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Does Education Matter?

Tests from Extensions of Compulsory Schooling in England and Wales

By Gregory Clark, University of California, Davis; and Neil Cummins, London School of Economics

here has been clamor and dismay at the expected future economic and social costs for children affected by school closures from COVID-19. A New York Times editorial, for example, stated: "A learning reversal of this magnitude could hobble an entire generation." A blog post from the Brookings Institution assumed that the wage loss from losing a year of schooling is 10 percent. It is also feared that the poorest students will suffer most. However, the nearly universal belief in the substantial social and economic benefits of education faces some disquieting counterevidence. School closings will likely have little social cost.

One piece of counterevidence is the effects of England's extensions of compulsory schooling in 1919–1922, 1947, and 1972. This shows compellingly that more schooling for students of lower socioeconomic status produced little or no gains in incomes or in broader measures of living standards, such as longevity.

The age for required school attendance in England was increased from 12 to 14 between 1919 and 1922, from 14 to 15 in 1947, and from 15 to 16 in 1972. These extensions of schooling all increased years of schooling by around 0.5 years for the children affected. This increase in schooling shows up clearly in contemporary enrollment data by age, thus making this a convincing natural experiment on the effects of education.

Earlier studies of the 1947 and 1972 extensions of schooling seemingly confirmed substantial wage gains for the affected cohorts, in the order of 10 percent per year of schooling. However, later studies suggested that the wage gains from

the 1947 and 1972 extensions were much lower, and potentially even zero. And additional research convincingly showed an absence of any mortality improvements from the 1947 and 1972 extensions.

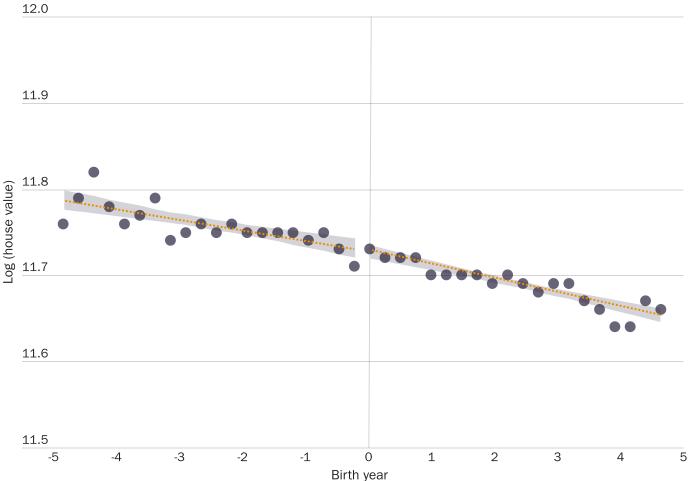
In our research, we exploit some new large-scale sources to examine the social and economic effects of the 1947 and 1972 schooling extensions and to also measure the effects of the 1919–1922 extension.

One new source is the estimated value of the houses that were inhabited by males affected by the reforms in 1999. The United Kingdom (UK) electoral register of that date gives the addresses of all registered voters. The UK Land Registry allows us to calculate average house values by postal code in England for 1996–2016, where typically a postal code covered just one street. House values are a good proxy for lifetime income. We can link a subset of uniquely named male voters to birth records for England and Wales for five years before and after each schooling extension (we link only males because female surnames change upon marriage). The affected cohorts would be aged 89, 66, and 42, respectively, when observed in 1999.

Our analysis of the effects of the 1947 schooling extension, by quarter of birth for the affected cohorts, finds that there is no sign of the 5 percent increase in permanent income that the schooling literature would predict. Indeed, the point estimate is for no gain at all. The picture is the same for the 1972 extension. The point estimate of the gains is again zero, and it is statistically impossible that the gain was the expected 5 percent. Figure 1, which shows the effects of the 1972 extension on house values, illustrates just how convincing the

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absence of gain from another 0.5 years of schooling is for the affected cohorts.

Suppose that, despite our failure to observe it from the data outlined above, the 1922, 1947, and 1972 schooling extensions did in fact produce gains in earnings and improved health. Another way this would appear empirically would be in terms of the characteristics of the districts people die in. There should be enhanced movement among those whose schooling was increased by compulsory schooling extensions to residential districts with people that are more educated, wealthy, and healthy and to districts with fewer social problems, such as crime. The death register in England and Wales recorded deaths between 1923 and 2007 in as many as 1,073 registration districts. We use the characteristics of the district of death to test for differential migration of the treated group to higher-amenity locations.

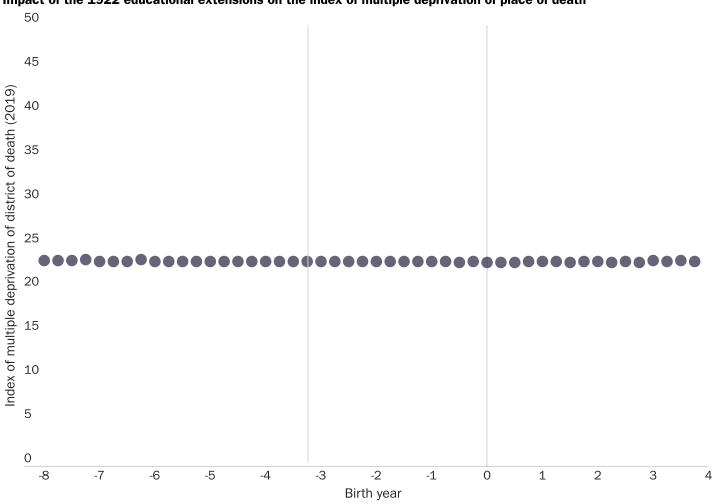
By matching death districts to 317 census districts for 2001, we can estimate the index of multiple deprivation for 2019 of the death districts of those born between 1900 and

1912 on either side of the cohorts affected by the 1919–1922 schooling extension. This index is a weighted average of measures of income, employment, education, health, crime, barriers to housing and services, and the living environment. Again, as Figure 2 shows, we find no effect. The 1919–1922 schooling extension did not allow the affected cohorts to move to communities with more education, less crime, or less unemployment. Similarly, we find that the 1947 extension of the leaving age to 15 had no impact on the survival rate of men and women from age 15 to 65 and by implication had no impact on the health of individuals.

Why then is there such near-universal belief in the social sciences and in the powerful effects of schooling on earnings, health, and crime when we can find such clear counterexamples? And the results above are not the only counterexample. A similar lack of effects of schooling extensions on earnings has been shown for Germany. Our belief is that the strange mix of papers reporting strong significant positive effects for education and papers reporting precisely

Figure 2

Impact of the 1922 educational extensions on the index of multiple deprivation of place of death



estimated zero effects reflects the ever-present problem of publication biases in the social sciences. Papers finding positive effects for education, confirming the orthodoxy, will have the least difficulty getting published and face the least scrutiny. Those finding a zero effect will have a harder path but can find outlets as puzzling exceptions to the general rule. But those that find negative effects will never see the light of day. They will be regarded as obviously implausible. Thus, what we expect is a set of results that contains positive, zero, and negative effects centered around the true number of zero, which gets narrowed to just positive and zero effects. The literature then takes the positive effects as the norm and the zero effects as exceptions. And we have the consensus on the very large social benefits from each year of education.

So on at least one issue of the social disruptions of COVID-19 we can be at ease. If the effects of extensions of compulsory schooling in England in the 20th century are a guide for the present, lost schooling will not have any long-term social costs.

NOTE:

This research brief is based on Gregory Clark and Neil Cummins, "Does Education Matter? Tests from Extensions of Compulsory Schooling in England and Wales 1919-22, 1947, and 1972," Center for Economic and Policy Research Discussion Paper no. 15252, September 2020, https://cepr.org/active/publications/discussion_papers/dp.php?dpno=15252.



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