

Age, Period, and Cohort Trends in Americans' Vocabulary Knowledge



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QUESTIONS

To what extent does Americans' vocabulary knowledge vary by age, period, and cohort?

In what ways have trends in educational attainment, immigration, newspaper readership, television viewing, and word obsolescence affected temporal patterns in vocabulary knowledge?

BACKGROUND

Prior analysts* have...

- ...disagreed about age, period, and cohort trends in vocabulary knowledge
- ...disagreed about what factors (e.g., educational attainment, word obsolescence, newspaper readership) account for these trends
- ...relied on age-period-cohort methods that suffer from serious conceptual and statistical problems

* Alwin 1991; Glenn 1994, 1999; Wilson and Gove 1999a,b; Alwin and McCammon 1999; Yang and Land 2006, 2008; Frenk et al. 2013

CONTRIBUTIONS

We use a new age-period-cohort model that is better aligned with theoretical ideas about cohorts and that does not require problematic statistical assumptions

We thus offer...

- ...more accurate descriptions of age, period, and cohort trends in vocabulary knowledge
- ...more accurate explanations for those trends

RESEARCH DESIGN

Data: 1974-2012 General Social Surveys

Key Measure: 10-item WORDSUM test

Model: $g(E(Y_{ij})) = \mu + \alpha_i + \beta_j + \alpha\beta_k$
 where a_i is age, b_j is period, and cohort is represented as a particular form of the age-by-period interactions

CONCLUSIONS

Vocabulary knowledge...

- ...increases with age until about age 60 and then declines thereafter
- ...was lower in the 1980s and higher in the 2000s
- ...was higher among early Baby Boomers when they were young (but not when they were older)

Age and period trends are partly driven by changes over time in Americans' educational attainments

Rising educational attainments have offset declines across periods in vocabulary knowledge

Age, period, and cohort patterns are not influenced by temporal changes in immigration, newspaper readership, television viewing, or word obsolescence

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RESULTS: Age, Period, and Cohort Trends in Vocabulary Knowledge

