
Memories of War: Wartime Sacrifice and Educational Recovery in China

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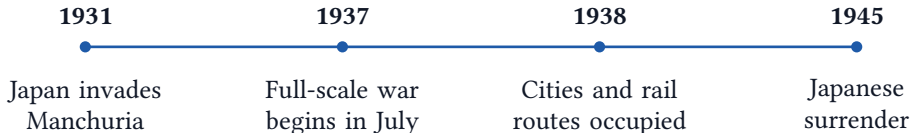
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Educational Recovery after War

Why did communities gain differently from China's expansion of basic education?

- **The war damaged the resources needed for schooling.**
 - Schools closed, teachers left, and families were displaced.
- **After 1949, national programs expanded primary schooling and literacy.**
 - Counties built schools, recruited teachers, and organized enrollment.
- **We study the local legacy of recognized wartime sacrifice.**
 - Did schooling expand more in counties with more recognized martyrs?

The War of Resistance, 1931–1945



■ Heavy human losses and disrupted schooling

- An estimated **14–20 million** Chinese died from combat, famine, and disease.
- Schools closed and teachers and families were displaced.

■ Different local war histories

- Occupation dates, duration, and resistance activity differed across counties.

Post-War Educational Expansion

■ 1945: the war with Japan ended

- Civil conflict continued. Nationwide education programs expanded after 1949.

■ After 1949: primary schooling and adult literacy

- Roughly four in five adults were illiterate at the PRC's founding (Pepper 1996; Hannum 1999).
- Primary education expanded through public and people-run (*minban*) schools.
- Adult literacy: a central commission in **1952**, followed by a national drive in **1956**.

■ County governments implemented national education programs

- Counties built schools, recruited teachers, and organized enrollment.
- Local resources and administrative choices shaped educational provision.

Measuring Wartime Sacrifice

■ 63,739 War of Resistance profiles in the national registry

- Sacrifice dates in 1931–1945, supported by evidence linking each profile to the conflict.
- Official recognition can follow the death many years later.

■ Assign records to the native county

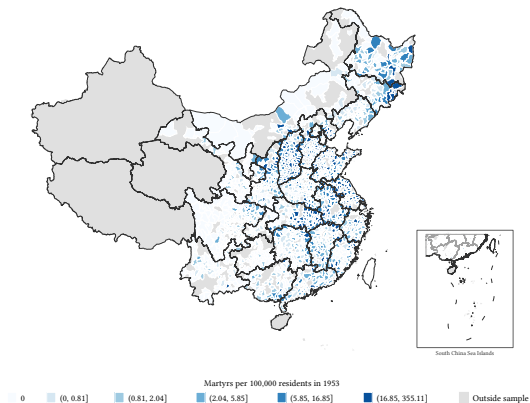
- Harmonize historical place names. Unresolved records remain unassigned.

$$X_c = \operatorname{asinh}\left(100,000 \frac{M_c^{\text{strict native-place}}}{\text{Population}_{c,1953}}\right).$$

■ County counts are scaled by 1953 population, then transformed using IHS.

- The measure retains zero-count counties. Population is measured after the war.

County Martyr Intensity



Census Data and Educational Outcomes

6,632,387 respondents in 2,050 counties

- Pooled IPUMS China censuses: **1982, 1990, and 2000.**
- Born in 1920–1956, within 15 cohorts of the local postwar school-entry cutoff.

Outcome	Definition	Sample mean
Years of schooling	Coded attainment, 0–16 years	4.972 years
Any formal schooling	100 if primary school or higher, 0 otherwise	67.859%
Primary completed	100 if primary completed or higher, 0 otherwise	50.884%

County matching

- Individuals: **residence at the census date.**
- Martyr records: **native places.**

Research Design

■ Compare counties with different martyr intensity and school-entry timing.

- W_{cb} : age six during the local war; P_{cb} : age six after it.

$$Y_{icbw} = \alpha_c + \lambda_b + \mu_w + \beta_W X_c W_{cb} + \beta_P X_c P_{cb} \\ + \delta_W W_{cb} + \delta_P P_{cb} + \gamma \text{Minority}_i + \varepsilon_{icbw}.$$

■ Local war-end year r_c sets the school-entry calendar.

- $k_{cb} = b - (r_c - 5)$; $k = 0$ is the first postwar school-entry cohort.
- $P_{cb} = \mathbf{1}\{k_{cb} \geq 0\}$. The baseline and event study use the same local calendar and sample.

■ β_P : postwar-versus-prewar schooling change per unit of X_c .

■ County, birth-year, and census-wave FE; minority control.

- Standard errors are clustered by county.

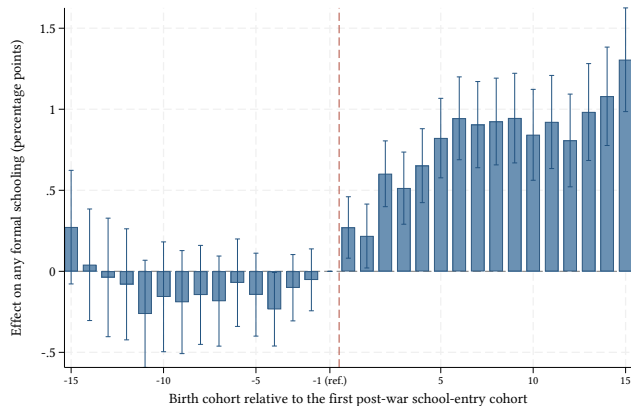
Gains in Basic Schooling

A one-unit increase in X_c is associated with a 1.130 pp larger postwar gain in formal schooling.

	(1) Completed years	(2) Any formal schooling (pp)	(3) Primary completed (pp)
IHS martyr rate × postwar school-entry cohort	0.054*** (0.012)	1.130*** (0.143)	0.813*** (0.148)
Outcome mean	4.972	67.859	50.884
Counties	2,050	2,050	2,050
Individuals	6,632,387	6,632,387	6,632,387

- The pattern points to wider access to basic education.
- Standard errors in parentheses are clustered by county.

Event Study: Any Formal Schooling



- **Before $k = 0$:** most estimates are imprecise.
- **Postwar:** larger positive estimates in later cohorts.
- **Omitted cohort:** $k = -1$.

Robustness

- **Allow more flexible cohort patterns.**
 - The formal-schooling estimate remains positive with province $\times$ birth-year FE and county cohort trends.
- **Use only counties with map-supported war dates.**
 - Formal schooling remains positive in the 1,335-county sample.
- **Completed years are sensitive to these choices.**
 - Those estimates change sign. The main conclusion centers on formal entry.
- **County matching uses residence at the census date.**
 - Selective migration remains an identification concern.

Commemorating Wartime Sacrifice through Schools

Zizhong Primary School, Beijing

抗日战争胜利后，张自忠将军的家属遵其遗嘱，于1948年春在北平筹办自忠小学，以此纪念他的爱国主义精神。新中国成立后，张自忠将军之女张廉云同志多次提出愿将学校交给组织。1950年1月，自忠小学与北京小学合并，自忠小学命名为北京小学分校，此后又先后更名为椅子胡同小学、光明小学等。1988年11月，北京市政府根据人大代表提出恢复自忠小学的议案，批准恢复现名——北京市自忠小学。

- **1948:** Zhang Zizhong's family founded the school to commemorate him.

Memorial Sites and Formal Schooling (pp)

Memorial availability during childhood is positively associated with formal schooling.

	(1) Baseline	(2) All sites	(3) War-specific sites
$X_c \times$ postwar entry	1.130*** (0.143)	0.945*** (0.146)	1.096*** (0.143)
IHS all-site stock, ages 6–12		2.537*** (0.418)	
IHS wartime-site stock, ages 6–12			2.242*** (0.722)
Counties	2,050	2,050	2,050
Individuals	6,632,387	6,632,387	6,632,387

- Facility dates measure availability at ages 6–12.
- Site placement is selective, and individual visits are unobserved.
- Standard errors in parentheses are clustered by county.

| Literacy Mobilization: Newspaper Evidence

More county literacy reports during the 1956–1958 drive.

People's Daily, 1950–1958.

	(1) Any literacy report naming the county	(2) Any report describing local implementation
IHS martyr rate $\times$ 1956–1958	0.0028* (0.0016)	0.0020** (0.0009)
1950–1955 outcome mean	0.0053	0.0043
County-years	19,404	19,404

- Both outcomes are county-year indicators, coded zero or one.
- County FE, province $\times$ year FE, and population controls.
- Actual campaign intensity is unobserved. SEs are clustered by province.

| Schooling in the Next Generation

Children's schooling also varies with their parents' exposure.

Pooled census links identify co-resident parents and children. Postwar-versus-prewar differences are per unit of X_c .

- **Mother-child pairs: 2,265,696 links**

- Children have **0.029 more years** of schooling (SE 0.009).

- **Father-child pairs: 2,172,301 links**

- The corresponding estimate is **0.048 years** (SE 0.010).

- **The comparison allows separate parent and child cohort effects.**

- Standard errors are clustered by county.
- The links cover co-resident families.

Household Education Investment

■ CHIP 2002: 2,051 households in 118 prefectures

- Heads born in 1920–1956, with a co-resident child or grandchild aged 6–18.

■ Higher probability of positive tuition spending

- Postwar-versus-prewar difference: **6.936 pp** per unit of prefecture IHS martyr intensity (SE 3.179).
- The sample mean is 62.94%. The baseline tuition-amount estimate is positive and imprecise.

■ Prefecture exposure and provincial war timing

- Prefecture and head birth-year FE; rural status and sex controls. Standard errors are clustered by prefecture.

Conclusion

- **Greater recognized wartime sacrifice is associated with larger gains in basic schooling.**
 - Formal entry is the most stable result across the checks.
- **Commemoration provides a possible link to educational recovery.**
 - Named schools preserved wartime histories. Memorial availability and literacy reports provide supporting evidence.
- **The pattern extends to families.**
 - Parent–child schooling links and tuition spending show positive associations.

Thank you.

Comments and suggestions are welcome.

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