

Aptitude and attitude and their relationships to labor market outcomes

Carolyn D. Gorman

NYU Robert F. Wagner Graduate School of Public Service
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The Issue

The labor market is changing. Jobs of the future will be different from the jobs of today. These labor market changes could have major implications for economic growth, employment, and inequality; individuals disproportionately employed in jobs with declining demand for their given skills could be particularly disadvantaged by labor market changes.

Uncertainty exists as to who will be affected by labor market changes and in what ways.

Research Question

To what extent are early life aptitude and attitude measures related to later life labor market outcomes and human capital accumulation?

Why it Matters

Human capital--the knowledge, skills, and experience workers have in an economy--can facilitate social and financial well-being on the individual level, and can promote economic growth on the societal level.

Understanding how aptitude and attitude in early adulthood relate to labor market outcomes and human capital accumulation may be important for informing differential outcomes in a rapidly changing labor market.

Data Source

National Longitudinal Survey of Youth (NLSY79): a nationally representative sample of 12,686 young men and women born between 1957 and 1964. Survey respondents were ages 14 to 22 and living in the US when first interviewed in 1979. Interviews were conducted annually from 1979 to 1994 and on a biennial basis thereafter. This research draws on data through 2013.

Figure 1. Respondents' year of birth, NLSY79

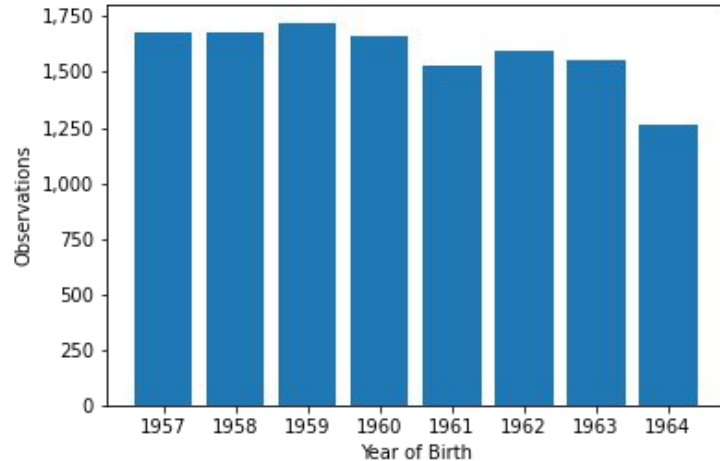
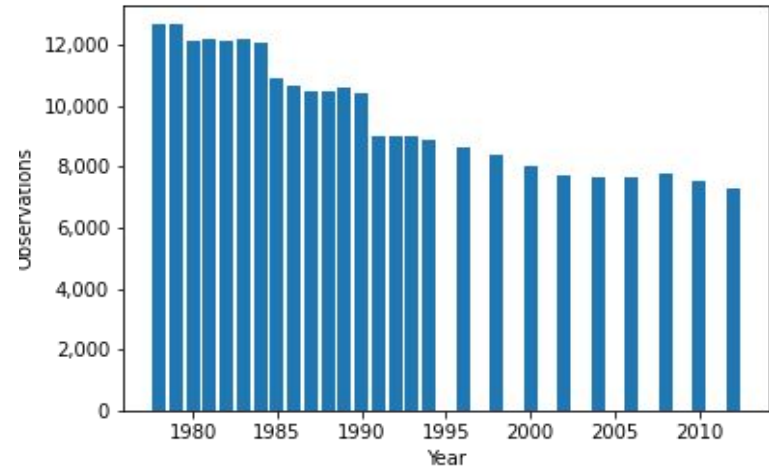


Figure 2. Number of respondents per year, NLSY79



Sample Demographics

Three original independent probability samples of the NLSY79 cohort:

- (1) cross-sectional sample of non-institutionalized young civilians
- (2) supplemental over-sample of Hispanics, Blacks, economically disadvantaged young civilians
- (3) young persons in the military

Military oversample was discontinued after 1984; supplemental oversample was discontinued in 1990. Eligible respondents remaining number 9,964 after the two subsamples were dropped.

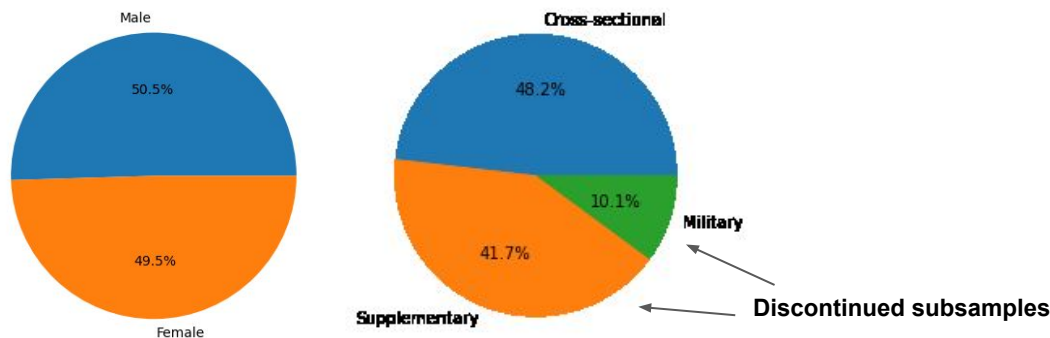
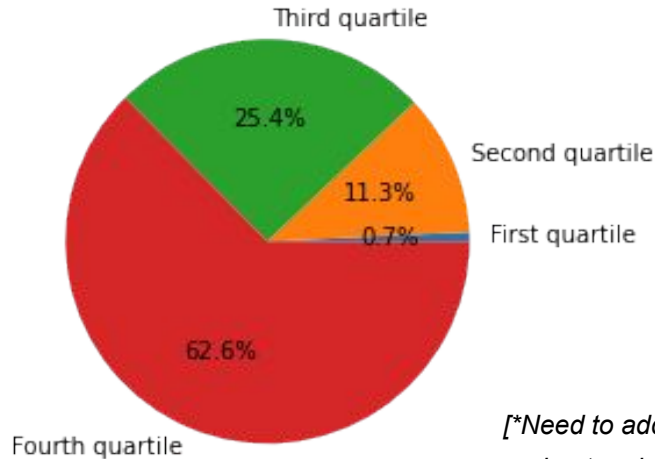


Figure 3. Males and females within the NLSY79 cohort; three independent probability samples in the NLSY79

Sample Demographics

The NLSY79 cohort is a unique source of income information. Income can be precisely measured for low-income and minority households thanks to the original 5,295-respondent panel supplemental sample. Detailed age/income profiles can be traced over time from in-depth income questions asked since 1979.

Figure 5. NLSY79 cohort family income quartiles



*[*Need to add note for income quartile ranges by dollar amount and not make this a pie chart.]*

Measures of Aptitude

Armed Forces Vocational Aptitude Test Battery (ASVAB): Well-known aptitude test; measures **developed abilities and predicts future success** academically or in military jobs; used for career exploration at schools, job corps centers, etc. The vast majority of NLSY79 respondents were given (and took) this test in 1980. Measures:

- Arithmetic reasoning
- Paragraph comprehension
- Word knowledge
- Math knowledge
- Coding speed

Armed Forces Qualifications Test (AFQT): used by many studies to **proxy for human capital** and/or **cognitive proficiency**, as well as **trainability**.^[1]

Measures of Attitude

Rotter-Locus of Control Scale: measures the extent to which **individuals believe they have internal control over their lives**--e.g. through self-motivation or self-determination--versus the extent they believe that the environment has external control of their lives, e.g. through chance, fate, or luck.

The **Rosenberg Self-Esteem Scale**: measures the self-reported **perception of one's own self-worth**--i.e. feelings of pride, satisfaction, and positivity towards oneself; feelings of one's own ability and success.

Analysis

Examine the basic **relationship between aptitude measures and three later life outcomes**: total wages and salary, industry/occupation categories, and whether an individual has employer-sponsored health insurance.

- Include gender and racial demographics for subgroups analysis
- Control for: family poverty status; respondent's education and parents' education; region of residence; if a respondent's health affects their ability to work; if a respondents health affects the type of work they can do

*[*Note: measuring all three outcomes is time pending.]*

Initial Findings

TBD

Implications

TBD