

International Journal of Population Data Science

Journal Website: www.ijpds.org



Does the timing of special educational needs identification have an impact on educational outcomes?

Jennifer Keating¹, Alexandra Sandu¹, Katy Huxley¹, Anthony Whiffen², and Rob French¹

¹Cardiff University, Cardiff, United Kingdom

²Welsh Government, Cardiff, United Kingdom

Objectives

Previous research has established an association between diagnosis of a neurodevelopmental condition and poorer academic outcomes. Many education policies advocate for early diagnosis and special education needs (SEN) support, however little is known about the association between timing of SEN identification and educational outcomes.

Conclusion

Early identified SEN pupils are less likely to achieve national attainment expectations. Late identification is more strongly associated with absence and exclusion issues. Variation by SEN classification and timing of diagnosis are important considerations for the new Additional Learning Needs framework in Wales, and wider health and education policy and practice.

Methods

To address this gap, we linked Welsh administrative education data to primary and secondary health care records to identify the age at which a child (i) receives a neurodevelopmental diagnosis and (ii) receives SEN support. Using data from over 90,000 children across 5 cohorts, we conducted logistic and linear regressions to examine the association between SEN identification and children's attainment, exclusions, and attendance at age 16. In the most recent cohort, we show that timing of SEN identification significantly associated with attainment, exclusions, and attendance.

Results

Children identified for SEN in their first year of school were eight times less likely (than those without SEN) to meet national attainment expectations at age 16, whereas those identified at age 16 were three times less likely, $X^2 = 41.7$, $p < .001$). The opposite pattern held true for exclusions and attendance: those identified in their first year were two times more likely to be excluded, compared to five times more likely for those identified in their final year $X^2 = 7.3$, $p = .007$). Those identified in first year were 1.6 times more likely to be persistently absent (missing >10% of sessions), while those identified in their final year were 2.5 times more likely $X^2 = 8.9$, $p = .003$). We show how these associations vary by type of need and timing of health diagnosis.



Temporary page!

$\LaTeX$ was unable to guess the total number of pages correctly. As there was some unprocessed data that should have been added to the final page this extra page has been added to receive it.

If you rerun the document (without altering it) this surplus page will go away, because $\LaTeX$ now knows how many pages to expect for this document.