

# School absenteeism and the poverty-related attainment gap

Part I: Family socioeconomic status and school absenteeism

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30 March 2022, Webinar - Part I

1. ESRC project
2. Family SES and school absenteeism
3. Implications

ESRC project

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# Project details

- **Title:** Family background and educational attainment: An investigation into the mediating role of school absenteeism
- **Funder:** Economic and Social Research Council Secondary Data Analysis Initiative (ESRC SDAI)
- **Period:** September 2018 - March 2023 (several no-cost extensions due to Covid-19)
- **Team:** Markus Klein (PI), Edward Sosu (Co-I) and Esme Lillywhite (research assistant)
  - Former team members: Shadrach Dare (University of Dundee), Claire Goodfellow (University of Glasgow)
- **Non-academic partners:** General Teaching Council Scotland (GTCS) and Poverty Alliance

- Peer-reviewed journal articles

- Klein, M., Sosu, E. M., Dare, S. (2020). Mapping inequalities in school attendance: The relationship between dimensions of socioeconomic status and forms of school absence. *Children and Youth Services Review*, 118, 105432.
- Sosu, E. M., Dare, S., Goodfellow, C., Klein, M. (2021). Socioeconomic status and school absenteeism: A systematic review and narrative synthesis. *Review of Education* 9(3), e3291.
- Klein, M., Sosu, E. M., Dare, S. (2022). School absenteeism and academic achievement: does the reason for absence matter? *AERA Open*, 8, 23328584211071115.

- Research briefs

- Klein, M., Goodfellow, C., Dare, S., Sosu, E. (2020). Socioeconomic Inequalities in School Attendance in Scotland. University of Strathclyde
- Sosu, E. M., Klein, M. (2021). Socioeconomic disparities in school absenteeism after the first wave of COVID-19 school closures in Scotland. University of Strathclyde

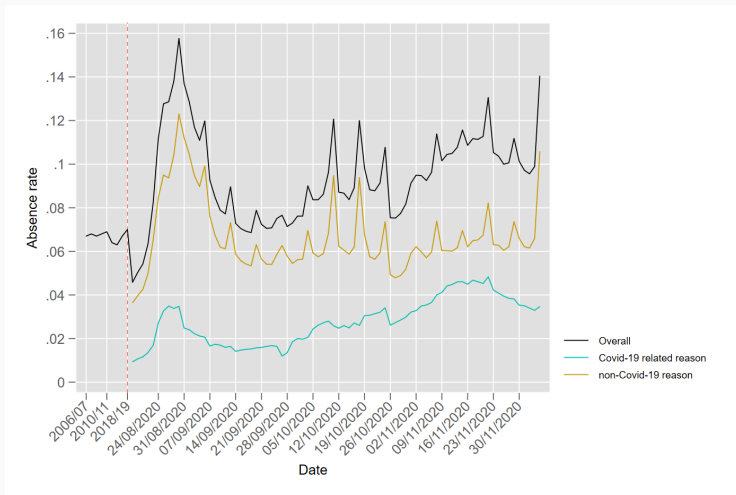
- Work in progress

- Sosu, E. M., Klein, M., Dare, S. School attendance and academic achievement: Understanding variation across family socioeconomic status. *Under review*
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# School absenteeism in Scotland

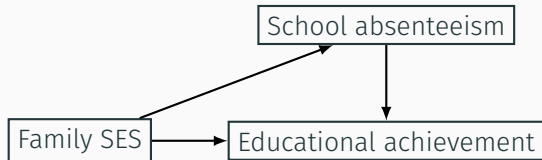
- Proportion of half days lost due to unexplained absences from school, including truancy, has risen from **0.7 per cent** in 2005-06 to **1.7 per cent** in 2018-19
- Unauthorised holidays hit highest level in 2018-19, with proportion of half days lost due to unauthorised holidays rising from **0.4 per cent** in 2005-06 to **0.7 per cent**.
- In 2018/19, students from **SIMD 1 (most deprived)** were absent **9.6 per cent** of half days; students from **SIMD 5 (least deprived)** were absent only **4.7 per cent** of half days

# Covid-19 and school absenteeism



Source: Scottish Government's national daily school attendance records after the first lockdown, own calculations

# Our overall question





# What We Know and Gaps

- **What We Know**

- SES gaps in achievement
- SES differences in absenteeism
- Absenteeism associated with achievement

- **Gaps**

- Studies mostly from US context
- Multidimensionality of SES and absences not considered
  - Focus on free- or reduced-price lunch (e.g., Morrissey et al., 2014)
  - Focus on overall, authorised and unauthorised absences (e.g., Gottfried, 2009)
  - More precise reasons inform us about potential mechanisms
- To what extent absenteeism explains SES-achievement gaps

# Data: Scottish Longitudinal Study (SLS)

- Large-scale, anonymised linkage study using data from current Scottish administrative and statistical sources:
  - **Census data** (1991, 2001, 2011)
  - Vital events data (births, deaths, marriages, etc.)
  - NHS central register (migration into and out of Scotland)
  - **School education data** (school census, attendance and exclusion, SQA, 2007-2010, 2011-2013)
  - Pollution and weather data
- Designed to capture 5.5 per cent of the Scottish population
- Sample selected using 20 semi-random birthdates
- NHS health data (e.g., maternity and birth records) can be linked but are not part of the core SLS database

# Our SLS sample

Table 1. Structure of School Census Data by cohort

STAGE COHORT	-2	-1	0	1	2	3	4	5	6	7	8	9	10	11	12	13
2007 School Census				p1	p2	p3	p4	p5	p6	p7	s1	s2	s3			
2007 Exam results expected																
2008 School Census			p1	p2	p3	p4	p5	p6	p7	s1	s2	s3	s4	s5	s6	
2008 Exam results expected																
2009 School Census			p1	p2	p3	p4	p5	p6	p7	s1	s2	s3	s4	s5	s6	
2009 Exam results expected																
2010 School Census	p1	p2	p3	p4	p5	p6	p7	s1	s2	s3	s4	s5	s6			
2010 Exam results expected																
<b>Number of pupils</b>	cohort -2	cohort -1	cohort 0	cohort 1	cohort 2	cohort 3	cohort 4	cohort 5	cohort 6	cohort 7	cohort 8	cohort 9	cohort 10	cohort 11	cohort 12	cohort 13
<b>All</b>	3005	2878	2903	3020	2994	3001	2919	3050	3226	3206	3412	3261	3376	3367	2582	1535

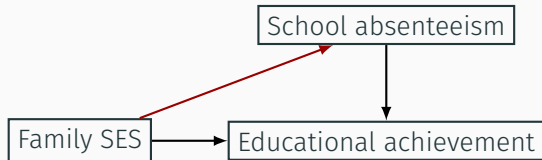
Source: Raab (2013)

- SLS sample: two student cohorts in S4 in 2007 and 2008 who were followed into S5 and S6 (cohorts 10 and 11 in the figure).
- Analytic sample:
  - Presence during Census 2001 and 2011 (for analysis on post-school destinations)
  - Mother and/or father identified from household information
  - SQA achievement records available (for analysis on educational achievement)

## Family SES and school absenteeism

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- Peer-reviewed journal articles
  - Klein, M., Sosu, E. M., Dare, S. (2020). Mapping inequalities in school attendance: The relationship between dimensions of socioeconomic status and forms of school absence. *Children and Youth Services Review*, 118, 105432.
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# Systematic review: SES and school absenteeism

- **Main findings**
  - Majority of studies found negative association between SES and school absences, albeit with small effect sizes
  - Greater evidence for a link between absenteeism and SES at the family than school level
  - Financial resources (e.g., free or reduced-price lunch) more strongly associated with absences than sociocultural resources (e.g., parental education)
  -
- **Identified gaps**
  - Only five out of 55 high-income country studies were based on non-US contexts
  - Free or reduced-price lunch most widely used SES dimension; only very few studies examined more than one SES dimension
  - Research investigating why SES is associated with absenteeism is sparse

# Research Questions

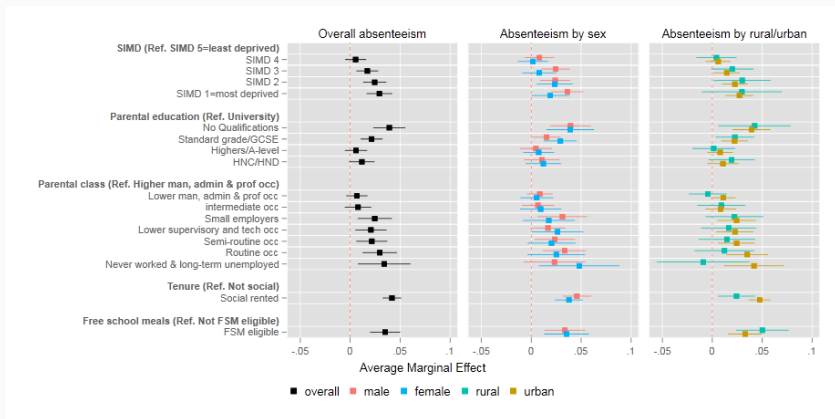
- **RQ1:** Are there socioeconomic inequalities in school absences in Scotland?
- **RQ2:** Do inequalities differ by the SES dimension (FSM registration, parental class, parental education, neighbourhood deprivation, housing status)?
- **RQ3:** Does the association between SES and absences differ across the reason for absence (truancy, sickness absence, family holidays, temporary exclusion)?
- **RQ4:** Do these associations vary by pupil sex and place of residence (urban vs. rural)?



# Measures of school absences

- Schools in Scotland report specific reasons for absences following guidelines set by the government (Scottish Government, 2007)
  - Authorised reason: parents contact school and provide reasons for why child is not at school
  - Otherwise it is assumed that child is truanting until an explanation is provided
- Overall absences, truancy and sickness absences are measured as the proportion of half days a child was absent in S4
- Family holidays and temporary exclusion measured whether pupils missed school at least once due to these reasons in S4

# SES dimensions and school absenteeism



Source: Scottish Longitudinal Study (n=4,620), own calculations. Note: ; Estimates (with 95 and 90 per cent confidence intervals) refer to Average Marginal Effects derived from fractional logit models. Control variables: ethnicity, child's age, mother's age at birth, pupil cohort

# Key Points

- Findings confirm previous studies in other contexts, mainly the US: Socioeconomic background is a significant predictor of being absent from school.
- Unique finding: all SES dimensions increased the risk of absenteeism from school.
- Multiple SES dimensions were associated with specific forms of absenteeism (sickness absence, truancy, temporary exclusion), except for family holidays
- Pupils from socially rented households, and households with no qualifications are the most likely to be absent and are consistently associated with specific forms of absenteeism
- The association between SES and absenteeism did not vary across pupil sex or place of residence

# Covid-19 and socioeconomic disparities in absenteeism



Source: Scottish Government's national daily school attendance records after the first lockdown, own calculations

# Key points

- Socioeconomic inequalities in learning increased not only during Covid-19 school closures but continued to increase after children returned to school
- We need greater monitoring and evaluation of
  - trends in inequalities in learning and achievement, especially after the Covid-19 school closures
  - policy interventions designed to mitigate the consequences of Covid-19 on achievement gaps.

# Implications

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# Implications

- School absenteeism likely mechanism for socioeconomic inequalities in educational attainment and life course outcomes
- Targeted interventions are needed to reduce school absences among children from lower socioeconomic backgrounds
- Improving families' socioeconomic conditions should be a key component of interventions to increase school attendance

# Implications

- Need for designing interventions tailored to subgroups and targeting specific socioeconomic risk indicators – personalised and whole school
- Making decisions on education policy solely based on one SES measure(e.g., SIMD) may miss many children from disadvantaged backgrounds



# Disclaimer

The help provided by staff of the Longitudinal Studies Centre – Scotland (LSCS) is acknowledged.

The LSCS is supported by the ESRC/JISC, the Scottish Funding Council, the Chief Scientist's Office and the Scottish Government. The authors alone are responsible for the interpretation of the data. Census output is Crown copyright and is reproduced with the permission of the Controller of HMSO and the Queen's Printer for Scotland.

For more information on the SLS, please visit: <http://sls.lscs.ac.uk>

## References

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- Morrissey, T. W., Hutchison, L., and Winsler, A. (2014). Family income, school attendance, and academic achievement in elementary school. *Developmental Psychology*, 50(3):741–753.
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Thank you!