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## ABSTRACT

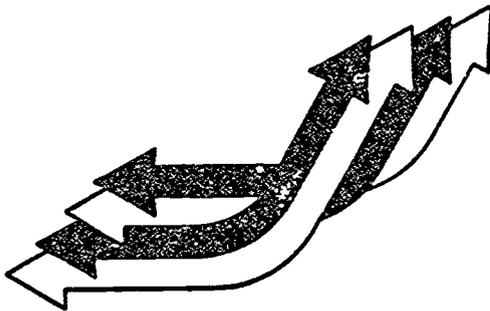
The third follow-up survey associated with the High School and Beyond (HSB) Study was conducted during the spring of 1986. This report provides information that fully documents major technical aspects of the third follow-up sample selection and implementation, describes the weighting procedures, examines the possible impact of non-response on sample estimates, and evaluates the precision of estimates derived from the sample. The base year design is briefly reviewed. The possible impact of survey non-response is examined as a potential source of bias, and procedures for computing sampling errors and design effects are discussed. The 14,825 high school sophomores in 1980 and the 11,995 high school seniors in 1980 who were used in the second HSB follow-up survey were used in this study. The calculation of sample case weights that adjust for differential probabilities of selection and for non-response within weighting cells is addressed. Appendices include extensive tabulated data on sophomore weights and non-response adjustments, senior weights and non-response adjustments, and design effects and sampling errors. (TJH)

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ED300444

# Contractor Report

## High School and Beyond Third Follow-Up (1986) Sample Design Report



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**High School and Beyond  
Third Follow-Up (1986)  
Sample Design Report**

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## 1. INTRODUCTION

The High School and Beyond third follow-up survey was conducted during the spring of 1986. This report provides information that fully documents major technical aspects of the third follow-up sample selection and implementation, describes the weighting procedures, examines the possible impact of nonresponse on sample estimates, and evaluates the precision of estimates derived from the sample.

A thorough understanding of the third follow-up sample design requires familiarity with the base year design. The present report reviews the base year sample design but does not discuss it in detail. Readers who want more detailed information about the base year sample should consult the High School and Beyond base year Sample Design Report.<sup>1</sup> In particular, readers not familiar with the base year school and student selection procedures may wish to review the construction of the sampling frame, selection procedures, replacement and substitution procedures for ineligible and noncooperating schools, and base year weighting procedures.

### 1.1 Overview of High School and Beyond

#### 1.1.1 CES' Longitudinal Studies Program

The mission of the Center for Education Statistics (CES) includes the responsibility to "collect and disseminate statistics and other data related to education in the United States" and to "conduct and publish reports on specific analyses of the meaning and significance of such statistics" (*Education Amendment of 1974--Public Law 93-380, Title V, Section 501, amending Part A of the General Education Provisions Act*).

Consistent with this mandate and in response to the need for policy relevant time series data on a nationally representative sample of high school students, CES instituted the National Education Longitudinal Studies (NELS) program, a continuing long term effort. The general aim of the NELS program is to study the educational, vocational, and personal development of high school students and the personal, familial, social, institutional, and cultural factors that may affect that development.

The overall NELS program utilizes longitudinal time-series data bases in two ways: (1) each cohort is surveyed at regular intervals over a span of years, and (2) comparable data are obtained from successive cohorts, permitting studies of trends relevant to educational and career development and societal roles. Thus far the NELS program consists of two major studies: The National Longitudinal Study of the High School Class of 1972 (NLS-72) and High School and Beyond (HS&B). A third major study, the National Education Longitudinal Study of 1988 (NELS:88), will begin with a survey of 8th graders in 1988 and will continue with biennial follow-up surveys throughout the 1990s.

The first major study, NLS-72, began with the collection of comprehensive base year data from approximately 19,000 high school seniors in the spring of 1972. The NLS-72 first follow-up survey added nearly 4,500 individuals in the original sample who did not participate at the time of the base year survey. Three more follow-up surveys were conducted with the full sample in 1974, 1976, and 1979, using a combination of mail surveys and personal and telephone interviews. Five follow-up surveys were conducted in the fall and winter of 1972, 1974, 1976, 1979, and 1986 using a combination of mail surveys and personal and telephone interviews.

The second major survey, HS&B was designed to inform federal and state policy in the decade of the 1980s. It began in 1980 with the collection of base year data on high school seniors and sophomores. The first follow-up study was conducted in the spring of 1982, the second follow-up study occurred in the spring of 1984, and the third follow-up study occurred in the spring of 1986.

### 1.1.2 The HS&B Base Year Survey

The base year survey utilized a highly stratified multistage national probability sample of over 1,100 secondary schools as the first stage units of selection. In the second stage, 36 seniors and 36 sophomores were selected per school (in schools with fewer than 36 in either of these groups, all eligible students were included). A total of 30,030 sophomores and 28,240 seniors who were enrolled in 1,015 public and private high schools across the country participated in the base year survey. Student questionnaires focused on individual and family background, high school experiences, work experiences, and plans for the future. Students also were given cognitive tests to measure a variety of abilities.

School questionnaires, completed by principals or school administrators, provided information about enrollment, staff, educational programs, facilities and services, dropout rates, and special programs for handicapped and disadvantaged students. Teachers filled out checklists in which they commented on the abilities, behavior, and attitudes of students participating in the survey. A parent questionnaire, with questions on plans for postsecondary education, was mailed to the parents of a subsample of students.

### 1.1.3 The HS&B First, Second, and Third Follow-Up Surveys

The first follow-up survey, conducted in 1982, included subsamples of 29,737 sophomore cohort and 11,995 senior cohort representatives from the base year survey samples. During the fall of 1982, nearly 18,500 of the sophomore cohort members selected for the first follow-up survey were subsampled for the High School and Beyond Transcripts Survey.<sup>2</sup> The second follow-up survey, conducted in 1984, subsampled 14,825 members of those 18,500 sophomores, and it retained all of the seniors from the first follow-up survey selections. The questionnaires for the second follow-up focused on postsecondary education, work, family formation, and selected attitudes. The third follow-up survey, conducted in 1986, used the same samples as the second follow-up survey, and for the first time, the senior and sophomore cohorts completed the same questionnaire, again covering postsecondary education, work, family formation, and selected attitudes.

## 1.2 Overview of Chapters 2 through 5

Chapter 2 summarizes the base year sample selection procedures and describes in detail the selection procedures for the follow-up surveys. It describes the sub-sampling plans that were adopted and shows the allocation of cases to sample cells in the sophomore and senior cohorts. Base year sample stratification and sample allocations are also summarized.

Chapter 3 describes the calculation of sample case weights that adjust for differential probabilities of selection and for nonresponse within weighting cells. In order to provide full technical information, the nonresponse adjustment factors for all weighting cells are included in appendices A and B.

Chapter 4 examines the possible impact of survey nonresponse, a potential source of bias. The amount of bias depends on the proportion of nonrespondents and the magnitude of any difference between respondents and nonrespondents on variables of interest. Unfortunately, it is seldom possible to estimate accurately the amount of bias because, although the proportion of nonrespondents is known, there is usually no satisfactory way to estimate the difference between respondents and nonrespondents. Panel surveys, however, often are able to obtain estimates of nonresponse bias based on the characteristics of sample members who participated in one wave but were nonrespondents to another wave. Chapter 4 presents the results of a comparison between base year refusing schools and their substitutes, a comparison of base year responding students and nonresponding students, and a description of nonresponse rates among various subclasses of the third follow-up sample.

Chapter 5 describes procedures for computing sampling errors and design effects. The High School and Beyond sample, because it is a clustered, stratified, and disproportionately allocated sample, presents some special difficulties in estimating actual sampling errors. Chapter 5 discusses the approach NORC has taken to this problem. Sampling errors and design effects are presented for a set of proportions for both the entire sample and important domains or subgroups. Design effects obtained from the second follow-up sample are compared to those obtained from the base year sample. Finally, several "rules of thumb" are offered for estimating standard errors under various circumstances.

#### NOTES TO CHAPTER 1

<sup>1</sup>Frankel, M., Kohnke, L., Buonanno, D. and Tourangeau, R. (1981) *Sample Design Report*. Chicago: NORC.

<sup>2</sup>Tourangeau R., McWilliams H., Jones C., Frankel M., and O'Brien F., (1983) *High School and Beyond First Follow-Up (1982) Sample Design Report*. Chicago: NORC.

## 2. SAMPLE DESIGN AND IMPLEMENTATION

### 2.1 Base Year Survey Sample Design<sup>1</sup>

In the base year, students were selected through a two stage, stratified probability sample with schools as the first stage units and students within schools as the second stage units. With the exception of certain special strata, which were oversampled, schools were selected with probabilities proportional to the estimated enrollment in their 10th and 12th grades. Within each school, 36 seniors and 36 sophomores were randomly selected. In those schools with fewer than 36 seniors or 36 sophomores, all eligible students were drawn in the sample. Sampling rates for each stratum were set so as to select in each stratum the number of schools needed to satisfy study design criteria regarding minimum sample sizes for certain types of schools. As a result, some schools had a very high probability of inclusion in the sample (in some cases, equal to 1.0), while others had a very low probability of inclusion. The total number of schools selected for the sample was 1,122, from a frame of 24,725 schools with grades 10 or 12 or both.<sup>2</sup> Sampling strata and the number of schools selected in each are shown in table 2.1-1.

Substitution was carried out for schools that refused to participate in the survey, but there was no substitution for students who refused, whose parents refused, or who were absent on Survey Day and make-up days.<sup>3</sup> Substitution for refusal schools occurred only within strata. In certain cases no substitution was possible because all schools were selected in some strata. The realization of the sample by stratum is shown in table 2.1-2.

### 2.2 First Follow-Up Survey Sample Design

All 1980 senior cohort students selected for the base year sample had a known, non-zero chance of being selected for the first and all subsequent follow-up surveys. The first follow-up sample consisted of 11,995 selections from the base year probability sample. This total includes 11,500 selections from among the 28,240 base year participants and 495 selections from among the 6,741 base year nonparticipants. In addition, 204 non-sampled co-twins or triplets (not part of the probability sample) were included in the first follow-up sample, resulting in a total of 12,199 selections. The sample design retained the essential features of a stratified multi-stage design; for further details, see Tourangeau, et al., 1983.<sup>4</sup>

Most of the sophomore cohort students selected for the base-year sample were retained in the first follow-up survey. Students (1980 sophomores) still enrolled in their original base year schools were retained with certainty, and the remaining sophomores were subsampled with various rates. In all, the sample numbered 29,737. Like the design for the senior cohort, the sophomore cohort first follow-up was a stratified multi-stage design.

Table 2.1-1

High School and Beyond Base Year School Sample Selections

<u>Special Strata (oversampled)</u>		<u>Number</u>
Alternative public		50
Cuban public		20*
Cuban Catholic		10*
Other Hispanic public		106*
High performance private		12
Other non-Catholic private (stratified by four census regions)		38
Black Catholic		30*
<u>Regular Strata (not oversampled)</u>		
Regular Catholic (stratified by four census regions)		48
Regular public (stratified by nine census divisions; racial composition, enrollment; central-city, suburban, rural)		808
		<u>1,122</u>

\*These schools were defined as those having 30 percent or more of enrollment from the indicated subgroup.

Table 2.1-2

High School and Beyond Base Year Sample Realization

<u>Stage 1: Sampling of Schools</u>						
<u>Stratum</u>	<u>Drawn in sample</u>	<u>Original schools*</u>	<u>Substituted schools</u>	<u>Total realized</u>		
Regular public	808	585	150	735		
Alternative public	50	41	4	45		
Cuban public	20	11	0	11		
Other Hispanic public	106	72	30	102		
Regular Catholic	48	40	5	45		
Black Catholic	30	23	7	30		
Cuban Catholic	10	7	2	9		
High performance private	12	9	2	11		
Other non-Catholic private	38	23	4	27		
<b>TOTAL</b>	<b>1,122</b>	<b>811</b>	<b>204</b>	<b>1,015</b>		
<u>Stage 2: Sampling of Students</u>						
	<u>Total drawn in sample</u>	<u>Absent, both Survey and Make-up days</u>	<u>Student refused</u>	<u>Parent refused</u>	<u>Partial materials missing**</u>	<u>Total realized</u>
Number	70,704	8,278	1,759	223	2,174	58,270
Percent	100	12	3	-	3	82

\*Includes additional selections made when schools were found to be out-of-scope.

\*\*Unusable because critical survey materials missing.

### 2.3 High School Transcripts Sample Design (1980 Sophomore Cohort)

Subsequent to the first follow-up survey, high school transcripts were sought for a probability subsample of nearly 18,500 members of the 1980 sophomore cohort. The subsampling plan for the Transcript Study emphasized the retention of members of subgroups of special relevance for education policy analysis. Compared to the base year and first follow-up surveys, the Transcript Study sample design further increased the overrepresentation of racial and ethnic minorities (especially those with above average HS&B achievement test scores), students who attended private high schools, school dropouts, transfers and early graduates, and students whose parents participated in the base year Parents' Survey on financing postsecondary education.

### 2.4 Second and Third Follow-Up Survey Sample Design

The members of the senior cohort selected into the second follow-up sample consisted exactly of those who were selected into the first follow-up.

The sample for the second follow-up survey of the 1980 sophomore cohort was based upon the transcripts study design. A total of 14,825 cases were selected from among the 18,500 retained for the transcript study. As was the case for the elder cohort, the younger cohort second follow-up sample included disproportionate numbers of sample members from policy-relevant subpopulations (e.g., racial and ethnic minorities, students from private high schools, high school dropouts, students who planned to pursue some type of postsecondary schooling, and so on). Sample weights have been provided to compensate for differential selection probabilities and participation rates across all survey waves.

For both the elder and the younger cohorts, the third follow-up survey sample was the same as the second follow-up survey sample. Since the third follow-up survey sample of the elder cohort was the same as the first (and second) follow-up survey sample, and the third follow-up survey sample of the younger cohort was the same as the second follow-up survey sample, descriptions of the compositions of the third follow-up survey samples of both cohorts may be found in earlier sample reports<sup>1</sup>.

#### NOTES TO CHAPTER 2

<sup>1</sup>For further details on the base year sample design see Frankel, M., Kohnke, L., Buonanno, D. and Tourangeau, R. (1981) *Sample Design Report*. Chicago: NORC.

<sup>2</sup>The sampling frame, defined as the universe of high schools in the United States, was obtained from the 1978 list of U.S. elementary and secondary schools of the Curriculum Information Center, a private firm. This was supplemented by the NCES lists of public and private elementary and secondary schools. Information on racial composition was obtained from the 1976 and 1972 DHEW/Office of Civil Rights Secondary School Civil Rights Computer File of public schools and the National Catholic Education Association's list of Catholic schools. Any school listed in any of these files that contained a 10th grade, a 12th grade, or both was made part of the frame.

<sup>3</sup>Apart from substitution for schools that refused, there were a number of schools in the originally-drawn sample that were "out-of-scope," failing to fit the criteria for inclusion in the sample. The sample was then augmented through selection of an additional school for each out-of-scope school, within major strata. Most of the out-of-scope schools were area vocational schools, having no enrollment of their own, although they were listed in the frame as having enrollments.

<sup>4</sup>Tourangeau R., McWilliams H., Jones C., Frankel M., and O'Brien F., (1983) *High School and Beyond First Follow-Up (1982) Sample Design Report*. Chicago: NORC.

<sup>5</sup>For the elder cohort see Tables 2.6 and 2.7 of Tourangeau et al. (1983), or Tables 3.2-1 of the *Senior Cohort Third Follow-Up (1986) Data File User's Manual*, Vol.1. For the younger cohort see Tables 2.4-1 through 2.4-4 of Jones and Spencer (1985), *High School and Beyond Second Follow-Up (1984) Sample Design Report* or Tables 3.3-1 through 3.3-4 of the *Sophomore Cohort Third Follow-Up Data File User's Manual*, Vol.1. Chicago: NORC.

## 3. SAMPLE WEIGHTS

### 3.1 General Approach to Weighting

The general purpose of weighting is to compensate for unequal probabilities of selection (retention) for the base year and the follow-up surveys and to adjust for the fact that not all individuals selected for participation in the surveys actually participated. The weights are based on the inverse of the selection probabilities through all stages of the sample selection process and on nonresponse adjustment factors computed within weighting cells. In this report, weights are described separately for three subgroups of respondents from each cohort of the HS&B sample: all third follow-up participants, third follow-up respondents who also participated in the base year, and third follow-up respondents who also participated in the base year, first, and second follow-up surveys. In addition to these various sets of weights, a raw weight, unadjusted for nonresponse in any of the surveys, was calculated and included on the data file for each cohort. The raw weight provides the basis for analysts to construct additional weights, adjusted for the presence of virtually any combination of data elements.

Several different weights have been calculated to adjust for the fact that not all sample members have data for all instruments in all survey waves. Table 3.1-1 describes four of the weights calculated for both the senior and sophomore cohorts. The senior cohort weights project to the population of approximately 3,040,000 high school seniors in 1980. Similarly, the sophomore cohort weights project to the population of 3,781,000 high school sophomores in 1980.

Table 3.1-1

Sample Case Weights, Third Follow-Up Survey			
Weight	Applies to cases with:	Unweighted number of cases having these weights	
		1980 Seniors	1980 Sophomores
FU3WT	Third follow-up questionnaire data	10,583	13,481
PANELWT4	Base year, first follow-up, second follow-up, and third follow-up questionnaire data	9,389	11,708
TESTWT3	Third follow-up questionnaire data and high school test data	9,149	13,205
RAWWTAll	Third follow-up selections	11,995	14,825

TESTWT3 was constructed only for cases for whom sufficient test data were available to construct a meaningful composite score (TEST). The counts in Table 3.1-1 include deceased persons, who have been given a weight in order to keep the population totals consistent with those of the base year survey.

### 3.2 Weighting Procedures

The weighting procedures consisted of two basic steps. The first step is the calculation of a preliminary follow-up weight based on the inverse of the cumulative probabilities of selection for the base year sample and up through the third follow-up survey. The second step carries out the adjustment of this preliminary weight to compensate for "unit" nonresponse--that is, for non-completion of an entire questionnaire or some combination of survey instruments. (No adjustments are made to the raw weights, which are, by definition, unadjusted for nonresponse.) These steps are described in more detail below.

**Step 1: Calculation of raw weights.** The first step in weighting the sample was to develop raw weights based on the inverse of the probability of selection (retention) for the various follow-ups. For HS&B selections, the raw weights are identical to the raw weights for the second follow-up sample, because all cases selected for the second follow-up were retained in the third follow-up sample and no new cases were selected.

**Step 2: Nonresponse adjustment.** In this step, the raw weights obtained in step 1 were multiplied by nonresponse ratio adjustment factors. Different factors were used to develop FU3WT, PANELWT4, and TESTWT3, but the approach is similar for each weight. Cases were distributed among weighting cells. Within each weighting cell two sums of raw weights were computed: the first for all cases in the cell selected for the survey wave or combination of waves (selections); the second for all cases in the cell for whom the specified combination of questionnaire and/or test data were collected (participants). The ratio of the two sums (selections over participants) provided a factor used to expand the preliminary weight of each participant to compensate for the missing weights of those who were selected but did not participate. The raw weights of nonparticipants were multiplied by an adjustment factor of zero to produce final weights of zero for these cases. Thus, the nonresponse adjustment consists of distributing the preliminary weights of the nonparticipants proportionately among the participants in each weighting cell.

The weighting cells were defined by cross classifying cases by several variables. For the sophomore cohort third follow-up weight (FU3WT), the cells were defined by:

- (1) Dropout status
  - (1) non-dropout
  - (2) dropout
  
- (2) School type (for non-dropouts only)
  - (1) regular public and alternative
  - (2) Hispanic public
  - (3) Catholic
  - (4) private non-Catholic
  
- (3) Sex
  - (1) male
  - (2) female

- (4) Race
  - (1) Hispanic
  - (2) non-Hispanic Black
  - (3) non-Hispanic White and other

- (5) Base year test quartile

for non-dropouts:

- (0) no test data available
- (1) lowest quartile
- (2) second quartile
- (3) third quartile
- (4) highest quartile

for dropouts:

- (0) no test data available
- (1) below median
- (2) above median

In some instances, cells were combined by pooling cases across base year test quartile classifications or type of high school attended.

For the senior cohort third follow-up weight (FU3WT), the cells were defined by:

- (1) Base year participation
  - (1) Non-participant
  - (2) Participant
- (2) School type
  - (1) Regular public and alternative
  - (2) Hispanic public
  - (3) Catholic
  - (4) Private non-Catholic
- (3) Sex (for base year participants only)
  - (1) male
  - (2) female
- (4) Race (for base year participants only)
  - (1) Hispanic
  - (2) non-Hispanic Black
  - (3) non-Hispanic White and other
- (5) Base year test quartile (for base year participants only)
  - (0) no test data available
  - (1) lowest quartile
  - (2) second quartile
  - (3) third quartile
  - (4) highest quartile

In some instances, cells were combined by pooling cases across base year test quartile classifications or type of high school attended.

For the senior cohort panel weight (PANELWT4), the cells were defined as above except that neither base year participation nor base year test quartile were used. For senior cohort weight TESTWT3, the cells were defined as for PANELWT4, except that sex was ignored for cases who attended private schools.

### 3.3 Results of Weighting

As a check on the adequacy of the sample case weights, NORC analyzed the statistical properties of the weights and the effects of various weights on the composition of the survey samples. Tables 3.3-1 and 3.3-2 show the mean, variance, standard deviation, coefficient of variation, minimum, maximum, skewness, and kurtosis for each of the weights calculated for the third follow-up survey.

Table 3.3-1

Statistical Properties of Sample Weights:  
1980 Sophomore Cohort

Weight	RAWWT	FU3WT	PANELWT4	TSTWT3
Mean	255.0	280.5	322.9	286.3
Variance	57,703	70,989	78,940	73,039
Standard Deviation	240.2	266.4	281.9	270.3
Coefficient of Variation	0.94	0.95	0.87	0.94
Minimum	1.45	1.62	1.80	1.74
Maximum	3098	3350	3969.7	3446.3
Skewness	2.38	2.66	1.97	2.71
Kurtosis	11.9	14.5	10.5	15.6
Number of Cases	14,825	13,481	11,708	13,205

Table 3.3-2

Statistical Properties of Sample Weights:  
1980 Senior Cohort

Weight	RAWWT	FU3WT	PANELWT4	TSTWT3
Mean	253.4	287.2	323.8	332.3
Variance	69,496	91,909	104,471	11,632
Standard Deviation	263.6	303.2	323.2	334.1
Coefficient of Variation	1.04	1.06	1.00	1.01
Minimum	1.09	1.14	1.57	1.67
Maximum	1,080.8	1,548.8	1,045.5	1,081.9
Skewness	1.02	1.22	0.09	0.94
Kurtosis	-0.40	0.60	-1.02	-0.92
Number of Cases	11,995	10,583	9,389	9,149

#### 4. NONRESPONSE ANALYSES

##### 4.1 General Considerations

Nonresponse inevitably introduces some degree of error into survey results. In examining the impact of nonresponse, it is useful to think of the survey population as including two strata--a respondent stratum that consists of all units that would have provided data had they been selected for the survey, and a nonrespondent stratum that consists of all units that would have been survey nonrespondents. The actual sample of respondents necessarily consists entirely of units from the respondent stratum. Sample statistics can serve as unbiased estimates only for this stratum; as estimates for the entire population, the sample statistics will be biased to the extent that the characteristics of the respondents differ from those of the entire population<sup>1</sup>. The bias may be expressed as:

$$\text{Bias} = Y_R - Y \quad (1)$$

in which

$Y_R$  = a parameter (e.g., a mean) characterizing the population of respondents

$Y$  = the corresponding parameter characterizing the entire population.

For many simple parameters such as means and proportions, the population parameter ( $Y$ ) is a weighted average of the stratum parameters ( $Y_R$  and  $Y_{NR}$ ):

$$Y = P(Y_{NR}) + (1 - P)Y_R \quad (2)$$

with

$P$  = the proportion of the population in the nonrespondent stratum.

It is evident from equations (1) and (2) that the nonresponse bias for an estimated mean or proportion depends on  $P$  and on the magnitude of the difference between respondents and nonrespondents:

$$\text{Bias} = P(Y_R - Y_{NR}) \quad (3)$$

Nonresponse bias will be small if the nonrespondent stratum constitutes only a small portion of the survey population or if the differences between respondents and nonrespondents are small.  $P$  can generally be estimated from survey data using an appropriately weighted nonresponse rate.

In the High School and Beyond study, there were two stages of sample selection and therefore two stages of nonresponse. During the base year survey, sample schools were asked to permit the selection of individual sophomores and seniors from school rosters and to designate "survey days" for the collection of student questionnaire and test data. Schools that

refused to cooperate in either of these activities were dropped from the sample. Individual students at cooperating schools could also fail to take part in the base year survey. Unlike "refusal" schools, nonparticipating students were not dropped from the sample; they remained eligible for selection into the follow-up samples.

Estimates based on student data from the base year surveys include two components of nonresponse bias:

$$\text{Bias} = (Y_{1R} - Y) + (Y_{2R} - Y_{1R}), \quad (4)$$

in which

$Y$  = a parameter characterizing all students,

$Y_{1R}$  = the corresponding parameter for all students attending cooperating schools, and

$Y_{2R}$  = the corresponding parameter for all cooperating students attending cooperating schools.

The first component ( $Y_{1R} - Y$ ) represents the bias introduced by nonresponse at the school level, and the second component ( $Y_{2R} - Y_{1R}$ ) represents bias introduced by nonresponse on the part of students attending cooperating schools. Each component of the overall bias depends on two factors--the level of nonresponse and the difference between respondents and nonrespondents:

$$\text{Bias} = P_1(Y_{1R} - Y_{1NR}) + P_2(Y_{2R} - Y_{2NR}) \quad (5)$$

in which

$P_1$  = the proportion of the population of students attending schools that would have been nonrespondents,

$Y_{1NR}$  = the parameter describing the population of students attending nonrespondent schools,

$P_2$  = the proportion of students attending respondent schools who would have been nonrespondents, and

$Y_{2NR}$  = the parameter describing this group of students.

The implications of equations (4) and (5) can be easily seen in terms of a particular base year estimate. On the average, sophomores got 10.9 items right on a standardized vocabulary test<sup>2</sup>. This figure is an estimate of  $Y_{2R}$ , the population mean for all participating students at cooperating schools. Now, suppose that sophomores at cooperating schools average two more correct than sophomores attending refusal schools ( $Y_{1R} - Y_{1NR} = 2$ ), and suppose further that among sophomores attending cooperating schools, student respondents average one more correct answer than student nonrespondents ( $Y_{2R} - Y_{2NR} = 1$ ). Noting that the base year school nonresponse rate was about .30<sup>3</sup> and the student nonresponse rate for sophomores was about .12<sup>4</sup>, we can use these figures as estimates of  $P_1$  and  $P_2$  and we can use equation (5) to calculate the bias as:

$$\text{Bias} = .30(2) + .12(1) = .72$$

That is, the sample estimate is biased by about .7 of a test score point.

This example assumes knowledge of the relevant population means; in practice, of course, they are not known and, although  $P_1$  and  $P_2$  can generally be estimated from the nonresponse rates, the lack of survey data for nonrespondents prevents the estimation of the nonresponse bias. The High School and Beyond study is an exception to this general rule: during the first follow-up, school questionnaire data were obtained from most of the base year refusal schools, and student data were obtained from most of the base year student nonrespondents selected for the first follow-up sample. These data provide a basis for assessing the magnitude of nonresponse bias in base year estimates.

The bias introduced by base year school-level refusals is of particular concern since it carries over into successive rounds of the survey. Students attending refusal schools were not sampled during the base year and have no chance for selection into subsequent rounds of observation. To the extent that these students differ from students from cooperating schools during later waves of the study, the bias introduced by base year school nonresponse will persist. Student nonresponse is not carried over in this way since student nonrespondents remain eligible for sampling in later waves of the study.

The results of three types of analyses concerning nonresponse are described in an earlier report<sup>5</sup>. Based on school questionnaire data, schools that participated during the base year were compared with all eligible schools. Based on the first follow-up student data, base year student respondents were compared with nonrespondents. Finally, student nonresponse during the first follow-up survey was analyzed. Taken together, these earlier analyses indicated that nonresponse had little effect on base year and first follow-up estimates. The results presented there suggest that the school-level component of the bias affected base year estimates by 2 percent or less and that the student-level component had even less impact.

In section 4.2, we analyze student nonresponse during the HS&B third follow-up. The school-level component of the nonresponse bias in third follow-up estimates is just the carryover from base year school nonresponse, which was shown to be 2 percent or less in the analysis cited above.

#### 4.2 Analysis of the Third Follow-Up Survey Student Nonresponse Rates

This section examines the antecedents and correlates of nonresponse. A few preliminary remarks on the bias resulting from nonresponse are nonetheless in order. First, it should be noted that school nonresponse may have the same effect on base year, first, second, and third follow-up estimates--students attending refusal schools were not sampled in the base year and have no chance of inclusion in the first, second, or third follow-up. For this reason, the estimates presented in earlier reports<sup>6</sup> may serve as estimates of the bias due to school nonresponse for the follow-up surveys as well as the base year. To the extent that the association between school attended and student characteristics decreases with the passage of time since the base year, the biasing effect of school refusals may be less now than it was for the base year. Second, student nonresponse was much lower in the third follow-up than in the base year

survey; other things being equal, the bias due to student nonresponse should be correspondingly smaller (see Equation 5). Overall, the weighted student nonresponse rates during the third follow-up were 9.6 percent in the sophomore cohort and 11.7 percent in the senior cohort (versus 12.0 and 15.2 percent respectively during the base year). Thus, it is reasonable to expect that bias in third follow-up estimates due to student nonresponse is smaller than that in the base year estimates, where it was already small.

There were several causes of student nonparticipation in the follow-up surveys. Some students refused to cooperate; others could not be located or were unavailable at the time of the third follow-up survey, and a few had died. Nonresponse rates were calculated in the usual way; the nonresponse rate is the proportion of the selected students (excluding deceased students) who were nonrespondents:

$$P = \frac{NR}{R + NR}$$

in which

- P = the nonresponse rate
- R = the number of responding students
- NR = the number of nonresponding students.

Nonresponse rates were calculated for each cohort by school-level and student-level variables using both unweighted and weighted data. The weight used was RAWWT. (See chapter 3 for a complete description of the weighting procedures.)

An overall indication of the level of participation and nonparticipation in the base year, first follow-up, second follow-up, and third follow-up surveys is presented in Table 4.2-1 and 4.2-2. These tables show frequencies and percentages of cases in each of sixteen cells. The totals presented in Tables 4.2-1 and 4.2-2 are unweighted.

#### 4.2.1 Third Follow-Up Survey Student Nonresponse Rates: School Variables

This section examines nonresponse to the third follow-up for each cohort by school-level variables. Five variables are shown in Table 4.2.1-1: school type, census region, level of urbanization, percentage of Black enrollment, and average enrollment. Base year and first follow-up data were used to classify the schools. The response rates given in the table are weighted, using RAWWT.

Table 4.2.1-1 indicates that the highest nonresponse rate for the sophomore cohort occurred among respondents who had been alternative public school students (19.8 percent), and the lowest rate was among former students at Catholic schools (5.7 percent). Among seniors, former Hispanic public school students had the highest nonresponse rate (16.9 percent) and former Catholic students the lowest (10.4 percent).

There is moderate variation in nonresponse by region, although in both cohorts, sample members selected from schools in the West show the highest rate of nonresponse (11.9 percent for the sophomores and 16.4 percent for the seniors). The nonresponse rates were lowest for participants who had been students in North Central schools (around 7.6 percent for each cohort).

Table 4.2-1  
 Participation Patterns for Base Year,  
 First Follow-Up, Second Follow-Up and Third Follow-Up Surveys:  
 Sophomore Cohort

Participation Patterns*				Frequency	Percent
Sophomore Cohort					
BY	1FU	2FU	3FU		
N	N	N	N	76	0.5
N	N	Y	Y	23	0.2
N	N	Y	N	9	0.1
N	N	Y	Y	13	0.1
N	N	N	Y	33	0.4
N	Y	Y	Y	60	0.4
N	Y	Y	N	76	0.5
N	Y	Y	Y	758	5.1
Y	Y	Y	Y	104	0.7
Y	Y	Y	N	93	0.6
Y	Y	Y	Y	52	0.4
Y	Y	Y	N	34	2.3
Y	Y	Y	Y	279	1.8
Y	Y	Y	N	447	3.0
Y	Y	Y	Y	715	4.8
Y	Y	Y	Y	11,683	79.1
Total				14,769	100.0

Table 4.2-2  
 Participation Patterns for Base Year,  
 First Follow-Up, Second Follow-Up, and Third Follow-Up Surveys:  
 Senior Cohort

Participation Pattern*				Frequency	Percent
Senior Cohort					
BY	1FU	2FU	3FU		
N	N	N	N	48	0.4
N	N	Y	Y	13	0.1
N	N	Y	N	4	0.0
N	N	Y	Y	18	0.2
N	Y	Y	Y	18	0.2
N	Y	Y	N	20	0.2
N	Y	Y	Y	35	0.3
N	Y	Y	Y	335	2.8
Y	Y	Y	Y	195	1.6
Y	Y	Y	N	106	0.9
Y	Y	Y	Y	77	0.6
Y	Y	Y	N	294	2.5
Y	Y	Y	Y	266	2.2
Y	Y	Y	Y	377	3.2
Y	Y	Y	Y	769	6.4
Y	Y	Y	Y	9,373	78.5
Total				11,948	100.0

NOTE: Counts refer to main samples only, excluding nonsampled co-twins, and excluding deceased persons.

\*BY - base year survey; 1FU - first follow-up survey;  
 2FU - second follow-up survey; 3FU - third follow-up survey;  
 Y denotes participation, and N denotes non participation.

Table 4.2.1-1  
Weighted Student Nonresponse Rates by Selected School  
Characteristics (figures are percents)

Characteristics	Sophomore cohort	Senior cohort
Total population	9.6	11.7
School type:		
Regular public	9.6	11.6
Hispanic public	11.3	16.9
Alternative public	19.8	11.3
Non-Catholic private	11.9	14.7
Catholic	5.7	10.4
Region:		
Northeast	11.3	12.6
North Central	7.3	7.8
South	9.2	11.8
West	11.9	16.4
Urbanization:		
Urban	14.4	14.3
Suburban	9.2	12.8
Rural	6.7	8.2
Percent Black:		
25% or less	8.6	11.0
Greater than 25%	13.3	13.8
Other/unknown	10.8	15.3
Average enrollment:		
100 or less	7.6	10.0
101-135	7.4	11.1
326-550	8.9	11.5
More than 550	13.5	13.6
Other/unknown	11.7	16.3

For both cohorts, there is a small but consistent relationship between student nonresponse and level of urbanization. The nonresponse rate is highest for students who were attending urban schools at the time of the base year sample selection (14.4 percent for the sophomore cohort and 14.3 percent for the senior), next highest for students from suburban schools (9.2 percent for sophomores and 12.8 percent for seniors) and lowest for students from rural schools (6.7 percent for sophomores and 8.2 percent for seniors).

Students selected at schools with a large percentage of Blacks (25 percent or more) showed somewhat higher rates of nonresponse than students at schools with fewer Blacks. The difference in nonresponse rates between these groups is slightly larger for the sophomore cohort (13.3 versus 8.6 percent) than for the seniors (13.8 versus 11.0 percent).

Student nonresponse seems to increase roughly with school size. For both cohorts, the rates are highest among students who attended the largest schools.

#### 4.2.2 Third Follow-Up Survey Student Nonresponse Patterns: Student-Level Variables

In this section, the student nonresponse rates to the third follow-up survey are analyzed by student-level variables, including demographic characteristics, academic aptitude, high school program, and postsecondary education. Students were classified by their responses to the base year questionnaire for all characteristics except student status (for which first and second follow-up data were used). Table 4.2.2-1 shows the weighted rate of nonresponse by race, sex, high school program, base year SES, and student status. The category "other/unknown" is a general classification that includes both cases with missing data and cases that did not fall into any of the other specifically defined categories. Nonresponse generally is substantially higher for the "other/unknown" categories. This is an artifact attributable to the substantial number of third follow-up nonrespondents who were also nonrespondents in both the base year and the first follow-up surveys. These triple nonparticipants could only be classified in the unknown category, hence elevating the nonresponse rate for that group.

Table 4.2.2-1  
Weighted Student Nonresponse Rates by Selected  
Student Characteristics (figures are percents)

Characteristics	Sophomore cohort	Senior cohort
Total population	9.6	11.7
Race:		
White/other	6.7	9.2
Black	13.1	15.3
Hispanic	11.9	13.1
Other/unknown	36.2	39.4
Sex:		
Male	11.6	14.1
Female	7.6	9.5
High school program:		
General	9.9	11.1
Academic	6.3	8.0
Vocational	9.5	11.0
Other/unknown*	63.3	21.1
SES quartile in base year:		
Highest quartile	5.7	8.2
Middle two quartile	7.6	9.6
Lowest quartile	9.4	11.5
Other/unknown	35.3	21.5
Student status:		
No postsecondary education	7.8	9.2
Only vocational postsecondary education	28.8	31.2
Other postsecondary education	4.5	8.1

Note: Other/unknown includes cases with missing data and cases who did not otherwise fall into any of the defined categories.

There is marked variation in student nonresponse by race. Blacks show the highest nonresponse rate in both cohorts, followed by Hispanics, and then by other whites; however, a substantial portion of the second follow-up student nonrespondents were also base year and first follow-up nonrespondents and were not classified by race. For this reason, there is some uncertainty about the actual nonresponse rates for the different racial and ethnic groups.

In both cohorts, males exhibit a higher nonresponse rate than females. The difference is 4.0 percent in the sophomore cohort (11.6 percent for males versus 7.6 percent for females) and 4.6 percent in the senior cohort (14.1 versus 9.5 percent).

In both cohorts, students who were in academic programs during the base year were less likely to be nonrespondents than students in general or vocational programs.

In each cohort, nonresponse was highest for students classified as the lowest SES level (9.4 percent in the sophomore cohort, 11.5 percent in the senior cohort). The lowest nonresponse rates were observed for students classified in the highest SES category (5.7 and 8.2 percent).

Table 4.2.2-1 also shows that the students who had non-vocational postsecondary education had the lowest nonresponse rates (4.5 percent for sophomores and 8.1 percent for seniors); students who reported no postsecondary education had somewhat higher rates of nonresponse (7.8 percent and 9.2 percent), and students who had only postsecondary vocational education had extremely high nonresponse rates (29.8 percent and 31.2 percent).

These differences across groups in response rates are somewhat similar to those observed during previous rounds of data collection. A picture of student nonrespondents is continuing to emerge from the analyses which suggests that groups with less involvement with education were less likely to participate in the survey: dropouts had higher nonresponse rates than non-dropouts; students with lower grades and lower test scores showed higher nonresponse than students with higher grades and test scores; students who were frequently absent from school showed higher nonresponse than students absent infrequently; students in vocational or general programs were more likely to be nonrespondents than students in academic programs.

#### 4.2.3 Summary of Nonresponse Analyses

The analyses presented here and in previous reports<sup>7</sup> support three general conclusions:

- (1) The school-level bias component in estimates is small, averaging less than 2 percent for base year and first follow-up estimates. It is probably of a similar magnitude for third follow-up estimates.
- (2) The student-level bias component in base year estimates is also small, averaging about 0.5 percent for percentage estimates concerning either cohort.
- (3) The student-level bias component in first, second, and third follow-up estimates is limited by the nonresponse rates, which for both cohorts were about three fourths of the base year rates.

The first and second conclusion together suggest that nonresponse bias is not a major contributor to error in base year estimates; the first and third suggest that nonresponse bias is not a major contributor to error in follow-up estimates either.

Each of these conclusions must be given some qualifications. The analysis of school-level nonresponse is based on data concerning the schools, not the students attending them. The analyses of student nonresponse are based on survey data and are themselves subject to nonresponse bias. Despite these limitations, the results consistently indicate that nonresponse had a small impact on base year and follow-up estimates.

NOTES TO CHAPTER 4

<sup>1</sup>See Cochran, W. G. (1977) *Sampling Techniques*, Third Ed., New York: Wiley. p. 361

<sup>2</sup>See p. A-4 of Tourangeau, R., McWilliams, H., Jones, C., Frankel, M., and O'Brien, F. (1983) *High School and Beyond First Follow-Up (1982) Sample Design Report*. Chicago: NORC.

<sup>3</sup>See Frankel, M., Kohnke, L., Buonanno, D., and Tourangeau, R. (1981). *High School and Beyond Sample Design Report*. Chicago: NORC, p. 93

<sup>4</sup>See Frankel et al. (1981), p. 124

<sup>5</sup>See Tourangeau et al. (1983), ch. 4

<sup>6</sup>See Tourangeau et al. (1983), ch. 4, tables 4.1 and 4.3

<sup>7</sup>See Frankel et al. (1981), Tourangeau et al. (1983), and Jones, C. and Spencer, B. D. (1985) *High School and Beyond Second Follow-Up (1984) Sample Design Report*. Chicago: NORC.

## 5. STANDARD ERRORS AND DESIGN EFFECTS

This chapter examines the standard errors for statistics--such as means and proportions--derived from the third follow-up survey data sets. Most researchers are familiar with the use of standard errors to assess the variability of estimates based on simple random samples; more complex designs, however, raise less familiar statistical issues. Both the senior and sophomore cohorts for the third follow-up survey were selected using stratified, clustered, unequal probability designs. With such complex designs, standard errors must be calculated using procedures different from the familiar methods used for data from simple random samples.

Before presenting standard errors for third follow-up survey estimates, it is useful to discuss some of the statistical issues raised by complex sample designs. First the computational procedures used to estimate the standard errors are discussed, followed by an examination of the relationship between standard errors based on complex samples and those based on simple random samples.

### 5.1 Computational Procedures

In a simple random sample, the mean is estimated as

$$\bar{x}_{\text{SRS}} = \sum x_i/n \quad (1)$$

Only the numerator is subject to sampling error; the denominator (the sample size) is taken as a fixed constant. In more complex sample designs, the mean is estimated as a ratio of estimates; for the High School and Beyond survey, the ratio is

$$r = \frac{\sum \sum y_{hij}}{\sum \sum x_{hi}} = y/x \quad (2)$$

in which

$y_{hij}$  = the weighted value for student  $j$   
from school  $i$  in stratum  $h$ ,

$x_{hi}$  = the estimated size of school  $i$  in  
stratum  $h$ .

The numerator ( $y$ ) represents an estimate of the population total; the denominator ( $x$ ), an estimate of the population size. When cluster sizes (i.e., school sizes) are unequal, the overall sample size will fluctuate depending on which clusters are selected. For the same reason, the estimates of the population size will show sampling fluctuation. Thus, for a ratio estimator, both the numerator and the denominator are subject to sampling error.

Kish and Frankel<sup>1</sup> distinguish three major approaches to the computation of standard errors for statistics based on complex designs where ratio estimators must be used: Taylor Series, balanced repeated replication (BRR), and jackknife repeated replication (JRR).

Taylor Series estimation. It can be shown<sup>2</sup> that the variance of  $r$  (i.e., the square of the standard error of  $r$ ) is

$$E(r - R)^2 = E \left[ \left( \frac{dy - Rdx}{X^2} \right)^2 \cdot \frac{1}{(1 + dx/X)^2} \right] \quad (3)$$

in which

$E(r - R)^2$  = the expected value of the squared difference between the population parameter  $R$  and the sample estimate  $r$

$dy$  = the difference between the sample estimate  $y$  and the population value  $Y$

$X$  = the population size

$dx$  = the difference between the sample estimate of the population size,  $x$ , and the population size  $X$ .

If the term involving one plus the relative error of  $x$  is ignored (i.e.,  $dx/X$  is negligible), it can be shown that (3) reduces to:

$$E(r - R)^2 = 1/X^2 (Var_y + R^2 Var_x - 2 R Cov_{xy}) \quad (4)$$

in which

$Var_y$  = the variance of  $y$

$Var_x$  = the variance of  $x$

$Cov_{xy}$  = the covariance of  $x$  and  $y$

All the terms in equation (4) can be estimated from sample data (e.g.,  $r$  would take the place of  $R$ ,  $x$  the place of  $X$ , and so forth). The variance terms are estimated by the variation of primary selection means around the stratum mean. Sampling statisticians have offered several rationales for the use of equation (4) as an approximation of (3). One line of argument<sup>3</sup> makes use of a standard approximation technique, called Taylor Series approximation, which gives this approach its name.

Balanced repeated replication (BRR). The replication approach was originally developed by Deming.<sup>4</sup> The principle underlying replicated sampling is quite simple. If a sample of size  $n$  is desired,  $g$  independent replicate samples are selected, each of size  $n/g$ . The variation among estimates from each replicate can be used to estimate the variance of estimates based on the entire sample.

Balanced repeated replication extends the principle of replication. It is usually applied to stratified designs with two primary selections per stratum. By choosing one primary selection from each stratum, a half-sample is created; the unselected primary units form another half-sample. In a design with  $h$  strata, a total of  $2^{(h-1)}$  different pairs of half-samples can be formed in this fashion. Each pair is referred to as a replicate. It is customary to form only a portion of the possible replicates using an orthogonal balanced design.

For any given replicate, estimates such as the ratio means can be computed from each half-sample. Then the sampling variance for the overall statistic ( $r$ ) can be estimated in any of several ways. One method compares the estimate from one halfsample with the overall estimate:

$$\text{Var}_k (r) = (r_{1k} - r)^2 \quad (5)$$

in which

$\text{Var}_k (r)$  = the variance estimate based on replicate  $k$ ,

$r$  = an estimate of  $R$  based on the entire sample, and

$r_{1k}$  = an estimate of  $R$  based on one of the half-samples from replicate  $k$ .

The final estimate for the variance of  $r$  is the average of  $\text{Var}_k (r)$  across all the replicates. The estimate  $r$  need not be a ratio mean; the logic of BRR applies to any type of estimate, giving the method its broad generality.

Jackknife repeated replication (JRR). Equation (5) shows that the variance of a sample statistic can be estimated using data from a portion of the sample, that is from a single half-sample. Jackknifing is a generalization of this idea. Estimates of variance can be obtained from subsamples of a single original sample with a technique known as jackknifing.

Frankel<sup>6</sup> has shown how jackknifing can be used with complex stratified samples. Again this assumes a design with two primary selections in each stratum. For a particular stratum, the variance can be estimated:

$$\text{Var}_h = (r_{1h} - r_h)^2 \quad (6)$$

in which

$r_{1h}$  = an estimate based on one of the primary selections from stratum  $h$ , and

$r_h$  = the corresponding estimate based on both primary selections from the stratum.

The estimated variance for the entire sample is just the sum of the estimated strata variances. With JRR, each "replication" represents the contribution of a single stratum to the variance of estimates from the entire sample.

Comparison of the methods. In the base year survey, NORC provided standard errors for sample statistics, using a program based on the Taylor Series approach. Prior to the first follow-up survey, NCES (now CES) acquired a program that computes BRR standard error estimates. BRR programs were used to compute standard errors for statistics derived from the first and second follow-up data sets.

BRR assumes a design with two primary selections per stratum. Although the High School and Beyond sample is stratified, each of the

original strata includes more than two primary selections (the primary selections in this case were high schools or students at high schools that came into the sample with certainty). In order to meet the assumptions of BRR, the original 26 school strata were divided into 90 "computing" strata. Within each computing stratum, the primary selections were randomly divided into two groups, which were treated as "pseudo-primaries." The BRR program thus treats the sample as though it included two primary selections from each of 90 strata.<sup>8</sup>

Previous empirical investigation<sup>9</sup> indicated that Taylor Series, BRR and JRR gave comparable results, although BRR standard error estimates consistently gave more accurate significance levels for t-statistics. Nonetheless, a comparison of Taylor Series and BRR standard error estimates was undertaken in order to assure that standard errors from the base year and first follow-up surveys could be interpreted in the same way.<sup>16</sup> The comparison showed no appreciable differences between the Taylor Series and BRR standard error estimates.<sup>10</sup>

### 5.2 Design Effects

No matter which method is used to estimate the standard errors for second follow-up statistics, the standard errors will be different from standard errors calculated on the assumption that the data are from a simple random sample. Like most national samples, the High School and Beyond sample is not a simple random sample; it departs from the model of simple random sampling in three major respects: the selections are clustered by school, major subgroups (such as private school students) are deliberately overrepresented in the sample, and the selections are stratified by school type. (The sample design is summarized in chapter 3, above.) Each of these departures from simple random sampling has a predictable impact on the standard errors of sample estimates. The variance of a statistic from a complex sample can be represented as the product of four factors:

$$\text{Var}(X) = \text{Var}_{\text{srs}} \times \text{Cluster} \times \text{Strat} \times \text{Disprop} \quad (7)$$

in which

$\text{Var}(X)$  = the actual variance of a sample estimate,

$\text{Var}_{\text{srs}}$  = the estimate variance that would be obtained if the sample were treated as a simple random sample, and

Cluster, Strat, Disprop = factors representing the impact of clustering, stratification, and disproportionate sampling.

$\text{Var}(X)$  can be estimated from sample data using any of the techniques considered earlier.

The ratio of  $\text{Var}(X)$  to  $\text{Var}_{\text{srs}}$  is commonly referred to as the design effect (DEFF).

In many cases, it is more useful to work with standard errors than with variances. The root design effect (DEFT) expresses the relation between the actual standard error of an estimate and the standard error of the corresponding estimate from a simple random sample:

$$\begin{aligned} \text{DEFT} &= (\text{DEFF})^{1/2} & (8) \\ &= (\text{Var}(x)/\text{Var}_{\text{srs}})^{1/2} \\ &= \text{se}(x)/\text{se}_{\text{srs}} \end{aligned}$$

The mean design effects given in tables 5.3-1a through 5.3-5b can be used to calculate approximate standard errors for other estimates not included in the tables. For example, for proportions, the simple random sample variance is just

$$= p(1 - p)/n \quad (9)$$

in which  $p$  = the estimated proportion, and

$n$  = the number of cases with non-missing data,

and so the standard error of a proportion can be estimated using the square root of the expression in (9) times the mean root design effect (DEFT):

$$\text{SE} = \text{DEFT} (p[1-p]/n)^{1/2} \quad (10)$$

Similarly, the standard error of a change in proportion can be calculated as the mean DEFT times the square root of the weighted variance of the change scores:

$$\text{SE} = \text{DEFT} (\text{WTVAR}/n)^{1/2} \quad (11)$$

in which

WTVAR = weighted variance of the individual change scores,

$n$  = unweighted number of valid observations, and

DEFT = mean of the root design effects for change estimates.

The appropriate weight to use in calculating the variance for change estimates using the base year through third follow-up survey data is the panel weight (PANELWT4). The appropriate values of DEFT to use for inflating standard errors based on simple-random-sampling calculations are discussed below.

### 5.3 Standard Errors and Design Effects

This section presents several sets of standard errors and design effects calculated on data from all four waves. Standard errors and design effects pertain to proportions of a sample who had specified characteristics. (See Appendix C for standard errors and design effects that were calculated using third follow-up variables.)

### 5.3.1 Base-year and First Follow-Up

Table 5.3-1a displays standard errors and design effects for the sophomore cohort for 30 proportions and seven averages based on weighted data from the first follow-up questionnaires and tests. The mean root design effect for the 37 statistics is 1.8, which is somewhat higher than the root design effect observed for the base year survey<sup>11</sup>. The reason for the difference is that the sample of sophomores for the first follow-up was a disproportionate subsample from the base year sample. Although most of the base year sophomore sample were retained (with certainty) for the first follow-up, several groups were subsampled. In particular, base year nonparticipants who dropped out of school prior to the first follow-up survey (approximately 500) cases, was subsampled at a rate of only 10%; the mean first follow-up survey weight for this group is about 15 times larger than the mean weight for the rest of the cohort sample. The variability of the weights due to disproportionate subsampling and higher nonresponse among dropouts reduce the efficiency of the sample and causes the increase in the design effects.

Table 5.3-1b displays standard errors and design effects for the senior cohort using the first follow-up questionnaire data and the first follow-up weights. The mean root design effect for the 30 proportions is 1.6. This is the same as the mean (1.6) found for the base year survey using Taylor Series estimation procedures rather than BRR. The sample of seniors for the follow-ups differs from the base year senior sample in several key respects. First of all, the sample is much smaller (11,995 selected cases versus 34,982), which means that the average cluster size (selections per school) is much smaller. Reducing the cluster size should increase the efficiency of the sample. However, the first follow-up sample of seniors represents some population subgroups even more disproportionately than did the base year sample; this greater disproportionality decreases the efficiency of the follow-up sample by introducing additional variability into the weights. Apparently, the effects of the reduced cluster size and the increased disproportionality offset each other--the base year and the follow-up samples exhibit similar mean design effects.

Table 5.3-2a displays estimates for the base year sophomore sample using data from base year participants who were selected for the first follow-up sample. The questionnaire items in table 5.3-2a are identical to those in table 5.3-1a but the estimated proportions and standard errors are based on responses to these items in the base year sophomore questionnaire. For the most part, these items were repeated verbatim in the first follow-up questionnaire; in one case, however, response options were reordered in the follow-up questionnaire. As table 5.3-2a shows, the mean DEFT is 1.643, a value that differs little from the analogous figure calculated during the base year (1.651). The mean DEFT in table 5.3-2a is lower than the mean in table 5.3-1a (1.6 vs. 1.8), because, as noted earlier, the estimates for the follow-up sophomore sample are less efficient than estimates for the base year sophomores.

Table 5.3-2b displays estimates for the base year senior sample using only data from base year participants who were selected for the first follow-up sample. The questionnaire items in table 5.3-2b are identical to those in table 5.3-1b, but the estimated proportions and standard errors are based on responses to these items in the base year senior questionnaire. For the most part, these items were repeated verbatim

Table 5.3-1a  
Standard Errors and Design Effects Associated with Estimated Proportions of  
First Follow-Up Sophomores Who Had Specified Characteristics, Using FU1WT

Statistic	Item Number*	Estimate	SE	DEFF	DEFT
<b>Proportions</b>					
In vocational program	2	0.270	0.007	6.922	2.631
Worked last week	24	0.532	0.005	2.804	1.675
Working at clerical job	29	0.250	0.005	3.080	1.755
Current job is place where people goof off	33A	0.132	0.004	2.938	1.720
Work more enjoyable than school	33C	0.513	0.005	2.149	1.466
Job encourages good work habits	33D	0.789	0.004	2.114	1.454
Father non-professional	53A	0.887	0.005	6.276	2.506
Father finished college	55	0.213	0.007	7.040	2.653
Mother finished college	56	0.136	0.005	5.374	2.318
Watch more than one hour of TV per day	61	0.791	0.003	1.480	1.217
Career success important	73A	0.860	0.003	1.960	1.400
Having lots of money not important	73C	0.103	0.003	2.549	1.597
Important to be a leader in community	73F	0.476	0.006	3.748	1.936
Important to live close to parents	73H	0.707	0.005	3.147	1.774
Having leisure time not important	73L	0.017	0.001	1.552	1.246
Have a positive attitude toward self	75A	0.932	0.002	1.564	1.250
Good luck more important than hard work	75B	0.127	0.003	1.986	1.409
Believe someone or something prevents success	75E	0.256	0.005	3.122	1.767
Believe plans hardly ever work out	75F	0.199	0.004	2.434	1.560
Have little to be proud of	75L	0.126	0.003	1.992	1.411
Working to correct inequalities important	73J	0.396	0.004	1.738	1.318
No serious trouble with law	76A	0.949	0.003	4.845	2.201
Expect to finish full-time education	80	0.382	0.007	5.288	2.300
Would be satisfied with less than college ed.	82	0.744	0.006	4.693	2.166
Seen by others as physically unattractive	76	0.103	0.003	2.480	1.575
Married	97A	0.035	0.002	2.883	1.698
Expect first child by age 25	97B	0.538	0.005	2.404	1.550
Expect to have own home or apt. by age 24	97D	0.921	0.002	1.326	1.151
Expect to have no children	98	0.089	0.003	2.706	1.645
Hard of hearing	103C	0.019	0.001	1.472	1.213
<b>Averages</b>					
Vocabulary score		10.387	0.085	5.776	2.403
Reading score		7.657	0.072	5.217	2.284
Math, part 1 score		10.820	0.143	7.407	2.722
Math, part 2 score		2.736	0.041	5.031	2.243
Science score		9.475	0.073	5.969	2.443
Writing score		9.503	0.074	4.993	2.234
Civics score		5.441	0.037	4.326	2.080
Mean (Proportions only)				3.136	1.719
Mean (All statistics)				3.589	1.837
Minimum				1.326	1.151
Maximum				7.407	2.722
Standard Deviation				1.804	0.470

\* First follow-up questionnaire number.

Table 5.3-1b  
 Standard Errors and Design Effects Associated with Estimated Proportions of  
 First Follow-Up Seniors Who Had Specified Characteristics, Using FU1WT

Statistic	Item Number*	Estimate	SE	DEFF	DEFT
Herd of hearing	83-c	.012	.001	.890	.943
Having leisure time not important	83-l	.013	.001	.802	.896
Have physical handicap	84	.070	.003	1.487	1.220
Have little to be proud of	75-l	.087	.004	2.085	1.444
Expect to have no children	61	.098	.004	1.880	1.371
Two or more siblings in high school	73	.099	.003	1.079	1.039
Good luck more important than hard work.	75-b	.100	.004	1.802	1.342
Expect to get married	15-a	.107	.006	3.963	1.991
Expect to finish full-time education	15-e	.136	.006	3.182	1.782
Mother finished college	21	.142	.009	7.151	2.676
Believe plans hardly ever work out	75-f .002	.143	.005	2.058	1.435
Having lots of money not important	85-c	.147	.004	1.362	1.167
Current job is place where people goof off	25-a	.182	.006	1.906	1.381
Believe someone/something prevents success	75-e	.216	.006	2.111	1.453
Father finished college	20	.227	.010	5.918	2.433
Planning professional career	16-a	.260	.006	2.064	1.437
Sibling in college	72	.372	.007	2.244	1.498
Have started first job	15-c	.420	.009	3.483	1.866
Important to be a leader in community	85-f	.465	.007	2.084	1.444
Plan to finish college	12	.486	.011	4.612	2.148
Expect first child by age 25	15-b	.489	.010	4.102	2.025
Work more enjoyable than school	25-b	.513	.008	2.011	1.418
Would be satisfied with less than college ed.	13	.629	.011	5.291	2.300
Working to correct inequalities important	85-j	.670	.007	2.345	1.531
Watch more than one hour of TV per day	76	.778	.007	3.167	1.780
Career success important	85-a	.829	.005	1.890	1.375
Job encourages good work habits	25-c	.858	.005	1.804	1.343
Have ability to finish college	14	.867	.005	2.355	1.535
Expect to have own home or apt. by age 24	15-d	.916	.004	2.203	1.484
Have a positive attitude toward self	75-a	.949	.003	1.923	1.387
Mean				2.642	1.571
Minimum				.802	.896
Maximum				7.161	2.676
Standard Deviation				1.499	.423

\* First follow-up questionnaire number

Table 5.3-2a  
Standard Errors and Design Effects Associated with Estimated Proportions  
and Averages of First Follow-Up Sophomores Who Had Specified  
Characteristics, Using Base Year Weights

Statistics	Item Number*	Estimate	SE	DEFF	DEFT
<b>Proportions</b>					
In vocational program	1	0.212	0.006	5.705	2.389
Worked last week	26	0.362	0.005	2.901	1.703
Working at clerical job	27	0.082	0.003	2.649	1.628
Current job is place where people goof off	30A	0.163	0.003	1.356	1.164
Work more enjoyable than school	30C	0.557	0.006	3.050	1.746
Job encourages good work habits	30D	0.722	0.003	0.945	0.972
Father non-professional	38	0.883	0.004	3.182	1.784
Father finished college	39	0.225	0.007	5.308	2.304
Mother finished college	42	0.139	0.005	4.508	2.123
Watch more than one hour of TV per day	48	0.909	0.003	2.896	1.702
Career success important	61A	0.850	0.003	1.846	1.359
Having lots of money not important	61C	0.102	0.003	2.556	1.599
Important to be a leader in community	61F	0.539	0.005	2.578	1.606
Important to live close to parents	61H	0.749	0.004	2.200	1.483
Having leisure time not important	73L	0.022	0.001	1.189	1.091
Have a positive attitude toward self	62A	0.909	0.002	1.131	1.064
Good luck more important than hard work	62B	0.155	0.003	1.612	1.270
Believe someone or something prevents success	62E	0.301	0.004	1.736	1.317
Believe plans hardly ever work out	62F	0.221	0.004	2.190	1.480
Have little to be proud of	62L	0.156	0.003	1.623	1.274
Working to correct inequalities important	61J	0.363	0.003	1.003	1.001
No serious trouble with law	67A	0.944	0.002	1.944	1.394
Expect to finish full-time education	69	0.397	0.006	3.916	1.979
Would be satisfied with less than college ed.	71	0.800	0.005	3.943	1.986
Seen by others as physically unattractive.	67C	0.166	0.003	1.606	1.267
Married	78A	0.003	0.000	..	..
Expect first child by age 25	78B	0.583	0.004	1.565	1.250
Expect to have own home or apt. by age 24	78D	0.929	0.002	.469	1.212
Expect to have no children	80	0.101	0.003	2.458	1.568
Hard of hearing	88C	0.024	0.001	1.034	1.017
<b>Averages</b>					
Vocabulary score		8.479			
Reading score		6.649	0.068	4.070	2.017
Math, part 1 score		9.801	0.060	4.025	2.006
Math, part 2 score		2.494	0.116	5.646	2.376
Science score		8.777	0.039	5.148	2.269
Writing score		8.127	0.069	5.540	2.354
Civics score		4.479	0.070	4.523	2.127
			0.039	5.182	2.276
Mean (Proportions only)				2.417	1.508
Mean (All statistics)				2.895	1.643
Minimum				.945	.972
Maximum				5.705	2.389
Standard Deviation				1.523	.448

\* Base year questionnaire number.

Table 5.3-2b  
Standard Errors and Design Effects Associated With Estimated Proportions of First  
Follow-Up Seniors Who Had Specified Characteristics, Using BYWT

Statistic	Item Number*	Estimate	SE	DEFF	DEFT
Herd of hearing	BB057C	.018	.002	2.404	1.551
Having leisure time not important	BB057L	.021	.002	2.184	1.478
Have physical handicap	BB058	.054	.003	1.932	1.390
Have little to be proud of	BB058L	.116	.005	2.563	1.601
Expect to have no children	BB052	.098	.005	3.037	1.743
Two or more siblings in high school	BB059	.141	.005	2.222	1.491
Good luck more important than hard work	BB058B	.121	.004	1.573	1.254
Expect to get married	BB081A	.010	.002	4.300	2.074
Expect to finish full-time education	BB081E	.013	.001	0.844	0.919
Mother finished college	BB042	.148	.008	4.915	2.217
Believe plans hardly ever work out	BB038F	.183	.006	2.434	1.560
Having lots of money not important	BB057C	.110	.005	2.710	1.646
Current job is place where people goof off	BB027A	.169	.005	1.667	1.291
Believe someone or something prevents success	BB058E	.236	.007	2.763	1.662
Father finished college	BB039	.245	.011	5.461	2.337
Planning professional career	BB062	.269	.005	1.390	1.179
Sibling in college	BB098	.314	.007	2.443	1.563
Have started first job	BB081C	.170	.005	1.868	1.367
Important to be a leader in community	BB057F	.510	.008	2.815	1.678
Plan to finish college	BB065	.457	.009	3.646	1.909
Expect first child by age 25	BB061B	.523	.010	4.151	2.038
Work more enjoyable than school	BB027C	.515	.007	1.850	1.360
Would be satisfied with less than college ed.	BB057	.713	.009	4.329	2.081
Working to correct inequalities important	BB057J	.610	.008	2.969	1.723
Watch more than one hour of TV per day	BB048	.848	.006	3.150	1.775
Career success important	BB057A	.880	.004	1.695	1.302
Job encourages good work habits	BB027D	.787	.006	2.104	1.450
Have ability to finish college	BB069	.803	.005	1.744	1.321
Expect to have own home or apt. by age 24	BB081D	.913	.004	2.123	1.457
Have a positive attitude toward self	BB058A	.908	.006	4.564	2.136
Mean				2.728	1.618
Minimum				0.844	0.919
Maximum				5.461	2.337
Standard Deviation				1.136	0.336

\* Same year SPSS variable name

in the first follow-up questionnaire; three of them, however, had an additional response option in the first follow-up questionnaire. As table 5.3-2b shows, the mean design effect is 1.618, a value that differs little from the analogous figure calculated during the base year.

Tables 5.3-3a and 5.3-3b display standard errors and design effects for changes in 30 proportions and, for sophomores, changes in seven test scores (Table 5.3-3a only). The statistics are based only on those students who participated in both the base year and the first follow-up survey and the changes refer to differences between base year and first follow-up responses.

The change statistics in tables 5.3-3a and 5.3-3b were computed by taking the weighted mean of the changes shown by each respondent who participated in both the base year and first follow-up surveys. The standard errors (and design effects) thus reflect the fact that whether a respondent was, for example, hard of hearing during the base year is correlated with his or her being hard of hearing during the first follow-up. The change estimates were calculated using individual change scores of sample members who participated in both the base year and first follow-up. Thus, the standard errors for these estimates take into account the correlation between base year and first follow-up respondents. The change estimates are directional: a negative estimate indicates that fewer respondents fell into the category of interest (e.g., hard of hearing) during the first follow-up survey; a positive estimate indicates that more respondents fell into the category. The mean DEFT in table 5.3-3a are lower than those for tables 5.3-1a and 5.3-2a (1.4 vs 1.8 and 1.6). Similarly mean DEFTs in table 5.3-3b are lower than those for tables 5.3-1b and 5.3-2b (1.5 vs 1.6). This probably reflects the observed tendency of more complex statistical estimates (such as change estimates, correlation or regression coefficients) to exhibit smaller design effects than simple estimates.

### 5.3.2 Second Follow-up

Tables 5.3-4a and 5.3-4b display the estimated percentages, standard errors, DEFFs, and DEFTs for variables from the second follow-up survey data. (As only ten of the thirty non-test items presented in the preceding tables were included in the second follow-up survey questionnaire, twenty additional items, representing estimated proportions of varying magnitudes, were added to this table). For sophomores, the mean DEFT for the thirty estimated percentages from the second follow-up survey is 1.54, a smaller figure than observed for the first follow-up and about equal to that for the base year. For seniors, the mean DEFT is 1.68, which is larger than the mean DEFT observed for the first two waves. For both cohorts, the variability of the design effects appears to be somewhat smaller than for either of the previous survey waves.

Table 5.3-3a  
 Standard Errors and Design Effects Associated with Changes  
 (between Base Year and First Follow-Up) in the Proportions and Averages  
 of First Follow-Up Sophomores Who Had Specified Characteristics,  
 Using First Follow-Up Weights

Statistic	Change Estimate	SE	DEFF	DEFT
<b>Proportions</b>				
In vocational program	0.054	0.004	1.646	1.283
Worked last week	0.177	0.005	1.651	1.285
Working at clerical job	0.168	0.005	2.033	1.426
Current job is place where people goof off	-0.033	0.004	1.184	1.088
Work more enjoyable than school	-0.046	0.006	1.487	1.220
Job encourages good work habits	0.077	0.005	1.356	1.165
Father non-professional	0.002	0.002	0.952	0.976
Father finished college	0.001	0.002	1.242	1.114
Mother finished college	-0.002	0.002	1.601	1.265
Watch more than one hour of TV per day	-0.116	0.003	1.193	1.072
Career success important	0.009	0.004	1.925	1.387
Having lots of money not important	0.000	0.003	1.577	1.256
Important to be a leader in community	-0.057	0.005	1.751	1.323
Important to live close to parents	-0.046	0.005	2.130	1.460
Having leisure time not important	-0.006	0.002	2.779	1.667
Have a positive attitude toward self	0.027	0.003	1.801	1.342
Good luck more important than hard work	-0.030	0.004	2.087	1.445
Believe someone or something prevents success	-0.047	0.005	1.810	1.345
Believe plans hardly ever work out	-0.076	0.004	1.413	1.189
Have little to be proud of	-0.000	0.004	1.833	1.354
Working to correct inequalities important	0.033	0.005	1.608	1.268
No serious trouble with law	0.007	0.002	1.405	1.185
Expect to finish full-time education	-0.021	0.004	1.728	1.315
Would be satisfied with less than college ed.	-0.059	0.004	1.937	1.392
Seen by others as physically unattractive	-0.063	0.004	2.081	1.443
Married	0.035	0.002	2.198	1.483
Expect first child by age 25	-0.037	0.005	1.613	1.270
Expect to have own home or apt. by age 24	-0.008	0.003	1.655	1.286
Expect to have no children	-0.020	0.004	3.026	1.740
Hard of hearing	-0.004	0.002	3.338	1.827
<b>Averages</b>				
Vocabulary score	2.070	0.040	2.816	1.678
Reading score	1.177	0.026	1.145	1.070
Math, part 1 score	1.352	0.053	2.541	1.594
Math, part 2 score	0.317	0.024	1.926	1.388
Science score	0.884	0.033	2.044	1.430
Writing score	1.603	0.044	2.871	1.695
Civics score	1.056	0.035	3.451	1.858
<b>Mean (Proportions only)</b>			1.801	1.330
<b>Mean (All statistics)</b>			1.945	1.368
<b>Minimum</b>			.952	.976
<b>Maximum</b>			3.451	1.858
<b>Standard Deviation</b>			.611	.213

Table 5.3-3b

Standard Error and Design Effects Associated with Changes  
(between Base Year and First Follow-Up) in the Proportion of  
First Follow-Up Seniors Who Had Specified Characteristics

Statistic	Change			
	Estimate	SE	DEFF	DEFT
Hard of hearing	-.006	.002	2.060	1.435
Having leisure time not important	-.009	.002	1.408	1.187
Have physical handicap	+.015	.005	2.435	1.560
Have little to be proud of	-.029	.005	1.520	1.233
Expect to have no children	-.004	.005	1.978	1.407
Two or more siblings in high school	-.043	.005	1.844	1.358
Good luck more important than hard work	-.022	.005	1.588	1.260
Expect to get married	+.095	.005	2.676	1.636
Expect to finish full-time education	+.116	.005	1.949	1.396
Mother finished college	-.001	.004	2.988	1.729
Believe plans hardly ever work out	-.047	.006	1.578	1.256
Having lots of money not important	+.030	.008	4.178	2.044
Current job is place where people goof off	+.015	.008	1.693	1.301
Believe someone or something prevents success	-.026	.008	2.316	1.522
Father finished college	+.002	.004	2.894	1.701
Planning professional career	-.010	.006	1.392	1.181
Sibling in college	+.067	.010	3.323	1.823
Have started first job	+.247	.008	1.977	1.406
Important to be a leader in community	-.040	.008	2.155	1.468
Plan to finish college	-.005	.006	1.998	1.414
Expect first child by age 25	-.032	.007	1.633	1.197
Work more enjoyable than school	-.010	.010	1.653	0.126
Would be satisfied with less than college ed.	-.079	.006	1.720	1.312
Working to correct inequalities important	+.062	.010	2.913	1.707
Watch more than one hour of TV per day	-.071	.007	2.207	1.486
Career success important	-.047	.007	2.613	1.617
Job encourages good work habits	+.060	.008	1.892	1.376
Have ability to finish college	+.066	.006	2.354	1.534
Expect to have own home or apt. by age 24	+.003	.006	2.690	1.640
Have a positive attitude toward self	+.043	.005	2.415	1.554
Mean			2.195	1.468
Minimum			1.395	1.181
Maximum			4.178	2.044
Standard Deviation			0.640	0.207

Table 5.3-4a

Estimated Percentages, Standard Errors and Design Effects  
in the Percentages of the Second Follow-Up Sophomores  
Who Had Specified Characteristics (Weight=FU2WT)

Statistic	Item Number	Estimate	SE	DEFF	DEF
Working full time, Feb '84	SY3A	58.51	0.67	2.53	1.59
Taking academic courses, Feb '84	SY3C	33.61	0.81	4.00	2.00
Looking for work, Feb '84	SY3I	9.96	0.35	1.26	1.36
Currently married	SY55	12.31	0.47	2.77	1.66
Have one or more children	SY65A	11.80	0.43	2.18	1.48
Expect to have 3 or more children	SY66	33.92	0.55	1.73	1.33
Have served on military active duty	SY43	6.21	0.35	2.80	1.67
If in PSE '82-'84: Earned no degree	SY181,J-201,J	70.40	0.64	1.35	1.16
If in PSE '82-'84: Earned vocational degree	SY181,J-201,J	1.11	0.14	1.23	1.11
If in PSE '82-'84: Earned 4-year college degree	SY181,J-201,J	1.47	0.21	2.14	1.46
Enrolled in postsecondary education, Oct '82	PSEDC82	44.68	0.70	2.67	1.63
Enrolled in postsecondary education, Oct '83	PSEDC83	42.78	0.79	3.43	1.85
If Employed: In clerical occupation, Oct '83	SY46A-49A	24.65	1.33	2.02	1.42
Employed, Oct '83	JOBSC83	66.57	0.63	2.37	1.53
Have used pocket calculator	SY8A2-A4	90.71	0.39	2.42	1.56
Have used computer terminal	SY8B2-B4	47.49	0.74	2.77	1.66
Have used mainframe computer	SY8E2-E4	23.33	0.60	2.51	1.59
Have used video tape recorder	SY8F2-F4	53.82	0.59	1.76	1.33
Have used audio cassette deck	SY8H2-H4	88.26	0.40	1.97	1.40
Have used word processor	SY8I2-I4	9.09	0.40	2.56	1.60
Currently registered to vote	SY69	53.72	0.70	2.61	1.62
Have voted in election since turning 18	SY70	33.38	0.72	3.08	1.76
Being successful in job very important	SY71A	85.27	0.45	2.11	1.45
Marrying the right person very important	SY1B	87.63	0.41	2.03	1.43
Having lots of money very important	SY71C	29.40	0.64	2.61	1.61
Being a community leader very important	SY71F	10.04	0.40	2.34	1.53
Better opportunities for children very important	SY71G	72.66	0.56	2.05	1.43
Correcting inequalities very important	SY71J	14.08	0.50	2.78	1.67
Having children very important	SY71K	49.19	0.65	2.25	1.50
Having leisure time very important	SY71L	72.14	0.67	2.95	1.72
Mean				2.40	1.54
Minimum				1.23	1.11
Maximum				4.00	2.00
Standard Deviation				0.56	0.18

Table 5.3-4b

Estimated Percentages, Standard Errors and Design Effects  
in the Percentages of the Second Follow-Up Seniors  
Who Had Specified Characteristics (Weight=FU2WT)

Statistic	Item Number	Estimate	SE	DEFF	DEFT
Working full time, Feb '84	SE3A	65.49	0.61	1.80	1.34
Taking academic courses, Feb '84	SE3C	32.63	0.88	3.84	1.96
Looking for work, Feb '84	SE3I	6.45	0.37	2.47	1.57
Currently married	SE57	24.17	0.77	3.52	1.88
Have one or more children	SE66	16.68	0.72	3.65	1.91
Expect to have 3 or more children	SE65	34.10	0.77	2.76	1.66
Have served on military active duty	SE44	6.86	0.31	1.64	1.28
If in PSE '82-'84: Earned no degree	SE181,J-201,J	60.46	0.92	2.46	1.57
If in PSE '82-'84: Earned vocational degree	SE181,J-201,J	1.62	0.25	2.72	1.65
If in PSE '82-'84: Earned 4-Year college degree	SE181,J-201,J	10.94	0.74	3.90	1.98
Enrolled in postsecondary education, Oct '82	PSESOC82	42.82	0.97	4.16	2.04
Enrolled in postsecondary education, Oct '83	PSESOC83	39.21	0.97	4.27	2.07
If employed: In clerical occupation, Oct '83	SE47A-50A	27.24	1.00	2.18	1.48
Employed, Oct '83	JOSSOC83	73.92	0.63	2.21	1.49
Have used pocket calculator	SE9A2-A4	91.83	0.31	1.36	1.17
Have used computer terminal	SE9B2-B4	55.78	0.97	3.85	1.96
Have used mainframe computer	SE9E2-E4	29.06	0.73	2.49	1.58
Have used video tape recorder	SE9F2-F4	54.75	0.92	3.39	1.84
Have used audio cassette deck	SE9H2-H4	89.08	0.52	2.84	1.69
Have used word processor	SE9I2-I4	12.55	0.52	2.58	1.60
Currently registered to vote	SE70	66.30	0.85	3.43	1.85
Have voted in election within last two years	SE71	46.80	0.88	3.28	1.81
Being successful in job very important	SE72A	82.00	0.55	2.17	1.47
Marrying the right person very important	SE72B	83.32	0.44	1.98	1.41
Having lots of money very important	SE72C	26.03	0.77	3.24	1.80
Being community leader very important	SE72F	10.21	0.44	2.22	1.69
Better opportunities for children very important	SE72G	67.05	0.84	3.34	1.83
Correcting inequalities very important	SE72J	13.83	0.46	1.87	1.37
Raising children very important	SE72K	49.69	0.92	3.57	1.89
Having leisure time very important	SE72L	73.93	0.72	2.84	1.69
Mean				2.87	1.68
Minimum				1.36	1.17
Maximum				4.27	2.07
Standard Deviation				0.78	0.24

### 5.3.3 Third Follow-up

Standard errors, DEFFs, and DEFTs for 30 third follow-up survey items are shown in tables 5.3-5a and 5.3-5b. The mean DEFT for the sophomore cohort is 1.48 and that for the seniors is 1.51, which are close to (just slightly below) the mean DEFTs for the second follow-up. The variability of the DEFTs is much lower for the third follow-up than it was for the second follow-up. Indeed, the standard deviation of the DEFTs for the third follow-up items is calculated to be less than 0.1. One tentative explanation for the greatly reduced standard deviation of the estimated DEFTs is that the BRR estimates of standard error for individual items have larger coefficients of variation than do the Taylor Series estimates. Hence the observed variability of the BRR estimated DEFTs across the 30 items from the second follow-up is greater than the variability for the Taylor Series estimates from the third follow-up.

Tables 5.3-6a and 5.3-6b present selected distributional statistics for the DEFFs and DEFTs for the same 30 third follow-up items contained in tables 5.3-5a and 5.3-5b, for the total population and for 11 selected domains.

With the exception of Hispanics, the DEFTs for subgroups were generally 10 percent smaller (1.5 versus 1.7) than that for the total population. The relative efficiency of the Hispanic subsample continued to be affected by the somewhat greater clustering of the Hispanic sample members in specific schools and relatively few geographical areas; the average DEFT for the Hispanic subsample was 1.9. Furthermore, the variability of the DEFTs for Hispanics was over twice that observed for most other subgroups (standard deviation of .4 versus less than .2). Thus, for analysis of third follow-up data from Hispanics, the use of a single generalized design effect to inflate simple random sample estimates of sampling errors involves a greater amount of approximation.

For both cohorts, the mean DEFT for all the subgroups except Hispanics were comparable to or smaller than the mean DEFT for all domains combined (1.5). The mean DEFT for Hispanics, 1.75 for the sophomores and 2.0 for the seniors, is somewhat higher. The variability of the DEFT for the Hispanic sample across different items was also somewhat larger than for the other domains for the third follow-up, but the variability by itself was not that great, as the standard deviation was only 0.21 for sophomores and 0.25 for seniors. The standard deviation for Hispanic sophomores is not much greater than the standard deviation of the DEFTs for all the domains combined in the second follow-up survey of the sophomore cohort, and the standard deviation for the Hispanic seniors is essentially the same as the standard deviation DEFTs for all the domains combined in the second follow-up.

The preceding data and discussion lead to the conclusion that the analyst seeking an appropriate value to use for a root design effect to inflate simple random sampling-based estimates of sampling errors for either cohort may simply use 1.5. If the statistic is based largely on the Hispanic subsample, a root design effect of 1.75 for sophomores and 2.0 for seniors will be more appropriate. If the statistic is more complex than a simple proportion or mean, the DEFTs just recommended will probably be conservative in that they will tend to overestimate the true standard errors.

Table 5.3-5a

Estimated Percentages, Standard Errors and Design Effects  
in the Percentages of the Third Follow-Up Sophomores  
Who Had Specified Characteristics (Weight = FL3WT)

Statistic	Item Number	Estimate	SE	DEFF	DEFT
Working at Full or Part Time Job, Feb '86	TY3A	67.47	0.58	2.02	1.42
Taking Academic Courses, Feb '86	TY3C	26.84	0.63	2.69	1.64
Looking For Work, Feb '86	TY3I	9.58	0.36	2.05	1.43
Currently Married	TY4I	23.14	0.56	2.36	1.54
Currently Divorced	TY4I	1.85	0.17	2.00	1.42
Currently Have One or More Children	TY49	22.33	0.58	2.55	1.60
Expect to Have Three or More Children	TY48	31.72	0.60	2.16	1.47
In PSE 84-86: Earned No Degree	TY21I-22I	21.36	1.15	2.05	1.43
In PSE 84-86: Received Vocational Degree	TY21H-22H	27.98	1.42	2.60	1.61
In PSE 84-86: Received 4 Year Degree	TY21H-22H	31.36	1.35	2.22	1.49
Enrolled in PSE, Oct '84	TY21C-22C	32.11	0.66	2.64	1.63
Enrolled in PSE, Oct '85	TY21C-22C	28.36	0.61	2.45	1.56
In PSE 84-86: V. Dissat W/Career Couns	TY28E	5.52	0.41	2.07	1.44
In PSE 84-86: Some Sat With Curriculum	TY28I	30.41	0.54	1.78	1.33
Applied for Grad/Professional School	TY39	4.46	0.28	2.23	1.49
If Employed 84-86, 1st Job Clerical	TY8A	24.83	0.53	1.88	1.37
Had Any Job Between 84-86	TY7	93.81	0.30	2.10	1.45
Did Not Receive Unemployment-'85	TY17D85	86.41	0.82	2.16	1.47
Currently Registered to Vote	TY56	66.40	0.67	2.58	1.60
Have Voted Since 1984	TY57	51.13	0.70	2.47	1.57
Active Participant in Service Org	TY59X	1.49	0.13	1.40	1.18
Job Security Very Important	TY16C	73.74	0.56	2.13	1.46
Success in Job Very Important	TY68A	79.83	0.51	2.03	1.43
Marrying the Right Person Very Important	TY68B	86.36	0.44	2.14	1.46
Having Lots of Money Very Important	TY68C	22.68	0.52	1.94	1.39
Being a Community Leader Very Important	TY68F	6.65	0.31	1.97	1.40
Providing Better Opp for Kids Very Imp	TY68G	69.65	0.65	2.54	1.59
Correcting Social Inequalities Very Imp	TY68J	11.02	0.42	2.32	1.52
Having Children Very Important	TY68K	47.85	0.64	2.08	1.44
Having Leisure Time Very Important	TY68L	68.21	0.59	2.05	1.43
Mean					
Minimum				2.19	1.48
Maximum				1.40	1.18
Standard Deviation				2.68	1.64
				0.29	0.10

Table 5.3-5b

Estimated Percentages, Standard Errors and Design Effects  
of the Third Follow-Up Seniors Who Had Specified Characteristics  
(Weight = PUSWT)

Statistic	Item Number	Estimate	SE	DEFF	DEFT
Working at Full or Part Time Job, Feb '86	TE3A	77.50	0.57	1.98	1.41
Taking Academic Courses, Feb '86	TE3C	11.32	0.48	2.37	1.54
Looking For Work, Feb '86	TE3I	8.02	0.39	2.13	1.46
Currently Married	TE4I	36.33	0.74	2.48	1.57
Currently Divorced	TE4J	2.78	0.25	2.46	1.57
Currently Have One or More Children	TE49	26.76	0.73	2.86	1.69
Expect to Have Three or More Children	TE4S	32.70	0.72	2.40	1.55
In PSE 84-86: Earned No Degree	TE21I-22I	7.61	0.80	2.13	1.46
In PSE 84-86: Received Vocational Degree	TE21H-22H	18.44	1.20	2.23	1.49
In PSE 84-86: Received 4 Year Degree	TE21H-22H	67.13	1.44	2.20	1.48
Enrolled in PSE, Oct '86	TE21C-22C	22.92	0.63	2.31	1.52
Enrolled in PSE, Oct '85	TE21C-22C	17.01	0.58	2.45	1.57
In PSE 84-86: V. Dissat W/Career Couns	TE22E	6.55	0.57	2.20	1.48
In PSE 84-86: Some Sat With Curriculum	TE22I	51.27	1.10	2.03	1.42
Applied for Grad/Professional School	TE39	6.22	0.38	2.50	1.58
If Employed 84-86, 1st Job Clerical	TE3A	23.07	0.63	2.22	1.49
Had Any Job Between 84-86	TE7	94.75	0.32	2.15	1.47
Did Not Receive Unemployment-'85	TE17D85	82.71	1.08	2.35	1.53
Currently Registered to Vote	TE56	72.34	0.74	2.77	1.66
Have Voted Since 1984	TE57	60.66	0.77	2.50	1.58
Active Participant in Service Org	TE59K	2.02	0.20	1.93	1.39
Job Security Very Important	TE16C	72.85	0.72	2.56	1.60
Success in Job Very Important	TE68A	75.76	0.58	1.87	1.37
Marrying the Right Person Very Important	TE68B	87.06	0.50	2.23	1.49
Having Lots of Money Very Important	TE68C	20.95	0.61	2.26	1.50
Being a Community Leader Very Important	TE68F	5.35	0.31	1.93	1.39
Providing Better Opp for Kids Very Imp	TE68G	65.69	0.73	2.35	1.53
Correcting Social Inequalities Very Imp	TE68J	9.73	0.44	2.20	1.48
Having Children Very Important	TE68K	48.58	0.77	2.40	1.55
Having Leisure Time Very Important	TE68L	68.86	0.66	2.07	1.44
Mean				2.28	1.51
Minimum				1.87	1.37
Maximum				2.86	1.69
Standard Deviation				0.23	0.08

Table 5.3-6a

Distributional Statistics for Design Effects and Root Design Effects for 30 Survey Measures for 12 Domains, Sophomore Cohort

DOMAIN		DEFF	DEFT
Total Population	Mean	2.19	1.48
	Minimum	1.60	1.18
	Maximum	2.68	1.64
	Standard Deviation	0.29	0.10
Hispanic	Mean	3.11	1.75
	Minimum	1.69	1.30
	Maximum	5.40	2.32
	Standard Deviation	0.76	0.21
Black	Mean	2.19	1.47
	Minimum	1.24	1.11
	Maximum	2.92	1.71
	Standard Deviation	0.36	0.13
Whites and Others	Mean	1.92	1.38
	Minimum	1.32	1.15
	Maximum	2.38	1.54
	Standard Deviation	0.23	0.08
Female	Mean	2.06	1.43
	Minimum	1.51	1.23
	Maximum	2.42	1.55
	Standard Deviation	0.21	0.07
Male	Mean	2.07	1.44
	Minimum	1.37	1.17
	Maximum	2.59	1.61
	Standard Deviation	0.24	0.09
Lowest Quartile SES	Mean	1.83	1.35
	Minimum	1.22	1.10
	Maximum	2.31	1.52
	Standard Deviation	0.26	0.10

Table 5.3-6a

Distributional Statistics for Design Effects and Root Design  
Effects for 30 Survey Measures for 12 Domains,  
Sophomore Cohort -- Continued

DOMAIN		DEFF	DEFT
Middle Quartiles SES	Mean	2.06	1.43
	Minimum	1.43	1.20
	Maximum	2.41	1.55
	Standard Deviation	0.25	0.09
Highest Quartile SES	Mean	1.92	1.38
	Minimum	1.31	1.14
	Maximum	2.48	1.57
	Standard Deviation	0.28	0.10
Received No PSE	Mean	1.98	1.40
	Minimum	1.25	1.12
	Maximum	2.82	1.68
	Standard Deviation	0.34	0.12
Received Some PSE	Mean	2.09	1.44
	Minimum	1.46	1.21
	Maximum	2.53	1.59
	Standard Deviation	0.19	0.07
Four-Year Degree	Mean	1.63	1.26
	Minimum	0.76	0.39
	Maximum	2.14	1.46
	Standard Deviation	0.42	0.21

Table 5.3-6b

Distributional Statistics for Design Effects and Root Design  
Effects for 30 Survey Measures for 12 Domains,  
Senior Cohort

DOMAIN		DEFF	DEFT
Total Population	Mean	2.28	1.51
	Minimum	1.87	1.37
	Maximum	2.86	1.69
	Standard Deviation	0.23	0.08
Hispanics	Mean	4.06	2.00
	Minimum	1.54	1.24
	Maximum	5.75	2.40
	Standard Deviation	0.93	0.25
Blacks	Mean	2.40	1.54
	Minimum	1.36	1.17
	Maximum	4.63	2.15
	Standard Deviation	0.61	0.18
Whites and others	Mean	1.70	1.30
	Minimum	1.38	1.17
	Maximum	2.06	1.43
	Standard Deviation	0.15	0.06
Female	Mean	2.26	1.50
	Minimum	1.83	1.35
	Maximum	2.59	1.61
	Standard Deviation	0.17	0.06
Male	Mean	2.13	1.46
	Minimum	1.76	1.33
	Maximum	2.45	1.63
	Standard Deviation	0.20	0.07
Bottom SES	Mean	2.31	1.52
	Minimum	1.61	1.27
	Maximum	3.04	1.74
	Standard Deviation	0.36	0.12

Table 5.3-6b

Distributional Statistics for Design Effects and Root Design  
Effects for 30 Survey Measures for 12 Domains,  
Senior Cohort -- Continued

DOMAIN		DEFF	DEFT
Middle SES	Mean	2.02	1.42
	Minimum	1.76	1.33
	Maximum	2.35	1.53
	Standard Deviation	0.16	0.06
Top SES	Mean	1.71	1.31
	Minimum	1.46	1.21
	Maximum	1.97	1.40
	Standard Deviation	0.16	0.05
No PSE Attendance	Mean	1.99	1.41
	Minimum	1.59	1.26
	Maximum	2.34	1.53
	Standard Deviation	0.17	0.06
Some PSE Attendance	Mean	2.25	1.50
	Minimum	1.73	1.32
	Maximum	2.72	1.65
	Standard Deviation	0.23	0.07
Four-Year Degree	Mean	2.07	1.44
	Minimum	1.79	1.34
	Maximum	2.47	1.57
	Standard Deviation	0.17	0.06

NOTES TO CHAPTER 5

<sup>1</sup>Kish, L. and Frankel, M. (1974) "Inference From Complex Samples," *Journal of the Royal Statistical Society: Series B (Methodological)*, 36:2-37.

<sup>2</sup>Kish, L. (1965) *Survey Sampling* New York: John Wiley, 206-208.

<sup>3</sup>Hansen, M., Hurwitz, W. and Madow, W. (1953) *Sample Survey Methods and Theory*, vol. II. New York: John Wiley:

<sup>4</sup>Denning, W. E. (1956) "On Simplification of Sampling Design Through Replication With Equal Probabilities and Without Stages," *Journal of the American Statistical Association*, 31:24-53.

<sup>5</sup>Frankel, M. (1971) *Inference from Survey Samples: An Empirical Investigation*. Ann Arbor: Institute for Social Research, University of Michigan, p. 35.

<sup>6</sup>Frankel, M. (1971) *Inference from Survey Samples: An Empirical Investigation*. Ann Arbor: Institute for Social Research, University of Michigan, p. 40 ff.

<sup>7</sup>Frankel, M., Kohnke, L., Buonanno, D., and Tourangeau, R. (1981) *Sample Design Report*, Chicago: NORC, Chapter 3.

<sup>8</sup>The BRR program is available through CES. The public use data tapes include the computing strata and pseudo-primary selection codes.

<sup>9</sup>Frankel, M. (1971) *Inference from Survey Samples: An Empirical Investigation*. Ann Arbor: Institute for Social Research, University of Michigan, p. 111 ff.

<sup>10</sup>Tourangeau R., McWilliams H., Jones C., Frankel M., and C. Brown F., (1982) *High School and Beyond First Follow-Up (1982) Sample Design Report*. Chicago: NORC, Chapter 5, Tables 5.1, 5.2.

<sup>11</sup>Frankel, M., Kohnke, L., Buonanno, D., and Tourangeau, R. (1981) *Sample Design Report*, Chicago: NORC, p. A-4.

Appendix A: Sophomore Weights and Nonresponse Adjustments

MSB SOPHOMORES - FU3 NONRESPONSE ADJUSTMENTS FOR EACH CELL

DROPSTAT	SEX	RACE	SCHTYPE	BYTESTO	TOTAL	TOTAL	FU3PART	
					N OF CASES	SUM OF WTS	SUM OF WTS	ADJUSTMENT
NON-DROPOUT	MALE	HISPANIC	REG PUB AND ALTER	UNAVAILABLE	106	26476.4850	21507.4160	1.2310
				LOWEST QUARTILE	114	26198.0170	23176.6510	1.1303
				SECOND QUARTILE	63	15839.7210	14282.0170	1.1090
				THIRD QUARTILE	67	11171.9090	10700.4900	1.0440
				HIGHEST QUARTILE	44	6757.7080	6484.5260	1.0421
			HISPANIC PUB	UNAVAILABLE	89	8638.2110	8276.7690	1.0434
				LOWEST QUARTILE	92	7058.6840	6273.9980	1.1351
				SECOND QUARTILE	66	4358.4890	3661.7400	1.1663
				THIRD QUARTILE	73	4437.5380	4304.1130	1.0310
				HIGHEST QUARTILE	60	2216.5120	2015.8340	1.0995
			CATHOLIC	BELOW MEDIAN	74	2314.0680	2070.4630	1.1176
				THIRD QUARTILE	61	1839.6430	1779.9530	1.0334
				HIGHEST QUARTILE	38	874.0840	863.6340	1.0121
			PRIV NON-CATHOLIC	NULL	19	3044.5370	2758.4470	1.1037
			NON-HISP BLACK	REG PUB AND ALTER	UNAVAILABLE	120	43046.4180	37918.9310
		LOWEST QUARTILE			217	71888.6990	63350.4440	1.1348

(CONTINUED)

DROPSTAT	SEX	RACE	SCHTYPE	BYTESTQ	TOTAL	TOTAL	FU3PART		
					N OF CASES	SUM OF WTS	SUM OF WTS	ADJUSTMENT	
NON-DROPOUT	MALE	NON-HISP BLACK	REG PUB AND ALTER	SECOND QUARTILE	133	36679.1650	29715.6770	1.2344	
				THIRD QUARTILE	102	16650.8270	13864.8420	1.2009	
				HIGHEST QUARTILE	63	10505.3550	9053.5030	1.1603	
				HISPANIC PUB	36	3774.0740	3283.6700	1.1492	
				CATHOLIC	191	5866.7790	5409.6860	1.0844	
			PRIV NON- CATHOLIC	22	1267.2000	1129.7340	1.1696		
			NON-HISP WHITE, OTHER	REG PUB AND ALTER	UNAVAILABLE	407	179909.0600	157535.2830	1.1420
					LOWEST QUARTILE	419	150272.6130	138970.6290	1.0813
					SECOND QUARTILE	615	219874.3710	188696.1170	1.1066
					THIRD QUARTILE	804	268382.6880	252730.4270	1.0619
		HIGHEST QUARTILE			998	317169.1310	304420.3560	1.0418	
		HISPANIC PUB		BELOW MEDIAN	84	10540.1480	8898.0890	1.1845	
				ABOVE MEDIAN	63	5786.8240	5704.8010	1.0144	
		CATHOLIC		BELOW MEDIAN	224	24999.7890	22781.1300	1.0973	
				ABOVE MEDIAN	562	62873.2560	59870.0600	1.0518	

(CONTINUED)

HSB SOPHOMORES - FU3 NONRESPONSE ADJUSTMENTS FOR EACH CELL

DROPSTAT	SEX	RACE	SCHTYPE	BYTESTO	TOTAL	TOTAL	FU3PART			
					N OF CASES	SUM OF WTS	SUM OF WTS	ADJUSTMENT		
NON-DROPOUT	MALE	NON-HISP WHITE, OTHER	PRIV NON- CATHOLIC	BELOW MEDIAN	51	22796.1830	18437.8320	1.1727		
				ABOVE MEDIAN	111	29035.8380	25980.1860	1.1175		
	FEMALE	HISPANIC	REG PUB AND ALTER	UNAVAILABLE	53	19724.5220	16269.1200	1.0766		
				LOWEST QUARTILE	89	21527.4950	19368.4390	1.1114		
				SECOND QUARTILE	74	13663.8700	12415.1150	1.1007		
				THIRD QUARTILE	52	9311.4840	8804.4520	1.0576		
				HIGHEST QUARTILE	24	3838.4360	3731.4170	1.0289		
				UNAVAILABLE	55	6541.4230	6310.5180	1.0365		
			HISPANIC PUB	LOWEST QUARTILE	140	10905.3420	10517.2470	1.0370		
				SECOND QUARTILE	86	6453.2820	5910.2060	1.0819		
				THIRD QUARTILE	67	2811.2530	275.350	1.0099		
				HIGHEST QUARTILE	35	954.8920	852.7580	1.0816		
				CATHOLIC	NULL	300	9355.2250	8864.0510	1.0436	
			NON-HISP BLACK	REG PUB AND ALTER	PRIV NON- CATHOLIC	NULL	9	2303.3850	2303.3850	1.0000
					UNAVAILABLE	107	41448.6010	33718.5380	1.2292	
LOWEST QUARTILE	256	94444.5290			86989.7480	1.0856				

(CONTINUED)

DROPSTAT	SEX	RACE	SCHTYPE	BYTESTQ	TOTAL	TOTAL	FU3PART		
					N OF CASES	SUM OF WTS	SUM OF WTS	ADJUSTMENT	
NON-DROPOUT	FEMALE	NON-HISP BLACK	REG PUB AND ALTER	SECOND QUARTILE	156	42928.3180	39703.7650	1.0811	
				THIRD QUARTILE	102	21033.3450	20440.8940	1.0290	
				HIGHEST QUARTILE	63	8884.3680	8163.5400	1.0882	
				NULL	41	7484.0030	7448.3470	1.0046	
			CATHOLIC	UNAVAILABLE	30	841.4600	826.1680	1.0185	
				LOWEST QUARTILE	61	1558.0810	1517.4970	1.0274	
				SECOND QUARTILE	73	2191.0590	2134.9540	1.0282	
				THIRD QUARTILE	33	1457.1630	1310.6980	1.1117	
		PRIV NON- CATHOLIC	HIGHEST QUARTILE	26	1683.6550	1680.1520	1.0080		
			NULL	7	1152.0070	1152.0070	1.0000		
			NON-HISP WHITE, OTHER	REG PUB AND ALTER	UNAVAILABLE	342	159791.9700	143177.8480	1.1160
				LOWEST QUARTILE	428	152308.5480	143414.0770	1.0620	
		SECOND QUARTILE		688	254860.5730	242711.5450	1.0487		
		THIRD QUARTILE		843	282812.8360	274112.7870	1.0317		
		HIGHEST QUARTILE		986	320320.3240	311271.8240	1.0290		

(CONTINUED)

HSB SOPHOMORES - FU3 NONRESPONSE ADJUSTMENTS FOR EACH CELL

DROPSTAT	SEX	RACE	SCHTYPE	BYTESTQ	TOTAL	TOTAL	FU3PART				
					N OF CASES	SUM OF WTS	SUM OF WTS	ADJUSTMENT			
NON-DROPOUT	FEMALE	NON-HISP WHITE, OTHER	HISPANIC PUB	BELOW MEDIAN	71	9688.2310	8981.2670	1.0755			
				ABOVE MEDIAN	63	7768.7730	7214.7910	1.0765			
			CATHOLIC	UNAVAILABLE	53	4184.3390	3740.8760	1.1106			
				LOWEST QUARTILE	64	5160.0370	4885.2940	1.0540			
				SECOND QUARTILE	188	20760.4270	20596.8020	1.0079			
				THIRD QUARTILE	272	31652.5780	30088.8050	1.0530			
				HIGHEST QUARTILE	343	41188.0460	38777.6760	1.0349			
				PRIV NON- CATHOLIC	BELOW MEDIAN	68	27220.7320	24204.3220	1.1246		
			DROPOUT	MALE	NON-HISP BLACK  NON-HISP WHITE, OTHER	HISPANIC	NULL	214	36384.8670	30487.0330	1.1840
							NULL	215	48657.4590	26094.2970	1.3480
NULL	NULL	730				102297.5000	128789.3780	1.4929			
	NULL	227				33426.7310	24204.6910	1.3810			
	NULL	178				38309.7090	32475.5930	1.2165			
FEMALE	HISPANIC	NULL		NULL		618	150921.2080	114148.0480	1.3222		
		NULL		NULL							
	NON-HISP BLACK  NON-HISP WHITE, OTHER	NULL		NULL							
		NULL		NULL							
		NULL		NULL							

## FOR EACH CELL

DROPSTAT	SEX	RACE	SCHTYPE	TOTAL	TOTAL		PHL4PART		TESTPART	
				N OF CASES	SUM OF WTS	SUM OF WTS	ADJUSTMENT	SUM OF WTS	ADJUSTMENT	
NON-DROPOUT	MALE	HISPANIC	REG PUB AND ALTER	394	86443.8400	86497.0570	1.5299	74597.4170	1.1587	
			HISPANIC PUB	380	26709.4340	18522.3880	1.4418	22891.7280	1.1622	
			CATHOLIC	173	5027.7950	4417.2460	1.1381	4714.0500	1.0665	
			PRIV NON-CATHOLIC	19	3044.8370	2283.6060	1.3331	2618.8860	1.1638	
		NON-HISP BLACK	REG PUB AND ALTER	635	178770.4620	119135.5770	1.5006	148850.3440	1.1930	
			HISPANIC PUB	38	3774.0740	2708.2960	1.3945	3241.1050	1.1644	
			CATHOLIC	191	5866.7790	4775.4590	1.2285	5404.3660	1.0855	
			PRIV NON-CATHOLIC	22	1367.2090	867.1860	1.4138	1139.7340	1.1996	
	NON-HISP WHITE, OTHER	REG PUB AND ALTER	3243	1133608	886288.8620	1.2812	1020889	1.1123		
		HISPANIC PUB	147	16326.9720	11687.7600	1.3268	13371.6080	1.2210		
		CATHOLIC	786	87973.0450	77362.1880	1.1371	82500.6020	1.0663		
		PRIV NON-CATHOLIC	162	51832.0210	37089.7470	1.3974	42307.9780	1.2250		
	FEMALE	HISPANIC	REG PUB AND ALTER	322	68066.8070	49014.7480	1.3888	58597.0470	1.1420	
			HISPANIC PUB	383	27667.1920	21272.1820	1.3008	26372.1330	1.0460	
			CATHOLIC	300	9355.2250	8225.4190	1.1373	8081.3180	1.0451	
			PRIV NON-CATHOLIC	9	2303.3850	2303.3850	1.0000	2303.3850	1.0000	

(CONTINUED)

HSE SOPHOMORES - PANEL4, TEST NONRESPONSE ADJUSTMENTS  
FOR EACH CELL

DROPSTAT	SEX	RACE	SCHTYPE	TOTAL	TOTAL	PNL4PART		TESTPART			
				N OF CASES	SUM OF WTS	SUM OF WTS	ADJUSTMENT	SUM OF WTS	ADJUSTMENT		
NON-DROPOUT	FEMALE	NON-HISP BLACK	REG PUB AND ALTER	684	208739.1610	163740.7350	1.2748	188234.5040	1.1208		
			HISPANIC PUB	41	7484.0030	6157.1810	1.2155	7012.8720	1.0671		
			CATHOLIC	229	7742.4480	6605.6280	1.1720	7148.3560	1.0830		
			PRIV NON- CATHOLIC	7	1152.0070	1152.0070	1.0000	1152.0070	1.0000		
		NON-HISP WHITE, OTHER	REG PUB AND ALTER	3275	1169785	984799.1800	1.1877	1093372	1.0698		
			HISPANIC PUB	134	17426.0040	13905.4920	1.2531	15759.6830	1.1057		
			CATHOLIC	920	102895.4470	93059.7360	1.1057	98758.8410	1.0411		
			PRIV NON- CATHOLIC	151	54379.8670	40938.4540	1.3283	49484.3770	1.0986		
			DROPOUT	MALE	HISPANIC	214	36364.9670	10180.2600	3.5727	28691.6240	1.2247
					NON-HISP BLACK	215	48657.4580	19260.2380	2.5265	34530.2180	1.4090
DROPOUT	FEMALE	NON-HISP WHITE, OTHER	NULL	730	182297.5000	69274.6540	2.7762	112300.8890	1.7123		
			HISPANIC	227	33426.7310	12547.4890	2.6638	22738.5210	1.4701		
		NON-HISP BLACK	NULL	178	39509.7090	19780.2230	1.9976	32346.6990	1.2214		
			NON-HISP WHITE, OTHER	618	150921.2080	65155.8930	2.3164	106910.1290	1.4130		

Sophomore Cohort

SAS  
UNIVARIATE

VARIABLE=RAWWT WT FOR FU2 SELECTION

MOMENTS				QUANTILES(DEF=4)			EXTREMES		
N	14825	SUM WGTs	14825	100% MAX	3098.14	95%	1264.23	LOWEST	HIGHEST
MEAN	255.037	SUM	37809.8	75% Q3	436.375	90%	530.728	1.449	2229.2
STD DEV	240.215	VARIANCE	57703.2	50% MED	147.865	10%	463.396	1.449	2239.24
SKEWNESS	2.37723	KURTOSIS	11.867	25% Q1	102.798	5%	21.8632	1.449	2239.24
USS	1819569595	CSS	8553920.1	0% MIN	1.449	1%	14.68	1.449	2627.14
CV	94.1881	STD MEAN	1.97289	RANGE	3096.7		5.296	1.449	3098.14
T:MEAN=0	129.271	PROB> T	0.0001	Q3-Q1	333.577				
SGN RANK	54948863	PROB> S	0.0001	MODE	436.375				
NUM -> 0	14825								

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SAS  
UNIVARIATE

VARIABLE=FU3WT WT FOR THIRD FOLLOWUP PARTICIPANTS

MOMENTS				QUANTILES(DEF=4)			EXTREMES		
N	13481	SUM WGTs	13481	100% MAX	3350.11	95%	1378.54	LOWEST	HIGHEST
MEAN	280.463	SUM	3780928	75% Q3	463.439	90%	594.488	1.619	2560.31
STD DEV	266.438	VARIANCE	70889.3	50% MED	166.899	10%	516.443	1.619	2588.84
SKEWNESS	2.65544	KURTOSIS	14.4557	25% Q1	113.076	5%	25.282	1.619	2561.81
USS	2017348708	CSS	956836427	0% MIN	1.619	1%	15.791	1.619	3000.28
CV	94.9893	STD MEAN	2.29475	RANGE	3348.49		5.481	1.619	3350.11
T:MEAN=0	122.22	PROB> T	0.0001	Q3-Q1	350.363				
SGN RANK	45437711	PROB> S	0.0001	MODE	449.061				
NUM -> 0	13481								

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SAS

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UNIVARIATE

VARIABLE=TESTWT3 WT FOR FU3 R'S WITH BY AND FU1 TEST DATA

MOMENTS				QUANTILES(DEF=4)			EXTREMES	
N	13205	SUM WGTs	13205	100% MAX	3446.28	99%	1378.83	
MEAN	286.325	SUM	3780927	75% Q3	485.411	95%	612.444	LOWEST
STD DEV	270.257	VARIANCE	73038.7	50% MED	170.708	90%	523.53	HIGHEST
SKEWNESS	2.70627	KURTOSIS	15.6204	25% Q1	117.405	10%	26.333	1.738
USS	2046979321	CSS	864403641	0% MIN	1.738	5%	15.846	1.738
CV	94.388	STD MEAN	2.35184			1%	5.518	1.775
T:MEAN=0	121.745	PROB> T	0.0001	RANGE	3444.55			1.775
SGN RANK	43596308	PROB> S	0.0001	Q3-Q1	368.005			3446.29
NUM -> 0	13205			MODE	468.876			

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SAS

4

UNIVARIATE

VARIABLE=PANELWT4 WT FOR PARTICIPANTS IN ALL FOUR WAVES

MOMENTS				QUANTILES(DEF=4)			EXTREMES	
N	11708	SUM WGTs	11708	100% MAX	3969.68	99%	1231.85	
MEAN	322.835	SUM	3780927	75% Q3	550.373	95%	677.056	LOWEST
STD DEV	280.962	VARIANCE	78939.8	50% MED	198.685	90%	605.994	HIGHEST
SKEWNESS	1.96794	KURTOSIS	10.4893	25% Q1	130.206	10%	31.1153	1.803
USS	2145142894	CSS	924147787	0% MIN	1.803	5%	17.059	1.803
CV	87.0026	STD MEAN	2.89661			1%	5.85843	2.025
T:MEAN=0	124.368	PROB> T	0.0001	RANGE	3967.88			2.025
SGN RANK	34272243	PROB> S	0.0001	Q3-Q1	420.167			3109.21
NUM -> 0	11708			MODE	518.348			3869.68

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**Appendix B: Senior Weights and Nonresponse Adjustments**

HSB SENIORS - FU3 NONRESPONSE ADJUSTMENTS FOR EACH CELL

BYPART	SEX	RACE	SCHTYPE	BYTESTQ	TOTAL	TOTAL	FU3PART	
					N OF CASES	SUM OF WTS	SUM OF WTS	ADJUSTMENT
NON-PARTICIPANT	NULL	NULL	REG PUB AND ALTER	NULL	442	399244.4560	318853.6040	1.2521
			HISP. PRIV. CATH	NULL	53	54248.7680	37858.9330	1.4328
PARTICIPANT	MALE	HISPANIC	REG PUB AND ALTER	UNAVAILABLE	53	6759.4260	5273.2710	1.2818
				LOWEST QUARTILE	153	16667.4930	12524.2910	1.3308
				SECOND QUARTILE	85	9802.6200	8390.3060	1.1683
				THIRD QUARTILE	56	5896.5060	5295.1870	1.1135
				HIGHEST QUARTILE	28	3411.2470	3290.1020	1.0388
			HISPANIC PUB	UNAVAILABLE	57	2273.8230	2030.0520	1.1200
				LOWEST QUARTILE	211	7988.0190	6933.5270	1.1520
				SECOND QUARTILE	106	3799.7740	3185.3770	1.1928
				THIRD QUARTILE	92	2389.8640	2222.5750	1.0752
				HIGHEST QUARTILE	53	1221.3200	1094.3640	1.1159
			ALL PRIVATE	BELOW MEDIAN	60	5285.9510	4748.9720	1.1130
				ABOVE MEDIAN	88	3510.3460	2948.8520	1.1803
			NON-HISP BLACK	REG PUB AND ALTER	UNAVAILABLE	206	25139.7010	20101.0450
LOWEST QUARTILE	594	62025.6660			51493.6720	1.2045		

(CONTINUED)

BYPART	SEX	RACE	SCHTYPE	BYTESTQ	TOTAL	TOTAL	FU3PART		
					N OF CASES	SUM OF WTS	SUM OF WTS	ADJUSTMENT	
PARTICIPANT	MALE	NON-HISP BLACK	REG PUB AND ALTER	SECOND QUARTILE	225	23369.8750	19471.2850	1.2001	
				THIRD QUARTILE	136	13345.0390	10418.0040	1.2809	
				HIGHEST QUARTILE	70	8044.3440	7118.3220	1.2706	
			HISPANIC PUB	NULL	59	3365.0010	2947.3800	1.1416	
			CATHOLIC	NULL	95	4624.3030	3740.3450	1.2363	
			PRIV NON- CATHOLIC	NULL	25	1348.8910	1076.3940	1.2532	
			NON-HISP WHITE, OTHER	REG PUB AND ALTER	UNAVAILABLE	245	117573.5730	98652.1150	1.1914
					LOWEST QUARTILE	431	152104.3230	131257.1520	1.1588
					SECOND QUARTILE	510	198161.4810	174451.0260	1.1357
		THIRD QUARTILE		546	215345.9890	192563.8900	1.1183		
		HIGHEST QUARTILE		784	238520.9260	218074.7530	1.0887		
		HISPANIC PUB		BELOW MEDIAN	80	8063.3900	5364.1370	1.5033	
			ABOVE MEDIAN	62	5226.1130	4583.5830	1.1401		
		CATHOLIC	BELOW MEDIAN	64	29594.0090	25000.6120	1.1837		
			ABOVE MEDIAN	129	39714.5630	34971.3280	1.1385		

(CONTINUED)

HSB SENIORS - FU3 NONRESPONSE ADJUSTMENTS FOR EACH CELL

BYPART	SEX	RACE	SCHTYPE	BYTESTO	TOTAL	TOTAL	FU3PART			
					N OF CASES	SUM OF WTS	SUM OF WTS	ADJUSTMENT		
PARTICIPANT	MALE	NON-HISP WHITE, OTHER	PRIV NON- CATHOLIC	BELOW MEDIAN	29	12616.9840	11224.4880	1.1241		
				ABOVE MEDIAN	83	23151.4660	22180.5810	1.0437		
	FEMALE	HISPANIC	REG PUB AND ALTER	UNAVAILABLE	64	8289.7620	7247.1640	1.1439		
				LOWEST QUARTILE	167	20890.6020	17413.5180	1.1996		
				SECOND QUARTILE	91	9879.3910	8610.5220	1.1473		
				THIRD QUARTILE	40	4537.0760	4093.3090	1.1084		
				HIGHEST QUARTILE	30	3408.1960	3043.3680	1.1188		
				UNAVAILABLE	73	2959.6270	2658.8360	1.1130		
			HISPANIC PUB	LOWEST QUARTILE	297	11352.8100	10343.7150	1.0975		
				SECOND QUARTILE	124	5440.7250	5111.8480	1.0642		
				THIRD QUARTILE	90	2200.3010	2143.5520	1.0264		
				HIGHEST QUARTILE	29	558.5070	481.6490	1.1595		
				ALL PRIVATE	BELOW MEDIAN	77	5392.6450	4733.5060	1.1392	
					ABOVE MEDIAN	114	2509.8250	1892.4330	1.3252	
					UNAVAILABLE	206	22370.7900	18482.2550	1.2103	
				NON-HISP BLACK	REG PUB AND ALTER	LOWEST QUARTILE	814	84337.0650	74778.0570	1.1279

(CONTINUED)

BYPART	SEX	RACE	SCHTYPE	BYTESTQ	TOTAL	TOTAL	FU3PART		
					N OF CASES	SUM OF WTS	SUM OF WTS	ADJUSTMENT	
PARTICIPANT	FEMALE	NON-HISP BLACK.	REG PUB AND ALTER	SECOND QUARTILE	315	32671.5600	29825.5450	1.0954	
				THIRD QUARTILE	135	13114.3550	11940.6400	1.0982	
				HIGHEST QUARTILE	56	5657.7360	5443.1770	1.2230	
			HISPANIC PUB	NULL	80	4242.6230	3709.1320	1.1437	
			ALL PRIVATE	NULL	125	7495.7000	6361.2450	1.1782	
			NON-HISP WHITE. OTHER	REG PUB AND ALTER	UNAVAILABLE	187	92711.2710	83877.9880	1.1053
					LOWEST QUARTILE	485	168082.6690	152285.7310	1.1036
					SECOND QUARTILE	583	227341.7910	214747.9480	1.0586
				THIRD QUARTILE	669	245218.4430	229681.0030	1.0676	
		HIGHEST QUARTILE		713	210480.3300	202281.9820	1.0405		
		HISPANIC PUB		BELOW MEDIAN	75	6234.9920	5433.2340	1.1475	
			ABOVE MEDIAN	68	6641.5490	5437.3600	1.2214		
		CATHOLIC	BELOW MEDIAN	104	34969.2700	32328.9450	1.0816		
			ABOVE MEDIAN	184	53554.1730	52373.4050	1.0231		
			PRIV NON- CATHOLIC	NULL	117	41308.0220	37225.8820	1.1096	

HSB SENIORS - PANEL4, TEST NONRESPONSE ADJUSTMENTS  
FOR EACH CELL

SEX	RACE	SCHTYPE	TOTAL	TOTAL	PNL4PART		TESTPART		
			N OF CASES	SUM OF WTS	SUM OF WYS	ADJUSTMENT	SUM OF WTS	ADJUSTMENT	
MALE	HISPANIC	PUB, ALTER, PRIV	403	53678.1950	32771.9730	1.6380	29502.0740	1.8195	
		HISPANIC PUB	524	22266.8400	13949.8250	1.5961	33435.8430	1.6572	
		CATHOLIC	130	6688.0740	5196.0440	1.2889	1000.3140	1.3952	
	NON-HISP BLACK	REG PUB AND ALTER	1253	152796.5210	93694.2630	1.6307	88501.2830	1.7265	
		HISPANIC PUB	59	3365.0010	2410.9730	1.3956	2267.1870	1.4667	
		AL. PRIVATE	123	5973.2940	4155.8460	1.4374	3918.3830	1.5253	
	NON-HISP WHITE, OTHER	PUB, ALTER, HISP	2858	1115727	756858.9420	1.4740	727186.1770	1.5342	
		CATHOLIC	203	79884.3620	55101.7370	1.4496	50087.7850	1.5748	
		PRIV NON-CATHOLIC	122	46576.8500	29030.2480	1.6043	28445.3290	1.6374	
	FEMALE	HISPANIC	PUB, ALTER, PRIV	415	58698.4530	39734.0740	1.4772	33736.3570	1.7400
			HISPANIC PUB	615	24349.4260	19568.5850	1.2444	19080.8640	1.5450
			CATHOLIC	179	6299.3050	3913.5400	1.6251	4235.9430	1.4872
NON-HISP BLACK		PUB, ALTER, PRIV	1565	182507.1920	132423.1750	1.3781	122753.1200	1.4889	
		HISPANIC PUB	81	5161.3510	3374.3720	1.8285	3084.0130	1.6736	
		CATHOLIC	111	6876.0250	4867.2870	1.4126	5050.0180	1.3616	
NON-HISP WHITE, OTHER		REG PUB AND ALTER	2788	1107312	837059.3830	1.3229	798898.6640	1.3858	
		HISPANIC PUB	146	15632.7250	10180.4300	1.5356	10719.3870	1.4583	
		CATHOLIC	295	95956.4960	79384.9160	1.2087	81771.1330	1.1732	

(CONTINUED)

FOR EACH CELL

			TOTAL	TOTAL	PNL4PART		TESTPART	
			N OF CASES	SUM OF WTS	SUM OF WTS	ADJUSTMENT	SUM OF WTS	ADJUSTMENT
SEX	RACE	SCHTYPE						
FEMALE	NON-HISP WHITE, OTHER	PRIV NON- CATHOLIC	125	49954.7420	33722.2790	1.4812	31403.7180	1.5908

## Senior Cohort

SAS

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## UNIVARIATE

VARIABLE=RAWWT WT FOR FU3 SELECTION

MOMENTS				QUANTILES(DEF=4)			EXTREMES		
N	11995	SUM WQTS	11995	100% MAX	1080.84	99%	903.268	LOWEST	HIGHEST
MEAN	253.415	SUM	3039713	75% Q3	594.622	95%	630.075	1.094	1080.84
STD DEV	263.622	VARIANCE	69496.4	50% MED	103.279	90%	594.622	1.094	1080.84
SKEWNESS	1.01828	KURTOSIS	-0.395701	25% Q1	83.69	10%	27.087	1.094	1080.84
USS	1602849235	CSS	833540215	0% MIN	1.094	5%	16.09	1.094	1080.84
CV	104.028	STD MEAN	2.40703			1%	5.485	1.094	1080.84
T:MEAN=0	105.281	PROB> T	0.0001	RANGE	1079.75				
SGN RANK	35973005	PROB> S	0.0001	Q3-Q1	510.932				
NUM != 0	11995			MODE	594.622				

SAS

17:09 THURSDAY, JULY 23, 1987 6

## UNIVARIATE

VARIABLE=FU3WT WT FOR THIRD FOLLOWUP PARTICIPANTS

MOMENTS				QUANTILES(DEF=4)			EXTREMES		
N	10583	SUM WQTS	10583	100% MAX	1548.76	99%	1131	LOWEST	HIGHEST
MEAN	207.226	SUM	3039713	75% Q3	629.51	95%	708.455	1.142	1548.76
STD DEV	303.166	VARIANCE	91809.4	50% MED	124.692	90%	675.324	1.302	1548.76
SKEWNESS	1.21689	KURTOSIS	0.60228	25% Q1	93.309	10%	31.6704	1.302	1548.76
USS	1848668759	CSS	872584942	0% MIN	1.142	5%	18.8758	1.371	1548.76
CV	105.549	STD MEAN	2.94697			1%	6.881	1.371	1548.76
T:MEAN=0	97.4649	PROB> T	0.0001	RANGE	1547.61				
SGN RANK	28002618	PROB> S	0.0001	Q3-Q1	536.201				
NUM != 0	10583			MODE	1131				

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SAS

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## UNIVARIATE

VARIABLE=TESTWT3

WT FOR FUG R'D WITH BY TEST DATA

MOMENTS				QUANTILES(DEF=4)			EXTREMES		
N	9149	SUM WGT'S	9149	100% MAX	1081.9	99%	955.724	LOWEST	HIGHEST
MEAN	332.246	SUM	3039714	75% Q3	824.074	95%	912.333	1.669	1034.59
STD DEV	334.114	VARIANCE	111632	50% MED	163.055	90%	912.333	1.669	1081.9
SKEWNESS	0.935866	KURTOSIS	-0.920926	25% Q1	118.836	10%	36.94	1.791	1081.9
USS	2031142091	CSS	1021210673	0% MIN	1.669	5%	22.593	1.991	1081.9
CV	100.562	STD MEAN	3.49307			1%	7.379	1.991	1081.9
T:MEAN=0	95.1155	PROB> T	0.0001	RANGE	1080.20				
SGN RANK	20928338	PROB> S	0.0001	Q3-Q1	705.238				
NUM -> 0	9149			MODE	824.074				

SAS

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## UNIVARIATE

VARIABLE=PANELWT4

WT FOR PARTICIPANTS IN ALL FOUR WAVES

MOMENTS				QUANTILES(DEF=4)			EXTREMES		
N	9389	SUM WGT'S	9389	100% MAX	1045.54	99%	913.458	LOWEST	HIGHEST
MEAN	323.753	SUM	3039712	75% Q3	786.601	95%	876.564	1.572	973.949
STD DEV	323.22	VARIANCE	104471	50% MED	155.665	90%	876.564	1.572	973.949
SKEWNESS	0.895201	KURTOSIS	-1.01992	25% Q1	116.788	10%	39.463	1.755	973.949
USS	1964893499	CSS	980776007	0% MIN	1.572	5%	22.893	1.792	1040.99
CV	99.8356	STD MEAN	3.3357			1%	7.957	1.792	1045.54
T:MEAN=0	97.0565	PROB> T	0.0002	RANGE	1043.97				
SGN RANK	22040678	PROB> S	0.0002	Q3-Q1	669.812				
NUM -> 0	9389			MODE	786.601				

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**Appendix C: Design Effects and Sampling Errors**

High School and Beyond Third Follow-Up Estimated Percentages,  
Standard Errors and Design Effects, Using Third Follow-Up Data  
Sophomore Cohort - Total Population

Survey Item (or Composite Variable)		Estimate	SE	DEFF	DEFT	N	SE-SRS
Working at Full or Part Time Job, Feb '86	TY3A	67.47	0.58	2.02	1.42	13383	0.40
Taking Academic Courses, Feb '86	TY3C	26.84	0.63	2.68	1.64	13383	0.38
Looking For Work, Feb '86	TY3I	9.50	0.36	2.05	1.43	13383	0.25
Currently Married	TY4I	23.14	0.56	2.36	1.54	13342	0.37
Currently Divorced	TY4I	1.85	0.17	2.00	1.42	13342	0.12
Currently Have One or More Children	TY49	22.33	0.58	2.55	1.60	13337	0.36
Expect to Have Three or More Children	TY48	31.72	0.60	2.16	1.47	12881	0.41
In PSE 84-86: Earned No Degree	TY21I-22I	21.36	1.15	2.05	1.43	2612	0.80
In PSE 84-86: Received Vocational Degree	TY21H-22H	27.98	1.42	2.60	1.61	2602	0.88
In PSE 84-86: Received 4 Year Degree	TY21H-22H	31.36	1.35	2.22	1.49	2602	0.91
Enrolled in PSE, Oct '84	TY21C-22C	32.11	0.66	2.64	1.63	13225	0.41
Enrolled in PSE, Oct '85	TY21C-22C	28.36	0.61	2.45	1.56	13225	0.39
In PSE 84-86: V. Dissat W/Career Couns	TY28E	5.52	0.41	2.07	1.44	6363	0.29
In PSE 84-86: Some Sat With Curriculum	TY28I	50.41	0.84	1.78	1.33	6368	0.63
Applied for Grad/Professional School	TY39	4.46	0.28	2.23	1.49	12573	0.18
If Employed 84-86, 1st Job Clerical	TY8A	24.83	0.53	1.89	1.37	12435	0.39
Had Any Job Between 84-86	TY7	93.81	0.30	2.10	1.45	13395	0.21
Did Not Receive Unemployment '85	TY17D85	86.41	0.82	2.16	1.47	3769	0.56
Currently Registered to Vote	TY56	66.40	0.67	2.58	1.60	12803	0.42
Have Voted Since 1984	TY57	51.13	0.70	2.47	1.57	12784	0.44
Active Participant in Service Org	TY59K	1.49	0.13	1.40	1.18	12689	0.11
Job Security Very Important	TY16C	75.74	0.56	2.13	1.46	12532	0.38
Success in Job Very Important	TY68A	79.88	0.51	2.03	1.43	12800	0.35
Marrying the Right Person Very Important	TY688	86.36	0.44	2.14	1.46	12774	0.30
Having Lots of Money Very Important	TY68C	22.68	0.52	1.94	1.39	12806	0.37
Being a Community Leader Very Important	TY68F	6.65	0.31	1.97	1.40	12793	0.22
Providing Better Opp for Kids Very Imp	TY68G	69.65	0.65	2.54	1.59	12757	0.41
Correcting Social Inequalities Very Imp	TY68J	11.02	0.42	2.32	1.52	12744	0.28
Having Children Very Important	TY68K	47.85	0.64	2.08	1.44	12789	0.44
Having Leisure Time Very Important	TY68L	68.21	0.59	2.05	1.43	12811	0.41
Mean				2.19	1.48		
Minimum				1.40	1.18		
Maximum				2.68	1.64		
Standard Deviation				0.29	0.10		
Median				2.14	1.46		

High School and Beyond Third Follow-Up Estimated Percentages,  
Standard Errors and Design Effects, Using Third Follow-Up Data  
Sophomore Cohort - Hispanic

Survey Item (or Composite Variable)		Estimate	SE	DEFF	DEFT	N	SE-SRS
Working at Full or Part Time Job, Feb '86	TY3A	71.28	1.79	3.36	1.83	2141	0.98
Taking Academic Courses, Feb '86	TY3C	14.04	1.12	2.23	1.49	2141	0.75
Looking For Work, Feb '86	TY3I	11.06	1.43	4.42	2.10	2141	0.68
Currently Married	TY41	22.51	1.56	2.98	1.73	2129	0.91
Currently Divorced	TY41	1.60	0.35	1.69	1.30	2129	0.27
Currently Have One or More Children	TY49	28.88	1.92	3.84	1.96	2132	0.98
Expect to Have Three or More Children	TY48	32.19	1.74	2.82	1.68	2033	1.04
In PSE 84-86: Earned No Degree	TY21I-22I	20.76	3.69	2.73	1.65	330	2.23
In PSE 84-86: Received Vocational Degree	TY21H-22H	44.06	6.37	5.40	2.32	328	2.74
In PSE 84-86: Received 4 Year Degree	TY21H-22H	11.66	2.63	2.20	1.48	328	1.77
Enrolled in PSE, Oct '84	TY21C-22C	19.26	1.42	2.74	1.66	2116	0.86
Enrolled in PSE, Oct '85	TY21C-22C	17.34	1.30	2.51	1.58	2116	0.82
In PSE 84-86: V. Dissat W/Career Couns	TY28E	5.02	1.16	2.50	1.58	893	0.73
In PSE 84-86: Some Sat With Curriculum	TY28I	46.26	3.10	3.45	1.86	894	1.67
Applied for Grad/Professional School	TY39	3.47	0.81	3.80	1.95	1948	0.41
If Employed 84-86, 1st Job Clerical	TY8A	25.92	1.67	2.83	1.68	1947	0.99
Had Any Job Between 84-86	TY7	92.71	0.92	2.66	1.63	2140	0.56
Did Not Receive Unemployment-'85	TY17D8!	85.73	2.32	2.79	1.67	632	1.39
Currently Registered to Vote	TY56	61.34	2.15	3.88	1.97	1994	1.09
Have Voted Since 1984	TY57	44.54	2.17	3.80	1.95	1990	1.11
Active Participant in Service Org	TY59K	0.74	0.27	1.89	1.38	1976	0.19
Job Security Very Important	TY16C	76.17	1.80	3.48	1.87	1950	0.95
Success in Job Very Important	TY68A	82.54	1.42	2.80	1.67	1996	0.85
Marrying the Right Person Very Important	TY68B	86.50	1.49	3.79	1.95	1995	0.77
Having Lots of Money Very Important	TY68C	28.07	1.77	3.11	1.76	2001	1.00
Being a Community Leader Very Important	TY68F	9.28	1.15	3.12	1.77	2000	0.65
Providing Better Opp for Kids Very Imp	TY68G	84.78	1.33	2.71	1.65	1992	0.80
Correcting Social Inequalities Very Imp	TY68J	13.01	1.31	3.00	1.73	1986	0.75
Having Children Very Important	TY68K	45.67	2.08	3.49	1.87	1995	1.12
Having Leisure Time Very Important	TY68L	62.77	2.00	3.41	1.85	2003	1.08
Mean				3.11	1.75		
Minimum				1.69	1.30		
Maximum				5.40	2.32		
Standard Deviation				0.76	0.21		
Median				2.99	1.73		

High School and Beyond Third Follow-Up Estimated Percentages,  
Standard Errors and Design Effects, Using Third Follow-Up Data  
Sophomore Cohort - Black

Survey Item (or Composite Variable)		Estimate	SE	OEFF	DEFT	N	SE-SRS
Working at Full or Part Time Job, Feb '86	TY3A	63.05	1.53	1.97	1.40	1954	1.09
Taking Academic Courses, Feb '86	TY3C	16.86	1.10	1.70	1.30	1954	0.85
Looking For Work, Feb '86	TY3I	15.19	1.19	2.13	1.46	1954	0.81
Currently Married	TY41	13.98	1.17	2.19	1.48	1938	0.79
Currently Divorced	TY41	0.92	0.31	2.07	1.44	1938	0.22
Currently Have One or More Children	TY49	38.22	1.67	2.28	1.51	1933	1.11
Expect to Have Three or More Children	TY48	29.10	1.50	2.05	1.43	1873	1.05
In PSE 84-86: Earned No Degree	TY21I-22I	17.71	3.01	2.02	1.42	326	2.11
In PSE 84-86: Received Vocational Degree	TY21H-22H	53.58	4.63	2.79	1.67	324	2.77
In PSE 84-86: Received 4 Year Degree	TY21H-22H	15.88	2.76	1.85	1.36	324	2.03
Enrolled in PSE, Oct '84	TY21C-22C	24.60	1.42	2.07	1.44	1911	0.99
Enrolled in PSE, Oct '85	TY21C-22C	18.02	1.20	1.85	1.36	1911	0.88
In PSE 84-86: V. Dissat W/Career Couns	TY28E	9.74	1.55	2.43	1.56	686	1.00
In PSE 84-86: Some Sat With Curriculum	TY28I	46.55	2.46	2.15	1.47	882	1.68
Applied for Grad/Professional School	TY39	5.01	0.88	2.92	1.71	1812	0.51
If Employed 84-86, 1st Job Clerical	TY8A	27.35	1.69	2.49	1.58	1738	1.07
Had Any Job Between 84-86	TY7	89.50	1.04	2.24	1.50	1947	0.69
Did Not Receive Unemployment-'85	TY17D85	90.83	1.56	2.23	1.49	760	1.05
Currently Registered to Vote	TY56	74.82	1.62	2.59	1.61	1860	1.01
Have Voted Since 1984	TY57	54.53	1.84	2.52	1.59	1854	1.16
Active Participant in Service Org	TY59K	1.65	0.33	1.24	1.11	1837	0.30
Job Security Very Important	TY16C	79.41	1.39	2.14	1.46	1820	0.95
Success in Job Very Important	TY68A	87.19	1.21	2.44	1.56	1855	0.78
Marrying the Right Person Very Important	TY68B	84.44	1.25	2.20	1.48	1849	0.84
Having Lots of Money Very Important	TY68C	33.03	1.54	2.00	1.41	1855	1.09
Being a Community Leader Very Important	TY68F	10.93	1.17	2.61	1.62	1852	0.73
Providing Better Opp for Kids Very Imp	TY68G	87.04	1.27	2.64	1.62	1852	0.78
Correcting Social Inequalities Very Imp	TY68J	23.26	1.48	2.25	1.50	1845	0.98
Having Children Very Important	TY68K	37.20	1.40	1.56	1.25	1854	1.12
Having Leisure Time Very Important	TY68L	63.06	1.62	2.09	1.45	1855	1.12
Mean				2.19	1.47		
Minimum				1.24	1.11		
Maximum				2.92	1.71		
Standard Deviation				0.36	0.13		
Median				2.17	1.48		

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High School and Beyond Third Follow-Up Estimated Percentages,  
Standard Errors and Design Effects, Using Third Follow-Up Data  
Sophomore Cohort - Whites and Others

Survey Item (or Composite Variable)		Estimate	SE	DEFF	DEFT	N	SE-SRS
Working at Full or Part Time Job, Feb '86	TY3A	67.83	0.68	1.95	1.40	9288	0.48
Taking Academic Courses, Feb '86	TY3C	29.81	0.73	2.38	1.54	9288	0.47
Looking For Work, Feb '86	TY3I	8.48	0.39	1.83	1.35	9288	0.29
Currently Married	TY4I	24.73	0.66	2.14	1.46	9275	0.45
Currently Divorced	TY4J	2.03	0.20	1.89	1.37	9275	0.15
Currently Have One or More Children	TY49	19.03	0.59	2.07	1.44	9272	0.41
Expect to Have Three or More Children	TY48	32.11	0.70	2.01	1.42	8975	0.49
In PSE 84-86: Earned No Degree	TY21I-22I	21.83	1.27	1.84	1.36	1956	0.93
In PSE 84-86: Received Vocational Degree	TY21J-22J	24.10	1.40	2.09	1.45	1950	0.97
In PSE 84-86: Received 4 Year Degree	TY21K-22K	34.26	1.51	1.97	1.41	1950	1.07
Enrolled in PSE, Oct '84	TY21C-22C	34.62	0.76	2.36	1.54	9198	0.50
Enrolled in PSE, Oct '85	TY21C-22C	31.16	0.72	2.20	1.48	9198	0.48
In PSE 84-86: V. Dissat W/Career Couns	TY28E	5.01	0.43	1.81	1.35	4584	0.32
In PSE 84-86: Some Sat With Curriculum	TY28I	51.18	0.93	1.57	1.25	4592	0.74
Applied for Grad/Professional School	TY39	4.46	0.30	1.87	1.37	8813	0.22
If Employed 84-86, 1st Job Clerical	TY8A	24.33	0.58	1.59	1.26	8750	0.46
Had Any J/b Between 84-86	TY7	94.64	0.32	1.87	1.37	9308	0.23
Did Not Receive Unemployment-'85	TY17D85	85.38	1.02	1.98	1.41	2377	0.72
Currently Registered to Vote	TY56	65.48	0.75	2.21	1.49	8949	0.50
Have Voted Since 1984	TY57	51.19	0.76	2.06	1.44	8940	0.50
Active Participant in Service Org	TY59K	1.53	0.15	1.32	1.15	8876	0.13
Job Security Very Important	TY16C	75.09	0.64	1.92	1.39	8762	0.46
Success in Job Very Important	TY68A	78.42	0.58	1.80	1.34	8949	0.43
Marrying the Right Person Very Important	TY68B	86.66	0.49	1.88	1.37	8930	0.36
Having Lots of Money Very Important	TY68C	20.45	0.55	1.68	1.30	8950	0.43
Being a Community Leader Very Important	TY68F	5.69	0.31	1.62	1.27	8941	0.24
Providing Better Opp for Kids Very Imp	TY68G	65.33	0.72	2.06	1.43	8913	0.50
Correcting Social Inequalities Very Imp	TY68J	8.80	0.41	1.87	1.37	8913	0.30
Having Children Very Important	TY68K	49.82	0.74	1.94	1.39	8940	0.53
Having Leisure Time Very Important	TY68L	69.58	0.66	1.84	1.36	8953	0.49
Mean				1.92	1.38		
Minimum				1.32	1.15		
Maximum				2.38	1.54		
Standard Deviation				0.23	0.08		
Median				1.91	1.38		

High School and Beyond Third Follow-Up Estimated Percentages,  
Standard Errors and Design Effects, Using Third Follow-Up Data  
Sophomore Cohort - Female

Survey Item (or Composite Variable)		Estimate	SE	DEFF	DEFT	N	SE-SRS
Working at Full or Part Time Job, Feb '86	TY3A	64.65	0.85	2.16	1.47	6917	0.57
Taking Academic Courses, Feb '86	TY3C	27.13	0.77	2.05	1.43	6917	0.53
Looking For Work, Feb '86	TY3I	9.49	0.51	2.09	1.45	6917	0.35
Currently Married	TY41	29.70	0.86	2.42	1.55	6899	0.55
Currently Divorced	TY41	2.48	0.25	1.73	1.31	6899	0.19
Currently Have One or More Children	TY49	29.31	0.82	2.26	1.50	6906	0.55
Expect to Have Three or More Children	TY48	32.72	0.81	2.00	1.41	6723	0.57
In PSE 84-86: Earned No Degree	TY21I-22I	19.95	1.54	2.25	1.50	1508	1.03
In PSE 84-86: Received Vocational Degree	TY21H-22H	28.65	1.81	2.41	1.55	1504	1.17
In PSE 84-86: Received 4 Year Degree	TY21J-22J	30.90	1.62	1.84	1.36	1504	1.19
Enrolled in PSE, Oct '84	TY21C-22C	33.80	0.84	2.15	1.47	6833	0.57
Enrolled in PSE, Oct '85	TY21C-22C	28.90	0.79	2.05	1.43	6833	0.55
In PSE 84-86: V. Dissat W/Career Couns	TY28E	5.12	0.52	1.89	1.38	3404	0.38
In PSE 84-86: Some Sat With Curriculum	TY28I	49.64	1.15	1.81	1.35	3411	0.86
Applied for Grad/Professional School	TY39	4.18	0.37	2.21	1.49	6538	0.25
If Employed 84-86, 1st Job Clerical	TY8A	39.76	0.89	2.06	1.44	6259	0.62
Had Any Job Between 84-86	TY7	90.91	0.52	2.24	1.50	6922	0.35
Did Not Receive Unemployment-'85	TY17D85	91.32	0.84	1.86	1.36	2117	0.61
Currently Registered to Vote	TY56	65.57	0.87	2.24	1.50	6669	0.58
Have Voted Since 1984	TY57	51.42	0.93	2.32	1.52	6659	0.61
Active Participant in Service Org	TY59K	1.26	0.17	1.51	1.23	6600	0.14
Job Security Very Important	TY16C	76.15	0.80	2.27	1.51	6496	0.53
Success in Job Very Important	TY68A	76.52	0.73	1.99	1.41	6666	0.52
Marrying the Right Person Very Important	TY68B	86.65	0.61	2.13	1.46	6658	0.42
Having Lots of Money Very Important	TY68C	17.38	0.64	1.92	1.38	6676	0.46
Being a Community Leader Very Important	TY68F	4.47	0.36	1.98	1.41	6665	0.25
Providing Better Opp for Kids Very Imp	TY68G	69.32	0.82	2.10	1.45	6653	0.57
Correcting Social Inequalities Very Imp	TY68J	11.04	0.54	2.00	1.41	6638	0.38
Having Children Very Important	TY68K	54.59	0.83	1.85	1.36	6663	0.61
Having Leisure Time Very Important	TY68L	67.20	0.78	1.82	1.35	6674	0.57
Mean				2.06	1.43		
Minimum				1.51	1.23		
Maximum				2.42	1.55		
Standard Deviation				0.21	0.07		
Median				2.06	1.44		

High School and Beyond Third Follow-Up Estimated Percentages,  
Standard Errors and Design Effects, Using Third Follow-Up Data  
Sophomore Cohort - Male

Survey Item (or Composite Variable)		Estimate	SE	DEFF	DEFT	N	SE-SRS
Working at Full or Part Time Job, Feb '86	TY3A	70.32	0.74	1.69	1.30	6466	0.57
Taking Academic Courses, Feb '86	TY3C	26.54	0.85	2.38	1.54	6466	0.55
Looking For Work, Feb '86	TY3I	9.67	0.53	2.08	1.44	6466	0.37
Currently Married	TY41	16.45	0.68	2.15	1.47	6443	0.46
Currently Divorced	TY41	1.21	0.22	2.59	1.61	6443	0.14
Currently Have Two or More Children	TY49	15.19	0.69	2.38	1.54	6431	0.45
Expect to Have Three or More Children	TY48	30.68	0.85	2.10	1.45	6158	0.59
In PSE 84-86: Earned No Degree	TY21I-22I	23.17	1.69	1.77	1.33	1104	1.27
In PSE 84-86: Received Vocational Degree	TY21H-22H	27.13	1.97	2.15	1.47	1098	1.34
In PSE 84-86: Received 4 Year Degree	TY21H-22H	31.96	1.98	1.97	1.40	1098	1.41
Enrolled in PSE, Oct '84	TY21C-22C	30.39	0.87	2.28	1.51	6352	0.58
Enrolled in PSE, Oct '85	TY21C-22C	27.81	0.82	2.16	1.47	6392	0.56
In PSE 84-86: V. Dissat W/Career Couns	TY28E	5.97	0.65	2.22	1.49	2959	0.44
In PSE 84-86: Some Sat With Curriculum	TY28I	51.27	1.28	1.95	1.40	2957	0.92
Applied for Grad/Professional School	TY39	4.75	0.41	2.19	1.48	6035	0.27
If Employed 84-86, 1st Job Clerical	TY8A	10.54	0.54	1.89	1.37	6176	0.39
Had Any Job Between 84-86	TY7	96.75	0.29	1.73	1.32	6473	0.22
Did Not Receive Unemployment-'85	TY17085	80.47	1.50	2.35	1.53	1652	0.98
Currently Registered to Vote	TY56	67.26	0.87	2.10	1.45	6134	0.60
Have Voted Since 1984	TY57	50.82	0.93	2.11	1.45	6125	0.64
Active Participant in Service Org	TY59K	1.72	0.20	1.37	1.17	6089	0.17
Job Security Very Important	TY16C	75.32	0.77	1.94	1.39	6036	0.55
Success in Job Very Important	TY68A	83.38	0.67	2.01	1.42	6134	0.48
Marrying the Right Person Very Important	TY688	66.06	0.65	2.17	1.47	6116	0.44
Having Lots of Money Very Important	TY68C	28.19	0.81	2.00	1.41	6130	0.57
Being a Community Leader Very Important	TY68F	8.91	0.49	1.81	1.34	6128	0.36
Providing Better Opp for Kids Very Imp	TY68G	69.99	0.88	2.25	1.50	6104	0.59
Correcting Social Inequalities Very Imp	TY68J	10.99	0.58	2.11	1.45	6106	0.40
Having Children Very Important	TY68K	40.82	0.94	2.22	1.49	6126	0.63
Having Leisure Time Very Important	TY68L	69.25	0.83	1.99	1.41	6137	0.59
Mean				2.07	1.44		
Minimum				1.37	1.17		
Maximum				2.59	1.61		
Standard Deviation				0.24	0.09		
Median				2.11	1.45		

High School and Beyond Third Follow-Up Estimated Percentages,  
Standard Errors and Design Effects, Using Third Follow-Up Data  
Sophomore Cohort - Lowest Quartile SES

Survey Item (or Composite Variable)		Estimate	SE	DEFF	DEFF	N	SE-SRS
Working at Full or Part Time Job, Feb '86	TY3A	66.40	1.14	2.01	1.44	3555	0.79
Taking Academic Courses, Feb '86	TY3C	9.78	0.63	1.57	1.25	3555	0.50
Looking For Work, Feb '86	TY3I	14.00	0.75	1.67	1.29	3555	0.58
Currently Married	TY41	31.39	1.18	2.28	1.51	3536	0.78
Currently Divorced	TY41	1.88	0.27	1.43	1.19	3536	0.23
Currently Have One or More Children	TY49	33.60	1.07	1.81	1.35	3541	0.79
Expect to Have Three or More Children	TY48	27.34	1.03	1.83	1.35	3422	0.76
In PSE 84-86: Earned No Degree	TY21I-22I	11.91	1.99	1.55	1.25	413	1.59
In PSE 84-86: Received Vocational Degree	TY21H-22H	59.56	2.47	2.04	1.43	401	2.43
In PSE 84-86: Received 4 Year Degree	TY21H-22H	9.18	1.65	1.33	1.15	407	1.43
Enrolled in PSE, Oct '84	TY21C-22C	13.70	0.74	1.61	1.27	3508	0.58
Enrolled in PSE, Oct '85	TY21C-22C	12.59	0.75	1.82	1.35	3508	0.56
In PSE 84-86: V. Dissat W/Career Couns	TY28E	5.22	0.91	1.76	1.33	1064	0.68
In PSE 84-86: Some Sat With Curriculum	TY28I	48.62	2.16	1.98	1.41	1060	1.54
Applied for Grad/Professional School	TY39	2.96	0.43	2.16	1.47	3298	0.30
If Employed 84-86, 1st Job Clerical	TY8A	23.47	1.04	1.92	1.39	3178	0.75
Had Any Job Between 84-86	TY7	90.95	0.62	1.68	1.30	3556	0.48
Did Not Receive Unemployment-'85	TY17D85	83.42	1.46	1.92	1.38	1246	1.05
Currently Registered to Vote	TY56	58.44	1.27	2.27	1.51	3391	0.85
Have Voted Since 1984	TY57	41.10	1.29	2.31	1.52	3389	0.85
Active Participant in Service Org	TY59K	0.59	0.15	1.22	1.10	3355	0.13
Job Security Very Important	TY16C	79.32	0.93	1.74	1.30	3293	0.71
Success in Job Very Important	TY68A	78.29	0.96	1.84	1.36	3382	0.71
Marrying the Right Person Very Important	TY68B	88.16	0.74	1.79	1.34	3379	0.56
Having Lots of Money Very Important	TY68C	23.23	1.01	1.94	1.39	3387	0.73
Being a Community Leader Very Important	TY68F	5.75	0.56	1.92	1.39	3381	0.40
Providing Better Opp for Kids Very Imp	TY68G	82.17	0.94	2.04	1.43	3379	0.66
Correcting Social Inequalities Very Imp	TY68J	10.90	0.70	1.67	1.29	3367	0.54
Having Children Very Important	TY68K	45.14	1.17	1.87	1.37	3383	0.86
Having Leisure Time Very Important	TY68L	63.10	1.12	1.83	1.35	3387	0.83
Mean				1.83	1.35		
Minimum				1.22	1.10		
Maximum				2.31	1.52		
Standard Deviation				0.26	0.10		
Median				1.83	1.35		

School and Beyond Third Follow-up Estimated Percentages,  
Standard Errors and Design Effects, Using Third Follow-up Data  
Sophomore Cohort - Two Middle Quintiles SES

Survey Item (or Composite Variable)		Estimate	SE	DEFF	DEFT	M	SE-SRS
Working at Full or Part Time Job, Feb '86	TY3A	70.76	0.79	1.99	1.41	6588	0.55
Taking Academic Courses, Feb '86	TY3C	22.54	0.67	1.68	1.30	6588	0.51
Looking For Work, Feb '86	TY3I	8.88	0.52	2.22	1.49	6588	0.35
Currently Married	TY4I	23.92	0.79	2.24	1.50	6574	0.53
Currently Divorced	TY4I	2.12	0.26	2.10	1.42	6574	0.18
Currently Have One or More Children	TY49	23.17	0.80	2.38	1.54	6568	0.52
Expect to Have Three or More Children	TY48	30.29	0.86	2.24	1.50	6339	0.58
In PSE 84-86: Earned No Degree	TY21I-22I	19.33	1.60	1.95	1.39	1179	1.15
In PSE 84-86: Received Vocational Degree	TY21H-22H	31.04	1.94	2.07	1.44	1175	1.35
In PSE 84-86: Received 4 Year Degree	TY21H-22H	24.57	1.66	1.75	1.32	1175	1.26
Enrolled in PSE, Oct '84	TY21C-22C	28.23	0.75	1.81	1.35	6508	0.56
Enrolled in PSE, Oct '85	TY21C-22C	24.65	0.70	1.73	1.32	6508	0.53
In PSE 84-86: V. Dissat W/Career Couns	TY28E	5.93	0.64	2.18	1.48	2964	0.43
In PSE 84-86: Some Sat With Curriculum	TY28I	50.44	1.27	1.93	1.39	2968	0.92
Applied for Grad/Professional School	TY39	3.65	0.37	2.41	1.55	6179	0.24
If Employed 84-86, 1st Job Clerical	TY8A	24.87	0.73	1.78	1.35	6176	0.55
Had Any Job Between 84-86	TY7	94.23	0.43	2.28	1.51	6599	0.29
Did Not Receive Unemployment-'85	TY17D85	85.29	1.24	2.21	1.49	1820	0.83
Currently Registered to Vote	TY56	65.47	0.92	2.15	1.53	6295	0.60
Have Voted Since 1984	TY57	50.07	0.95	2.24	1.50	6281	0.63
Active Participant in Service Org	TY59K	1.46	0.18	1.43	1.20	6245	0.15
Job Security Very Important	TY16C	77.66	0.77	2.11	1.45	6178	0.53
Success in Job Very Important	TY68A	79.44	0.75	2.16	1.47	5303	0.51
Marrying the Right Person Very Important	TY68B	86.03	0.67	2.35	1.53	6289	0.24
Having Lots of Money Very Important	TY68C	22.57	0.70	1.74	1.32	6303	0.53
Being a Community Leader Very Important	TY68F	6.47	0.47	2.31	1.52	6300	0.31
Providing Better Opp for Kids Very Imp	TY68G	70.29	0.79	1.88	1.37	6286	0.58
Correcting Social Inequalities Very Imp	TY68J	10.55	0.58	2.24	1.50	6270	0.39
Having Children Very Important	TY68K	47.78	0.89	2.00	1.42	6294	0.63
Having Leisure Time Very Important	TY68L	68.16	0.85	2.30	1.45	6308	0.59
Mean				2.06	1.43		
Minimum				1.43	1.20		
Maximum				2.41	1.55		
Standard Deviation				0.25	0.09		
Median				2.11	1.45		

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High School and Beyond Third Follow-Up Estimated Percentages,  
Standard Errors and Design Effects, Using Third Follow-Up Data  
Sophomore Cohort - Highest Quintile SES

Survey Item (or Composite Variable)		Estimate	SE	DEFF	DEFT	N	SE-SRS
Working at Full or Part Time Job, Feb '86	TY3A	61.09	1.30	2.29	1.51	3240	0.86
Taking Academic Courses, Feb '86	TY3C	53.65	1.29	2.17	1.47	3240	0.88
Looking For Work, Feb '86	TY3I	6.73	0.63	2.03	1.42	3240	0.44
Currently Married	TY4I	13.11	0.90	2.30	1.52	3232	0.59
Currently Divorced	TY4I	1.21	0.27	1.90	1.38	3232	0.19
Currently Have One or More Children	TY49	9.12	0.70	1.89	1.38	3228	0.51
Expect to Have Three or More Children	TY4R	39.37	1.12	1.64	1.28	3120	0.87
In PSE 84-86: Earned No Degree	TY21I-22I	27.07	2.01	2.08	1.44	1020	1.39
In PSE 84-86: Received Vocational Degree	TY21N-22N	13.48	1.53	2.05	1.43	1020	1.07
In PSE 84-86: Received 4 Year Degree	TY21H-22H	47.08	2.23	2.04	1.43	1020	1.56
Enrolled in PSE, Oct '84	TY21C-22C	59.20	1.37	2.48	1.57	3209	0.87
Enrolled in PSE, Oct '85	TY21C-22C	52.44	1.34	2.30	1.52	3209	0.88
In PSE 84-86: V. Dissat W/Career Cours	TY28E	5.11	0.67	2.16	1.47	2335	0.46
In PSE 84-86: Some Sat With Curriculum	TY28I	51.01	1.33	1.66	1.29	2340	1.03
Applied for Grad/Professional School	TY39	7.72	0.64	1.79	1.34	3096	0.48
If Employed 84-86, 1st Job Clerical	TY8A	26.0	1.07	1.83	1.35	3081	0.79
Had Any Job Between 84-86	TY7	95.70	0.43	1.48	1.22	3240	0.36
Did Not Receive Unemployment-'85	TY17085	94.61	1.03	1.46	1.21	703	0.85
Currently Registered to Vote	TY55	76.47	1.06	1.94	1.39	3116	0.76
Have Voted Since 1984	TY57	63.56	1.23	2.02	1.42	3114	0.86
Active Participant in Service Org	TY59K	2.44	0.32	1.36	1.17	3089	0.28
Job Security Very Important	TY16C	67.92	1.23	2.13	1.46	3061	0.84
Success in Job Very Important	TY68A	82.46	0.95	1.95	1.40	3115	0.68
Marrying the Right Person Very Important	TY68B	85.29	0.87	1.85	1.36	3106	0.64
Having Lots of Money Very Important	TY68C	22.37	0.99	1.74	1.32	3116	0.75
Being a Community Leader Very Important	TY68F	7.95	0.56	1.31	1.14	3112	0.48
Providing Better Opp for Kids Very Imp	TY68G	55.74	1.25	1.97	1.40	3098	0.89
Correcting Social Inequalities Very Imp	TY68J	12.17	0.80	1.85	1.36	3107	0.59
Having Children Very Important	TY68K	50.68	1.25	1.94	1.39	3112	0.90
Having Leisure Time Very Important	TY68L	73.39	1.08	1.86	1.36	3116	0.79
Mean				1.92	1.38		
Minimum				1.31	1.14		
Maximum				2.48	1.57		
Standard Deviation				0.28	0.10		
Median				1.94	1.39		

High School and Beyond Third Follow-Up Estimated Percentages,  
Standard Errors and Design Effects, Using Third Follow-Up Data  
Sophomore Cohort - Received No Post-Secondary Education

Survey Item (or Composite Variable)		Estimate	SE	DEFF	DEFT	#	SE-SRS
Working at Full or Part Time Job, Feb '86	TY3A	71.41	0.90	1.91	1.38	4793	0.65
Taking Academic Courses, Feb '86	TY3C	0.36	0.10	1.39	1.18	4793	0.09
Looking for Work, Feb '86	TY3I	11.90	0.66	1.96	1.40	4793	0.47
Currently Married	TY41	34.76	0.97	1.99	1.41	4792	0.69
Currently Divorced	TY41	2.52	0.27	1.42	1.19	4792	0.23
Currently Have One or More Children	TY45	35.85	1.03	2.21	1.49	4793	0.69
Expect to Have Three or More Children	TY48	26.49	0.91	1.95	1.40	4614	0.65
In PSE 84-86: Earned No Degree	TY21I-22I	n/a	n/a	n/a	n/a	n/a	n/a
In PSE 84-86: Received Vocational Degree	TY21H-22H	n/a	n/a	n/a	n/a	n/a	n/a
In PSE 84-86: Received 4 Year Degree	TY21H-22H	n/a	n/a	n/a	n/a	n/a	n/a
Enrolled in PSE, Oct '84	TY21C-22C	n/a	n/a	n/a	n/a	n/a	n/a
Enrolled in PSE, Oct '85	TY21C-22C	n/a	n/a	n/a	n/a	n/a	n/a
In PSE 84-86: V. Dissat W/Career Couns	TY28E	n/a	n/a	n/a	n/a	n/a	n/a
In PSE 84-86: Some Sat With Curriculum	TY28I	n/a	n/a	n/a	n/a	n/a	n/a
Applied for Grad/Professional School	TY39	1.94	0.35	2.82	1.68	4444	0.21
If Employed 84-86, 1st Job Clerical	TY8A	18.82	0.77	1.69	1.30	4323	0.59
Had Any Job Between 84-86	TY7	91.31	0.59	2.09	1.45	4811	0.41
Did Not Receive Unemployment-'85	TY17085	81.82	1.44	2.05	1.43	1472	1.01
Currently Registered to Vote	TY56	55.69	1.10	2.23	1.49	4557	0.74
Have Voted Since 1984	TY57	38.32	1.05	2.13	1.46	4551	0.72
Active Participant in Service Org	TY59X	0.64	0.13	1.25	1.12	4512	0.12
Job Security Very Important	TY16C	78.94	0.84	1.87	1.37	4423	0.61
Success in Job Very Important	TY68A	75.49	0.91	2.02	1.42	4543	0.64
Marrying the Right Person Very Important	TY68B	87.00	0.72	2.05	1.43	4533	0.50
Having Lots of Money Very Important	TY68C	23.95	0.86	1.83	1.35	4548	0.63
Being a Community Leader Very Important	TY68F	5.59	0.50	2.13	1.46	4542	0.34
Providing Better Opp for Kids Very Imp	TY68G	78.23	0.96	2.43	1.56	4532	0.61
Correcting Social Inequalities Very Imp	TY68J	9.07	0.64	2.26	1.50	4516	0.43
Having Children Very Important	TY68K	46.24	0.99	1.79	1.34	4540	0.74
Having Leisure Time Very Important	TY68L	63.17	1.03	2.05	1.43	4552	0.72
Mean				1.98	1.40		
Minimum				1.25	1.12		
Maximum				2.82	1.68		
Standard Deviation				0.34	0.12		
Median				2.02	1.42		

High School and Beyond Third Follow-Up Estimated Percentages.  
Standard Errors and Design Effects. Using Third Follow-Up Data  
Sophomore Cohort - Received Some Post-Secondary Education

Survey Item (or Composite Variable)		Estimate	SE	DEFF	DEFT	N	SE-SRS
Working at Full or Part Time Job, Feb '86	TY3A	67.22	0.76	2.03	1.43	7675	0.54
Taking Academic Courses, Feb '86	TY3C	39.97	0.81	2.11	1.45	7675	0.56
Looking For Work, Feb '86	TY3I	7.95	0.44	2.05	1.43	7675	0.31
Currently Married	TY41	16.56	0.59	1.92	1.39	7635	0.43
Currently Divorced	TY41	1.55	0.23	2.53	1.53	7635	0.14
Currently Have One or More Children	TY49	14.58	0.60	2.18	1.48	7631	0.40
Expect to Have Three or More Children	TY48	34.36	0.80	2.09	1.45	7378	0.55
In PSE 84-86: Earned No Degree	TY21I-22I	30.87	1.64	2.20	1.48	1753	1.10
In PSE 84-86: Received Vocational Degree	TY21H-22H	40.86	1.81	2.36	1.53	1743	1.18
In PSE 84-86: Received 4 Year Degree	TY21H-22H	n/a	n/a	n/a	n/a	n/a	n/a
Enrolled in PSE, Oct '84	TY21C-22C	49.66	0.83	2.08	1.44	7499	0.58
Enrolled in PSE, Oct '85	TY21C-22C	43.99	0.82	2.05	1.43	7499	0.57
In PSE 84-86: V. Dissat w/ Career Couns	TY28E	5.67	0.46	2.12	1.46	5483	0.31
In PSE 84-86: Some Sat With Curriculum	TY28I	51.20	0.93	1.91	1.38	5484	0.67
Applied for Grad/Professional School	TY39	4.42	0.36	2.21	1.49	7225	0.24
If Employed 84-86, 1st Job Clerical	TY8A	28.97	0.78	2.16	1.47	7232	0.53
Had Any Job Between 84-86	TY7	95.26	0.35	2.05	1.43	7667	0.24
Did Not Receive Unemployment-'85	TY17D8L	89.14	0.99	2.16	1.47	2125	0.68
Currently Registered to Vote	TY56	72.48	0.77	2.20	1.48	7345	0.52
Have Voted Since 1984	TY57	58.37	0.81	1.99	1.41	7331	0.58
Active Participant in Service Org	TY59X	1.90	0.19	1.46	1.21	7285	0.16
Job Security Very Important	TY16C	74.77	0.76	2.23	1.49	7215	0.51
Success in Job Very Important	TY68A	82.43	0.63	2.01	1.42	7354	0.44
Marrying the Right Person Very Important	TY68B	85.78	0.61	2.22	1.49	7339	0.41
Having Lots of Money Very Important	TY68C	22.12	0.68	2.00	1.41	7355	0.48
Being a Community Leader Very Important	TY68F	6.68	0.59	1.77	1.33	7349	0.29
Providing Better Opp for Kids Very Imp	TY68G	65.62	0.82	2.16	1.47	7325	0.55
Correcting Social Inequalities Very Imp	TY68J	11.73	0.55	2.13	1.46	7327	0.38
Having Children Very Important	TY68K	48.46	0.86	2.19	1.48	7346	0.58
Having Leisure Time Very Important	TY68L	71.39	0.76	2.06	1.44	7357	0.53
Mean				2.05	1.44		
Minimum				1.46	1.21		
Maximum				2.53	1.59		
Standard Deviation				0.19	0.07		
Median				2.11	1.45		

High School and Beyond Third Follow-Up Estimated Percentages,  
Standard Errors and Design Effects. Using Third Follow-Up Data  
Sophomore Cohort - Received a Four-Year Degree

Survey Item (or Composite Variable)		Estimate	SE	DEFF	DEFT	N	SE-SRS
Working at Full or Part Time Job, Feb '86	TY3A	44.15	2.32	2.00	1.41	915	1.64
Taking Academic Courses, Feb '86	TY3C	84.13	1.66	1.89	1.37	915	1.21
Looking For Work, Feb '86	TY3I	8.62	1.36	2.14	1.46	915	0.93
Currently Married	TY41	4.53	0.91	1.74	1.32	915	0.69
Currently Divorced	TY41	0.02	0.02	0.16	0.39	915	0.04
Currently Have One or More Children	TY49	1.57	0.55	1.79	1.34	913	0.41
Expect to Have Three or More Children	TY48	42.63	2.12	1.64	1.28	889	1.66
In PSE 84-86: Earned No Degree	TY21I-22I	1.34	0.41	1.08	1.04	859	0.39
In PSE 84-86: Received Vocational Degree	TY21H-22H	1.02	0.45	1.72	1.31	859	0.34
In PSE 84-86: Received 4 Year Degree	TY21H-22H	97.05	0.69	1.47	1.20	859	0.58
Enrolled in PSE, Oct '84	TY21C-22C	93.37	1.02	1.54	1.24	911	0.82
Enrolled in PSE, Oct '85	TY21C-22C	91.33	1.01	1.99	1.41	911	1.29
In PSE 84-86: V. Dissat. w/ Career Couns	TY28E	4.59	0.80	1.29	1.14	880	0.71
In PSE 84-86: Some Sat With Curriculum	TY28I	45.48	2.32	1.91	1.38	884	1.67
Applied for Grad/Professional School	TY39	20.09	1.77	1.77	1.33	904	1.33
If Employed 84-86, 1st Job Clerical	TY8A	26.34	1.88	1.60	1.27	880	1.48
Had Any Job Between 84-86	TY7	97.42	0.59	1.28	1.13	917	0.52
Did Not Receive Unemployment-'85	TY17D85	99.65	0.35	0.60	0.78	172	0.45
Currently Registered to Vote	TY56	82.24	1.68	1.74	1.32	901	1.27
Have Voted Since 1974	TY57	70.36	2.04	1.81	1.34	907	1.52
Active Participant in Service Org	TY59K	3.31	0.72	1.45	1.20	892	0.60
Job Security Very Important	TY68C	64.06	2.10	1.71	1.31	894	1.50
Success in Job Very Important	TY68A	85.91	1.64	2.01	1.42	903	1.16
Marrying the Right Person Very Important	TY68B	87.23	1.48	1.76	1.33	902	1.11
Having Lots of Money Very Important	TY68C	19.41	1.77	1.81	1.35	903	1.32
Being a Community Leader Very Important	TY68F	13.04	1.43	1.62	1.27	902	1.12
Providing Better Opp for Kids Very Imp	TY68G	49.98	2.21	1.76	1.33	900	1.67
Correcting Social Inequalities Very Imp	TY68J	17.13	1.74	1.92	1.39	901	1.26
Having Children Very Important	TY68K	52.66	2.31	1.94	1.39	903	1.66
Having Leisure Time Very Important	TY68L	73.15	1.96	1.77	1.33	902	1.48
Mean				1.63	1.26		
Minimum				0.16	0.39		
Maximum				2.14	1.46		
Standard Deviation				0.42	0.21		
Median				1.75	1.33		

High School and Beyond Third Follow-Up Estimated Percentages,  
Standard Errors and Design Effects, Using Third Follow-Up Data  
Senior Cohort - Total Population

Survey Item (or Composite Variable)		Estimate	SE	DEFF	DEFT	N	SE-SRS
Working at Full or Part Time Job, Feb '86	TE3A	77.50	0.57	1.98	1.41	10492	0.41
Taking Academic Courses, Feb '86	TE3C	11.32	0.45	2.37	1.54	10492	0.31
Looking For Work, Feb '86	TE3I	8.02	0.39	2.13	1.46	10492	0.27
Currently Married	TE4I	36.33	0.74	2.48	1.57	10473	0.47
Currently Divorced	TE4J	2.78	0.25	2.46	1.57	10473	0.16
Currently Have One or More Children	TE49	26.76	0.73	2.86	1.69	10445	0.43
Expect to Have Three or More Children	TE48	32.70	0.72	2.40	1.55	10150	0.47
In PSE 84-86: Earned No Degree	TE21I-22I	7.61	0.80	2.13	1.46	2360	0.55
In PSE 84-86: Received Vocational Degree	TE21H-22H	18.44	1.20	2.23	1.49	2347	0.80
In PSE 84-86: Received 4 Year Degree	TE21H-22H	67.13	1.44	2.20	1.48	2347	0.97
Enrolled in PSE, Oct '84	TE21C-22C	22.92	0.63	2.31	1.52	10370	0.41
Enrolled in PSE, Oct '85	TE21C-22C	17.01	0.58	2.45	1.57	10370	0.37
In PSE 84-86: V. Dissat W/Career Couns	TE28E	6.55	0.57	2.20	1.48	4184	0.38
In PSE 84-86: Some Sat With Curriculum	TE28I	51.27	1.10	2.03	1.42	4184	0.77
Applied for Grad/Professional School	TE39	6.22	0.37	2.50	1.58	9917	0.24
If Employed 84-86, 1st Job Clerical	TE8A	23.07	0.63	2.22	1.49	9795	0.43
Had Any Job Between 84-86	TE7	94.75	0.32	2.15	1.47	10509	0.22
Did Not Receive Unemployment-'85	TE17D85	82.71	1.08	2.35	1.53	2860	0.71
Currently Registered to Vote	TE56	72.34	0.74	2.77	1.60	1011C	0.44
Have Voted Since 1984	TE57	60.66	0.77	2.50	1.58	10099	0.49
Active Participant in Service Org	TE59K	2.02	0.20	1.93	1.39	10029	0.14
Job Security Very Important	TE16C	72.85	0.72	2.56	1.60	9887	0.45
Success in Job Very Important	TE68A	75.76	0.58	1.87	1.37	10123	0.43
Marrying the Right Person Very Important	TE68B	67.06	0.50	2.23	1.49	10102	0.33
Having Lots of Money Very Important	TE68C	20.95	0.61	2.26	1.50	10111	0.40
Being a Community Leader Very Important	TE68F	5.35	0.31	1.93	1.39	10107	0.22
Providing Better Opp for Kids Very Imp	TE68G	65.69	0.73	2.35	1.53	10065	0.47
Correcting Social Inequalities Very Imp	TE68J	9.73	0.41	2.20	1.48	10089	0.29
Having Children Very Important	TE68K	48.58	0.77	2.40	1.55	10101	0.50
Having Leisure Time Very Important	TE68L	68.86	0.66	2.07	1.44	10123	0.46
Mean				2.28	1.51		
Minimum				1.87	1.37		
Maximum				2.86	1.69		
Standard Deviation				0.23	0.08		
Median				2.25	1.50		

High School and Beyond Third Follow-Up Estimated Percentages,  
Standard Errors and Design Effects, Using Third Follow-Up Weights  
Senior Cohort - Hispanic

Survey Item (or Composite Variable)		Estimate	SE	DEFF	DEFT	N	SE-SRS
Working at Full or Part Time Job, Feb '86	TE3A	76.53	1.98	4.24	2.06	1941	0.96
Taking Academic Courses, Feb '86	TE3C	13.48	1.35	3.05	1.75	1941	0.78
Looking For Work, Feb '86	TE3I	8.74	1.43	4.97	2.23	1941	0.64
Currently Married	TE41	38.05	2.31	4.37	2.09	1934	1.10
Currently Divorced	TE41	3.90	0.90	4.14	2.04	1934	0.44
Currently Have One or More Children	TE49	35.89	2.40	4.02	2.19	1932	1.09
Expect to Have Three or More Children	TE48	32.48	2.38	4.80	2.19	1853	1.09
In PSE 84-86: Earned No Degree	TE21I-22I	9.80	1.98	2.54	2.24	346	1.00
In PSE 84-86: Received Vocational Degree	TE21H-22H	40.85	6.26	5.53	2.35	341	2.66
In PSE 84-86: Received 4 Year Degree	TE21H-22H	41.63	5.25	3.86	1.97	341	2.67
Enrolled in PSE, Oct '84	TE21C-22C	20.44	1.65	3.21	1.79	1916	0.92
Enrolled in PSE, Oct '85	TE21C-22C	16.77	1.45	2.87	1.69	1916	0.85
In PSE 84-86: V. Dissat w/Career Couns	TE28E	8.71	2.51	5.75	2.40	726	1.05
In PSE 84-86: Some Sat With Curriculum	TE28I	50.70	3.70	3.97	1.99	724	1.86
Applied for Grad/Professional School	TE39	3.41	0.79	3.32	1.82	1768	0.43
If Employed 84-86, 1st Job Clerical	TE8A	26.95	2.26	4.63	2.15	1791	1.05
Had Any Job Between 84-86	TE7	91.55	1.46	5.32	2.31	1943	0.63
Did Not Receive Unemployment-'85	TE17D85	87.76	2.32	2.56	1.60	511	1.45
Currently Registered to Vote	TE56	70.27	2.11	3.86	1.96	1817	1.07
Have Voted Since 1984	TE57	52.78	2.44	4.33	2.08	1816	1.17
Active Participant in Service Org	TE59K	1.15	0.46	3.37	1.81	1808	0.25
Job Security Very Important	TE16C	78.24	2.03	4.50	2.12	1771	0.98
Success in Job Very Important	TE68A	79.25	1.94	4.17	2.04	1821	0.95
Marrying the Right Person Very Important	TE68B	86.45	1.63	4.27	2.07	1818	0.80
Having Lots of Money Very Important	TE68C	24.22	2.08	4.30	2.07	1816	1.01
Being a Community Leader Very Important	TE68F	7.78	1.01	2.56	1.60	1818	0.43
Providing Better Opp for Kids Very Imp	TE68G	78.47	2.07	4.61	2.15	1816	0.96
Correcting Social Inequalities Very Imp	TE68J	14.14	1.78	4.75	2.18	1813	0.82
Having Children Very Important	TE68K	49.09	2.36	4.04	2.01	1817	1.17
Having Leisure Time Very Important	TE68L	66.23	2.24	4.07	2.02	1820	1.11
Mean				4.06	2.00		
Minimum				1.54	1.24		
Maximum				5.75	2.40		
Standard Deviation				0.93	0.25		
Median				4.21	2.05		

High School and Beyond Third Follow-up Estimated Percentages,  
Standard Errors and Design Effects, Using Third Follow-up Weights  
Senior Cohort - Black

Survey Item (or Composite Variable)		Estimate	SE	DEFF	DEFT	N	SE-SRS
Working at Full or Part Time Job, Feb '86	TE3A	74.10	1.25	2.21	1.49	2708	0.84
Taking Academic Courses, Feb '86	TE3C	10.06	0.91	2.50	1.58	2708	0.58
Looking For Work, Feb '86	TE3I	12.29	1.00	2.49	1.58	2708	0.63
Currently Married	TE4I	22.65	1.25	2.41	1.55	2699	0.81
Currently Divorced	TE4J	1.95	0.57	4.63	2.15	2699	0.27
Currently Have One or More Children	TE49	42.65	1.51	2.52	1.59	2687	0.95
Expect to Have Three or More Children	TE4B	29.98	1.28	2.06	1.43	2633	0.89
In PSE 84-86: Earned No Degree	TE21I-22I	9.94	2.57	3.62	1.90	491	1.35
In PSE 84-86: Received Vocational Degree	TE21H-22H	29.03	3.23	2.47	1.57	488	2.05
In PSE 84-86: Received 4 Year Degree	TE21H-22H	51.09	3.71	2.69	1.64	488	2.26
Enrolled in PSE, Oct '84	TE21C-22C	16.71	0.97	1.82	1.35	2663	0.72
Enrolled in PSE, Oct '85	TE21C-22C	13.02	0.93	2.64	1.43	2663	0.65
In PSE 84-86: V. Dissat W/Career Couns	TE28E	6.97	1.32	2.58	1.61	956	0.82
In PSE 84-86: Some Sat With Curriculum	TE28I	51.53	2.29	2.00	1.42	955	1.62
Applied for Grad/Professional School	TE39	4.37	0.55	1.81	1.35	2548	0.40
If Employed 84-86, 1st Job Clerical	TE8A	28.59	1.31	2.06	1.44	2454	0.91
Had Any Job Between 84-86	TE7	90.46	1.06	3.55	1.88	2718	0.56
Did Not Receive Unemployment-'85	TE17D85	87.55	1.76	2.58	1.61	905	1.10
Currently Registered to Vote	TE56	77.79	1.21	2.23	1.49	2619	0.81
Have Voted Since 1984	TE57	62.47	1.38	2.12	1.45	2608	0.95
Active Participant in Service Org	TE59K	2.19	0.34	1.36	1.17	2583	0.29
Job Security Very Important	TE16C	33.28	1.16	2.43	1.56	2542	0.74
Success in Job Very Important	TE68A	31.97	1.08	2.08	1.44	2623	0.75
Marrying the Right Person Very Important	TE69B	85.33	0.98	2.00	1.41	2618	0.69
Having Lots of Money Very Important	TE63C	29.80	1.43	2.55	1.60	2622	0.89
Being a Community Leader Very Important	TE68F	11.29	0.97	2.46	1.57	2619	0.62
Providing Better Opp for Kids Very Imp	TE68G	87.80	0.94	2.15	1.47	2614	0.64
Correcting Social Inequalities Very Imp	TE68J	22.71	1.26	2.35	1.53	2613	0.82
Having Children Very Important	TE68K	37.74	1.35	2.04	1.43	2617	0.95
Having Leisure Time Very Important	TE68L	65.93	1.39	2.25	1.50	2623	0.93
Mean				2.40	1.54		
Minimum				1.36	1.17		
Maximum				4.63	2.15		
Standard Deviation				0.51	0.18		
Median				2.30	1.52		

High School and Beyond Third Follow-Up Estimated Percentages,  
Standard Errors and Design Effects, Using Third Follow-Up Data  
Senior Cohort - Whites and Others

Survey Item (or Composite Variable)		Estimate	SE	DEFF	DEFT	N	SE-SRS
Working at Full or Part Time Job, Feb '86	TE3A	78.05	0.66	1.50	1.23	5843	0.54
Taking Academic Courses, Feb '86	TE3C	11.34	0.53	1.61	1.27	5843	0.41
Looking For Work, Feb '86	TE3I	7.36	0.43	1.57	1.25	5843	0.34
Currently Married	TE41	38.16	0.83	1.70	1.30	5840	0.64
Currently Divorced	TE41	2.82	0.29	1.78	1.33	5840	0.22
Currently Have One or More Children	TE49	23.85	0.80	2.06	1.43	5826	0.56
Expect to Have Three or More Children	TE4E	35.15	0.84	1.80	1.34	5674	0.63
In PSE 84-86: Earned No Degree	TE21I-22I	7.28	0.90	1.81	1.34	1523	0.67
In PSE 84-86: Received Vocational Degree	TE21H-22H	16.41	1.25	1.74	1.32	1518	0.95
In PSE 84-86: Received 4 Year Degree	TE21H-22H	69.86	1.56	1.75	1.32	1518	1.18
Enrolled in PSE, Oct '84	TE21C-22C	23.98	0.73	1.67	1.29	5791	0.56
Enrolled in PSE, Oct '85	TE21C-22C	17.59	0.67	1.77	1.33	5791	0.50
In PSE 84-86: V. Dissat w/Career Couns	TE28E	6.39	0.64	1.72	1.31	2502	0.49
In PSE 84-86: Some Sat. With Curriculum	TE28I	51.26	1.25	1.55	1.25	2505	1.00
Applied for Grad/Professional School	TE39	6.67	0.45	1.86	1.36	5601	0.33
If Employed 84-86, 1st Job Clerical	TE8A	22.06	0.72	1.67	1.29	5550	0.56
Had Any Job Between 84-86	TE7	95.59	0.31	1.64	1.28	5848	0.27
Did Not Receive Unemployment-'85	TE17D85	81.39	1.32	1.66	1.29	1444	1.02
Currently Registered to Vote	TE56	71.70	0.85	2.02	1.42	5674	0.60
Have Voted Since 1984	TE57	60.95	0.88	1.84	1.36	5674	0.65
Active Participant in Service Org	TE59K	2.06	0.23	1.51	1.23	5638	0.19
Job Security Very Important	TE16C	71.02	0.81	1.76	1.33	5574	0.61
Success in Job Very Important	TE68A	74.64	0.68	1.38	1.17	5679	0.58
Marrying the Right Person Very Important	TE68B	87.35	0.57	1.65	1.29	5666	0.44
Having Lots of Money Very Important	TE68C	19.46	0.69	1.70	1.31	5673	0.53
Being a Community Leader Very Important	TE68F	4.33	0.34	1.55	1.25	5670	0.27
Providing Better Opp for Kids Very Imp	TE68G	61.63	0.81	1.56	1.25	5635	0.65
Correcting Social Inequalities Very Imp	TE68J	7.57	0.47	1.76	1.33	5663	0.35
Having Children Very Important	TE68K	50.04	0.89	1.80	1.31	5667	0.66
Having Leisure Time Very Important	TE68L	69.46	0.76	1.53	1.25	5687	0.61
Mean				1.70	1.30		
Minimum				1.38	1.17		
Maximum				2.06	1.43		
Standard Deviation				0.15	0.06		
Median				1.70	1.31		

High School and Beyond Third Follow-Up Estimated Percentages,  
Standard Errors and Design Effects, Using Third Follow-Up Data  
Senior Cohort - Female

Survey Item (or Composite Variable)		Estimate	SE	DEFF	DEFT	N	SE-SRS
Working at Full or Part Time Job, Feb '86	TE3A	74.29	0.80	1.88	1.37	5677	0.58
Taking Academic Courses, Feb '86	TE3C	9.97	0.59	2.17	1.47	5677	0.40
Looking For Work, Feb '86	TE3I	7.96	0.52	2.07	1.44	5677	0.36
Currently Married	TE41	42.42	1.02	2.42	1.55	5660	0.66
Currently Divorced	TE41	2.97	0.35	2.45	1.56	5660	0.23
Currently Have One or More Children	TE49	32.30	1.00	2.59	1.61	5650	0.62
Expect to Have Three or More Children	TE48	32.90	0.95	2.27	1.51	5521	0.63
In PSE 84-86: Earned No Degree	TE21I-22I	6.58	1.02	2.20	1.48	1293	0.69
In PSE 84-86: Received Vocational Degree	TE21H-22H	19.71	1.68	2.28	1.51	1284	1.11
In PSE 84-86: Received 4 Year Degree	TE21H-22H	66.55	1.98	2.26	1.50	1284	1.32
Enrolled in PSE, Oct '84	TE21C-22C	22.23	0.86	2.41	1.55	5618	0.55
Enrolled in PSE, Oct '85	TE21C-22C	16.04	0.76	2.40	1.55	5618	0.49
In PSE 84-86: V. Dissat w/Career Couns	TE28E	6.08	0.76	2.28	1.51	2269	0.50
In PSE 84-86: Some Sat With Curriculum	TE28I	49.12	1.49	2.01	1.42	2273	1.05
Applied for Grad/Professional School	TE39	6.63	0.52	2.38	1.54	5389	0.34
If Employed 84-86, 1st Job Clerical	TE8A	37.60	1.03	2.31	1.52	5134	0.67
Had Any Job Between 84-86	TE7	91.76	0.55	2.27	1.51	5586	0.26
Did Not Receive Unemployment-'85	TE17085	88.79	1.16	2.26	1.50	1690	0.77
Currently Registered to Vote	TE56	72.87	0.96	2.56	1.60	5500	0.60
Have Voted Since 1984	TE57	61.45	1.01	2.35	1.53	5492	0.66
Active Participant in Service Org	TE59X	1.47	0.24	2.23	1.49	5465	0.16
Job Security Very Important	TE16C	73.35	0.93	2.37	1.54	5367	0.60
Success in Job Very Important	TE68A	71.08	0.89	2.11	1.45	5509	0.61
Marrying the Right Person Very Important	TE68B	87.63	0.65	2.14	1.46	5505	0.44
Having Lots of Money Very Important	TE68C	15.91	0.76	2.36	1.54	5504	0.49
Being a Community Leader Very Important	TE68F	3.79	0.35	1.83	1.35	5500	0.26
Providing Better Opp for Kids Very Imp	TE68G	66.75	0.94	2.19	1.48	5489	0.64
Correcting Social Inequalities Very Imp	TE68J	9.77	0.61	2.29	1.51	5489	0.40
Having Children Very Important	TE68K	54.55	1.01	2.25	1.50	5500	0.67
Having Leisure Time Very Important	TE68L	68.44	0.94	2.27	1.51	5509	0.63
Mean				2.26	1.50		
Minimum				1.83	1.35		
Maximum				2.59	1.61		
Standard Deviation				0.17	0.06		
Median				2.27	1.51		

High School and Beyond Third Follow-Up Estimated Percentages,  
Standard Errors and Design Effects. Using Third Follow-Up Data  
Senior Cohort - Male

Survey Item (or Composite Variable)		Estimate	SE	DEFF	DEFT	N	SE-SPS
Working at Full or Part Time Job, Feb '86	TE3A	80.87	0.83	2.16	1.47	4815	0.57
Taking Academic Courses, Feb '86	TE3C	12.74	0.68	2.01	1.42	4815	0.48
Looking For Work, Feb '86	TE3I	8.08	0.57	2.08	1.44	4815	0.39
Currently Married	TE41	29.94	1.00	2.29	1.51	4813	0.66
Currently Divorced	TE41	2.58	0.33	2.12	1.46	4813	0.23
Currently Have One or More Children	TE49	20.93	0.89	2.28	1.51	4795	0.59
Expect to Have Three or More Children	TE48	32.49	1.05	2.32	1.52	4629	0.69
In PSE 84-86: Earned No Degree	TE21I-22I	8.77	1.26	2.12	1.46	1067	0.87
In PSE 84-86: Received Vocational Degree	TE21H-22H	17.03	1.61	1.94	1.39	1063	1.15
In PSE 84-86: Received 4 Year Degree	TE21H-22H	67.78	2.08	2.11	1.45	1063	1.43
Enrolled in PSE, Oct '84	TE21C-22C	23.65	0.86	1.93	1.39	4752	0.62
Enrolled in PSE, Oct '85	TE21C-22C	18.02	0.75	1.83	1.35	4752	0.56
In PSE 84-86: V. Dissat W/Career Couns	TE28E	7.06	0.82	1.97	1.40	1915	0.59
In PSE 84-86: Some Sat With Curriculum	TE28I	53.59	1.67	2.13	1.46	1911	1.14
Applied for Grad/Professional School	TE39	5.77	0.51	2.18	1.48	4528	0.35
If Employed 84-86, 1st Job Clerical	TE8A	8.69	0.60	2.09	1.45	4641	0.41
Had Any Job Between 84-86	TE7	97.88	0.29	2.00	1.41	4823	0.21
Did Not Receive Unemployment-'85	TE17D85	75.66	1.86	2.20	1.48	1170	1.25
Currently Registered to Vote	TE56	71.79	1.08	2.65	1.63	4610	0.66
Have Voted Since 1984	TE57	59.83	1.11	2.37	1.54	4606	0.72
Active Participant in Service Org	TE59K	2.61	0.32	1.87	1.37	4564	0.24
Job Security Very Important	TE16C	72.33	1.04	2.43	1.56	4520	0.67
Success in Job Very Important	TE68A	80.74	0.81	1.93	1.39	4514	0.58
Marrying the Right Person Very Important	TE68B	86.45	0.75	2.21	1.49	4597	0.50
Having Lots of Money Very Important	TE68C	26.31	0.96	2.21	1.49	4607	0.65
Being a Community Leader Very Important	TE68F	6.99	0.50	1.76	1.33	4607	0.38
Providing Better Opp for Kids Very Imp	TE68G	64.56	1.05	2.20	1.48	4576	0.71
Correcting Social Inequalities Very Imp	TE68J	9.67	0.61	1.93	1.39	4600	0.44
Having Children Very Important	TE68K	42.23	1.13	2.39	1.54	4601	0.73
Having Leisure Time Very Important	TE68L	69.31	1.00	2.16	1.47	4614	0.68
Mean				2.13	1.46		
Minimum				1.76	1.33		
Maximum				2.65	1.63		
Standard Deviation				0.20	0.07		
Median				2.13	1.46		

High School and Beyond Third Follow-Up Estimated Percentages,  
Standard Errors and Design Effects, Using Third Follow-Up Data  
Senior Cohort - Lowest Quartile SES

Survey Item (or Composite Variable)		Estimate	SE	DEFF	DEFT	N	SE-SRS
Working at Full or Part Time Job, Feb '86	TE3A	74.01	1.09	2.25	1.50	3650	0.73
Taking Academic Courses, Feb '86	TE3C	7.52	0.63	2.06	1.44	3650	0.44
Looking For Work, Feb '86	TE3I	6.98	0.70	2.21	1.49	3650	0.47
Currently Married	TE41	43.87	1.33	2.63	1.32	3644	0.82
Currently Divorced	TE41	3.31	0.50	2.86	1.69	3644	0.30
Currently Have One or More Children	TE49	41.55	1.32	2.62	1.62	3636	0.82
Expect to Have Three or More Children	TE48	29.54	1.18	2.35	1.53	3533	0.77
In PSE 84-86: Earned No Degree	TE21I-22I	8.58	1.82	2.24	1.50	532	1.21
In PSE 84-86: Received Vocational Degree	TE21H-22H	27.97	2.86	2.13	1.46	526	1.96
In PSE 84-86: Received 4 Year Degree	TE21H-22H	49.76	3.21	2.17	1.47	526	2.18
Enrolled in PSE, Oct '84	TE21C-22C	13.47	0.82	2.07	1.44	3601	0.57
Enrolled in PSE, Oct '85	TE21C-22C	11.26	0.80	2.28	1.51	3601	0.53
In PSE 84-86: V. Dissat w/Career Couns	TE28E	4.76	0.82	1.63	1.28	1093	0.64
In PSE 84-86: Some Sat With Curriculum	TE28I	55.29	2.25	2.23	1.49	1092	1.50
Applied for Grad/Professional School	TE39	2.78	0.39	1.96	1.40	3423	0.28
Employed 84-86, 1st Job Clerical	TE8A	26.39	1.20	2.46	1.57	3346	0.76
Had Any Job Between 84-86	TE7	91.86	0.74	2.65	1.63	3655	0.45
Did Not Receive Unemployment-'85	TE17D85	79.96	1.88	2.38	1.54	1076	1.22
Currently Registered to Vote	TE56	66.26	1.34	2.80	1.67	3513	0.80
Have Vote, Since 1984	TE57	51.80	1.42	2.82	1.68	3508	0.84
Active Participant in Service Org	TE59K	1.04	0.22	1.67	1.29	3483	0.17
Job Security Very Important	TE16C	78.29	1.11	2.46	1.57	3407	0.71
Success in Job Very Important	TE68A	73.50	1.14	2.34	1.53	3517	0.74
Marrying the Right Person Very Important	TE6JB	88.38	0.76	2.10	1.45	3511	0.54
Having Lots of Money Very Important	TE68C	20.47	1.04	2.33	1.52	3507	0.68
Being a Community Leader Very Important	TE68F	5.22	0.50	1.81	1.34	3515	0.38
Providing Better Opp for Kids Very Imp	TE68G	75.92	1.26	3.04	1.74	3506	0.72
Correcting Social Inequalities Very Imp	TE68J	10.47	0.66	1.61	1.27	3502	0.52
Having Children Very Important	TE68K	47.96	1.35	2.56	1.60	3511	0.84
Having Leisure Time Very Important	TE68L	65.23	1.30	2.62	1.62	3517	0.80
Mean				2.31	1.52		
Minimum				1.61	1.27		
Maximum				3.04	1.74		
Standard Deviation				0.36	0.12		
Median				2.31	1.52		

High School and Beyond Third Follow-Up Estimated Percentages,  
Standard Errors and Design Effects, Using Third Follow-Up Data  
Senior Cohort - Two Middle Quartiles SES

Survey Item (or Composite Variable)		Estimate	SE	DEFF	DEFT	N	SE-SRS
Working at Full or Part Time Job, Feb '86	TE3A	78.13	0.82	1.93	1.39	4949	0.59
Taking Academic Courses, Feb '86	TE3C	10.57	0.62	2.01	1.42	4949	0.44
Looking For Work, Feb '86	TE3I	7.95	0.52	1.86	1.36	4949	0.38
Currently Married	TE41	36.81	0.94	1.89	1.37	4936	0.69
Currently Divorced	TE41	3.08	0.38	2.35	1.53	4936	0.25
Currently Have One or More Children	TE49	26.26	0.95	2.31	1.52	4925	0.63
Expect to Have Three or More Children	TE48	32.61	0.97	2.07	1.44	4787	0.68
In PSE 84-86: Earned No Degree	TE21I-22I	8.68	1.27	2.16	1.47	1072	0.86
In PSE 84-86: Received Vocational Degree	TE21H-22H	22.38	1.84	2.09	1.44	1066	1.28
In PSE 84-86: Received 4 Year Degree	TE21H-22H	62.49	2.08	1.96	1.40	1066	1.48
Enrolled in PSE, Oct '84	TE21C-22C	21.38	0.83	1.99	1.41	4894	0.59
Enrolled in PSE, Oct '85	TE21C-22C	15.78	0.75	2.09	1.44	4894	0.52
In PSE 84-86: V. Dissat w/Career Couns	TE28E	7.70	0.81	1.78	1.33	1935	0.61
In PSE 84-86: Some Sat With Curriculum	TE28I	49.61	1.69	2.22	1.49	1940	1.14
Applied for Grad/Professional School	TE39	5.23	0.47	2.12	1.46	4686	0.33
If Employed 84-Po, 1st Job Clerical	TE8A	24.60	0.89	2.00	1.41	4638	0.63
Had Any Job Between 84-86	TE7	94.99	0.44	2.00	1.41	4957	0.31
Did Not Receive Unemployment-'85	TE17D85	80.54	1.61	2.13	1.46	1283	1.11
Currently Registered to Vote	TE56	71.23	1.00	2.32	1.52	4767	0.66
Have Voted Since 1984	TE57	58.78	1.03	2.07	1.44	4763	0.71
Active Participant in Service Org	TE59K	2.44	0.30	1.84	1.36	4739	0.22
Job Security Very Important	TE16C	74.39	0.94	2.15	1.47	4674	0.64
Success in Job Very Important	TE68A	75.23	0.84	1.80	1.34	4782	0.62
Marrying the Right Person Very Important	TE68B	86.86	0.67	1.87	1.37	4774	0.49
Having Lots of Money Very Important	TE68C	20.80	0.84	2.03	1.42	4783	0.59
Being a Community Leader Very Important	TE68F	4.61	0.40	1.76	1.33	4773	0.30
Providing Better Opp for Kids Very Imp	TE68G	66.28	0.95	1.92	1.39	4756	0.69
Correcting Social Inequalities Very Imp	TE68J	8.90	0.59	2.07	1.44	4766	0.41
Having Children Very Important	TE68K	47.47	1.03	2.02	1.42	4772	0.72
Having Leisure Time Very Important	TE68L	68.30	0.91	1.85	1.36	4783	0.67
Mean				2.02	1.42		
Minimum				1.76	1.33		
Maximum				2.35	1.53		
Standard Deviation				0.16	0.06		
Median				2.02	1.42		

High School and Beyond Third Follow-Up Estimated Percentages,  
Standard Errors and Design Effects, Using Third Follow-Up Data  
Senior Cohort - Highest Quartile SES

Survey Item (or Composite Variable)	Estimate	SE	DEFF	DEFT	N	SE-SRS	
Working at Full or Part Time Job, Feb '86	TE3A	79.15	1.26	1.82	1.35	1893	0.93
Taking Academic Courses, Feb '86	TE3C	17.10	1.16	1.78	1.34	1893	0.87
Looking For Work, Feb '86	TE3I	7.27	0.75	1.57	1.25	1893	0.60
Currently Married	TE4I	27.65	1.35	1.71	1.31	1893	1.03
Currently Divorced	TE4J	1.45	0.33	1.48	1.22	1893	0.27
Currently Have One or More Children	TE49	13.70	1.04	1.73	1.31	1884	0.79
Expect to Have Three or More Children	TE48	36.07	1.41	1.59	1.26	1830	1.12
In PSE 84-86: Earned No Degree	TE21I-22I	5.86	1.10	1.66	1.29	756	0.85
In PSE 84-86: Received Vocational Degree	TE21H-22H	10.38	1.46	1.73	1.32	755	1.11
In PSE 84-86: Received 4 Year Degree	TE21H-22H	78.33	1.94	1.67	1.29	755	1.50
Enrolled in PSE, Oct '84	TE21C-22C	36.41	1.48	1.76	1.33	1875	1.11
Enrolled in PSE, Oct '85	TE21C-22C	25.99	1.40	1.90	1.38	1875	1.01
In PSE 84-86: V. Dissat w/Career Couns	TE28E	5.36	0.93	1.95	1.40	1155	0.66
In PSE 84-86: Some Sat With Curriculum	TE28I	52.43	1.78	1.46	1.21	1152	1.47
Applied for Grad/Professional School	TE39	12.30	1.03	1.77	1.2	808	0.77
If Employed 84-86, 1st Job Clerical	TE8A	17.44	1.11	1.55	1.24	1811	0.89
Had Any Job Between 84-86	TE7	96.90	0.49	1.50	1.23	1897	0.40
Did Not Receive Unemployment-'85	TE17D85	91.44	1.68	1.80	1.34	501	1.25
Currently Registered to Vote	TE56	81.46	1.21	1.77	1.33	1830	0.91
Have Voted Since 1984	TE57	74.68	1.41	1.92	1.39	1827	1.02
Active Participant in Service Org	TE59K	1.81	0.39	1.52	1.23	1807	0.31
Job Security Very Important	TE16C	63.43	1.55	1.87	1.37	1806	1.13
Success in Job Very Important	TE68A	79.49	1.23	1.68	1.30	1824	0.95
Marrying the Right Person Very Important	TE68B	86.32	1.09	1.84	1.35	1817	0.81
Having Lots of Money Very Important	TE68C	21.83	1.29	1.76	1.33	1821	0.97
Being a Community Leader Very Important	TE68F	7.53	0.82	1.74	1.32	1819	0.62
Providing Better Opp for Kids Very Imp	TE68G	53.84	1.52	1.68	1.30	1803	1.17
Correcting Social Inequalities Very Imp	TE68J	11.31	0.94	1.60	1.26	1821	0.74
Having Children Very Important	TE68K	52.31	1.64	1.97	1.40	1818	1.17
Having Leisure Time Very Important	TE68L	74.04	1.31	1.64	1.28	1823	1.03
Mean				1.71	1.31		
Minimum				1.46	1.21		
Maximum				1.97	1.40		
Standard Deviation				0.14	0.05		
Median				1.73	1.32		

High School and Beyond Third Follow-Up Estimated Percentages,  
Standard Errors and Design Effects, Using Third Follow-Up Weights  
Senior Cohort - Received No Post-Secondary Education

Survey Item (or Composite Variable)		Estimate	SE	DEFF	DEFT	N	SE-SRS
Working at Full or Part Time Job, Feb '86	TE3A	75.29	1.02	1.97	1.40	3515	0.73
Taking Academic Courses, Feb '86	TE3C	0.32	0.13	1.96	1.40	3515	0.09
Looking For Work, Feb '85	TE3I	6.25	0.63	1.85	1.36	3515	0.46
Currently Married	TE41	46.45	1.22	2.09	1.45	3523	0.84
Currently Divorced	TE41	4.13	0.51	2.34	1.53	3523	0.34
Currently Have One or More Children	TE49	41.13	1.24	2.22	1.49	3520	0.83
Expect to Have Three or More Children	TE48	30.50	1.14	2.10	1.45	3415	0.79
In PSE 84-86: Earned No Degree	TE21I-22I	n/a	n/a	n/a	n/a	n/a	n/a
In PSE 84-86: Received Vocational Degree	TE21H-22H	n/a	n/a	n/a	n/a	n/a	n/a
In PSE 84-86: Received 4 Year Degree	TE21H-22H	n/a	n/a	n/a	n/a	n/a	n/a
Enrolled in PSE, Oct '84	TE21C-22C	n/a	n/a	n/a	n/a	n/a	n/a
Enrolled in PSE, Oct '85	TE21C-22C	n/a	n/a	n/a	n/a	n/a	n/a
In PSE 84-86: V. Dissatisfied w/Career Counc	TE21E	n/a	n/a	n/a	n/a	n/a	n/a
In PSE 84-86: Some Sat With Curriculum	TE21B	n/a	n/a	n/a	n/a	n/a	n/a
Applied for Grad/Professional School	TE39	0.78	0.19	1.59	1.26	3291	0.15
If Employed 84-86, 1st Job Clerical	TE8A	22.88	1.08	2.12	1.45	3202	0.74
Had Any Job Between 84-86	TE7	91.93	0.63	1.87	1.37	3525	0.46
Did Not Receive Unemployment-'85	TE17D85	73.71	2.19	2.28	1.51	924	1.45
Currently Registered to Vote	TE56	61.26	1.18	2.00	1.41	3387	0.84
Have Voted Since 1984	TE57	47.17	1.24	2.09	1.45	3388	0.86
Active Participant in Service Org	TE59K	1.35	0.27	1.88	1.37	3359	0.20
Job Security Very Important	TE16C	78.23	1.02	2.00	1.42	3254	0.72
Success in Job Very Important	TE68A	72.19	1.03	1.80	1.34	3391	0.77
Marrying the Right Person Very Important	TE68B	88.62	0.77	1.98	1.41	3381	0.55
Having Lots of Money Very Important	TE68C	21.45	1.00	2.01	1.42	3385	0.71
Being a Community Leader Very Important	TE68F	3.48	0.41	1.73	1.31	3384	0.31
Providing Better Opp for Kids Very Imp	TE68G	73.62	1.06	1.94	1.39	3381	0.76
Correcting Social Inequalities Very Imp	TE68J	7.03	0.60	1.85	1.36	3373	0.44
Having Children Very Important	TE68K	48.97	1.19	1.93	1.39	3382	0.86
Having Leisure Time Very Important	TE68L	65.24	1.17	2.06	1.43	3391	0.82
Mean				1.99	1.41		
Minimum				1.59	1.23		
Maximum				2.34	1.53		
Standard Deviation				0.17	0.06		
Median				1.98	1.41		

High School and Beyond Third Follow-Up Estimated Percentages,  
Standard Errors and Design Effects, Using Third Follow-Up Weights  
Senior Cohort - Received Some Post-Secondary Education

Survey Item (or Composite Variable)		Estimate	SE	DEFF	DEFT	N	SE-SRS
Working at Full or Part Time Job, Feb '86	TE3A	77.87	0.86	2.18	1.48	5124	0.58
Taking Academic Courses, Feb '86	TE3C	21.18	0.92	2.59	1.61	5124	0.57
Looking For Work, Feb '86	TE3I	7.68	0.54	2.08	1.44	5124	0.37
Currently Married	TE41	33.27	1.01	2.32	1.52	5098	0.66
Currently Divorced	TE41	2.59	0.37	2.72	1.65	5098	0.22
Currently Have One or More Children	TE49	23.92	0.94	2.47	1.57	5074	0.60
Expect to Have Three or More Children	TE48	32.35	1.02	2.34	1.53	4927	0.67
In PSE 84-86: Earned No Degree	TE21I-22I	24.00	2.37	2.43	1.56	790	1.52
In PSE 84-86: Received Vocational Degree	TE21H-22H	54.97	2.63	2.17	1.47	777	1.78
In PSE 84-86: Received 4 Year Degree	TE21H-22H	n/a	n/a	n/a	n/a	n/a	n/a
Enrolled in PSE, Oct '84	TE21C-22C	28.53	0.93	2.13	1.46	4989	0.64
Enrolled in PSE, Oct '85	TE21C-22C	26.81	0.96	2.32	1.52	4989	0.63
In PSE 84-86: V. Dissat W/Career Couns	TE26E	6.03	0.69	2.15	1.47	2561	0.47
In PSE 84-86: Some Sat With Curriculum	TE28I	52.76	1.43	2.11	1.45	2560	0.99
Applied for Grad/Professional School	TEs9	3.71	0.40	2.11	1.45	4811	0.27
If Employed 84-86, 1st Job Clerical	TE8A	26.33	0.90	1.99	1.41	4806	0.64
Had Any Job Between 84-86	TE7	95.97	0.39	2.01	1.42	5128	0.27
Did Not Receive Unemployment-'85	TE17D85	83.83	1.58	2.50	1.58	1354	1.00
Currently Registered to Vote	TE56	75.44	1.01	2.71	1.65	4901	0.61
Have Voted Since 1984	TE57	63.68	1.03	2.22	1.49	4888	0.69
Active Participant in Service Org	TE59K	1.82	0.27	2.04	1.43	4863	0.19
Job Security Very Important	TE16C	72.63	0.99	2.37	1.54	4829	0.64
Success in Job Very Important	TE58A	75.99	0.88	2.07	1.44	4913	0.61
Marrying the Right Person Very Important	TE68B	86.09	0.76	2.34	1.53	4910	0.49
Having Lots of Money Very Important	TE68C	20.71	0.83	2.04	1.43	4907	0.58
Being a Community Leader Very Important	TE68F	5.35	0.42	1.73	1.32	4906	0.32
Providing Better Opp for Kids Very Imp	TE68G	64.91	1.08	2.49	1.58	4881	0.68
Correcting Social Inequalities Very Imp	TE68J	10.31	0.63	2.10	1.45	4898	0.43
Having Children Very Important	TE68K	47.92	1.08	2.30	1.52	4903	0.71
Having Leisure Time Very Important	TE68L	70.08	0.99	2.29	1.51	4913	0.65
Mean				2.25	1.50		
Minimum				1.73	1.32		
Maximum				2.72	1.65		
Standard Deviation				0.23	0.07		
Median				2.22	1.49		

High School and Beyond Third Follow-Up Estimated Percentages,  
Standard Errors and Design Effects, Using Third Follow-Up Weights  
Senior Cohort - Received a Four-Year Degree

Survey Item (or Composite Variable)		Estimate	SE	DEFF	DEFT	N	SE-SRS
Working at Full or Part Time Job, Feb '86	TE3A	80.89	1.26	1.91	1.38	1853	0.91
Taking Academic Courses, Feb '86	TE3C	8.79	0.91	1.89	1.38	1853	0.66
Looking For Work, Feb '85	TE3I	8.38	0.89	1.93	1.39	1853	0.64
Currently Married	TE4I	23.98	1.41	2.01	1.42	1852	0.99
Currently Divorced	TE4I	0.62	0.29	2.47	1.57	1852	0.18
Currently Have One or More Children	TE49	5.54	0.78	2.15	1.46	1851	0.53
Expect to Have Three or More Children	TE48	37.79	1.64	2.06	1.43	1808	1.14
In PSE 84-86: Earned Degree	TE21I-22I	0.62	0.31	2.37	1.54	1570	0.20
In PSE 84-86: Received Vocational Degree	TE21H-22H	3.13	0.68	2.37	1.54	1570	0.44
In PSE 84-86: Received 4 Year Degree	TE21H-22H	95.29	0.79	2.15	1.47	1570	0.53
Enrolled in PSE, Oct '84	TE21C-22C	54.53	1.63	1.98	1.41	1847	1.16
Enrolled in PSE, Oct '85	TE21C-22C	27.07	1.54	2.23	1.49	1847	1.03
In PSE 84-86: V. Dissat w/Career Couns	TE28E	7.26	0.93	2.10	1.45	1623	0.64
In PSE 84-86: Some Sat With Curriculum	TE28I	49.25	1.70	1.88	1.37	1624	1.24
Applied for Grad/Professional School	TE39	22.14	1.44	2.20	1.48	1815	0.97
If Employed 84-86, 1st Job Clerical	TEBA	15.61	1.25	2.13	1.46	1787	0.86
Had Any Job Between 84-86	TE7	97.27	0.51	1.82	1.35	1855	0.38
Did Not Receive Unemployment-'85	TE17D85	94.99	1.29	2.03	1.42	582	0.90
Currently Registered to Vote	TE56	86.32	1.13	1.96	1.40	1822	0.81
Have Voted Since 1984	TE57	79.47	1.35	2.02	1.42	1822	0.95
Active Participant in Service Org	TE59K	3.77	0.65	2.10	1.45	1807	0.45
Job Security Very Important	TE16C	63.46	1.69	2.21	1.49	1804	1.13
Success in Job Very Important	TE68A	82.11	1.25	1.95	1.40	1819	0.90
Marrying the Right Person Very Important	TE68B	86.37	1.12	1.94	1.39	1811	0.81
Having Lots of Money Very Important	TE68C	20.55	1.43	2.28	1.51	1819	0.95
Being a Community Leader Very Important	TE68F	8.92	0.92	1.89	1.37	1817	0.67
Providing Better Opp for Kids Very Imp	TE68G	52.13	1.57	1.79	1.34	1803	1.18
Correcting Social Inequalities Very Imp	TE68J	13.52	1.16	2.08	1.44	1818	0.80
Having Children Very Important	TE68K	49.39	1.73	2.16	1.47	1816	1.17
Having Leisure Time Very Important	TE68L	72.93	1.51	2.09	1.45	1819	1.04
Mean				2.07	1.44		
Minimum				1.79	1.34		
Maximum				2.4	1.57		
Standard Deviation				0.17	0.06		
Median				2.07	1.44		