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Trajectories of school absences and pupils' academic performance

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Introduction

There has been a significant and worrying increase in school absenteeism rates in the UK and internationally since schools reopened after the pandemic. For example, in England, the overall absence rate rose from 4.3% in the autumn term of 2018 to 7.5% in the autumn term of 2022 (Department for Education, 2023). Data from Scotland show a 2.4% increase in absences between the 2018-19 and the 2020-21 academic years, with particular increases among secondary and special school students (Scottish Government, 2022). Similar trends in school absences have been recorded in Wales and Northern Ireland (Department for Education Northern Ireland, 2023; Welsh Government, 2023).

Prior research has shown that school absences harm students' academic achievement (Aucejo & Romano, 2016; Gottfried, 2010; Klein et al., 2022). The existing literature primarily assesses absences for relatively short periods and focuses on the immediate effects on academic performance. However, this prior research does not account for the fact that children's absences change as they progress through school. Additionally, different groups of children may follow different absence patterns throughout their education. Given the critical importance of children's academic achievement for subsequent life prospects, their absence trajectories across the entire schooling career and their impact on achievement merit closer scrutiny. Investigating how patterns of authorised and unauthorised absences influence achievement is critical, as these types of absences necessitate different interventions to mitigate their consequences effectively. Finally, understanding absence trajectories and their consequences will help guide policy decisions to reduce post-pandemic increases in school absences and enable all children to succeed.

Aims

First, our research aimed at describing typical absence trajectories from year 1 to year 11 in England, differentiating between authorised and unauthorised absences.

Second, we examined the consequences of our identified absence trajectories on pupils' GCSE achievement.
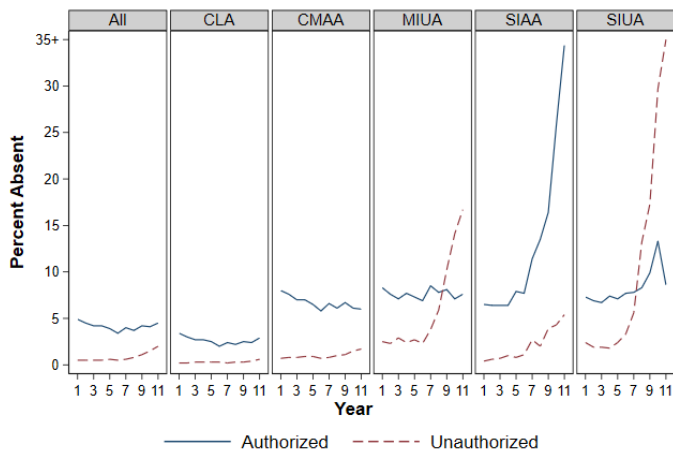
Data

We used data from the Millennium Cohort Study (MCS) and the National Pupil Database (NPD) in England for our analysis, as they provide the most comprehensive information available for investigating these questions within a UK context. The NPD contains information about pupils' absences, both authorised and unauthorised, as well as achievement at key stages 1, 2, and 4 (GCSE) for all pupils in state schools in England (Jay et al., 2019). The MCS was linked to the NPD to obtain detailed background information about the pupils and their families. It is a large and representative study of children born in 2000 and 2001 living in the UK (Joshi & Fitzsimons, 2016). This background information allows us to account for other differences between pupils who regularly attend school and those absent more frequently, such as their socio-economic background, cognitive ability, and behaviour.

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Key findings

Absence trajectories

When all children are considered, authorised absences remained relatively stable from year 1 to year 11, at around 4-5%, as shown in the column "All" in Figure 1. Unauthorised absences rose from approximately 0.5% in the early years to 2% in year 11. However, there are subsets of students whose trajectories deviate significantly from the average.

Figure 1. Mean authorised and unauthorised absences over time by absence trajectory.

Note. Linked MCS-NPD data, N=7,218. CLA=Consistently Low Absences, CMAA=Consistently Moderate Authorised Absences, MIUA=Moderately Increasing Unauthorised Absences, SIAA=Strongly Increasing Authorised Absences, SIUA=Strongly Increasing Unauthorised Absences. Mean absences above 35% are truncated.

We discovered five typical absence trajectories. Approximately two-thirds of students have very low absences throughout their school careers, either authorised or unauthorised (Consistently Low Absences (CLA)). A second group of more than one-fourth of students had very low unauthorised absences, but their authorised absences were consistently about 7% between year one and year 11 (Consistently Moderate Authorised Absences (CMAA)).

In addition to these two large groups, we discovered three smaller groups, each with a unique pattern of increasing absences in the later school years. Unauthorised absences steadily increased in the first of these groups after year 6, reaching 17% in year 11 (Moderately Increasing Unauthorised Absences (MIUA)). Another group initially showed a similar pattern but with a much stronger increase in unauthorised absences. Unauthorised absences increased to more than 60% in this group in year 11 (Strongly Increasing Unauthorised Absences (SIUA)). Finally, we discovered a group of students whose authorised absences increased in later years, reaching more than 30% in year 11 (Strongly Increasing Authorised Absences (SIAA)).

Effect of Absence trajectories on GCSE achievement

Absence trajectories have a significant impact on GCSE achievement after accounting for all relevant background characteristics of students and their families. Students with Consistently Low Absences perform best, as expected. Students with Consistently Moderate Authorised Absences have an 8-percentage point lower likelihood of obtaining 5 GCSEs.

Students in the three increasing absence trajectories face even greater disadvantages. Students with Strongly Increasing Unauthorised Absences perform the worst (33 percentage points less likely to obtain five or more GCSEs compared to students with Consistently Low Absences). Students with

Strongly Increasing Authorised Absences fare the second worst in achievement (29 percentage points less likely to obtain five or more GCSEs). Students with Moderately Increasing Unauthorised Absences outperform students in both groups of strongly increasing absences but fare much worse than students with Consistently Low Absences (27 percentage points lower likelihood of obtaining 5 GCSEs). We looked at other types of achievement, such as "Attainment 8" (i.e., attainment in the top eight subjects), and the effects were consistent with the trends described for obtaining five or more GCSEs.

Recommendations

Tailored Interventions: Develop interventions tailored to specific absence trajectories, recognising that different groups of students may have distinct patterns of absenteeism. Interventions should be designed to address students' unique needs and challenges in these different trajectory groups. For instance, for those experiencing moderate levels of absences, supportive approaches that help to ensure consistent attendance are likely to yield results. However, those with increasing levels of authorised and unauthorised absences may require a multi-component intervention that addresses the root causes of their absences as well as extensive support to mitigate their impact on achievement.

Early Identification and Support: Implement measures for early identification of attendance issues, allowing for timely intervention and support to prevent further disruptions to students' education. Schools, policymakers, and educators must collaborate to implement proactive measures that identify and assist at-risk students as early as possible to prevent their academic trajectories from deteriorating.

Collaborative Attendance Approach: Facilitating a multifaceted approach involving all stakeholders (parents, pupils, educators, community organisations, and policymakers) ensures a coordinated and holistic effort to tackle attendance issues and address the underlying causes of a pupil's absence trajectory. It is also clear that efforts to combat absenteeism should extend beyond merely tracking attendance rates and include a holistic understanding of absence trajectories and their implications. This necessitates a multifaceted approach that integrates not only attendance policies but also family support, mental health services, and community engagement to address the underlying factors contributing to absenteeism.

Promote Data-Informed Decision-Making: Implement initiatives to enhance data literacy among educators, administrators, and staff. This includes providing training on how to analyse and interpret attendance data, empowering them to make informed decisions, and tailoring interventions based on evidence.

Conclusions

The findings of this study support the increasing focus on addressing school absenteeism, offering valuable insights into the various absence trajectories students follow throughout their academic journey and their profound impact on achievement. Identifying five distinct absence trajectories highlights the diversity of student experiences and challenges in relation to absenteeism.

Only about two-thirds of all students had absence trajectories that can be described as unproblematic, and a quarter of students had consistently moderate authorised absences over the 11 school years. Although the differences in trajectories between these two groups do not seem large, their significant difference in GCSE achievement highlights the pervasive impact of absenteeism on educational outcomes. It suggests that even moderate absences accumulated over the 11-year period led to significant disadvantages in achievement.

Moreover, we found three groups of students with increasing absences across school years. Two groups had increasing unauthorised absences (moderate and strong increase), while one group had strongly increased authorised absences over time. All three groups faced massive disadvantages regarding their performance in GCSEs, with strongly increasing unauthorised absences having the most detrimental impact.

Our research has significant implications for educational policy and practice. Existing policy frameworks in the UK and internationally tend to place a strong emphasis on statutory attendance requirements. This includes setting a minimum attendance threshold that students must meet, as well as penalties for non-compliance, such as fines or legal action against parents. However, our findings reveal that absenteeism patterns are diverse and not easily captured by a one-size-fits-all approach. The identified absence trajectories, ranging from consistently low to strongly increasing absences, indicate that a more nuanced understanding of absenteeism is required.

Our research highlights the importance of early intervention by identifying specific absence trajectories. For instance, students with moderately increasing unauthorised absences or strongly increasing authorised absences may benefit from targeted support well before their attendance issues escalate.

The study underscores the importance of developing the capacity of schools to analyse and identify school attendance patterns among students. This enables timely intervention and support, potentially preventing further disruptions to pupils' education. Any analysis should also examine specific types of absences to enable targeted interventions that address the causes of absences. For instance, knowing if absences are due to health issues, family circumstances, or other reasons can inform appropriate support measures. Fostering a data-driven culture leads to improved student outcomes and a more conducive learning environment.

Since schools reopened following the pandemic, there has been a significant and concerning increase in absenteeism rates in the UK and worldwide. This study's identification of various absence trajectories provides a framework for understanding how certain patterns of absenteeism may evolve in the post-pandemic cohort. The study underscores the significance of a comprehensive and differentiated strategy to tackle school absenteeism. By addressing authorised and unauthorised absences, tailoring interventions to specific absence trajectories, and prioritising early support for at-risk students, educational stakeholders can work collaboratively to mitigate the detrimental effects of absenteeism on students' academic achievement and, ultimately, their life prospects.

Key points

- Two-thirds of pupils have consistently low absence trajectories, while one-third demonstrate some form of moderate to high absence trajectories over the compulsory schooling period.
- More than one-fourth of pupils have consistently moderate authorised absences.
- Three smaller groups have moderately increased unauthorised, strongly increasing authorised, and strongly increasing unauthorised absences.
- All identified absence trajectories have a detrimental impact on GCSE achievement in year 11, with increasing unauthorised absences having the most harmful impact.
- While extreme levels of unauthorised absences are most detrimental, a narrow policy focus on this absentee group will miss many students with other absence trajectories, whose impact is also harmful to achievement.
- The findings emphasise the need for a nuanced approach to combating absenteeism, including tailored support for students in different absence trajectory groups.

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