School transitions due to grade configuration, i.e. “structural switches,” are widespread in the US, and have increasingly concentrated between grades 5th and 6th. Recent research suggests that achievement falls after structural switches. But researchers also find that structural switching coincides with better test score performance prior to the switching grade. Taken together, this evidence suggests the top dog/bottom dog (TDBD) hypothesis. With this motivation, DiSalvo explores whether school switching due to grade configuration affects test score trajectories. His work is published in vol. 17 issue 1 of EFP.

The Study

Using US data from 2008-09 through 2014-15, DiSalvo identifies school-terminal grades as those with at least a 90% enrollment drop from one grade to the next. Between grades 3 and 7 (inclusive), the most common terminal grade is 5th: for 61% of students in 5th grade, their grade is school-terminal. The author combines this measure with test score trajectories of students relative to third grade performance, measured using the Stanford Education Data Archive (SEDA).

Findings

The author uncovers evidence in favor of both the top dog and bottom dog patterns. The TDBD pattern can be seen in the figure below, regardless of the switching grade (among grades 3 through 8). The author also finds the TDBD pattern is robust to controls (right panel of the figure), and is present in most commuting zones (not shown).

The TDBD pattern suggests that the use of structural switching does not lead to an unambiguous achievement loss. Rather, it should be viewed as a trade-off: with structural switching, younger students do better on tests, while older students do worse. Overall, the findings suggest that there remains room for debate over the optimal grade configuration policy.