

Determinants and consequences of school absenteeism

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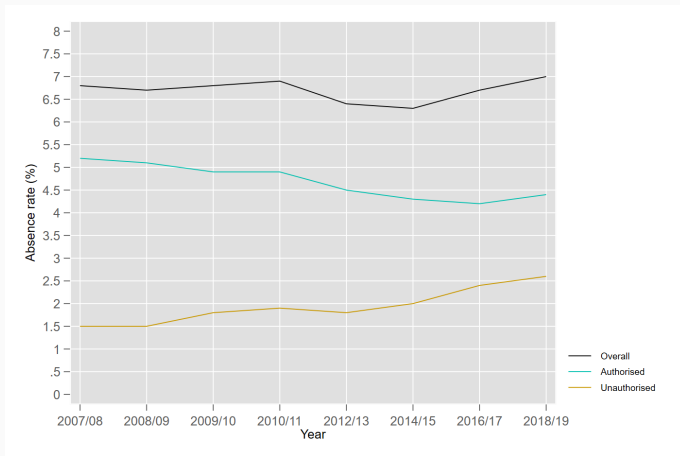
27 March 2023, The Attendance Symposium

Outline

1. Trends in school absence rates
2. Determinants of school absenteeism
3. Short-term consequences of school absenteeism
4. Longer-term consequences of school absenteeism
5. Attendance interventions

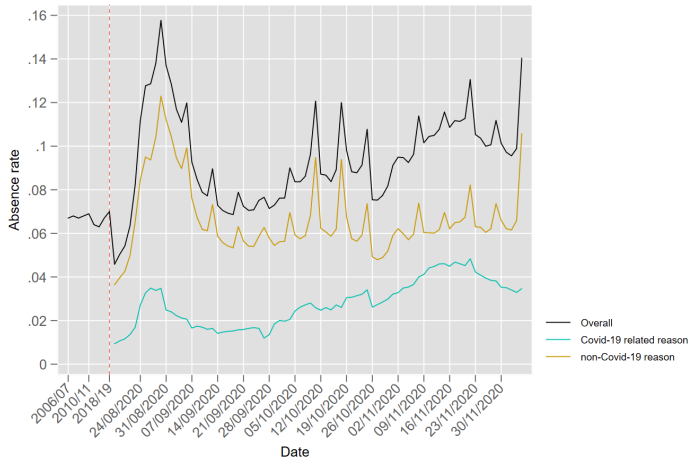
Trends in school absence rates

Pre-pandemic school absenteeism in Scotland



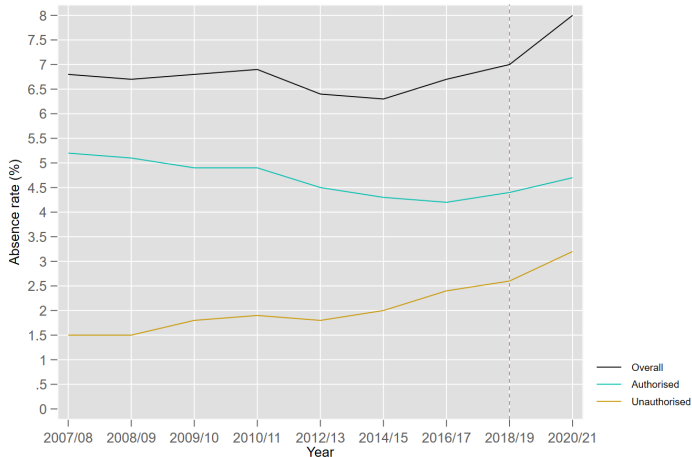
Source: Scottish Government's summary statistics on schools in Scotland. Note: Data refer to state-funded primary and secondary schools.

Covid-19 and school absenteeism in Scotland



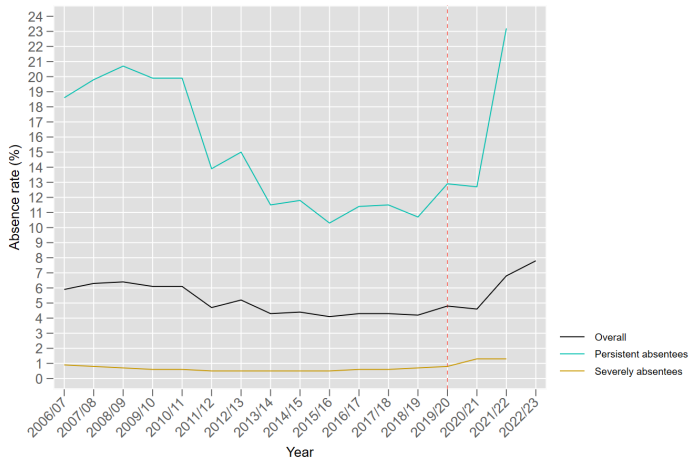
Source: Scottish Government's national daily school attendance records after the first lockdown, own calculations. Note: Data refer to state-funded primary and secondary schools.

Trends in school absenteeism in Scotland



Source: Scottish Government's summary statistics on schools in Scotland; Note: Data refer to state-funded primary and secondary schools. For 2020/21 data refer to 'Attendance or absence – schools open' including attendance or absence only for the occasions when schools were open to pupils.

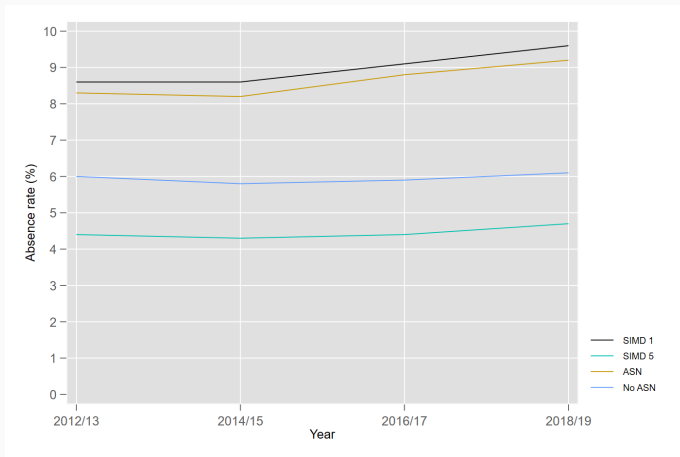
Trends in school absenteeism in England



Source: Department for Education, Pupil absence in schools in England: Autumn term 2020/21, 26 May 2022; Department for Education, Pupil attendance in schools, 12 January 2023. Note: 2022/23 overall absence rate is a DfE estimate; Covid-related absences not included in overall; "Persistent absentee rate" defined as missing 10 per cent or more of possible sessions; "Severely absentee rate" defined as missing 50 per cent or more of possible sessions

Determinants of school absenteeism

What we know from official statistics



Source: Scottish Government's summary statistics on schools in Scotland. Note: Data refer to state-funded primary and secondary schools.

Meta-analysis on risk factors (Gubbels et al., 2019)

- 75 studies reporting 781 potential risk factors for school absenteeism
- 28 risk domains identified (16 child-related, 9 family-related, and 3 school-related)
- Provides important knowledge on adequate prevention
- Summary of evidence based on more than 5 studies

Identified risk domains (Gubbels et al., 2019)

- **Child school problems**
 - Negative school attitude
 - Low educational achievement
- **Child physical and mental health**
 - Poor physical health
 - Mental health problems (e.g., anxiety, depression)
- **Child behaviour problems**
 - Risky behaviour
 - Substance abuse (alcohol, drugs, smoking)

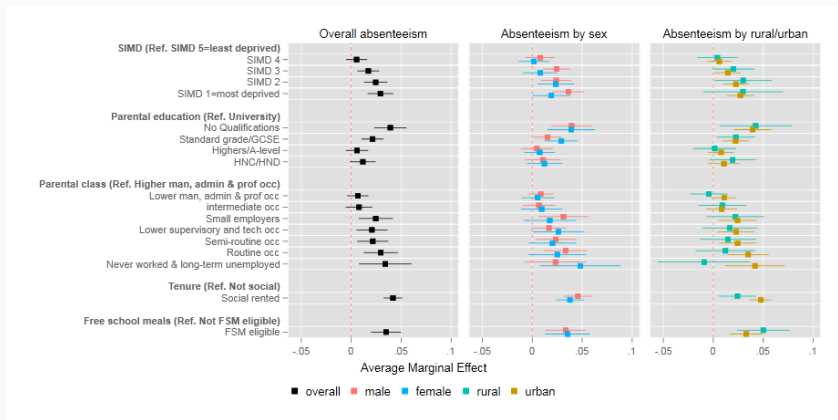
Identified risk domains (Gubbels et al., 2019)

- Other child characteristics
 - Age (being older)
- Family circumstances
 - Low SES
 - Single-parent household
 - Low parental control
 - Low family cohesion
- School factors
 - Poor pupil-teacher relationship
 - Low quality of school or education (e.g., low achievement standards at school)
 - Negative school or class climate (e.g., low levels of school spirit)

- **Main findings**
 - Negative association between SES and school absences in majority of studies
 - Greater evidence for link between absenteeism and SES at family than school level
 - Free or reduced-price lunch (FRPL) more strongly associated with absences than parental education or class
- **Identified gaps**
 - 50 of 55 high-income country studies based on US context
 - FRPL most widely used SES dimension; very few studies examined more than one SES dimension
 - Research on mechanism is sparse

- **Data:** Scottish Longitudinal Study (SLS)
 - Large-scale, anonymised linkage study capturing 5.5 per cent of the Scottish population:
 - Census data (2001, 2011)
 - School education data (school census, attendance and exclusion, SQA, 2007-2010)
 - Our SLS sample: two student cohorts in **S4** in 2007 and 2008 who were followed into **S5 and S6**.

Findings: SES and overall absences (Klein et al., 2020)



Source: Scottish Longitudinal Study (n=4,620), own calculations. Note: Estimates (with 95 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

Summary of findings (Klein et al., 2020)

- All SES dimensions increased the risk of absence from school.
- Multiple SES dimensions were associated with specific reasons for absence (sickness absence, truancy, temporary exclusion), except for family holidays
- Growing up in socially rented households and having parents with no qualifications had the most pervasive effects across all reasons for absence
- No variation across pupil sex and place of residence

Covid-19 and SES disparities in absenteeism (Sosu and Klein, 2021)



Source: Scottish Government's national daily school attendance records after the first lockdown, own calculations. Note: Data refer to state-funded primary and secondary schools.

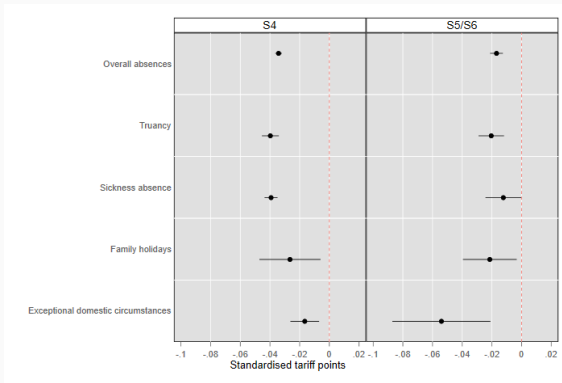
Key points

- Determinants of school absenteeism **multifaceted and complex**, including family, health, psychosocial and school-related factors
- **Family socioeconomic status** and various SES dimensions are important predictors of school absenteeism, more so since the pandemic
- More research is needed on the **pathways** between family SES and school absenteeism
- Making **decisions** on education policy solely based on **one SES measure (e.g., SIMD)** may miss many children from disadvantaged backgrounds

Short-term consequences of school absenteeism

- School absenteeism is linked to poor **academic achievement** (e.g. Gottfried, 2010, 2014; Ready, 2010)
- Some studies found that unauthorised absences are **more harmful** to achievement than authorised absences (e.g. Gottfried, 2009; Aucejo and Romano, 2016; Gershenson et al., 2017)
- **Research gaps**
 - No evidence for Scotland
 - Limited evidence on precise reasons for absence (e.g., sickness) and achievement link (Hancock et al., 2018)

Absences and academic achievement in Scotland (Klein et al., 2022)



Source: Scottish Longitudinal Study, own calculations. Note: Estimates based on OLS regressions, $n = 4,419$ for S4 analysis; $n = 3,135$ for S5/S6 analysis, weighted with inverse probability of dropout weights.

- **Robustness check:** Estimating the effect of absence changes (from S4 to S5) on academic achievement progress (from S4 to S5/S6) confirmed these results except for family holidays

Intersection of SES and school absences

- Low-SES students have a **higher risk** of school absenteeism than high-SES students (Klein et al., 2020)
- Absences may cause **greater harm** to low-SES students → families have fewer resources to compensate for lost instructional time
- **Research gap**
 - Limited research (e.g. Ready, 2010; Smerillo et al., 2018) on the intersection of SES and absences
 - Studies did not consider multiple SES dimensions and reasons for absence

Findings

- **No discernible differences** in the association between overall absences and academic achievement across SES groups
- **Same pattern** of effects when considering truancy
- Evidence for a **stronger negative impact** of sickness absences on the achievement of pupils from lower SES backgrounds.

Key points

- Overall school absences are **detrimental to student achievement** in Scotland
- Unauthorised (e.g., truancy) and authorised absences (e.g., sickness) seem to be **equally harmful**
- Findings suggest that there are **other mechanisms** at play, in addition to learning loss
 - Health pathway
 - Behavioural and psychosocial pathway
- School absenteeism contributes to **poverty-related attainment gap** → Greater focus on reducing absenteeism, particularly among students from low-SES backgrounds

Key points

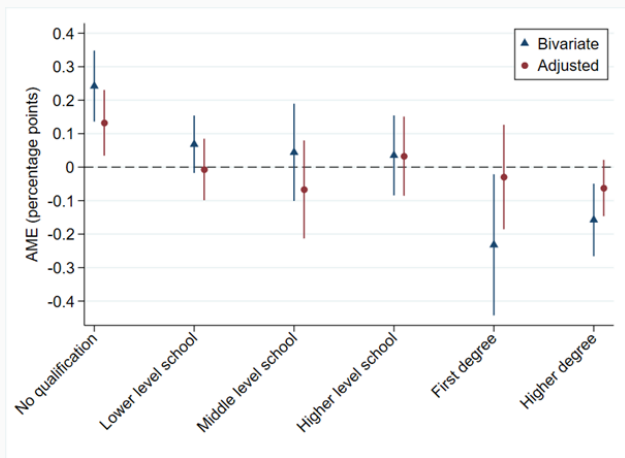
- Overall absences and truancy **detrimental to all children** no matter their socioeconomic background
- High-SES pupils **recover more quickly** from sickness absence learning loss
 - Fewer underlying health conditions
 - Families leveraging assets to catch up with missed lesson content

Longer-term consequences of school absenteeism

Risk of being NEET after post-compulsory education (Klein Sosu, in preparation)

- Overall and specific reasons for absence (sickness, truancy) **significantly increase** the risk of being NEET
- Role of **school qualifications**:
 - School qualifications significantly explain the greater risk of being NEET; stronger for truancy and weaker for sickness absence
 - Overall and sickness absences significantly increase the risk of being NEET net of qualifications

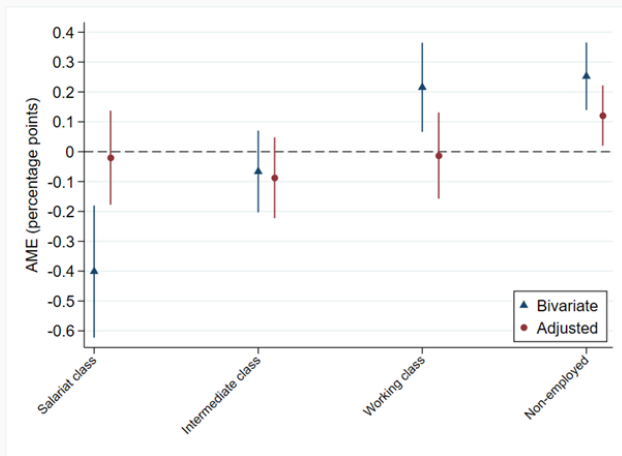
Educational attainment at age 42 (Dräger et al., 2023)



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

- Individuals who have missed 5 days of school at age 10 (spring term) have a 0.66 percentage point higher probability of not receiving any qualification after controlling for risk factors

Social class at age 42 (Dräger et al., 2023)



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

- Individuals who have missed 5 days of school at age 10 (spring term) have a 0.6 percentage point higher probability of being out of the labour force after controlling for risk factors

Key points

- Absences have **longer term effects** beyond school achievement
- Need to address school absenteeism to reduce future **labour market inequalities**

Attendance interventions

Key interventions

- **Improving family finances** and combating child poverty should be at the centre of efforts to get more pupils to school → increased parental control and family cohesion
- Target underlying causes such as **child health and wellbeing** and **pupil behaviour**
- Improve **school climate** and student-teacher relationships → improve pupil attitude towards school

Positive attendance interventions (EEF, 2022)

- **Parental communication approaches**
 - Increase awareness of the consequences of absences
 - Target commonly held parental misbeliefs
 - Aim: guardian takes more active role in pupil's attendance
- **Targeted parental engagement interventions**
 - Tailored to the needs of pupil and family
 - Discussions with parents about the reasons for non-attendance
 - Planning support for students and their families to overcome attendance barriers
- **Responsive and targeted approaches to attendance**
 - Monitoring and identification of pupils that need attendance support and the reasons for low attendance
 - Multi-component and delivered by a variety of staff from social workers to teachers

Limitations of existing research

- Effects of these positive interventions were **small** → may not address the root of the problem (e.g., poverty)
- Many of the interventions (e.g., mentoring) did **not** have **sufficient** evidence to reach a conclusion on effectiveness.
- Overall quality of evidence is **weak** (e.g., small samples) and more rigorous research is required
- Almost all studies took place in the US and very **little research** took place in **UK schools**

Key points

- **Supportive approaches** such as increasing parental communication and engagement more effective than punitive ones, e.g., financial and legal penalties.
- Aside from reducing absenteeism, interventions should be concerned with **mitigating** lost learning for absent pupils, particularly where absence is hard to avoid (e.g., sickness)
- There is a need for systematic monitoring and **evaluation** of attendance interventions in Scottish schools

Disclaimer

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

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Thank you!

Project website: <https://schoolattendance.org/>