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## Reduced School Tracking Increased Educational Attainment and Fertility in France

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# POLICY BRIEF

## Reduced School Tracking Increased Educational Attainment and Fertility in France

Serena Cnaan

### BRIEF HIGHLIGHTS

- *In the late 1970s, France raised the age of tracking—separating students into classrooms based on academic achievement—from age 11 to 13.*
- *This reform increased the quality of degrees that individuals attained, especially for those from low-income backgrounds.*
- *It also made women more likely to have partners in high-skilled occupations and closer in age.*
- *For women from low-income backgrounds, the reform increased their total number of children at age 42.*
- *School tracking can have strong effects on long-term family formation.*

For additional details, see the full working paper at [https://research.upjohn.org/up\\_workingpapers/403/](https://research.upjohn.org/up_workingpapers/403/).

School tracking is the practice of separating students into tracks or classrooms based on their academic achievement. While school systems around the world use tracking, some track more heavily than others. For example, some European countries, such as Germany, have a rigorous form of tracking whereby students are divided from an early age into academic and vocational tracks, which differ in their curricula, the types of degrees that students can eventually obtain, and—consequently—the career options available. Other countries, including the United States, use a milder form of tracking in which students are sorted into different classrooms based on their abilities but follow a common academic curriculum.

Tracking is controversial, as low-income students are more likely than high-income students to be placed in low-achieving classrooms or tracks, resulting in greater socioeconomic disparities in educational attainment and ultimately in the labor market. Several studies have examined how different types of school tracking affect individuals' career outcomes (Malamud and Pop-Eleches 2010; Dustmann, Puhani, and Schönberg 2017; Cnaan 2020). However, less is known about the relationship between school tracking and family formation. This relationship is important to understand, as the decisions of whether, when, and whom to marry, as well as whether and when to have children, directly affect economic well-being.

In a [recent paper](#) (Cnaan 2024), I investigate how reducing the degree to which students are tracked at an early age affects their marriage and fertility outcomes. Specifically, I evaluate the consequences of a French reform that delayed the separation of students into academic and vocational tracks from age 11 to 13 and replaced it with a less intensive system of grouping students into achievement-based classrooms. I find three major consequences of the reform. First, students, especially those from low-income backgrounds, pursued higher-quality degrees. Second, more women chose partners or spouses in high-skilled occupations and closer to their ages. Third, women from low-income backgrounds had more children by their mid-40s. These results show that the decisions school systems make about when and how to track students can have long-term consequences for social and economic inequalities.

### The French School Tracking Reform

Until the late 1970s, schools in France sorted students at age 11 into either an academic or a vocational track, based on their previous academic performance. High-performing students were placed in the academic track, where they would eventually obtain either an academic high school degree and enroll in a university, or a technical high school degree with the option of pursuing a two-year postsecondary technical credential. Low-performing students were put on the vocational track, which eventually led to a trades certificate (Certificat d'Aptitude Professionnelle, or CAP) or to leaving

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**Starting with the 1977–1978 school year, France delayed the assignment of students into academic and vocational tracks by two years, until age 13.**

school without a degree. Starting with the 1977–1978 school year, a new policy delayed the tracking of students into academic and vocational tracks by two years, until age 13. Under the new system, students aged 11 to 13 pursued a common academic curriculum but were mostly divided into different classrooms based on academic achievement. The reform essentially replaced a more intensive tracking system with a milder form of ability grouping.

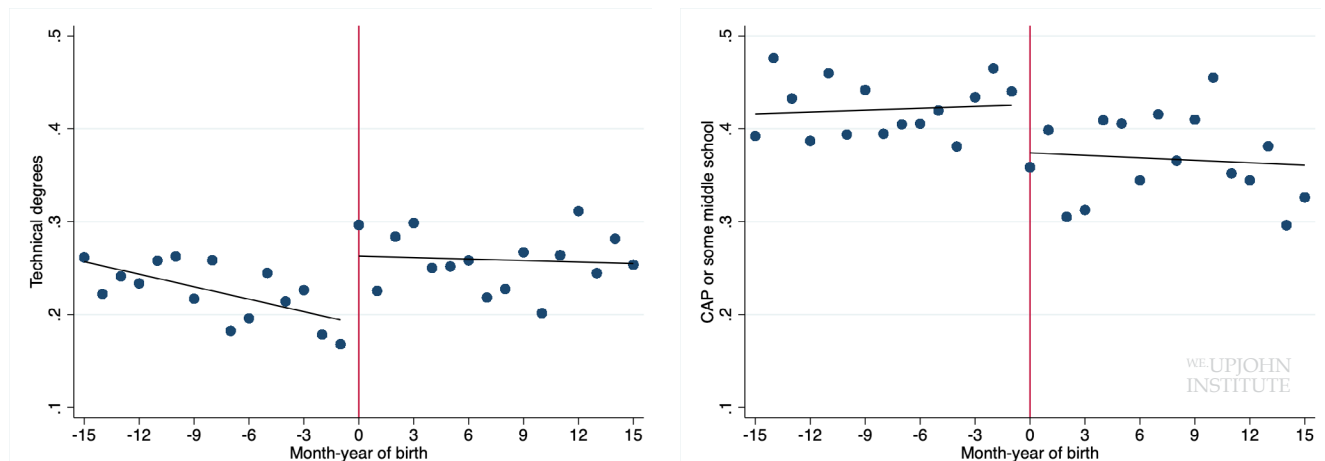
### Effect of the Reform on Education

The nature of the reform allows me to estimate how decreasing the intensity of tracking at an early age affects family formation as an adult. Simply comparing outcomes of individuals who were sorted into academic and vocational tracks to those of individuals who were not tracked will not produce strong causal estimates, because these groups likely differ in many other ways that are unobservable to the researcher. The French reform permits a comparison of the outcomes of individuals under two different tracking regimes that changed exogenously.

The reform was passed in the academic year 1977–78 and affected students who were aged 11. Thus, the first cohort of students affected by the reform were born on or after January 1, 1966; those born earlier were tracked under the previous system. I therefore use a survey of adults to compare the outcomes of individuals who were born right after January 1, 1966, and thus were exposed to the reform, to the outcomes of individuals who were born right before that date, and thus not exposed to the reform.

For students from low-socioeconomic-status backgrounds (low-SES; students whose fathers were manual laborers), the reform increased educational attainment, as Figure 1 shows.<sup>1</sup> The left panel plots, by an individual's month and year of birth relative to the date cutoff, the probability that the individual's highest degree, measured at age 44, is either a high school or postsecondary technical degree (roughly equivalent to an associate or two-year degree in the United States). At the birth date cutoff of January

**Figure 1 Delaying Tracking Shifted Students' Degree Attainment toward the Higher Technical Degree**



NOTE: The different panels show the average shares of individuals who hold different types of highest degrees (left: technical degree; right: CAP or vocational credential) by month of birth relative to the cutoff of January 1, 1966. Thus, -1 represents December 1965, while +1 represents February 1966.

SOURCE: Canaan (2024).

<sup>1</sup> In the full paper, I show that the reform had minimal effect on students from high-SES backgrounds (students whose fathers held middle-class or professional occupations).

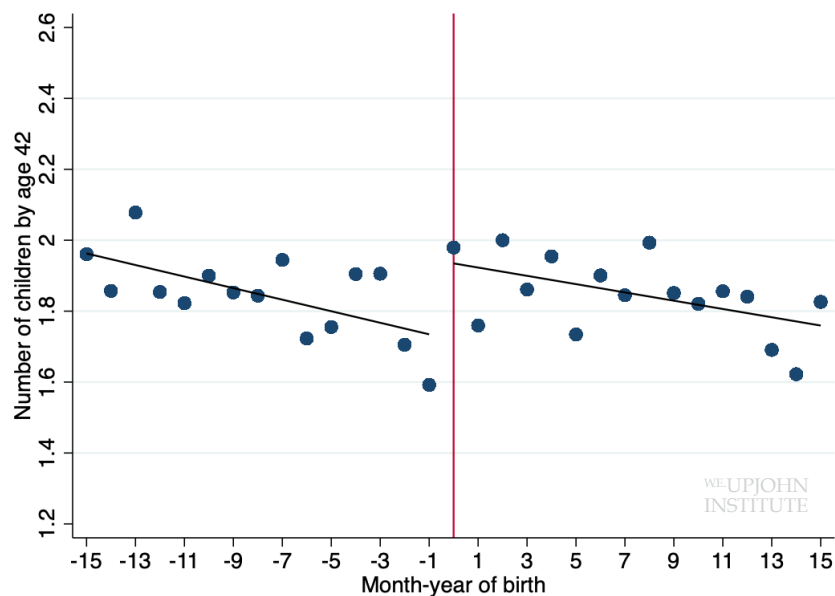
**Less intensive tracking improved students' educational attainment. The reform increased the likelihood of gaining a technical degree by nearly 10 percentage points.**

1966, represented by 0 on the horizontal axis, there is a clear positive jump, indicating that the reform increased the likelihood that an individual holds a technical degree—traditionally accessed through the academic track—by 9.3 percentage points. At the same time, the right panel shows a negative jump at the cutoff, indicating an 8.5 percentage point drop in the likelihood of having either a CAP degree or no degree—which were typical outcomes of students from the vocational track. This suggests that the reform boosted attainment for lower-SES students who would previously have been put into the vocational track.

### Effect of the Reform on Fertility and Marriage

The tracking reform also increased the number of children born to affected low-SES students by the age of 42, as shown in Figure 2. The positive bump at the cutoff is approximately 0.2, indicating that the reform increased low-SES individuals' number of children by 11 percent. This effect is concentrated among low-SES women, who averaged 0.3 more children at age 42 as a result of the reform. In the marriage market, the reform had no impact on the likelihood that individuals married, cohabited, or divorced. However, for women, the reform changed the characteristics of their spouses: women became more likely to have a partner who works in a high-skilled occupation and who is closer to their own age. Taken together, these results indicate that the type of educational tracking that individuals are exposed to at an early age substantially shapes their long-term family outcomes.

**Figure 2 Delaying Tracking Led to an Increase in the Number of Children by Age 42**



NOTE: The figure plots the average number of children at age 42 for low-SES individuals by month of birth relative to the cutoff of January 1, 1966. Thus, -1 represents December 1965, while +1 represents February 1966.

SOURCE: Canaan (2024).

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### Conclusion

I document that a change in the type of educational tracking to which French students were exposed had substantial long-term consequences for their education, marriage, and fertility. Why does educational tracking affect family formation? It is possible that the type of education that individuals attain changes their preferences regarding marriage and fertility choices. My earlier study of the same reform showed that it increased individuals' earnings at age 45 (Canaan 2020), and these higher earnings could also have affected family outcomes. Regardless of why tracking affects family formation, these findings highlight that nationwide educational reforms not only can directly impact education and earnings, they can also change social outcomes like marriage and childbearing, with potential long-term consequences for social and economic inequality.

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