



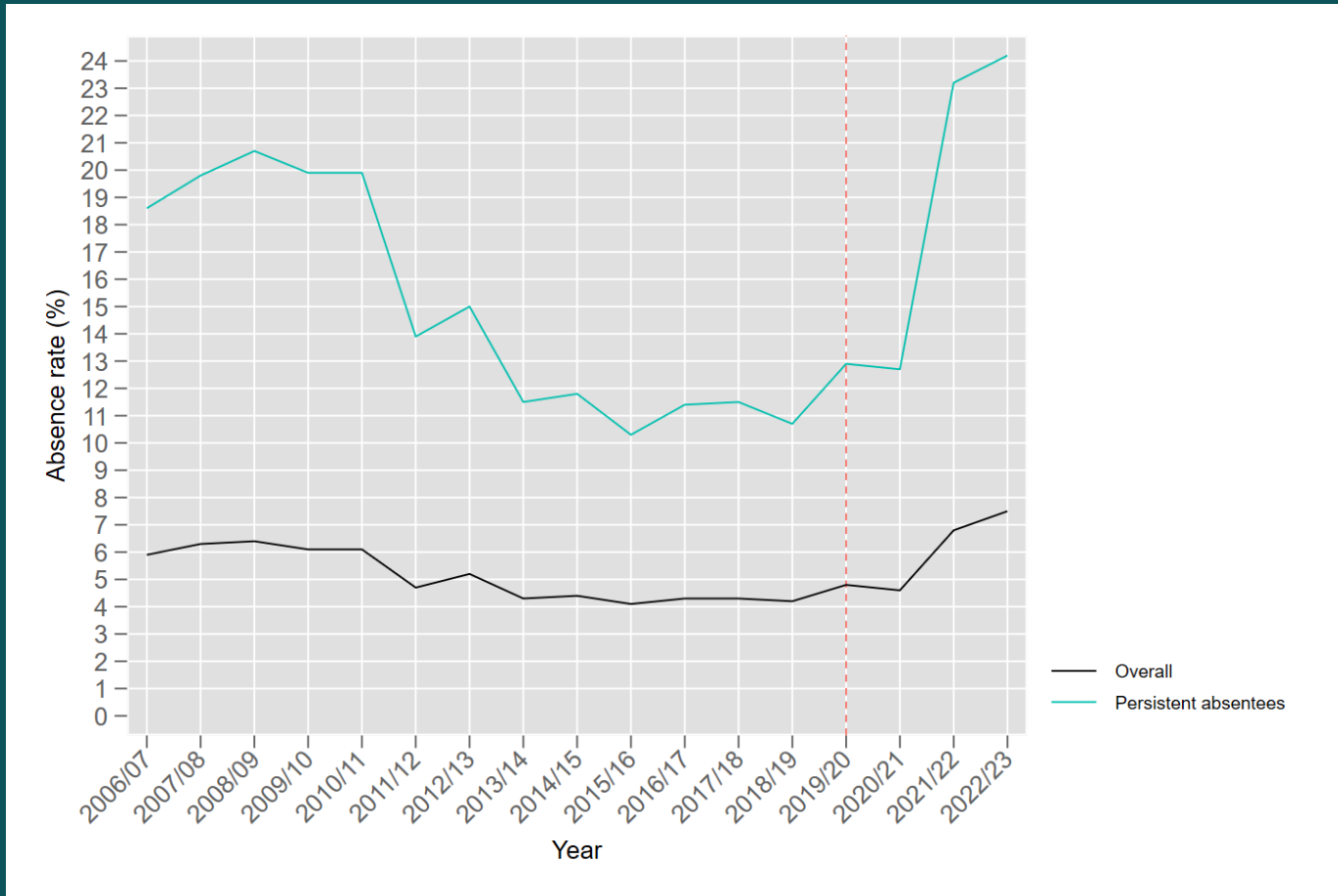
# Understanding school attendance, education, and labour market outcomes

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RAs: Dr Jascha Dräger, Ms Valentina Perinetti Casoni, & Dr Olga Rotar

# Post-pandemic absences



Source: Department for Education, Pupil absence in schools in England, Autumn term, own illustration. Note: "Persistent absentee rate" defined as missing 10 per cent or more of possible sessions

# Policy context

## More Pandemic Fallout: The Chronically Absent Student

At one middle school, more than 40 percent of the students have been chronically absent this year. Districts are going to great lengths — offering gift cards, night classes — to reach them.

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## Covid-19: Unprecedented levels of chronic absence in schools

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## Committees

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## Persistent absence and support for disadvantaged pupils

### Inquiry

The Education Committee has launched an inquiry into persistent absence and support for disadvantaged pupils.

This inquiry will focus on the issue of persistent and severe absence in schools, with a focus on supporting disadvantaged pupils. The inquiry aims to examine the issue of persistent and severe absence and the factors causing it and to assess the likely impact and effectiveness of the Department's proposed reforms on attendance. The inquiry will also assess the impact of interventions such as breakfast clubs, free school meals, holiday clubs, and after school clubs on improving attendance for disadvantaged pupils, and will develop recommendations as to how attendance can be improved, particularly for disadvantaged pupils.

Read the [call for evidence](#) for more detail about the inquiry. You can submit evidence until 23:59 on Thursday 9 February 2023. Your submission should be no more than 3000 words.

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News story

## Government to tackle post pandemic absence rates with new support

Successful attendance programmes expanded by Government to get more children into school.

From: [Department for Education](#) and [The Rt Hon Nick Gibb MP](#)  
Published 18 May 2023



# Research Aims

## 1. Long-term effects

Impact of pupil absences on educational attainment and labour market outcomes in mid-adulthood

## 2. Absence Dynamics

Role of absence dynamics for attainment

- a) Timing
- b) Trajectory
- c) Reason – authorised vs unauthorised

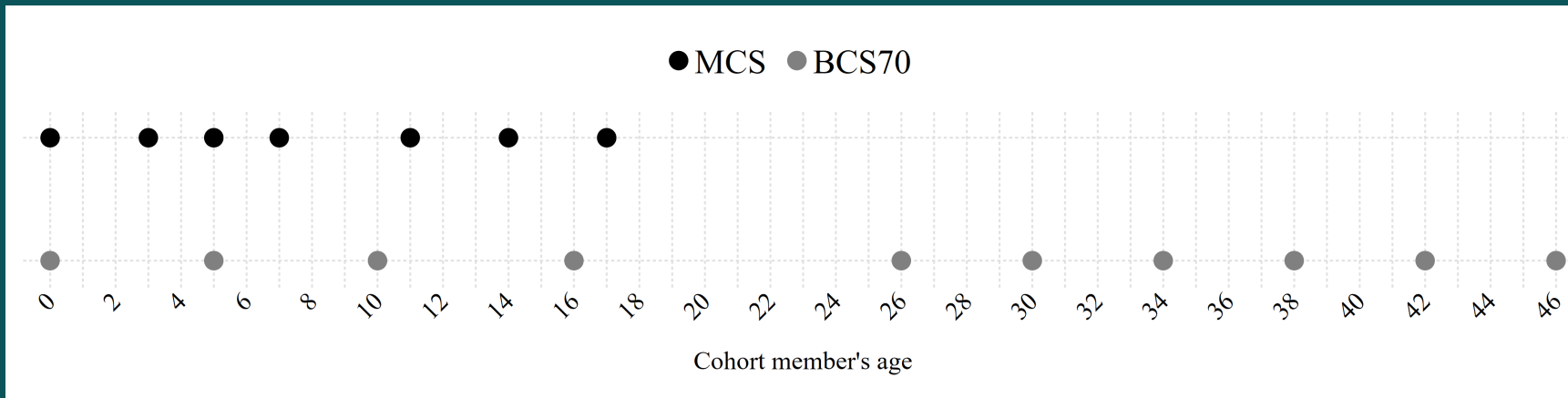
## 3. Psychosocial factors

Role of psychosocial factors in explaining the link between absences and attainment (e.g. problem behaviours, educational motivation)

## 4. Impact heterogeneity

Does the impact of absences on attainment vary across sociodemographic groups (e.g., family SES, SEND)?

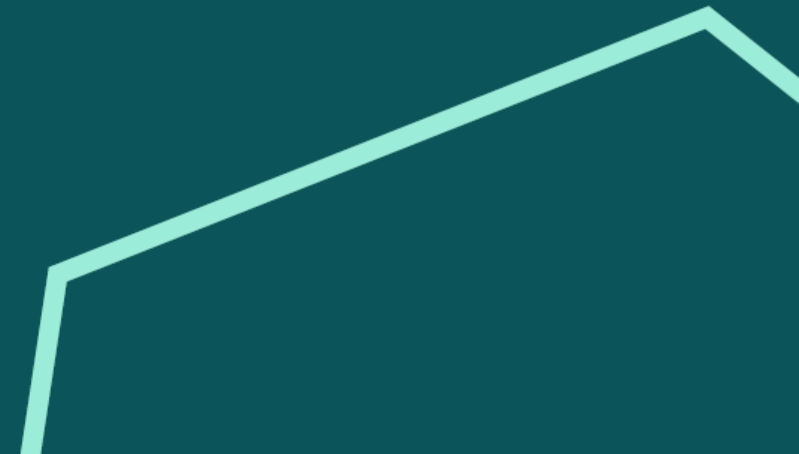
# Data



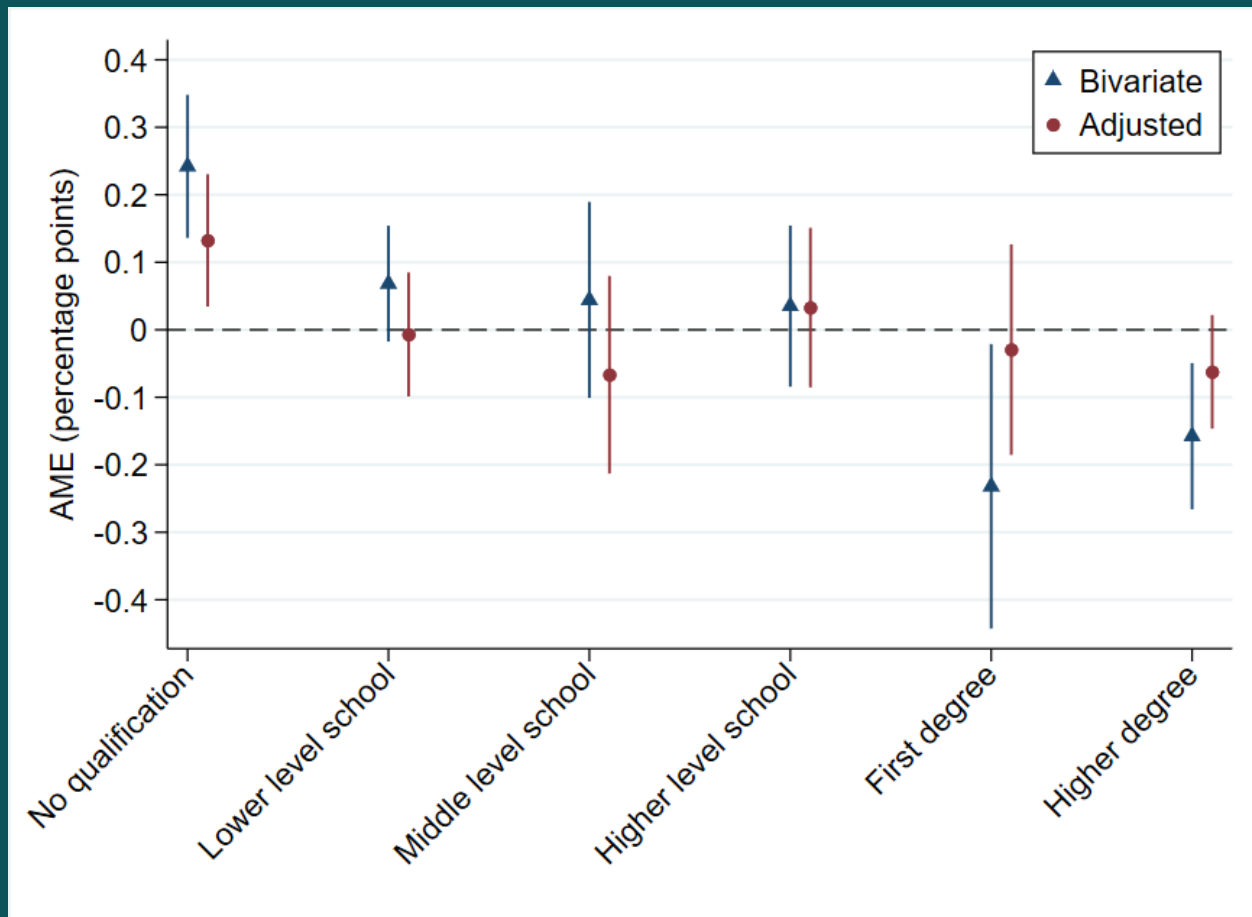
- British Cohort Study 1970 (BCS70)
- Millennium Cohort Study (MCS) + linked National Pupil Database for England (via UK Data Service)
- MCS + Welsh administrative school data (via SAIL Databank)

# Long-term effects

- Absences disrupt skill formation process: “skills beget skills”  
→ Lack of skills needed to succeed in education and the labour market long-term



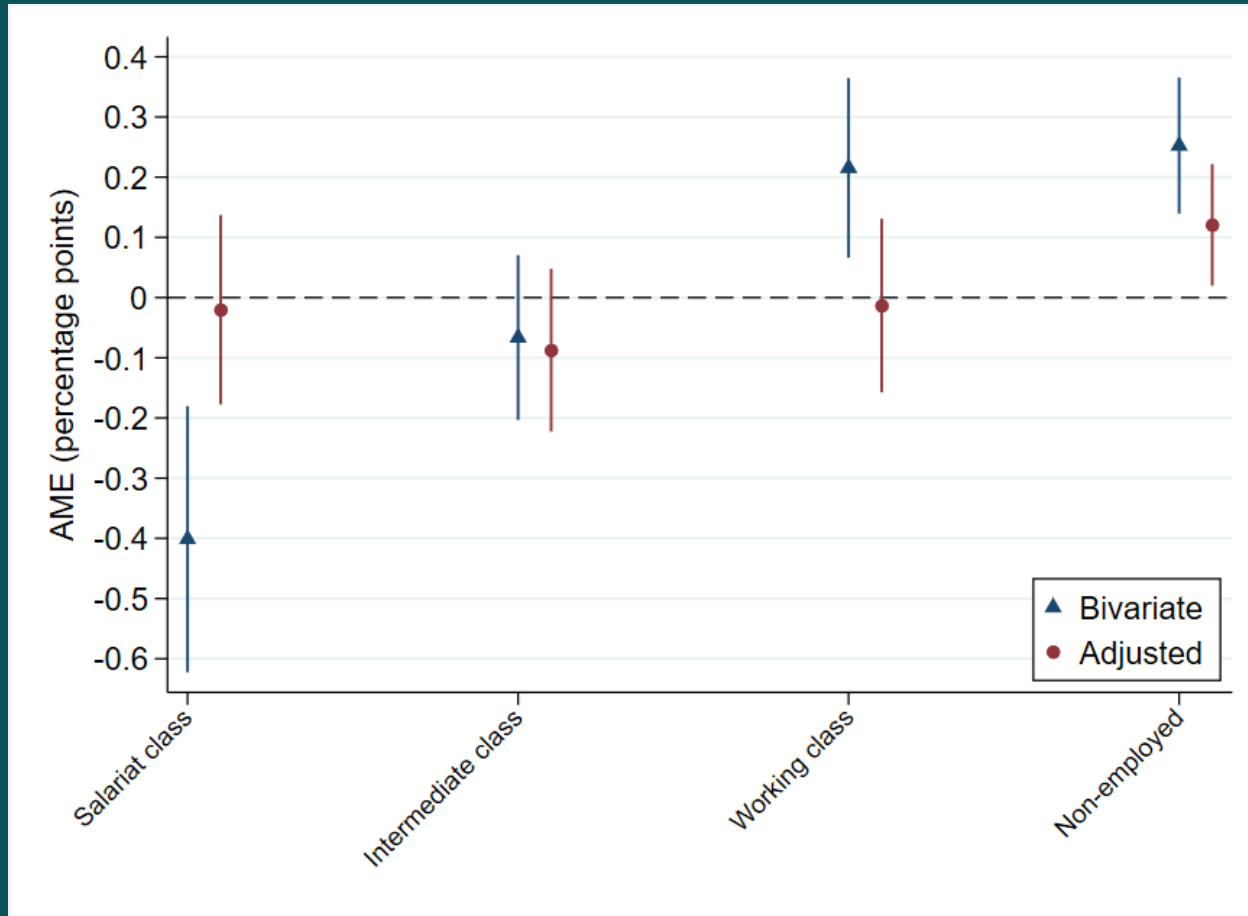
# Absences and educational attainment



**Key Finding:**  
Missing five days of school at age 10 is associated with a 0.66 percentage point increased likelihood of having no qualifications at age 42

Source: British Cohort Study 1970. Note: N=8,535. Multiple imputed and weighted to correct for attrition. Vertical lines indicate the 95 per cent intervals. AMEs derived after multinomial logistic regression/

# Absences and employment

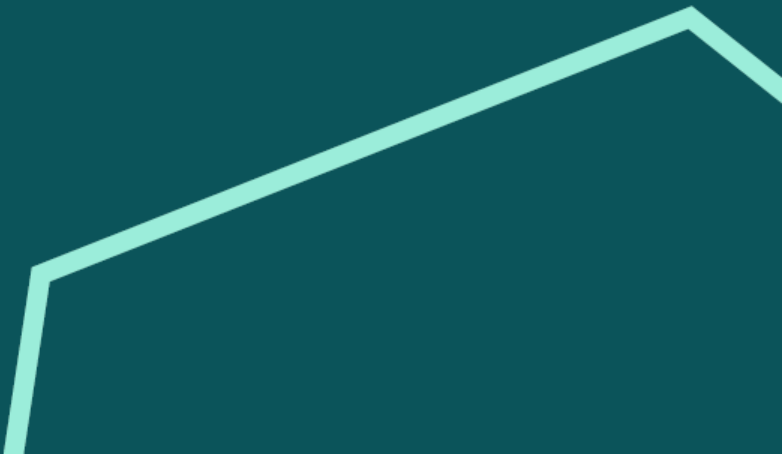


**Key Finding:**  
Missing five days of school at age 10 is associated with a 0.6 percentage point increase in the likelihood of being predominantly out of the labour force between the ages of 30 and 42.

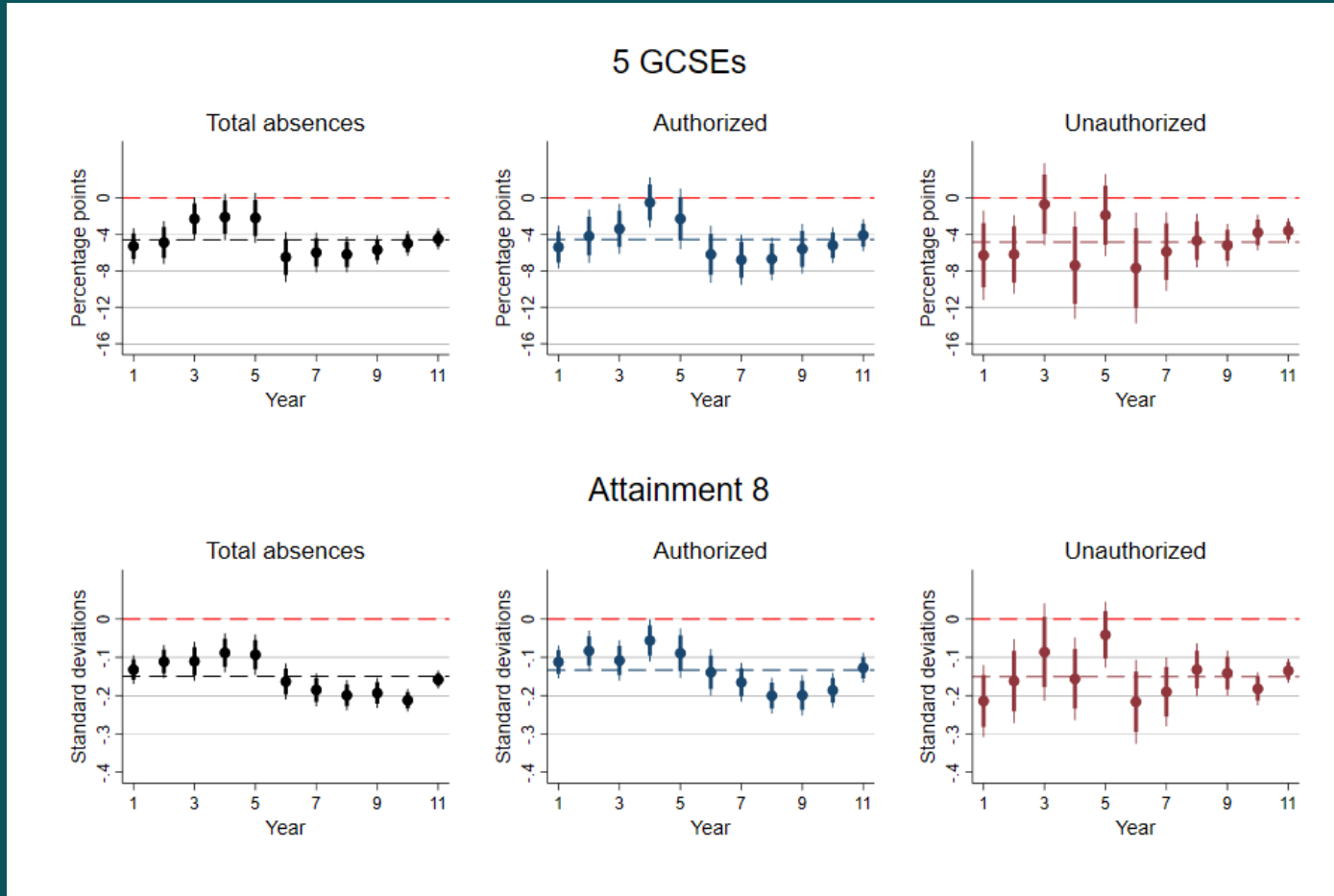
Source: British Cohort Study 1970. Note N=9,012. Multiple imputed and weighted to correct for attrition. Vertical lines indicate the 95 per cent intervals. AMEs derived after multinomial logistic regression



# Absence dynamics

- Early absences more harmful?
    - Missing out on foundational learning
  - Later absences more harmful?
    - Missing out on recent exposure to examined content
  - Absences more harmful during school transition
    - Changes in friendships, teachers, pedagogical approaches, curriculum, etc
  - Trajectories also account for cumulative impact of absences
  - Dynamics intertwined with absence reason → unauthorised absences more common over time
- 

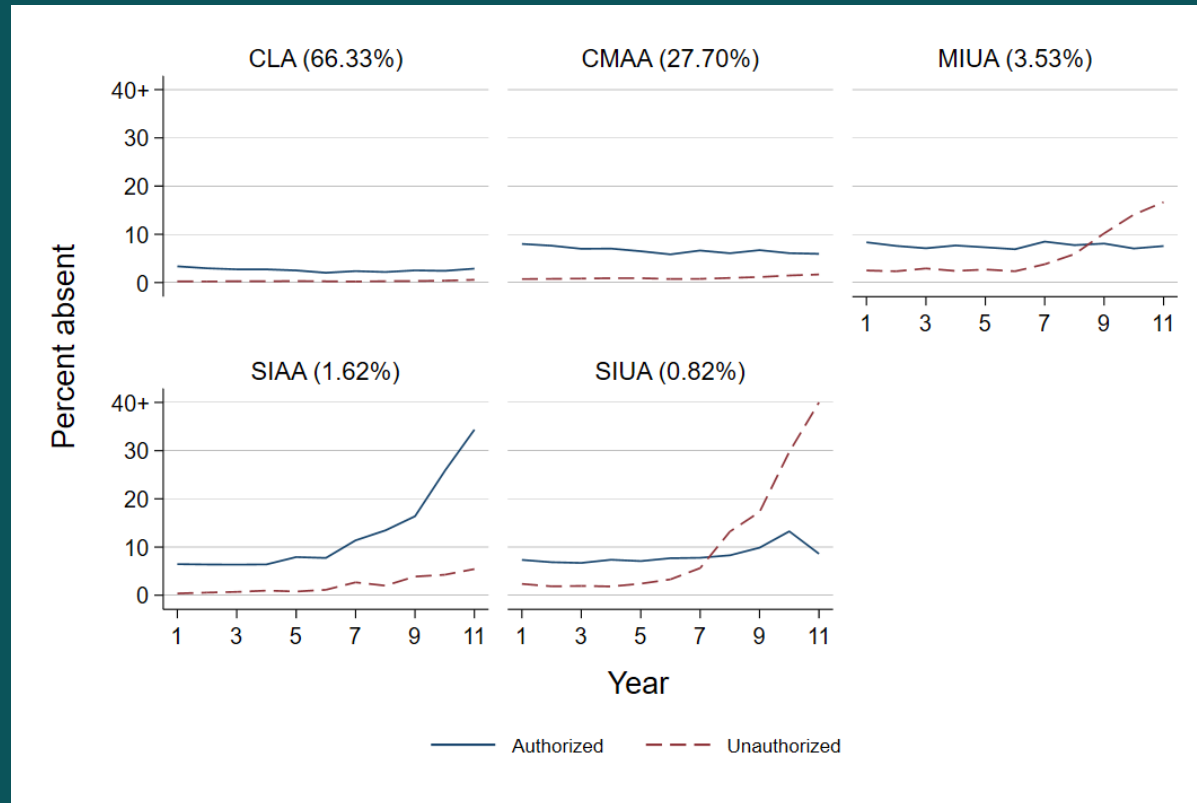
# Timing of absences and attainment



**Key Finding:**  
School absences are harmful to achievement in all years but are most detrimental in years 6-10.

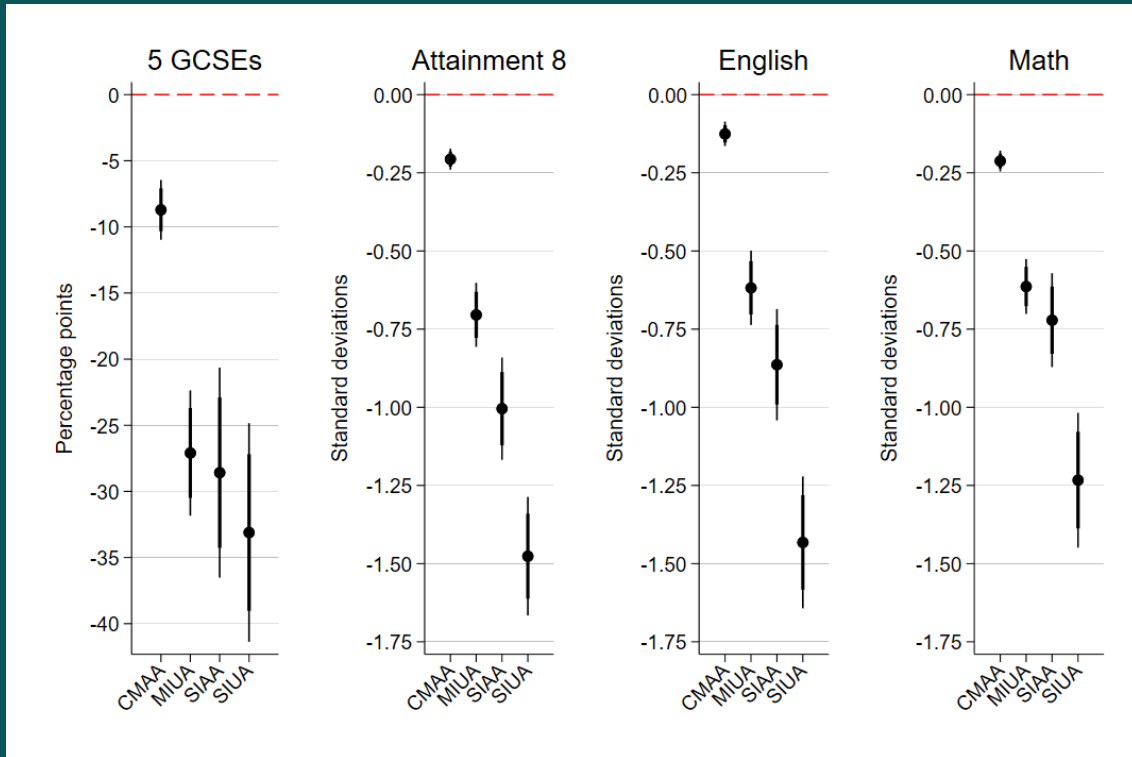
Source: Linked MCS-NPD data. N=8,139. Multiple Imputed and weighted. Note: Effects shown for 10 percentage point increases in absences and adjusted by confounders. Black dots: effects of total absences, blue dots: effects of authorized absences, red dots: effects of unauthorized absences

# Typical absence trajectories



Source: Linked MCS-NPD data, N=7,218, weighted. CLA=Consistently Low Absence, CMAA=Consistently Moderate Authorised Absences, MIUA=Moderately Increasing Unauthorised Absences, SIAA=Strongly Increasing Authorised Absences, SIUA=Strongly Increasing Unauthorised Absences. Mean absences above 40% are truncated.

# Absence trajectories and attainment

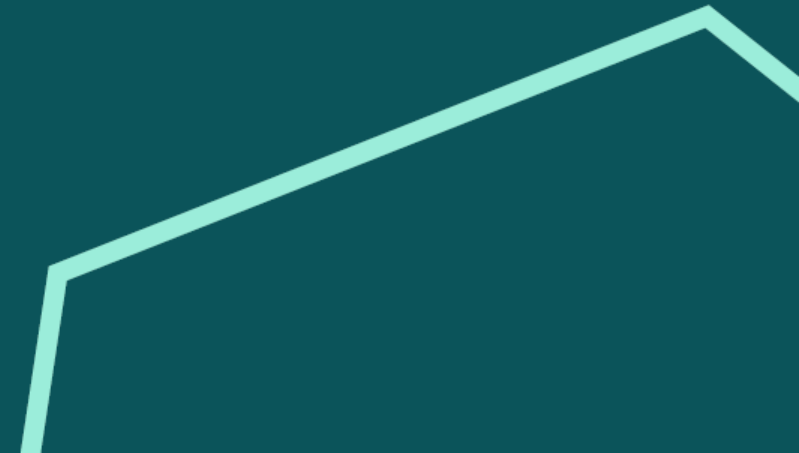


**Key Finding:**  
Increasing absence trajectories hugely detrimental, but consistently moderate absences also harm achievement

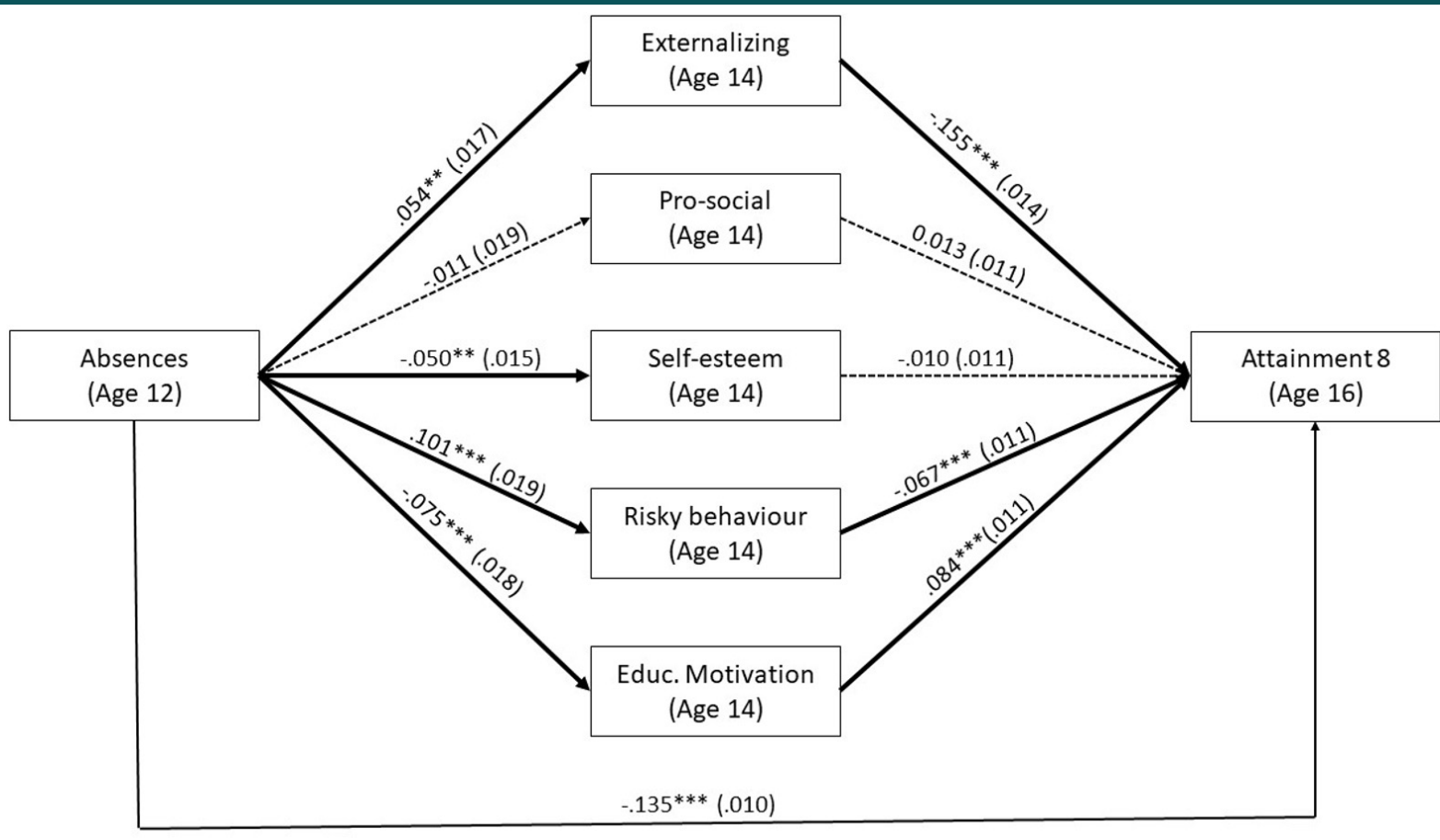
Source: Linked MCS-NPD data, N=7,218, multiply imputed and weighted. Reference category: Consistently Low Absence (CLA). CMAA=Consistently Moderate Authorised Absences, MIUA=Moderately Increasing Unauthorised Absences, SIAA=Strongly Increasing Authorised Absences, SIUA=Strongly Increasing Unauthorised Absences. Thick vertical lines indicate the 84%-Confidence Interval, and thin vertical lines the 95%-Confidence Interval.

# Psychosocial factors

- Learning loss is assumed to be the main reason for a negative impact of absences on attainment
- Absences may adversely impact children's psychosocial development
  - Increase in externalizing and risky behaviour
  - Decline in educational motivation, self-esteem and pro-social behaviour
- These psychosocial factors in turn affect children's attainment



# Psychosocial factors



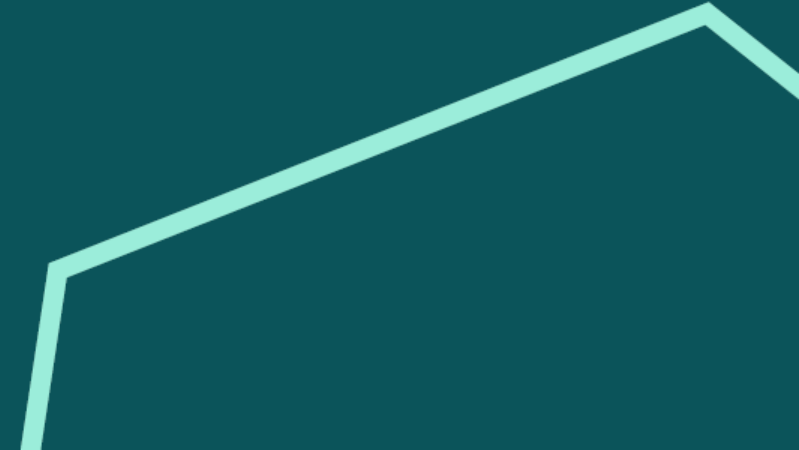
**Key Finding:**  
Absences harm achievement not only through learning loss but also through increasing problem behaviour and reduced educational motivation

Source. Linked MCS-NPD data for England, N=7,204. Note: Weighted. Full Information Maximum Likelihood (FIML) for missing data. Standardised path coefficients shown.

\*\*\*  $p < .001$ ; \*\*  $p < .01$ ; \*  $p < .05$ . Solid lines indicate  $p < .05$ ; dashed lines indicate  $p > .05$ .

# Impact heterogeneity

- Are absences more or less harmful based on children's characteristics and family circumstances (socioeconomic status, gender, ethnicity, SEND)?
- Key Findings
  - Absences are detrimental to attainment among all sociodemographic groups
  - No evidence for a double disadvantage: groups that are more likely to be absent are not more affected by absences in their attainment.



# Implications: Long-term effects

1

Need for targeted **attendance interventions** that address underlying causes to reduce future inequalities

2

School policies that prioritise helping pupils **recover lost learning** when they miss school

3

Opportunities for **lifelong learning** so that chronically absent pupils develop the skills needed to succeed in the labour market.



# Implications: Absence dynamics

1

Policies and interventions should address **all forms and levels of absence**, not just pupils with persistent or unauthorised absences

2

**Early identification** of students at greater risk of absences to allow for timely intervention and support → requires data literacy and support systems in schools

3

Interventions to reduce absences are relevant at all stages, but particularly during the **transition period** from primary to secondary school

# Implications: psychosocial/heterogeneity

1

Interventions should help pupils to engage with missed content and experience success after students return to school  
→ **maintain pupil motivation**

2

Interventions aimed at **addressing problem and risky behaviour** have the potential to reduce the negative impact of school absences

3

Given the pervasive negative impact of absences among all groups, it is essential to address school absenteeism and mitigate its effects on a **national scale**

Thank you for your attention!

- Special thanks to members of our research advisory group

More information about our project on  
<https://schoolattendance.org/>



**Nuffield Foundation**

# Publications

## Academic articles:

- Dräger, J., Klein, M. & Sosu, E. (2024). The long-term consequences of early school absences for educational attainment and labour market outcomes. *British Educational Research Journal*, 00, 1–19. <https://doi.org/10.1002/berj.3992>
- 
- Dräger, J., Klein, M., & Sosu, E. (2024). Does the impact of pupil absences on achievement depend on their timing? <https://doi.org/10.35542/osf.io/nwzqh>
- 
- Dräger, J., Klein, M., & Sosu, E. (2023). School absence trajectories and their consequences for achievement. <https://doi.org/10.35542/osf.io/ch4jq>. Accepted for publication in Plos One

## Policy brief:

- Dräger, J., Klein, M., & Sosu, E. (2023). Trajectories of school absences and pupils' academic performance. University of Strathclyde. <https://doi.org/10.17868/strath.00086856>

Forthcoming: Main Public Output in early September

