



# Overview of the BLS National Longitudinal Surveys Program

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## Key Questions This Presentation Answers

1. What are longitudinal surveys?
2. What are the benefits and challenges of longitudinal surveys?
3. Which BLS programs provide longitudinal data?
4. What are the National Longitudinal Surveys?
5. Which cohorts are being followed by the NLS program?
6. Who uses NLS data and what have we learned from the National Longitudinal Surveys?



## What Are Longitudinal Surveys?

There are two types of long-term survey designs:

- Repeated Cross Sectional
  - Different samples are given the same survey at multiple points in time
- Longitudinal (also known as panel surveys)
  - Same sample is surveyed at multiple points in time

Individuals, households, or establishments may be surveyed



# Benefits of Longitudinal Data

- Analyze complex relationships among different variables over time.
- Trace the sequence of events in respondents' lives over the long run.
- Examine the impact of early experiences on later outcomes.
- Control for individual variation in order to draw conclusions about cause and effect.



# Advantages of Longitudinal Data over Cross-Sectional Data

- Measurement of Change
- Measurement of Duration
- Relationships among Variables over Time
  - Timing of Events
  - Inferring Cause and Effect

***Let's look at some examples....***



**Example: From the Current Population Survey (CPS), a repeated cross sectional survey, we can see that the labor force participation rate of women has increased significantly over time. Are all women part of this trend?**

- Longitudinal data enable us to examine the amount of time that women spend employed, unemployed, or not in the labor force over segments of their lives.



## **Example: Experiencing unemployment early in life is highly correlated with experiencing unemployment later in life. Why is this?**

- Does unemployment change skills, preferences, or constraints to make repeat spells more likely?

*Or*

- Are people who experience unemployment early in life just different from those who don't?

Longitudinal data help researchers distinguish between these possibilities.



# Challenges of Longitudinal Surveys

- Attrition
  - Death of respondent
  - Inability to locate respondent
  - Respondent refuses to participate
- Changing population
  - Immigration
  - Need to start new cohorts as existing cohorts age





# Challenges of Longitudinal Surveys

- Sample sizes
  - Longitudinal surveys are expensive in terms of both time and money, and sample sizes tend to be much smaller than in cross-sectional surveys.
  - A smaller sample size means the level of publishable detail will not be as fine and statistical variance may be greater than with a large cross-sectional survey such as the Current Population Survey.



## Which BLS programs provide longitudinal data?

- **Quarterly Census of Employment and Wages** – an administrative database of establishments covered by State unemployment insurance programs
- **National Longitudinal Surveys** – a group of surveys of individuals in different generations



## What are the National Longitudinal Surveys?

- Gather detailed information about labor market activity and other experiences in the lives of seven groups, or cohorts, of men and women.
  - Four original cohorts (surveys began in the 1960s) have been discontinued.
  - Three active cohorts continue to be interviewed.



# NLS Sample Characteristics

- Each cohort was selected to represent certain age groups living in the U.S. at the initial interview date.
- Allows conclusions to be drawn about the sample group that can be generalized to the experiences of the entire population of similar U.S. residents.



# Original NLS Cohorts

- Begun in mid-1960s by the Employment and Training Administration of the Department of Labor. NLS program moved to BLS in 1985.
- Each cohort was selected because they were undergoing a significant labor force transition.



## Four Original NLS Cohorts

- Older Men (ages 45 to 59 in 1966)
  - Transition from workforce into retirement.
- Mature Women (ages 30 to 44 in 1967)
  - Entering or reentering the workforce as children grew older.
- Young Men (ages 14 to 24 in 1966)
- Young Women (ages 14 to 24 in 1968)
  - Young Men and Young Women were moving from school to work, getting married, starting families.



## Three Active NLS Cohorts

- National Longitudinal Survey of Youth 1979 (NLSY79) – includes respondents born in the years 1957-64 and living in the U.S. in 1979
- NLSY79 Child and Young Adult surveys – began in 1986 and include the biological children of female NLSY79 respondents
- National Longitudinal Survey of Youth 1997 (NLSY97) – includes respondents born in the years 1980-84 and living in the U.S. in 1997



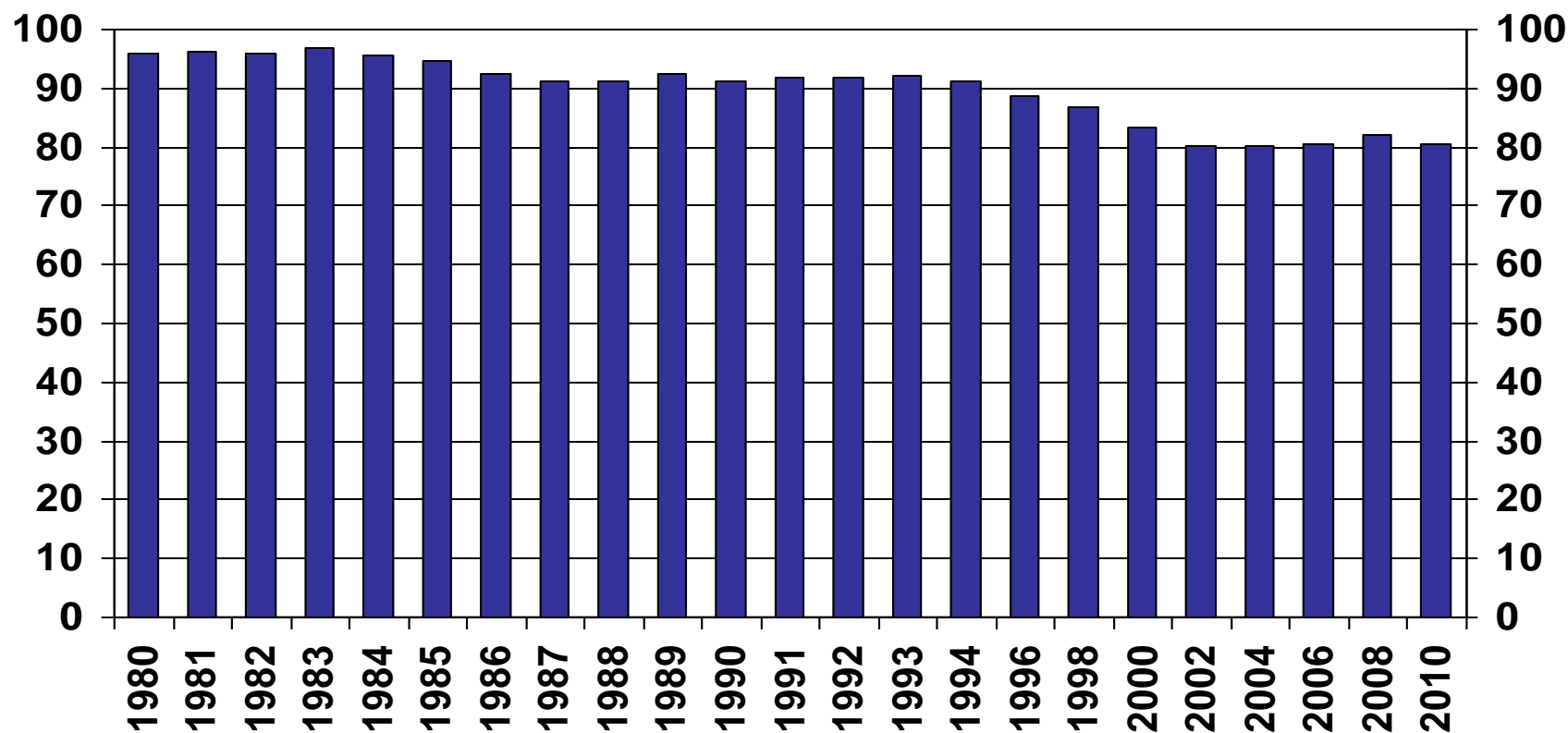
## NLSY79

- NLSY79 now includes a total eligible sample of 9,964 people (577 of whom were reported deceased as of the 2010 round of interviews).
- Respondents were ages 14 to 22 when first interviewed in 1979 and are now in their 40s and 50s.
- Interviews were conducted annually from 1979 to 1994 and biennially since 1994. Respondents have been interviewed a total of 24 times.





## NLSY79 Sample Retention Rates (Adjusted for Deceased Sample Members)





## Children of the NLSY79

- Sample of children whose mothers are in the NLSY79
  - Enables researchers to examine how the characteristics and behaviors of mothers influence various outcomes of their children.
  - Focus is child development.
- Began in 1986 with a battery of cognitive, social, emotional, and physiological assessments.
- Short survey of children beginning at age 10; longer survey starting at age 15

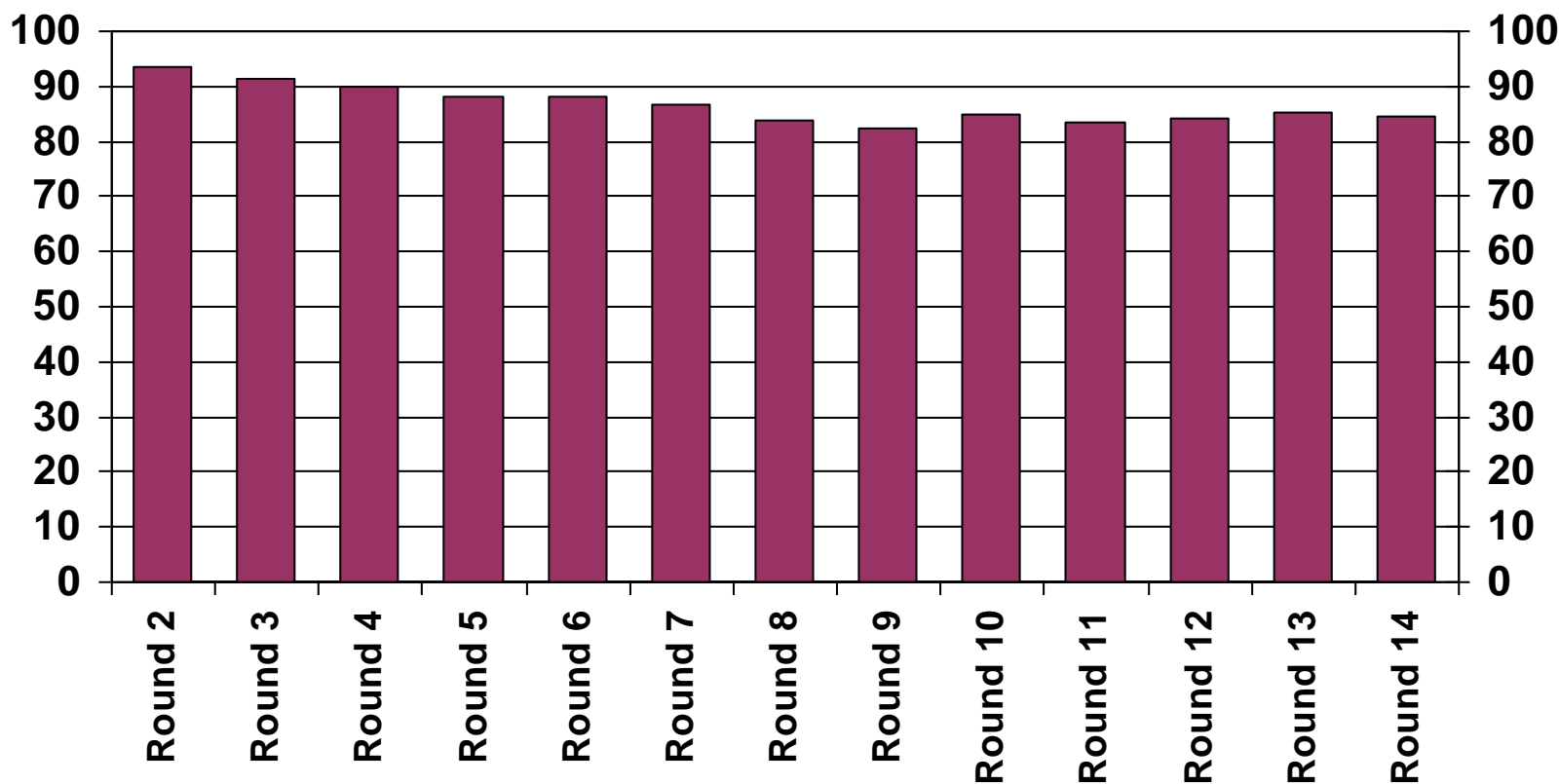


## NLSY97

- Nationally representative sample of 8,984 men and women born in the years 1980-84.
- Respondents were ages 12 to 17 when first interviewed in 1997 and are now in their 20s and early 30s.
- Interviews have been conducted annually since 1997. Will transition to biennial interviews after 2012.



## NLSY97 Sample Retention Rates (Adjusted for Deceased Sample Members)





# Who Works with BLS to Conduct the Surveys?

- **National Opinion Research Center (NORC) at the University of Chicago**
  - Data collection and questionnaire design
- **Center for Human Resource Research (CHRR), The Ohio State University**
  - Questionnaire design, computerized survey instrument development, data processing, and data documentation and dissemination



# Who Uses NLS data?

- Bureau of Labor Statistics
- Academic researchers in economics, sociology, demography, education, criminology, child development, and public health
- Policymakers and journalists (usually through the analyses of researchers)

***Let's look at the NLS Publications from BLS first...***



## NLS Publications from BLS

- NLSY79 and NLSY97 news releases
- *Monthly Labor Review* articles and other occasional BLS publications such as *Spotlight on Statistics*
- *NLS News*, a quarterly newsletter for data users



## A few facts from the NLSY79

- Individuals born in the years 1957 to 1964 held an average of 11 jobs from ages 18 to 44.
- The average person was employed during 77 percent of the weeks from age 18 to age 44. Men spent a larger percent of weeks employed than did women (84 versus 70 percent).
- The annual percent growth in inflation-adjusted hourly earnings was fastest when workers were in their late teens and early twenties. Growth rates in earnings generally were higher for college graduates than for workers with less education.






## A few facts from the NLSY97

- Twenty-three percent of 23-year-old women had earned a bachelor's degree, compared with 14 percent of men.
- Eight percent of male high school graduates who had never attended college were in the Armed Forces at age 23, as were 6 percent of men who had attended college but left before earning a bachelor's degree.
- Individuals born in the years 1980 to 1984 held an average of 4.9 jobs from age 18 to age 23.
- Men and women spent similar amounts of time employed from age 18 to age 23.



# What have we learned from the National Longitudinal Surveys?

NLS Questions Cover Many Topics

- Focus is on labor market activities, but the surveys also obtain information on aspects of life that affect or are affected by labor market activity. 



# NLSY79 and NLSY97 Major Topics

- Employment history, including military service
- Job search
- Educational attainment
- High school transcripts
- Training
- School-to-work transitions
- ASVAB scores
- Crime, delinquency, and arrest records
- Drug, alcohol, cigarette, and other substance use
- Marital history
- Fertility and sexual activity
- Childcare
- Income, poverty, and assets
- Participation in public programs
- Health
- Family background
- Race and ethnicity



## NLS Funding Partners

- In addition to BLS, many other agencies have contributed funding for the NLS program:
  - Department of Defense
  - Department of Justice
  - Department of Education
  - National Institute of Child Health and Human Development
  - National Institute on Drug Abuse
  - National Institute on Alcohol Abuse and Alcoholism
  - National Institute on Aging
  - Centers for Disease Control and Prevention
  - National Science Foundation
  - Social Security Administration




# NLS Microdata Files

The Main Product of  
the NLS Program



# Three Levels of NLSY Data Available

1. Public-Use Files – Available through NLS web site. Also includes user's guides, questionnaires, and other documentation to help researchers use the data. 
2. Geocode Files – Approved researchers can use these files for specified purposes at the facilities of their own institutions.
3. Zip Code/Census Tract Files and School Surveys – Approved researchers can use these files for specified purposes only at BLS.



# Public-use data at <https://www.nlsinfo.org/>

The screenshot shows a Windows Internet Explorer browser window titled "Investigator - Windows Internet Explorer provided by Bureau of Labor Statistics". The address bar displays "https://www.nlsinfo.org/investigator/pages/login.jsp". The browser's menu bar includes File, Edit, View, Favorites, Tools, and Help. The Favorites bar shows "Investigator". The page content is titled "NLS Investigator" with a blue header. Below the header, there is a "Log In" section on the left with fields for "Username:" and "Password:", a "Login" button, and links for "I cannot access my account" and "Register". To the right of the login section, the text "Welcome to Investigator" is followed by a paragraph: "Sponsored by the Bureau of Labor Statistics, the National Longitudinal Surveys (NLS) are a family of surveys dedicated to tracking the labor market and other life experiences of American men and women." Below this, it states "The seven NLS cohorts are:" and lists them: "National Longitudinal Survey of Youth 1997 (NLSY97)", "National Longitudinal Survey of Youth 1979 (NLSY79)", "NLSY79 Child and Young Adult", "Older Men", "Mature Women", "Young Men", and "Young Women". At the bottom of the main content area, it says "To access data for any of the seven NLS cohorts use the login box to the left or [begin searching](#) as guest." The footer of the page includes links for "NLS Home", "NLS Bibliography", and "Privacy Policy", and a note "For help, email [usersvc@chrr.osu.edu](mailto:usersvc@chrr.osu.edu)". The Windows taskbar at the bottom shows the Start button, several open applications (Inbox - Micro..., N:\NLS outr..., Microsoft Po..., Investigat...), and the system clock showing 2:14 PM.

Investigator - Windows Internet Explorer provided by Bureau of Labor Statistics

https://www.nlsinfo.org/investigator/pages/login.jsp

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Investigator

## NLS Investigator

Welcome, Guest | [LOGIN](#) | [Register](#) | [Search](#) | [Help](#)

**Log In**  
Username:  
  
Password:  
  
  
[I cannot access my account](#)  
[Register](#)

**Welcome to Investigator**

Sponsored by the Bureau of Labor Statistics, the National Longitudinal Surveys (NLS) are a family of surveys dedicated to tracking the labor market and other life experiences of American men and women.

The seven NLS cohorts are:

- National Longitudinal Survey of Youth 1997 (NLSY97)
- National Longitudinal Survey of Youth 1979 (NLSY79)
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For help, email [usersvc@chrr.osu.edu](mailto:usersvc@chrr.osu.edu)


Done

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Internet | 100% | 2:14 PM



## Examples of Research Based on the NLS

- The economic benefits of attending college and of attending different types of colleges
- The long-term effects of the Head Start program on behavioral problems, risk-taking behaviors and attitudes, drug and alcohol use, and educational attainment
- The economic benefits of earning a GED 





**Stephen V. Cameron and James J. Heckman,  
“Nonequivalence of High School Equivalents,” *Journal  
of Labor Economics*, January 1993**

- Finds that people with a GED credential are statistically indistinguishable from high school dropouts in terms of labor market success. Any differences among GED recipients, high school dropouts, and high school graduates are accounted for by their years of schooling completed. The only payoff to the GED arises from its value in opening postsecondary schooling and training opportunities, but completion rates for GED recipients are much lower in these activities than they are for ordinary graduates. There is no easy substitute for schooling.



## More Examples of NLS Research

- The relationship between alcohol and drug use and labor market outcomes
- The effects of youth criminal and delinquent behavior on adult outcomes
- The effects of childhood lead exposure on child development and young adult behavior
- The relationship between television viewing and standardized test scores



# Still More Examples of NLS Research

- The effects of working while in school on high school grades, graduation, college enrollment, and adult labor market outcomes
- The relationship between teen driving restrictions and risky teen behaviors
- The effects of obesity on labor market outcomes



# Does the Freshman 15 Really Happen?

- Among people who went to college, average weight change was a gain of 7.0 pounds from senior year of high school to two survey rounds later.
- 25% of college students gained 15 pounds or more
- Among high school graduates who didn't go to college, average weight change was a gain of 6.6 pounds.
- 27% of high school graduates gained 15 pounds or more.
- **About the same percentage of people who had not enrolled in college gained the Freshman 15 as did those who had enrolled.**



# Where to Find Even More Examples of NLS Research: NLS Bibliography

- A searchable online bibliography contains citations for more than 7,000 journal articles, working papers, books, dissertations, news stories, and other publications examining NLS data.
- [www.nlsbibliography.org](http://www.nlsbibliography.org)



## The **F**uture of the NLS

- Importance of longitudinal data continues to grow.
- Hope to continue following current cohorts until they reach retirement.
- Changing emphasis on topics but continue to get holistic view of people.
- Need for new cohorts to cover age spectrum.



## For More Information

- The NLS home page  
<http://www.bls.gov/nls/home.htm>
- The NLS Bibliography  
<http://www.nlsbibliography.org/>
- [NLS\\_Info@bls.gov](mailto:NLS_Info@bls.gov)
- Jay Meisenheimer: 202-691-7409  
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