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Volume Title: The Youth Labor Market Problem: Its Nature, Causes, and Consequences

Volume Author/Editor: Richard B. Freeman and David A. Wise, eds.

Volume Publisher: University of Chicago Press

Volume ISBN: 0-226-26161-1

Volume URL: <http://www.nber.org/books/free82-1>

Publication Date: 1982

Chapter Title: Why Does the Rate of Youth Labor Force Activity Differ across Surveys?

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Chapter URL: <http://www.nber.org/chapters/c7872>

Chapter pages in book: (p. 75 - 114)

4 Why Does the Rate of Youth Labor Force Activity Differ across Surveys?

Richard B. Freeman and James L. Medoff

One prerequisite for analysis of the economic problem of youths is a set of sound estimates of the employment and labor force status of the young. Yet existing estimates of the extent of labor market involvement and the extent of work activity of the young based on the monthly Current Population Survey (CPS), the source of official government figures on this subject, and from special longitudinal surveys of the young, notably the National Longitudinal Survey of Young Men (NLS) and the National Longitudinal Survey of the High School Class of 1972 (NLS72), give strikingly different pictures of the labor market for young men.¹ Labor force participation rates, employment to population ratios, and weeks worked are noticeably higher in both longitudinal surveys than in the CPS. Unemployment rates differ significantly but are neither higher nor lower consistently across surveys.

The differences in the recorded activity rates constitute a major problem in evaluating the magnitude and nature of the labor force problem for young men. If the CPS data are incorrect and understate the employment to population ratio for young individuals, standard discussions of youth employment problems are exaggerated. If the longitudinal data are incorrect, studies that use the longitudinal surveys to ascertain the causes and effects of the youth employment problem may be invalid. What explains the large differences in rates of male youth labor force activity found in the different surveys? Can the observed differences be traced to specific differences in survey procedures or questions?

The purpose of this chapter is to answer these questions by providing a detailed quantitative analysis of the divergences between the rates of

We are extremely grateful to M. Borus, K. Coons, J. Fay, W. Gray, S. Hills, R. Lerman, D. Mandelbaum, E. Phillipp, M. Van Denburgh, and H. Woltman for their assistance in helping us address this question.

labor force activity for male youths indicated by these surveys. Section 4.1 describes the three surveys providing the youth labor force information on which we focus: the CPS, NLS, and NLS72. Section 4.2 compares the labor force participation rates, ratios of employment to population, rates of unemployment, and rates of school enrollment given by the surveys. Section 4.3 uses a matched mother-son sample drawn from the NLS and other information to examine three potential causes of survey differences: (1) the fact that youths report their own activity in the NLS and NLS72 while parents or other adults typically report the activities of youths in the CPS; (2) differences in the samples studied; and (3) differences in the survey methods employed. In the fourth section, some suggestions for further investigations of alternative measures of the employment of young persons are offered.

Our analysis indicates that there are significant differences between rates of activity for young males calculated with surveys in which young people respond for themselves and those calculated with surveys in which they are unlikely to do so. Of particular importance is the fact that the responses of young male self-respondents imply a significantly higher employment to population ratio than is implied by the responses of proxy respondents. The person questioned about the activity of young men appears to be a major determinant of the responses obtained, which raises important questions about current ways of obtaining information about the youth joblessness problem.

4.1 Survey Procedures and Questions

In this section we will compare the questions asked and survey methods employed in the CPS, NLS, and NLS72. Each of the surveys seeks information about labor force activity, weeks worked in the previous year, and enrollment in school. While the questions are reasonably similar across surveys, the survey methods, in particular the relative importance of proxy versus self-response, differ. These differences must be understood if the large disparities in the picture of the youth labor market given by the surveys are to be explained.

The CPS² interviews approximately 56,000 households (47,000 before July 1975) using a stratified sample. Part of the sample is changed each month to avoid problems of noncooperation when a person is interviewed for many months in a row. The method of rotation of the sample is such that a group will be interviewed for four consecutive months one year, deleted from the CPS for eight months and then interviewed in the same four months of the following year. As a result, 75% of the sample is common from month to month and 50% is common from year to year. Each month, during the calendar week containing the nineteenth day, interviewers contact some "responsible person" in each of the sample

households. Personal visits are used to obtain 90% or more of the responses during the first and fifth months that the household is in the sample and about 50 to 60% in the second month; in other months more than 75% of the responses come from telephone interviews. Roughly half of the households in any month are interviewed by phone. Though the questions are asked for every individual in the household, it is important to understand that *young individuals usually do not respond for themselves*. This is because one “responsible person” in the family, usually not a teen,³ answers for every household member.

Tabulated results from the CPS are derived by using responses to calculate a “composite estimate” of the status of individuals by taking the unweighted mean of two separate estimates: the “actual” value for the current month and a figure obtained by adding to the preceding month’s composite estimate the change in the actual value of each item between the preceding month and the present month based on the part of the sample that is common to both months. By using raw data for most of our analysis we have taken into account the possible bias caused by this procedure.

To determine the labor force status of an individual, the CPS asks a standard set of interrelated questions that are designed to classify a person as a member of one of three categories: employed, unemployed, and out of the labor force. Figure 4.1 gives this set of questions from the CPS survey.

To determine weeks worked over the previous year the CPS asks (in its March questionnaire only):

In 19__ how many weeks did _____ work either full time or part time not counting work around the house? Include paid vacation and paid sick leave.

The CPS has two questions regarding enrollment in school. Each October the CPS asks:

Is _____ attending or enrolled in school?

In each month, the major activity question

What was _____ doing most of last week?

provides information on attendance at school (see question 19 in figure 4.1).

The National Longitudinal Survey⁵ is a survey that covers about 5,000 persons in several specified age groups: young men aged 14 to 24 in 1966 (more accurately, as of April 1, 1966); young women aged 14 to 24 in 1968; women between the ages of 30 and 44 in 1966; and men 45 to 59 in 1966. The original samples were chosen through a multistage probability sampling procedure. To ensure that reliable information on blacks could

<p>18. LINE NUMBER</p> <p>19. What was ... doing most of LAST WEEK -</p> <p>Working <input type="checkbox"/> Keeping house <input type="checkbox"/> Going to school or something else? <input checked="" type="checkbox"/></p> <p>Working (Skip to 20A)..... WK <input type="checkbox"/> With a job but not at work... J <input type="checkbox"/> Looking for work..... LK <input type="checkbox"/> Keeping house..... H <input type="checkbox"/> Going to school..... S <input type="checkbox"/> Unable to work (Skip to 24)... U <input type="checkbox"/> Retired..... R <input type="checkbox"/> Other (Specify)..... OT <input type="checkbox"/></p> <hr/> <p>20C. Does ... USUALLY work 35 hours or more a week at this job?</p> <p>Yes <input type="checkbox"/> What is the reason ... worked less than 35 hours LAST WEEK?</p> <p>No <input type="checkbox"/> What is the reason ... USUALLY works less than 35 hours a week?</p> <p>(Mark the appropriate reason)</p> <p>Slack work..... <input type="checkbox"/> Material shortage..... <input type="checkbox"/> Plant or machine repair..... <input type="checkbox"/> New job started during week... <input type="checkbox"/> Job terminated during week... <input type="checkbox"/> Could find only part-time work <input type="checkbox"/> Holiday (Legal or religious)... <input type="checkbox"/> Labor dispute..... <input type="checkbox"/> Bad weather..... <input type="checkbox"/> Own illness..... <input type="checkbox"/> On vacation..... <input type="checkbox"/> Too busy with housework, school, personal bus., etc. <input type="checkbox"/> Did not want full-time work... <input type="checkbox"/> Full-time work week under 35 hours <input type="checkbox"/> Other reason (Specify)..... <input type="checkbox"/></p> <p>(Skip to 23 and enter job worked at last week)</p>	<p>20. Did ... do any work at all LAST WEEK, not counting work around the house? (Notes: If farm or business operator in hh., ask about unpaid work.)</p> <p>Yes <input type="checkbox"/> No <input type="checkbox"/> (Go to 21)</p> <p>20A. How many hours did ... work LAST WEEK at all jobs?</p> <p>1 1 2 2 3 3 4 4 5 5 6 6 7 7 8 8 9 9 10 10 11 11 12 12 13 13 14 14 15 15 16 16 17 17 18 18 19 19 20 20 21 21 22 22 23 23 24 24 25 25 26 26 27 27 28 28 29 29 30 30 31 31 32 32 33 33 34 34 35 35 36 36 37 37 38 38 39 39 40 40 41 41 42 42 43 43 44 44 45 45 46 46 47 47 48 48 49 49 50 50 51 51 52 52 53 53 54 54 55 55 56 56 57 57 58 58 59 59 60 60</p> <p>20B. INTERVIEWER CHECK ITEM</p> <p>49+ (Skip to item 23)</p> <p>1-34 (Go to 20C)</p> <p>35-48 (Go to 20B)</p> <p>20C. Did ... lose any time or take any time off LAST WEEK for any reason such as illness, holiday or slack work?</p> <p>Yes <input type="checkbox"/> How many hours did ... take off?</p> <p>(Correct 20A if last time not already deducted; if 20A reduced below 35, correct 20B and fill 20C; otherwise, skip to 23.)</p> <p>No <input type="checkbox"/></p> <p>20C. Did ... work any overtime or at more than one job LAST WEEK?</p> <p>Yes <input type="checkbox"/> How many extra hours did ... work?</p> <p>(Correct 20A and 20B as necessary if extra hours not already included and skip to 23.)</p> <p>No <input type="checkbox"/></p> <p>(Skip to 23)</p>	<p>21. (If 1 in 19, skip to 21A.) Did ... have a job or business from which he was temporarily absent or on layoff LAST WEEK?</p> <p>Yes <input type="checkbox"/> No <input type="checkbox"/> (Go to 22)</p> <p>21A. Why was ... absent from work LAST WEEK?</p> <p>Own illness..... <input type="checkbox"/> On vacation..... <input checked="" type="checkbox"/> Bad weather..... <input type="checkbox"/> Labor dispute... <input type="checkbox"/> New job to begin within 30 days (Skip to 22B and 22C) Temporary layoff (Under 30 days) <input type="checkbox"/> Indefinite layoff (30 days or more or no def. recall date) <input type="checkbox"/> (Skip to 22C) Other (Specify)... <input type="checkbox"/></p> <hr/> <p>21B. Is ... getting wages or salary for any of the time off LAST WEEK?</p> <p>Yes..... <input type="checkbox"/> No..... <input type="checkbox"/> Self-employed <input type="checkbox"/></p> <p>21C. Does ... usually work 35 hours or more a week at this job?</p> <p>Yes <input type="checkbox"/> No <input checked="" type="checkbox"/></p> <p>(Skip to 23 and enter job held last week)</p>	<p>22. (If LK in 19, skip to 22A.) Has ... been looking for work during the past 4 weeks?</p> <p>Yes <input type="checkbox"/> No <input type="checkbox"/> (Go to 24)</p> <p>22A. What has ... been doing in the last 4 weeks to find work? (Mark all methods used; do not read list.)</p> <p>Checked with... pub. employ. agency <input type="checkbox"/> priv. employ. agency <input type="checkbox"/> employer directly... <input type="checkbox"/> friends or relatives <input type="checkbox"/> Placed or answered ads..... <input type="checkbox"/> Nothing (Skip to 24)..... <input type="checkbox"/> Other (Specify in notes, e.g., MDTA, union or prof. register, etc.)..... <input type="checkbox"/></p> <p>22B. Why did ... start looking for work? Was it because ... lost or quit a job at that time (specify) or was there some other reason?</p> <p>Last job..... <input type="checkbox"/> Quit job..... <input type="checkbox"/> Left school..... <input type="checkbox"/> Wanted temporary work <input type="checkbox"/> Other (Specify in notes) <input type="checkbox"/></p> <p>22C. 1) How many weeks has ... been looking for work?</p> <p>1 1 2 2 3 3 4 4 5 5 6 6 7 7 8 8 9 9</p> <p>2) How many weeks ago did ... start looking for work?</p> <p>1 1 2 2 3 3 4 4 5 5 6 6 7 7 8 8 9 9</p> <p>3) How many weeks ago was ... laid off?</p> <p>1 1 2 2 3 3 4 4 5 5 6 6 7 7 8 8 9 9</p> <p>22D. Has ... been looking for full-time or part-time work?</p> <p>Full <input type="checkbox"/> Part <input checked="" type="checkbox"/></p> <p>22E. Is there any reason why ... could not take a job LAST WEEK?</p> <p>Yes <input type="checkbox"/> (Already has a job..... <input type="checkbox"/> Temporary illness..... <input type="checkbox"/> Going to school..... <input type="checkbox"/> Other (Specify in notes) <input type="checkbox"/> No <input type="checkbox"/></p> <p>22F. When did ... last work at a full-time job or business lasting 2 consecutive weeks or more? 1970 or later (Write month and year) ...</p> <p>(Month and year)</p> <p>Before 1970..... <input type="checkbox"/> Nov. worked full-time 2 wks. or more <input type="checkbox"/> Never worked at all..... <input type="checkbox"/></p> <p>(Skip to 23 and enter last full-time civilian job lasting 2 weeks or more, job from which laid off, or "Never Worked")</p>																										
<p>OFFICE USE ONLY</p> <table style="width:100%;"> <thead> <tr> <th style="width:50%;">INDUSTRY</th> <th style="width:50%;">OCCUPATION</th> </tr> </thead> <tbody> <tr> <td><input type="checkbox"/> A <input type="checkbox"/></td> <td><input type="checkbox"/> N <input type="checkbox"/></td> </tr> <tr> <td><input type="checkbox"/> B <input type="checkbox"/></td> <td><input type="checkbox"/> P <input type="checkbox"/></td> </tr> <tr> <td><input type="checkbox"/> C <input type="checkbox"/></td> <td><input type="checkbox"/> Q <input type="checkbox"/></td> </tr> <tr> <td><input type="checkbox"/> D <input type="checkbox"/></td> <td><input type="checkbox"/> R <input type="checkbox"/></td> </tr> <tr> <td><input type="checkbox"/> E <input type="checkbox"/></td> <td><input type="checkbox"/> S <input type="checkbox"/></td> </tr> <tr> <td><input type="checkbox"/> F <input type="checkbox"/></td> <td><input type="checkbox"/> T <input type="checkbox"/></td> </tr> <tr> <td><input type="checkbox"/> G <input type="checkbox"/></td> <td><input type="checkbox"/> U <input type="checkbox"/></td> </tr> <tr> <td><input type="checkbox"/> H <input type="checkbox"/></td> <td><input type="checkbox"/> V <input type="checkbox"/></td> </tr> <tr> <td><input type="checkbox"/> I <input type="checkbox"/></td> <td><input type="checkbox"/> W <input type="checkbox"/></td> </tr> <tr> <td><input type="checkbox"/> J <input type="checkbox"/></td> <td><input type="checkbox"/> X <input type="checkbox"/></td> </tr> <tr> <td><input type="checkbox"/> K <input type="checkbox"/></td> <td><input type="checkbox"/> Y <input type="checkbox"/></td> </tr> <tr> <td><input type="checkbox"/> L <input type="checkbox"/></td> <td><input type="checkbox"/> Z <input type="checkbox"/></td> </tr> <tr> <td>Ref. <input type="checkbox"/> M <input type="checkbox"/></td> <td>Ref. <input type="checkbox"/> Z <input type="checkbox"/></td> </tr> </tbody> </table>		INDUSTRY	OCCUPATION	<input type="checkbox"/> A <input type="checkbox"/>	<input type="checkbox"/> N <input type="checkbox"/>	<input type="checkbox"/> B <input type="checkbox"/>	<input type="checkbox"/> P <input type="checkbox"/>	<input type="checkbox"/> C <input type="checkbox"/>	<input type="checkbox"/> Q <input type="checkbox"/>	<input type="checkbox"/> D <input type="checkbox"/>	<input type="checkbox"/> R <input type="checkbox"/>	<input type="checkbox"/> E <input type="checkbox"/>	<input type="checkbox"/> S <input type="checkbox"/>	<input type="checkbox"/> F <input type="checkbox"/>	<input type="checkbox"/> T <input type="checkbox"/>	<input type="checkbox"/> G <input type="checkbox"/>	<input type="checkbox"/> U <input type="checkbox"/>	<input type="checkbox"/> H <input type="checkbox"/>	<input type="checkbox"/> V <input type="checkbox"/>	<input type="checkbox"/> I <input type="checkbox"/>	<input type="checkbox"/> W <input type="checkbox"/>	<input type="checkbox"/> J <input type="checkbox"/>	<input type="checkbox"/> X <input type="checkbox"/>	<input type="checkbox"/> K <input type="checkbox"/>	<input type="checkbox"/> Y <input type="checkbox"/>	<input type="checkbox"/> L <input type="checkbox"/>	<input type="checkbox"/> Z <input type="checkbox"/>	Ref. <input type="checkbox"/> M <input type="checkbox"/>	Ref. <input type="checkbox"/> Z <input type="checkbox"/>
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Fig. 4.1 The CPS Labor Force Questions⁴

be derived from the surveys, this group was oversampled. The NLS interviews the same persons repeatedly as they age over a ten-year period. In-person interviews were conducted from 1966 to 1971, telephone interviews were generally employed in 1973 and 1975, and no interviews were conducted in 1972 and 1974.

The weeks-worked question in the NLS varies only slightly from that in the CPS:

In how many different weeks did you work either full- or part-time in the last 12 months, (not counting work around the house)? Count any week where you did any work at all. . . . (Include paid vacations and paid sick leave.)

The NLS asks two questions to ascertain the enrollment status of individuals. At one point it inquires:

Are you attending or enrolled in regular school?

At another point it asks a question regarding the major activity of the individual to which one answer is “going to school.”

The NLS and CPS surveys are reasonably similar. Both are administered by experienced CPS interviewers. Both use the standard set of CPS labor force questions to determine whether a person is employed or out of the labor force. The NLS differs from the CPS, however, in that each individual in the NLS describes his/her own labor force experience rather than having it described by someone else in the household and in that the NLS is part of a larger battery of labor force questions.⁶

The NLS72 is a very different survey.⁷ It was based on a stratified national probability sample of 1,200 high schools (later slightly amended) from which eighteen persons per school in the class of 1972 were selected for the survey. An initial base-year survey of students was administered followed by several “follow-up” questionnaires designed to track each individual’s progress over time. Most of the information was obtained by mail, with between one-quarter and one-third of the respondents interviewed by telephone. The response rate to the NLS72 was extremely high, with 95.5 percent of an initial base group of 23,457 students responding to either the base-year or first follow-up questionnaires and with a large percentage responding to ensuing follow-up surveys.

To obtain information on the individual’s labor force status in October 1972, the interviewer asked:

Now please think back to about a year ago. Did you hold a job of any kind during the *month of October 1972?*

- Yes, same job as in October 1973 1
- Yes, but different job than in October 1973 2
- No 3

What were the reasons you were not working during the *month of October 1972*? (Circle one number on each line.)

	Applies to me	Does not apply to me
Did not want to work	1	2
On temporary layoff from work or waiting to report to work	1	2
Was full-time homemaker	1	2
Going to school	1	2
Not enough job openings available	1	2
Union restrictions	1	2
Would have required moving	1	2
Required work experience I did not have	1	2
Jobs available offered little opportunity for career development	1	2
Health problems or physical handicap	1	2
Could not arrange child care	1	2
Other family responsibilities (including pregnancy)	1	2
Waiting to enter or in armed forces	1	2
Not educationally qualified for types of work available	1	2

Did you look for work during October 1972?

Yes 1
No 2

To obtain information on the weeks worked by the individual in the year, the following question was asked:

Each part of this question refers to the entire 52-week period *from October 1972 to October 1973*.

About how many different weeks did you work altogether during this period? (Count all weeks in which you did any work at all or were on paid vacation.) _____ Number of weeks

To ascertain the enrollment status of the former high school seniors in October 1972 (a period for which comparable CPS data on the high school class of 1972 is available), the students were asked (in 1973):

Now please think back a year to the Fall of 1972. Were you taking classes or courses at any school during *the month of October 1972*?

Yes 1
No 2

To summarize, the CPS and NLS use roughly the same set of questions but employ survey methods that differ in a number of potentially important respects. It seems that the primary difference in interview procedures is that individuals self-report activity in the NLS but are often reported for by proxy respondents in the CPS. The CPS and NLS72 differ in more fundamental ways, both in terms of questions and survey procedures. The NLS and NLS72 have one basic similarity: each seeks self-responses as opposed to proxy responses.

4.2 Estimates of Differences in Youth Activity among Surveys

This section will document the basic “fact” under study: the strikingly different rates of labor force activity reported for young males in the NLS and NLS72 from those in the CPS. Our study reveals generally large differences in employment to population ratios, labor force participation rates, and weeks worked, and occasionally substantial differences in unemployment rates. Basically, both the NLS and NLS72 show greater work activity among male youths than does the CPS.

4.2.1 CPS vs. NLS

First, we will examine differences in the patterns of labor force and school activity for young males indicated by the CPS and the NLS. Table 4.1 compares the percentage of young persons in school, employment to population ratios, labor force participation rates, unemployment rates, and weeks worked, as defined by the Bureau of Labor Statistics, for males in the civilian, noninstitutional population aged 16–17, 18–19, and 20–24 as indicated by the two surveys. The NLS figures are based on weighted counts of individuals interviewed in the 1966–71 surveys, with the number of respondents as given in the table. In addition to the NLS sampling weights, a second set of weights was applied to people of different ages to correct for a problem with reporting on the age of NLS respondents. Because NLS codes the age of respondents as of April 1 and interviews the respondents primarily in November,⁸ there is a seven-month lag between the reported age and the time of the employment status question. This lag means that the age variable for roughly seven-twelfths of the sample must be increased by one year between the time their age is recorded and the time their labor market status is ascertained. In light of this problem, we applied different weights to people of different recorded ages in the NLS (unless otherwise stated). These weights were chosen so that we could derive NLS figures for “X-Y” year olds that are comparable to CPS figures for “X-Y” year olds. For example, in constructing an NLS average for 16–17 year olds, we attached to 15 year olds a weight of seven-twelfths (the probability of their having turned 16

by the interview date), to 16 year olds (all of whom would be either 16 or 17) a weight of one, and to 17 year olds a weight of five-twelfths (the probability of their not having turned 18 by the interview date). The final weight applied to a respondent in the NLS was the product of this weight and the individual's sampling weight.

The CPS data are obtained from published documents, with enrollment figures relating to November, and weeks-worked information covering the calendar year. Because of the timing of the surveys, the NLS figures do not refer to the same time periods. While most of the NLS interviews occur in November, some take place in the surrounding months. Also, while the NLS weeks-worked question covers the preceding twelve months, the CPS question relates to the calendar year, creating a divergence of one to two months. While these slight differences in timing may have some effects, there is typically not wide enough variation in rates of activity across CPS surveys in the relevant months to suggest any major problems in comparison. We did, however, attach different weights to those of different ages (eleven-twelfths or one-twelfth using the method described above) for the NLS weeks-worked data because CPS weeks-worked and age questions are asked in March while the NLS age pertains to April of the preceding year.

The figures in table 4.1 reveal five differences between the NLS and CPS descriptions of youth activity.

First, and most important, the NLS indicates a much higher proportion of young males employed than does the CPS. The employment to population ratios diverge by 9.7 to 11.2 points among 16–17 years olds, by 4.6 to 10.0 points among 18–19 year olds, and by 3.5 to 6.4 points among 20–24 year olds. Since individuals either have a job or do not, the employment to population ratio is a more straightforward measure than is the unemployment rate. Thus the difference in the reported levels is striking.

Second, rates of unemployment also differ between the surveys, with the NLS showing typically higher rates among the youngest males and generally lower rates among the older males. The unemployment rates for 16–17 year olds diverge by 4.2 to 8.6 points; those for 18–19 year olds by –0.5 to 3.9 points; those for 20–24 year olds by –1.2 to 0.2 points.

Third, the higher employment to population ratios and differing rates of unemployment translate into even larger differences in labor force participation rates (LFPRs) between the surveys although the differences narrow with age. For 16–17 year old males, the NLS LFPRs are 14.3 to 18.3 points above the CPS LFPRs; for 18–19 year old males, the NLS LFPRs are 8.1 to 11.1 points higher; and for 20–24 year old males, the NLS rates dominate by 2.7 to 5.9 points.

Fourth, consistent with the employment to population ratio evidence, the evidence on weeks worked in the previous year also shows diver-

Table 4.1 Comparison of Rates of School and Labor Force Activity for Young Men, 1966–71: NLS vs. CPS

		Percent in school ^b		Emp/Pop ^c		LFPR ^c		Unemployment ^c		Weeks worked ^d	
		No. in NLS sample ^a	NLS	CPS	NLS	CPS	NLS	CPS	NLS	CPS	NLS
Total males											
<u>16–17 year olds</u>											
1966	1966	89.8	89.9	47.6	36.4	59.2	40.9	19.7	11.1	18.8	14.7
1967	1976	90.2	91.0	44.9	35.2	56.3	42.0	20.3	16.1	20.4	15.5
<u>18–19 year olds</u>											
1966	1519	61.8	57.8	63.5	54.2	71.0	59.9	10.5	9.6	29.2	24.4
1967	1622	63.0	56.3	62.3	52.3	70.5	59.5	11.6	12.1	29.3	24.8
1968	1619	59.0	60.4	64.2	54.3	70.3	59.8	8.7	9.2	30.0	25.2
1969	1621	59.6	59.4	60.9	56.3	70.0	61.9	13.1	9.2	29.8	30.4
<u>20–24 year olds</u>											
1966	2056	30.1	29.2	83.6	79.5	86.3	83.1	3.1	4.3	38.8	37.7
1967	1976	31.9	30.6	82.1	77.8	85.4	81.7	3.8	4.8	38.6	35.1
1968	1909	33.5	30.5	80.3	76.8	83.2	80.4	3.5	4.4	39.0	34.6
1969	1970	31.1	32.0	80.4	76.9	84.7	80.8	5.1	4.9	38.0	33.9
1970	2283	29.2	29.3	77.9	74.3	84.9	82.2	8.3	9.5	41.6	33.5
1971	2600	28.7	29.2	79.9	73.5	87.4	81.5	8.6	9.8	37.3	33.2

^aThe numbers in this column are unweighted counts of the observations used in generating the relevant row estimates. Thus, for example, the sixteen- to seventeen-year-old figures include all males who were fifteen to seventeen years old in April of the given year. The NLS numbers in all other columns are based on counts weighted in accordance with age. (See pages 81–82 for a discussion of the weighting procedure.)

^bU.S. Bureau of the Census, *Current Population Reports*, Series P–20, “School Enrollment,” October 1966–71, numbers 167, 190, 206, 222, 241. Table: “Enrollment Status of the Population 3 to 34 Years Old, by Age, Race, Sex, and Selected Educational Characteristics, for the United States.”

^cU.S. Bureau of Labor Statistics, *Employment and Earnings*, December 1966–71. Table: “Employment Status of the Noninstitutional Population by Age, Sex, and Color.”

^dU.S. Bureau of Labor Statistics, *Work Experience of the Population*, Special Labor Force Reports 91, 107, 115, 127, 141, 162. Table: “Age: Persons with Work Experience, by Sex.”

gences, with the CPS indicating that young males work fewer weeks than is indicated by the NLS.

Fifth, although the NLS and CPS report strikingly different patterns of work activity, they report similar proportions of young men in school.

And sixth, differences in reported labor force activity tend to be less for older males than for younger.

4.2.2 Racial Differences

Does the pattern of higher rates of work activity in the NLS than in the CPS hold for nonwhite males as well as for all young men? To what extent does the magnitude of white/nonwhite difference in work activity differ between the surveys?

Table 4.2 contains the basic data needed to answer these questions: rates of activity disaggregated by race. The figures in the table show that the pattern of work activity rates higher in the NLS than in the CPS is found among nonwhite males as well as among white males. More importantly, comparison of the rates of activity of nonwhite and white young men estimated with the two surveys reveals a general pattern of much smaller absolute differences in employment to population ratios between nonwhite and white male youths in the NLS than in the CPS, especially for younger men (see table 4.3).

If the NLS figures are correct and the CPS figures incorrect, the differences in employment to population ratios for nonwhite young men and for white young men are much smaller than is generally believed. Alternatively, if the CPS figures are correct and the NLS figures incorrect, studies of the causes and effects of nonwhite/white differences in employment using the NLS tapes are questionable.

Inspection of other variables in table 4.2 reveals that while the CPS yields white labor force participation rates that are higher in five out of nine cases compared with the corresponding nonwhite rates, the NLS gives nonwhite participation rates that are typically above the comparable white rate. White/nonwhite differences in percentages in school are larger in the NLS than in the CPS, while differences in unemployment rates tend to be somewhat smaller in the NLS than in the CPS, at least for younger men, as shown in table 4.4.

4.2.3 School Status

How do the differences in work activity between the NLS and CPS vary with regard to the school status of the young? Given the differences by age group presented in table 4.2, one would expect greater divergences among those whose major activity is reported as being in school than among those whose activity is not being in school. Table 4.5 presents evidence for the 16–21 year old group of males for whom the Census

Table 4.2

**Comparison of Rates of School and Labor Force Activity
for Young Men by Race, 1966–1971: NLS vs. CPS**

	No. in NLS ^a sample	Percent in School ^b		Emp/Pop ^c		LFPR ^c		Unem- ployment ^c		
		NLS	CPS	NLS	CPS	NLS	CPS	NLS	CPS	
White males										
<hr/>										
<u>16–17 year olds</u>										
1966	1310	90.7	90.3	48.4	NA ^e	59.4	NA	18.6	NA	
1967	1319	91.7	91.4	45.6	36.7	56.1	42.8	18.7	14.4	
<u>18–19 year olds</u>										
1966	1093	63.3	59.0	64.1	NA	70.6	NA	9.1	NA	
1967	1099	64.3	57.2	62.8	56.7	70.0	63.4	10.3	10.6	
1968	1085	60.0	61.5	64.6	55.7	70.2	60.2	7.9	7.5	
1969	1103	62.0	60.9	61.2	56.8	69.9	61.4	12.5	7.6	
<u>20–24 year olds</u>										
1966	1570	32.2	31.6	83.1	NA	85.8	NA	3.1	NA	
1967	1496	33.9	32.2	81.8	78.0	84.5	81.2	3.2	4.0	
1968	1410	35.4	32.5	79.7	76.5	82.6	79.8	3.4	4.1	
1969	1402	32.8	33.6	80.8	76.7	84.6	80.3	4.6	4.5	
1970	1619	30.6	30.9	78.2	75.0	84.5	82.2	7.4	8.8	
1971	1869	30.0	30.3	80.5	74.1	87.5	81.8	8.0	9.3	
Nonwhite males										
<hr/>										
<u>16–17 year olds</u>										
1966	656	84.9	87.2	43.0	NA	58.2	NA	26.2	NA	
1967	657	84.4	88.0	40.6	26.2	57.8	36.7	29.8	28.8	
<u>18–19 year olds</u>										
1966	426	49.8	49.1	58.5	NA	74.0	NA	20.9	NA	
1967	523	54.4	50.5	59.7	47.0	74.0	60.1	19.4	21.7	
1968	534	53.3	53.5	61.7	45.6	71.3	57.2	13.5	20.3	
1969	518	43.5	49.8	59.0	52.6	70.9	65.1	16.9	19.0	
<u>20–24 year olds</u>										
1966	486	15.3	12.3	89.9	NA	90.1	NA	3.5	NA	
1967	480	16.2	18.9	84.8	76.9	91.9	85.7	7.8	10.3	
1968	499	18.5	16.3	84.6	79.0	87.9	84.7	3.7	6.7	
1969	568	18.1	20.5	78.1	78.2	85.5	84.7	8.7	7.7	
1970	664	18.9	18.1	75.1	69.0	87.9	81.2	14.6	15.0	
1971	731	19.1	21.7	75.3	69.5	86.7	79.9	13.2	13.0	

^a, ^b, ^c See corresponding notes in table 4.1.

^e Not available.

Table 4.3 Difference in Employment to Population Ratios for Young White Males versus Young Nonwhite Males from table 4.2 (White Minus Nonwhite)

	1967	1968	1969	1970	1971
<u>16-17 year olds</u>					
CPS	10.5	—	—	—	—
NLS	5.0	—	—	—	—
<u>18-19 year olds</u>					
CPS	6.2	10.0	4.2	—	—
NLS	3.1	2.9	2.1	—	—
<u>20-24 year olds</u>					
CPS	1.1	-2.5	-1.4	6.0	4.6
NLS	-3.0	-4.9	2.7	3.1	5.2

publishes data on work activity by school status which is consistent with this expectation. The table shows three things.

First, NLS/CPS differences between the employment to population ratios and labor force participation rates for young men are greater for those youths whose major activity is school than for others. Employment to population figures differ by 10.9 to 12.3 points for the in-school young men compared to 4.8 to 10.6 points for other young men.

Second, mean weeks worked for 16-21 year old males are higher by 4.1 to 7.1 weeks in the NLS than in the CPS for those sample members whose major activity is school, and by about 2.6 to 3.4 weeks for the other sample members.

Third, the direction of differences between the unemployment rates calculated from young men with the NLS and those calculated with the CPS depends critically on the major activity of persons. For 16-21 year old males whose major activity is other than being in school, the NLS

Table 4.4 Differences in Unemployment Rates for Young White Males Versus Young Nonwhite Males from table 4.2 (Nonwhite Minus White)

	1967	1968	1969	1970	1971
<u>16-17 year olds</u>					
CPS	14.4	—	—	—	—
NLS	11.1	—	—	—	—
<u>18-19 year olds</u>					
CPS	11.1	12.8	11.4	—	—
NLS	9.1	5.6	4.4	—	—
<u>20-24 year olds</u>					
CPS	6.3	2.6	3.2	6.2	3.7
NLS	4.6	0.3	4.1	7.2	5.2

Table 4.5 Comparison of Rates of School and Labor Force Activity for Young Men, by Major Activity, 1967, 16–21 Year Olds: NLS vs. CPS

	No. in NLS ^a sample	Major activity ^b		Emp/Pop ^c		LFPR ^c		Unem- ployment ^c		Weeks worked ^d	
		NLS	CPS	NLS	CPS	NLS	CPS	NLS	CPS	NLS	CPS
Total Males											
Major activity: school	2284	65.2	64.7	42.8	31.7	52.7	36.5	18.8	13.1	21.5	17.1
Major activity: other	1248	34.8	35.3	87.8	82.1	92.8	91.3	5.3	10.2	37.1	33.7
White males											
Major activity: school	1657	66.3	66.1	43.9	33.0	52.9	37.5	17.0	11.9	22.0	17.9
Major activity: other	786	33.7	33.9	88.6	83.8	92.5	91.6	4.2	8.5	38.0	34.6
Nonwhite males											
Major activity: school	627	57.5	55.8	33.9	21.6	51.0	28.8	33.7	25.2	17.4	10.3
Major activity: other	462	42.5	44.2	83.7	73.1	94.2	90.1	11.1	18.9	32.4	29.8

^a, ^b, ^c, ^dSee corresponding notes in table 4.1.

shows much lower rates of unemployment than the CPS. For those males whose major activity was school, however, the NLS shows much higher rates of unemployment than the CPS.

Overall, the greater differences in work activity or desired work activity for those in school suggest that many of the differences between surveys occur among those who are going to school and are thus most likely to have a more marginal commitment to the work force.

4.2.4 CPS vs. NLS72

Table 4.6 compares the October 1972 rates of work activity for young males indicated by the National Longitudinal Survey of the Class of 1972 with the rates for young men indicated by the CPS study of graduates and dropouts in the class of 1972. The principal finding in the table is that NLS72, like the NLS, reports higher employment to population ratios among young males not enrolled in school than does the CPS, somewhat smaller differences in employment to population ratios between nonwhite and white young men, and much smaller rates of unemployment for both white and nonwhite male youths. With respect to labor market activity, the figures based on the NLS72 differ from the figures based on the CPS data in the same direction as the NLS-based estimates differ from the CPS-based estimates.

Table 4.6 Comparison of School and Labor Force Activity for Young Men, by Race, October 1972: NLS 72 vs. CPS Survey of the High School Class of 1972

	White youths		Nonwhite youths	
	NLS72 ^a	CPS ^b	NLS72 ^a	CPS ^b
1. Percent enrolled in school ^c	57.6	52.8 ^d	46.7	52.5 ^d
2. Percent not enrolled	42.4	47.2	53.3	47.5
3. Percent employed of not enrolled	88.0	81.5	78.4	68.0
4. Percent in labor force of not enrolled	92.9	91.6	90.2	88.0
5. Percent unemployed of not enrolled youth	5.3	11.0	13.0	22.7

^aMeyer and Wise, "High School Preparation and Early Labor Force Participation," chapter 9 of the present volume, table 9.1.

^bU.S. Department of Labor, Bureau of Labor Statistics, *Employment of High School Graduates and Dropouts: October 1972*, Special Labor Force Report 155, Table 1: College Enrollment and Labor Force Status of 1972 High School Graduates, October 1972, p. 27.

^cFull- and part-time students.

^dEnrolled in college.

4.3 What Explains the Difference?

There are three major potential sources of differences between the youth activity rates reported in the CPS and those reported in the longitudinal surveys.

First, the surveys could yield different results because of differences among respondents—the fact that in the longitudinal surveys youths report their own activity, whereas in the CPS proxy respondents report what youths do. Young men report themselves doing relatively more work than proxies report them doing. The male youths may tend to exaggerate their work time or they may actually hold jobs unknown to other household members. Whatever the cause, at least some of the CPS/NLS and CPS/NLS72 differences could reflect "respondent bias."

Second, the surveys could yield different results because of the differences in the population covered. The longitudinal surveys may be subject to selectivity bias because of the unwillingness of some young men to participate, particularly as time proceeds. If the male youths who do not participate have a lower probability of being employed than those who do, the longitudinal surveys would yield higher employment to population ratios than the CPS.

Third, the differences in work activity estimates across surveys could also be due to differences in the way in which the surveys are conducted. For instance, differences in the extent of reliance on telephone versus in-person interviews or differences in the number of times that an individual is interviewed in a given year could affect the responses yielded by the various surveys.

This section attempts to ascertain the relative importance of each of these three potentially relevant factors. The main finding is that a very substantial portion of the CPS/NLS differences in the estimated probability that a teenage male is employed seems to be explicable by the fact that the CPS relies primarily on proxy responses while the NLS does not.

4.3.1 Respondent Bias

The most direct way of evaluating the extent to which “proxy-respondent bias” contributes to the CPS and longitudinal survey differences in rates of school and labor force activity among young males is to compare the self-reported labor force activity of young men with the activity reported for them by other household members. If some of the differences in results with the CPS and longitudinal surveys are due to respondent bias, then we would expect to find males giving self-responses that indicate more employment than do the proxy-responses given by their parents. The information needed for this type of experiment was collected in the NLS; to save on sampling cost, the survey queried more than one member of a substantial number of families. In particular, both mothers and sons were asked about the work activity and enrollment of the sons. Thus with these data it was possible to develop a matched sample for comparing the activity reported by a young man with the activity ascribed to him by his mother, the most likely proxy respondent. We used the family record numbers on the tapes to create a matched file of this nature; it contains information on 1,541 mother-son pairs in 1966, 1,094 pairs in 1968, and 734 pairs in 1970. While the mothers were not asked the labor force status of their sons at a given time, they were asked, “In all how many weeks did _____ work either full or part time (not counting work around the house)?” which is comparable to the weeks worked question on the young men’s survey.

4.3.2 Weeks Worked Comparisons

A comparison with NLS data of the weeks worked by a group of young men as reported by their mothers and by themselves must be done carefully because of modest differences in the time period to which the relevant questions relate. As indicated in table 4.7, mature women were asked about the activity of their sons over a calendar year while their sons were asked about their own activity over a slightly different period, one covering the twelve months prior to the survey. If, as seems reasonable, youth work activity increases over time, the one-month difference in the period covered should, if anything, lead to *higher* rates of activity reported by mothers than by sons, as the mothers’ reference period is one month or more later in time than the sons’. Since this potential problem is likely to reduce the estimated impact of respondent bias, we ignore it in the ensuing analysis.⁹

Table 4.7

<u>Respondents</u>	<u>Approximate month of year interviewed</u>	<u>Weeks worked of young men relates to</u>
Mature women	May 1967	1966 (Jan. '66–Dec. '66)
Young men	Nov. 1966	Past 12 months (approximately Dec. '65–Nov. '66)
Mature women	May 1969	1968 (Jan. '68–Dec. '68)
Young men	Nov. 1969	Past 12 months (approximately Dec. '68–Nov. '69)

Table 4.8 presents the basic results of the comparison of self-reported and mother-reported weeks worked of young men on the matched file. Only those observations for which data were available from both mother and son were used. Line 1 records the number of sons in the sample. The second line gives the distribution of weeks worked reported by mothers and sons, including a “missing” category. The mean weeks worked for all responses and for mother-son pairs with no missing values is given in line 3.

What stands out in the table is the markedly lower rates of work activity among young men indicated by the mother proxy responses than by the son self-responses; the differences in mean weeks worked vary from 4.2 to 6.5 weeks depending on the year and age group (or from 14 to 27% of the mean of sons’ self-reported weeks worked). For 16–17 year olds, the figures differ by 5.6 to 6.5 weeks, for 18–19 year olds and 20–24 year olds they differ by 4.2 to 6.4 weeks.

To what extent can the differences in weeks worked between mothers and sons explain the differences in weeks worked between the NLS and CPS? Table 4.9 presents the data from tables 4.6 and 4.8 that can answer this question.

According to these calculations, the difference in mother-son reporting could easily explain the divergence in weeks worked reported between the NLS and the CPS and indeed tends to “overexplain” the differences. The anomalous overexplanation could be rationalized by the fact that the mother/son differences in table 4.8 relate only to those males *living at home*, while the CPS/NLS differences in table 4.1 relate to *all* males. According to the respondent bias hypothesis, differences between the CPS and NLS arise when a proxy reports a young male’s status on the CPS and the individual reports his status on the NLS. For males not living in their parents’ home, we would expect smaller differences in rates of activity between the surveys than are found for young men living at home. One would expect that overexplanation would be more prevalent for older males in the sample since they are less likely to live at home. Indeed, our results show that for 20–24 year old males, roughly half of whom reside outside their parents’ home, the overexplanation is substantially larger than for the younger males.

This argument suggests that we should tabulate weeks worked for 20–24 year old males who are unmarried heads of households and for those who are not heads of households and use the resultant figures to reestimate the effect of respondent bias on the CPS/NLS difference. The former group will presumably give self-responses in both the CPS and NLS. The latter group will tend to have the mother as proxy respondent

Table 4.8 Comparison of Weeks Worked Reported by Sons and Mothers: National Longitudinal Survey 1966 and 1968^a

	Age: 16–17		18–19		20–24	
	1966		1966		1966	
	Mother	Son	Mother	Son	Mother	Son
1. Sample size (sons) ^b	1250	1250	430	430	152	152
2. Distribution of weeks worked						
missing	16.5	0.3	8.2	0.0	11.7	0.0
0	36.3	27.9	14.8	7.0	11.3	4.2
1–13	25.2	27.4	33.6	24.6	28.9	23.9
14–26	8.8	17.9	15.3	23.6	11.7	19.2
27–39	2.2	6.7	6.1	10.2	4.8	11.7
40–47	1.6	3.4	2.2	5.7	4.2	7.7
48–49	0.2	1.7	1.9	3.3	2.0	4.8
50–52	9.2	14.7	17.8	25.6	25.3	28.5
3. Mean weeks worked (with observations missing relevant information deleted)	12.1	17.7	21.2	27.6	26.4	30.6

	Age: 16–17		18–19		20–24	
	1968		1968		1968	
	Mother	Son	Mother	Son	Mother	Son
1. Sample size (sons) ^b	603	603	619	619	282	282
2. Distribution of weeks worked						
missing	3.4	3.0	3.1	7.0	5.3	11.8
0	30.5	13.4	15.6	8.4	14.2	5.4
1–13	28.2	29.1	30.9	23.0	20.4	14.7
14–26	14.4	16.5	15.1	16.1	17.6	15.6
27–39	3.7	7.6	9.3	8.1	5.9	9.0
40–47	2.3	7.5	3.5	8.0	4.1	9.1
48–49	0.3	3.3	1.3	4.8	2.3	3.8
50–52	17.2	19.6	21.2	24.6	30.3	30.6
3. Mean weeks worked (with observations missing relevant information deleted)	17.5	24.0	22.9	28.4	27.4	33.1

^aThe NLS estimates presented in this table are weighted averages. The weighting scheme that makes the NLS figures more comparable to those from the CPS, is described on pp. 81–82.

^bThe sample sizes given are before weighting for age. For example, the sample of sixteen- to seventeen-year-olds includes all those males aged fifteen to seventeen in April of the given year.

Table 4.9 Comparison of Differences in Mean Weeks Worked as Reported by the NLS and the CPS and by the NLS Mother-Son Matched File

	(1) Difference in mean weeks worked (NLS-CPS)	(2) Difference in mean weeks worked (Sons-Mothers)
<u>16-17 year olds</u>		
1966	4.1	5.6
<u>18-19 year olds</u>		
1966	4.8	6.4
1968	4.8	5.5
average	4.8	6.0
<u>20-24 year olds</u>		
1966	1.1	4.2
1968	4.4	5.7
average	2.8	5.0

for the CPS. In the tabulation below NLS observations have been weighted (using the weighting procedure described on pages 81-82) so that NLS interviewee ages are comparable to those in the CPS. However, the Census weeks-worked figures relate to the preceding calendar year (January 1968-December 1968) while the NLS figures relate to the twelve months prior to interview (approximately December 1967-November 1968). Thus there is one month difference in the time span to which the question pertains. Resolution of this problem has been ignored in the tabulation:

	Mean weeks worked from Dec. '67- Nov. '68; 1968 NLS 20-24 year old males	Mean weeks worked in 1968: March 1969 CPS 20-24 year old males	Difference in mean weeks worked
Unmarried heads	41.1	37.3	3.8
Not heads	33.9	28.8	5.1

As expected, the difference for unmarried heads is much smaller than that for young men who are not heads.

4.3.3 Matrix of Responses

Analysis of the differences in responses between mothers and sons is pursued further in table 4.10 which cross-classifies the weeks worked by the son as reported by the mother with the son's weeks worked as reported by the son. Each element in the matrix gives the percentage of mother-son pairs reporting a given pair of weeks-worked values. If there were perfect agreement between mothers and sons, all of the elements of

Table 4.10 Comparison of Weeks Worked Reported by Mothers and Their Sons; 1966 NLS Data for Males Aged 16-24^a

	Weeks worked	Number of sons reporting	0	Percent of mothers reporting weeks worked						Missing	Total
				1-13	14-26	27-39	40-47	48-49	50-52		
Percent of sons reporting weeks worked	0	327	63.0	11.0	2.8	.3	.3	.3	.9	21.4	100.0
	1-13	405	30.4	40.5	8.4	1.0	—	—	3.5	16.3	100.0
	14-26	295	16.3	38.3	17.3	5.4	2.4	.3	7.5	12.5	100.0
	27-39	121	19.0	28.1	17.4	8.3	3.3	—	12.4	11.6	100.0
	40-47	67	14.9	28.4	14.9	7.5	9.0	1.5	13.4	10.4	100.0
	48-49	36	2.3	13.9	13.9	5.6	5.6	8.3	41.7	8.3	100.0
	50-52	287	13.2	16.4	11.5	4.2	3.5	2.1	41.5	7.7	100.0
	Total	1,541	29.2	27.3	10.6	3.2	1.9	.8	12.8	14.2	100.0
	Missing	3	33.3	66.7	—	—	—	—	—	—	100.0

^aAs of April 1, 1966.

the matrix would fall along the main diagonal and would equal 100. (If there were no relation between the weeks worked reported by mothers and sons, all columns would be identical.) While there is a definite concentration at or near the diagonals, a very large proportion of the sample lies off the diagonal: only 63% of mothers whose sons self-report working 0 weeks last year also report their sons as working 0 weeks; only 41.5% of mothers whose sons report themselves as working 52 weeks report their sons in that category, and so forth.

The divergences provide evidence of potentially large response bias and measurement error in the weeks-worked data, which supports the respondent bias hypothesis. In addition, the divergences suggest the value of a detailed analysis of why some mother-son pairs are in agreement and others are not, a question we address to some extent later in this section.

4.3.4 Employment Activity of Heads vs. Others

If respondent bias is the major cause of the differences in the labor force activity rates of young males implied by the NLS and CPS, one would expect only negligible survey differences for young males who are themselves unmarried heads of households. The activity of these persons in the CPS is more likely to be reported by the individual himself than by others, making the results from the CPS more likely to be consistent with those from the NLS.

To test this implication of the respondent bias hypothesis, the rates for 1969 of labor force activity of 20–24 year old males who are unmarried heads of households and those who are not heads of households were tabulated with the NLS and CPS tapes. The results of the calculations, shown in table 4.11, yield a striking conclusion: for 20–24 year old unmarried heads of households there are *no effective differences* in the ratio of employment to population or in the rate of labor force participation, whereas for comparable individuals who are not heads there are sizable differences. It appears that the bulk of the differentials reported earlier is attributable to those whose status is self-reported in the NLS but likely to be reported by the mother in the CPS.

In sum, there appears to be considerable support in the data for the hypothesis that much of the NLS/CPS difference shown in section I is attributable to respondent bias.

4.3.5 Differences in Samples and Methods

Since detailed information on persons designated to be included in the NLS or in the CPS who were not represented is missing, it is difficult to assess accurately the importance of sample differences in explaining the observed differences in the employment experience of young men. However, an examination of the NLS and CPS sampling procedures and

Table 4.11 Comparison of Labor Force Rates by Household Status of Men Aged 20–24^a

	National Longitudinal Survey Fall 1968	Current Population Survey March 1969	Difference between NLS Fall '68 and CPS March '69
<u>Unmarried heads</u>			
Employment/Population	82.7	83.0	-0.3
Labor force participation	83.9	84.9	-1.0
Unemployment (UNE)	3.2	4.3	-1.1
Out of labor force; major activity is being in school	9.7	9.3	0.4
<u>Not Heads</u>			
Employment/Population	66.1	61.0	5.1
Labor force participation	68.3	63.0	5.3
Unemployment	4.7	5.5	-0.8
Out of labor force; major activity is being in school	22.1	26.2	-4.1

^aAlthough the NLS observations were weighted in accordance with age to facilitate comparability between the CPS and the NLS estimates (see pages 81 and 82), there is still a difference between the two sets of figures. Both sets of data refer to the survey week. The NLS, however, takes place in November while the CPS is administered in March. Thus there is approximately a four-month difference in the period referred to by the NLS and the CPS under analysis. The figures in the table were based on weighted counts with the CPS March 1969 microdata and NLS microdata.

the characteristics of their samples yields some insights into the possible magnitude of sample survey bias.

We will examine first the sampling procedures. One major difference between the CPS and NLS methods is that the former uses a one-stage screening procedure to obtain households for surveying, whereas the latter uses a two-stage procedure. During the first stage of the NLS process, each of the four NLS samples (young men aged 14–24, young women aged 14–24, women aged 30–44, and men aged 45–59) was designated to represent the civilian noninstitutional population of the United States. An initial group of 42,000 households from the primary sampling units of the Census was selected by the NLS; a sample of this size was drawn so that no age/sex/color group would be underrepresented. The 42,000 households were screened by interviews conducted in March and April of 1966, and adequate numbers of each age/sex/color group were identified for each of the four NLS samples.

In the fall of 1966, however, a second stage of screening was undertaken to insure that during the months since April the sample size for

young men had not become inadequate because of the mobility of male youths. From these two screenings, 5,713 young men were designated to be interviewed; of these 5,225 were actually interviewed, giving a noninterview rate of 8.6%.¹⁰ By contrast the noninterview rate on the CPS was considerably lower, ranging from 4.1 to 4.4% annually in the 1974–76 period.¹¹

If the employment to population ratio for noninterviewees (those designated to be interviewed who were not) in the NLS is less than for interviewees,¹² and if the employment to population ratio for young males in noninterviewee CPS families is less than for young men in the interviewee families by the same amount, the differential noninterviewee rates in the NLS and the CPS that were observed would cause the estimated NLS employment to population ratio to be higher than the estimated CPS ratio; this would explain part of the difference in employment to population ratios between the NLS and CPS. If, because the CPS is based on proxy as opposed to self-responses, the employment to population ratio for young males in noninterviewee CPS families is closer to the rate in interviewee families than the NLS noninterviewee rate is to the NLS interviewee rate, then the higher NLS noninterviewee rate might account for an even larger proportion of the NLS/CPS young male employment to population ratio differential. In the absence of information on the employment of noninterviewees, only the crudest estimates of the magnitude of the effects can be made.

The calculations that can be made do, however, indicate that noninterviewee bias most likely cannot explain a major fraction of the observed differences in the NLS and CPS employment to population ratios for young men. Under the totally unrealistic assumption that absolutely none of the NLS noninterviewees worked and the assumption that young men in noninterviewee CPS families have the same employment to population ratio as do those in interviewee CPS families, there are still substantial differences in the NLS and CPS young male employment to population ratios to be explained: a 7.1 percentage point differential for 16–17 year olds in 1966 and a 3.8 percentage point differential for 18–19 year olds in the same year. Under the seemingly more realistic assumption that the NLS noninterviewees worked only half as much as the NLS interviewees, the comparable differentials are 9.1 and 6.6 percentage points. Thus noninterviewee bias could only account for a part of the 11.2 and 9.3 percentage point differentials for 16–17 and 18–19 year old males in 1966 shown in table 4.1.

In the NLS72, 21,350 of 23,451 students responded to the first follow-up survey, giving a noninterview rate of 9.0%, which is comparable to the NLS rate.¹³ As argued above in the discussion of sample bias with the NLS, this noninterview rate could also explain some, but certainly not all of the differences between the surveys.

An alternative method for assessing important sample differences is to compare the nonwork characteristics of the samples. The NLS two-stage screening process described above was specifically designed to compensate for the high mobility of young men. It seems that young men who passed through this double screen would be more stable than those selected through a single screening process (such as that found in the CPS). If the NLS sample does have a larger fraction of young persons with stable characteristics, then we would expect some of the estimated differences in employment to population ratios to be attributable to characteristics of the sample respondents.

Information on the household status of individuals in the NLS and CPS suggests that the surveys' samples include similar fractions of high-propensity-to-work individuals. In the CPS 46% of 20–24 year old men are heads of households; in the NLS 48% of the comparable group are heads, a negligible 2 percentage point difference. If the CPS heads/others difference in employment to population ratios given in table 4.11 is assumed valid, the 2 percentage point difference in the relative importance of heads and others implies a $.57 (= 28.3 \times .02)$ point NLS/CPS differential in the overall ratios. If the NLS heads/others difference in employment to population ratios given in table 4.11 is used, the 2 percentage point difference translates into a $.47 (= 23.6 \times .02)$ point differential. By contrast, the difference in the employment to population ratio for others in the table predicts about a 3.0 point differential no matter which estimate of the ratio of others to others plus heads is used. Thus sample differences appear to account for a relatively tiny fraction of the NLS/CPS difference in employment to population ratios.

There are two other potentially important differences in the way the NLS and CPS surveys are carried out. These involve the rotation pattern and the method of interview.

Under the CPS, a respondent will appear in a survey for four months, be dropped for eight months, interviewed for another four months, and then be dropped permanently. During any month, one-eighth of the sample will be interviewed for the first time, one-eighth for the second time, and so on. Under the NLS, the same young male sample group is interviewed once each year for the duration of the survey.

The other difference concerns interview technique. The CPS used primarily telephone interviews to collect its data. The NLS data on young persons (for the time periods discussed in this study) were gathered using face-to-face interviews almost exclusively.

It is likely that these two differences in survey methods will lead to a difference in the employment to population ratios observed between the NLS and CPS. This contention is supported by analyses of the National Crime Survey (NCS) currently being conducted by R. Lerman and H. Woltman.¹⁴

The NCS surveys 14,000 households each month. A total of 72,000 households are selected for interview over a three-year period. They are interviewed one month, left out of the sample for five months, interviewed again, left out for another five months, and so on for the three-year period.

There are two other important characteristics of the NCS. First, more than 90% of the survey responses are self-reported, which makes the NCS similar to the NLS and NLS72. Second, about 80% of the NCS interviews are personal interviews, in contrast to the CPS in which the majority of interviews are done by telephone. Therefore, the most important differences between the NCS and the CPS are that the NCS is self-response as opposed to proxy response, is based primarily on personal rather than telephone interviews, and uses a rotation pattern under which sample members are never surveyed two months in a row. In all these respects, the NCS methodology is similar to the NLS methodology.

In analyzing the NCS data, Lerman looks separately at young persons as categorized by age, race, and sex. His age groups are 16-17 year olds, 18-19 year olds, 20-21 year olds, and 22-24 year olds. Lerman's tabulations reveal that the employment to population ratios among young males (especially nonwhites) based on the NCS are significantly higher than those derived with the CPS. However, the Lerman employment to population rates for young females show substantially smaller differences than those observed for males. In fact, for Lerman's largest group of females (white females aged 22-24), the CPS employment to population ratio is higher than it is with the NCS. These findings suggest somewhat different patterns of response bias for women than for men.

Woltman examined samples of people who were coming into the NCS or CPS for the first time. He limited his sample to incoming survey members in an effort to control for potential differences in rates caused by differences in the surveys' rotations and in the extent to which the surveys rely upon telephone and personal interviews. This could be accomplished since in both surveys the first interview conducted with a sample member is done in person.

Woltman did his calculations for two age groups (16-19 year olds and 20-24 year olds) but did not cross-classify individuals by age, race, or sex. He found virtually identical employment to population ratios for each age group for new members of the NCS and new members of the CPS. Part of Woltman's result can be explained by the fact that he, unlike Lerman and us, did not focus just on young males, since, according to Lerman's analyses, there appear to be much smaller and even differently signed differentials for young females. Nevertheless, it is unlikely that this fact can fully explain the Woltman findings. This leads us to believe that the nature of a survey's rotation pattern and its reliance on personal versus telephone interviews affect the estimates that it obtains of the employ-

ment to population ratios for young males. The numbers derived by Lerman and Woltman do not appear to refute our belief that the *key* factor causing differences in the employment to population ratios among young males estimates with various surveys is whether or not the surveys relied on self-responses as opposed to proxy responses. They do, however, underscore the need for more data collection and analysis concerning the issue at hand.

4.4 Future Research

The finding that many of the cross-survey differences in reported male youth work activity depend on the way in which these surveys are conducted raises many important questions. What factors explain the differences in the responses that young males give concerning their work activity and the responses that proxies give about the work activity of these youths? What additional research is needed to confirm or refute the respondent bias hypothesis? How can we discover whether young persons or their parents provide more accurate information on actual activity? What should be done to improve our data base?

4.4.1 Why Responses Differ

There are two basic reasons for expecting differences between self-reported work activity and proxy-reported work activity: first, differences in knowledge of the facts; second, differences in the accuracy of reporting a given set of facts, possibly for reasons of self-esteem.

The NLS matched mother-son file can be used to analyze the factors that affect the mother's report of son's weeks worked. To do this, we ran regressions of the son's weeks worked as reported by his mother in 1966 on the seemingly relevant and available characteristics of the son, his mother, and their household. The estimated coefficients for 1966 of the most complete equation fit and the mean and standard deviation of each of the model's variables are given in table 4.12. These figures indicate several interesting results.

First, the coefficient relating the young males' weeks worked reported by mothers to the weeks worked reported by sons is markedly less than 1. While increases in sons' reported weeks worked raise mothers' reported weeks worked, the effect is just .6 weeks for every 1 week increase reported by sons. Thus the absolute difference in weeks worked grows with weeks worked.

Second, the race of the family affects the number of weeks worked the mother reports for her son. The mother tends to report a much smaller number of weeks worked for the son if the family is nonwhite. The -2.8 weeks effect of race is a 15% difference in weeks worked at the mean of the sample.

Table 4.12 Factors Affecting Number of Weeks Worked for Son as Reported by Mother, 1966 NLS Data for Males Aged 16–24^a (N = 474)

Independent variables:	Dependent variable: son's weeks worked in 1966 reported by mother ^b	
	Mean (S.D.)	Coefficient ^c (Standard error)
<u>Reported by son</u>		
son's weeks worked	25.10 (18.73)	.576 (.040)
Son's enrollment status (in school = 1)	.723 (.448)	-2.634 (1.754)
Son's usual hours worked per week	28.52 (17.49)	.076 (.043)
Son's hourly wage in current or last job	1.370 (.853)	-.541 (.946)
Son's age ^a	17.41 (1.680)	.207 (.461)
Son's race (nonwhite = 1)	.418 (.494)	-2.827 (1.587)
<u>Reported by mother</u>		
Mother's weeks worked	24.22 (23.33)	.008 (.052)
Mother's usual hours worked per week	22.16 (19.79)	.031 (.060)
Mother's education	10.12 (2.737)	.096 (.285)
Number in household	5.97 (2.517)	-.367 (.300)
1966 family income (in thousands of dollars)	8.659 (6.008)	.000 (.000)
R^2		.393

^aAs of April 1, 1966.

^bThe mean (S.D.) of the dependent variable is 19.61 (18.75).

^cA constant was included in the regression estimated.

Third, the son's enrollment status has a large negative (though insignificant) effect on his mother's proxy response: if the son is enrolled in school the mother's reported response will be much smaller than if he is not enrolled.

Fourth, the mean of the son's reported usual weekly hours worked is large (28.5), indicating that our typical young male labor force member with a job is working more than just a couple of hours a day; the estimated coefficient of this variable is positive (but insignificant).

In contrast, family income has no partial relationship to the number of weeks worked reported by a mother for her son. Neither do a mother's educational background, her current labor market status, and the size of her household seem to be partially related to her proxy response.

Overall, the principal finding is that the divergence between self- and proxy responses appears to be larger for youths whose attachment to the labor force is weaker, while, except for race, the demographic characteristics of individuals do not greatly affect the divergence.

4.4.2 Improving the Data Base

The cross-survey differences in rates of young male work activity reported in this study suggest that the magnitude, not to mention the nature, of youth joblessness is known with less certainty than is currently believed. If the estimates from relevant surveys other than the CPS are correct, more young males hold jobs than is reported in government statistics, and some aspects of the youth joblessness problem are exaggerated. If the CPS data are correct, analyses of youth joblessness based on the longitudinal surveys could be seriously flawed. Because valid scientific analysis and policy prescription requires data that deal accurately with the issue at hand, improving our information about what youths in our society are actually doing should be a top priority for those concerned with the youth unemployment problem. In this section we offer some suggestions about ways in which improvements might be made.

First, it is important to obtain better estimates of the extent to which respondent bias affects estimates of the work activity of the young. While useful, our analyses of the matched mother-son NLS sample suffer from various problems, as described earlier, and should be corroborated (or disproved) with actual CPS-derived data. We recommend that the Bureau of the Census survey youths whose families are included in the CPS and compare the youths' self-reported work activity to that reported by proxy respondents. If such a study substantiates our findings, it will be necessary to devise new methods of obtaining information about youth work activities, either through new questions designed to elicit more accurate information about the employment of the young or through CPS supplements answered by the young (and other relevant individuals) themselves. Whatever approach is taken, the Bureau of the Census should undertake a major analysis of the respondent bias problem as it relates to youths.

Second, a substantial effort should be devoted to determining whether self-reported or proxy-reported youth work activity rates are the more accurate. This can be done by requesting information about the putative employer of the youth and verifying the reported job with the employer. Such an analysis would go far beyond what we have been able to do in this study and significantly improve our knowledge of basic labor force activity. Thus we recommend that the Bureau of the Census request names of employers from young persons, particularly those reporting employment when a proxy respondent does not report the youth as having a job, and attempt to verify the position of the youth.

Third, we believe that serious attention should be given to the development of entirely new questions and concepts for analysis of the activity of youths (and others who are not typically heads of households). The current set of CPS questions were developed in large measure to determine the employment status of adult heads of households and are not well suited to an understanding of the economic problems of youths. Current CPS questions provide very little information on the activities of jobless persons who are out of school, and essentially define their status negatively: they are not employed and not in school. What is needed is a set of questions evaluating what these people do with their time, possibly oriented in part toward whether their current activity is likely to increase or decrease their chances for employment in ensuing periods. We recommend that the Bureau of the Census experiment with new sets of questions to find out what persons are doing who are out of school and not employed. Such questions should seek to determine the way in which time is allocated by the young (and others in this state) among unpaid work in the home, part-time school, "loafing," and so forth. It is difficult to understand the problems faced by the not-employed, not-enrolled young person when we have so little information about what he is doing. What is needed, we wish to stress, is not additional questions designed to differentiate discouraged from other young workers on the basis of possible work plans, but rather *objective* information on what people actually do when they are not employed and not in school.

Basically, we believe that to deal adequately with new economic problems such as youth joblessness we need new data. The payoff from obtaining more information about what teenagers are really doing and why they are really doing it will most likely be extremely high.

Notes

1. The divergence between youth labor market conditions as depicted in the NLS and the CPS was noted in the important study by Borus, Mott and Nestel. An earlier but much less complete discussion of the phenomenon is found in Parnes.

2. For an in-depth discussion of the CPS see Hanson.

3. This information was gathered in a telephone conversation with Paul Flaim of the Bureau of Labor Statistics.

4. U.S. Bureau of Labor Statistics, *BLS Handbook of Methods*, Bulletin 1910.

5. For an in-depth discussion of the NLS, see Ohio State University.

6. Another difference, pointed out by Borus et al., exists between the 1966 CPS and NLS. The NLS adopted changes in the definitions of employment and unemployment in 1966 which were not adopted by the CPS until 1967.

7. For a discussion of the NLS72 survey, see U.S. Department of Health, Education and Welfare.

8. This information was gathered in a telephone conversation with Gilbert Nestel of Ohio State University.

9. Another possible source of discrepancy exists because mothers are interviewed about their son's activity from four to six months after the end of the reference period. Sons, however, are interviewed immediately after the reference period. The direction of the bias introduced by this discrepancy is unclear.

10. These data were calculated with NLS tapes.

11. See Hanson, p. 23 for a discussion.

12. See Borus et al., p. 18 for more information.

13. These figures were derived from data in Levinsohn et al.

14. This discussion is based on telephone conversations with Robert Lerman and Henry Woltman and on a memorandum by Woltman.

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Comment Paul O. Flaim

The existence of some differences between the findings from the Current Population Survey (CPS) and those from the National Longitudinal Survey (NLS) with regard to the rates of labor force activity and unemployment of youths has been known for some years. While the dimensions of these differences had perhaps not been clearly defined until recently, they were most usefully quantified and discussed in a 1978 paper by Borus, Mott, and Nestel.¹ What Freeman and Medoff set out to do was to dissect these differences and try to attribute their causes to various factors.

Their conclusions, if I may cite them at the outset, are as follows: (1) A larger proportion of youths are found to be employed in the NLS than in the CPS; (2) Although the rates of unemployment are not materially different in the two surveys, the discrepancies in terms of employment are sufficiently large to call into question our knowledge of the magnitude and nature of the youth employment problem; (3) In order to shed more light on this question, the Bureau of the Census should undertake special methodological studies and add further questions to the CPS questionnaire.

It is hard to argue against the desirability of the proposed methodological studies or against the collection of additional information on the labor force status of youths. After all, even the National Commission on Employment and Unemployment Statistics has recently recommended the regular collection of some additional data on youths through the CPS.² However, before mounting any large and costly studies based on the measurement differences discussed in the Freeman-Medoff chapter, we ought to ask ourselves whether these differences are truly as important as they seem.

Paul O. Flaim is an official of the Bureau of Labor Statistics. However, these comments reflect his views and not necessarily those of the Bureau of Labor Statistics.

Using data for 1967—which are also fairly representative of the NLS/CPS differences in other years—the findings from the two surveys in terms of the labor force status of male youths are summarized in table C4.1.

As shown, there are no systematic differences between the two surveys in terms of the incidence of unemployment for young men, with the CPS jobless rate being slightly higher than the NLS rate for some groups and slightly lower for others. In terms of employment, however, there is a clear pattern of systematic differences, with the employment-population ratios considerably higher as measured in the NLS than in the CPS. But let us look a little closer at these differences.

What we see is that as the age of youths increases and as their attachment to the job market becomes firmer, the NLS/CPS differences in employment-population ratios become smaller and smaller, both in absolute as well as relative terms. And here it might be pointed out that the rapid growth in the attachment of youths to the job market as they age can be confirmed not only in terms of the age related rise in employment-population ratios, but also in terms of a similar rise in the number of hours worked each week. Data for 1978 (which are also representative of the workweek pattern for youths in other years) are given in table C4.2.

Clearly, the widest NLS/CPS differences in the measurements of youth employment turn up for the 16 and 17 year olds, those who, as shown above, are most likely to work only part time. As youths age and move into jobs which take up much more of their time, and which thus acquire more meaning as part of their lives, the measurements of their employment status as derived from the NLS and the CPS become much more similar. True, the NLS turns up more employed youths than does the CPS even in the 20–24 age group, with the respective employment-population ratios being 81.8 vs. 78.0% for white males and 84.8 vs. 76.9% for black males. But how consequential are these differences? Are they of such magnitude that they might possibly affect any decisions concerning youth employment policies? I cannot see how.

Table C4.1

Age, sex, and race	Employment/population ratios		Unemployment rates		
	NLS	CPS	NLS	CPS	
White males:	16–17 years	45.6	36.7	18.7	14.4
	18–19 years	62.8	56.7	10.3	10.6
	20–24 years	81.8	78.0	3.2	4.0
Nonwhite males:	16–17 years	40.6	26.2	29.8	28.8
	18–19 years	59.7	47.0	19.4	21.7
	20–24 years	84.8	76.9	7.8	10.3

Table C4.2

		Weekly hours
White males:	16-17 years	22.7
	18-19 years	34.7
	20-24 years	39.9
Nonwhite males:	16-17 years	21.9
	18-19 years	30.5
	20-24 years	37.8

Decisions about youth employment policies have generally been made on the basis of the unemployment rates for youths, rather than on the basis of some normative value concerning employment ratios. And, as already noted, the unemployment rates from the NLS and the CPS are not that dissimilar. This is not to suggest that we should not be concerned with the NLS/CPS differences, but simply that we should put them in the proper perspective.

As to the reasons for these differences, Freeman and Medoff (and Borus et al. before them) point rather convincingly to the fact that the NLS data were obtained through personal interviews with the youths whose work activity was actually being measured, while the CPS data for youths are most often obtained from other members of the households, and generally from the mothers of the youths in question. In logical pursuit of this line, Freeman and Medoff turned to the data from the Longitudinal Survey of the High School Class of 1972 (NLS72) and found strong evidence that mothers tend to report less employment activity for their sons than is reported by the sons themselves.

However, we should still not jump to the conclusion that mothers are biased when it comes to reporting the employment of their children. There is, I think, a better explanation. My hypothesis is that the parent/youth differences in the reporting of the youth's employment arise simply from different perceptions as to what constitutes having "worked" or having held "a job," particularly when the employment in question is of very marginal nature. For example, a 16 year old who earns, say, \$10 in a given week through lawn-mowing or baby-sitting tasks may attribute considerable importance to such work and would probably report it to an interviewer. On the other hand, the mother of such a teenager may not view such tasks as worth mentioning.

It must be kept in mind that in the typical CPS interviewing sequence the mother would first be queried about her husband's job with the ABC corporation and then, if applicable, about her own job with the XYZ corporation. Her mind having been focused upon such jobs, it is quite possible—and understandable—that she would then view the casual lawnmowing and baby-sitting jobs of her son or daughter as not worth reporting.³

There are, admittedly, situations in which the parents may simply not have adequate knowledge of the employment status of their children. This situation is most likely to arise when youths are temporarily away at school and when their labor force status in the CPS is determined on the basis of data obtained from their parents as part of the interviews conducted in their home town. In such instances—and they are clearly numerous—the parents may simply not know whether their sons or daughters worked (or looked for work) during the reference period.

Table C4.3 shows several hypothetical situations where, either because of different perceptions or different levels of knowledge, the reporting of a youth's employment status could vary significantly depending on whether the pertinent questions are addressed to the youth or to his parents.

What the table illustrates is that the employment status of youths is very often not a matter of black and white but a gray area where the dichotomy between “working” and “not working” is not that obvious. It is thus not surprising that parents might draw the line differently from their children in considering what constitutes a job, or what is worth mentioning as a job.

It should also be emphasized that the work activity questions asked in the CPS are not always identical to those asked in the NLS, and we know that only a slight difference in the wording of such questions can affect the answers. In determining how many weeks a person worked during the previous year, the annual question in the CPS has been: “In [year x] how many weeks did _____ work either full time or part time not counting work around the house? Include paid vacation and sick pay leave.” In the NLS, the youths were asked about the number of weeks during the year in which they did “any work at all.” It is not surprising that the NLS question, which includes this additional phrase, might result in the reporting of more weeks of employment than would a question which does not contain such a phrase.

There are other features of the CPS which are very dissimilar relative to the NLS and which might contribute to the differences discussed in the Freeman-Medoff chapter. As mentioned in the chapter, the reporting of employment and of job-seeking activity in the CPS tends to be significantly higher in the households being visited for the first time than in those whose members are being interviewed for the second, third, or fourth time. While this “rotation group bias” has never been satisfactorily explained, we know it is particularly large in the case of persons whose labor force activity, as reported in the first-month interview, is somewhat marginal. To cite an extreme example, the average number of women reported as looking for part-time work is generally about one-fourth higher in the first monthly interview than in the third one.⁴

While the rotation group bias in the CPS data for youths may not be that large, it tends generally in the same direction. As shown in table

Table C4.3 Possible Reasons for Differences between Parents and Youths in Reporting of Youths' Labor Force Status

Hypothetical situation	Perception of situation and probable reporting by youth	Perception of situation and probable reporting by parent
1. Boy mowing lawns; girl baby-sitting; both working only a few hours per week.	Income from tasks very important to youth; tasks likely to be reported as employment.	Parent may not consider such occasional tasks as a "job" and may not report as employment, particularly in a retrospective survey.
2. Youth away at college; working part time in library.	Would probably report employment but is treated as resident of parents' household for CPS purposes.	Parents likely to answer "don't know" when asked what youth did last week, and youth is not classified as employed.
3. Youth away at college; looking for part time job.	Would probably report job-seeking efforts but is treated as resident of parents household.	Parents may not know of job-seeking efforts and youth would not be reported as unemployed.
4. Youth residing at home; making sporadic efforts to find casual work.	Would probably report job-seeking efforts.	Parents may not consider such sporadic efforts to find casual work worth mentioning as a job-seeking activity.

C4.4, the employment-population ratios and unemployment rates based on the first interview are generally higher than those based on the entire survey. Thus NLS/CPS comparisons would yield smaller differences if based on first-month data from the CPS. Alternatively, they would also probably be much smaller if the NLS data were collected through repeated monthly interviews as in the CPS.

Conclusion

Given the rather marginal nature of the labor force activity of many youths and the different ways in which the data on their labor force status is collected and computed in the NLS and the CPS, it is not surprising to find some differences between the findings from the two surveys. Freeman and Medoff shed very useful light on these differences and on the processes that may lead up to them. They recognize as well that these differences are most apparent where labor market attachment is most tenuous. Their suggestions for further research on the topic and for a sharpening of the labor force questions relative to youths are quite valid and in line with suggestions made by the National Commission on Employment and Unemployment Statistics. I do not think, however, that the differences are of such weight as to warrant any large-scale methodological studies. Moreover, since the employment status of many youths is not easily defined, I doubt whether the NLS/CPS differences could ever be satisfactorily reconciled, even through a special survey designed specifically for that purpose.

Notes

1. Michael E. Borus, Frank L. Mott, and Gilbert Nestel, "Counting Youth: A Comparison of Youth Labor Force Statistics in the Current Population Survey and the National Longitudinal Surveys," in *Conference Report on Youth Unemployment: Its Measurement and Meaning*, U.S. Department of Labor, 1978.

2. *Counting the Labor Force*, final report of the National Commission on Employment and Unemployment Statistics, 1979.

3. In the spring of 1979, an observer of the CPS interviewing process noted the following situation. A mother who was asked about the labor force status of her young son reported that he had not done any work during the previous week, that he did not have a job from which he was temporarily absent, etc. After the interview was completed, it turned out that the son was about to go off to play the drums in a cafe where he performed with a small group three nights a week. Obviously, this mother did not regard such activity as the equivalent of "working" or "having a job."

4. *The Current Population Survey Design and Methodology*, Technical Paper 40, U.S. Department of Commerce, Bureau of the Census, 1978. (see particularly table VIII-4, page 84).

Table C4.4 Comparisons of employment-population ratios and unemployment rates from CPS as derived from data from first-month households and as derived from entire sample. Annual averages for 1977.

Age, sex, and race		Employment-population ratios			Unemployment rates		
		First-month households (1)	Entire sample (2)	Difference (1)-(2)	First-month households (3)	Entire sample (4)	Difference (3)-(4)
<u>Males</u>							
White	16 to 24	68.5	67.5	1.0	12.5	11.5	1.0
	16-17	48.2	44.3	3.9	18.6	17.6	1.0
	18-19	66.8	65.2	1.6	13.6	13.0	0.6
	20-21	72.0	72.8	-0.8	12.2	10.7	1.5
	22-24	82.8	82.9	-0.1	8.9	8.3	0.6
Black and other:	16 to 24	47.1	44.2	2.9	27.7	27.2	0.5
	16-17	25.5	19.0	6.5	34.9	38.7	-3.8
	18-19	41.5	36.9	4.6	35.7	36.1	-0.4
	20-21	56.5	52.8	3.7	23.4	26.0	-2.6
	22-24	65.2	67.7	-2.5	22.3	18.7	3.6
<u>Females</u>							
White:	16 to 24	56.4	54.4	2.0	13.2	11.9	1.3
	16-17	40.2	37.5	2.7	19.9	18.2	1.7
	18-19	56.8	54.3	2.5	15.5	14.2	1.3
	20-21	61.4	60.2	1.2	10.9	10.1	0.8
	22-24	64.0	62.3	1.7	9.8	8.7	1.1
Black and other:	16 to 24	35.3	33.6	1.7	34.8	29.1	5.7
	16-17	15.3	12.5	2.8	51.3	44.7	6.6
	18-19	29.3	28.0	1.3	43.5	37.4	6.1
	20-21	39.8	38.2	1.6	34.5	29.3	5.2
	22-24	51.8	50.6	1.2	24.2	20.2	4.0

Comment Stephen M. Hills

As Freeman and Medoff note, the discrepancy between CPS and NLS estimates of labor force statistics is not a new research topic. Their research extends comparisons to a greater number of years than was the case in the most recent study by Borus, Mott and Nestel. Borus et al. were reluctant to make comparisons for more recent years because of the decreasing degree of representativeness of the NLS caused by attrition. Nevertheless, the same pattern of responses is shown in the Freeman/Medoff data for later years of the NLS (1968–71) and for earlier years when attrition was not a problem (1966–67).

Freeman and Medoff seek to improve our understanding of the discrepancies in several ways. First, they adjust the data from the NLS for slight differences in age that result because of the timing of the sample screening. Borus et al. did not adjust their data for age and furthermore did not break down comparisons by as many age categories as have Freeman and Medoff. The important result that emerges in table 4.1 is not only the large discrepancy in employment to population ratios which is the focus of the paper. The table also shows very large discrepancies in the degree of unemployment reported for 16 and 17 year olds. The discrepancy in unemployment does not appear to be that great in the earlier study by Borus et al., both because the data are not adjusted for age and because they are reported for 16–19 year olds as a total group.

Second, Freeman and Medoff seek to extend the comparisons of labor force statistics by utilizing a second longitudinal data set, the NLS72. This attempt to generalize was, in my opinion, not very successful because of important differences in methods used to obtain employment status. Respondents in the NLS72 were asked to recall whether or not they were looking for work during the month of October, 1972, but the date at which they were asked to recall this information was twelve months later. The intervening time period should result in a serious underreporting for rates of unemployment. To determine whether a respondent was employed, the questionnaire simply asks if a job was held at any time during the month of October, 1972. Since CPS employment status is based on a survey *week* one would need to divide the number of weeks employed in October by 4.3 (the number of weeks in the month) and average this ratio for all respondents to obtain an estimate of the employment to population ratio that was at all comparable with the CPS. The employment to population ratio now reported is an overestimate since the time period on which it is based is approximately four times longer than the time period for the CPS.

Third, Freeman and Medoff focus on the differences in CPS reports and NLS reports for work experience across a twelve-month period of time. In this area the authors have significantly extended our understanding of the *potential* causes of differences in estimates of survey week status. The data do not permit a direct experiment, however, to determine the sources of bias that may exist in survey week status. We must *infer* this from the experiment which is performed on data for work experience. Nevertheless, the inference is strong that proxy respondents could account for much of the discrepancy in labor force statistics, and the authors present a convincing set of comparative data to support their case.

The focus of the chapter is therefore on the discrepancy between mean weeks of work experience reported in the March supplement of the CPS and in the work experience sections of the NLS. Mothers underreport the weeks of work experience for their sons by about six weeks, regardless of age category or year for which comparisons are made. There are undoubtedly systematic differences in underreporting which the authors examine through a mother/son matrix of responses and a multivariate analysis. Still more can be done simply by examining in slightly different fashion the distribution contained in table 4.8.

We can establish as a hypothesis that what we observe is a systematic underreporting of specific kinds of work that young people are doing. It is quite likely that adults may ignore particular kinds of work that teenagers do as trivial—baby sitting, distributing advertising pamphlets, working a few hours each week at the grocery store. Teenagers themselves may consider these jobs important enough to report even though they do not spend much time working at them or earn much money from them. The discrepancy between reports of the mother and the son may be due both to a problem of recall and to a different evaluation of what “work” really is.

If we reexamine the distributions of table 4.8, we can see that most of the discrepancy in mean weeks worked flows from the “missing” category, the zero category, or the 1–13 week category. If we assume that the missing category is proportionately distributed across the other categories of each distribution, we find for 1966 that mothers report 74% of their sons working 0–13 weeks whereas only 55% of the sons report that they worked only that amount for the year. For 18–19 year olds the figures are “mother’s report,” 63%, “son’s report,” 32%. Finally, for 20–24 year olds, the figures are 46% and 28%. If we recalculate the distributions, looking only at the portion of the sample that was reporting 14–52 weeks, the picture looks quite similar for both the mother’s and the son’s reports. If anything, there is some tendency in these instances for mothers to overrepresent the number of sons in the fifty-two week category, shifting

the distribution upwards somewhat. Results of the recalculation are shown in table C4.5.

The conclusion that can then be drawn is this: disproportionate numbers of mothers report zero weeks of work when they really do not know what kinds of jobs their sons have. Likewise, others report 1–13 weeks (perhaps a summer job) when the son reports that he was working more consistently throughout the year.

The NLS also contains a report of the kind of work that the son was doing, both reported by the mother and by the son. Thus it is possible to examine the kinds of work being underreported by the mother when there are serious discrepancies between her report and the son's. Freeman and Medoff do not deal with this issue directly and therefore it must be considered as a possibility for future research.

A critique of the Freeman/Medoff chapter also requires comment on the policy interpretations that could be attributed to their findings. The traditional philosophy underlying the gathering of labor force statistics has been to ask a consistent set of questions that are as unambiguous as possible and hope that respondents interpret them in approximately the same manner. The concept of "work" is not terribly ambiguous for the prime-age worker with a steady, paid job. For younger workers the concepts of both "work" and "looking for work" become much more ambiguous. Yet we make normative judgments about whether or not "the youth joblessness problem is exaggerated" based on these data.

It seems clear that if the source of discrepancy between CPS and NLS data is due to proxy respondents, we should have more faith in the data obtained from young people themselves, regardless of the meaning they attach to the concepts of "work" or "looking for work." Furthermore, if we accept their responses as more reliable, two conclusions flow from the Freeman/Medoff chapter and each should have equal emphasis. In the late 1960s young men were working more than the CPS estimates indicated, even though we don't know much about the kinds of jobs that were missed by the CPS. Very young men, particularly those aged 16 and 17, were also looking for work in greater numbers than the CPS estimates would have indicated. This latter issue, which was first raised in the

Table C4.5 Distribution of Weeks Worked If 14–52 Weeks Were Reported

Age		16–17		18–19		20–24	
		Mother	Son	Mother	Son	Mother	Son
Weeks worked	14–26	40	40	35	34	24	27
	27–39	10	15	14	15	10	16
	40–47	7	8	5	8	9	11
	48–49	1	4	4	5	4	7
	50–52	42	33	41	37	52	40

mid-sixties, has again become relevant with the publication of preliminary figures on employment status for youths, drawn from the newest extension of the NLS.

The newest comparisons with the CPS are for youths aged 16–21. They provide support for the arguments made by Freeman and Medoff by showing that for out-of-school youths, the CPS and NLS estimates of labor force participation, unemployment and employment to population ratios are relatively close. For in-school youths who are the most likely to be living at home, however, the discrepancies can be extremely large. NLS in-school employment/population ratios range from five percentage points higher than the CPS for white females to almost nine percentage points higher for black males. NLS estimates of the unemployment rate for in-school youths are five percentage points higher than the CPS for white males (the minimum discrepancy), but exceed the CPS by a startling twenty-four percentage points for black females.¹ The largest differences between the March 1979 CPS and the NLS occurred for females, both white and black, and for black males. Given the importance of labor force statistics for policy purposes, this most recent information only underscores Freeman and Medoff's call for immediate attention to the way in which we gather data on the labor market activities of youth.

Note

1. Richard Santos, "The Employment Status of Youth," chapter 2 in *Research on Youth Employment and Employability Development—Findings of the National Longitudinal Survey of Young Americans, 1979*, Youth Knowledge Development Report 2.7, table 2.7 (Washington, D.C.: U.S. Government Printing Office, May 1980), p. 34.