

**National Longitudinal Study of Adolescent to Adult Health (Add Health), 1994-2008 [Public Use]**

ICPSR 21600

# Kathleen Mullan Harris

*University of North Carolina-Chapel Hill*

# J. Richard Udry

*University of North Carolina-Chapel Hill*

### Wave II: Public Use Grand Sample Weights Codebook/Questionnaire

Inter-university Consortium for Political and Social Research

P.O. Box 1248

Ann Arbor, Michigan 48106 [www.icpsr.umich.edu](http://www.icpsr.umich.edu/)

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Wave II: Public Use Grand Sample Weights Original P.I. Documentation

*N ational Longitudinal Study of Adolescent Health*

*Public-use Grand Sample W eights*

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# Roger Tourangeau Hee-Choon Shin

National Opinion Research Center

Carolina Pop u lation Center

University of N orth Carolina at Chap el H ill Au gu st 1998

Th is research w as su p p orted by gran t P01-H D 31921 from th e N ation al In stitu te of Ch ild H ealth an d H u m an D ev elop m en t. Fu r th er in form ation m ay be obtain ed by con tactin g Jo Jon es, Ph D , Project

M an ager, 919/ 962-8412 (em ail: jo\_jon es@u n c.ed u ) at th e Carolin a Pop u lation Cen ter, CB# 8120 U n iv ersity Squ are, Ch ap el H ill, N C 27516-3997.

**Weights for the Public-Use Sample**

#### Wave I Weights

The public-use sample includes data from 6,504 respondents, who were originally selected for the core sample, the high education black supplement sample, or both. For the purpose of

weighting the public-use data, respondents were divided into two groups. One group

consisted of those who were eligible only for the core sample (and who had, therefore, only one chance of selection for the public-use sample); the second included those who were eligible for selection into both samples (thus, giving them two chances of selection). The weights for the latter group had to take into account the respondents’ selection probabilities for both samples.

For the respondents eligible only for the core sample, the calculation of initial public-use

weights was straightforward. The public-use cases are a random subsample that includes one- half of the core respondents. Thus, their initial public-use weights were twice their final core

weights. The core weights already incorporated adjustments for In-home Questionnaire

nonresponse, but they did not include post-stratification adjustments; we intended to post- stratify the public-use weights as the final stage in computing the new weights, after we had computed preliminary weights for both groups of public-use cases.

For the respondents eligible for selection into both samples, however, a more elaborate

weighting procedure was needed. This procedure consisted of two main steps. In the first, a base weight was calculated that reflected the student’s probability of selection into either sample (Pijk). That probability, in turn, reflected the school’s selection probability (Pi), the

conditional probability for selection into the core sample (given that school i was selected), and

the conditional probability for selection into the black supplement (PB):



in which n ij is the number of selections taken from stratum i at school j (within each school, separate core selections were made within each grade-sex cell, or stratum), N ij is the total

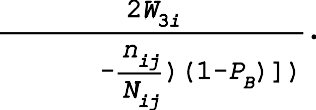
number of students in that stratum and school, and PB is a constant (equal to .3077)

representing the sampling fraction for high education black students at all the sample schools.

In computing the weights, we used the inverse of the final school weight (W3) rather than the school’s selection probability; the school weight took into account school-level nonresponse

and school-level post-stratification adjustments. In addition, we multiplied the base probability by one-half (since the public-use file included data for only half of the eligible respondents).

Thus, the initial weight for cases eligible for both the core and black supplement samples was:



[1]

The next step in computing weights for the cases eligible for both samples was to calculate a nonresponse adjustment. We calculated weighted nonresponse rates for each grade-sex combination (using W1 defined in equation [1] above as the weight). Altogether there were

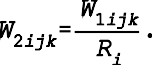
PUBGSW GT.CBK 2

1,318 cases who were selected for the high education black supplement (including 218 cases

who were also selected for the core) and an additional 410 core selections who were eligible for selection into the supplement but not actually selected. Of these 1,728 cases, 1,375 completed

the Wave I in-home interview and an additional 13 turned out to be ineligible for the interview.

The adjusted weight W2 for each respondent in grade-sex cell i was simply the base weight divided by the response rate (Ri) for that cell:



For nonrespondents, this weight was set to zero.

The final step in computing the Wave I public-use weights was to put the two groups of

respondents back together again and to adjust the sum of the weights for the entire sample to agree with estimates from the Census Bureau of the size of each grade-sex-race (black vs. non- black) population. This post-stratification procedure removed any differences between the composition of the sample and the estimated composition of the population.

#### Wave II Weights

Some 5,469 of the Wave I public-use respondents were deemed eligible for follow-up in Wave

II. (The remainder were seniors who had graduated after Wave I). Of those fielded during Wave II, 4,834 completed the Wave II questionnaire. Because there was no subsampling of eligible Wave I respondents, the weight for Wave II is simply the final Wave I public-use

weight adjusted for additional nonresponse during second wave of data collection. Separate

nonresponse adjustments were calculated for each grade-sex cell. The final Wave II weight for a respondent in cell i was simply the Wave I weight divided by the weighted Wave II response rate for that cell; for the Wave II nonrespondents, the weight is zero.

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*Public-use Grand Sample Weights*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | | | Variable | Type/ |
| Frequency | Code | Response | Name | Length |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Respondent Identifier | | | **AID** | char 8 |
| Sample cluster | | | **CLUSTER2** | num 5 |
| Grand Sample Weight - Wave II | | | **GSWGT2** | num 8, with decimal places |
| 4834 |  | range 282.447 to 21107.100 | | |

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#### Variables for Correcting for Design Effects in the Public-use Dataset

Design Type = With Replacement Unit = Adolescent

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Wave I N=6504 | Wave II  N = 4834\* | Wave III N = 4882\* | Wave IV N=5114\* |
| Strata Variable | - # | - # | - # | - # |
| Cluster Variable | CLUSTER2+ | CLUSTER2+ | CLUSTER2+ | CLUSTER2+ |
| Weight Variable | GSWGT1 | GSWGT2 | GSWGT3\_2\*\* | GSWGT4\_2\*\* |
| # With Weights | 6504 | 4834 | 4882 | 5114 |
| # Missing Weights | 0 | 0 | 0 | 0 |
| Mean of Weights | 3422.6630 | 3892.7001 | 4535.91 | 4304.66 |
| Sum of Weights | 22261000.000 | 18817312.465 | 22144327.000 | 22014038.00 |
| Minumum Weight Value | 256.0588 | 282.4469 | 295.5669 | 265.3710 |
| Maximum Weight Value | 1835.4864 | 21107.1003 | 27327.081 | 2309.52 |

\* These numbers are based on individual datasets, not combined datasets.

# A strata variable is not available; not using a strata variable only minimally affects the standard errors.

+ The Sociometrics variable name is MEX50197.

\*\* The Wave III and IV files have two weight variables. See chart in codebook for which weight to use.