms of causal influence, there is a lack of evidence on how some factors, such as risk aversion and environmental worry, influence youth mental health. Other areas of research, although extensive, have significant methodological limitations. For example, the literature on social media and smartphone use is weakened by poor measurement and weak study designs. Given the high level of public and policy interest, more robust causal evidence from well-conducted randomised trials, and/or policy evaluations is needed.

We also recommend further research to better understand subgroup differences; specifically, why girls and young women appear most affected in recent trends, and why some ethnic minority groups appear least affected. We also suggest that cross-national comparisons of youth mental health trends could offer valuable insight into potential cultural or environmental resilience factors. Examining such subgroup trends and contextualising trends in the wider international context could be revealing not only of insights relevant to specific groups and countries, but also to understanding wider trends for others.

Of the factors examined, many are understood to impact mental health via similar mechanisms, particularly stress, uncertainty and concern about the future, social comparison and self-confidence, social withdrawal and loneliness, and family stress.

Though we necessarily focused on factor-level influences here, examination of shared mechanisms would be beneficial in understanding trends.

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