Considerations for Analysis of Data from the Secondary Longitudinal Studies from 1972-2000

Module Objectives

- Describe the research potential of the secondary longitudinal studies datasets from 1972-2000
- Describe key documents that can provide insights into analyzing data from the National Longitudinal Study of 1972 (NLS-72), High School and Beyond (HS&B), and the National Education Longitudinal Study of 1988 (NELS:88)
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**Publications that have been produced from NLS-72, HS&B, and NELS:88**

- Approximately 3,000 journal articles, dissertations, books or book chapters, conference papers, and reports have been produced so far
- Journal articles (47%), reports or working papers (27%), conference papers (13%), dissertations (11%), and books or book chapters (2%)
- Education, economics, demography, sociology, psychology, statistics, and psychometrics

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**Transitions that can be Examined with NLS-72, HS&B, and NELS:88**

Researchers use NLS-72, HS&B, and NELS:88 to examine

- NLS-72 – Transitions from high school to postsecondary education and work
- HS&B 12th grade cohort – Transitions from high school to postsecondary education and work
- HS&B 10th grade cohort – Transitions through high school and a look at late dropouts
- NELS:88 – Transitions from middle school to high school and beyond
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Following the NLS-72, HS&B, and NELS:88 Cohorts

Most cohorts followed for at least 10 years across three decades

- NLS-72 – 14 years
- HS&B 12th grade cohort – 6 years
- HS&B 10th grade cohort – 12 years
- NELS:88 – 12 years

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Types of Analyses that can be Conducted

- Across the secondary longitudinal studies, each cohort of respondents can be examined at a specific point in time or as a cross-section
  - An example of a report using cross-sectional data is: Public and Private Schools: An Analysis of High School and Beyond (HS&B) Part I and Part II
- Respondents within a specific dataset can be followed longitudinally across time
  - An example of a report using longitudinal data is: Coming of Age in the 1990s: The Eighth-Grade Class of 1988 12 Years Later (NCES 2002321)
- Respondents within the four cohorts can be compared across time periods to examine trends
  - Examples of reports using trend data are: Trends Among High School Seniors, 1972-2004 (NCES 2008320)
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<table>
<thead>
<tr>
<th>Research Potential for Specific Periods of Time</th>
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<tbody>
<tr>
<td>• NLS-72 enables the examination of issues (or changes) that occurred between 1972 and 1986 to a cohort of seniors</td>
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<tr>
<td>• HS&amp;B sophomore cohort enables the examination of issues (or changes) that occurred between 1980 and 1992 to a cohort of sophomores</td>
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<tr>
<td>• HS&amp;B senior cohort enables the examination of issues (or changes) that occurred between 1980 and 1986 to a cohort of seniors</td>
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<tr>
<td>• NELS:88 enables the examination of issues (or changes) that occurred between 1988 and 2000 for 8th, 10th, and 12th grade cohorts</td>
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<table>
<thead>
<tr>
<th>Examining Trends Over Time for Specific Grade Cohorts</th>
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<tbody>
<tr>
<td>• Senior cohorts</td>
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<tr>
<td>o NLS-72, HS&amp;B seniors, and NELS:88/92 seniors</td>
</tr>
<tr>
<td>• Sophomore cohorts</td>
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<tr>
<td>o HS&amp;B sophomores and NELS:88/90 sophomores</td>
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<tr>
<td>• High School Transcripts</td>
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<td>o HS&amp;B sophomores and NELS:88 seniors</td>
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<td>• Postsecondary Transcripts</td>
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<td>o NLS-72, HS&amp;B sophomores, HS&amp;B seniors, and NELS:88/2000</td>
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**Trend Analyses Across NLS-72, HS&B, and NELS:88**

- Tenth Grade
  - HS&B sophomore (BY) and NELS:88 (F1) cohorts
- Twelfth Grade
  - NLS-72 (BY), HS&B senior (BY), and NELS:88 (F2) cohorts
- Two Years after Twelfth Grade
  - NLS-72 (F2), HS&B sophomores (F2) and seniors (F1), and NELS:88 (F3) cohorts
- Dropouts (Grade 10 to Grade 12)
  - HS&B sophomores (BY and F1) and NELS:88 (F1 and F2) cohorts
- High School Transcripts
  - HS&B sophomores (F1) and NELS:88 (F2) cohorts
- Postsecondary Transcripts
- When conducting trend analyses, researchers should review the technical documentation (e.g., design weights, sample sizes, etc.) for each data set being used

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**Comparisons with More Recent Secondary Longitudinal Studies**

- ELS:2002 sophomore cohort (BY) can be compared to HS&B (BY) and NELS:88 (F1)
- ELS:2002 senior cohort (F1) can be compared to NLS-72 (BY), HS&B senior cohort (BY), and NELS:88 (F2)
- ELS:2002 and HSLS:09 cohort postsecondary experiences can be compared to NLS-72, HS&B, and NELS:88
- ELS:2002 and HSLS:09 high school transcripts can be compared to HS&B and NELS:88
- ELS:2002 and HSLS:09 postsecondary transcripts can be compared to NLS-72, HS&B, and NELS:88
Importance of Technical Documentation

- There are no short cuts when working with Secondary Longitudinal Studies from 1972-2000
- Even though there are major design features common across NLS-72, HS&B, and NELS:88, each of these data sets contain unique variations in methodologies used that require analysts to become familiar with the technical documentation and methodology reports that have been written
- Researchers MUST review each study’s documentation and understand how the data were collected, coded, and weighted to ensure accurate analyses

Must-Read Technical Documents for NLS-72

  - Volume I
    - Study background, sample, weights (guidance regarding weight selection), and instrumentation (questionnaires and assessments)
  - Volume II
    - Composite score analysis, constructed education variables, and subject keyword index
  - Volume III
    - Frequency distributions for the base year through fourth follow-up
  - The final NLS-72 technical report that details methods of collection, response rates, and other technical information
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**Must-Read Technical Documents for HS&B Sophomore Cohort**

- [High School and Beyond Fourth Follow-Up Methodology Report. Technical Report (NCES 1995426)]
  - Describes and evaluates the methods, procedures, techniques, and activities that produced the fourth (1992) follow-up of the High School and Beyond (HS&B) study

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**Must-Read Technical Documents for HS&B Senior Cohort**

- [High School and Beyond Third Follow-Up (1986) Sample Design Report (NCES 88402)]
  - Provides information that documents major technical aspects of the third follow-up sample selection and implementation, describes the weighting procedures, documents major technical aspects of the third follow-up sample selection and implementation, examines the possible impact of nonresponse on sample estimates, and evaluates the precision of estimates derived from the sample
Must-Read Technical Documents for NELS:88

  - Appendix H provides information on NELS:88 student data weights, flags, and composite variables (including SES) for the base year, and first and second follow-ups
- National Education Longitudinal Study (NELS:88/94) Methodology Report (NCES 96174)
  - Provides information on the subsampling and data collection activities for the third follow-up
- User's Manual: NELS:88 Base-Year to Fourth Follow-up: Student Component Data File (NCES 2002323)
  - Final NELS:88 technical report
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Additional Rounds of Data Collection

- In 2015, NCES will release restricted data for the HS&B sophomore cohort that were collected in 2013-14 when many of these cohort members were in their early 50’s
- In 2017, a new round of restricted data may be released for the HS&B senior cohort when many of these cohort members were in their mid-50’s

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Module Summary

- Described the documentation necessary for proper analysis of secondary longitudinal studies data from 1972-2000
- Described key documents that can provide insights into analyzing data from NLS-72, HS&B, and NELS:88
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Module Resources

- Secondary Longitudinal Studies Program
- National Longitudinal Study of 1972 (NLS-72)
- High School and Beyond (HS&B)
- National Education Longitudinal Study of 1988 (NELS:88)
- Public and Private Schools: An Analysis of High School and Beyond (HS&B) Part I and Part II
- Coming of Age in the 1990s: The Eighth-Grade Class of 1988 12 Years Later (NCES 2002321)
- Trends Among High School Seniors, 1972-2004 (NCES 2008320)
- America’s High School Sophomores: A Ten year Comparison, 1980 – 1990 (NCES 93087)
  - Volume I
  - Volume II
  - Volume III
- High School and Beyond Third Follow-Up (1986) Sample Design Report (NCES 88402)
- National Education Longitudinal Study (NELS:88/94) Methodology Report (NCES 96174)
- User’s Manual: NELS:88 Base-Year to Fourth Follow-up: Student Component Data