

# Mental health among young people: longitudinal evidence from the UK

Emla Fitzsimons  
22<sup>nd</sup> October 2020

CENTRE FOR  
LONGITUDINAL  
STUDIES



# Mental health among young people in the UK

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Major impacts on people's lives and society as a whole →

***provision for early support and intervention essential***

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Despite recent targeted increases, **child and adolescent mental health** accounts for less than 10% of the overall mental health budget

- which equates to just under 1% of the NHS budget

# Mental health among young people in the UK

Significant levels of unmet need in children and young people's mental health care

- Specialist services **turning away one in four** of the children referred to them by their GPs or teachers for treatment
- Over 338,000 children were referred to CAMHS in 2017; **less than a third received treatment** within the year
- 75% of young people experiencing a mental health problem are forced to **wait** so long their condition gets worse or are **unable to access any treatment** at all

# Mental health among young people in the UK

Widespread concerns about the impact of COVID-19, associated periods of lockdown and isolation, and uncertainty about the future on children and young people's mental health

# Mental health

Extensive evidence that

(a) the majority of adult mental health problems start/are rooted in childhood

(b) long shadow is cast by childhood mental health problems on adult life, e.g. on:  
education, employment and earnings, physical health, relationship stability,  
social mobility...

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E.g. large impacts of childhood psychological problems on family income, reaching peak of 28% lower net family income by age 50 y.

Contributing factors - reduced conscientiousness, lower probabilities of being married, being at work. Experience of adult psychological problems a major pathway through which effects occur (Goodman et al 2011)

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Origins and consequences of mental ill-health are complex and multi-faceted → multi-disciplinary approach

Understanding the scale of the problem and how it changes over time is important

+

Having rich data on several aspects of life, and following people over time, key to understanding origins of developmental difficulties and lasting inequalities → large scale birth cohort studies unique

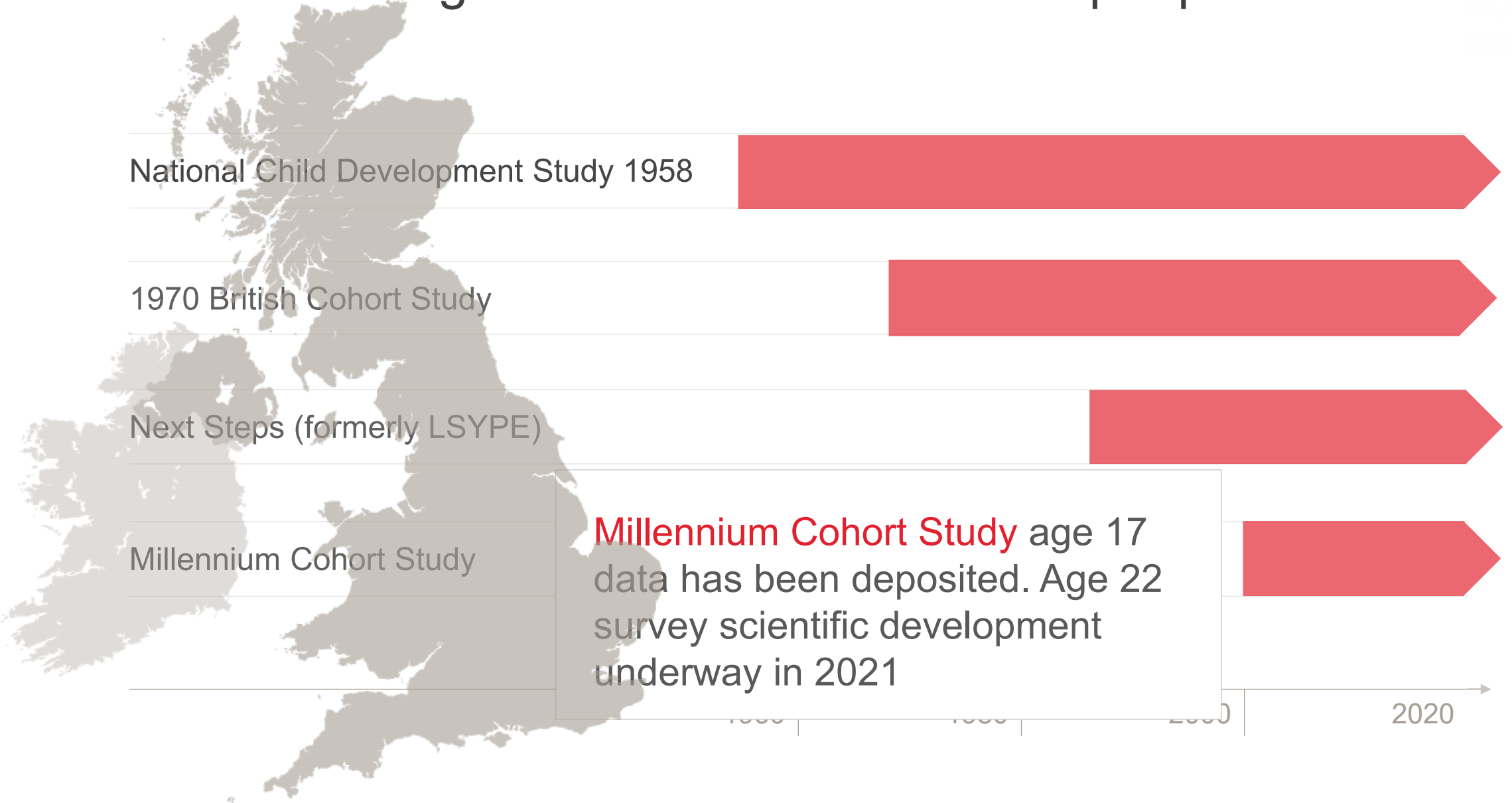


# What we do at the Centre for Longitudinal Studies (CLS)

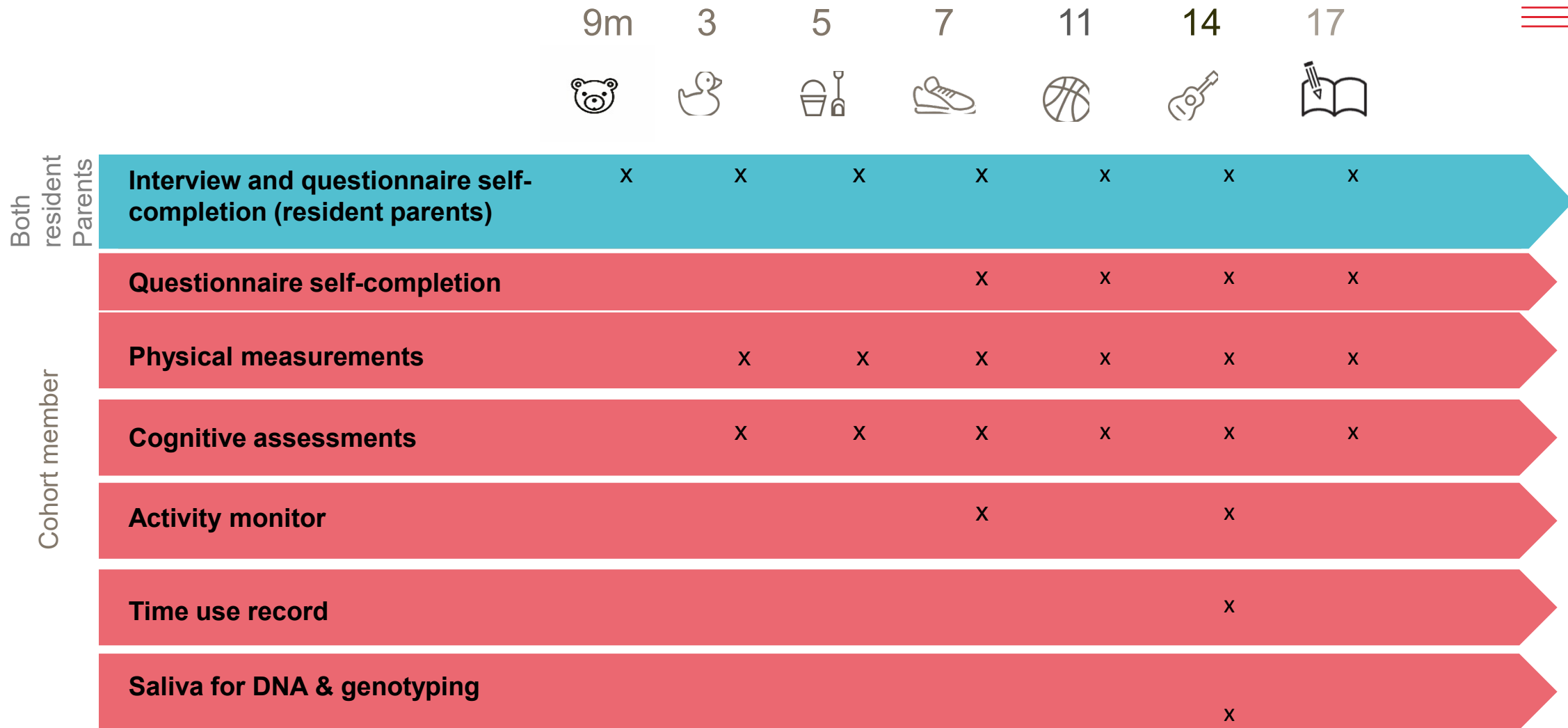
- We run four major national longitudinal studies, which follow people throughout life: scientific development, and design of the studies
- We are funded by ESRC as a 'resource centre' – to provide data to the wider scientific and policy community
- Research – strong multi-disciplinary group



# Centre for Longitudinal Studies: we follow people across life



# MCS timeline and content at a glance



Also: consent to link administrative records - health, education, economic, crime

Joshi & Fitzsimons (2016). Study profile: The UK Millennium Cohort Study: the making of a multipurpose resource for social science and policy in the UK. *Longitudinal and Life Course Studies*, 7, 409-430.

Connelly & Platt. (2014) Cohort Profile: UK Millennium Cohort Study (MCS). *International Journal of Epidemiology*, 43(6), 1719-1725.

# **Mental health during childhood: the evidence**

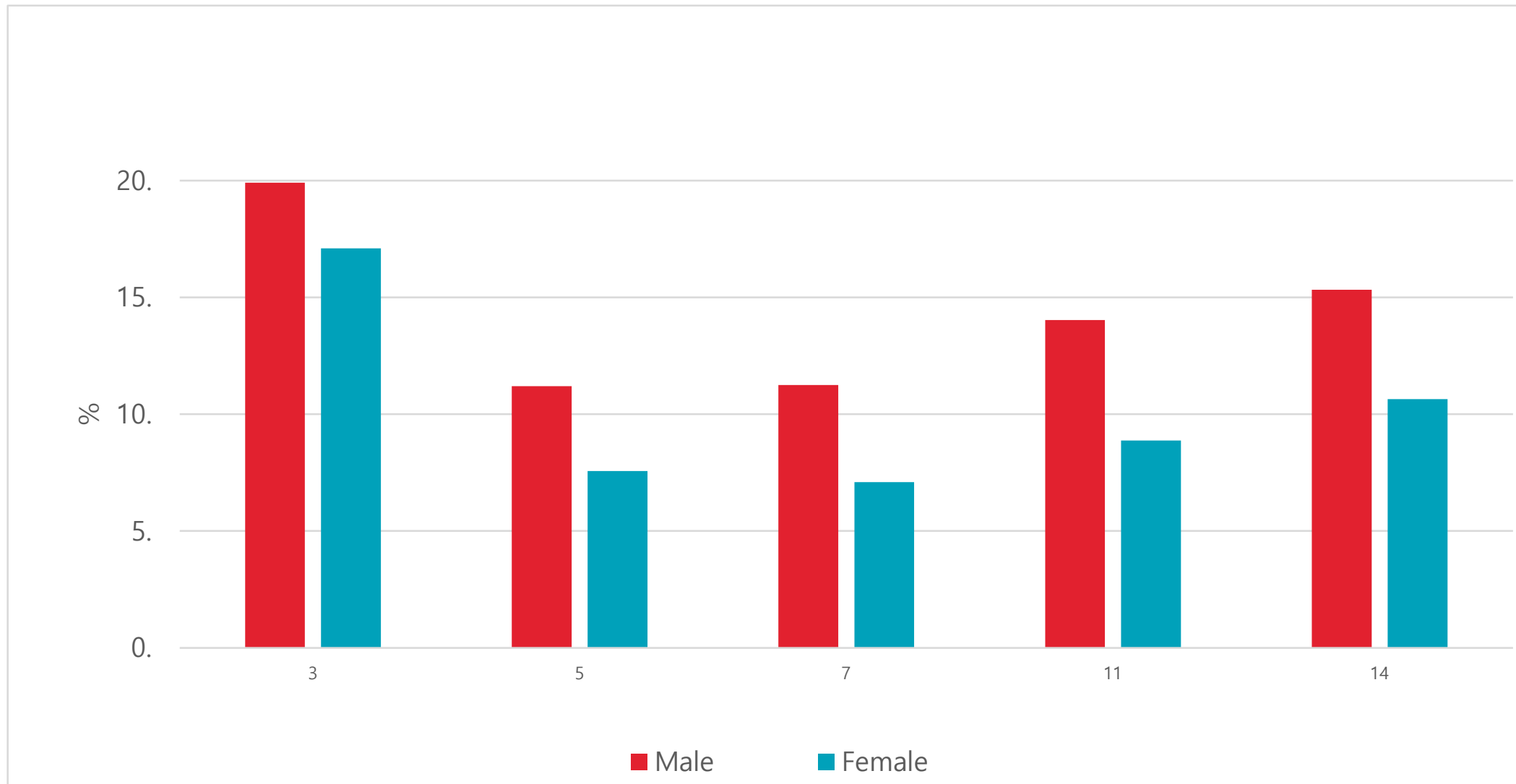


# Prevalence of mental health problems: parent-reports

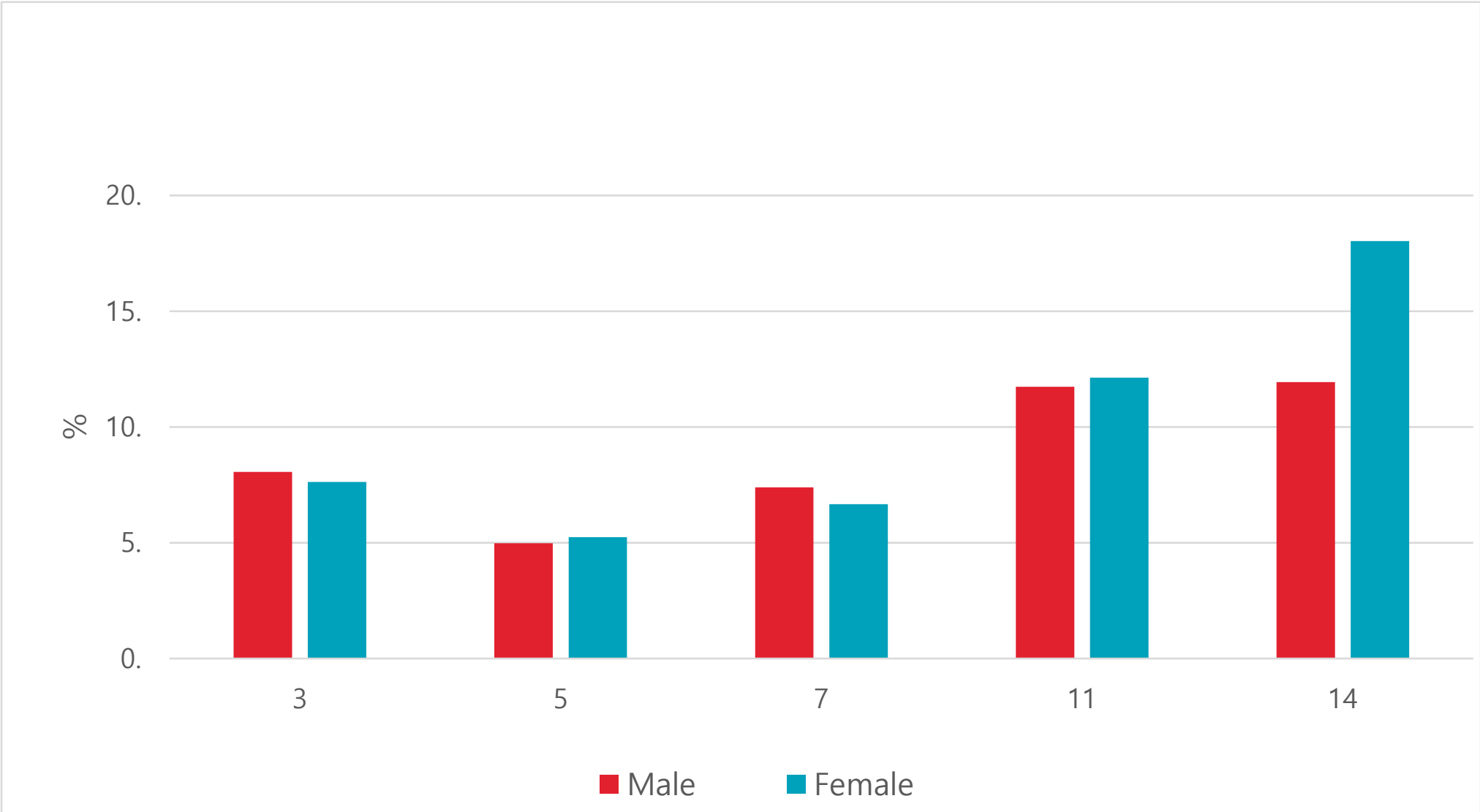
**Parental reports** on their children's difficulties in 4 areas, via Strengths and Difficulties Questionnaire

- emotional; conduct; hyperactivity; peer relationships
- score > a certain threshold is indicative of high levels of difficulty in the area

# Behaviour problems, ages 3-14



# Emotional problems, ages 3-14



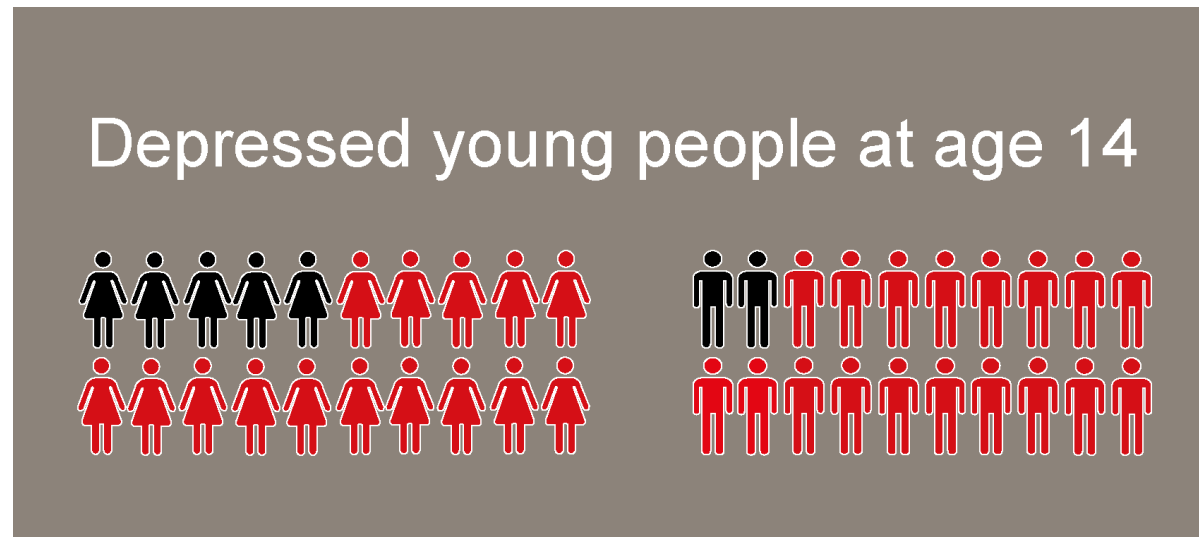
# Mental health at age 14: self-reports

- **Cohort members** answered questions about mental health difficulties for the first time @ age 14
- Short Moods and Feelings Questionnaire, which assesses symptoms of depression
  - assesses feelings or behaviours in previous fortnight (e.g. I felt miserable or unhappy)
  - score > established threshold is indicative of suffering from depression



# Mental health at age 14

Almost 1 in every 4 girls (24%) at age 14 report high levels of depressive symptoms, compared with almost 1 in 10 (9%) boys



Equates to around  
67,000 boys and  
166,000 girls  
nationally

...of total population  
in this cohort of  
730,000 boys and  
696,000 girls

## Mental ill-health among children of the new century

### Trends across childhood, with a focus on age 14

#### Introduction

In recent years, there has been a growing policy focus on children's mental health. The government has repeatedly stated its commitment to improving access to specialist mental health services. At the same time, there is widespread concern that staff at schools and colleges lack the resources and skills to help improve pupils' emotional wellbeing.<sup>1</sup> Demand for specialist services is growing with recent evidence that child and adolescent mental health services (CAMHS) are,

on average, turning away nearly a quarter of children referred to them for treatment by concerned parents, GPs, teachers and others.<sup>2</sup> Half of all cases of adult mental illness start by the age of 14<sup>3</sup>, meaning prevention and early support for children is vital.

This briefing paper summarises the prevalence of mental health problems among children taking part in the Millennium Cohort Study (MCS), which is a representative group of children born in the UK

at the start of this century.

The report explores the prevalence of poor mental health amongst these children based on surveys of their parents at ages 3, 6, 7 and 14. It then examines in more detail, including by gender, income and ethnicity, the data on depressive symptoms reported by 14-year-olds themselves in the latest survey. The report also compares 14-year-olds' perceptions of their mental ill-health with their parents' perceptions.

#### Key findings

- Average levels of emotional symptoms, such as feeling depressed and anxious, increased from early childhood through to mid-adolescence. From ages 3 to 11 years similar proportions of girls and boys suffered from emotional problems as reported by their parents. However, between age 11 and 14 years prevalence in boys stayed the same (around 12%), but for girls it increased from 12% to 18%.
- Difficulties related to conduct and disruptive behaviour, reported by parents, decreased from infancy to mid-childhood and then slightly



- increased from mid-childhood to adolescence. At every age, prevalence of behaviour problems was slightly higher in boys than in girls.
- At age 14, when children reported their own symptoms, 24% of girls and 9% of boys were suffering from high symptoms of depression.

- 14-year-olds from poorer socioeconomic backgrounds were more likely to report greater symptoms compared to those from better-off families.
- Emotional symptoms of 14-year-olds often differed depending on whether they were reported by themselves or their parents.

**Bumper barbecue special**

**Yotam Ottolenghi's charred seabass**  
**Anna Jones's feta parcels**  
**Felicity Cloake's sausage taste test**

➔ *Feast*

**The Guardian**

Saturday 19 May 2018  
 Issue No 53,413  
 £2.90

### Quarter of 14-year-old girls 'have signs of depression'

By Michelle Roberts  
Health editor, BBC News online

September 2017 | Health | [f](#) [t](#) [b](#) [e](#) [Share](#)

## One in four girls have depression by the time they hit 14, study reveals

Data from government-funded research prompts fresh questions about effect of social media and school stresses on young people's mental health



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## Depression risk for bright girls and those in poor families

**Denis Campbell**  
Exclusive

Brighter girls and girls from poorer families are more likely to be depressed than other children by the time they enter adolescence, according to a new study, triggering fresh concern about soaring rates of teenage mental illness. The government-funded research has identified those two groups as being most at risk of displaying high symptoms of depression at the age of 14. In contrast, more intelligent boys and boys from the most deprived backgrounds appear not to suffer from the mental troubles that affect their female equivalents, the researchers discovered.

The findings are based on detailed questionnaires filled in by 9,553 boys and girls aged 14 across Britain as part of the Millennium Cohort Study (MCS), which is tracking the progress of young people born in 2000 into adulthood. They have added to the growing

evidence that teenage girls are particularly vulnerable to mental health difficulties. NHS figures show that there have been sharp increases in the number of girls under the age of 18 who were admitted to hospital in England between 2005-06 and 2015-16 because they had self-harmed after cutting (285%), poisoning (42%) or hanging themselves (331%).

The researchers, led by Dr Praveetha Patel, also found that being overweight, a history of being bullied and not getting on with peers are the three commonest causes of depression in boys or girls aged 14. Their previous finding - that 24% of 14-year-old girls and 9% of boys of that age are depressed - stirred widespread debate last year.

Dr Nihara Krause, a consultant clinical psychologist, said the findings about brighter and poorer girls were worrying, given the known links between depression and self-harm, and self-harm and risk of suicide. "Some children who are depressed will self-harm. Some people say that physical pain is easier to tolerate than emotional pain."

"What's very concerning, in those who are depressed, is the link with suicide, because more and more studies show that self-harm is a predictor of suicide; that someone who self-harms is more likely to try to take their own life, especially if they are depressed. So these new findings are a concern from that point of view."

Girls from families in the bottom two quintiles of household income are 7.5% more likely

*'Part of it could be that brighter girls have a hyper brain, often meaning a higher emotional reaction to things'*

Dr Nihara Krause  
Consultant psychologist



Meghan Markle and her mother Doria Ragland arrive at Cliveden House hotel yesterday evening  
PHOTOGRAPH BY DYLAN MARTINEZ/REUTERS

**Long Walk**  
By Carol Ann Duffy

It should be private, the long walk on bereavement's hard stones; and when people wave, their hands should not be mobile phones, nor their faces lenses; so your heart dressed in its uniform.

On. Then one blessed step and the long walk ended where love had always been aimed, her arrows of sweet flowers gifting the air among bells - yes, they all looked - and saying your name.

*'On the eve of a wedding, whose run-up has been several shades of toxic, we must ask: what do we want of these people?'*

Marina Hyde

After the week they've had, it's too fitting that Prince Harry and Meghan Markle are doing this thing in Windsor Castle's St George's Chapel, the official spiritual home to the Order of the Garter. The order was founded after the perceived embarrassment and shaming of a woman at court in 1348, through no fault of her own.

Legend has it (probably apocryphally) that Edward III's dance partner accidentally flashed her garter, to various looks askance, prompting Edward to take the garter upon himself and challenge the mockers with what would become his new order's motto: "Honi soit qui mal y pense". Shame on him who thinks badly of this. "Those who laugh at



# Impact

- No other national data source at that time that could provide nationally representative prevalence figures of this kind
- First evidence to emerge in UK in over a decade – and showed dramatic increase
- Embedding of information within a longitudinal study makes it all the more powerful for understanding drivers of mental health, including from very early in life
- Timed for release just ahead of Govt Green Paper on Children and Young People's Mental Health Provision

Claire Murdoch, NHS England's national mental health director: '***After decades in the shadows, children's mental health is finally in the spotlight***'

# Wellbeing

We drew attention to important yet much overlooked distinction between mental ill-health and mental wellbeing in young people:

debate around whether the two constructs represent two ends of same spectrum of mental health or two distinct domains that overlap

We found that absence of mental health difficulties does not necessarily equate to positive wellbeing

→ important to measure both to get full picture and best support young people

We also found that parent and child reports of emotional or depressive symptoms have weak correlation

→ child-reports important

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→ **Inform** a review by Public Health England of **existing metrics** within the Children and Young People's Mental Health and Wellbeing profile and to consult on the best measures to use for young people's population mental wellbeing

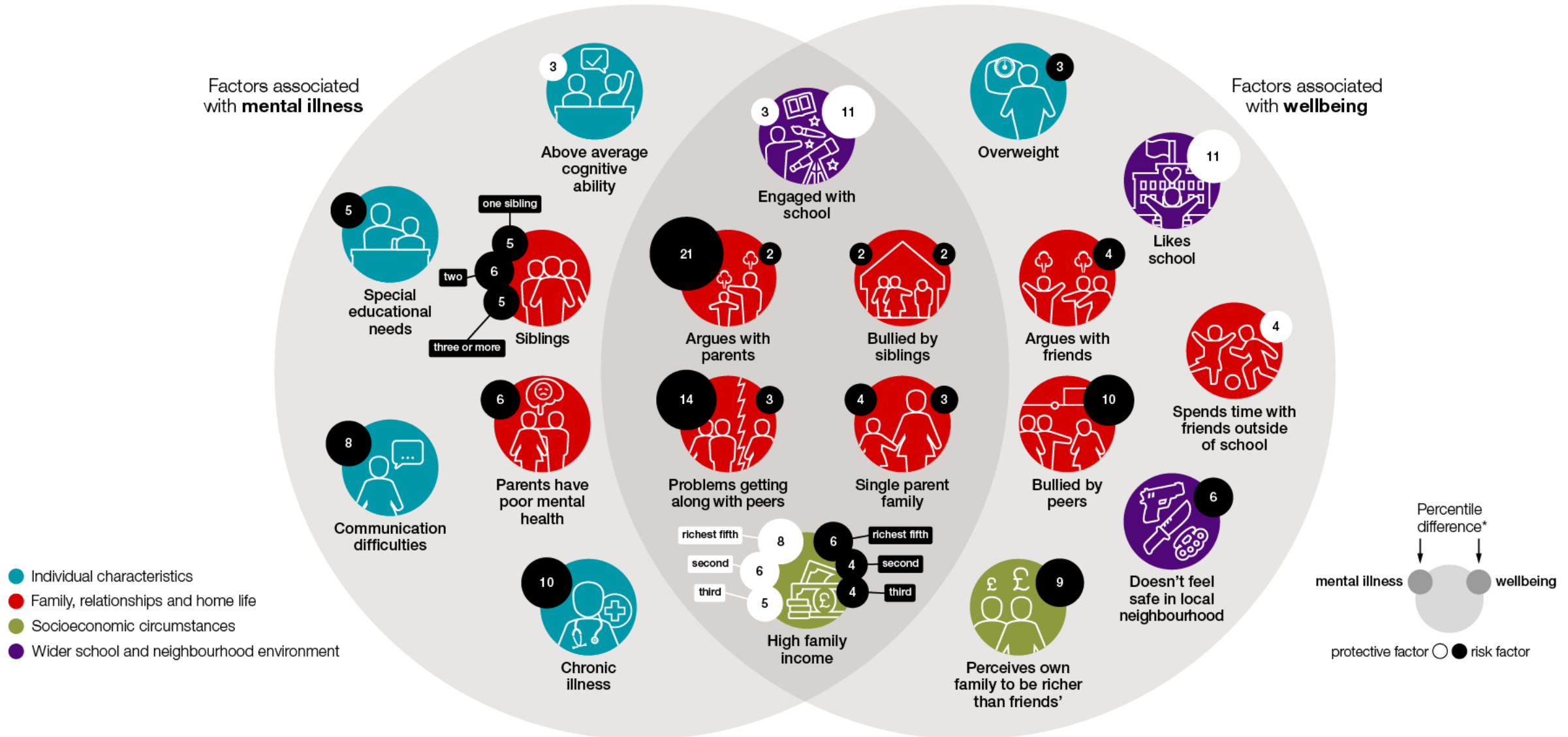
# Wellbeing

We also compared a wide range of predictors of children's mental ill-health and subjective wellbeing in the same sample

→ highlighting that their risk and protective factors can differ, and setting out concrete areas for policy action

# Children's mental illness and wellbeing at age 11

Findings from the Millennium Cohort Study



All factors included in the infographic are statistically significant at (at least) the 5% level. • Findings from Patalay, P. and Fitzsimons, E. (2016) Correlates of mental illness and wellbeing in children: are they the same? *Journal of the American Academy of Child and Adolescent Psychiatry* 55(9), pp. 771-783.

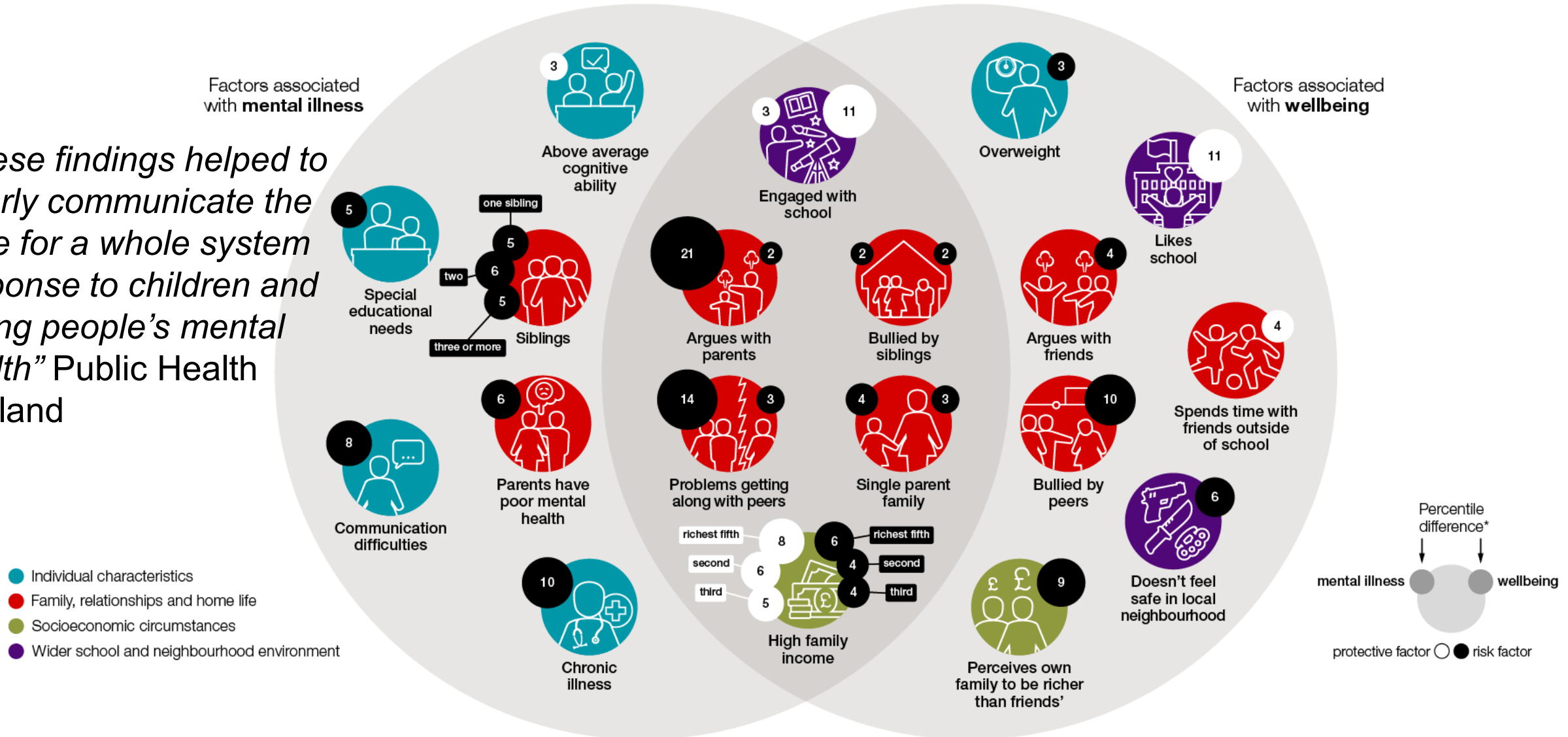
\*'Percentile difference' is the change in rank position between 1 and 100 away from the median or reference category.



# Children's mental illness and wellbeing at age 11

Findings from the Millennium Cohort Study

*"These findings helped to clearly communicate the case for a whole system response to children and young people's mental health"* Public Health England



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# Factors affecting mental ill-health in childhood

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Risk factors for mental health problems include common occurrences in young people's lives, e.g. poverty, long-term physical illness, bereavement, family breakdown...

Essential to understand potential triggers and risk factors, to help policy and prevent longer-term mental health issues from developing

Research on instability in childhood, in three areas:

## **Poverty**

- entering poverty, exiting poverty, persistent poverty

## **Parental mental health**

- improving, deteriorating, staying the same

## **Family structure**

- parental separation/divorce



Social Science & Medicine

Volume 175, February 2017, Pages 43-51



# Poverty dynamics and parental mental health: Determinants of childhood mental health in the UK

Emla Fitzsimons <sup>a, b</sup> ✉, Alissa Goodman <sup>a, b</sup> ✉, Elaine Kelly <sup>b</sup> ✉, James P. Smith <sup>c</sup> 人 ✉

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<https://doi.org/10.1016/j.socscimed.2016.12.040>

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# Poverty fluctuations

Considerable evidence that poverty matters for mental ill-health

AGE 11	Emotional	Peer	Conduct	Hyper-activity
Income quintile				
Lowest	0.156	0.172	0.188	0.163
Second	0.132	0.140	0.138	0.145
Third	0.101	0.094	0.079	0.086
Fourth	0.091	0.078	0.051	0.072
Highest	0.065	0.071	0.033	0.058

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But what about fluctuations in poverty?

# Poverty fluctuations

Persistent poverty worse at early ages; fluctuations in poverty (adverse income shocks) worse in later childhood:

- Living in persistent poverty throughout early childhood strongly predictive of poor mental health by age 5; poverty transitions during early childhood not predictive of poor mental health by age 5
- Poverty transitions, specifically moving into poverty, more strongly predictive of poor mental health by age 11 than living in persistent poverty throughout childhood

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- Poverty transitions, specifically moving into poverty, more strongly predictive of poor mental health by age 11 than living in persistent poverty throughout childhood

By age 11 children more aware of economic transitions taking place?

Only looking at current poverty, as most research does, is missing an important dimension of economic circumstances



# Parental mental health fluctuations

Parental mental health an important correlate of childhood mental health

We look at how changes in parental mental ill-health during childhood affect their children's mental health

→ We consider movements from good to poor mental health (and vice versa), as well as persistent mental ill-health

# Parental mental health fluctuations

## Key findings

- **Persistent** maternal mental ill-health in childhood is most detrimental to children, at both ages 5 and 11
- Effects of parental mental health on children's mental health are typically larger for **mothers** than for fathers (caveat: maternal-reports of child mental health)

Important to support parents experiencing difficulties to maintain positive relationships



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Contents lists available at [ScienceDirect](#)

## Social Science & Medicine

journal homepage: [www.elsevier.com/locate/socscimed](http://www.elsevier.com/locate/socscimed)

### Father departure and children's mental health: How does timing matter?

Emla Fitzsimons<sup>a,b</sup>, Aase Villadsen<sup>a,\*</sup>

<sup>a</sup> *UCL Institute of Education, London, UK*

<sup>b</sup> *Institute for Fiscal Studies, London, UK*

# Family breakdown

Around 20% of families experience parental separation/divorce by the time child is age 14

We look at how effects on children's internalising (emotional, peer) and externalising (hyperactivity, conduct) problems

We account for extensive range of other background factors (education, social class, ethnicity, parenting activities...), and find that family breakdown has a detrimental effect on children's mental health, and importantly - the **timing of the breakdown** and **child gender** matter

# Family breakdown

## **Breakdown in early childhood** (before age 5)

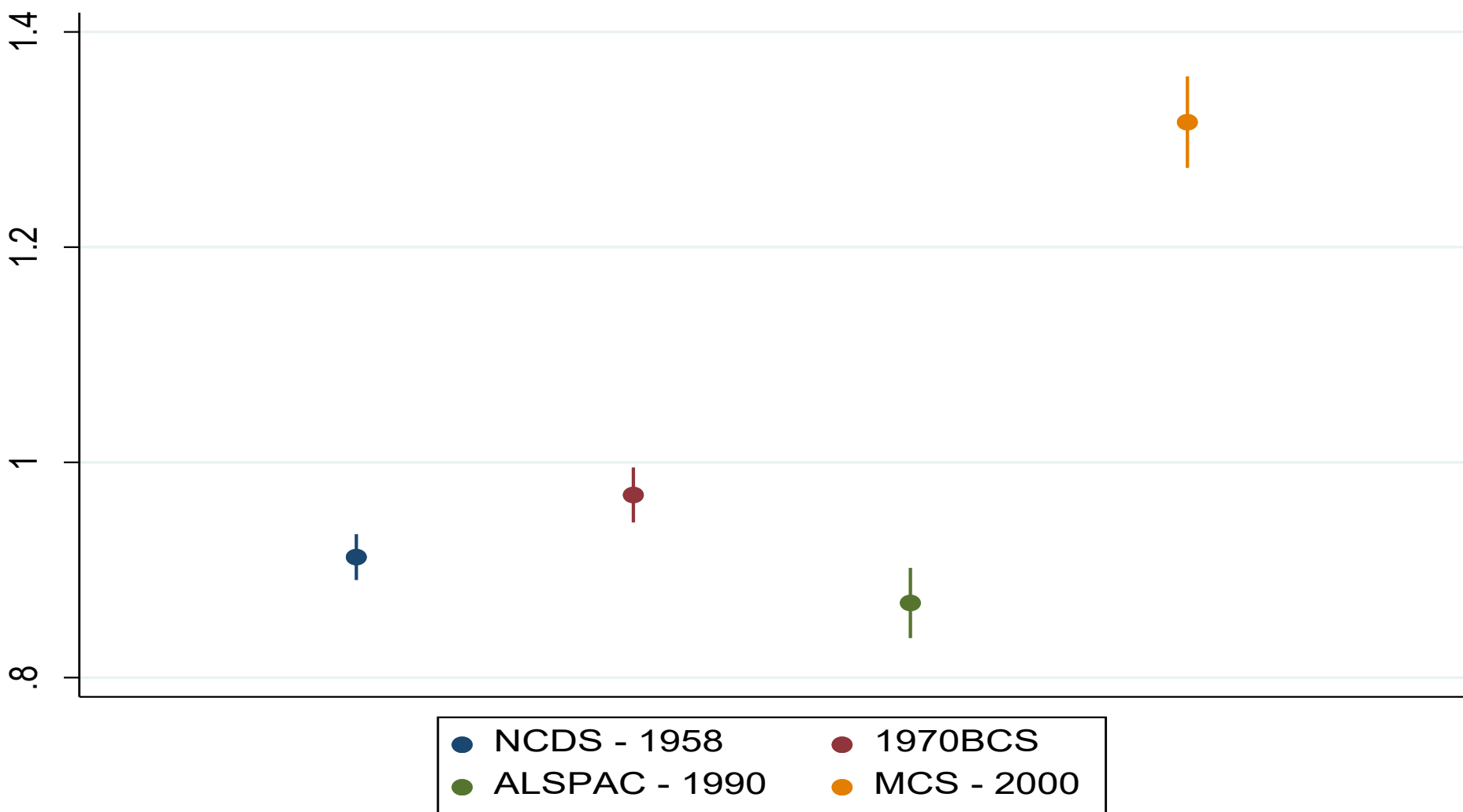
- no short- or medium-term effects on boys
- adverse effects on girls, which persist through childhood and early adolescence

## **Breakdown in mid/late childhood** (ages 7-11)

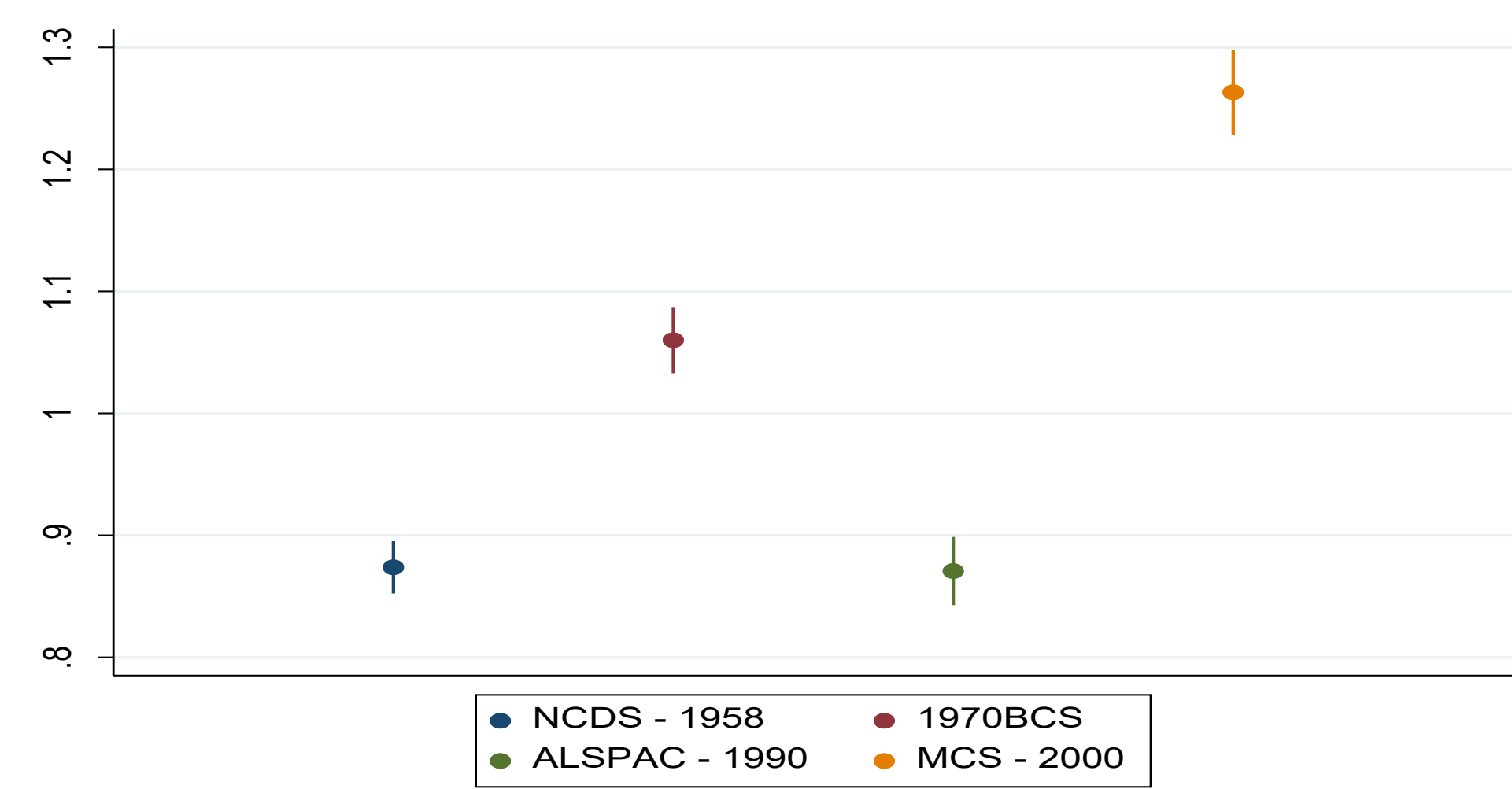
- increases in boys' internalising and externalising problems
- increases in girls' internalising problems

# Changing experiences across cohorts

# Trends across cohorts: Affective symptoms at age 14-16



# Trends across cohorts: Conduct problems at age 14-16





# COVID-19 Survey in Five National Longitudinal Studies

Aim: To understand **economic, social and health impacts of COVID-19 crisis**, the extent to which it is widening or narrowing inequalities, and **the lifelong factors** which shape vulnerability and resilience to its effects

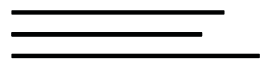
# Design

- **May 2020:** W1. Web-only
- **Sept 2020:** W2. Web-only
- **Jan 2021:** W3. Web plus telephone



August 2020

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# Mental health during lockdown: evidence from four generations

Initial findings from the *COVID-19 Survey in  
Five National Longitudinal Studies*

By Morag Henderson, Emla Fitzsimons,  
George Ploubidis, Marcus Richards and  
Praveetha Patalay

Mental health is assessed using a set of common measures across cohorts in May 2020:

## **MENTAL ILL-HEALTH**

PHQ-2 for depressive symptoms (range 0-6; score  $\geq 3$  indicates high symptoms)

GAD-2 for anxiety symptoms (range 0-6; score  $\geq 3$  indicates high symptoms)

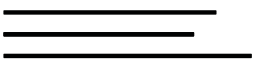
## **LONELINESS**

UCLA Loneliness 3 item scale for loneliness (range 3-9; score  $\geq 6$  indicates high loneliness)

## **WELLBEING**

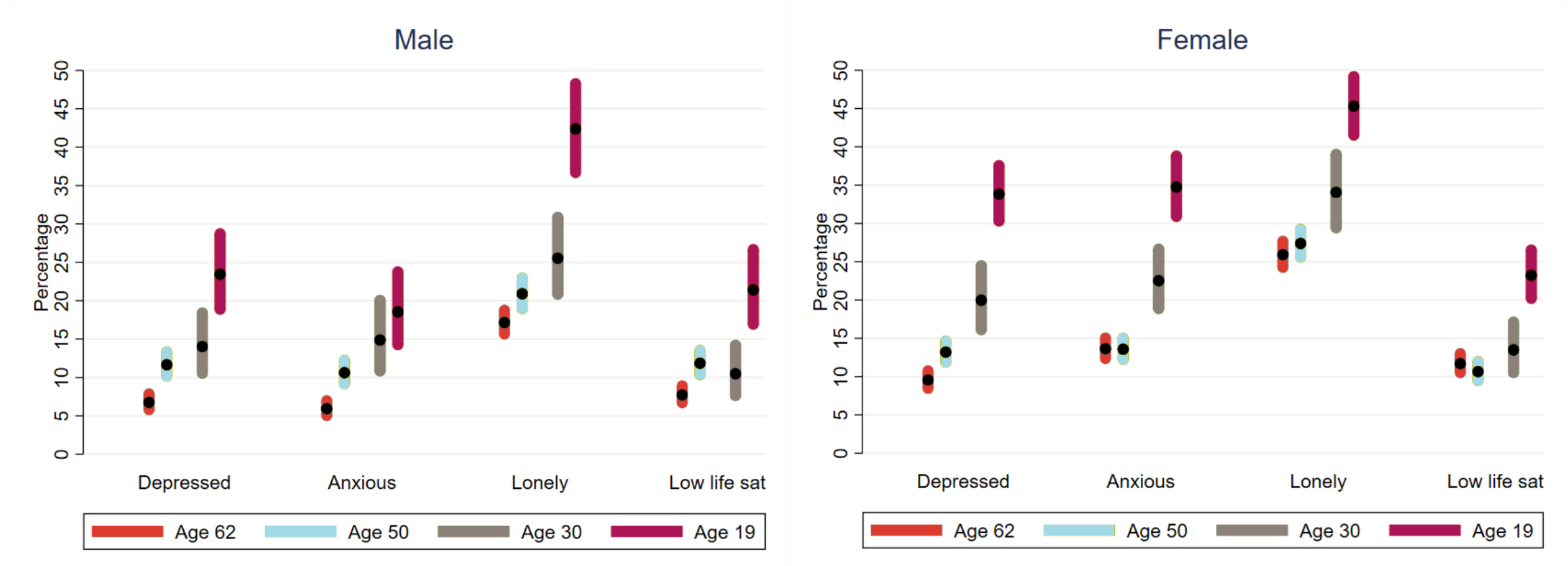
ONS life satisfaction question for life satisfaction (range 0-10; score  $\leq 4$  indicates low life satisfaction)

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# Mental health outcomes by sex

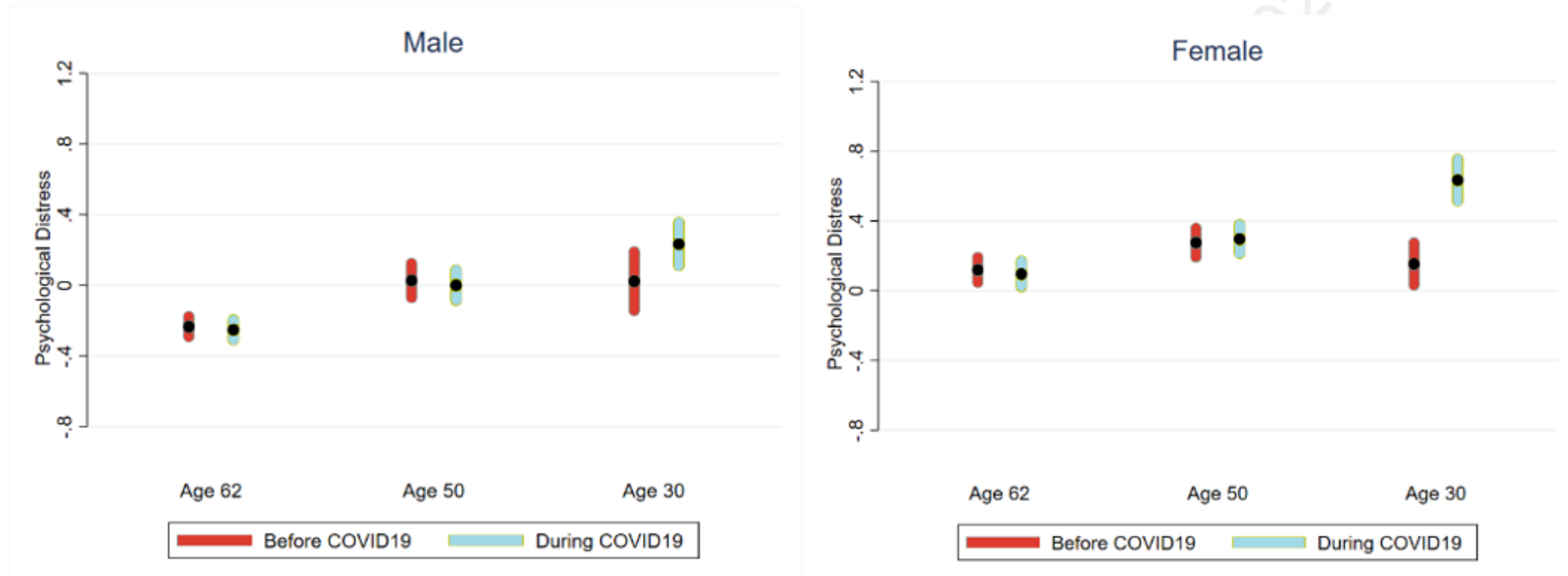
Figure 1: Prevalence of depressive symptoms, anxiety symptoms, loneliness and low life satisfaction in May 2020 in the four cohorts



Note: Proportions based on weighted survey responses; the bars (whiskers) reflect 95% confidence intervals using the Agresti-Coull method.

# Before-during

Figure 2: Psychological distress prior to and during lockdown for males and females



Note: The chart shows measures of psychological distress in each cohort, measured before and during the lockdown. The 'before COVID-19' measures were captured at 12, four and five years prior for age 62, age 50 and age 30 respectively. The age 62 and 50 cohorts both used the Malaise Inventory before and during the lockdown, and in Next Steps the GHQ-12 was used. To facilitate before-during comparisons on a common metric the mental health measures were first re-scaled (the Malaise Inventory total score was rescaled to the GHQ12 metric with linear stretching), and then were pooled, and standardised (Z-scores).

# COVID-19 Survey in Five National Longitudinal Studies

## Mental health during lockdown, selected press coverage

**The Telegraph**

Pandemic mental health: young women and millennials disproportionately affected



**INDEPENDENT**

Loneliness is public health issue linked to risk of early death, new study finds



Dr Praveetha Patalay interviewed live by Julia Hartley-Brewer



Young women are the most likely to suffer depression, anxiety and loneliness in lockdown, study shows



## What's next?

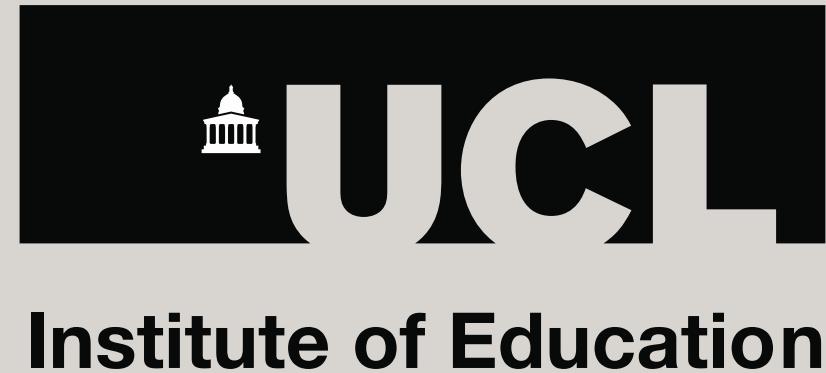
- Findings from MCS age 17 in November 2020
- Next study sweep - being planned for age 22



Thanks to our funders and host institution



And thank  
you to MCS  
cohort  
members and  
their families



Thanks for listening!

Any questions?

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