Early Life Schooling and Late Life Financial Literacy in The Wisconsin Longitudinal Study

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The opinions and conclusions expressed are solely those of the author(s) and do not represent the opinions or policy of SSA or any agency of the Federal Government or of the of the University of Wisconsin System, including the Center for Financial Security.
Study Contributions

• Focusing on the relationship between ‘general skills’ early in life and financial literacy in late life rather than ‘specific skills’ training.

• Testing alternative measures of financial literacy.
Changing Context of Retirement

• Individualized retirement planning
  – Shift from Defined Benefit to Defined Contribution
  – Parallels in health care

• The rising importance of financial literacy skills
  – Parallels in health care (health literacy)
Specific vs. General Skills: Interventions

• Current research emphasis on specific kinds of ‘educational’ intervention—specific skills

• But what about general skills? How does early life schooling matter? Might these more general skills matter in the ability to adapt in changing contexts?
Measures of Financial Literacy

• Existing measures include:
  – Knowledge (ability to calculate compound interest)
  – Behavior based measures (i.e. debt levels, participation in retirement plans)

• Proposed Measure: Knowledge of individual financial resources
  – Captures both knowledge and behavior
  – Usefulness may vary based on age of respondents
Research Question

• How do early life schooling and general cognition measures correlate with knowledge of individual financial resources in late life?
Data: Wisconsin Longitudinal Study

• 1 in 3 Wisconsin high school graduates from the class of 1957
• We employ the 1957 and 2004 data.
• Sample loss due to death, attrition, and non-response.
Data: Wisconsin Longitudinal Study

- **Outcome Measures (2004):**
  - Ability to answer values on all asset questions (percent of assets held for which exact amount was given).
  - Ability to provide value of retirement accounts that accumulate a balance including IRAs, 401-ks, etc.
  - Ability to state value of checking account.
Data: Wisconsin Longitudinal Study

• Covariate Measures (1957):
  – Sex
  – Age
  – Parental SES
  – Educational Attainment (updated in recent surveys)
  – Coursework (English, Algebra, Trig/Physics)
  – IQ (3 splines)
  – High School Rank
Methods

• OLS and Logit/Probit Models
• Separate models for those with and without college degrees.
Findings
Results: Assets Summary

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Results: Assets Summary

- IQ and high school rank matter for those without a college degree. Up to 100, each 10 points is associated with a 3% increase asset knowledge.

- Coursework (Trig/Physics/Algebra) matter for those with a college degree. But these effects are smaller than the IQ effects for those without a college degree, but closer to the ‘rank’ effect.
Results: Private Pensions

- Male: SSA FLFC 19-F-10003-5-01, University of Wisconsin
Results: Private Pension

• For those without a college degree, IQ matters. (up to 120, each 10 points is associated with a 4% increase in the probability of knowing the value).

• For those with a college degree it’s additional schooling that matters. (2% for each additional level).
Results: Checking Accounts

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Results: Checking Account

• For those without a college degree, IQ matters. 10 points increase probability by 3 percent for middle IQ group.

• For those with a college degree, algebra coursework is weakly related.
Sensitivity Analyses

• Comparing do not knows to refusals
  – IQ
  – Gender
  – Underestimated effects

• Varying the course content measures

• Probabilities instead of odds ratios
Discussion

• Importance of early life cognition and educational attainment
• GENDER!
• Need more tests of these outcome measures (i.e. utilize bracketing)
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