Workshop on Using the National Survey of Children's Health Dataset: Practical Applications

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National Center for Health Statistics

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National Survey of Children's Health, 2003

- Sponsored by HRSA's Maternal and Child Health Bureau
- Conducted by CDC's National Center for Health Statistics
- Part of the State and Local Area Integrated Telephone Survey (SLAITS) program

Agenda

- Brief description of the NSCH
- Key sociodemographic variables
- Weights and sampling variables
- Tips on preparing data for analysis
- Frequencies, crosstabs, and logistic regression examples in SUDAAN, SAS, and STATA

National Survey of Children's Health, 2003

- To produce national and state-based estimates on the health and well-being of children, their families, and their communities

Interview Process

- Independent random-digit-dial samples for all 50 states plus D.C.
- Screened households for children under 18 years of age
- One child under 18 years of age was randomly selected to be the target of the interview

Final Sample

- 102,353 completed interviews
  - Minimum: 1,483 in Utah
  - Maximum: 2,241 in Louisiana and Ohio
  - 25 states have more than 2,000 each
- Overall response rate: 55.3%
  - Minimum: 49.6% in New Jersey
  - Maximum: 64.4% in South Dakota
  - 32 states were above 55%

Weighting and Estimation

- Sampling weights to permit national and state-specific estimates of health and well-being
- Sampling weights are adjusted for potential non-response biases
- Sampling weights are adjusted to account for non-coverage of non-telephone households

Locating SLAITS Data

- The SLAITS home page is located at http://www.cdc.gov/nchs/slaits.htm

- SLAITS Overview
- Key Features of the SLAITS Mechanism
- Frequently Asked Questions
- Existing Survey Modules

Key Variables on Public Use File

Key Variables on Public Use File:

State of Residence

- Name: STATE
- Levels: Separate numeric code for each state

Key Variables on Public Use File:

Age

- Name: AGEYR_CHILD
- Levels: Age in years
  - 0 = Younger than one year

Key Variables on Public Use File:

Sex

- Name: S1Q01
- Levels: 1 = male, 2 = female

Confidentiality

- Confidentiality was guaranteed to participants
- Section 308d of the Public Health Service Act (42 U.S.C. 242m):

  "No information…may be used for any purpose other than the purpose for which it was supplied…[and] may not be published or released…if the particular establishment or person supplying the information or described in it is identifiable."
- Prohibits the release of sub-state identifiers or contextual information

Key Variables on Public Use File:

Race

- Name: RACER, RACEAIAN, RACEASIA, RACE_HI
- Levels:
  - RACER = White, Black, Other, Multirace
  - RACEAIAN adds American Indian/AK Native
  - RACEASIA adds Asian
  - RACE_HI adds Asian and Native Hawaiian / PI
- Only RACER can be used for national estimates

Key Variables on Public Use File:

Family Structure

- Name: FAMSTRUCT
- Levels:
  - 1 = Two-parent biological/adoptive household
  - 2 = Two-parent household with at least one step-parent
  - 3 = One-parent household with a biological, step, foster, or adoptive mother and no father
  - 4 = All other family structures

Key Variables on Public Use File:

Relative Ages of Children

- Name: AGEPOS4
- Levels:
  - 1 = Only child
  - 2 = Oldest child
  - 3 = Second oldest child
  - 4 = Third oldest child
  - 5 = Fourth oldest child or younger
- Note: This variable refers to the relative ages of children in the household. If the child has siblings over 17 years of age or unrelated children live in the household, this variable should not be interpreted as birth order.

Key Variables on Public Use File:

Urban/Rural Identifier

- Name: MSA_STAT
- Levels: 1 = Yes, 0 = No
- Missing Data: MSA_STAT was suppressed in 16 states to protect the confidentiality of participants

Key Variables on Public Use File:

Income

- Name: POVERTY_LEVELR
- Levels: 8 categories relative to the Federal Poverty Level
- Derived from: Total number of household members and household income value
- Missing Data: Total household members and/or household income were missing

Key Variables on Public Use File:

Highest Education Achieved

- Name: EDUCATIONR
- Levels:
  - 1 = < 12 years
  - 2 = 12 years (including high school graduate)
  - 3 = More than high school (including college graduates)

Key Variables on Public Use File:

Primary Language in Home

- Name: PLANGUAGE
- Levels:
  - 1 = English
  - 2 = Any other language

Key Variables on Public Use File:

Number of Adults in HH

- Name: TOTADULT3
- Note: This variable refers to the number of adults in the household. It has been topcoded at 3+.

Key Variables on Public Use File:

Number of Children in HH

- Name: TOTKIDS4
- Note: This variable refers to the number of children in the household. It has been topcoded at 4+.

Top-Coded and Bottom-Coded Variables

- How many times (past 12 months) sample child (S.C.) saw a doctor, nurse, or other health care professional for preventative medical care ? (S4Q03R)
- How many times (past 12 months) S.C. go to a hospital emergency room about health? (S4Q04R)
- How many emergency room visits because of accident, injury, or poisoning (S4Q05R)
- Excluding emergency room visits, hospitalizations, and well-child care, how many times in last 12 months did S.C. see a doctor, nurse, or other health care professional for sick-child care? (S4Q06R)

Top-Coded and Bottom-Coded Variables

- How old was S.C. when completely stopped breastfeeding or being fed breast milk? (S6Q60R)
- During past 12 months, about how many days did S.C. miss school because of illness or injury? (S7Q02R)
- During the past week, how many times did you or a family member take S.C. on any kind of outing (park, library, zoo, shopping, church, etc)? (S8Q01R)
- About how often does S.C. attend a religious service? (S8Q02R)
- How many times has S.C ever moved to a new address? (S11Q06R)

Key Variables on Public Use File:

Overweight

- Name: BMICLASS
- Levels:
  - 1 = Underweight
  - 2 = Normal weight
  - 3 = At risk of overweight
  - 4 = Overweight
- Derived from: Parent-reported height and weight, which are top-coded and bottom coded (see HGHT_FLG and WGHT_FLG)

Weights and Sampling Variables

Use Weighted Data

- Sampling weights to permit national and state-specific estimates
- Sampling weights are adjusted for potential non-response biases
- Sampling weights are adjusted to account for non-coverage of non-telephone households

Only One Weight

- WEIGHT_I

→ The same weight is used for national and state-level analyses.

Variance Estimation

- Sample design involved clustering of children within households and stratification of household within states.
- Therefore, SUDAAN, SAS survey procedures, STATA, or other such programs must be used to obtain estimates of variability and statistical significance.

Variance Estimation

- Several data users have noted that, within a given state, the NSCH sample was drawn as a simple random sample. Therefore, these data users have suggested that accurate variance estimates for a single state can be obtained from SAS if the sampling weights are normalized.

- **This is not true.** SAS does not adequately account for the heterogeneous sampling weights. Therefore, the standard errors provided by SAS for normalized weights are smaller than they should be.

Sampling Variables

- Stratum: State (STATE)
- PSU: Household (IDNUMR)

- In SUDAAN…
  - PROC … DESIGN=WR;
  - NEST STATE IDNUMR;
  - WEIGHT WEIGHT_I;

Statistical packages used to analyze Survey Data

- SUDAAN – SUrvey DAta ANalysis
- Selected SAS procedures: SURVEYFREQ and SURVEYLOGISTIC
- STATA

- Taylor series linearization method for estimating population characteristics from complex survey data

Preparing the Data for Analysis

- Subsetting the population to analyze particular subgroups only
- Dealing with question non-response values like “Don’t Know” and “Refused” responses
- Categorical variables in SUDAAN

Preparing the Data: Subsetting

- Don’t subset (e.g., SAS “subsetting if statement”, deleting unneeded records)
- Subsetting can delete entire PSUs from the sample design
- The software needs to “see” the entire design structure to accurately estimate the standard errors
- Use specific procedural statements (e.g SUPPOPN) to specify an analytic subgroup (e.g., males)

Preparing the Data: Item Non-Response

- Set “Don’t Know” and “Refused” responses to missing values
- DK = 6, 96, 996, 9996
- RF = 7, 97, 997, 9997
- Variables with missing values set to “.” are excluded from the analysis

Preparing the data: Categorical Variables

- SUDAAN variables require special preparation for some of types of analysis
  - Categorical variables must begin with 1 and increase in whole numbers with no integers missing
  - Yes/no – 1/0 recode to 1/2
  - Subgroup and Levels statements
  - Will become clear when we look at sample programs

Statistics

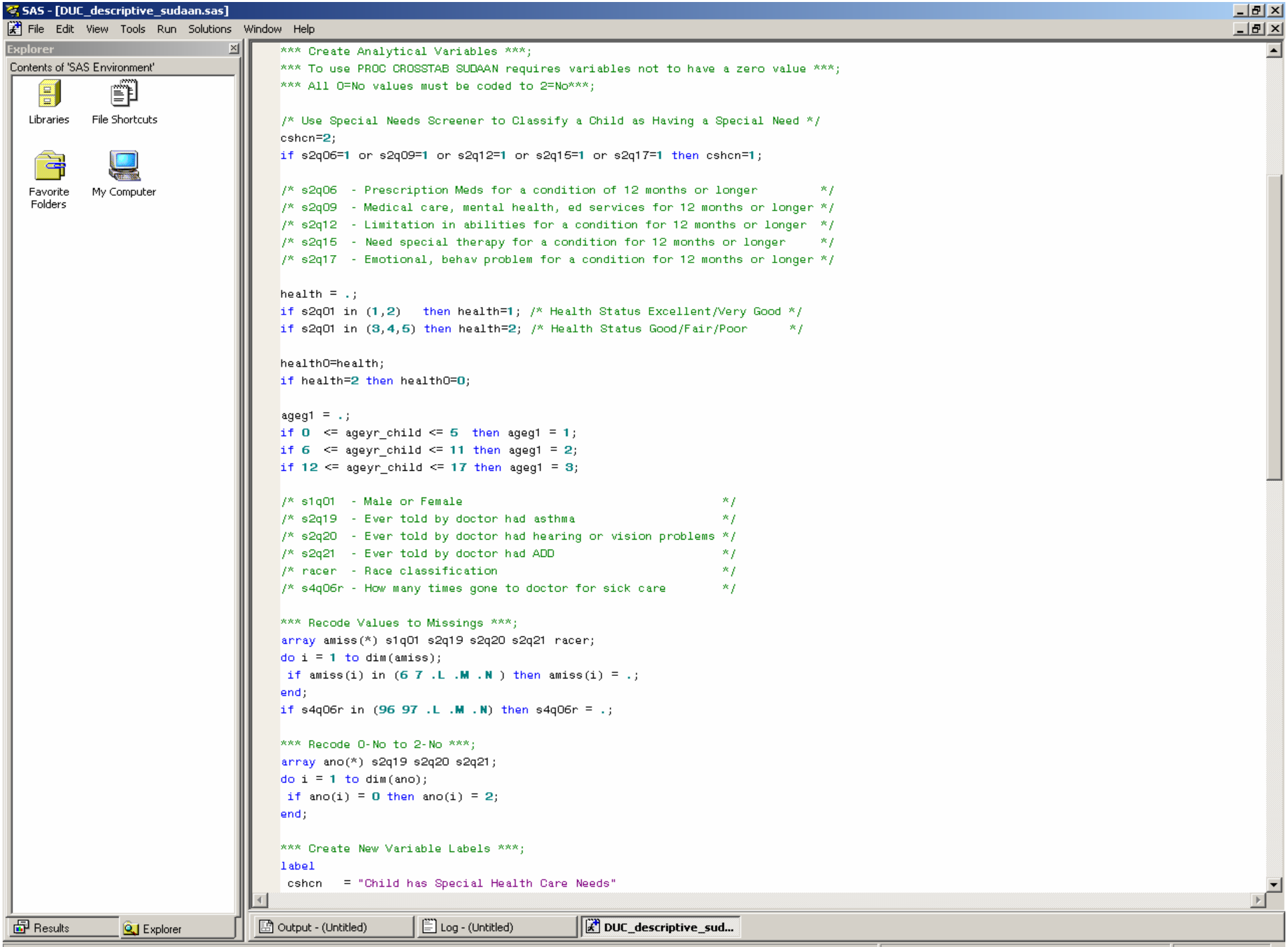
- Frequency distributions and Crosstabs
- Logistic regression

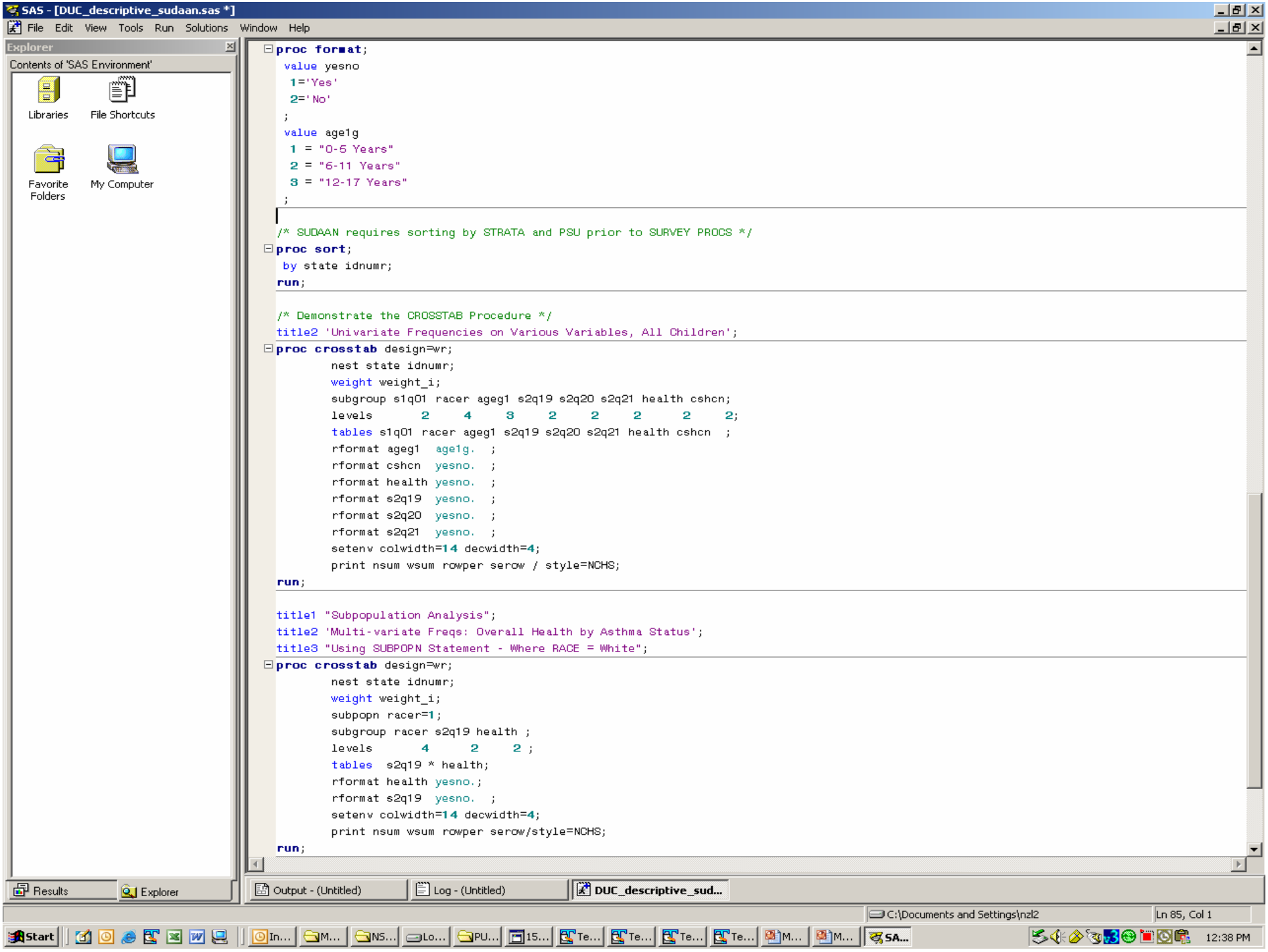
General SAS and SUDAAN Syntax

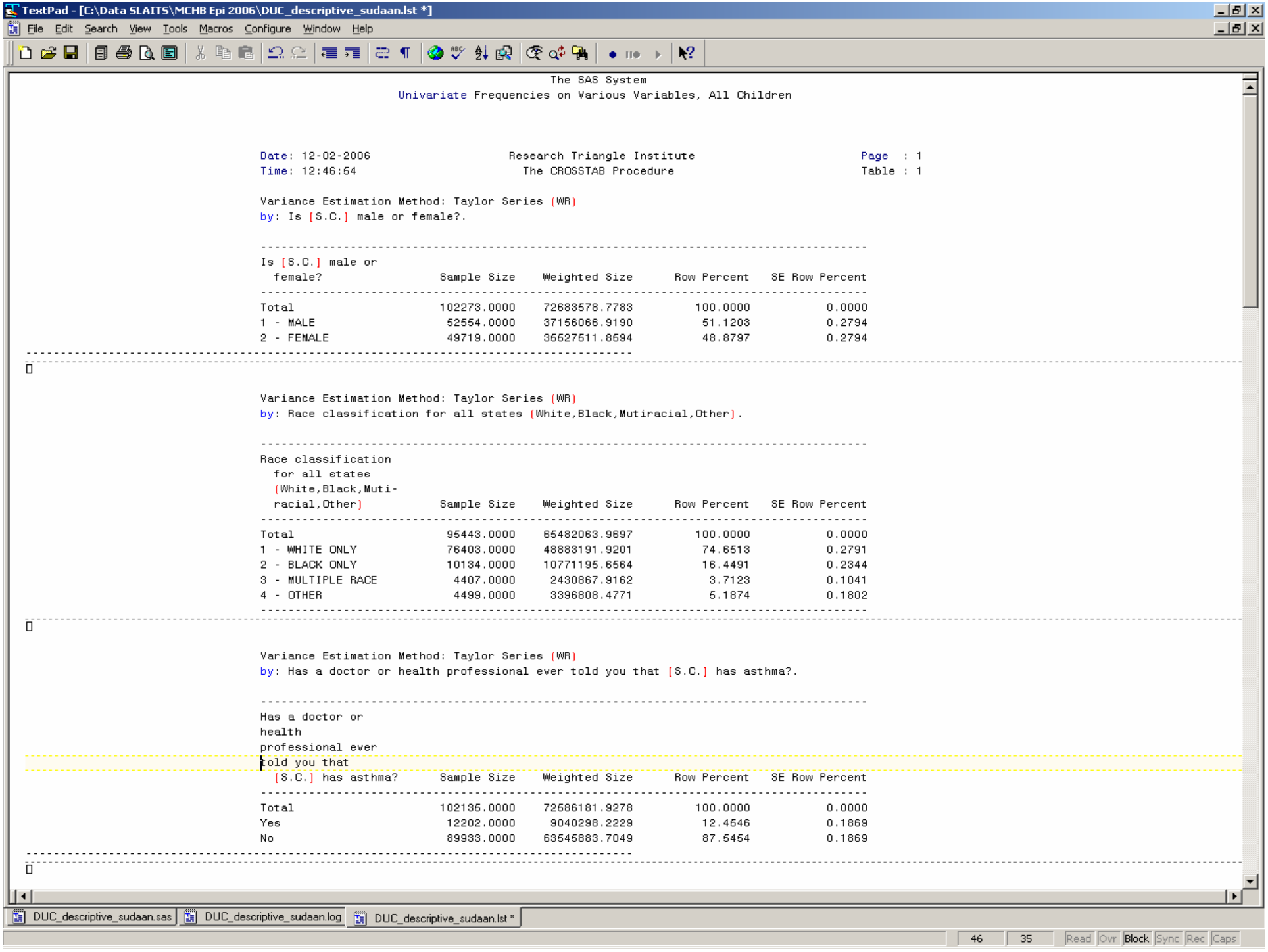
- PROC _____ ;
  - Sample Design statements
  - Computational statements
  - Output specifications

Frequency Distributions: SUDAAN CROSSTAB Syntax

- PROC CROSSTAB DESIGN = WR;
  - NEST STATE IDNUMR;
  - WEIGHT WEIGHT_I;
  - SUBPOPN VAR1 = value;
  - SUBGROUP VAR2 VAR3 VAR4;
  - LEVELS n2 n3 n4;
  - TABLES VAR2 VAR3*VAR4;
  - PRINT NSUM WSUM ROWPER SEROW / STYLE = NCHS WSUMFMT = F7.0 SEROWFMT = F5.4;


SAS - [DUC_descriptive_sudaan.sas]
File Edit View Tools Run Solutions Window Help
Explorer
Contents of 'SAS Environment'
Libraries
File Shortcuts
Favorite Folders
My Computer
Results
Explorer
*** Create Analytical Variables ***;
*** To use PROC CROSSTAB SUDAAN requires variables not to have a zero value ***;
*** All 0=No values must be coded to 2=No***;
/* Use Special Needs Screener to Classify a Child as Having a Special Need */
cshcn=2;
if s2q06=1 or s2q09=1 or s2q12=1 or s2q15=1 or s2q17=1 then cshcn=1;
/* s2q06 - Prescription Meds for a condition of 12 months or longer */
/* s2q09 - Medical care, mental health, ed services for 12 months or longer */
/* s2q12 - Limitation in abilities for a condition for 12 months or longer */
/* s2q15 - Need special therapy for a condition for 12 months or longer */
/* s2q17 - Emotional, behav problem for a condition for 12 months or longer */
health = .;
if s2q01 in (1,2) then health=1; /* Health Status Excellent/Very Good */
if s2q01 in (3,4,5) then health=2; /* Health Status Good/Fair/Poor */
health0=health;
if health=2 then health0=0;
ageg1 = .;
if 0 <= ageyr_child <= 5 then ageg1 = 1;
if 6 <= ageyr_child <= 11 then ageg1 = 2;
if 12 <= ageyr_child <= 17 then ageg1 = 3;
/* s1q01 - Male or Female */
/* s2q19 - Ever told by doctor had asthma */
/* s2q20 - Ever told by doctor had hearing or vision problems */
/* s2q21 - Ever told by doctor had ADD */
/* racer - Race classification */
/* s4q06r - How many times gone to doctor for sick care */
*** Recode Values to Missings ***;
array amiss(*) s1q01 s2q19 s2q20 s2q21 racer;
do i = 1 to dim(amiss);
if amiss(i) in (6 7 .L .M .N) then amiss(i) = .;
end;
if s4q06r in (96 97 .L .M .N) then s4q06r = .;
*** Recode 0-No to 2-No ***;
array ano(*) s2q19 s2q20 s2q21;
do i = 1 to dim(ano);
if ano(i) = 0 then ano(i) = 2;
end;
*** Create New Variable Labels ***;
label
cshcn = "Child has Special Health Care Needs"
Output - (Untitled)
Log - (Untitled)
DUC_descriptive_sud...
C:\Documents and Settings\nzl2
Ln 1, Col 1


SAS - [DUC_descriptive_sudaan.sas *]
File Edit View Tools Run Solutions Window Help
Explorer
Contents of 'SAS Environment'
Libraries
File Shortcuts
Favorite Folders
My Computer
Results
Explorer
proc format;
value yesno
1='Yes'
2='No'
;
value age1g
1 = "0-5 Years"
2 = "6-11 Years"
3 = "12-17 Years"
;
/* SUDAAN requires sorting by STRATA and PSU prior to SURVEY PROCS */
proc sort;
by state idnumr;
run;
/* Demonstrate the CROSSTAB Procedure */
title2 'Univariate Frequencies on Various Variables, All Children';
proc crosstab design=wr;
nest state idnumr;
weight weight_i;
subgroup s1q01 racer ageg1 s2q19 s2q20 s2q21 health cshcn;
levels 2 4 3 2 2 2 2 2;
tables s1q01 racer ageg1 s2q19 s2q20 s2q21 health cshcn ;
rformat ageg1 age1g. ;
rformat cshcn yesno. ;
rformat health yesno. ;
rformat s2q19 yesno. ;
rformat s2q20 yesno. ;
rformat s2q21 yesno. ;
setenv colwidth=14 decwidth=4;
print nsum wsum rowper serow / style=NCHS;
run;
title1 "Subpopulation Analysis";
title2 'Multi-variate Freqs: Overall Health by Asthma Status';
title3 "Using SUBPOPN Statement - Where RACE = White";
proc crosstab design=wr;
nest state idnumr;
weight weight_i;
subpopn racer=1;
subgroup racer s2q19 health ;
levels 4 2 2 ;
tables s2q19 * health;
rformat health yesno.;
rformat s2q19 yesno. ;
setenv colwidth=14 decwidth=4;
print nsum wsum rowper serow/style=NCHS;
run;
Output - (Untitled)
Log - (Untitled)
DUC_descriptive_sud...
C:\Documents and Settings\nzl2
Ln 85, Col 1
Start
12:38 PM


TextPad - [C:\Data SLAITS\MCHB Epi 2006\DUC_descriptive_sudaan.lst *]
File Edit Search View Tools Macros Configure Window Help
The SAS System
Univariate Frequencies on Various Variables, All Children
Date: 12-02-2006 Research Triangle Institute Page : 1
Time: 12:46:54 The CROSSTAB Procedure Table : 1
Variance Estimation Method: Taylor Series (WR)
by: Is [S.C.] male or female?.
Is [S.C.] male or female? Sample Size Weighted Size Row Percent SE Row Percent
Total 102273.0000 72683578.7783 100.0000 0.0000
1 - MALE 52554.0000 37156066.9190 51.1203 0.2794
2 - FEMALE 49719.0000 35527511.8594 48.8797 0.2794
Variance Estimation Method: Taylor Series (WR)
by: Race classification for all states (White,Black,Mutiracial,Other).
Race classification for all states (White,Black,Muti-racial,Other) Sample Size Weighted Size Row Percent SE Row Percent
Total 95443.0000 65482063.9697 100.0000 0.0000
1 - WHITE ONLY 76403.0000 48883191.9201 74.6513 0.2791
2 - BLACK ONLY 10134.0000 10771195.6564 16.4491 0.2344
3 - MULTIPLE RACE 4407.0000 2430867.9162 3.7123 0.1041
4 - OTHER 4499.0000 3396808.4771 5.1874 0.1802
Variance Estimation Method: Taylor Series (WR)
by: Has a doctor or health professional ever told you that [S.C.] has asthma?.
Has a doctor or health professional ever told you that [S.C.] has asthma? Sample Size Weighted Size Row Percent SE Row Percent
Total 102135.0000 72586181.9278 100.0000 0.0000
Yes 12202.0000 9040298.2229 12.4546 0.1869
No 89933.0000 63545883.7049 87.5454 0.1869
DUC_descriptive_sudaan.sas
DUC_descriptive_sudaan.log
DUC_descriptive_sudaan.lst *
46
35
Read Ovr Block Sync Rec Caps

TextPad - [C:\Data SLAITS\MCHB Epi 2006\DUC_descriptive_sudaan.lst *]

File Edit Search View Tools Macros Configure Window Help

Multi-variate Freqs: Overall Health by Asthma Status
Using SUBPOPN Statement - Where RACE = White
12:44 Saturday, December 2, 2006

S U D A A N
Software for the Statistical Analysis of Correlated Data
Copyright Research Triangle Institute February 2005
Release 9.0.1

Number of observations read : 102353 Weighted count : 72736965
Observations in subpopulation : 76403 Weighted count: 48883192
Denominator degrees of freedom : 102302

Date: 12-02-2006 Research Triangle Institute Page : 1
Time: 12:47:00 The CROSSTAB Procedure Table : 1

Variance Estimation Method: Taylor Series (WR)
For Subpopulation: RACER = 1
by: Has a doctor or health professional ever told you that [S.C.] has asthma?, Child Overall Health is Excellent/Very Good.

Has a doctor or health professional ever told you that [S.C.] has asthma? Child Overall Health is Excellent/Very Good	Sample Size	Weighted Size	Row Percent	SE Row Percent
Total				
Total	76237.0000	48784783.8337	100.0000	0.0000
Yes	68466.0000	43104534.2209	88.3565	0.2101
No	7771.0000	5680249.6128	11.6435	0.2101
Yes				
Total	8391.0000	5557150.2948	100.0000	0.0000
Yes	6310.0000	4071695.2139	73.2695	0.8201
No	2081.0000	1485455.0809	26.7305	0.8201
No				
Total	67846.0000	43227633.5389	100.0000	0.0000
Yes	62156.0000	39032839.0071	90.2960	0.2094
No	5690.0000	4194794.5318	9.7040	0.2094

DUC_descriptive_sudaan.sas DUC_descriptive_sudaan.log DUC_descriptive_sudaan.lst *

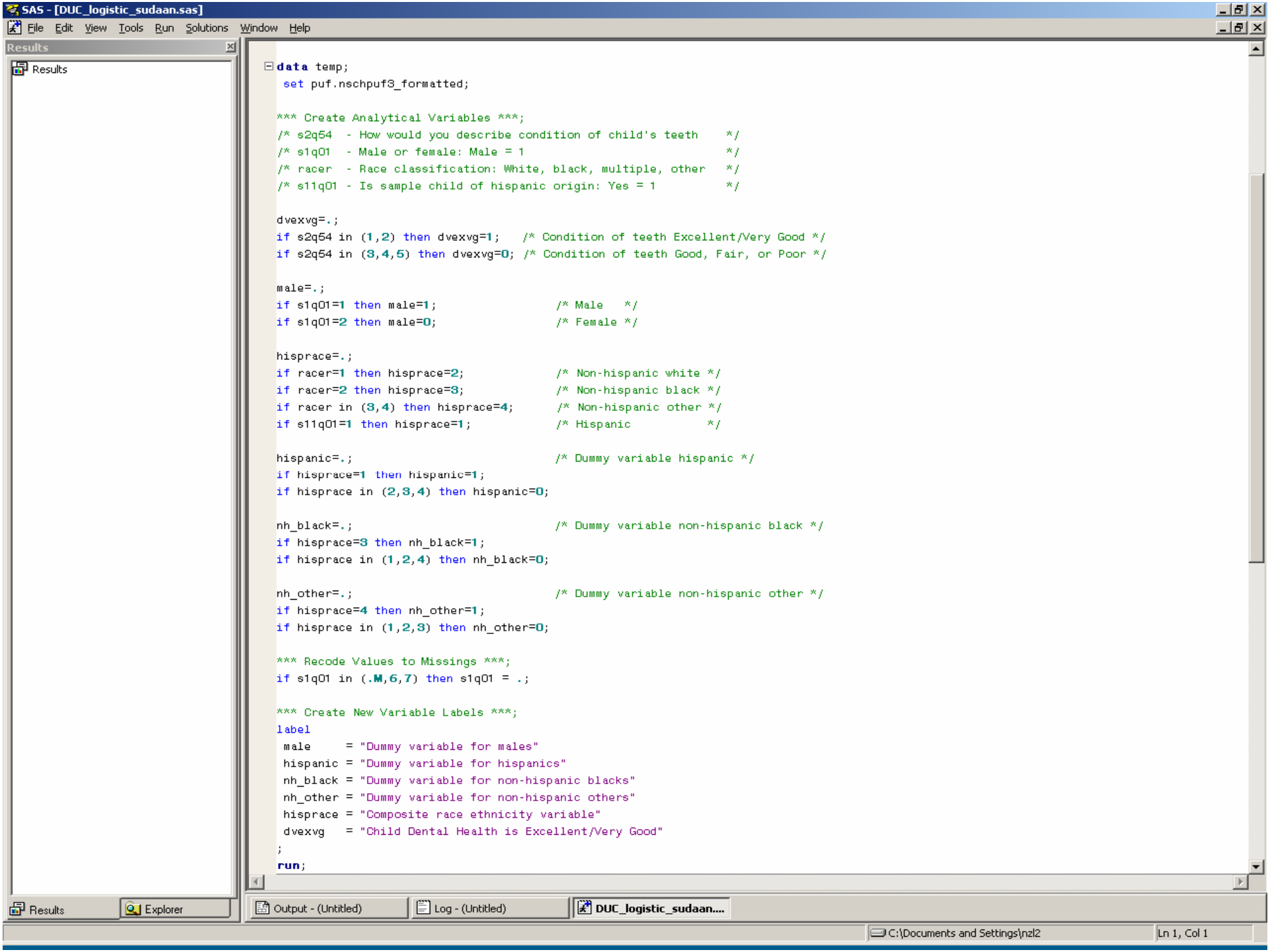
177 35 Read Ovr Block Sync Rec Caps

Logistic Regression: SUDAAN LOGISTIC/RLOGIST Syntax

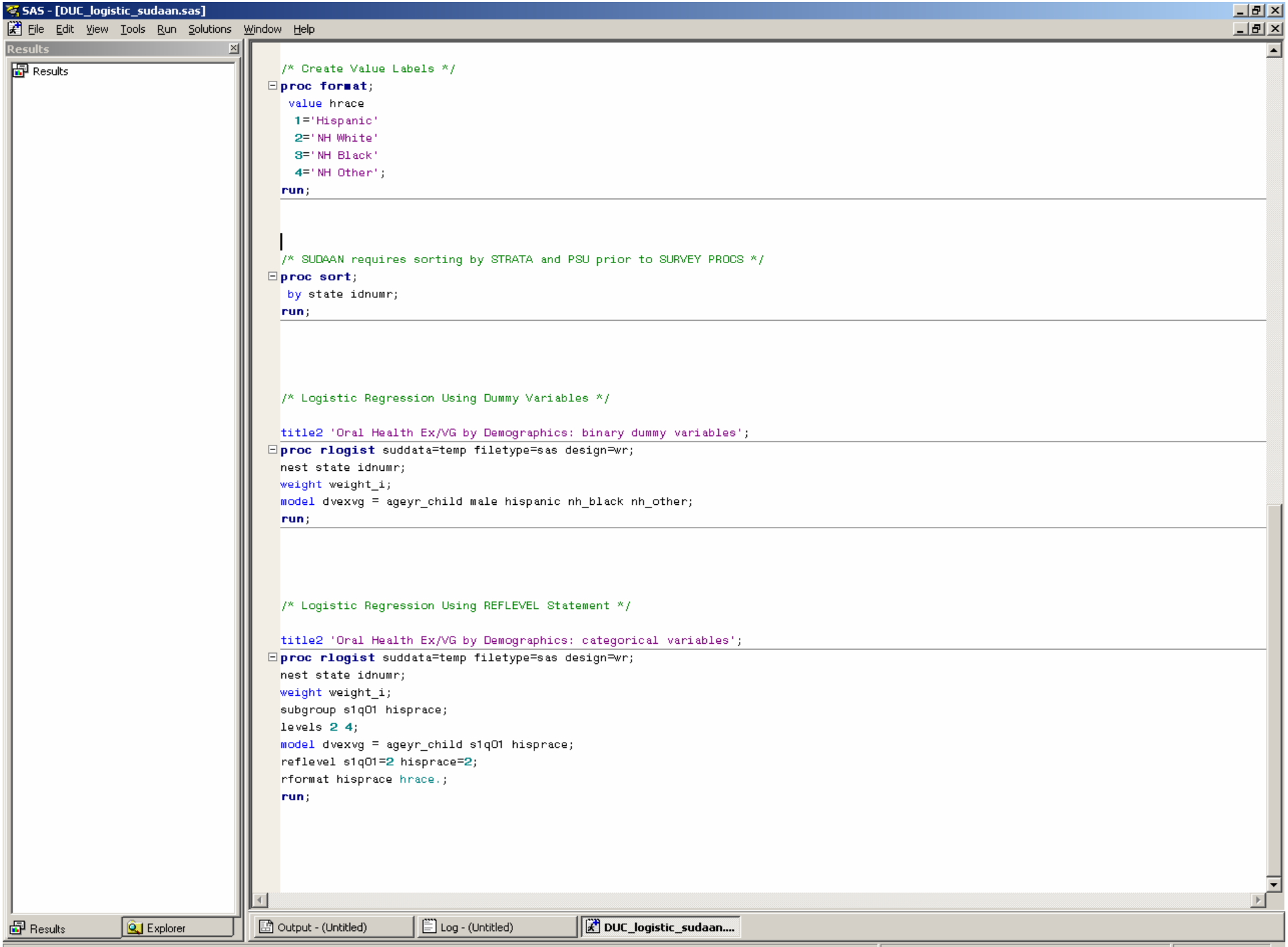
- PROC LOGISTIC DESIGN=WR;
- PROC RLOGIST DESIGN=WR;
  - NEST STATE IDNUMR ;
  - WEIGHT WEIGHT_I ;
  - SUBGROUP IVAR1 IVAR2;
  - LEVELS 2 4
  - MODEL DVAR = IVAR1 IVAR2 IVAR3;
  - REFLEVEL IVAR1=Value1 IVAR2=Value2;

Logistic Regression: SUDAAN LOGISTIC/RLOGIST Syntax

- PROC LOGISTIC DESIGN=WR;
- PROC RLOGIST DESIGN=WR;
  - NEST STATE IDNUMR ;
  - WEIGHT WEIGHT_I ;
  - MODEL DVAR = IVAR1M IVAR2H IVAR2B IVAR2O IVAR3;




```
data temp;
 set puf.nschpuf3_formatted;

*** Create Analytical Variables ***;
/* s2q54  - How would you describe condition of child's teeth    */
/* s1q01  - Male or female: Male = 1                             */
/* racer  - Race classification: White, black, multiple, other   */
/* s11q01 - Is sample child of hispanic origin: Yes = 1          */

dvexvg=.;
if s2q54 in (1,2) then dvexvg=1;   /* Condition of teeth Excellent/Very Good */
if s2q54 in (3,4,5) then dvexvg=0; /* Condition of teeth Good, Fair, or Poor */

male=.;
if s1q01=1 then male=1;                /* Male   */
if s1q01=2 then male=0;                /* Female */

hisprace=.;
if racer=1 then hisprace=2;            /* Non-hispanic white */
if racer=2 then hisprace=3;            /* Non-hispanic black */
if racer in (3,4) then hisprace=4;     /* Non-hispanic other */
if s11q01=1 then hisprace=1;           /* Hispanic           */

hispanic=.;                            /* Dummy variable hispanic */
if hisprace=1 then hispanic=1;
if hisprace in (2,3,4) then hispanic=0;

nh_black=.;                            /* Dummy variable non-hispanic black */
if hisprace=3 then nh_black=1;
if hisprace in (1,2,4) then nh_black=0;

nh_other=.;                            /* Dummy variable non-hispanic other */
if hisprace=4 then nh_other=1;
if hisprace in (1,2,3) then nh_other=0;

*** Recode Values to Missings ***;
if s1q01 in (.M,6,7) then s1q01 = .;

*** Create New Variable Labels ***;
label
 male     = "Dummy variable for males"
 hispanic = "Dummy variable for hispanics"
 nh_black = "Dummy variable for non-hispanic blacks"
 nh_other = "Dummy variable for non-hispanic others"
 hisprace = "Composite race ethnicity variable"
 dvexvg   = "Child Dental Health is Excellent/Very Good"
;
run;
```


SAS - [DUC_logistic_sudaan.sas]
File Edit View Tools Run Solutions Window Help
Results
Results
/* Create Value Labels */
proc format;
value hrace
1='Hispanic'
2='NH White'
3='NH Black'
4='NH Other';
run;
/* SUDAAN requires sorting by STRATA and PSU prior to SURVEY PROCS */
proc sort;
by state idnumr;
run;
/* Logistic Regression Using Dummy Variables */
title2 'Oral Health Ex/VG by Demographics: binary dummy variables';
proc rlogist suddata=temp filetype=sas design=wr;
nest state idnumr;
weight weight_i;
model dvexvg = ageyr_child male hispanic nh_black nh_other;
run;
/* Logistic Regression Using REFLEVEL Statement */
title2 'Oral Health Ex/VG by Demographics: categorical variables';
proc rlogist suddata=temp filetype=sas design=wr;
nest state idnumr;
weight weight_i;
subgroup s1q01 hisprace;
levels 2 4;
model dvexvg = ageyr_child s1q01 hisprace;
reflevel s1q01=2 hisprace=2;
rformat hisprace hrace.;
run;
Results
Explorer
Output - (Untitled)
Log - (Untitled)
DUC_logistic_sudaan....
File saved successfully.
C:\Documents and Settings\nzl2
Ln 76, Col 1

Response variable DVEXVG: Child Dental Health is Excellent/Very Good
by: Independent Variables and Effects.

Independent Variables and Effects	Beta Coeff.	SE Beta	Lower 95% Limit Beta	Upper 95% Limit Beta	T-Test B=0	P-value T-Test B=0
Intercept	1.65	0.03	1.59	1.72	49.89	0.0000
Derived. Age in years of selected child	-0.04	0.00	-0.05	-0.04	-16.97	0.0000
Dummy variable for males	-0.09	0.03	-0.15	-0.04	-3.48	0.0005
Dummy variable for hispanics	-1.36	0.04	-1.44	-1.29	-36.47	0.0000
Dummy variable for non-hispanic blacks	-0.73	0.04	-0.81	-0.66	-19.10	0.0000
Dummy variable for non-hispanic others	-0.44	0.06	-0.56	-0.32	-7.04	0.0000

by: Contrast.

Contrast	Degrees of Freedom	Wald F	P-value Wald F
OVERALL MODEL	6	1014.69	0.0000
MODEL MINUS INTERCEPT	5	335.56	0.0000
INTERCEPT	1	2488.62	0.0000
AGEYR_CHILD	1	288.12	0.0000
MALE	1	12.14	0.0005
HISPANIC	1	1330.12	0.0000
NH_BLACK	1	364.99	0.0000
NH_OTHER	1	49.59	0.0000

by: Independent Variables and Effects.

Independent Variables and Effects	Odds Ratio	Lower 95% Limit OR	Upper 95% Limit OR
Intercept	5.23	4.90	5.58
Derived. Age in years of selected child	0.96	0.95	0.96
Dummy variable for males	0.91	0.86	0.96
Dummy variable for hispanics	0.26	0.24	0.28
Dummy variable for non-hispanic blacks	0.48	0.45	0.52
Dummy variable for non-hispanic others	0.64	0.57	0.73

Response variable DVEXVG: Child Dental Health is Excellent/Very Good
by: Independent Variables and Effects.

Independent Variables and Effects	Beta Coeff.	SE Beta	Lower 95% Limit Beta	Upper 95% Limit Beta	T-Test B=0	P-value T-Test B=0
Intercept	1.65	0.03	1.59	1.72	49.89	0.0000
Derived. Age in years of selected child	-0.04	0.00	-0.05	-0.04	-16.97	0.0000
Is [S.C.] male or female?						
1 - MALE	-0.09	0.03	-0.15	-0.04	-3.48	0.0005
2 - FEMALE	0.00	0.00	0.00	0.00	.	.
Composite race ethnicity variable						
Hispanic	-1.36	0.04	-1.44	-1.29	-36.47	0.0000
NH White	0.00	0.00	0.00	0.00	.	.
NH Black	-0.73	0.04	-0.81	-0.66	-19.10	0.0000
NH Other	-0.44	0.06	-0.56	-0.32	-7.04	0.0000

Response variable DVEXVG: Child Dental Health is Excellent/Very Good
by: Contrast.

Contrast	Degrees of Freedom	Wald F	P-value Wald F
OVERALL MODEL	6	1014.69	0.0000
MODEL MINUS INTERCEPT	5	335.56	0.0000
INTERCEPT	.	.	.
AGEYR_CHILD	1	288.12	0.0000
S1Q01	1	12.14	0.0005
HISPRACE	3	499.86	0.0000

Response variable DVEXVG: Child Dental Health is Excellent/Very Good
by: Independent Variables and Effects.

Independent Variables and Effects	Odds Ratio	Lower 95% Limit OR	Upper 95% Limit OR
Intercept	5.23	4.90	5.58
Derived. Age in years of selected child	0.96	0.95	0.96
Is [S.C.] male or female?			
1 - MALE	0.91	0.86	0.96
2 - FEMALE	1.00	1.00	1.00
Composite race ethnicity variable			
Hispanic	0.26	0.24	0.28
NH White	1.00	1.00	1.00
NH Black	0.48	0.45	0.52
NH Other	0.64	0.57	0.73

Frequency Distributions: SAS SURVEYFREQ Syntax

- PROC SURVEYFREQ;
  - STRATA STATE;
  - CLUSTER IDNUMR;
  - WEIGHT WEIGHT_I;
  - TABLES VAR1 VAR2*VAR3 / display options;
  - FORMAT VAR1 fmt1. VAR2 fmt2.;

SAS - [DUC_descriptive_sas.sas]

File Edit View Tools Run Solutions Window Help

Results

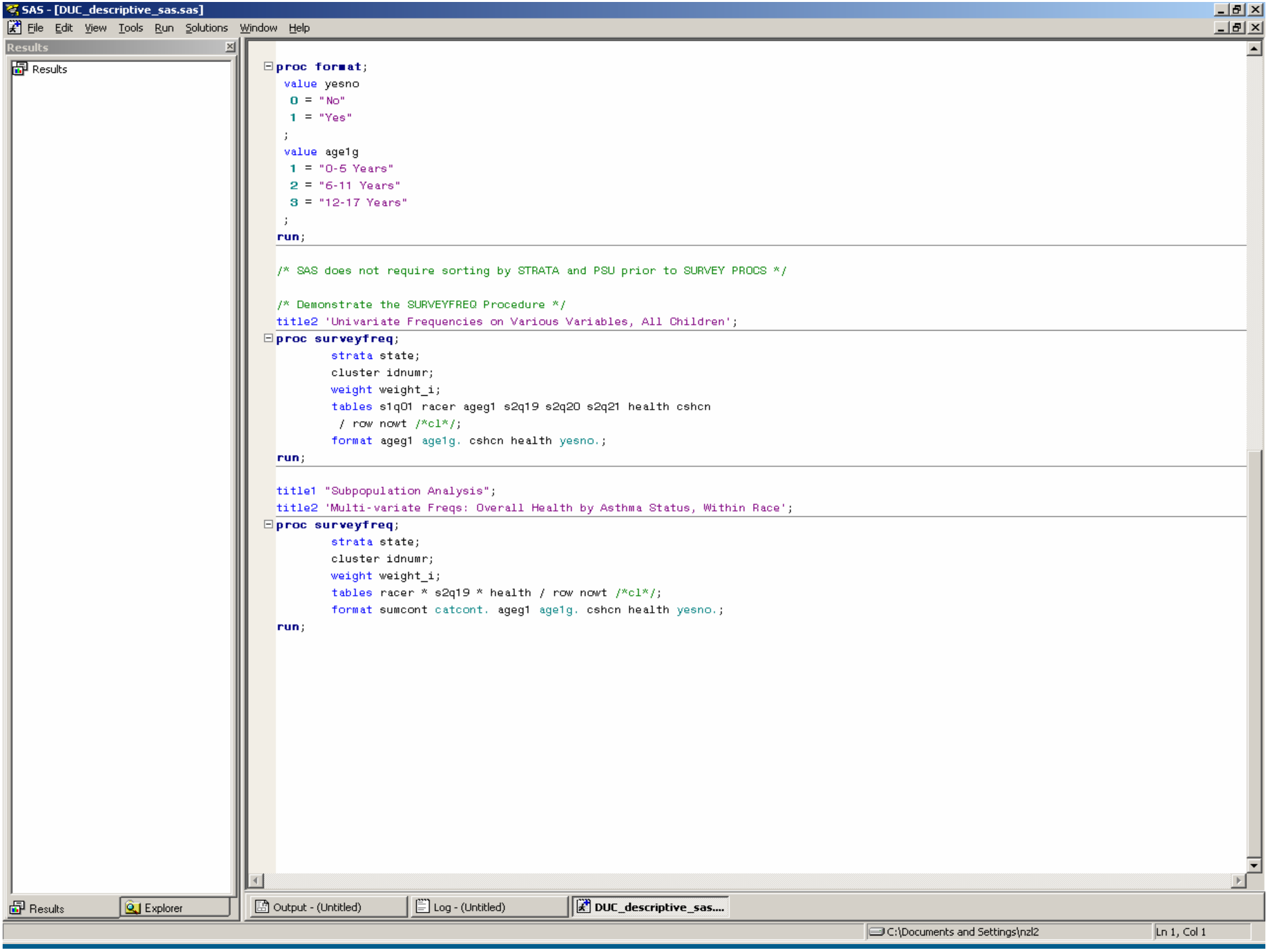
Results

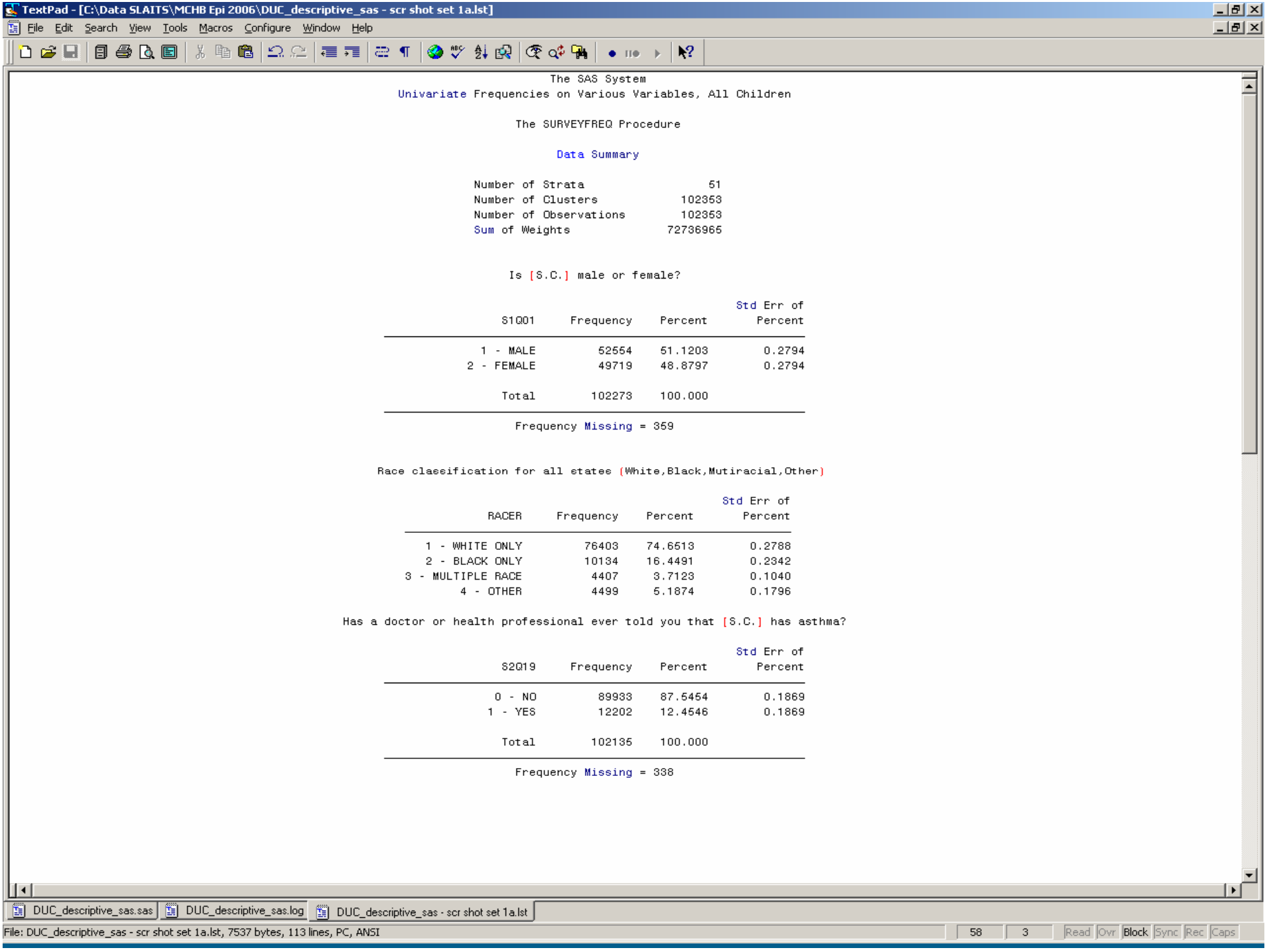
```
*** Create Analytical Variables ***;
/* Use Special Needs Screener to Classify a Child as Having a Special Need */
cshcn=0;
if s2q06=1 or s2q09=1 or s2q12=1 or s2q15=1 or s2q17=1 then cshcn=1;

/* s2q06  - Prescription Meds for a condition of 12 months or longer        */
/* s2q09  - Medical care, mental health, ed services for 12 months or longer */
/* s2q12  - Limitation in abilities for a condition for 12 months or longer  */
/* s2q15  - Need special therapy for a condition for 12 months or longer     */
/* s2q17  - Emotional, behav problem for a condition for 12 months or longer */

health = .;
if s2q01 in (1,2)   then health=1; /* Health Status Excellent/Very Good */
if s2q01 in (3,4,5) then health=0; /* Health Status Good/Fair/Poor      */

ageg1 = .;
if 0  <= ageyr_child <= 5  then ageg1 = 1;
if 6  <= ageyr_child <= 11 then ageg1 = 2;
if 12 <= ageyr_child <= 17 then ageg1 = 3;

/* s1q01  - Male or Female                                  */
/* s2q19  - Ever told by doctor had asthma                  */
/* s2q20  - Ever told by doctor had hearing or vision problems */
/* s2q21  - Ever told by doctor had ADD                     */
/* racer  - Race classification                             */
/* s4q06r - How many times gone to doctor for sick care     */

*** Recode Values to Missings ***;
array amiss(*) s1q01 s2q19 s2q20 s2q21 racer;
do i = 1 to dim(amiss);
 if amiss(i) in (6 7 .L .M .N ) then amiss(i) = .;
end;
if s4q06r in (96 97 .L .M .N) then s4q06r = .;

*** Create New Variable Labels ***;
label
 cshcn   = "Child has Special Health Care Needs"
 health  = "Child Overall Health is Excellent/Very Good"
 ageg1   = "Age of Child Grouping 1"
;
run;

proc format;
 value yesno
  0 = "No"
  1 = "Yes"
 ;
 value age1g
  1 = "0-5 Years"
```

Results Explorer

Output - (Untitled) Log - (Untitled) DUC_descriptive_sas....

C:\Documents and Settings\nzl2 Ln 1, Col 1


SAS - [DUC_descriptive_sas.sas]
File Edit View Tools Run Solutions Window Help
Results
Results
Results Explorer
proc format;
value yesno
0 = "No"
1 = "Yes"
;
value age1g
1 = "0-5 Years"
2 = "6-11 Years"
3 = "12-17 Years"
;
run;
/* SAS does not require sorting by STRATA and PSU prior to SURVEY PROCS */
/* Demonstrate the SURVEYFREQ Procedure */
title2 'Univariate Frequencies on Various Variables, All Children';
proc surveyfreq;
strata state;
cluster idnumr;
weight weight_i;
tables s1q01 racer ageg1 s2q19 s2q20 s2q21 health cshcn
/ row nowt /*cl*/;
format ageg1 age1g. cshcn health yesno.;
run;
title1 "Subpopulation Analysis";
title2 'Multi-variate Freqs: Overall Health by Asthma Status, Within Race';
proc surveyfreq;
strata state;
cluster idnumr;
weight weight_i;
tables racer * s2q19 * health / row nowt /*cl*/;
format sumcont catcont. ageg1 age1g. cshcn health yesno.;
run;
Output - (Untitled)
Log - (Untitled)
DUC_descriptive_sas....
C:\Documents and Settings\nzl2
Ln 1, Col 1


TextPad - [C:\Data SLAITS\MCHB Epi 2006\DUC_descriptive_sas - scr shot set 1a.lst]
File Edit Search View Tools Macros Configure Window Help
The SAS System
Univariate Frequencies on Various Variables, All Children
The SURVEYFREQ Procedure
Data Summary
Number of Strata 51
Number of Clusters 102353
Number of Observations 102353
Sum of Weights 72736965
Is [S.C.] male or female?
S1Q01 Frequency Percent Std Err of Percent
1 - MALE 52554 51.1203 0.2794
2 - FEMALE 49719 48.8797 0.2794
Total 102273 100.000
Frequency Missing = 359
Race classification for all states (White,Black,Mutiracial,Other)
RACER Frequency Percent Std Err of Percent
1 - WHITE ONLY 76403 74.6513 0.2788
2 - BLACK ONLY 10134 16.4491 0.2342
3 - MULTIPLE RACE 4407 3.7123 0.1040
4 - OTHER 4499 5.1874 0.1796
Has a doctor or health professional ever told you that [S.C.] has asthma?
S2Q19 Frequency Percent Std Err of Percent
0 - NO 89933 87.5454 0.1869
1 - YES 12202 12.4546 0.1869
Total 102135 100.000
Frequency Missing = 338
DUC_descriptive_sas.sas
DUC_descriptive_sas.log
DUC_descriptive_sas - scr shot set 1a.lst
File: DUC_descriptive_sas - scr shot set 1a.lst, 7537 bytes, 113 lines, PC, ANSI
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The SURVEYFREQ Procedure

Data Summary

Number of Strata	51
Number of Clusters	102353
Number of Observations	102353
Sum of Weights	72736965

Table of S2Q19 by health
Controlling for RACER=1 - WHITE ONLY

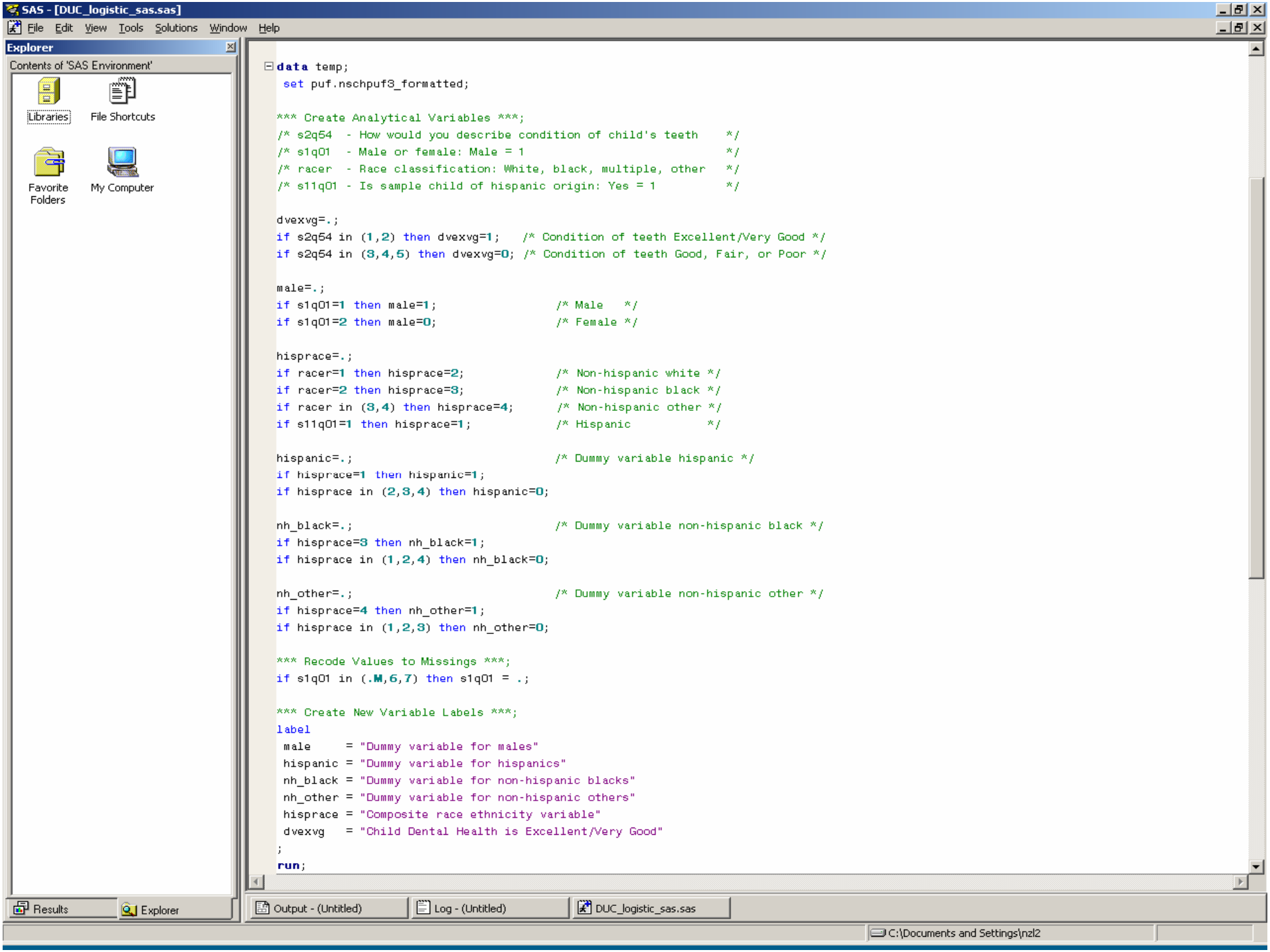
S2Q19	health	Frequency	Percent	Std Err of Percent	Row Percent	Std Err of Row Percent
0 - NO	No	5690	8.5986	0.1868	9.7040	0.2093
	Yes	62156	80.0103	0.2528	90.2960	0.2093
	Total	67846	88.6088	0.1949	100.000	
1 - YES	No	2081	3.0449	0.1085	26.7305	0.8201
	Yes	6310	8.3462	0.1680	73.2695	0.8201
	Total	8391	11.3912	0.1949	100.000	
Total	No	7771	11.6435	0.2100		
	Yes	68466	88.3565	0.2100		
	Total	76237	100.000			

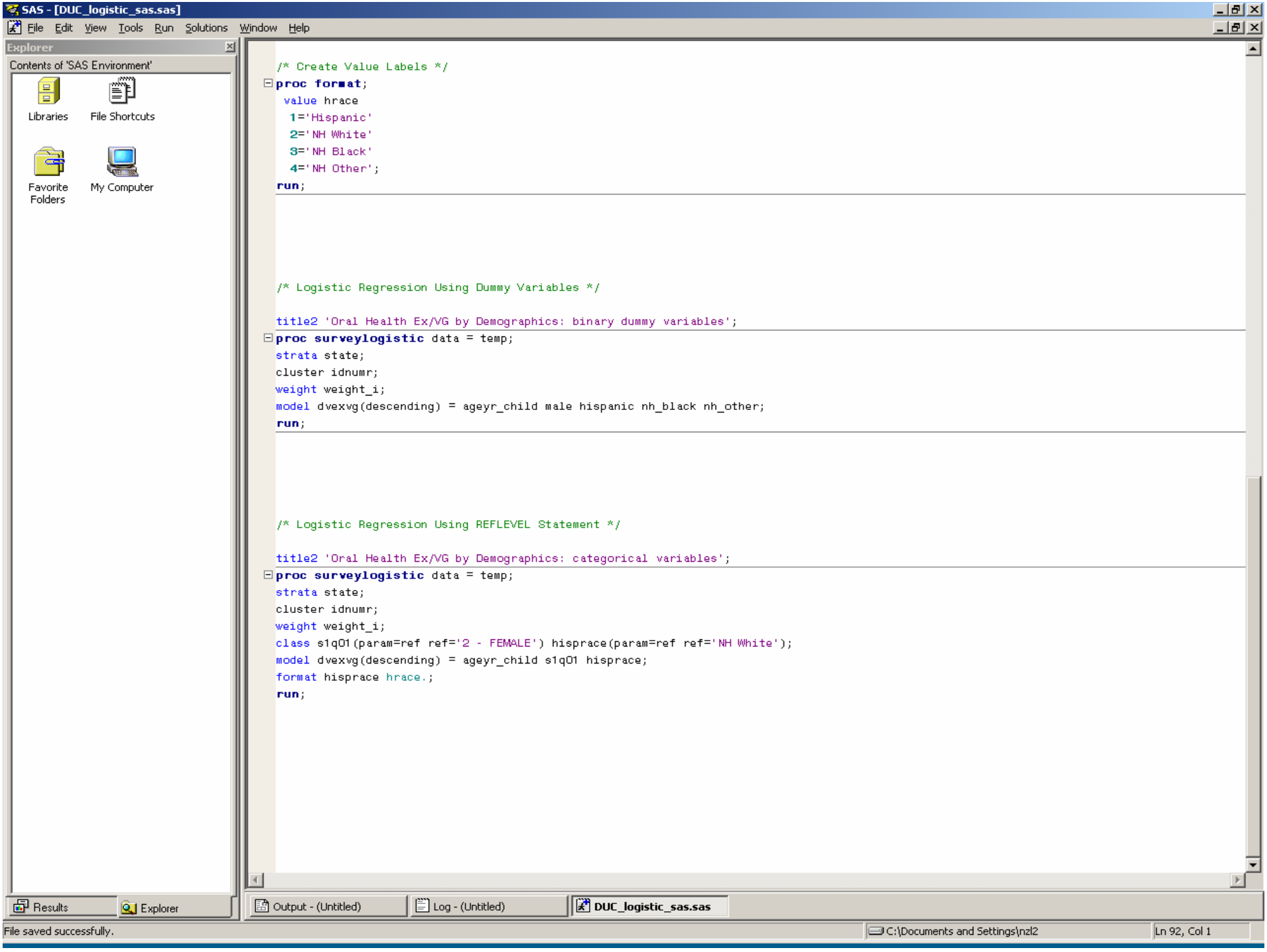
Logistic Regression: SAS SURVEYLOGISTIC Syntax

- PROC SURVEYLOGISTIC;
  - STRATA STATE ;
  - CLUSTER IDNUMR ;
  - WEIGHT WEIGHT_I ;
  - CLASS IVAR1 (param=ref ref='VALUE');
  - MODEL DVAR = IVAR1 IVAR2 IVAR3;
  - FORMAT IVAR1 fmt1. IVAR2 fmt2.;

Logistic Regression: SAS SURVEYLOGISTIC Syntax

- PROC SURVEYLOGISTIC;
  - STRATA STATE ;
  - CLUSTER IDNUMR ;
  - WEIGHT WEIGHT_I ;
  - MODEL DVAR = IVAR1M IVAR2 IVAR3;
  - FORMAT IVAR1 fmt1. IVAR2 fmt2.;


SAS - [DUC_logistic_sas.sas]
File Edit View Tools Solutions Window Help
Explorer
Contents of 'SAS Environment'
Libraries
File Shortcuts
Favorite Folders
My Computer
Results
Explorer
data temp;
set puf.nschpuf8_formatted;
*** Create Analytical Variables ***;
/* s2q54 - How would you describe condition of child's teeth */
/* s1q01 - Male or female: Male = 1 */
/* racer - Race classification: White, black, multiple, other */
/* s11q01 - Is sample child of hispanic origin: Yes = 1 */
dvexvg=.;
if s2q54 in (1,2) then dvexvg=1; /* Condition of teeth Excellent/Very Good */
if s2q54 in (3,4,5) then dvexvg=0; /* Condition of teeth Good, Fair, or Poor */
male=.;
if s1q01=1 then male=1; /* Male */
if s1q01=2 then male=0; /* Female */
hisprace=.;
if racer=1 then hisprace=2; /* Non-hispanic white */
if racer=2 then hisprace=3; /* Non-hispanic black */
if racer in (3,4) then hisprace=4; /* Non-hispanic other */
if s11q01=1 then hisprace=1; /* Hispanic */
hispanic=.; /* Dummy variable hispanic */
if hisprace=1 then hispanic=1;
if hisprace in (2,3,4) then hispanic=0;
nh_black=.; /* Dummy variable non-hispanic black */
if hisprace=3 then nh_black=1;
if hisprace in (1,2,4) then nh_black=0;
nh_other=.; /* Dummy variable non-hispanic other */
if hisprace=4 then nh_other=1;
if hisprace in (1,2,3) then nh_other=0;
*** Recode Values to Missings ***;
if s1q01 in (.M,6,7) then s1q01 = .;
*** Create New Variable Labels ***;
label
male = "Dummy variable for males"
hispanic = "Dummy variable for hispanics"
nh_black = "Dummy variable for non-hispanic blacks"
nh_other = "Dummy variable for non-hispanic others"
hisprace = "Composite race ethnicity variable"
dvexvg = "Child Dental Health is Excellent/Very Good"
;
run;
Output - (Untitled)
Log - (Untitled)
DUC_logistic_sas.sas
C:\Documents and Settings\nzl2


SAS - [DUC_logistic_sas.sas]
File Edit View Tools Run Solutions Window Help
Explorer
Contents of 'SAS Environment'
Libraries
File Shortcuts
Favorite Folders
My Computer
Results
Explorer
/* Create Value Labels */
proc format;
value hrace
1='Hispanic'
2='NH White'
3='NH Black'
4='NH Other';
run;
/* Logistic Regression Using Dummy Variables */
title2 'Oral Health Ex/VG by Demographics: binary dummy variables';
proc surveylogistic data = temp;
strata state;
cluster idnumr;
weight weight_i;
model dvexvg(descending) = ageyr_child male hispanic nh_black nh_other;
run;
/* Logistic Regression Using REFLEVEL Statement */
title2 'Oral Health Ex/VG by Demographics: categorical variables';
proc surveylogistic data = temp;
strata state;
cluster idnumr;
weight weight_i;
class s1q01(param=ref ref='2 - FEMALE') hisprace(param=ref ref='NH White');
model dvexvg(descending) = ageyr_child s1q01 hisprace;
format hisprace hrace.;
run;
Output - (Untitled)
Log - (Untitled)
DUC_logistic_sas.sas
File saved successfully.
C:\Documents and Settings\nzl2
Ln 92, Col 1

TextPad - [C:\Data SLAITS\MCHB Epi 2006\DUC_logistic_sas - scr shot set 1.lst]

File Edit Search View Tools Macros Configure Window Help

The SAS System 14:32
Oral Health Ex/VG by Demographics: binary dummy variables

The SURVEYLOGISTIC Procedure

Testing Global Null Hypothesis: BETA=0

Test	Chi-Square	DF	Pr > ChiSq
Likelihood Ratio	4528247.43	5	<.0001
Score	4628495.06	5	<.0001
Wald	1677.8326	5	<.0001

Analysis of Maximum Likelihood Estimates

Parameter	DF	Estimate	Standard Error	Wald Chi-Square	Pr > ChiSq
Intercept	1	1.6545	0.0332	2488.5080	<.0001
AGEYR_CHILD	1	-0.0449	0.00264	288.1062	<.0001
male	1	-0.0938	0.0269	12.1380	0.0005
hispanic	1	-1.3627	0.0374	1330.1952	<.0001
nh_black	1	-0.7330	0.0384	364.9904	<.0001
nh_other	1	-0.4400	0.0625	49.5898	<.0001

Odds Ratio Estimates

Effect	Point Estimate	95% Wald Confidence Limits	
AGEYR_CHILD	0.956	0.951	0.961
male	0.910	0.864	0.960
hispanic	0.256	0.238	0.275
nh_black	0.480	0.446	0.518
nh_other	0.644	0.570	0.728

Association of Predicted Probabilities and Observed Responses

Percent Concordant	61.1	Somers' D	0.245
Percent Discordant	36.6	Gamma	0.251
Percent Tied	2.3	Tau-a	0.097
Pairs	1752983040	c	0.623

DUC_logistic_sas.sas | DUC_logistic_sas.log | DUC_logistic_sas - scr shot set 1.lst

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TextPad - [C:\Data SLAITS\MCHB Epi 2006\DUC_logistic_sas - scr shot set 1.lst *]

File Edit Search View Tools Macros Configure Window Help

The SAS System
Oral Health Ex/VG by Demographics: categorical variables

The SURVEYLOGISTIC Procedure

Testing Global Null Hypothesis: BETA=0

Test	Chi-Square	DF	Pr > ChiSq
Likelihood Ratio	4528247.43	5	<.0001
Score	4628495.06	5	<.0001
Wald	1677.8326	5	<.0001

Analysis of Maximum Likelihood Estimates

Parameter		DF	Estimate	Standard Error	Wald Chi-Square	Pr > ChiSq
Intercept		1	1.6545	0.0332	2488.5080	<.0001
AGEYR_CHILD		1	-0.0449	0.00264	288.1062	<.0001
S1Q01	1 - MALE	1	-0.0938	0.0269	12.1380	0.0005
hisprace	Hispanic	1	-1.3627	0.0374	1330.1952	<.0001
hisprace	NH Black	1	-0.7330	0.0384	364.9904	<.0001
hisprace	NH Other	1	-0.4400	0.0625	49.6898	<.0001

Odds Ratio Estimates

Effect			Point Estimate	95% Wald Confidence Limits	
AGEYR_CHILD			0.956	0.951	0.961
S1Q01	1 - MALE	vs 2 - FEMALE	0.910	0.864	0.960
hisprace	Hispanic	vs NH White	0.256	0.238	0.275
hisprace	NH Black	vs NH White	0.480	0.446	0.518
hisprace	NH Other	vs NH White	0.644	0.570	0.728

Association of Predicted Probabilities and Observed Responses

Percent Concordant	61.1	Somers' D	0.245
Percent Discordant	36.6	Gamma	0.251
Percent Tied	2.3	Tau-a	0.097
Pairs	1752983040	c	0.623

DUC_logistic_sas.sas | DUC_logistic_sas.log | DUC_logistic_sas - scr shot set 1.lst *

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Frequency Distributions: STATA SVY: TABULATE Syntax

- SVYSET [PWEIGHT=WEIGHT_I], STRATA(STATE) PSU(IDNUMR)

- SVY:TABULATE V1 V2
  - Declare analysis variables
  - Declare the method used for variance estimation
  - Request specific table items such a standard errors, confidence limits, and row or column proportions
  - Request additional test statistics such as Chi-square or likelihood ratios
  - Define subgroup analyses

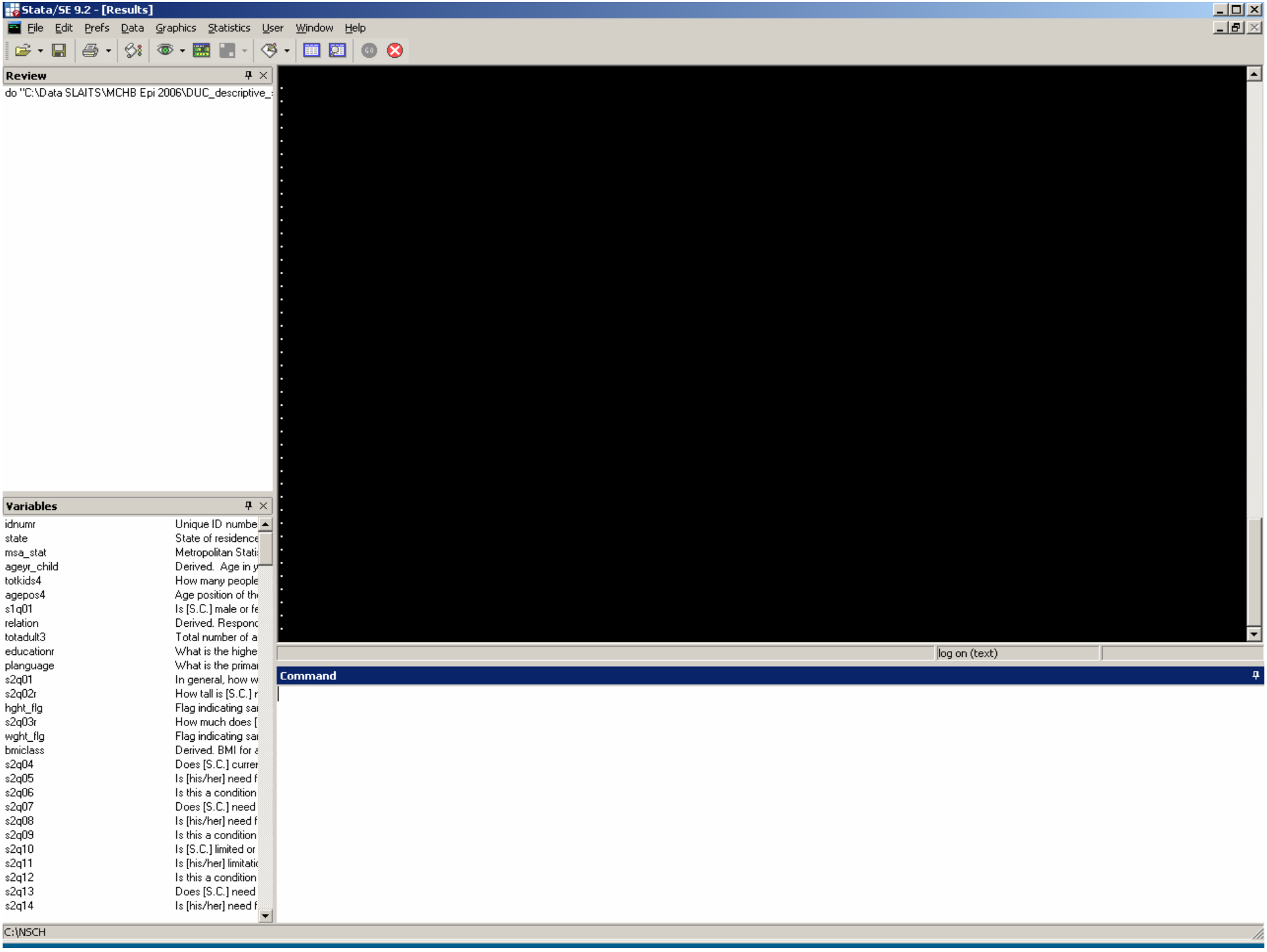
TextPad - [C:\Data SLAITS\MCHB Epi 2006\DUC_descriptive_stata.do]

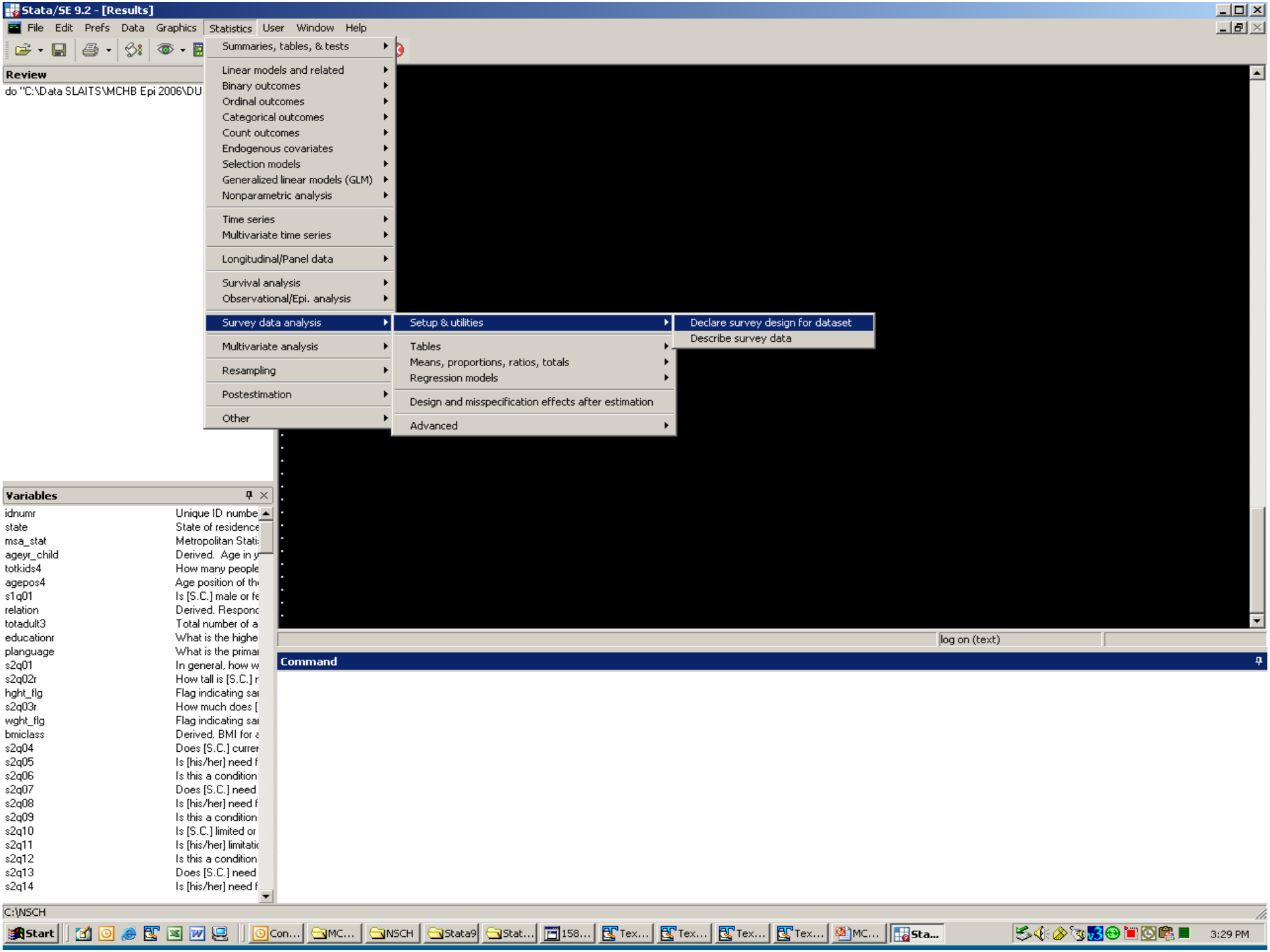
File Edit Search View Tools Macros Configure Window Help

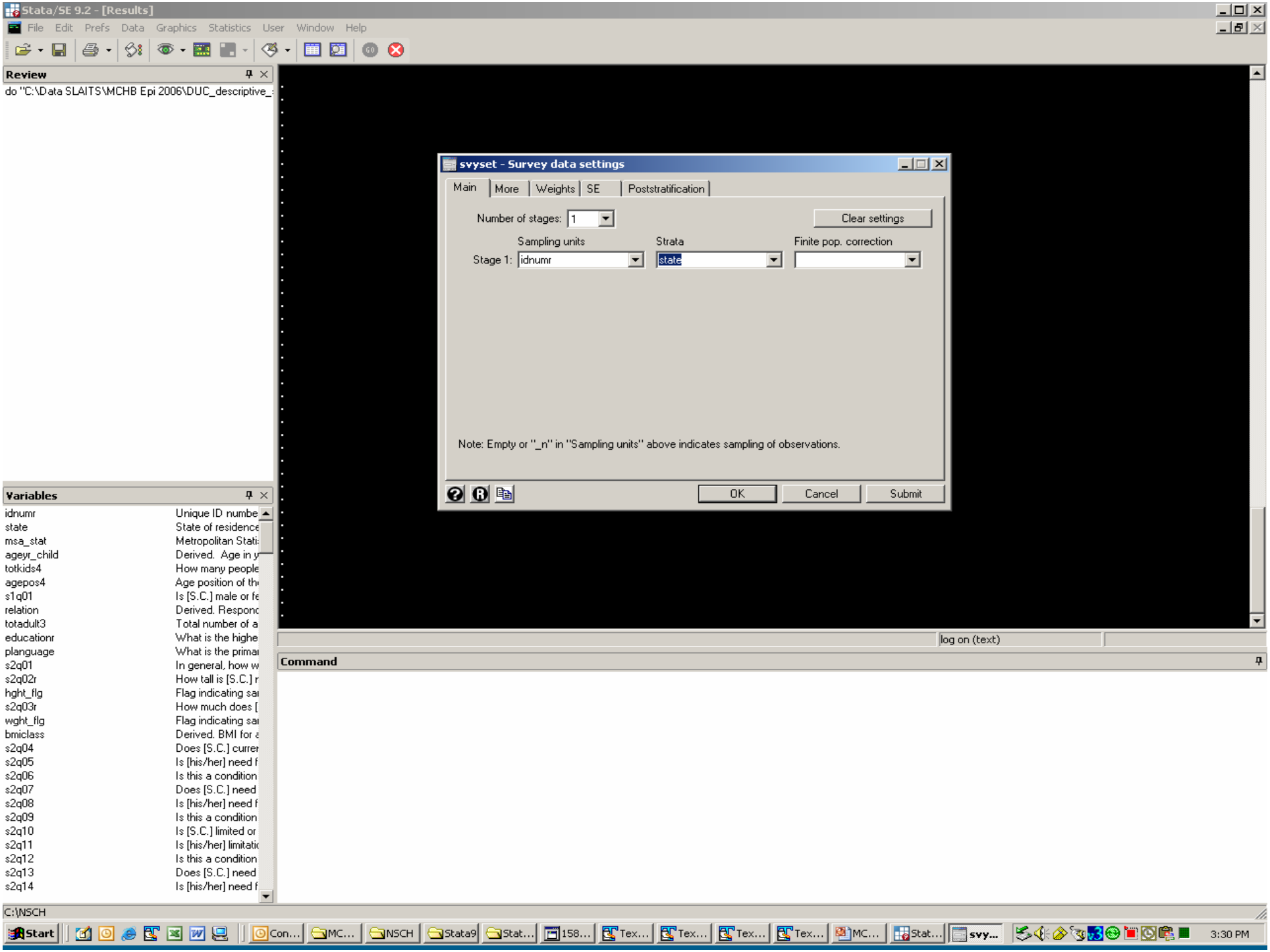
```
*** create analytical variables ***;
*** Use Special Needs Screener to Classify a Child as Having a Special Need ***;
generate cshcn = 0;
replace cshcn = 1 if s2q06==1 | s2q09==1 | s2q12==1 | s2q15==1 | s2q17==1;

** s2q06  - Prescription Meds for a condition of 12 months or longer         **;
** s2q09  - Medical care, mental health, ed services for 12 months or longer **;
** s2q12  - Limitation in abilities for a condition for 12 months or longer  **;
** s2q15  - Need special therapy for a condition for 12 months or longer     **;
** s2q17  - Emotional, behav problem for a condition for 12 months or longer **;

generate health = .;
replace health = 1 if s2q01==1 | s2q01==2;
replace health = 0 if s2q01==3 | s2q01==4 | s2q01==5;

generate ageg1 = .;
replace ageg1 = 1 if ageyr_child <= 5;
replace ageg1 = 2 if ageyr_child >= 6 & ageyr_child <= 11;
replace ageg1 = 3 if ageyr_child >= 12 & ageyr_child <= 17;

* s1q01  - Male or Female                                  ;
* s2q19  - Ever told by doctor had asthma                  ;
* s2q20  - Ever told by doctor had hearing or vision problems ;
* s2q21  - Ever told by doctor had ADD                     ;
* racer  - Race classification                             ;
* s4q06r - How many times gone to doctor for sick care     ;

*** Recode values to missings ***;
recode s1q01 6 7 96 97 .l .m .n = .;
recode s2q19 6 7 96 97 .l .m .n = .;
recode s2q20 6 7 96 97 .l .m .n = .;
recode s2q21 6 7 96 97 .l .m .n = .;
recode racer 6 7 96 97 .l .m .n = .;
recode s4q06r 96 97 .l .m .n = .;

*** Create new variable labels ***;
label variable cshcn "Child has Special Health Care Needs";
label variable health "Child Overall Health is Excellent/Very Good";
label variable ageg1 "Age of Child Grouping 1";

*** Create variable value formats ***;
label define yesno
  0  "No"
  1  "Yes"
;
label define age1g
  1  "0-5 Years"
  2  "6-11 Years"
  3  "12-17 Years"
;

label values health yesno;
label values cshcn yesno;
label values ageg1 age1g;
```

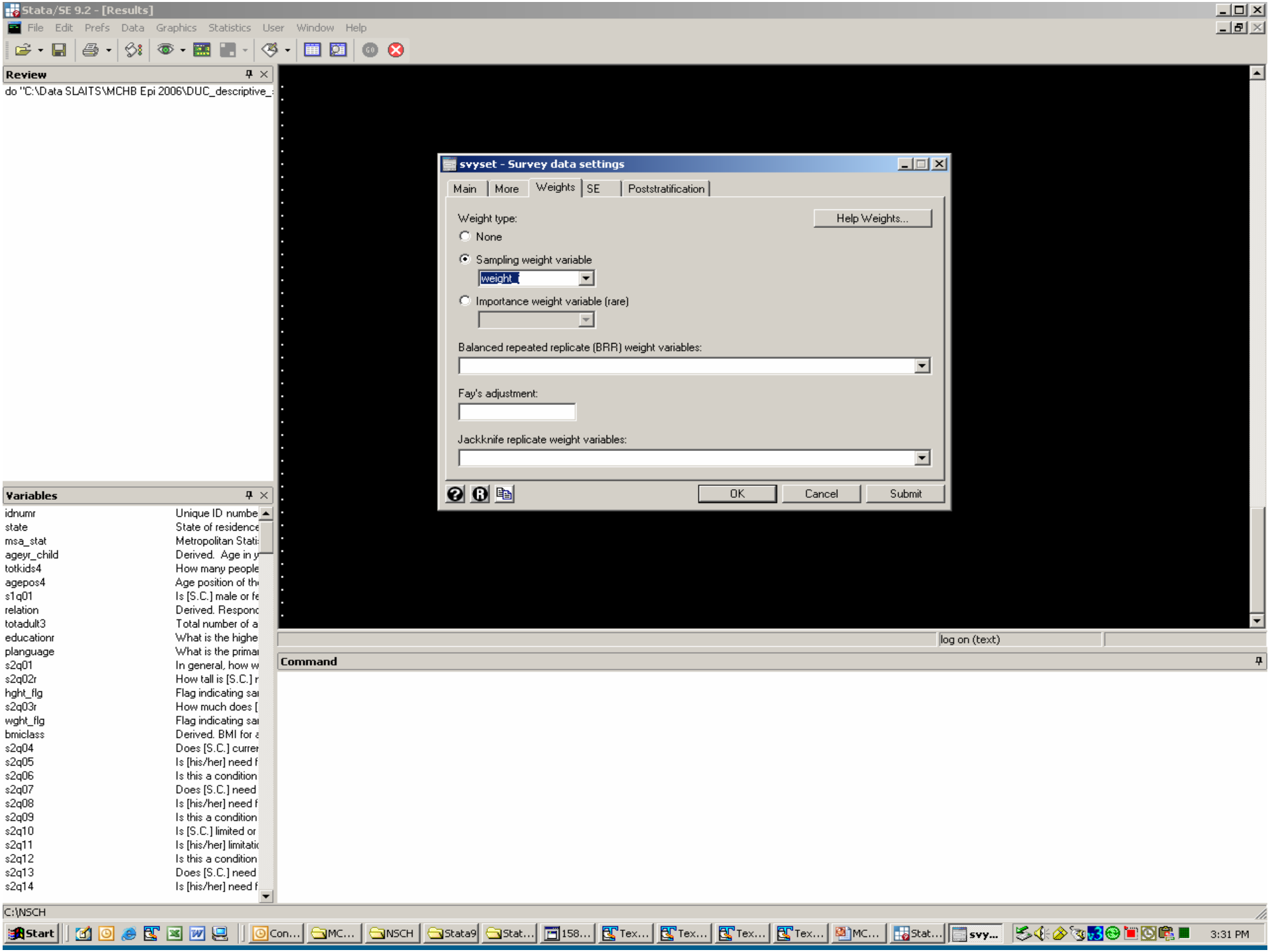
DUC_descriptive_stata.do

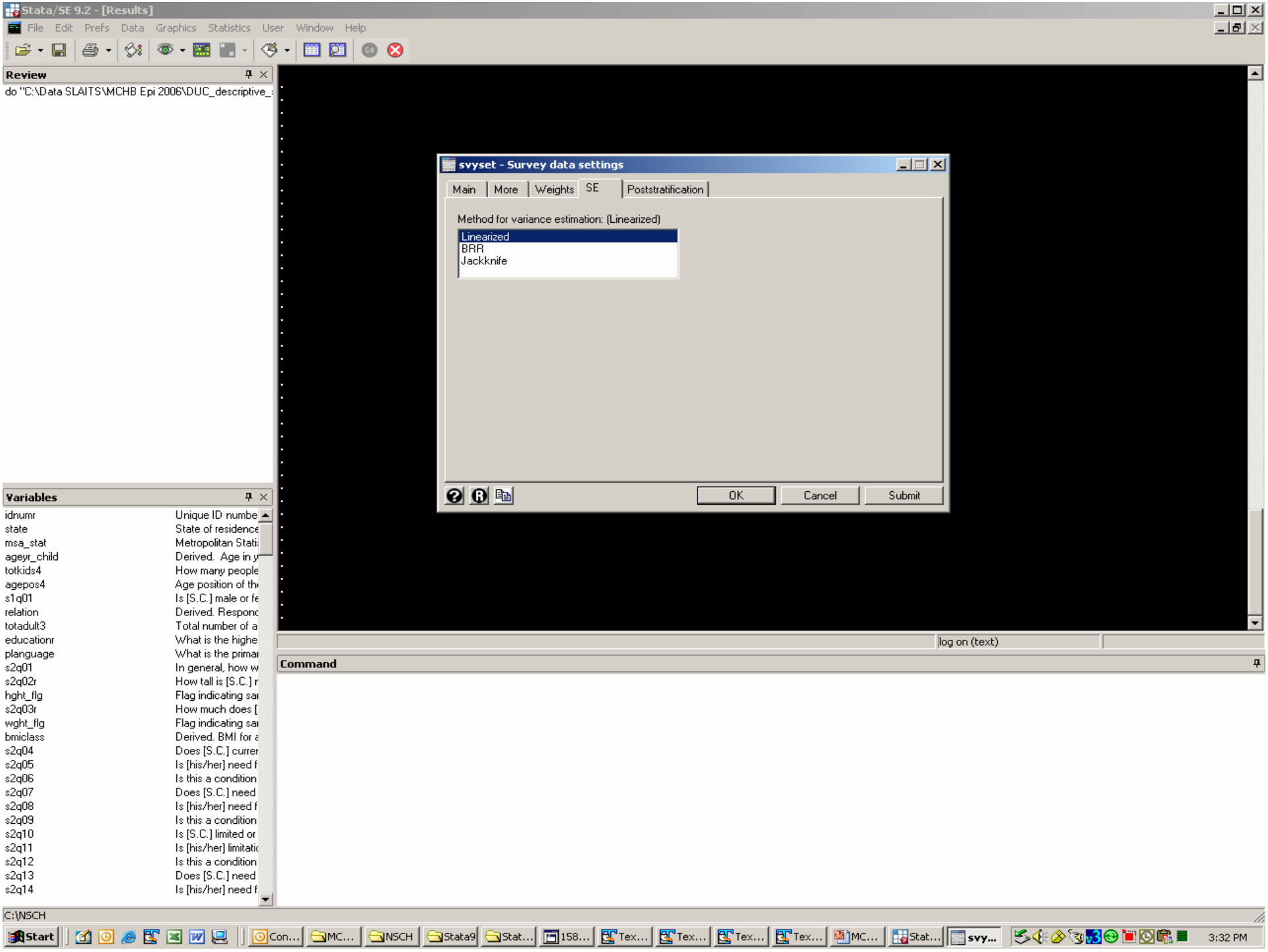
File: DUC_descriptive_stata.do, 4440 bytes, 130 lines, PC, ANSI | 89 | 1 | Read Ovr Block Sync Rec Caps

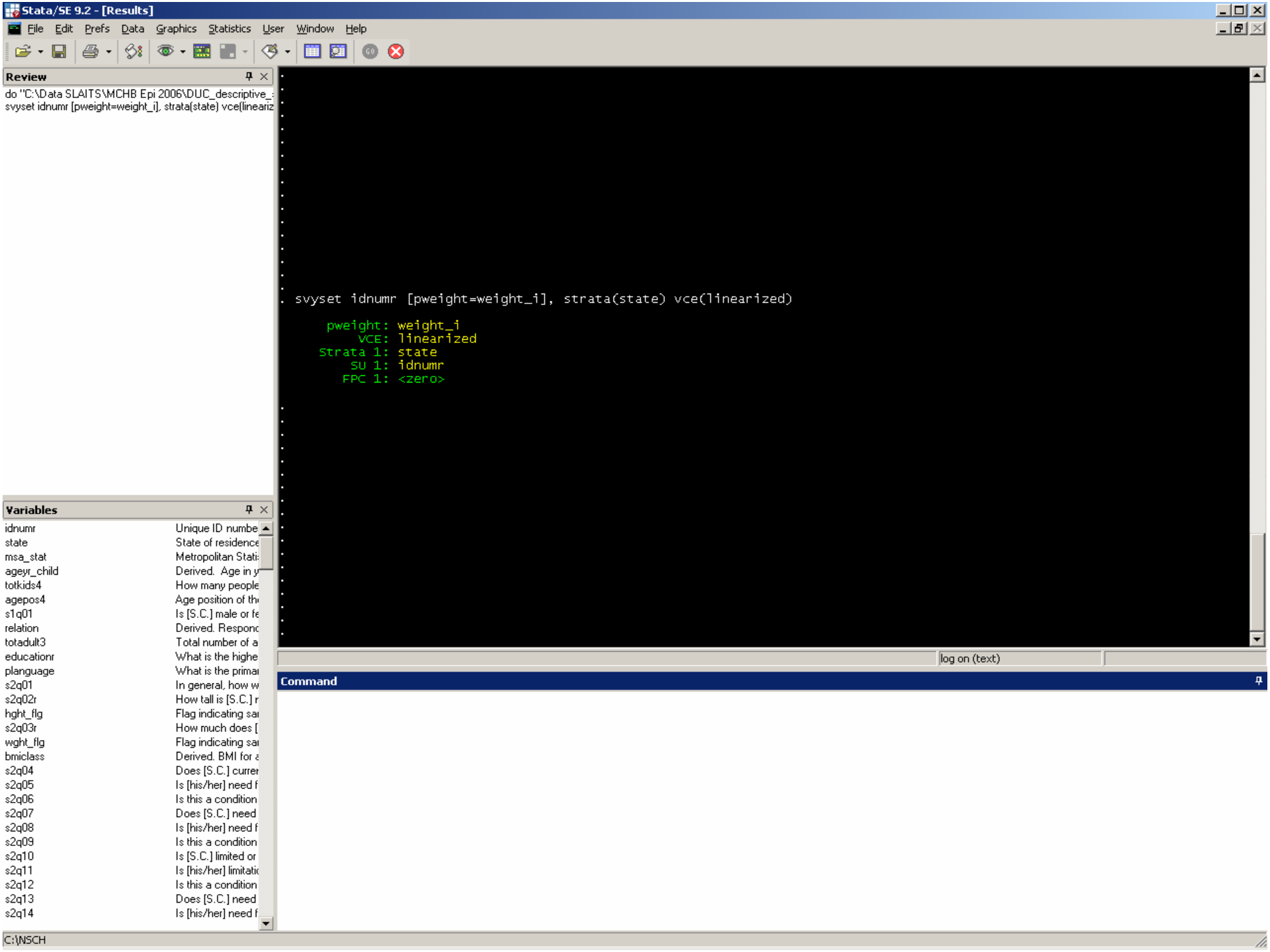

Stata/SE 9.2 - [Results]
File Edit Prefs Data Graphics Statistics User Window Help
Review
do "C:\Data SLAITS\MCHB Epi 2006\DUC_descriptive_
Variables
idnumr Unique ID numbe
state State of residence
msa_stat Metropolitan Stati
ageyr_child Derived. Age in y
totkids4 How many people
agepos4 Age position of th
s1q01 Is [S.C.] male or fe
relation Derived. Respond
totadult3 Total number of a
educationr What is the highe
planguage What is the primar
s2q01 In general, how w
s2q02r How tall is [S.C.] r
hght_flg Flag indicating sa
s2q03r How much does [
wght_flg Flag indicating sa
bmiclass Derived. BMI for a
s2q04 Does [S.C.] curre
s2q05 Is [his/her] need f
s2q06 Is this a condition
s2q07 Does [S.C.] need
s2q08 Is [his/her] need f
s2q09 Is this a condition
s2q10 Is [S.C.] limited or
s2q11 Is [his/her] limitatic
s2q12 Is this a condition
s2q13 Does [S.C.] need
s2q14 Is [his/her] need f
log on (text)
Command
C:\NSCH

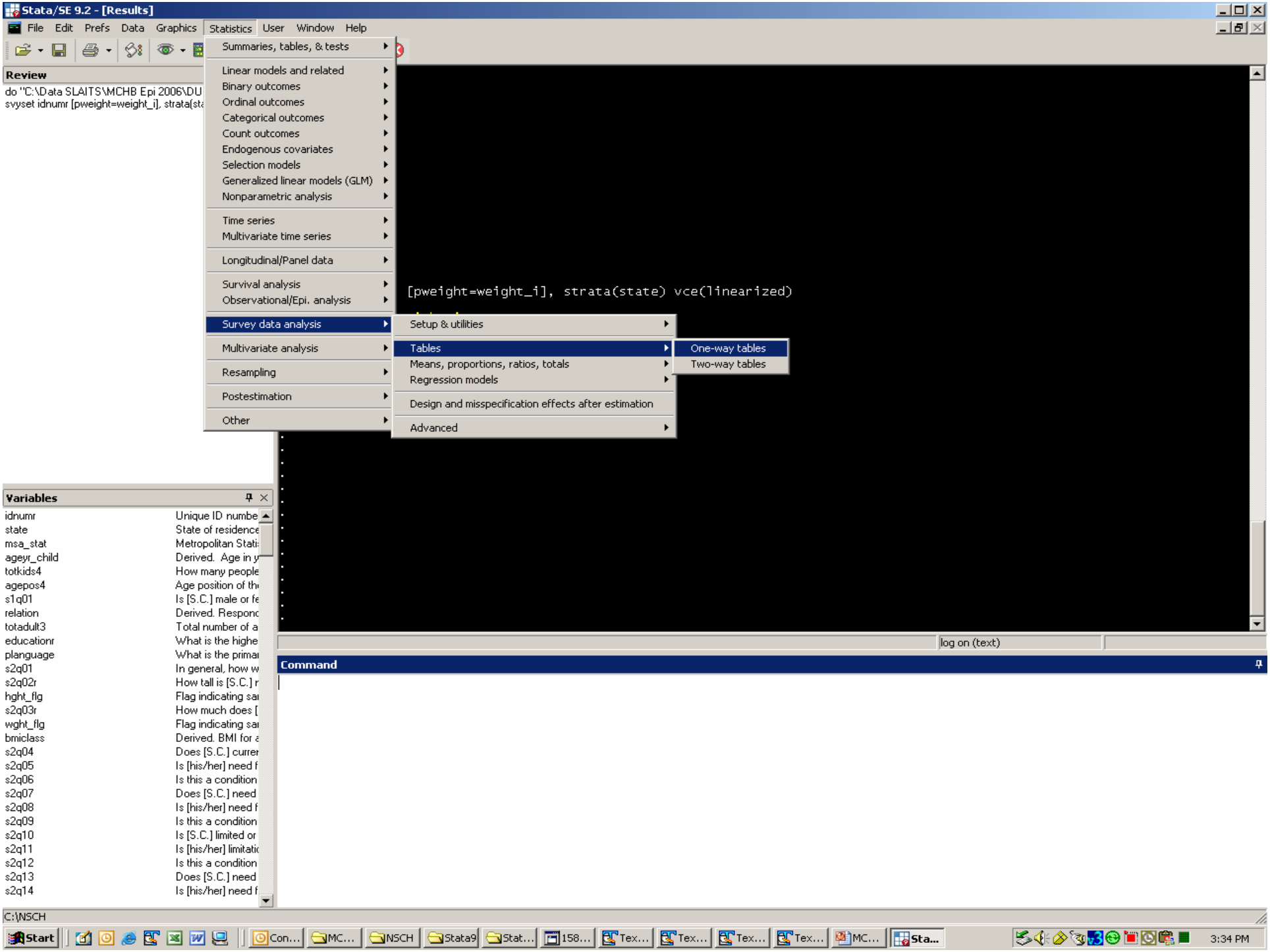

Stata/SE 9.2 - [Results]
File Edit Prefs Data Graphics Statistics User Window Help
Summaries, tables, & tests
Linear models and related
Binary outcomes
Ordinal outcomes
Categorical outcomes
Count outcomes
Endogenous covariates
Selection models
Generalized linear models (GLM)
Nonparametric analysis
Time series
Multivariate time series
Longitudinal/Panel data
Survival analysis
Observational/Epi. analysis
Survey data analysis
Multivariate analysis
Resampling
Postestimation
Other
Setup & utilities
Tables
Means, proportions, ratios, totals
Regression models
Design and misspecification effects after estimation
Advanced
Declare survey design for dataset
Describe survey data
Review
do "C:\Data SLAITS\MCHB Epi 2006\DU
Variables
idnumr Unique ID numbe
state State of residence
msa_stat Metropolitan Stati
ageyr_child Derived. Age in y
totkids4 How many people
agepos4 Age position of th
s1q01 Is [S.C.] male or fe
relation Derived. Respond
totadult3 Total number of a
educationr What is the highe
planguage What is the primar
s2q01 In general, how w
s2q02r How tall is [S.C.] r
hght_flg Flag indicating sa
s2q03r How much does [
wght_flg Flag indicating sa
bmiclass Derived. BMI for a
s2q04 Does [S.C.] curre
s2q05 Is [his/her] need f
s2q06 Is this a condition
s2q07 Does [S.C.] need
s2q08 Is [his/her] need f
s2q09 Is this a condition
s2q10 Is [S.C.] limited or
s2q11 Is [his/her] limitati
s2q12 Is this a condition
s2q13 Does [S.C.] need
s2q14 Is [his/her] need f
log on (text)
Command
C:\NSCH
Start
3:29 PM

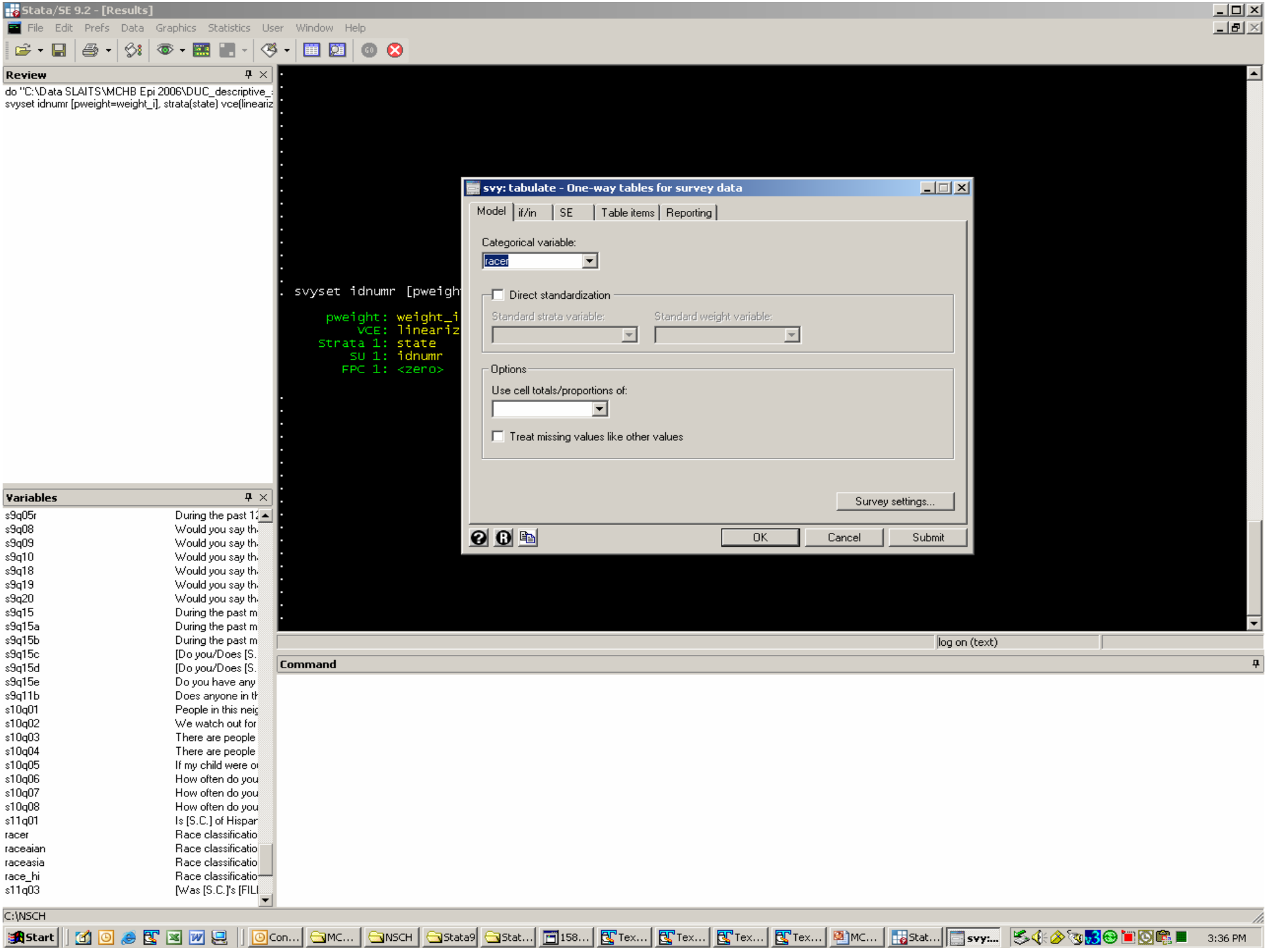

Stata/SE 9.2 - [Results]
File Edit Prefs Data Graphics Statistics User Window Help
Review
do "C:\Data SLAITS\MCHB Epi 2006\DUC_descriptive_
svyset - Survey data settings
Main More Weights SE Poststratification
Number of stages: 1
Clear settings
Sampling units
Strata
Finite pop. correction
Stage 1: idnumr
state
Note: Empty or "_n" in "Sampling units" above indicates sampling of observations.
OK
Cancel
Submit
Variables
idnumr Unique ID numbe
state State of residence
msa_stat Metropolitan Stati
ageyr_child Derived. Age in y
totkids4 How many people
agepos4 Age position of th
s1q01 Is [S.C.] male or fe
relation Derived. Respond
totadult3 Total number of a
educationr What is the highe
planguage What is the primar
s2q01 In general, how w
s2q02r How tall is [S.C.] r
hght_flg Flag indicating sa
s2q03r How much does [
wght_flg Flag indicating sa
bmiclass Derived. BMI for a
s2q04 Does [S.C.] curre
s2q05 Is [his/her] need f
s2q06 Is this a condition
s2q07 Does [S.C.] need
s2q08 Is [his/her] need f
s2q09 Is this a condition
s2q10 Is [S.C.] limited or
s2q11 Is [his/her] limitatic
s2q12 Is this a condition
s2q13 Does [S.C.] need
s2q14 Is [his/her] need f
log on (text)
Command
C:\NSCH
Start
3:30 PM

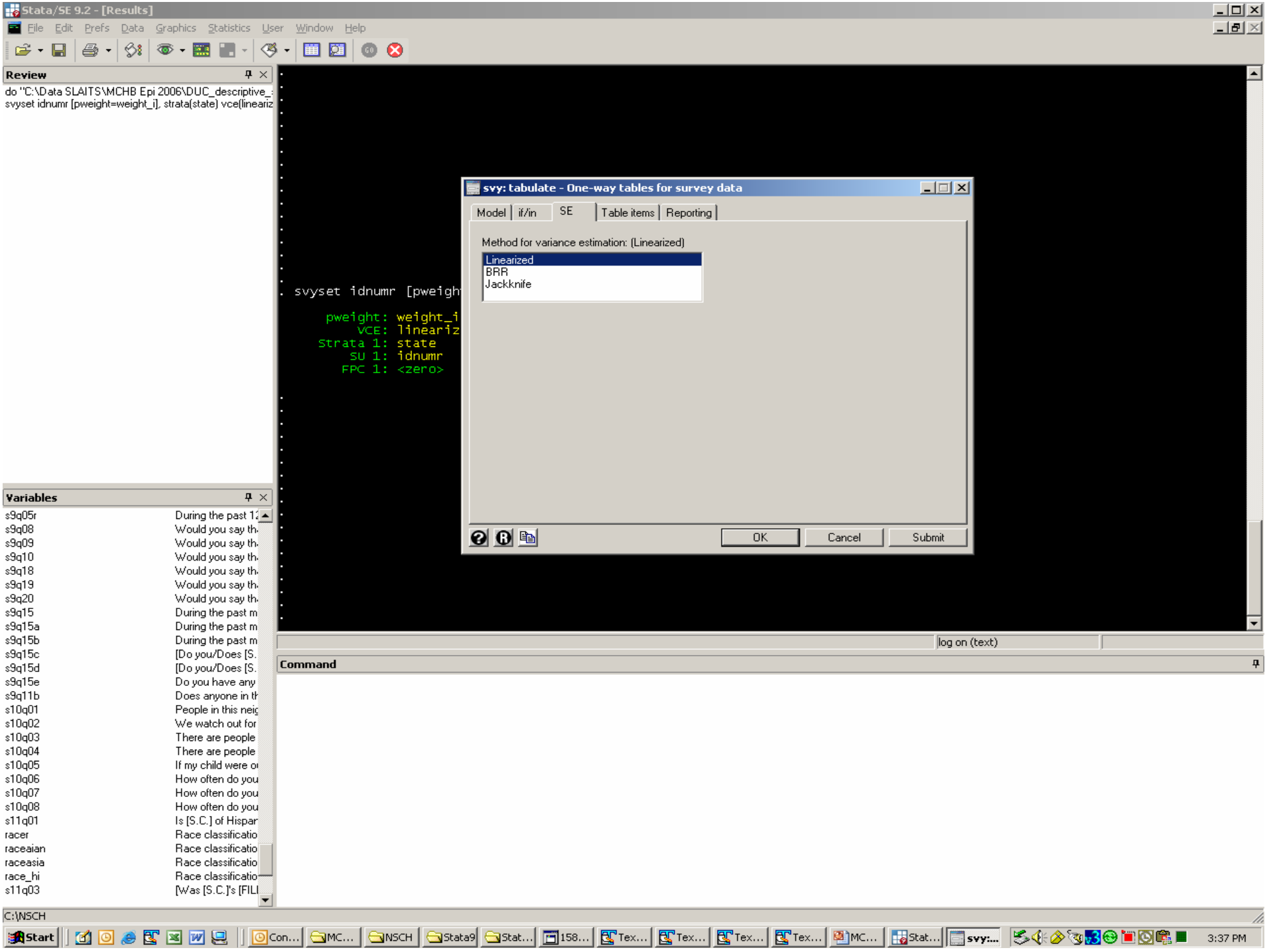

Stata/SE 9.2 - [Results]
File Edit Prefs Data Graphics Statistics User Window Help
Review
do "C:\Data SLAITS\MCHB Epi 2006\DUC_descriptive_
svyset - Survey data settings
Main More Weights SE Poststratification
Weight type:
Help Weights...
None
Sampling weight variable
weight
Importance weight variable (rare)
Balanced repeated replicate (BRR) weight variables:
Fay's adjustment:
Jackknife replicate weight variables:
OK Cancel Submit
Variables
idnumr Unique ID numbe
state State of residence
msa_stat Metropolitan Stati
ageyr_child Derived. Age in y
totkids4 How many people
agepos4 Age position of th
s1q01 Is [S.C.] male or fe
relation Derived. Respond
totadult3 Total number of a
educationr What is the highe
planguage What is the primar
s2q01 In general, how w
s2q02r How tall is [S.C.] r
hght_flg Flag indicating sa
s2q03r How much does [
wght_flg Flag indicating sa
bmiclass Derived. BMI for a
s2q04 Does [S.C.] curre
s2q05 Is [his/her] need f
s2q06 Is this a condition
s2q07 Does [S.C.] need
s2q08 Is [his/her] need f
s2q09 Is this a condition
s2q10 Is [S.C.] limited or
s2q11 Is [his/her] limitatic
s2q12 Is this a condition
s2q13 Does [S.C.] need
s2q14 Is [his/her] need f
log on (text)
Command
C:\NSCH
Start
3:31 PM

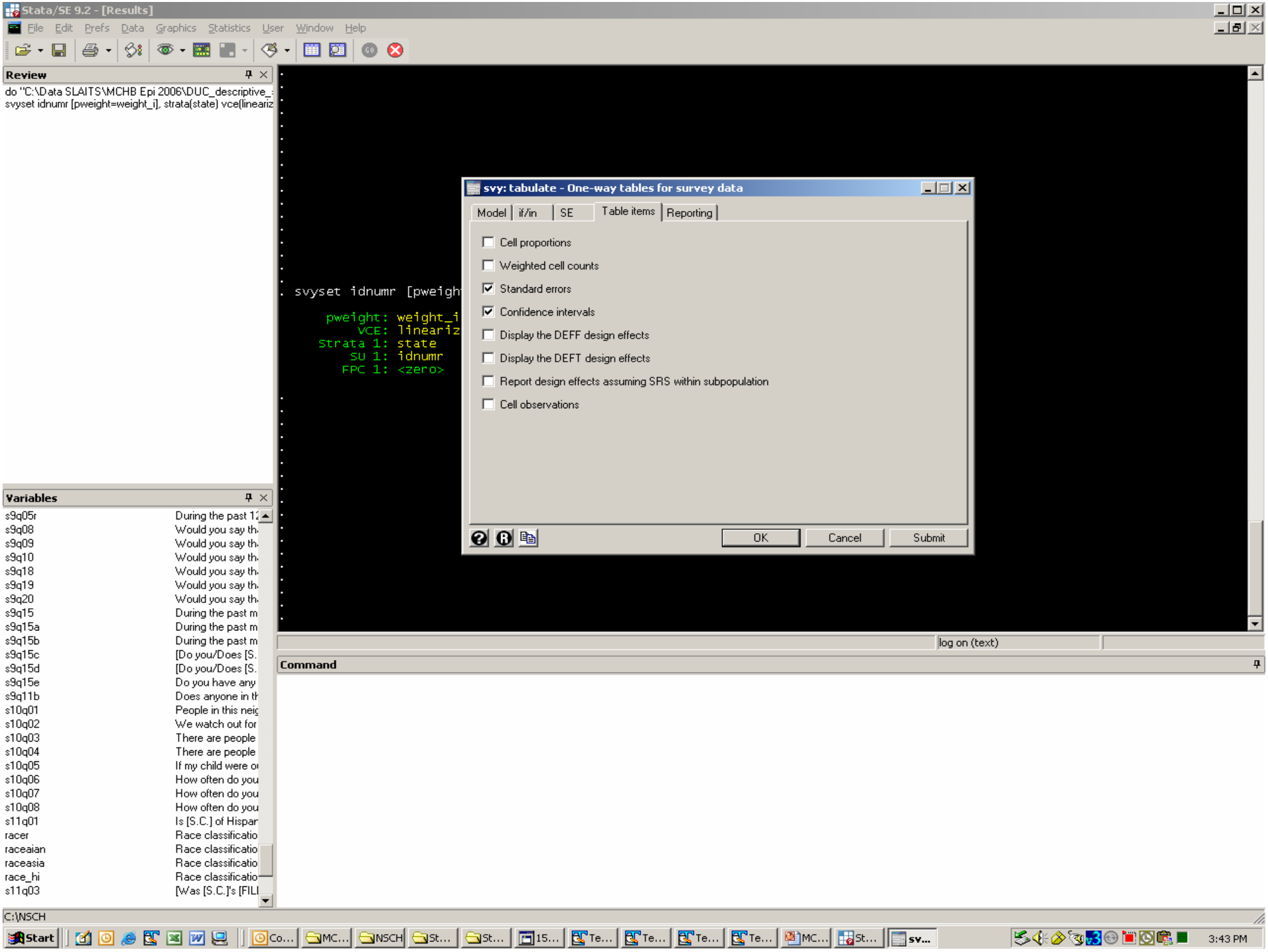

Stata/SE 9.2 - [Results]
File Edit Prefs Data Graphics Statistics User Window Help
Review
do "C:\Data SLAITS\MCHB Epi 2006\DUC_descriptive_
svyset - Survey data settings
Main More Weights SE Poststratification
Method for variance estimation: (Linearized)
Linearized
BRR
Jackknife
OK Cancel Submit
Variables
idnumr Unique ID numbe
state State of residence
msa_stat Metropolitan Stati
ageyr_child Derived. Age in y
totkids4 How many people
agepos4 Age position of th
s1q01 Is [S.C.] male or fe
relation Derived. Respond
totadult3 Total number of a
educationr What is the highe
planguage What is the primar
s2q01 In general, how w
s2q02r How tall is [S.C.] r
hght_flg Flag indicating sa
s2q03r How much does [
wght_flg Flag indicating sa
bmiclass Derived. BMI for a
s2q04 Does [S.C.] curre
s2q05 Is [his/her] need f
s2q06 Is this a condition
s2q07 Does [S.C.] need
s2q08 Is [his/her] need f
s2q09 Is this a condition
s2q10 Is [S.C.] limited or
s2q11 Is [his/her] limitatic
s2q12 Is this a condition
s2q13 Does [S.C.] need
s2q14 Is [his/her] need f
log on (text)
Command
C:\NSCH
Start
3:32 PM

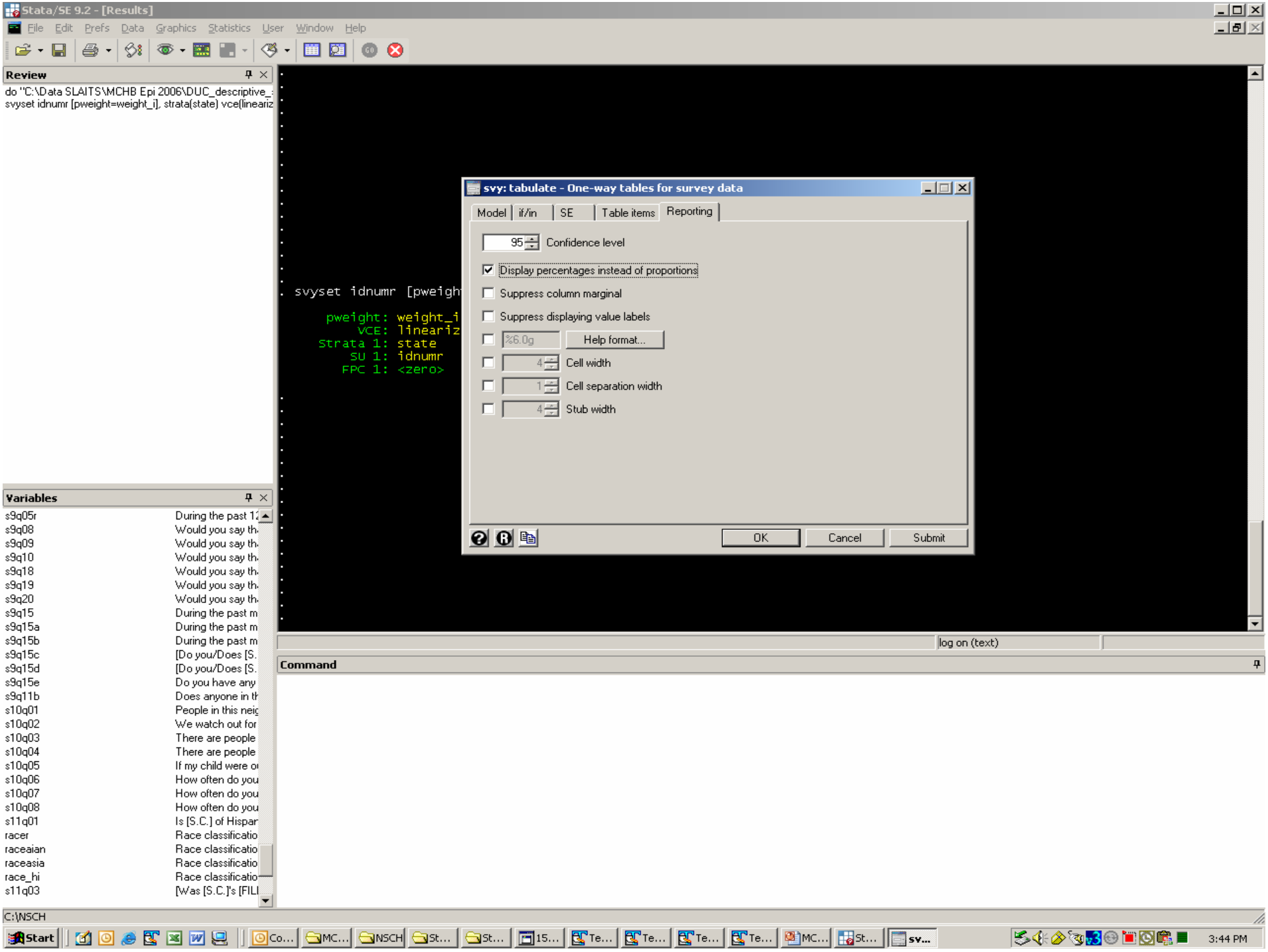

Stata/SE 9.2 - [Results]
File Edit Prefs Data Graphics Statistics User Window Help
Review
do "C:\Data SLAITS\MCHB Epi 2006\DUC_descriptive_
svyset idnumr [pweight=weight_i], strata(state) vce(lineariz
. svyset idnumr [pweight=weight_i], strata(state) vce(linearized)
pweight: weight_i
VCE: linearized
Strata 1: state
SU 1: idnumr
FPC 1: <zero>
Variables
idnumr Unique ID numbe
state State of residence
msa_stat Metropolitan Stati
ageyr_child Derived. Age in y
totkids4 How many people
agepos4 Age position of th
s1q01 Is [S.C.] male or fe
relation Derived. Respond
totadult3 Total number of a
educationr What is the highe
planguage What is the primar
s2q01 In general, how w
s2q02r How tall is [S.C.] r
hght_flg Flag indicating sa
s2q03r How much does [
wght_flg Flag indicating sa
bmiclass Derived. BMI for a
s2q04 Does [S.C.] currer
s2q05 Is [his/her] need f
s2q06 Is this a condition
s2q07 Does [S.C.] need
s2q08 Is [his/her] need f
s2q09 Is this a condition
s2q10 Is [S.C.] limited or
s2q11 Is [his/her] limitatic
s2q12 Is this a condition
s2q13 Does [S.C.] need
s2q14 Is [his/her] need f
log on (text)
Command
C:\NSCH

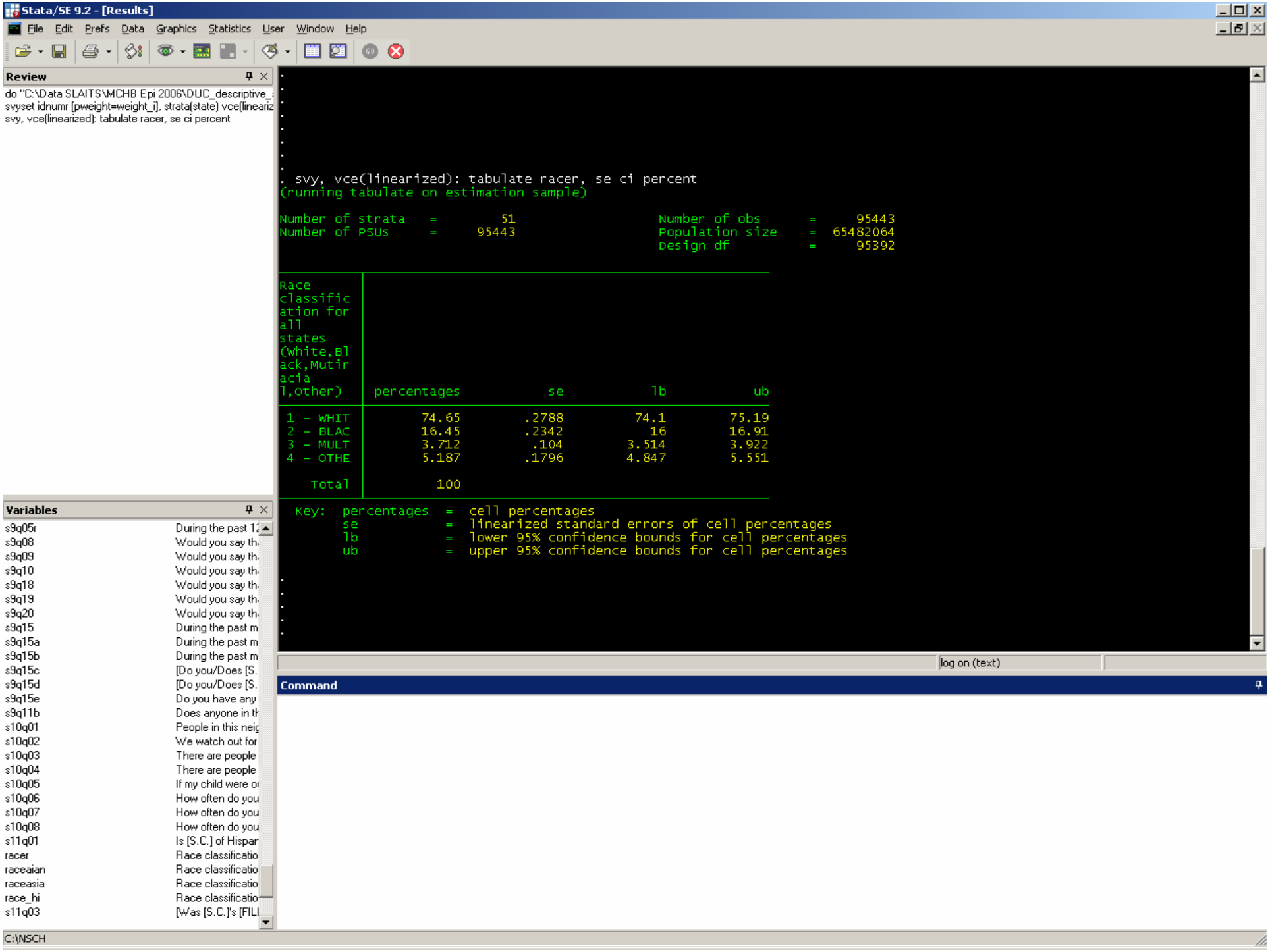

Stata/SE 9.2 - [Results]
File Edit Prefs Data Graphics Statistics User Window Help
Summaries, tables, & tests
Linear models and related
Binary outcomes
Ordinal outcomes
Categorical outcomes
Count outcomes
Endogenous covariates
Selection models
Generalized linear models (GLM)
Nonparametric analysis
Time series
Multivariate time series
Longitudinal/Panel data
Survival analysis
Observational/Epi. analysis
Survey data analysis
Multivariate analysis
Resampling
Postestimation
Other
Setup & utilities
Tables
Means, proportions, ratios, totals
Regression models
Design and misspecification effects after estimation
Advanced
One-way tables
Two-way tables
Review
do "C:\Data SLAITS\MCHB Epi 2006\DU
svyset idnumr [pweight=weight_i], strata(sta
[pweight=weight_i], strata(state) vce(linearized)
Variables
idnumr Unique ID numbe
state State of residence
msa_stat Metropolitan Stati
ageyr_child Derived. Age in y
totkids4 How many people
agepos4 Age position of th
s1q01 Is [S.C.] male or fe
relation Derived. Respond
totadult3 Total number of a
educationr What is the highe
planguage What is the primar
s2q01 In general, how w
s2q02r How tall is [S.C.] r
hght_flg Flag indicating sa
s2q03r How much does [
wght_flg Flag indicating sa
bmiclass Derived. BMI for a
s2q04 Does [S.C.] curre
s2q05 Is [his/her] need f
s2q06 Is this a condition
s2q07 Does [S.C.] need
s2q08 Is [his/her] need f
s2q09 Is this a condition
s2q10 Is [S.C.] limited or
s2q11 Is [his/her] limitatic
s2q12 Is this a condition
s2q13 Does [S.C.] need
s2q14 Is [his/her] need f
log on (text)
Command
C:\NSCH
Start
3:34 PM

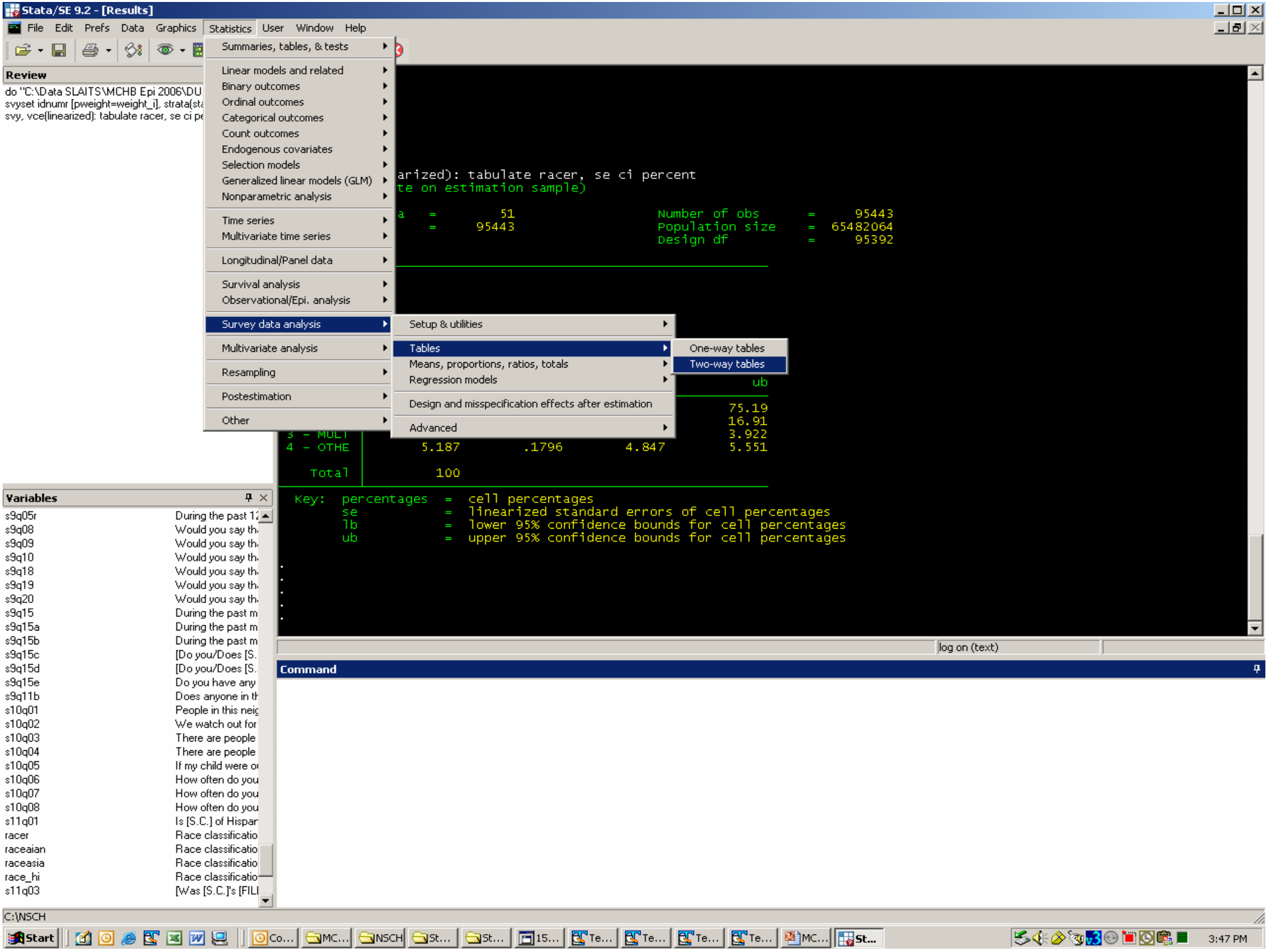

Stata/SE 9.2 - [Results]
File Edit Prefs Data Graphics Statistics User Window Help
Review
do "C:\Data SLAITS\MCHB Epi 2006\DUC_descriptive_
svyset idnumr [pweight=weight_i], strata(state) vce(lineariz
. svyset idnumr [pweigh
pweight: weight_i
VCE: linearız
Strata 1: state
SU 1: idnumr
FPC 1: <zero>
svy: tabulate - One-way tables for survey data
Model
if/in
SE
Table items
Reporting
Categorical variable:
racer
Direct standardization
Standard strata variable:
Standard weight variable:
Options
Use cell totals/proportions of:
Treat missing values like other values
Survey settings...
OK
Cancel
Submit
Variables
s9q05r During the past 12
s9q08 Would you say th
s9q09 Would you say th
s9q10 Would you say th
s9q18 Would you say th
s9q19 Would you say th
s9q20 Would you say th
s9q15 During the past m
s9q15a During the past m
s9q15b During the past m
s9q15c [Do you/Does [S.
s9q15d [Do you/Does [S.
s9q15e Do you have any
s9q11b Does anyone in th
s10q01 People in this neig
s10q02 We watch out for
s10q03 There are people
s10q04 There are people
s10q05 If my child were o
s10q06 How often do you
s10q07 How often do you
s10q08 How often do you
s11q01 Is [S.C.] of Hispar
racer Race classificatio
raceaian Race classificatio
raceasia Race classificatio
race_hi Race classificatio
s11q03 [Was [S.C.]'s [FIL
log on (text)
Command
C:\NSCH
Start
3:36 PM

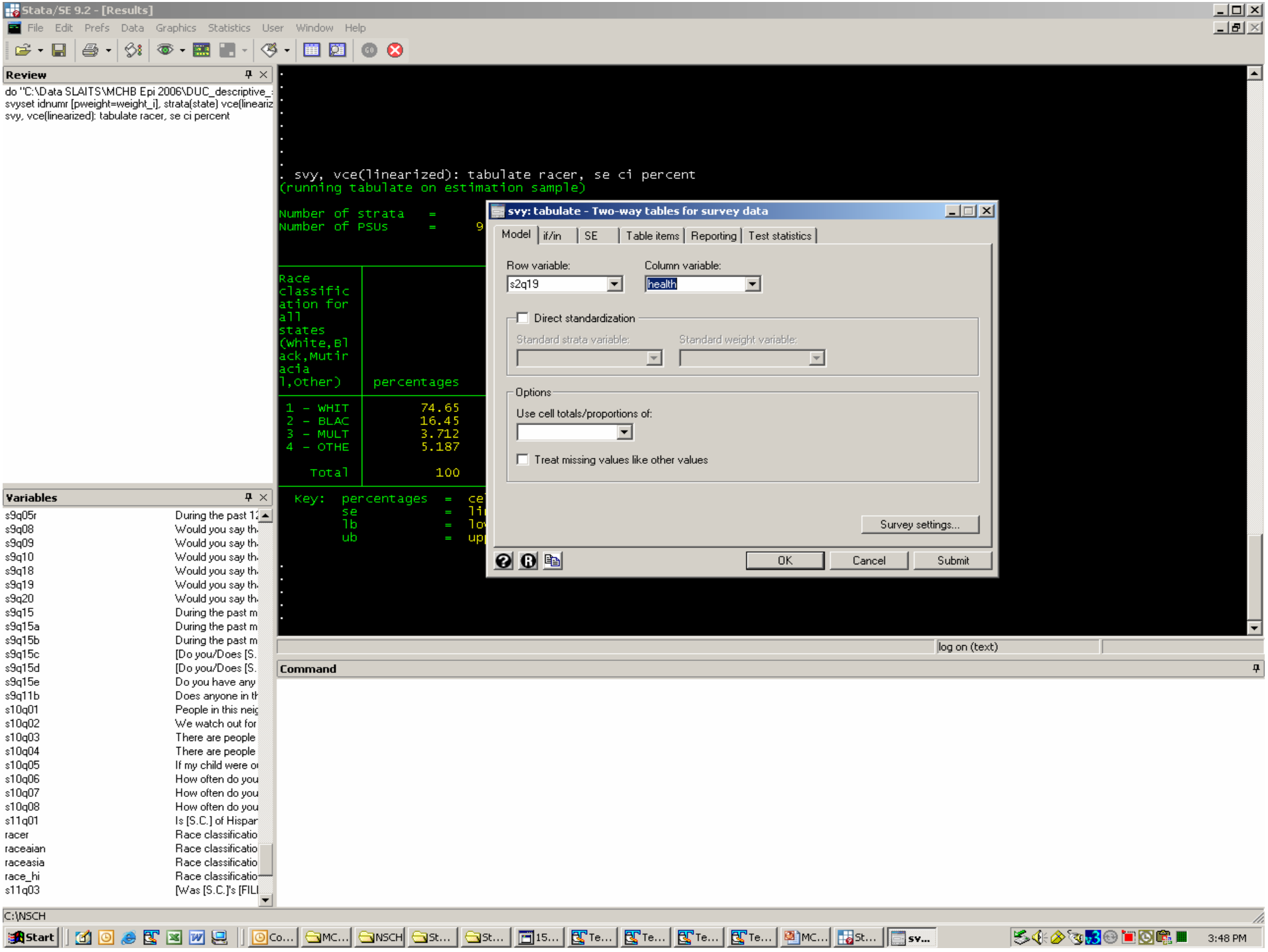

Stata/SE 9.2 - [Results]
File Edit Prefs Data Graphics Statistics User Window Help
Review
do "C:\Data SLAITS\MCHB Epi 2006\DUC_descriptive_
svyset idnumr [pweight=weight_i], strata(state) vce(lineariz
. svyset idnumr [pweigh
pweight: weight_i
VCE: linearız
Strata 1: state
SU 1: idnumr
FPC 1: <zero>
svy: tabulate - One-way tables for survey data
Model if/in SE Table items Reporting
Method for variance estimation: (Linearized)
Linearized
BRR
Jackknife
OK Cancel Submit
log on (text)
Command
Variables
s9q05r During the past 12
s9q08 Would you say th
s9q09 Would you say th
s9q10 Would you say th
s9q18 Would you say th
s9q19 Would you say th
s9q20 Would you say th
s9q15 During the past m
s9q15a During the past m
s9q15b During the past m
s9q15c [Do you/Does [S.
s9q15d [Do you/Does [S.
s9q15e Do you have any
s9q11b Does anyone in th
s10q01 People in this neig
s10q02 We watch out for
s10q03 There are people
s10q04 There are people
s10q05 If my child were o
s10q06 How often do you
s10q07 How often do you
s10q08 How often do you
s11q01 Is [S.C.] of Hispar
racer Race classificatio
raceaian Race classificatio
raceasia Race classificatio
race_hi Race classificatio
s11q03 [Was [S.C.]'s [FIL
C:\NSCH
Start
3:37 PM

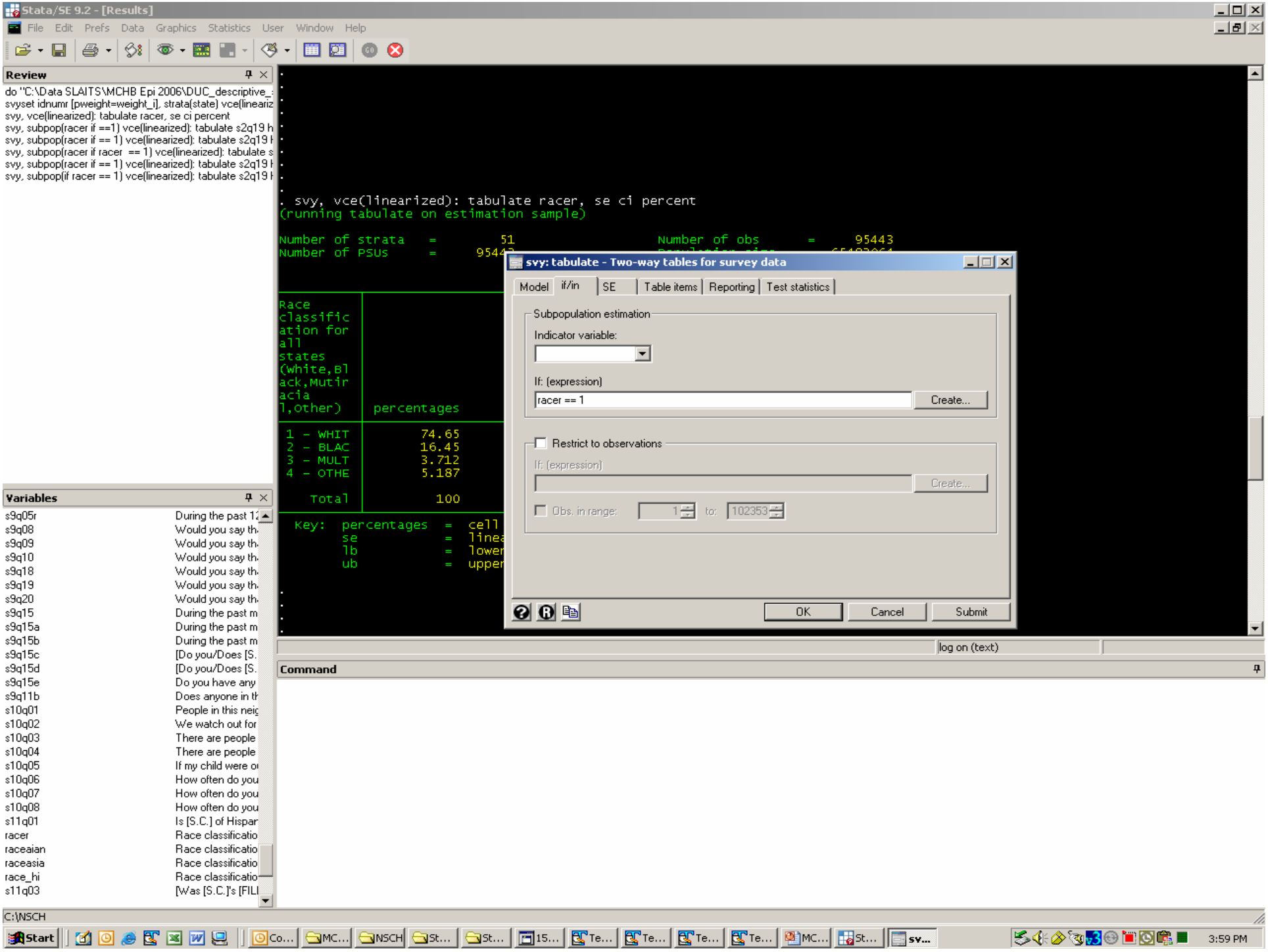

Stata/SE 9.2 - [Results]
File Edit Prefs Data Graphics Statistics User Window Help
Review
do "C:\Data SLAITS\MCHB Epi 2006\DUC_descriptive_
svyset idnumr [pweight=weight_i], strata(state) vce(linearizv
. svyset idnumr [pweigh
pweight: weight_i
VCE: linearizv
Strata 1: state
SU 1: idnumr
FPC 1: <zero>
svy: tabulate - One-way tables for survey data
Model if/in SE Table items Reporting
Cell proportions
Weighted cell counts
Standard errors
Confidence intervals
Display the DEFF design effects
Display the DEFT design effects
Report design effects assuming SRS within subpopulation
Cell observations
OK Cancel Submit
Variables
s9q05r During the past 12
s9q08 Would you say th
s9q09 Would you say th
s9q10 Would you say th
s9q18 Would you say th
s9q19 Would you say th
s9q20 Would you say th
s9q15 During the past m
s9q15a During the past m
s9q15b During the past m
s9q15c [Do you/Does [S.
s9q15d [Do you/Does [S.
s9q15e Do you have any
s9q11b Does anyone in th
s10q01 People in this neig
s10q02 We watch out for
s10q03 There are people
s10q04 There are people
s10q05 If my child were ou
s10q06 How often do you
s10q07 How often do you
s10q08 How often do you
s11q01 Is [S.C.] of Hispar
racer Race classificatio
raceaian Race classificatio
raceasia Race classificatio
race_hi Race classificatio
s11q03 [Was [S.C.]'s [FILL
log on (text)
Command
C:\NSCH
Start
3:43 PM

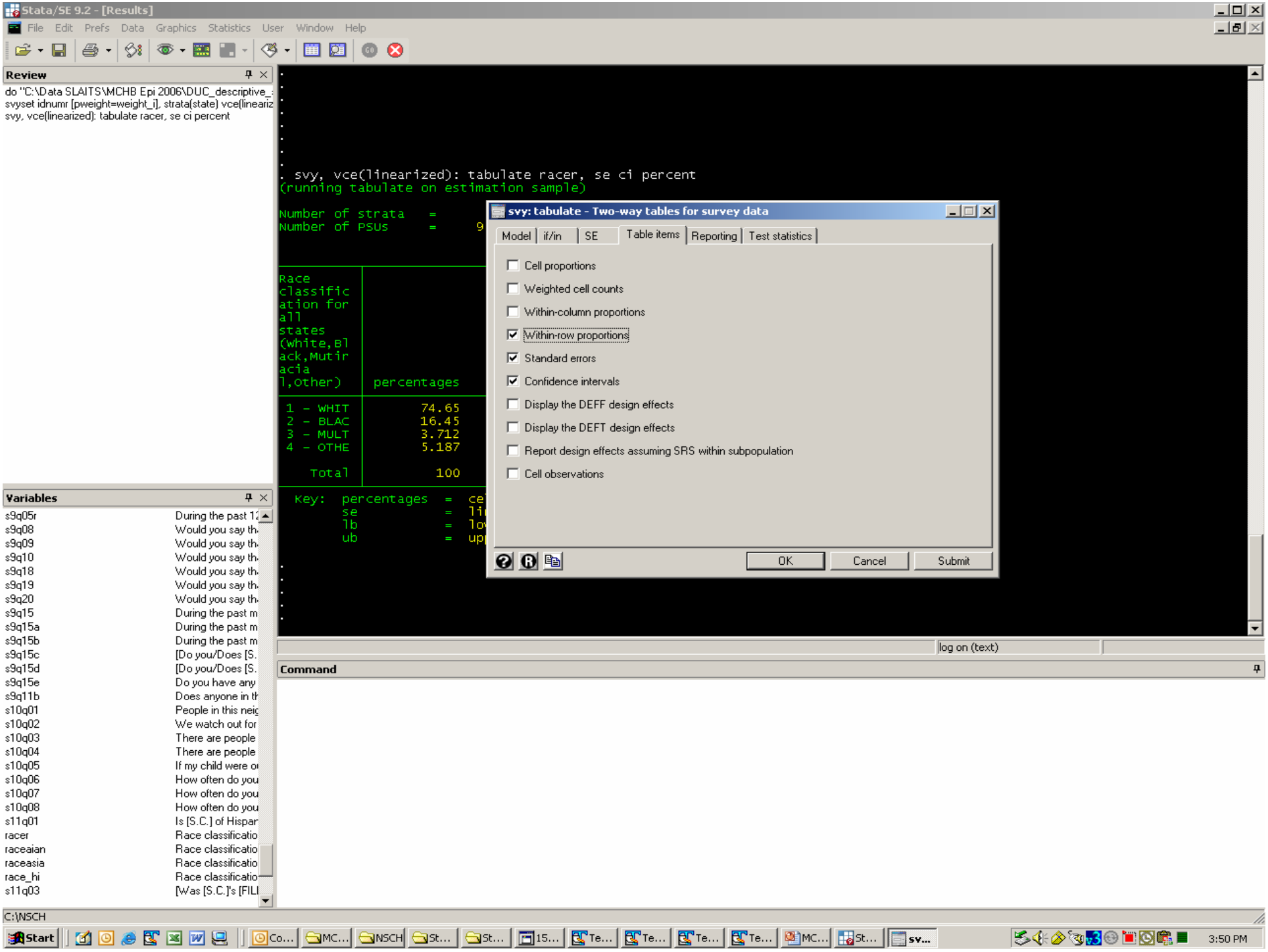

Stata/SE 9.2 - [Results]
File Edit Prefs Data Graphics Statistics User Window Help
Review
do "C:\Data SLAITS\MCHB Epi 2006\DUC_descriptive_
svyset idnumr [pweight=weight_i], strata(state) vce(lineariz
. svyset idnumr [pweigh
pweight: weight_i
VCE: lineariz
Strata 1: state
SU 1: idnumr
FPC 1: <zero>
svy: tabulate - One-way tables for survey data
Model if/in SE Table items Reporting
95 Confidence level
Display percentages instead of proportions
Suppress column marginal
Suppress displaying value labels
%6.0g Help format...
4 Cell width
1 Cell separation width
4 Stub width
OK Cancel Submit
log on (text)
Command
Variables
s9q05r During the past 12
s9q08 Would you say th
s9q09 Would you say th
s9q10 Would you say th
s9q18 Would you say th
s9q19 Would you say th
s9q20 Would you say th
s9q15 During the past m
s9q15a During the past m
s9q15b During the past m
s9q15c [Do you/Does [S.
s9q15d [Do you/Does [S.
s9q15e Do you have any
s9q11b Does anyone in th
s10q01 People in this neig
s10q02 We watch out for
s10q03 There are people
s10q04 There are people
s10q05 If my child were o
s10q06 How often do you
s10q07 How often do you
s10q08 How often do you
s11q01 Is [S.C.] of Hispar
racer Race classificatio
raceaian Race classificatio
raceasia Race classificatio
race_hi Race classificatio
s11q03 [Was [S.C.]'s [FIL
C:\NSCH
Start
3:44 PM

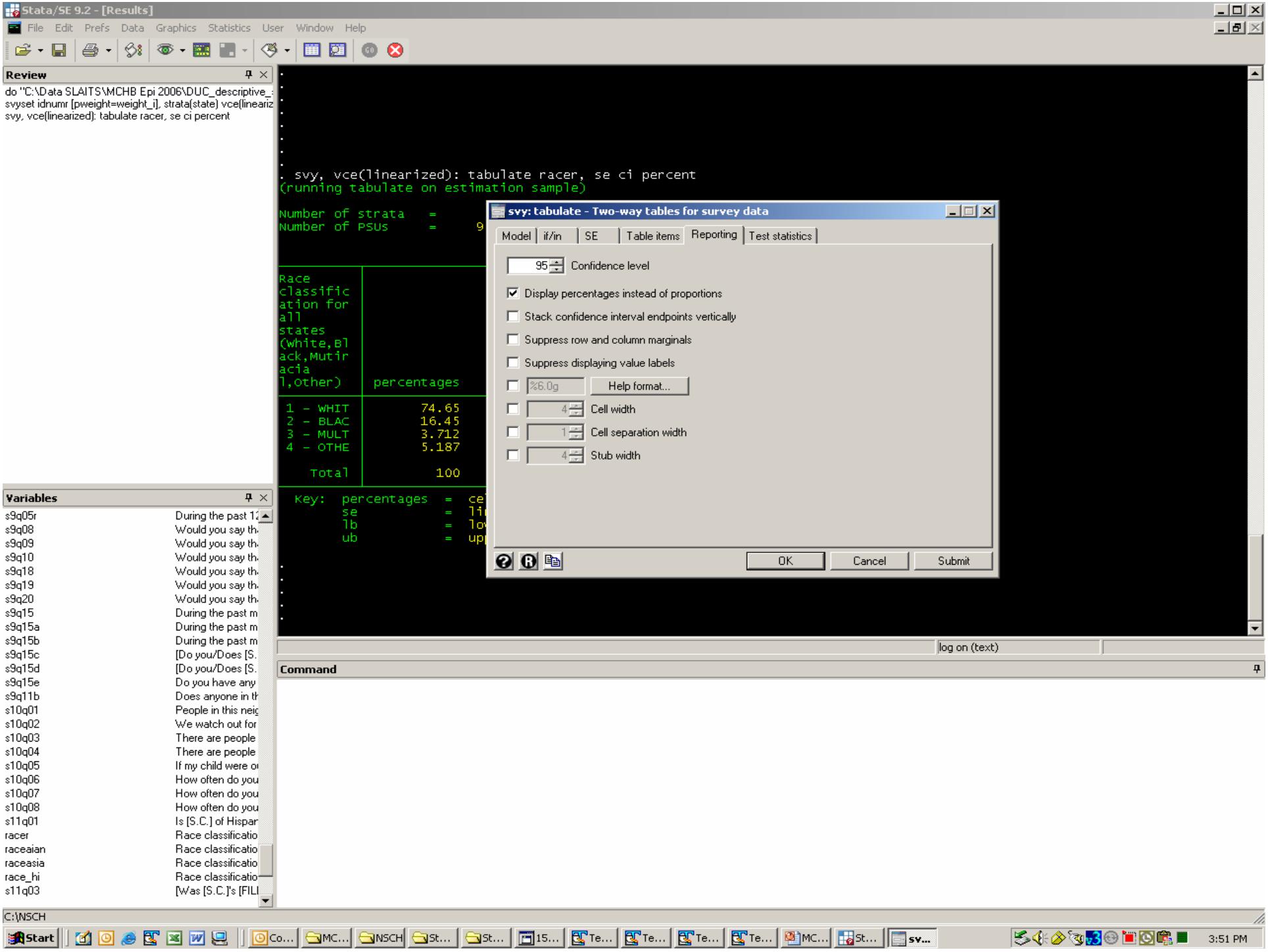

Stata/SE 9.2 - [Results]
File Edit Prefs Data Graphics Statistics User Window Help
Review
do "C:\Data SLAITS\MCHB Epi 2006\DUC_descriptive_
svyset idnumr [pweight=weight_i], strata(state) vce(lineariz
svy, vce(linearized): tabulate racer, se ci percent
. svy, vce(linearized): tabulate racer, se ci percent
(running tabulate on estimation sample)
Number of strata = 51
Number of PSUs = 95443
Number of obs = 95443
Population size = 65482064
Design df = 95392
Race classification for all states (white,Black,Mutiracial,other)
percentages se lb ub
1 - WHIT 74.65 .2788 74.1 75.19
2 - BLAC 16.45 .2342 16 16.91
3 - MULT 3.712 .104 3.514 3.922
4 - OTHE 5.187 .1796 4.847 5.551
Total 100
Key: percentages = cell percentages
se = linearized standard errors of cell percentages
lb = lower 95% confidence bounds for cell percentages
ub = upper 95% confidence bounds for cell percentages
Variables
s9q05r During the past 12
s9q08 Would you say th
s9q09 Would you say th
s9q10 Would you say th
s9q18 Would you say th
s9q19 Would you say th
s9q20 Would you say th
s9q15 During the past m
s9q15a During the past m
s9q15b During the past m
s9q15c [Do you/Does [S.
s9q15d [Do you/Does [S.
s9q15e Do you have any
s9q11b Does anyone in th
s10q01 People in this neig
s10q02 We watch out for
s10q03 There are people
s10q04 There are people
s10q05 If my child were o
s10q06 How often do you
s10q07 How often do you
s10q08 How often do you
s11q01 Is [S.C.] of Hispar
racer Race classificatio
raceaian Race classificatio
raceasia Race classificatio
race_hi Race classificatio
s11q03 [Was [S.C.]'s [FIL
log on (text)
Command
C:\NSCH

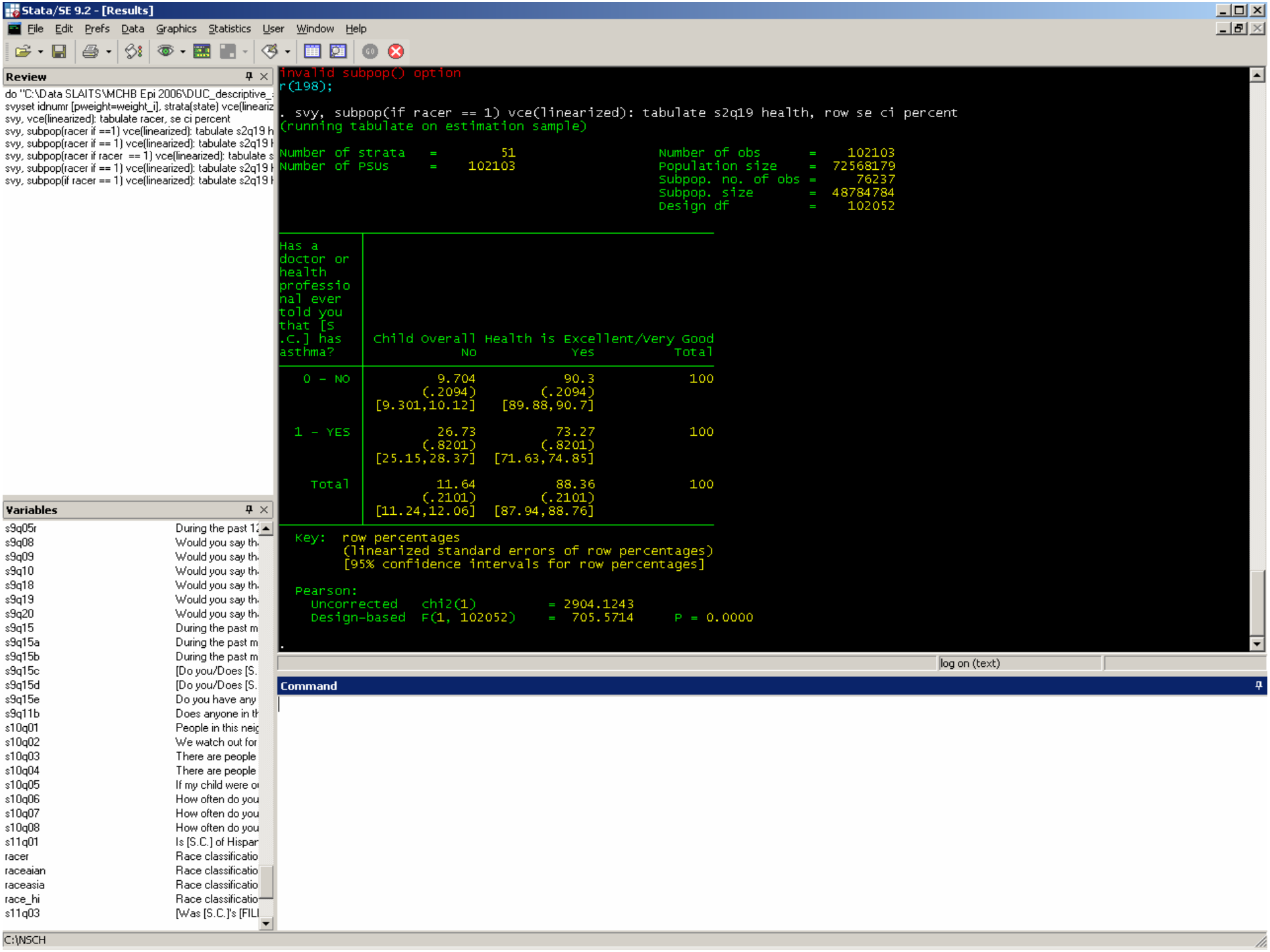

Stata/SE 9.2 - [Results]
File Edit Prefs Data Graphics Statistics User Window Help
Summaries, tables, & tests
Linear models and related
Binary outcomes
Ordinal outcomes
Categorical outcomes
Count outcomes
Endogenous covariates
Selection models
Generalized linear models (GLM)
Nonparametric analysis
Time series
Multivariate time series
Longitudinal/Panel data
Survival analysis
Observational/Epi. analysis
Survey data analysis
Multivariate analysis
Resampling
Postestimation
Other
Setup & utilities
Tables
Means, proportions, ratios, totals
Regression models
Design and misspecification effects after estimation
Advanced
One-way tables
Two-way tables
Review
do "C:\Data SLAITS\MCHB Epi 2006\DU
svyset idnumr [pweight=weight_i], strata(st
svy, vce(linearized): tabulate racer, se ci pe
arized): tabulate racer, se ci percent
te on estimation sample)
a = 51
= 95443
Number of obs = 95443
Population size = 65482064
Design df = 95392
ub
75.19
16.91
3.922
3 - MULT
4 - OTHE 5.187 .1796 4.847 5.551
Total 100
Key: percentages = cell percentages
se = linearized standard errors of cell percentages
lb = lower 95% confidence bounds for cell percentages
ub = upper 95% confidence bounds for cell percentages
Variables
s9q05r During the past 12
s9q08 Would you say th
s9q09 Would you say th
s9q10 Would you say th
s9q18 Would you say th
s9q19 Would you say th
s9q20 Would you say th
s9q15 During the past m
s9q15a During the past m
s9q15b During the past m
s9q15c [Do you/Does [S.
s9q15d [Do you/Does [S.
s9q15e Do you have any
s9q11b Does anyone in th
s10q01 People in this neig
s10q02 We watch out for
s10q03 There are people
s10q04 There are people
s10q05 If my child were o
s10q06 How often do you
s10q07 How often do you
s10q08 How often do you
s11q01 Is [S.C.] of Hispar
racer Race classificatio
raceaian Race classificatio
raceasia Race classificatio
race_hi Race classificatio
s11q03 [Was [S.C.]'s [FILL
log on (text)
Command
C:\NSCH
Start
3:47 PM


Stata/SE 9.2 - [Results]
File Edit Prefs Data Graphics Statistics User Window Help
Review
do "C:\Data SLAITS\MCHB Epi 2006\DUC_descriptive_
svyset idnumr [pweight=weight_i], strata(state) vce(linearized
svy, vce(linearized): tabulate racer, se ci percent
. svy, vce(linearized): tabulate racer, se ci percent
(running tabulate on estimation sample)
Number of strata =
Number of PSUs = 9
Race classification for all states (White,Black,Mutiracial,Other) | percentages
1 - WHIT | 74.65
2 - BLAC | 16.45
3 - MULT | 3.712
4 - OTHE | 5.187
Total | 100
Key: percentages = ce
se = li
lb = lo
ub = up
svy: tabulate - Two-way tables for survey data
Model if/in SE Table items Reporting Test statistics
Row variable: s2q19
Column variable: health
Direct standardization
Standard strata variable:
Standard weight variable:
Options
Use cell totals/proportions of:
Treat missing values like other values
Survey settings...
OK Cancel Submit
Variables
s9q05r During the past 12
s9q08 Would you say th
s9q09 Would you say th
s9q10 Would you say th
s9q18 Would you say th
s9q19 Would you say th
s9q20 Would you say th
s9q15 During the past m
s9q15a During the past m
s9q15b During the past m
s9q15c [Do you/Does [S.
s9q15d [Do you/Does [S.
s9q15e Do you have any
s9q11b Does anyone in th
s10q01 People in this neig
s10q02 We watch out for
s10q03 There are people
s10q04 There are people
s10q05 If my child were o
s10q06 How often do you
s10q07 How often do you
s10q08 How often do you
s11q01 Is [S.C.] of Hispar
racer Race classificatio
raceaian Race classificatio
raceasia Race classificatio
race_hi Race classificatio
s11q03 [Was [S.C.]'s [FIL
log on (text)
Command
C:\NSCH
Start
3:48 PM


Stata/SE 9.2 - [Results]
File Edit Prefs Data Graphics Statistics User Window Help
Review
do "C:\Data SLAITS\MCHB Epi 2006\DUC_descriptive_
svyset idnumr [pweight=weight_i], strata(state) vce(linearize
svy, vce(linearized): tabulate racer, se ci percent
svy, subpop(racer if ==1) vce(linearized): tabulate s2q19 h
svy, subpop(racer if == 1) vce(linearized): tabulate s2q19 h
svy, subpop(racer if racer == 1) vce(linearized): tabulate s
svy, subpop(racer if == 1) vce(linearized): tabulate s2q19 h
svy, subpop(if racer == 1) vce(linearized): tabulate s2q19 h
. svy, vce(linearized): tabulate racer, se ci percent
(running tabulate on estimation sample)
Number of strata = 51 Number of obs = 95443
Number of PSUs = 95443
Race classification for all states (White,Black,Mutiracial,Other) | percentages
1 - WHIT 74.65
2 - BLAC 16.45
3 - MULT 3.712
4 - OTHE 5.187
Total 100
Key: percentages = cell
se = linea
lb = lower
ub = upper
svy: tabulate - Two-way tables for survey data
Model if/in SE Table items Reporting Test statistics
Subpopulation estimation
Indicator variable:
If: (expression)
racer == 1
Create...
Restrict to observations
If: (expression)
Create...
Obs. in range: 1 to: 102353
OK Cancel Submit
log on (text)
Command
Variables
s9q05r During the past 12
s9q08 Would you say th
s9q09 Would you say th
s9q10 Would you say th
s9q18 Would you say th
s9q19 Would you say th
s9q20 Would you say th
s9q15 During the past m
s9q15a During the past m
s9q15b During the past m
s9q15c [Do you/Does [S.
s9q15d [Do you/Does [S.
s9q15e Do you have any
s9q11b Does anyone in th
s10q01 People in this neig
s10q02 We watch out for
s10q03 There are people
s10q04 There are people
s10q05 If my child were o
s10q06 How often do you
s10q07 How often do you
s10q08 How often do you
s11q01 Is [S.C.] of Hispar
racer Race classificatio
raceaian Race classificatio
raceasia Race classificatio
race_hi Race classificatio
s11q03 [Was [S.C.]'s [FIL
C:\NSCH
Start
3:59 PM


Stata/SE 9.2 - [Results]
File Edit Prefs Data Graphics Statistics User Window Help
Review
do "C:\Data SLAITS\MCHB Epi 2006\DUC_descriptive_
svyset idnumr [pweight=weight_i], strata(state) vce(linearized
svy, vce(linearized): tabulate racer, se ci percent
. svy, vce(linearized): tabulate racer, se ci percent
(running tabulate on estimation sample)
Number of strata = 1
Number of PSUs = 9
Race classification for all states (White,Black,Mutiracial,Other) | percentages
1 - WHIT | 74.65
2 - BLAC | 16.45
3 - MULT | 3.712
4 - OTHE | 5.187
Total | 100
Key: percentages = ce
se = li
lb = lo
ub = up
svy: tabulate - Two-way tables for survey data
Model if/in SE Table items Reporting Test statistics
Cell proportions
Weighted cell counts
Within-column proportions
Within-row proportions
Standard errors
Confidence intervals
Display the DEFF design effects
Display the DEFT design effects
Report design effects assuming SRS within subpopulation
Cell observations
OK Cancel Submit
Variables
s9q05r During the past 12
s9q08 Would you say th
s9q09 Would you say th
s9q10 Would you say th
s9q18 Would you say th
s9q19 Would you say th
s9q20 Would you say th
s9q15 During the past m
s9q15a During the past m
s9q15b During the past m
s9q15c [Do you/Does [S.
s9q15d [Do you/Does [S.
s9q15e Do you have any
s9q11b Does anyone in th
s10q01 People in this neig
s10q02 We watch out for
s10q03 There are people
s10q04 There are people
s10q05 If my child were o
s10q06 How often do you
s10q07 How often do you
s10q08 How often do you
s11q01 Is [S.C.] of Hispar
racer Race classificatio
raceaian Race classificatio
raceasia Race classificatio
race_hi Race classificatio
s11q03 [Was [S.C.]'s [FIL
log on (text)
Command
C:\NSCH
Start
3:50 PM


Stata/SE 9.2 - [Results]
File Edit Prefs Data Graphics Statistics User Window Help
Review
do "C:\Data SLAITS\MCHB Epi 2006\DUC_descriptive_
svyset idnumr [pweight=weight_i], strata(state) vce(linearized
svy, vce(linearized): tabulate racer, se ci percent
. svy, vce(linearized): tabulate racer, se ci percent
(running tabulate on estimation sample)
Number of strata =
Number of PSUs = 9
Race classification for all states (white,Black,Mutiracial,other) | percentages
1 - WHIT | 74.65
2 - BLAC | 16.45
3 - MULT | 3.712
4 - OTHE | 5.187
Total | 100
Key: percentages = ce
se = li
lb = lo
ub = up
svy: tabulate - Two-way tables for survey data
Model | if/in | SE | Table items | Reporting | Test statistics
95 Confidence level
Display percentages instead of proportions
Stack confidence interval endpoints vertically
Suppress row and column marginals
Suppress displaying value labels
%6.0g Help format...
4 Cell width
1 Cell separation width
4 Stub width
OK
Cancel
Submit
Variables
s9q05r During the past 12
s9q08 Would you say th
s9q09 Would you say th
s9q10 Would you say th
s9q18 Would you say th
s9q19 Would you say th
s9q20 Would you say th
s9q15 During the past m
s9q15a During the past m
s9q15b During the past m
s9q15c [Do you/Does [S.
s9q15d [Do you/Does [S.
s9q15e Do you have any
s9q11b Does anyone in th
s10q01 People in this neig
s10q02 We watch out for
s10q03 There are people
s10q04 There are people
s10q05 If my child were o
s10q06 How often do you
s10q07 How often do you
s10q08 How often do you
s11q01 Is [S.C.] of Hispar
racer Race classificatio
raceaian Race classificatio
raceasia Race classificatio
race_hi Race classificatio
s11q03 [Was [S.C.]'s [FIL
log on (text)
Command
C:\NSCH
Start
3:51 PM


Stata/SE 9.2 - [Results]
File Edit Prefs Data Graphics Statistics User Window Help
Review
do "C:\Data SLAITS\MCHB Epi 2006\DUC_descriptive_
svyset idnumr [pweight=weight_i], strata(state) vce(linearized
svy, vce(linearized): tabulate racer, se ci percent
svy, subpop(racer if ==1) vce(linearized): tabulate s2q19 h
svy, subpop(racer if == 1) vce(linearized): tabulate s2q19 h
svy, subpop(racer if racer == 1) vce(linearized): tabulate s
svy, subpop(racer if == 1) vce(linearized): tabulate s2q19 h
svy, subpop(if racer == 1) vce(linearized): tabulate s2q19 h
invalid subpop() option
r(198);
. svy, subpop(if racer == 1) vce(linearized): tabulate s2q19 health, row se ci percent
(running tabulate on estimation sample)
Number of strata = 51
Number of PSUs = 102103
Number of obs = 102103
Population size = 72568179
Subpop. no. of obs = 76237
Subpop. size = 48784784
Design df = 102052
Has a doctor or health professional ever told you that [S.C.] has asthma?
Child Overall Health is Excellent/Very Good
No Yes Total
0 - NO
9.704 90.3 100
(.2094) (.2094)
[9.301,10.12] [89.88,90.7]
1 - YES
26.73 73.27 100
(.8201) (.8201)
[25.15,28.37] [71.63,74.85]
Total
11.64 88.36 100
(.2101) (.2101)
[11.24,12.06] [87.94,88.76]
Key: row percentages
(linearized standard errors of row percentages)
[95% confidence intervals for row percentages]
Pearson:
Uncorrected chi2(1) = 2904.1243
Design-based F(1, 102052) = 705.5714 P = 0.0000
.
log on (text)
Variables
s9q05r During the past 12
s9q08 Would you say th
s9q09 Would you say th
s9q10 Would you say th
s9q18 Would you say th
s9q19 Would you say th
s9q20 Would you say th
s9q15 During the past m
s9q15a During the past m
s9q15b During the past m
s9q15c [Do you/Does [S.
s9q15d [Do you/Does [S.
s9q15e Do you have any
s9q11b Does anyone in th
s10q01 People in this neig
s10q02 We watch out for
s10q03 There are people
s10q04 There are people
s10q05 If my child were o
s10q06 How often do you
s10q07 How often do you
s10q08 How often do you
s11q01 Is [S.C.] of Hispar
racer Race classificatio
raceaian Race classificatio
raceasia Race classificatio
race_hi Race classificatio
s11q03 [Was [S.C.]'s [FIL
Command
C:\NSCH

Logistic Regression: STATA SVY:LOGIT

- SVYSET [PWEIGHT=WEIGHT_I], STRATA(STATE) PSU(IDNUMR)

- SVY: LOGIT DVAR1 IVAR1 IVAR2 IVAR3, OR
  - Declare dependent analysis variable
  - Define subgroup analyses
  - Declare the method used for variance estimation
  - Declare reporting specifications such as the confidence interval levels and request odds ratios or dependent variable coefficients
  - Define the maximum number or iterations to run

TextPad - [C:\Data SLAITS\MCHB Epi 2006\DUC_logistic_stata_sub.do]

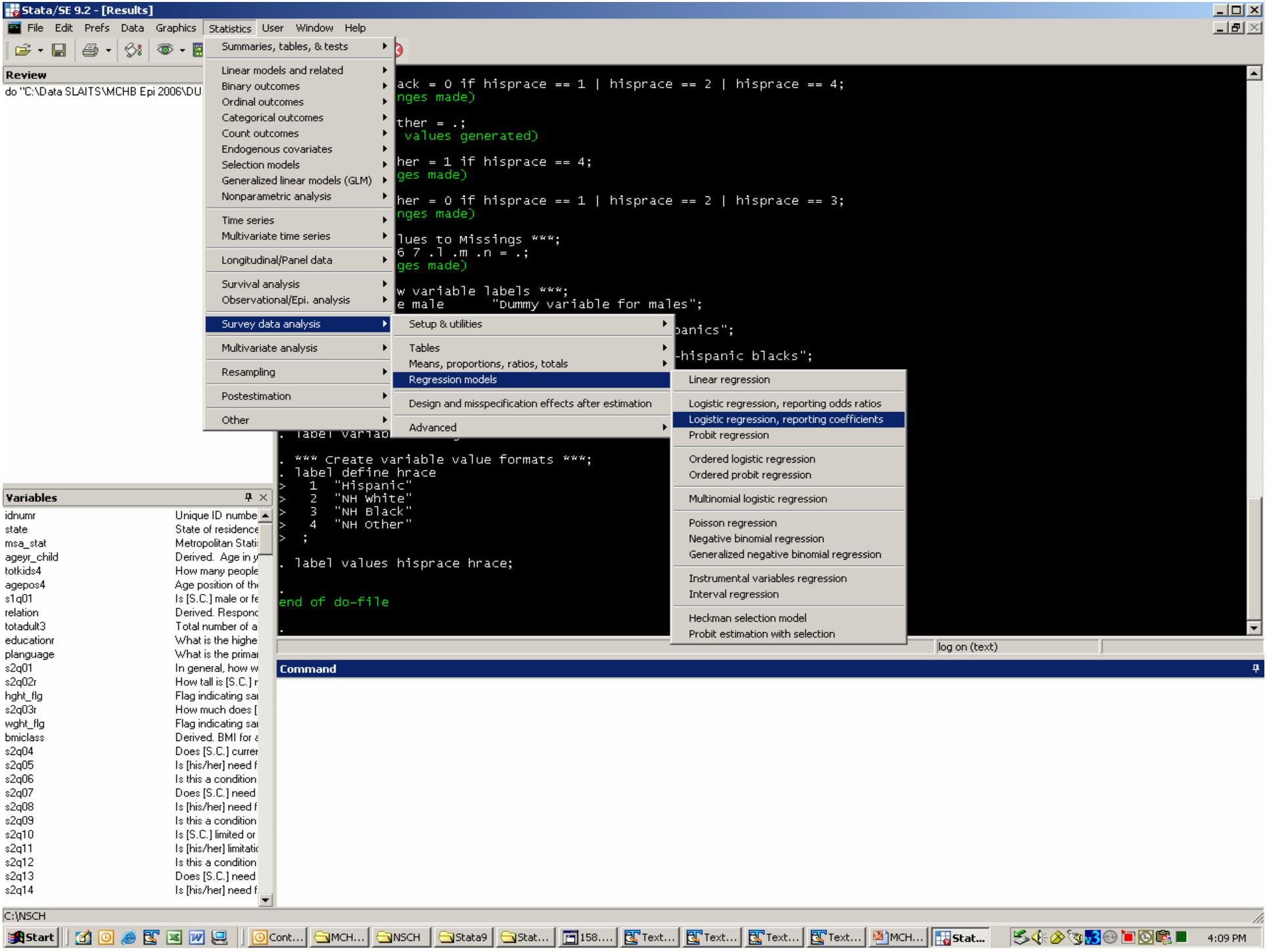
File Edit Search View Tools Macros Configure Window Help

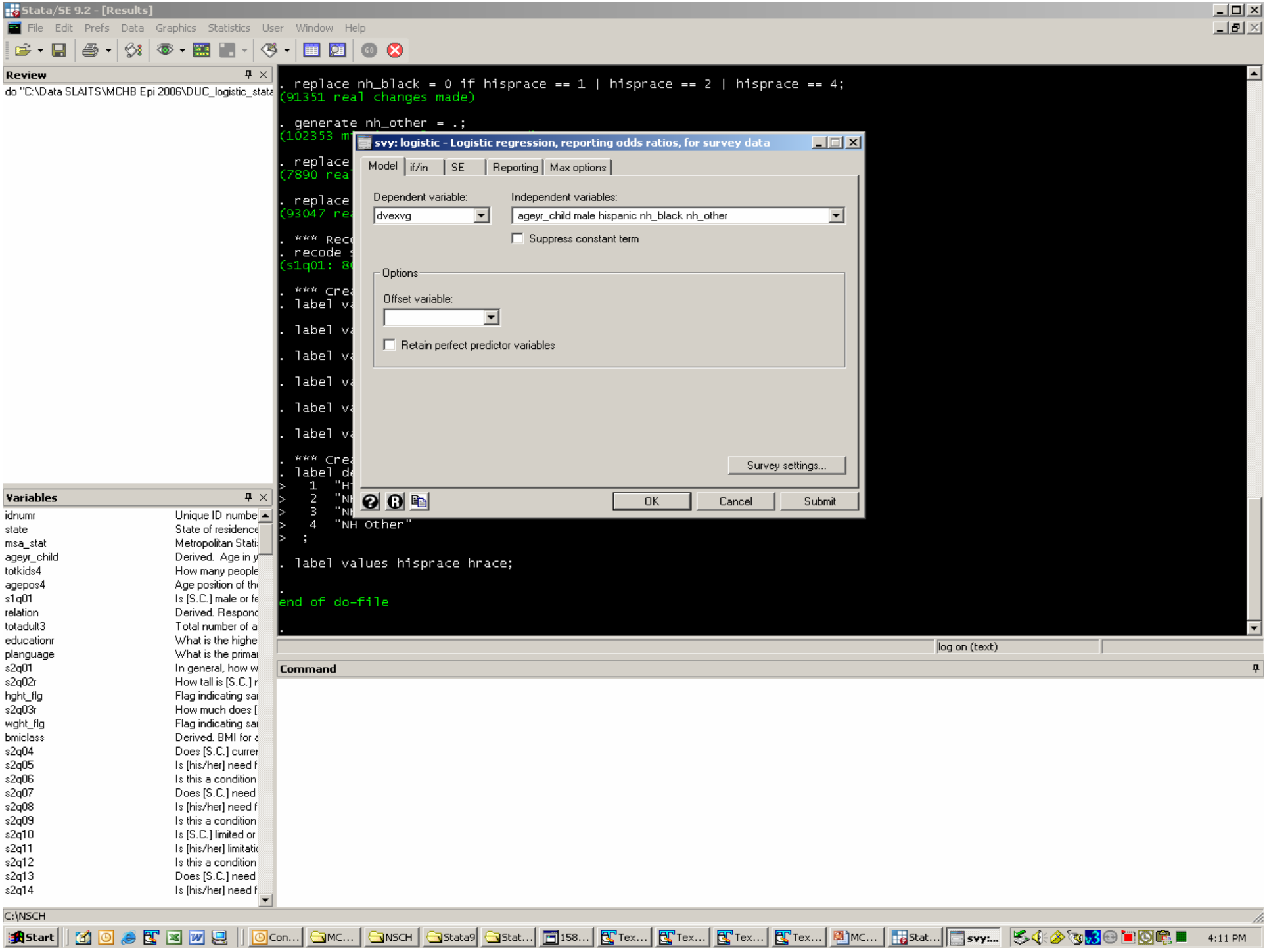
```
*** create analytical variables ***;
** s2q54  - How would you describe condition of child's teeth              **;
** s1q01  - Male or female: Male = 1                                       **;
** racer  - Race classification: White, black, multiple, other             **;
** s11q01 - Is sample child of hispanic origin: Yes = 1                    **;

generate dvexvg = .;
replace dvexvg = 1 if s2q54==1 | s2q54==2;
replace dvexvg = 0 if s2q54==3 | s2q54==4 | s2q54==5;

generate male = .;
replace male = 1 if s1q01==1;
replace male = 0 if s1q01==2;

generate hisprace = .;
replace hisprace = 2 if racer == 1;
replace hisprace = 3 if racer == 2;
replace hisprace = 4 if racer == 3 | racer == 4;
replace hisprace = 1 if s11q01 == 1;

generate hispanic = .;
replace hispanic = 1 if hisprace == 1;
replace hispanic = 0 if hisprace == 2 | hisprace == 3 | hisprace == 4;

generate nh_black = .;
replace nh_black = 1 if hisprace == 3;
replace nh_black = 0 if hisprace == 1 | hisprace == 2 | hisprace == 4;

generate nh_other = .;
replace nh_other = 1 if hisprace == 4;
replace nh_other = 0 if hisprace == 1 | hisprace == 2 | hisprace == 3;

*** Recode Values to Missings ***;
recode s1q01 6 7 .l .m .n = .;


*** Create new variable labels ***;
label variable male      "Dummy variable for males";
label variable hispanic  "Dummy variable for hispanics";
label variable nh_black  "Dummy variable for non-hispanic blacks";
label variable nh_other  "Dummy variable for non-hispanic others";
label variable hisprace  "Composite race ethnicity variable";
label variable dvexvg    "Child Dental Health is Excellent/Very Good";


*** Create variable value formats ***;
label define hrace
  1  "Hispanic"
  2  "NH White"
  3  "NH Black"
  4  "NH Other"
 ;

label values hisprace hrace;
```

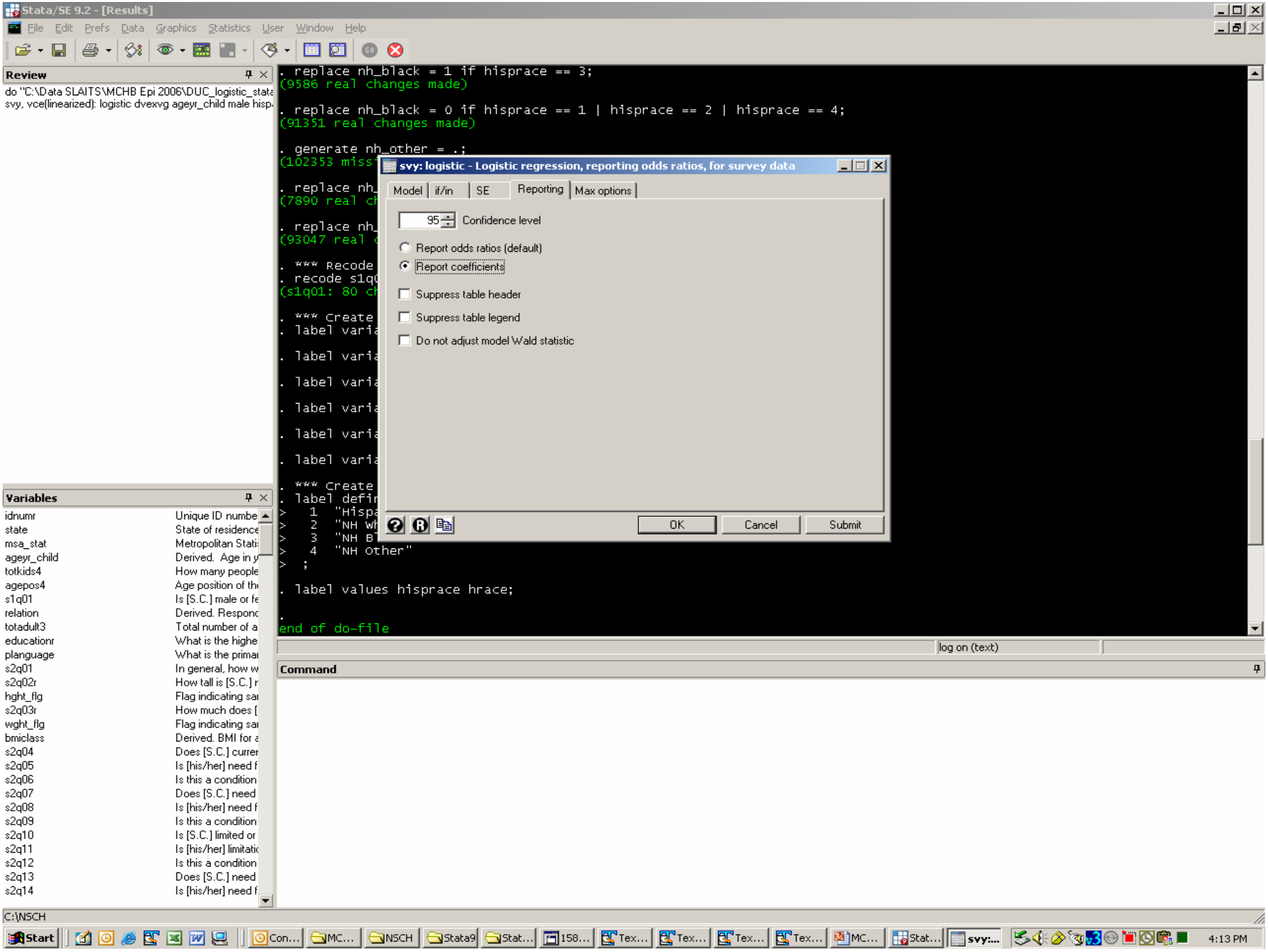
DUC_descriptive_stata.do | DUC_descriptive_stata_sub.do | DUC_logistic_stata_sub.do

File: DUC_logistic_stata_sub.do, 3162 bytes, 101 lines, PC, ANSI

102 1 Read Ovr Block Sync Rec Caps


Stata/SE 9.2 - [Results]
File Edit Prefs Data Graphics Statistics User Window Help
Summaries, tables, & tests
Linear models and related
Binary outcomes
Ordinal outcomes
Categorical outcomes
Count outcomes
Endogenous covariates
Selection models
Generalized linear models (GLM)
Nonparametric analysis
Time series
Multivariate time series
Longitudinal/Panel data
Survival analysis
Observational/Epi. analysis
Survey data analysis
Multivariate analysis
Resampling
Postestimation
Other
Setup & utilities
Tables
Means, proportions, ratios, totals
Regression models
Design and misspecification effects after estimation
Advanced
Linear regression
Logistic regression, reporting odds ratios
Logistic regression, reporting coefficients
Probit regression
Ordered logistic regression
Ordered probit regression
Multinomial logistic regression
Poisson regression
Negative binomial regression
Generalized negative binomial regression
Instrumental variables regression
Interval regression
Heckman selection model
Probit estimation with selection
Review
do "C:\Data SLAITS\MCHB Epi 2006\DU
Variables
idnumr Unique ID numbe
state State of residence
msa_stat Metropolitan Stati
ageyr_child Derived. Age in y
totkids4 How many people
agepos4 Age position of th
s1q01 Is [S.C.] male or fe
relation Derived. Respond
totadult3 Total number of a
educationr What is the highe
planguage What is the primar
s2q01 In general, how w
s2q02r How tall is [S.C.] r
hght_flg Flag indicating sa
s2q03r How much does [
wght_flg Flag indicating sa
bmiclass Derived. BMI for a
s2q04 Does [S.C.] curre
s2q05 Is [his/her] need f
s2q06 Is this a condition
s2q07 Does [S.C.] need
s2q08 Is [his/her] need f
s2q09 Is this a condition
s2q10 Is [S.C.] limited or
s2q11 Is [his/her] limitati
s2q12 Is this a condition
s2q13 Does [S.C.] need
s2q14 Is [his/her] need f
. *** Create variable value formats ***;
. label define hrace
> 1 "Hispanic"
> 2 "NH White"
> 3 "NH Black"
> 4 "NH Other"
> ;
. label values hisprace hrace;
end of do-file
log on (text)
Command
C:\NSCH
Start
4:09 PM


Stata/SE 9.2 - [Results]
File Edit Prefs Data Graphics Statistics User Window Help
Review
do "C:\Data SLAITS\MCHB Epi 2006\DUC_logistic_stata
. replace nh_black = 0 if hisprace == 1 | hisprace == 2 | hisprace == 4;
(91351 real changes made)
. generate nh_other = .;
svy: logistic - Logistic regression, reporting odds ratios, for survey data
Model
if/in
SE
Reporting
Max options
Dependent variable:
dvexvg
Independent variables:
ageyr_child male hispanic nh_black nh_other
Suppress constant term
Options
Offset variable:
Retain perfect predictor variables
Survey settings...
OK
Cancel
Submit
. label values hisprace hrace;
end of do-file
log on (text)
Command
Variables
idnumr Unique ID numbe
state State of residence
msa_stat Metropolitan Stati
ageyr_child Derived. Age in y
totkids4 How many people
agepos4 Age position of th
s1q01 Is [S.C.] male or fe
relation Derived. Respond
totadult3 Total number of a
educationr What is the highe
planguage What is the primar
s2q01 In general, how w
s2q02r How tall is [S.C.] r
hght_flg Flag indicating sa
s2q03r How much does [
wght_flg Flag indicating sa
bmiclass Derived. BMI for a
s2q04 Does [S.C.] curre
s2q05 Is [his/her] need f
s2q06 Is this a condition
s2q07 Does [S.C.] need
s2q08 Is [his/her] need f
s2q09 Is this a condition
s2q10 Is [S.C.] limited or
s2q11 Is [his/her] limitati
s2q12 Is this a condition
s2q13 Does [S.C.] need
s2q14 Is [his/her] need f
C:\NSCH
Start
4:11 PM


Stata/SE 9.2 - [Results]
File Edit Prefs Data Graphics Statistics User Window Help
Review
do "C:\Data SLAITS\MCHB Epi 2006\DUC_logistic_state
svy, vce(linearized): logistic dvexvg ageyr_child male hisp
. replace nh_black = 1 if hisprace == 3;
(9586 real changes made)
. replace nh_black = 0 if hisprace == 1 | hisprace == 2 | hisprace == 4;
(91351 real changes made)
. generate nh_other = .;
(102353 miss
. replace nh_
(7890 real ch
. replace nh_
(93047 real
. *** Recode
. recode s1q0
(s1q01: 80 ch
. *** Create
. label varia
. label varia
. label varia
. label varia
. label varia
. label varia
. *** Create
. label defin
> 1 "Hispa
> 2 "NH wh
> 3 "NH Bl
> 4 "NH Other"
> ;
. label values hisprace hrace;
.
end of do-file
svy: logistic - Logistic regression, reporting odds ratios, for survey data
Model if/in SE Reporting Max options
95 Confidence level
Report odds ratios (default)
Report coefficients
Suppress table header
Suppress table legend
Do not adjust model Wald statistic
OK Cancel Submit
Variables
idnumr Unique ID numbe
state State of residence
msa_stat Metropolitan Stati
ageyr_child Derived. Age in y
totkids4 How many people
agepos4 Age position of th
s1q01 Is [S.C.] male or fe
relation Derived. Respond
totadult3 Total number of a
educationr What is the highe
planguage What is the primar
s2q01 In general, how w
s2q02r How tall is [S.C.] r
hght_flg Flag indicating sa
s2q03r How much does [
wght_flg Flag indicating sa
bmiclass Derived. BMI for a
s2q04 Does [S.C.] curre
s2q05 Is [his/her] need f
s2q06 Is this a condition
s2q07 Does [S.C.] need
s2q08 Is [his/her] need f
s2q09 Is this a condition
s2q10 Is [S.C.] limited or
s2q11 Is [his/her] limitatio
s2q12 Is this a condition
s2q13 Does [S.C.] need
s2q14 Is [his/her] need f
log on (text)
Command
C:\NSCH
Start
4:13 PM

Stata/SE 9.2 - [Results]

File Edit Prefs Data Graphics Statistics User Window Help

Review

```
do "C:\Data SLAITS\MCHB Epi 2006\DUC_logistic_stata
svy, vce(linearized): logistic dvexvg ageyr_child male hisp
svy, vce(linearized): logistic dvexvg ageyr_child male hisp
```

Variables

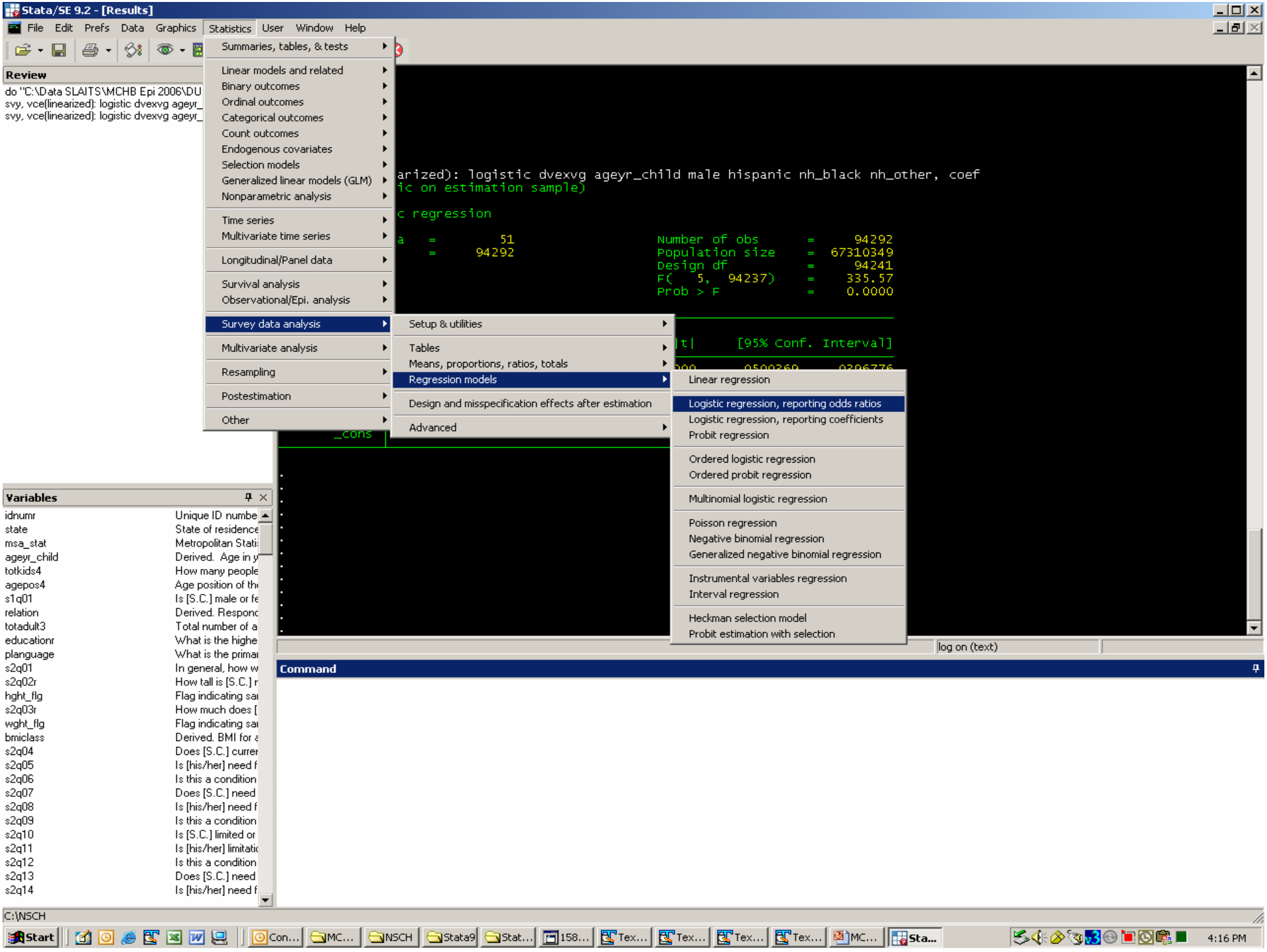
idnumr	Unique ID numbe
state	State of residence
msa_stat	Metropolitan Stati
ageyr_child	Derived. Age in y
totkids4	How many people
agepos4	Age position of th
s1q01	Is [S.C.] male or fe
relation	Derived. Respond
totadult3	Total number of a
educationr	What is the highe
planguage	What is the primar
s2q01	In general, how w
s2q02r	How tall is [S.C.] r
hght_flg	Flag indicating sa
s2q03r	How much does [
wght_flg	Flag indicating sa
bmiclass	Derived. BMI for a
s2q04	Does [S.C.] curre
s2q05	Is [his/her] need f
s2q06	Is this a condition
s2q07	Does [S.C.] need
s2q08	Is [his/her] need f
s2q09	Is this a condition
s2q10	Is [S.C.] limited or
s2q11	Is [his/her] limitatio
s2q12	Is this a condition
s2q13	Does [S.C.] need
s2q14	Is [his/her] need f

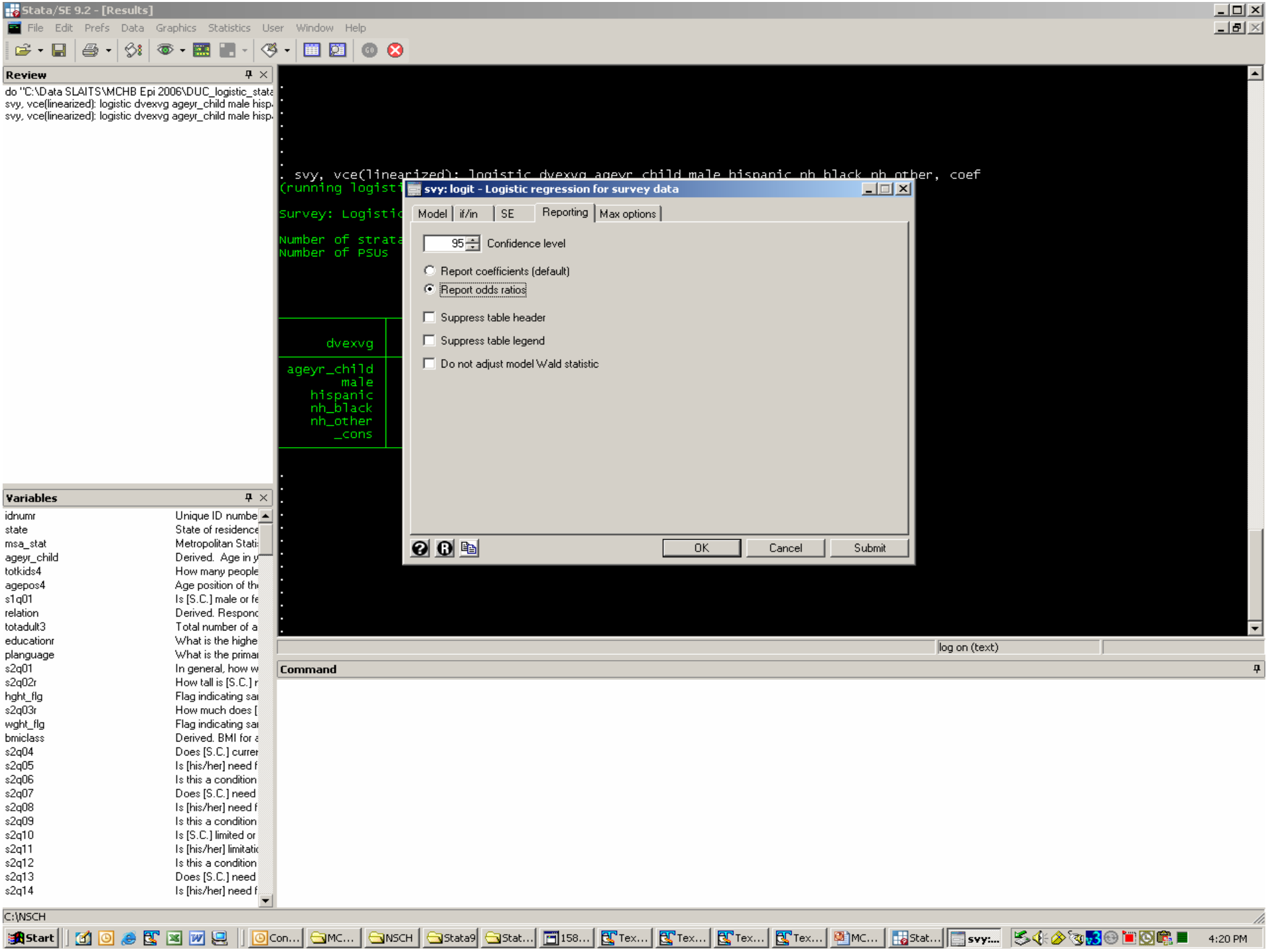
```
. svy, vce(linearized): logistic dvexvg ageyr_child male hispanic nh_black nh_other, coef
(running logistic on estimation sample)

Survey: Logistic regression

Number of strata   =        51                  Number of obs      =     94292
Number of PSUs     =     94292                  Population size    =  67310349
                                                 Design df          =     94241
                                                 F(   5,  94237)    =    335.57
                                                 Prob > F           =    0.0000

------------------------------------------------------------------------------
             |             Linearized
      dvexvg |      Coef.   Std. Err.      t    P>|t|     [95% Conf. Interval]
-------------+----------------------------------------------------------------
 ageyr_child |  -.0448572   .0026427   -16.97   0.000    -.0500369   -.0396776
        male |  -.0937836    .026918    -3.48   0.000    -.1465425   -.0410246
    hispanic |  -1.362716   .0373626   -36.47   0.000    -1.435947   -1.289486
    nh_black |  -.7329964   .0383663   -19.11   0.000     -.808194   -.6577988
    nh_other |  -.4400072   .0624817    -7.04   0.000    -.5624706   -.3175437
       _cons |   1.654497   .0331654    49.89   0.000     1.589493    1.719501
------------------------------------------------------------------------------
```

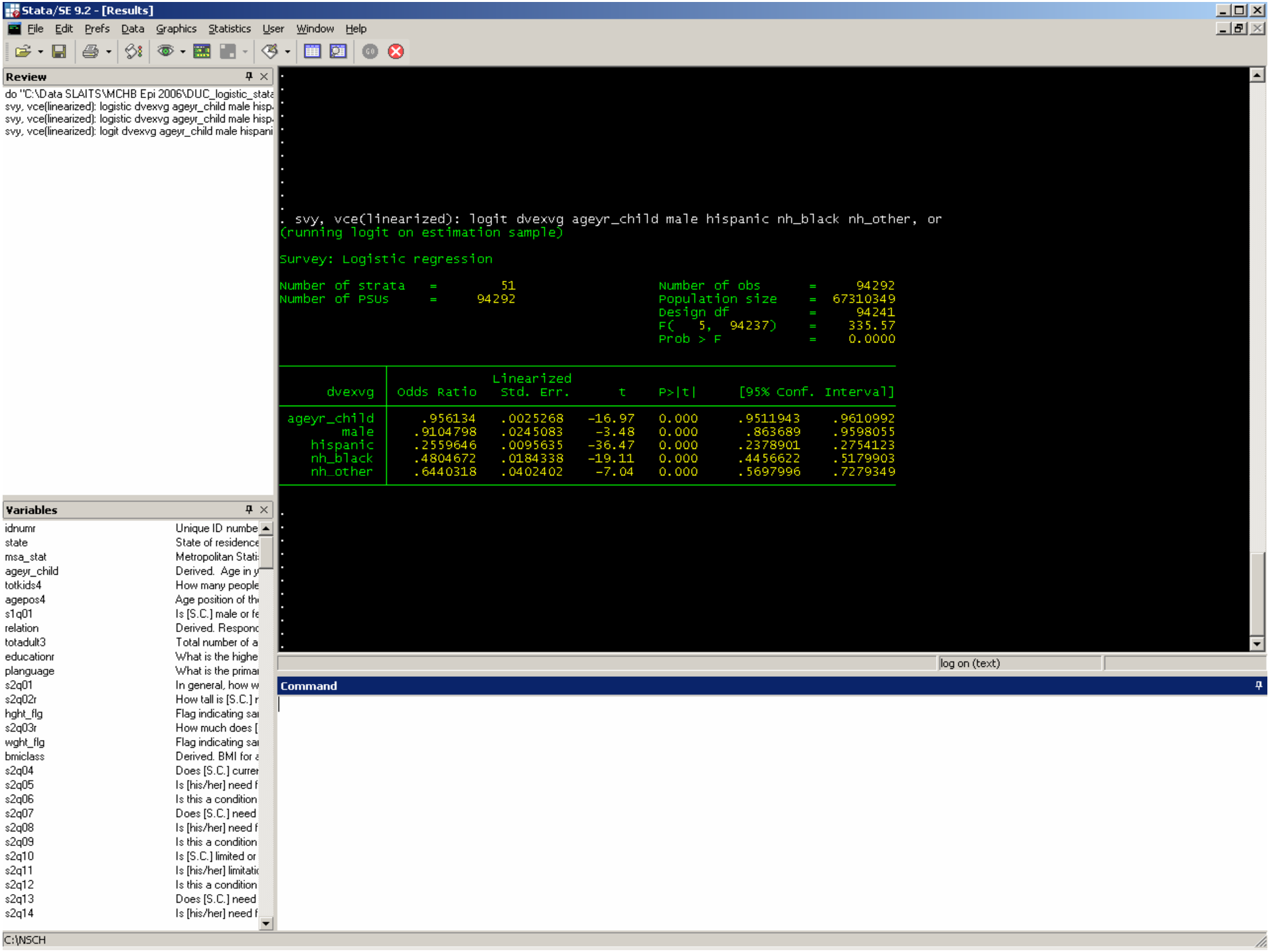
log on (text)

Command

C:\NSCH


Stata/SE 9.2 - [Results]
File Edit Prefs Data Graphics Statistics User Window Help
Summaries, tables, & tests
Linear models and related
Binary outcomes
Ordinal outcomes
Categorical outcomes
Count outcomes
Endogenous covariates
Selection models
Generalized linear models (GLM)
Nonparametric analysis
Time series
Multivariate time series
Longitudinal/Panel data
Survival analysis
Observational/Epi. analysis
Survey data analysis
Multivariate analysis
Resampling
Postestimation
Other
Setup & utilities
Tables
Means, proportions, ratios, totals
Regression models
Design and misspecification effects after estimation
Advanced
Linear regression
Logistic regression, reporting odds ratios
Logistic regression, reporting coefficients
Probit regression
Ordered logistic regression
Ordered probit regression
Multinomial logistic regression
Poisson regression
Negative binomial regression
Generalized negative binomial regression
Instrumental variables regression
Interval regression
Heckman selection model
Probit estimation with selection
Review
Variables
Command
log on (text)
C:\NSCH
Start
4:16 PM


Stata/SE 9.2 - [Results]
File Edit Prefs Data Graphics Statistics User Window Help
Review
do "C:\Data SLAITS\MCHB Epi 2006\DUC_logistic_state
svy, vce(linearized): logistic dvexvg ageyr_child male hisp
svy, vce(linearized): logistic dvexvg ageyr_child male hisp
. svy, vce(linearized): logistic dvexvg ageyr_child male hispanic nh_black nh_other, coef
(running logist
Survey: Logistic
Number of strata
Number of PSUs
dvexvg
ageyr_child
male
hispanic
nh_black
nh_other
_cons
svy: logit - Logistic regression for survey data
Model if/in SE Reporting Max options
95 Confidence level
Report coefficients (default)
Report odds ratios
Suppress table header
Suppress table legend
Do not adjust model Wald statistic
OK Cancel Submit
log on (text)
Command
Variables
idnumr Unique ID numbe
state State of residence
msa_stat Metropolitan Stati
ageyr_child Derived. Age in y
totkids4 How many people
agepos4 Age position of th
s1q01 Is [S.C.] male or fe
relation Derived. Respond
totadult3 Total number of a
educationr What is the highe
planguage What is the primar
s2q01 In general, how w
s2q02r How tall is [S.C.] r
hght_flg Flag indicating sa
s2q03r How much does [
wght_flg Flag indicating sa
bmiclass Derived. BMI for a
s2q04 Does [S.C.] curre
s2q05 Is [his/her] need f
s2q06 Is this a condition
s2q07 Does [S.C.] need
s2q08 Is [his/her] need f
s2q09 Is this a condition
s2q10 Is [S.C.] limited or
s2q11 Is [his/her] limitatic
s2q12 Is this a condition
s2q13 Does [S.C.] need
s2q14 Is [his/her] need f
C:\NSCH
Start
4:20 PM


Stata/SE 9.2 - [Results]
File Edit Prefs Data Graphics Statistics User Window Help
Review
do "C:\Data SLAITS\MCHB Epi 2006\DUC_logistic_stata
svy, vce(linearized): logistic dvexvg ageyr_child male hisp
svy, vce(linearized): logistic dvexvg ageyr_child male hisp
svy, vce(linearized): logit dvexvg ageyr_child male hispani
. svy, vce(linearized): logit dvexvg ageyr_child male hispanic nh_black nh_other, or
(running logit on estimation sample)
Survey: Logistic regression
Number of strata = 51
Number of PSUs = 94292
Number of obs = 94292
Population size = 67310349
Design df = 94241
F(5, 94237) = 335.57
Prob > F = 0.0000
dvexvg | Odds Ratio | Linearized Std. Err. | t | P>|t| | [95% Conf. | Interval]
ageyr_child | .956134 | .0025268 | -16.97 | 0.000 | .9511943 | .9610992
male | .9104798 | .0245083 | -3.48 | 0.000 | .863689 | .9598055
hispanic | .2559646 | .0095635 | -36.47 | 0.000 | .2378901 | .2754123
nh_black | .4804672 | .0184338 | -19.11 | 0.000 | .4456622 | .5179903
nh_other | .6440318 | .0402402 | -7.04 | 0.000 | .5697996 | .7279349
log on (text)
Variables
idnumr Unique ID numbe
state State of residence
msa_stat Metropolitan Stati
ageyr_child Derived. Age in y
totkids4 How many people
agepos4 Age position of th
s1q01 Is [S.C.] male or fe
relation Derived. Respond
totadult3 Total number of a
educationr What is the highe
planguage What is the primar
s2q01 In general, how w
s2q02r How tall is [S.C.] r
hght_flg Flag indicating sa
s2q03r How much does [
wght_flg Flag indicating sa
bmiclass Derived. BMI for a
s2q04 Does [S.C.] curre
s2q05 Is [his/her] need f
s2q06 Is this a condition
s2q07 Does [S.C.] need
s2q08 Is [his/her] need f
s2q09 Is this a condition
s2q10 Is [S.C.] limited or
s2q11 Is [his/her] limitati
s2q12 Is this a condition
s2q13 Does [S.C.] need
s2q14 Is [his/her] need f
Command
C:\NSCH

For More Information…

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  Hyattsville, Maryland 20782 USA

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