



School absence and Not in Education, Employment or Training



Key points

- The team investigated the association between school absence (6–16 years of age) and risk of being Not in Employment, Education, or Training (NEET) (16–18 years of age) using records provided by the Department for Education.
- Persistent absence was associated with 3.9 times greater risk of being NEET and 6.3 times greater risk of being persistently NEET.
- The timing and quantity of absence moderates the risk of NEET, with absence later in schooling and a greater quantity of absence both increasing the risk of being NEET.

Summary

Using the Connected Bradford research database, with a sample of over 23,000 pupils, the team investigated the association between persistent school absence (at age 6–16 years) and risk of being NEET (at age 16–18 years).

Persistent absenteeism (less than 90% attendance) across all school years was associated with a 3.9 times greater risk of being NEET and a 6.3 times greater risk of being persistently NEET (being NEET for four or more months). This effect is greater in secondary than primary schools. In addition, as the

overall rate of absence increased, so did the risk of becoming NEET.

These findings demonstrate how linked school data can be used to identify children at risk of later adverse outcomes and provide evidence of factors contributing to NEET specifically. By providing early support for children with poor attendance, the risk of becoming NEET may be reduced.

Background

The UK is in the midst of a school attendance crisis, with rates of school absence increasing dramatically since the Covid-19 pandemic. Given established links between school absence and negative long-term outcomes, including unemployment and criminal justice involvement, it is essential that we understand the trajectory of absence to NEET.

The “NEET problem” has received considerable interest in recent decades. Being NEET is associated with long-term poor outcomes for the individuals, including worse physical and mental health and social isolation. It also impacts society through the loss of tax revenue and increased welfare payments. It is no surprise then, that considerable policy development has targeted reducing the rate of NEETs, both in the UK and internationally. Most interventions aimed at reducing NEET rates target those already NEET, but it is generally understood that interventions addressing the causes, rather than the symptoms, would be more effective in the long term.

Recent work from Connected Bradford shows that early life factors, like school readiness at age 4–5, are predictive of later NEET status. This would suggest interventions could be targeted particularly early in life, but such long-term planning requires a strong evidence base. Identifying other early indicators that a young person is at increased risk of becoming NEET would help target these interventions. School absence is a good candidate for a risk indicator, as it has previously been associated with worse academic attainment, an important precursor to NEET status, and with

poorer employment outcomes directly. However, previous research has not explored absence at a finer-grained level, such as its quantity or timing.



What we did

The team used the **Connected Bradford research database**, which links **anonymised routinely collected datasets**, to investigate whether:

1. there is an overall association between absence and NEET;
2. the timing of absence moderates this relationship;
3. the quantity of absence moderates this relationship.

School attendance data (ages 6–16) and NEET data (ages 16–18) were provided by the Department for Education. Using absence directly through

attendance data, rather than self-reported data, provides greater specificity and validity to the associations investigated.

First, the team investigated whether persistent absence, defined as missing more than 10% of academic sessions over the 10-year school period considered, was associated with ever being NEET (“ever NEET”) and being NEET for four or more months (“persistently NEET”) during the two-year follow-up period. Then, the association between persistent absence within a particular school year and NEET outcomes, and whether the overall rate of absence over the full ten-year period moderated NEET risk, was assessed.

Key findings

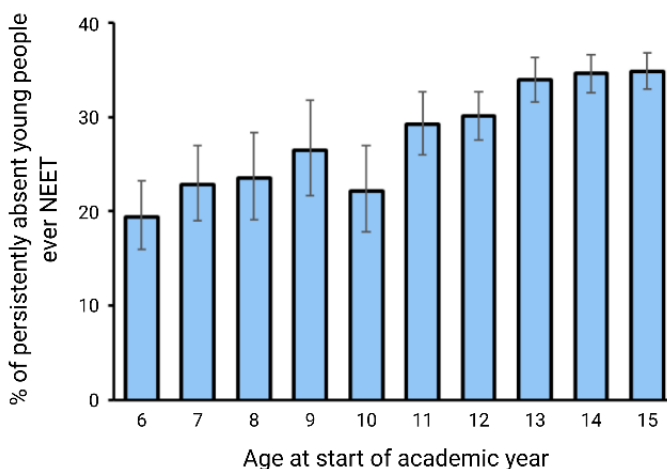
Analyses demonstrated that persistent absence was associated with a greater risk of becoming NEET at 16–18 years. Those who were persistently absent in later school years (e.g. Year 11 vs Year 6) and those who were absent more often, were more likely to be NEET.

When considering the whole 10-year school period, persistent absence was associated with greater chances of becoming NEET at 16–18 years. Those who were persistently absent had 3.9 times greater risk of being ever NEET (31% vs 8%), and a 6.3 times greater risk of being persistently NEET (19% vs 3%). Importantly, this association was present when other important covariates were controlled for, including sex, ethnicity, Special Educational Needs (SEN) support, free school meals eligibility, and neighbourhood deprivation (IMD). In fact, persistent absence was the single biggest predictor of later NEET status of the covariates considered. When considering only the primary school years, persistent absence was still predictive of later NEET status but to a lesser extent (2.3 times greater risk of being ever NEET, 2.9 times greater risk of being persistently NEET).

To explore this in more detail, the team assessed persistent absence within each academic year (e.g. September 2018 – July 2019) to gauge what proportion of those persistently absent went on to be NEET. They found a consistent increase in the

chances of being NEET or persistently NEET and this effect increased with each school year (see Figure 1). Lastly, as the overall rate of absence increased, so did the risk of becoming ever or persistently NEET. Indeed, in children with 95–100% attendance, only 5% went on to become “ever NEET”. Meanwhile, for children with less than 75% attendance, approximately 50% of children went on to become “ever NEET”.

Figure 1. The rates of persistently absent pupils who become NEET by age.



Next steps

This research highlights important factors that moderate the association between school absence and risk of later becoming NEET. Future work could investigate different absence trajectories, for example individuals who were absent primarily early or late in their schooling, the extent to which the relationship is causal, and whether school absence could act as an indicator for more targeted interventions.

There are several important ways to progress this work to provide a greater understanding of how school absence may ultimately influence later life outcomes. One is to understand whether there are different trajectories of absence across the school years, and if so whether these are differentially associated with NEET outcomes. For example, two children may have a similar overall rate of absence but may differ in whether these absences are clustered within a single academic year, and if so which academic year, or spread out over the whole school period. These results would suggest these two children would have different probabilities of becoming NEET, but further statistical analysis is warranted to address this directly.

Additionally, the present work does not address issues of causality. It is a widely held belief that school absence causally influences later outcomes like academic attainment, employment prospects, mental health difficulties etc., and interventions targeting school absence to improve long-term prospects rely on this causal link. Going forward, additional work will test various models to provide causal insight. For example, these models can test whether school

absence is associated with the risk of becoming NEET directly, or whether it acts indirectly through other factors related to NEET, like academic attainment.

Finally, even without evidence for a causal link between school absence and later NEET status, school absence is a clear indicator for worse later-life outcomes. These findings add to a growing body of work identifying early-life factors, like school readiness, that are associated with later NEET status. As such, schools and local authorities can leverage these findings to identify those individuals most at risk of poorer later-life outcomes at an earlier stage and target holistic interventions towards them.

This study is based [in part] on data from Connected Bradford (REC 18/YH/0200 & 22/EM/0127). The data is provided by the citizens of Bradford and district, and collected by the NHS, DfE and other organisations as part of their care and support. The interpretation and conclusions contained in this study are those of the authors alone. The NHS, DfE and other organisations do not accept responsibility for inferences and conclusions derived from their data by third parties.



For further information

Read more about our Connected Data Analytics programme on our website: vulnerabilitypolicing.org.uk/connected-data-analytics

Centre Deputy Director:

Professor Dan Birks
d.birks@leeds.ac.uk

The research team were:

Emily Connell, Matthew Warburton,
Megan Wood, Dan Birks

<https://doi.org/10.48785/100/279>



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Data Analytics*

This project was conducted in collaboration with the Leeds Institute for Data Analytics and its Data Scientist Development Programme, which trains early-career data scientists to deliver real-world, data-driven impact.

