

BACKGROUND

- Labor unions play an important role in equalizing economic outcomes. However, little is known about their relationship with health inequality throughout the life course.
- **Longitudinal data** allow us to explore the impact of **union membership at different ages** on a cohort aging during a time of **declining union membership**.

RESEARCH QUESTIONS

- Did union membership at prime working ages reduce the educational gradient in later-life health?
- Does the association between education, union membership, and health change as the cohort ages?
- What role do selection into union membership and processes of equalization play?

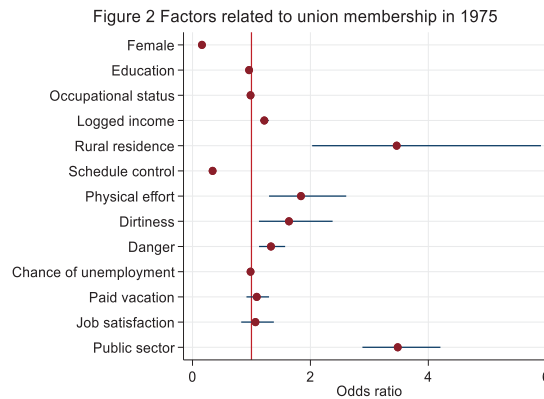
DATA AND METHODS

- **Data:** Wisconsin Longitudinal Study (1957-2020 waves).
- **Dependent variables:** Self-rated health (0 = very poor/poor/fair, 1 = good/very good/excellent).
- **Independent variables:** (1) Years of schooling. (2) Labor union membership in 1975 and 1993.
- **Other key variables:** Pension and health insurance coverage between 1975 and 2004, work characteristics in 1975.
- **Control variables:** Birth year, gender, childhood SES, Duncan SEI scores in 1975, marital status, and logged income.
- **Analytic strategy:** Logistic regression & KHB-mediation analysis.

RESULTS

Table 1 Descriptive statistics

Variables	2004 (N=6,687)	2011 (N=5,576)	2020 (N=3,147)
Good health	90.64%	88.18%	74.58%
In labor unions in 1975	17.76%	17.02%	15.91%
In labor unions in 1993	21.45%	21.43%	20.13%
Labor union membership changes between 1975 and 1993			
1975-No, 1993-No	72.36%	72.80%	74.30%
1975-No, 1993-Yes	9.57%	9.90%	9.56%
1975-Yes, 1993-Yes	11.84%	11.50%	10.54%
1975-Yes, 1993-No	6.23%	5.80%	5.59%
Years of schooling (means)	13.50	13.57	13.69



DISCUSSION

- **Union members experience a more equal distribution of later-life health than non-members**, but an educational gradient re-emerges after age 80.
- Increased access to retirement pensions for workers with lower educational attainment is a significant mechanism through which unions mitigate the educational gradient in health.
- Workers with low schedule control, more frequent physical effort at work, and more dirtiness and dangers at work were more likely to join labor unions, which suggests **potential selection** of those with poorer health into union membership.
- The findings suggest that forces of **selection and equalization** are both at play. **Declining labor union membership** in the United States may **erode protections** for those with lower levels of education and **potentially widen future health inequalities**.
- **Limitation:** The largely white sample comprises individuals who graduated from Wisconsin high schools in 1957, limiting its generalizability to populations with greater ethnorracial and socioeconomic diversity.

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Figure 1 Predicted probability of good health in 2004 and 2020

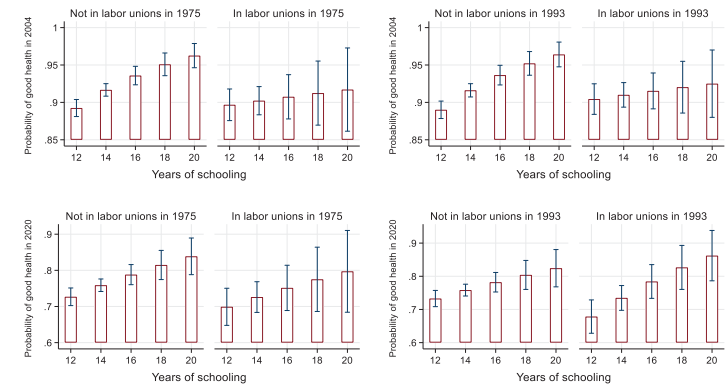


Table 2 Mediation analysis

	Self-rated health in 2004		Self-rated health in 2020	
Mediators: Access to pension plans or health insurance between 1975 and 2004	Pension plans	Health insurance	Pension plans	Health insurance
Indirect effects among respondents with less than 16 years of schooling	0.04* (0.02)	0.02 (0.01)	-0.02 (0.02)	-0.03 (0.01)
Indirect effects among respondents with 16+ years of schooling	0.03 (0.03)	0.05 (0.03)	-0.02 (0.02)	-0.01 (0.03)

Notes: Indirect effect is a product of (a) the path from 1975 union membership to the mediator, and (b) the path from the mediator to self-rated health. A positive effect means the two paths have the same sign (both positive or both negative); a negative effect means the two paths have opposite signs.
* p < 0.05