```
* Encoding: UTF-8.
* SPSS 29 Syntax ASDA3 Chapter 5, Winter 2025.

* Nhanes 2011-2012 data.
GET
  SAS DATA='P:\asda3\data sets for analysis examples and stata r code\nhanes1112.sas7bdat'.
DATASET NAME DataSet_nhanes WINDOW=FRONT.
```

Dataset Name

Notes

Output Created		26-FEB-2025 12:23:11
Comments		
Input	Filter	<none>
	Weight	<none>
	Split File	<none>
Syntax		DATASET NAME DataSet_nhanes WINDOW=FRONT.
Resources	Processor Time	00:00:00.00
	Elapsed Time	00:00:00.00

Warnings

The active dataset will replace the existing dataset named DataSet_nhanes.

```
COMPUTE age18p=0.
    if (age >=18) age18p=1.
EXECUTE.
USE ALL.

* FILTER CASES.
COMPUTE filter_$=(AGE18P = 1.).
VARIABLE LABELS filter_$ 'AGE18P = 1. (FILTER)'.
VALUE LABELS filter_$ 0 'Not Selected' 1 'Selected'.
FORMATS filter_$ (f1.0).
FILTER BY filter_$.
EXECUTE.
SHOW FILTER.
```

SHOW

Notes

Output Created		26-FEB-2025 12:23:11
Comments		
Input	Active Dataset	DataSet nhanes
	Filter	AGE18P = 1. (FILTER)
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	5864
Syntax		SHOW FILTER.
Resources	Processor Time	00:00:00.00
	Elapsed Time	00:00:00.00

[DataSet_nhanes]

System Settings

Keyword	Description	Setting
FILTER	Filter variable	AGE18P = 1. (FILTER)

```
* Apply Weight.
WEIGHT BY WTMEC2YR.
SHOW WEIGHT.
```

SHOW

Notes

Output Created		26-FEB-2025 12:23:11
Comments		
Input	Active Dataset	DataSet nhanes
	Filter	AGE18P = 1. (FILTER)
	Weight	Full sample 2 year MEC exam weight
	Split File	<none>
	N of Rows in Working Data File	5864
Syntax		SHOW WEIGHT.
Resources	Processor Time	00:00:00.00
	Elapsed Time	00:00:00.00

System Settings

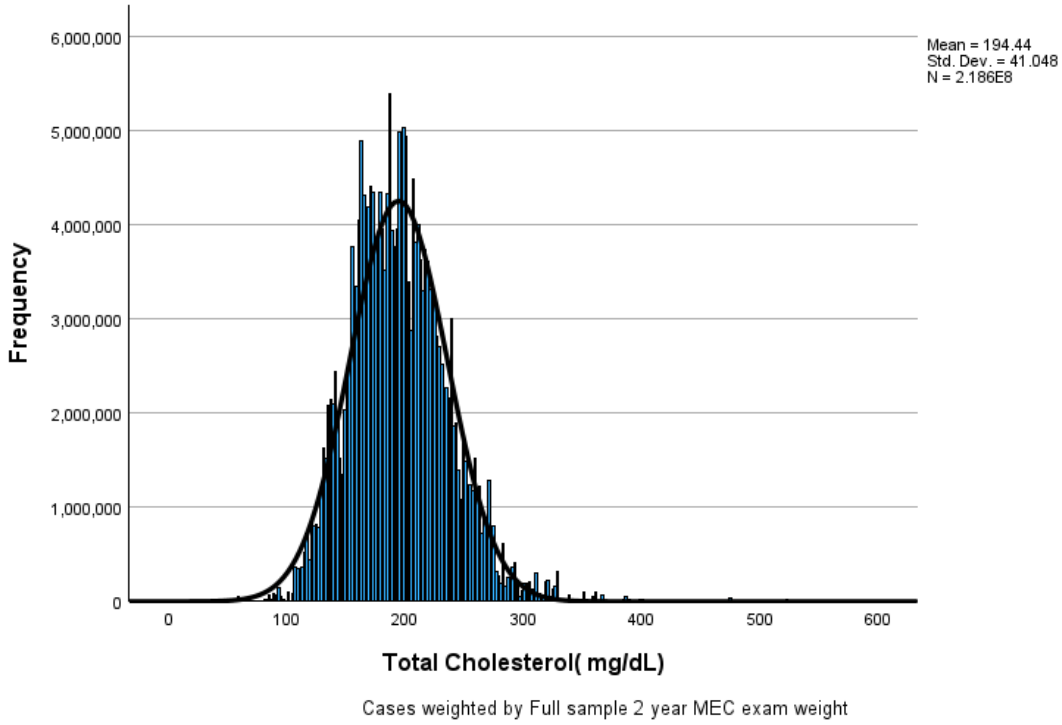
Keyword	Description	Setting
WEIGHT	Variable used to weight cases	Full sample 2 year MEC exam weight

```
* Weighted Histogram of Cholestrol by Gender  Example 5.1 and 5.2.
GRAPH
  /HISTOGRAM(NORMAL)=LBXTC.
```

Graph

Notes

Output Created		26-FEB-2025 12:23:11
Comments		
Input	Active Dataset	DataSet nhanes
	Filter	AGE18P = 1. (FILTER)
	Weight	Full sample 2 year MEC exam weight
	Split File	<none>
	N of Rows in Working Data File	5615
Syntax		GRAPH /HISTOGRAM(NORMAL)=LBXTC .
Resources	Processor Time	00:00:00.06
	Elapsed Time	00:00:00.19



Explore

Notes

Output Created		26-FEB-2025 12:23:11
Comments		
Input	Active Dataset	DataSet_nhanes
	Filter	AGE18P = 1. (FILTER)
	Weight	Full sample 2 year MEC exam weight
	Split File	<none>
	N of Rows in Working Data File	5615
Missing Value Handling	Definition of Missing	User-defined missing values for dependent variables are treated as missing.
	Cases Used	Statistics are based on cases with no missing values for any dependent variable or factor used.
Syntax		EXAMINE VARIABLES=LBXTC BY RIAGENDR /PLOT=BOXPLOT /STATISTICS=NONE /NOTOTAL.
Resources	Processor Time	00:00:00.13
	Elapsed Time	00:00:00.41

Gender

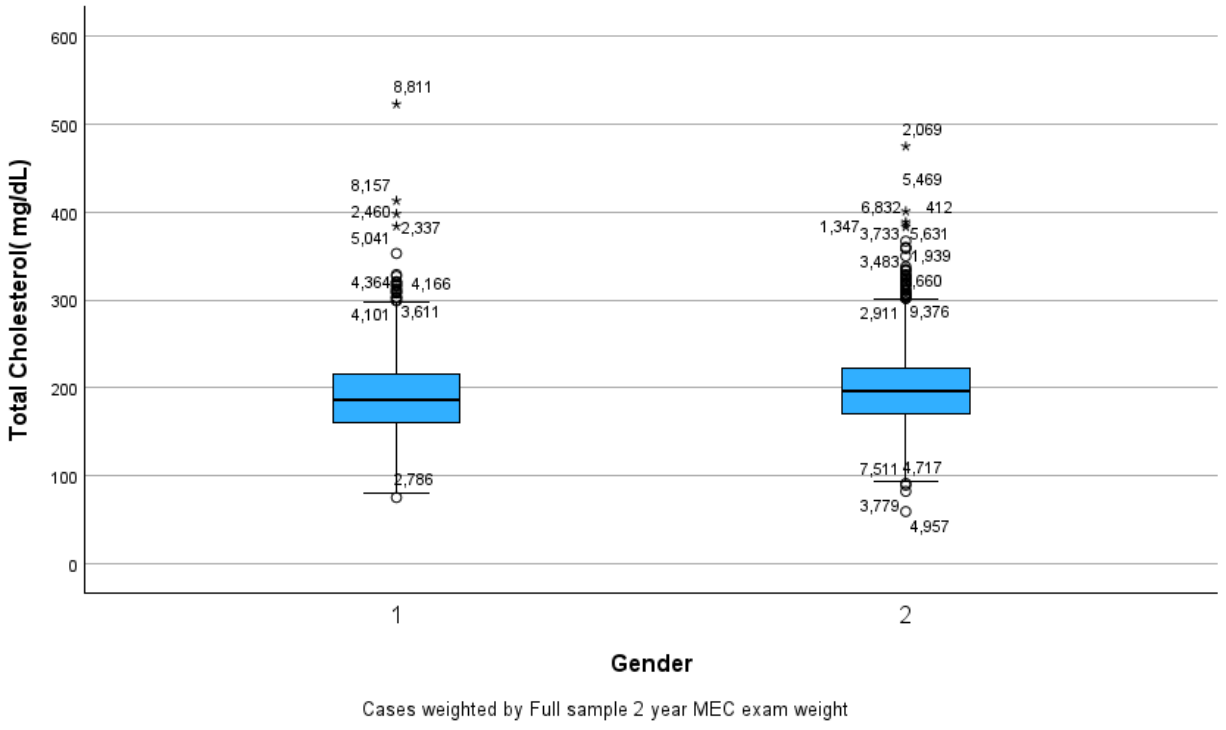
Case Processing Summary

		Cases				
		Valid		Missing		Total
	Gender	N	Percent	N	Percent	N
Total Cholesterol(mg/dL)	1	106186384	94.7%	5932076	5.3%	112118460
	2	112455652	93.8%	7428428	6.2%	119884079

Case Processing Summary

		Cases
		Total
	Gender	Percent
Total Cholesterol(mg/dL)	1	100.0%
	2	100.0%

Total Cholesterol(mg/dL)



Cases weighted by Full sample 2 year MEC exam weight

```
* NCSR data.
GET
  SAS DATA='P:\asda3\data sets for analysis examples and stata r code\ncsr.sas7bdat'.
DATASET NAME DataSet_ncsr  WINDOW=FRONT.
```

Dataset Name

Notes

Output Created		26-FEB-2025 12:23:12
Comments		
Input	Filter	<none>
	Weight	<none>
	Split File	<none>
Syntax		DATASET NAME DataSet_ncsr WINDOW=FRONT.
Resources	Processor Time	00:00:00.00
	Elapsed Time	00:00:00.02

Warnings

The active dataset will replace the existing dataset named DataSet ncsr.

```
* Compute Population Weight.
COMPUTE ncsrwtsh_pop=ncsrwtsh*(209128094/ 9282) .
```

```
* Analysis Example 5.3 Population Count of US Adults with MDE.
* Analysis Example 5.3 Total Count of US Adults with MDE by Marital Status.
CSTABULATE
 /PLAN FILE='P:\asda3\data sets for analysis examples and stata r code\ncsr_pop_wgt.csaplan'
 /TABLES VARIABLES=mde
 /SUBPOP TABLE=MAR3CAT DISPLAY=LAYERED
 /CELLS POPSIZE
 /STATISTICS SE CV CIN(95) DEFF
 /MISSING SCOPE=TABLE CLASSMISSING=EXCLUDE.
```

Complex Samples: Tables

Notes

Output Created		26-FEB-2025 12:23:12
Comments		
Input	Active Dataset	DataSet_ncsr
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	9282
	Plan File	P:\asda3\data sets for analysis examples and stata r code/ncsr_pop_wgt.csaplan
Missing Value Handling	Definition of Missing	User-defined missing values among the strata, cluster, or subpopulation variables are treated as missing.
	Cases Used	Each table is based on all valid data for the tabulation variable(s) used in creating the table.

Syntax		CSTABULATE /PLAN FILE='P:\asda3\data sets for analysis examples and stata r code\ncsr_pop_wgt.csaplan' /TABLES VARIABLES=mde /SUBPOP TABLE=MAR3CAT DISPLAY=LAYERED /CELLS POPSIZE /STATISTICS SE CV CIN(95) DEFF /MISSING SCOPE=TABLE CLASSMISSING=EXCLUDE.
Resources	Processor Time	00:00:00.00
	Elapsed Time	00:00:00.16

[DataSet_ncsr]

Major Depressive Episode 1=Yes 0=No

			Standard	95% Confidence Interval	
		Estimate	Error	Lower	Upper
Population Size	0	169035890.905	7876169.959	153141136.423	184930645.387
	1	40092206.520	2567487.979	34910806.008	45273607.032
	Total	209128097.425	10218607.411	188506112.779	229750082.070

Major Depressive Episode 1=Yes 0=No

		Coefficient of Variation	Design Effect
Population Size	0	.047	84.958
	1	.064	9.028
	Total	.049	.

Subpopulation Tables

Major Depressive Episode 1=Yes 0=No

Marital Status 1=Married 2=Previously Married 3=Never Married			Estimate	Standard Error
1	Population Size	0	96459587.080	4705215.830
		1	20304190.500	1584108.641
		Total	116763777.580	6109331.527
2	Population Size	0	32386705.280	1895123.123
		1	10360670.649	702621.506
		Total	42747375.928	2381848.331
3	Population Size	0	40189598.546	2944180.685
		1	9427345.371	773137.582
		Total	49616943.916	3488233.477

Major Depressive Episode 1=Yes 0=No

Marital Status 1=Married 2=Previously Married 3=Never Married			95% Confidence Interval Lower	Upper
1	Population Size	0	86964077.106	105955097.053
		1	17107329.836	23501051.165
		Total	104434647.409	129092907.752
2	Population Size	0	28562191.981	36211218.579
		1	8942723.044	11778618.253
		Total	37940611.392	47554140.464
3	Population Size	0	34248001.376	46131195.715
		1	7867090.562	10987600.179
		Total	42577403.762	56656484.070

Major Depressive Episode 1=Yes 0=No

Marital Status 1=Married 2=Previously Married 3=Never Married			Coefficient of Variation	Design Effect
1	Population Size	0	.049	18.907
		1	.078	6.075
		Total	.052	32.121
2	Population Size	0	.059	5.823
		1	.068	2.225
		Total	.056	7.403
3	Population Size	0	.073	11.850
		1	.082	2.947
		Total	.070	14.269

```
* HRS data.
GET
  SAS DATA='P:\asda3\data sets for analysis examples and stata r code\hrs12.sas7bdat'.
DATASET NAME DataSet_hrs WINDOW=FRONT.
```

Dataset Name

Notes

Output Created		26-FEB-2025 12:23:14
Comments		
Input	Filter	<none>
	Weight	<none>
	Split File	<none>
Syntax		DATASET NAME DataSet_hrs WINDOW=FRONT.
Resources	Processor Time	00:00:00.00
	Elapsed Time	00:00:00.02

Warnings

The active dataset will replace the existing dataset named DataSet hrs.

```
* Analysis Preparation Wizard.
CSPLAN ANALYSIS
  /PLAN FILE='P:\asda3\data sets for analysis examples and stata r code\hrs_HHwgt.csaplan'
  /PLANVARS ANALYSISWEIGHT=NWGTHH
  /SRSESTIMATOR TYPE=WOR
  /PRINT PLAN
  /DESIGN STRATA=STRATUM CLUSTER=SECU
  /ESTIMATOR TYPE=WR.
```

Complex Samples: Plan

Notes

Output Created		26-FEB-2025 12:23:14
Comments		
Input	Active Dataset	DataSet hrs
	Filter	<none>
	Weight	<none>
	Split File	<none>

Syntax		CSPLAN ANALYSIS /PLAN FILE='P:\asda3\data sets for analysis examples and stata r code\hrs_HHwgt.csaplan' /PLANVARS ANALYSISWEIGHT=NWGTHH /SRSESTIMATOR TYPE=WOR /PRINT PLAN /DESIGN STRATA=STRATUM CLUSTER=SECU /ESTIMATOR TYPE=WR.
Resources	Processor Time	00:00:00.00
	Elapsed Time	00:00:00.11
Files Saved	Plan File	P:\asda3\data sets for analysis examples and stata r code\hrs_HHwgt.csaplan

[DataSet_hrs]

Warnings

This procedure does not check the consistency of the working data file with the plan file. We recommend looking at the output table or the plan file to check consistency before performing selection or analysis.

Summary

		Stage 1	
Design Variables	Stratification	1	STRATUM ID
	Cluster	1	SAMPLING ERROR COMPUTATION UNIT
Analysis Information	Estimator Assumption		Sampling with replacement

Plan File: P:\asda3\data sets for analysis examples and stata r

code\hrs_HHwgt.csaplan

Weight Variable: 2012 WEIGHT: HOUSEHOLD LEVEL

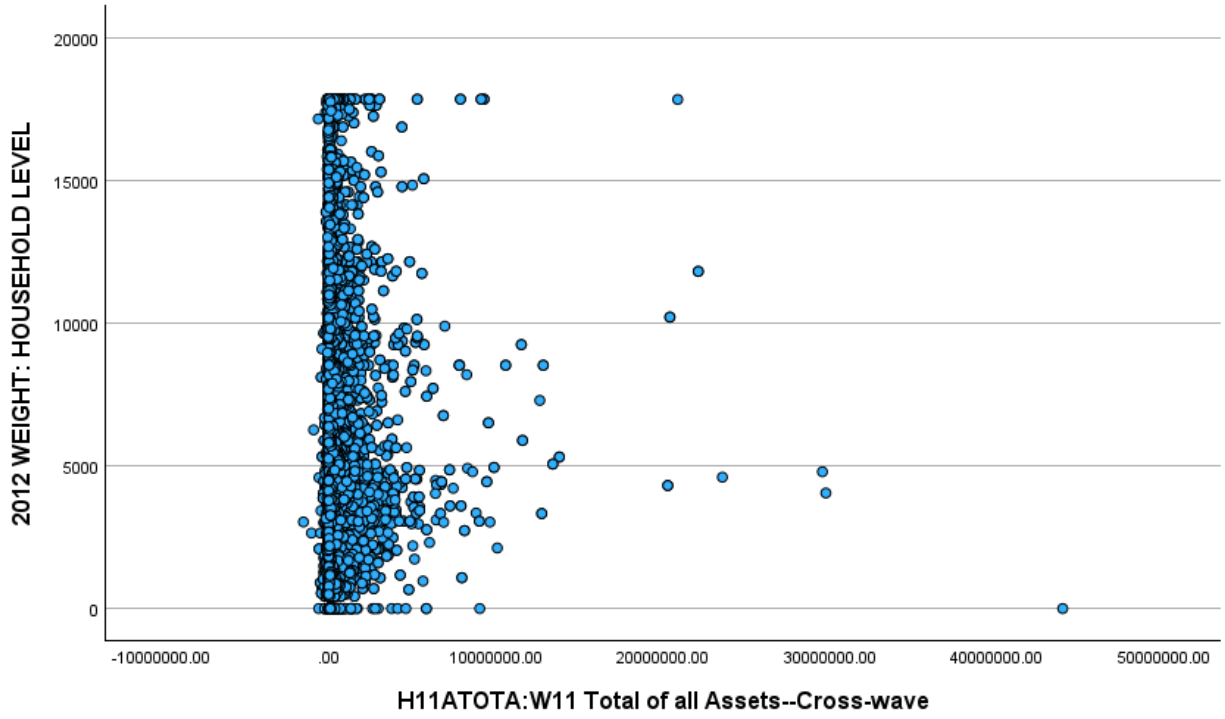
SRS Estimator: Sampling without replacement

```
* Compute variables for analysis: finr, female, age70.
COMPUTE finr=0.
IF (nfinr =1) finr=1.
EXECUTE.

COMPUTE female=0.
IF (gender =2) female=1.
EXECUTE.

COMPUTE age70=0.
IF (nage >=70) age70=1.
EXECUTE.

* Figure 5.1 Scatter Plot for H11atota Weighted with Variable nwgthh (HH weight).
GRAPH
/ scatterplot(bivar)=h11atota with nwgthh
/missing=listwise.
```

Graph

Notes

Output Created		26-FEB-2025 12:23:14
Comments		
Input	Active Dataset	DataSet_hrs
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	20554
Syntax		GRAPH / scatterplot(bivar)=h11atota with nwgthh /missing=listwise.
Resources	Processor Time	00:00:00.34
	Elapsed Time	00:00:00.81


2012 WEIGHT: HOUSEHOLD LEVEL
20000
15000
10000
5000
0
-10000000.00
.00
10000000.00
20000000.00
30000000.00
40000000.00
50000000.00
H11ATOTA:W11 Total of all Assets--Cross-wave

```
* Analysis Example 5.4 HRS Data to Estimate Total HH Wealth.
CSDESCRIPTIVES
 /PLAN FILE='P:\asda3\data sets for analysis examples and stata r code\hrs_HHwgt.csaplan'
 /SUMMARY VARIABLES=H11ATOTA
 /SUBPOP TABLE=FINR DISPLAY=LAYERED
 /MEAN
 /SUM
 /STATISTICS SE DEFF CIN(95)
 /MISSING SCOPE=ANALYSIS CLASSMISSING=EXCLUDE.
```

Complex Samples: Descriptives

Notes

Output Created		26-FEB-2025 12:23:15
Comments		
Input	Active Dataset	DataSet hrs
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	20554
	Plan File	P:\asda3\data sets for analysis examples and stata r code\hrs_HHwgt.csaplan
Missing Value Handling	Definition of Missing	User-defined missing values among the strata, cluster, or subpopulation variables are treated as missing.
	Cases Used	Each statistic is based on all valid data for the analysis variable(s) used in computing the statistic.

Syntax		CSDESCRIPTIVES /PLAN FILE='P:\asda3\data sets for analysis examples and stata r code\hrs_HHwgt.csaplan' /SUMMARY VARIABLES=H11ATOTA /SUBPOP TABLE=FINR DISPLAY=LAYERED /MEAN /SUM /STATISTICS SE DEFF CIN(95) /MISSING SCOPE=ANALYSIS CLASSMISSING=EXCLUDE.
Resources	Processor Time	00:00:00.02
	Elapsed Time	00:00:00.17

Univariate Statistics

				95% Confidence Interval	
		Estimate	Standard Error	Lower	Upper
Mean	H11ATOTA:W11 Total of all Assets--Cross-wave	474128.8174	19680.72721	434703.5833	513554.0515
Sum	H11ATOTA:W11 Total of all Assets--Cross-wave	42280205919979.71	2323788735085.16750	37625097703857.94	46935314136101.48

Univariate Statistics

		Design Effect
Mean	H11ATOTA:W11 Total of all Assets--Cross-wave	5.920
Sum	H11ATOTA:W11 Total of all Assets--Cross-wave	10.380

Subpopulation Descriptives

Univariate Statistics

finr			Estimate	Standard Error	95% Confidence Interval Lower
.00	Mean	H11ATOTA:W11 Total of all Assets--Cross-wave	563269.0578	26670.34089	509841.9450
	Sum	H11ATOTA:W11 Total of all Assets--Cross-wave	17013344183755.99	1031603297298.14750	14946794452910.99
1.00	Mean	H11ATOTA:W11 Total of all Assets--Cross-wave	428470.7552	17353.77335	393706.9698
	Sum	H11ATOTA:W11 Total of all Assets--Cross-wave	25266861736223.72	1353710422880.11800	22555053895581.97

Univariate Statistics

finr			95% Confidence Interval Upper	Design Effect
.00	Mean	H11ATOTA:W11 Total of all Assets--Cross-wave	616696.1707	3.373
	Sum	H11ATOTA:W11 Total of all Assets--Cross-wave	19079893914601.00	4.823
1.00	Mean	H11ATOTA:W11 Total of all Assets--Cross-wave	463234.5406	3.210
	Sum	H11ATOTA:W11 Total of all Assets--Cross-wave	27978669576865.46	5.349

```
* Analysis Example 5.5 HRS Data Mean HH Income.
CSDESCRIPTIVES
 /PLAN FILE='P:\asda3\data sets for analysis examples and stata r code\hrs_HHwgt.csaplan'
 /SUMMARY VARIABLES=H11ITOT
 /SUBPOP TABLE=FINR DISPLAY=LAYERED
 /MEAN
 /SUM
 /STATISTICS SE DEFF CIN(95)
 /MISSING SCOPE=ANALYSIS CLASSMISSING=EXCLUDE.
```

Complex Samples: Descriptives

Notes

Output Created		26-FEB-2025 12:23:15
Comments		
Input	Active Dataset	DataSet_hrs
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	20554
	Plan File	P:\asda3\data sets for analysis examples and stata r code\hrs_HHwgt.csaplan
Missing Value Handling	Definition of Missing	User-defined missing values among the strata, cluster, or subpopulation variables are treated as missing.
	Cases Used	Each statistic is based on all valid data for the analysis variable(s) used in computing the statistic.

Syntax		CSDESCRIPTIVES /PLAN FILE='P:\asda3\data sets for analysis examples and stata r code\hrs_HHwgt.csaplan' /SUMMARY VARIABLES=H11ITOT /SUBPOP TABLE=FINR DISPLAY=LAYERED /MEAN /SUM /STATISTICS SE DEFF CIN(95) /MISSING SCOPE=ANALYSIS CLASSMISSING=EXCLUDE.
Resources	Processor Time	00:00:00.03
	Elapsed Time	00:00:00.17

Univariate Statistics

				95% Confidence Interval	
		Estimate	Standard Error	Lower	Upper
Mean	H11ITOT:W11 Incm: Total HHold / R+Sp only	80648.0964	2289.82002	76061.0357	85235.1571
Sum	H11ITOT:W11 Incm: Total HHold / R+Sp only	7191754641480.94	333578539233.68900	6523516528754.34	7859992754207.54

Univariate Statistics

		Design Effect
Mean	H11ITOT:W11 Incm: Total HHold / R+Sp only	6.484
Sum	H11ITOT:W11 Incm: Total HHold / R+Sp only	17.304

Subpopulation Descriptives

Univariate Statistics

finr			Estimate	Standard Error	95% Confidence Interval Lower
.00	Mean	H11ITOT:W11 Incm: Total HHold / R+Sp only	98737.9150	3007.88324	92712.4008
	Sum	H11ITOT:W11 Incm: Total HHold / R+Sp only	2982344064214.44	159820364120.64667	2662185403106.92
1.00	Mean	H11ITOT:W11 Incm: Total HHold / R+Sp only	71382.4039	1937.22918	67501.6675
	Sum	H11ITOT:W11 Incm: Total HHold / R+Sp only	4209410577266.50	177579139702.98346	3853676813795.57

Univariate Statistics

finr			95% Confidence Interval Upper	Design Effect
.00	Mean	H11ITOT:W11 Incm: Total HHold / R+Sp only	104763.4291	3.383
	Sum	H11ITOT:W11 Incm: Total HHold / R+Sp only	3302502725321.96	7.720
1.00	Mean	H11ITOT:W11 Incm: Total HHold / R+Sp only	75263.1403	3.326
	Sum	H11ITOT:W11 Incm: Total HHold / R+Sp only	4565144340737.43	7.203

```
* Activate NHANES Data.
DATASET ACTIVATE dataset_nhanes.

* Prepare CSPlan File for NHANES.
CSPLAN ANALYSIS
  /PLAN FILE='P:\asda3\data sets for analysis examples and stata r code\nhanes_csplan.csaplan'
  /PLANVARS ANALYSISWEIGHT=WTMEC2YR
  /SRSESTIMATOR TYPE=WOR
  /PRINT PLAN
  /DESIGN STRATA=SDMVSTRA CLUSTER=SDMVPSU
  /ESTIMATOR TYPE=WR.
```

Complex Samples: Plan

Notes

Output Created		26-FEB-2025 12:23:16
Comments		
Input	Active Dataset	DataSet_nhanes
	Filter	AGE18P = 1. (FILTER)
	Weight	Full sample 2 year MEC exam weight
	Split File	<none>
Syntax		CSPLAN ANALYSIS /PLAN FILE='P:\asda3\data sets for analysis examples and stata r code\nhanes_csplan.csaplan' /PLANVARS ANALYSISWEIGHT=WTMEC2YR /SRSESTIMATOR TYPE=WOR /PRINT PLAN /DESIGN STRATA=SDMVSTRA CLUSTER=SDMVPSU /ESTIMATOR TYPE=WR.
Resources	Processor Time	00:00:00.02
	Elapsed Time	00:00:00.13
Files Saved	Plan File	P:\asda3\data sets for analysis examples and stata r code/nhanes csplan.csaplan

[DataSet_nhanes]

Warnings

This procedure ignores the weight variable.
This procedure does not check the consistency of the working data file with the plan file. We recommend looking at the output table or the plan file to check consistency before performing selection or analysis.

Summary

			Stage 1
Design Variables	Stratification	1	Masked variance pseudo-stratum
	Cluster	1	Masked variance pseudo-PSU
Analysis Information	Estimator Assumption		Sampling with replacement

Plan File: P:\asda3\data sets for analysis examples and stata r code\nhanes_csplan.csaplan

Weight Variable: Full sample 2 year MEC exam weight

SRS Estimator: Sampling without replacement

```
* ANALYSIS EXAMPLE 5.6 Mean Systolic Blood Pressure in US Adults using the NHANES Data.
CSDESCRIPTIVES
 /PLAN FILE='P:\asda3\data sets for analysis examples and stata r code\nhanes_csplan.csaplan'
 /SUMMARY VARIABLES=BPXSY1
 /SUBPOP TABLE=age18p DISPLAY=LAYERED
 /MEAN
 /STATISTICS SE DEFF CIN(95)
 /MISSING SCOPE=ANALYSIS CLASSMISSING=EXCLUDE.
```

Complex Samples: Descriptives

Notes

Output Created		26-FEB-2025 12:23:16
Comments		
Input	Active Dataset	DataSet_nhanes
	Filter	AGE18P = 1. (FILTER)
	Weight	Full sample 2 year MEC exam weight
	Split File	<none>
	N of Rows in Working Data File	5864

	Plan File	P:\asda3\data sets for analysis examples and stata r code\nhanes_csplan.csaplan
Missing Value Handling	Definition of Missing	User-defined missing values among the strata, cluster, or subpopulation variables are treated as missing.
	Cases Used	Each statistic is based on all valid data for the analysis variable(s) used in computing the statistic.
Syntax		CSDESCRIPTIVES /PLAN FILE='P:\asda3\data sets for analysis examples and stata r code\nhanes_csplan.csaplan' /SUMMARY VARIABLES=BPXSY1 /SUBPOP TABLE=age18p DISPLAY=LAYERED /MEAN /STATISTICS SE DEFF CIN(95) /MISSING SCOPE=ANALYSIS CLASSMISSING=EXCLUDE.
Resources	Processor Time	00:00:00.00
	Elapsed Time	00:00:00.14

Warnings

This procedure ignores the weight variable.

Univariate Statistics

		Estimate	Standard Error	95% Confidence Interval Lower	95% Confidence Interval Upper	Design Effect
Mean	Systolic: Blood pres (1st rdg) mm Hg	122.03	.616	120.73	123.33	6.461

Subpopulation Descriptives

Univariate Statistics

age18p			Estimate	Standard Error	95% Confidence Interval Lower	95% Confidence Interval Upper
1.00	Mean	Systolic: Blood pres (1st rdg) mm Hg	122.03	.616	120.73	123.33

Univariate Statistics

age18p			Design Effect
1.00	Mean	Systolic: Blood pres (1st rdg) mm Hg	6.461

```
* Activate HRS data.
DATASET ACTIVATE DATASET_HRS.

* Analysis Example 5.7 Total HH Wealth Using HRS Data.
CSDESCRIPTIVES
 /PLAN FILE='P:\asda3\data sets for analysis examples and stata r code\hrs_HHwgt.csaplan'
 /SUMMARY VARIABLES=H11aTOTa
 /SUBPOP TABLE=FINR DISPLAY=LAYERED
 /MEAN
 /SUM
 /STATISTICS SE DEFF CIN(95)
 /MISSING SCOPE=ANALYSIS CLASSMISSING=EXCLUDE.
```

Complex Samples: Descriptives

Notes

Output Created		26-FEB-2025 12:23:16
Comments		
Input	Active Dataset	DataSet hrs
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	20554
	Plan File	P:\asda3\data sets for analysis examples and stata r code\hrs_HHwgt.csaplan
Missing Value Handling	Definition of Missing	User-defined missing values among the strata, cluster, or subpopulation variables are treated as missing.
	Cases Used	Each statistic is based on all valid data for the analysis variable(s) used in computing the statistic.

Syntax		CSDESCRIPTIVES /PLAN FILE='P:\asda3\data sets for analysis examples and stata r code\hrs_HHwgt.csaplan' /SUMMARY VARIABLES=H11aTOTa /SUBPOP TABLE=FINR DISPLAY=LAYERED /MEAN /SUM /STATISTICS SE DEFF CIN(95) /MISSING SCOPE=ANALYSIS CLASSMISSING=EXCLUDE.
Resources	Processor Time	00:00:00.06
	Elapsed Time	00:00:00.20

[DataSet_hrs]

Univariate Statistics

		Estimate	Standard Error	95% Confidence Interval Lower	95% Confidence Interval Upper
Mean	H11ATOTA:W11 Total of all Assets--Cross-wave	474128.8174	19680.72721	434703.5833	513554.0515
Sum	H11ATOTA:W11 Total of all Assets--Cross-wave	42280205919979.71	2323788735085.16750	37625097703857.94	46935314136101.48

Univariate Statistics

		Design Effect
Mean	H11ATOTA:W11 Total of all Assets--Cross-wave	5.920
Sum	H11ATOTA:W11 Total of all Assets--Cross-wave	10.380

Subpopulation Descriptives

Univariate Statistics

finr			Estimate	Standard Error	95% Confidence Interval Lower
.00	Mean	H11ATOTA:W11 Total of all Assets--Cross-wave	563269.0578	26670.34089	509841.9450
	Sum	H11ATOTA:W11 Total of all Assets--Cross-wave	17013344183755.99	1031603297298.14750	14946794452910.99
1.00	Mean	H11ATOTA:W11 Total of all Assets--Cross-wave	428470.7552	17353.77335	393706.9698
	Sum	H11ATOTA:W11 Total of all Assets--Cross-wave	25266861736223.72	1353710422880.11800	22555053895581.97

Univariate Statistics

finr			95% Confidence Interval Upper	Design Effect
.00	Mean	H11ATOTA:W11 Total of all Assets--Cross-wave	616696.1707	3.373
	Sum	H11ATOTA:W11 Total of all Assets--Cross-wave	19079893914601.00	4.823
1.00	Mean	H11ATOTA:W11 Total of all Assets--Cross-wave	463234.5406	3.210
	Sum	H11ATOTA:W11 Total of all Assets--Cross-wave	27978669576865.46	5.349

```
* Analysis Example 5.8 Weighted HH Total Income.
WEIGHT BY NWGTHH.
DESCRIPTIVES VARIABLES=H11ATOTA
  /STATISTICS=MEAN STDDEV MIN MAX.
```

Descriptives

Notes

Output Created		26-FEB-2025 12:23:16
Comments		
Input	Active Dataset	DataSet_hrs
	Filter	<none>
	Weight	2012 WEIGHT: HOUSEHOLD LEVEL
	Split File	<none>
	N of Rows in Working Data File	19990
Missing Value Handling	Definition of Missing	User defined missing values are treated as missing.
	Cases Used	All non-missing data are used.
Syntax		DESCRIPTIVES VARIABLES=H11ATOTA /STATISTICS=MEAN STDDEV MIN MAX.
Resources	Processor Time	00:00:00.00
	Elapsed Time	00:00:00.03

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
H11ATOTA:W11 Total of all Assets--Cross-wave	89174512	-1510000.00	29748000.00	474128.8174	1143686.99937
Valid N (listwise)	89174512				

Warning # 3211
On at least one case, the value of the weight variable was zero, negative, or missing. Such cases are invisible to statistical procedures and graphs which need positively weighted cases, but remain on the file and are processed by non-statistical facilities such as LIST and SAVE.

```
* ANALYSIS EXAMPLE 5.9 QUANTILES NOT AVAILABLE IN SPSS
* ANALYSIS EXAMPLE 5.10 ESTIMATING THE LORENZ CURVE AND GINI COEFFICIENT NOT AVAILABLE IN SPSS

* Prepare Data for Figure 5.5.
DATASET ACTIVATE DATASET_NHANES.
WEIGHT BY WTMEC2YR.
* Prepare Filter Again (as another example).
COMPUTE filter_$=(age18p=1 ).
FILTER BY filter_$.
EXECUTE.

Warning # 3211
On at least one case, the value of the weight variable was zero, negative, or
missing.  Such cases are invisible to statistical procedures and graphs which
need positively weighted cases, but remain on the file and are processed by
non-statistical facilities such as LIST and SAVE.
* Show Weight and Filters in Effect.
SHOW WEIGHT.
```

SHOW

Notes

Output Created		26-FEB-2025 12:23:16
Comments		
Input	Active Dataset	DataSet_nhanes
	Filter	AGE18P = 1. (FILTER)
	Weight	Full sample 2 year MEC exam weight
	Split File	<none>
	N of Rows in Working Data File	5615
Syntax		SHOW WEIGHT.
Resources	Processor Time	00:00:00.00
	Elapsed Time	00:00:00.00

[DataSet_nhanes]

System Settings

Keyword	Description	Setting
WEIGHT	Variable used to weight cases	Full sample 2 year MEC exam weight

```
SHOW FILTER.
```

SHOW

Notes

Output Created		26-FEB-2025 12:23:16
Comments		
Input	Active Dataset	DataSet_nhanes
	Filter	AGE18P = 1. (FILTER)

	Weight	Full sample 2 year MEC exam weight
	Split File	<none>
	N of Rows in Working Data File	5615
Syntax		SHOW FILTER.
Resources	Processor Time	00:00:00.00
	Elapsed Time	00:00:00.00

System Settings

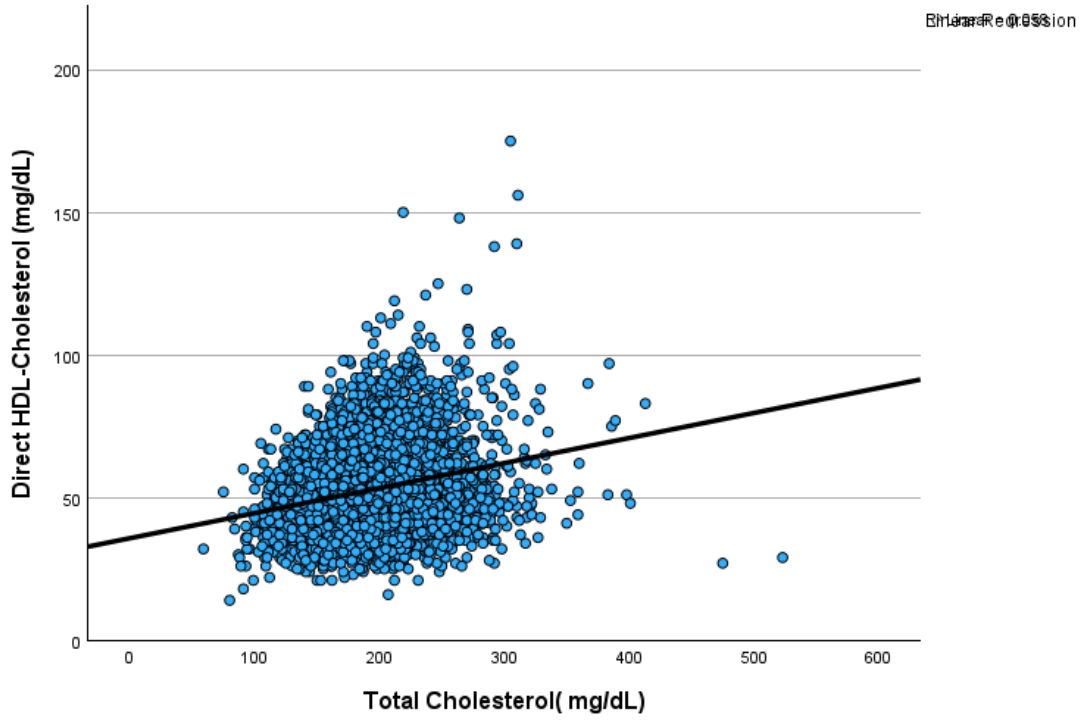
Keyword	Description	Setting
FILTER	Filter variable	AGE18P = 1. (FILTER)

```
* Figure 5.5 Weighted Scatter Plot with Regression Line for Total and High-Density Cholesterol Measures in 2011-2012 NHANES.
IGRAPH
 /X1=VAR(lbxtc) TYPE=SCALE
 /Y=VAR(lbdhdd) TYPE=SCALE
 /SCATTER
 /FITLINE METHOD=regression linear.
```

Interactive Graph

Notes

Output Created		26-FEB-2025 12:23:16
Comments		
Input	Active Dataset	DataSet_nhanes
	Filter	AGE18P = 1. (FILTER)
	Weight	Full sample 2 year MEC exam weight
	Split File	<none>
	N of Rows in Working Data File	5615
Syntax		IGRAPH /X1=VAR(lbxtc) TYPE=SCALE /Y=VAR(lbdhdd) TYPE=SCALE /SCATTER /FITLINE METHOD=regression linear.
Resources	Processor Time	00:00:00.09
	Elapsed Time	00:00:00.22




```
* Analysis Example 5.11 Correlation Analysis and Means for Cholesterol, Weighted  by wtmec2yr.
DESCRIPTIVES VARIABLES=LBXTC LBDHDD
  /STATISTICS=MEAN STDDEV MIN MAX.
```

Descriptives

Notes

Output Created		26-FEB-2025 12:23:16
Comments		
Input	Active Dataset	DataSet nhanes
	Filter	AGE18P = 1. (FILTER)
	Weight	Full sample 2 year MEC exam weight
	Split File	<none>
	N of Rows in Working Data File	5615
Missing Value Handling	Definition of Missing	User defined missing values are treated as missing.
	Cases Used	All non-missing data are used.
Syntax		DESCRIPTIVES VARIABLES=LBXTC LBDHDD /STATISTICS=MEAN STDDEV MIN MAX.
Resources	Processor Time	00:00:00.00
	Elapsed Time	00:00:00.02

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Total Cholesterol(mg/dL)	218642036	59	523	194.44	41.048
Direct HDL-Cholesterol (mg/dL)	218642036	14	175	52.84	14.930
Valid N (listwise)	218642036				

Warning # 3211
On at least one case, the value of the weight variable was zero, negative, or missing. Such cases are invisible to statistical procedures and graphs which need positively weighted cases, but remain on the file and are processed by non-statistical facilities such as LIST and SAVE.

```
* Run correlations.
CORRELATIONS
  /VARIABLES=lbxtc with lbdhdd
  /PRINT=TWOTAIL NOSIG FULL
  /MISSING=PAIRWISE.
```

Correlations

Notes

Output Created		26-FEB-2025 12:23:16
Comments		
Input	Active Dataset	DataSet_nhanes
	Filter	AGE18P = 1. (FILTER)
	Weight	Full sample 2 year MEC exam weight
	Split File	<none>
	N of Rows in Working Data File	5615
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics for each pair of variables are based on all the cases with valid data for that pair.
Syntax		CORRELATIONS /VARIABLES=lbxtc with lbdhdd /PRINT=TWOTAIL NOSIG FULL /MISSING=PAIRWISE.
Resources	Processor Time	00:00:00.02
	Elapsed Time	00:00:00.03

Correlations

		Direct HDL-Cholesterol (mg/dL)
Total Cholesterol(mg/dL)	Pearson Correlation	.241**
	Sig. (2-tailed)	<.001
	N	218642036

**. Correlation is significant at the 0.01 level (2-tailed).

Warning # 3211
On at least one case, the value of the weight variable was zero, negative, or

missing. Such cases are invisible to statistical procedures and graphs which need positively weighted cases, but remain on the file and are processed by non-statistical facilities such as LIST and SAVE.

```
* Compute standardized variables for correlation/regression analysis.
COMPUTE stdlbxtc =(lbxtc - 194.4355) / 41.05184.
COMPUTE stdlbdhdd=(lbdhdd - 52.83826)/ 14.93157.
EXECUTE.

Warning # 3211
On at least one case, the value of the weight variable was zero, negative, or
missing.  Such cases are invisible to statistical procedures and graphs which
need positively weighted cases, but remain on the file and are processed by
non-statistical facilities such as LIST and SAVE.

* Turn Filter Off.
FILTER OFF.

* Complex Samples General Linear Model, Permits weighted and design based correlation.
CSGLM  stdlbdhdd WITH stdlbxtc
  /PLAN FILE='P:\asda3\data sets for analysis examples and stata r code\nhanes_csplan.csaplan'
  /DOMAIN VARIABLE=age18p(1)
  /MODEL stdlbxtc
  /INTERCEPT INCLUDE=YES SHOW=YES
  /STATISTICS PARAMETER SE CINTERVAL
  /PRINT SUMMARY VARIABLEINFO SAMPLEINFO
  /TEST TYPE=F PADJUST=LSD
  /MISSING CLASSMISSING=EXCLUDE
  /CRITERIA CILEVEL=95.
```

Complex Samples: General Linear Model

Notes

Output Created		26-FEB-2025 12:23:16
Comments		
Input	Active Dataset	DataSet_nhanes
	Filter	<none>
	Weight	Full sample 2 year MEC exam weight
	Split File	<none>
	N of Rows in Working Data File	9756
	Plan File	P:\asda3\data sets for analysis examples and stata r code/nhanes_csplan.csaplan
Missing Value Handling	Definition of Missing	User-defined missing values among the strata, cluster, subpopulation and factor variables are treated as missing.
	Cases Used	Only cases with valid data for all analysis variables are used in computing any statistics.

Syntax		CSGLM stdlbdhdd WITH stdlbxtc /PLAN FILE='P:\asda3\data sets for analysis examples and stata r code\nhanes csplan.csapl an' /DOMAIN VARIABLE=age18p(1) /MODEL stdlbxtc /INTERCEPT INCLUDE=YES SHOW=YES /STATISTICS PARAMETER SE CINTERVAL /PRINT SUMMARY VARIABLEINFO SAMPLEINFO /TEST TYPE=F PADJUST=LSD /MISSING CLASSMISSING=EXCLUDE /CRITERIA CILEVEL=95.
Resources	Processor Time	00:00:00.06
	Elapsed Time	00:00:00.17

Warnings

This procedure ignores the weight variable.

Sample Design Information

		N
Unweighted Cases	Valid	6988
	Invalid	2768
	Total	9756
Population Size		260814684.891
Subpopulation Size		218642035.660[a]
Stage 1	Strata	14
	Units	31
Sampling Design Degrees of Freedom		17

a. Subpopulation: age18p = 1.00

Variable Information

		Mean
Dependent Variable	stdlbdhdd	.0000
Covariates	stdlbxtc	.0000

Subpopulation: age18p = 1.00

Model Summary[a]

R Square	.058

Subpopulation: age18p = 1.00[a]

a. Model: stdlbdhdd = (Intercept) + stdlbxtc

Tests of Model Effects[a]

Source	df1	df2	Wald F	Sig.
(Corrected Model)	1.000	17.000	288.582	<.001
(Intercept)	1.000	17.000	.000	1.000
stdlbxtc	1.000	17.000	288.582	<.001

Subpopulation: age18p = 1.00[a]

a. Model: stdlbdhdd = (Intercept) + stdlbxtc

Parameter Estimates[a]

			95% Confidence Interval	
Parameter	Estimate	Std. Error	Lower	Upper
(Intercept)	4.098E-7	.034	-.072	.072
stdlbxtc	.241	.014	.211	.271

Subpopulation: age18p = 1.00[a]

a. Model: stdlbdhdd = (Intercept) + stdlbxtc

```
* ANALYSIS EXAMPLE 5.12 Ratio of HDL to Total Cholesterol in US Adult Population, using NHANES Data.
CSDESCRIPTIVES
 /PLAN FILE='P:\asda3\data sets for analysis examples and stata r code\nhanes_csplan.csaplan'
 /RATIO NUMERATOR=lbdhdd DENOMINATOR=lbxtc
 /subpop table=age18p display=layered
 /STATISTICS SE DEFF CIN(95)
 /MISSING SCOPE=ANALYSIS CLASSMISSING=EXCLUDE.
```

Complex Samples: Descriptives

Notes

Output Created		26-FEB-2025 12:23:17
Comments		
Input	Active Dataset	DataSet_nhanes
	Filter	<none>
	Weight	Full sample 2 year MEC exam weight
	Split File	<none>
	N of Rows in Working Data File	9756
	Plan File	P:\asda3\data sets for analysis examples and stata r code\nhanes_csplan.csaplan
Missing Value Handling	Definition of Missing	User-defined missing values among the strata, cluster, or subpopulation variables are treated as missing.
	Cases Used	Each statistic is based on all valid data for the analysis variable(s) used in computing the statistic.

Syntax		CSDESCRIPTIVES /PLAN FILE='P:\asda3\data sets for analysis examples and stata r code\nhanes_csplan.csaplan' /RATIO NUMERATOR=lbdhdd DENOMINATOR=lbxtc /subpop table=age18p display=layered /STATISTICS SE DEFF CIN(95) /MISSING SCOPE=ANALYSIS CLASSMISSING=EXCLUDE.
Resources	Processor Time	00:00:00.02
	Elapsed Time	00:00:00.19

Warnings

This procedure ignores the weight variable.

Ratios 1

Numerator	Denominator	Ratio Estimate	Standard Error	95% Confidence Interval Lower
Direct HDL-Cholesterol (mg/dL)	Total Cholesterol(mg/dL)	.280	.003	.274

Ratios 1

Numerator	Denominator	95% Confidence Interval Upper	Design Effect
Direct HDL-Cholesterol (mg/dL)	Total Cholesterol(mg/dL)	.285	6.484

Subpopulation Descriptives

Ratios 1

age18p	Numerator	Denominator	Ratio Estimate	Standard Error
.00	Direct HDL-Cholesterol (mg/dL)	Total Cholesterol(mg/dL)	.332	.003
1.00	Direct HDL-Cholesterol (mg/dL)	Total Cholesterol(mg/dL)	.272	.003

Ratios 1

age18p	Numerator	Denominator	95% Confidence Interval		Design Effect
			Lower	Upper	
.00	Direct HDL-Cholesterol (mg/dL)	Total Cholesterol(mg/dL)	.326	.338	1.324
1.00	Direct HDL-Cholesterol (mg/dL)	Total Cholesterol(mg/dL)	.266	.278	6.949

```
* Activate HRS Data.
DATASET ACTIVATE DATASET_HRS.

* Analysis Preparation Wizard.
CSPLAN ANALYSIS
  /PLAN FILE='P:\asda3\data sets for analysis examples and stata r code\hrs_rwgt.csaplan'
  /PLANVARS ANALYSISWEIGHT=nwgtr
  /SRSESTIMATOR TYPE=WOR
  /PRINT PLAN
  /DESIGN STRATA=STRATUM CLUSTER=SECU
  /ESTIMATOR TYPE=WR.
```

Complex Samples: Plan

Notes

Output Created		26-FEB-2025 12:23:17
Comments		
Input	Active Dataset	DataSet_hrs
	Filter	<none>
	Weight	2012 WEIGHT: HOUSEHOLD LEVEL
	Split File	<none>
Syntax		CSPLAN ANALYSIS /PLAN FILE='P:\asda3\data sets for analysis examples and stata r code\hrs_rwgt.csaplan' /PLANVARS ANALYSISWEIGHT=nwgtr /SRSESTIMATOR TYPE=WOR /PRINT PLAN /DESIGN STRATA=STRATUM CLUSTER=SECU /ESTIMATOR TYPE=WR.
Resources	Processor Time	00:00:00.00
	Elapsed Time	00:00:00.17
Files Saved	Plan File	P:\asda3\data sets for analysis examples and stata r code\hrs_rwgt.csaplan

[DataSet_hrs]

Warnings

This procedure ignores the weight variable.

This procedure does not check the consistency of the working data file with the plan file. We recommend looking at the output table or the plan file to check consistency before performing selection or analysis.

Summary

			Stage 1
Design Variables	Stratification	1	STRATUM ID
	Cluster	1	SAMPLING ERROR COMPUTATION UNIT
Analysis Information	Estimator Assumption		Sampling with replacement

Plan File: P:\asda3\data sets for analysis examples and stata r code\hrs rwgt.csaplan

Weight Variable: 2012 WEIGHT: RESPONDENT LEVEL

SRS Estimator: Sampling without replacement

```
* Analysis Example 5.13 Diabetes by Gender, Among Subpopulation Age >70.
CSDESCRIPTIVES
 /PLAN FILE='P:\asda3\data sets for analysis examples and stata r code\hrs_rwgt.csaplan'
 /SUMMARY VARIABLES=diabetes
 /SUBPOP TABLE=age70 BY GENDER DISPLAY=LAYERED
 /MEAN
 /STATISTICS SE DEFF CIN(95)
 /MISSING SCOPE=ANALYSIS CLASSMISSING=EXCLUDE.
```

Complex Samples: Descriptives

Notes

Output Created		26-FEB-2025 12:23:17
Comments		
Input	Active Dataset	DataSet_hrs
	Filter	<none>
	Weight	2012 WEIGHT: HOUSEHOLD LEVEL
	Split File	<none>
	N of Rows in Working Data File	20554
	Plan File	P:\asda3\data sets for analysis examples and stata r code\hrs_rwgt.csaplan
Missing Value Handling	Definition of Missing	User-defined missing values among the strata, cluster, or subpopulation variables are treated as missing.
	Cases Used	Each statistic is based on all valid data for the analysis variable(s) used in computing the statistic.

Syntax		CSDESCRIPTIVES /PLAN FILE='P:\asda3\data sets for analysis examples and stata r code\hrs_rwgt.csaplan' /SUMMARY VARIABLES=diabetes /SUBPOP TABLE=age70 BY GENDER DISPLAY=LAYERED /MEAN /STATISTICS SE DEFF CIN(95) /MISSING SCOPE=ANALYSIS CLASSMISSING=EXCLUDE.
Resources	Processor Time	00:00:00.05
	Elapsed Time	00:00:00.19

Warnings

This procedure ignores the weight variable.

Univariate Statistics

			Standard Error	95% Confidence Interval		Design Effect
				Lower	Upper	
Mean	1=Yes Diabetes 0=No Diabetes	.22	.004	.21	.22	2.174

Subpopulation Descriptives

Univariate Statistics

age70	Gender 1=Male 2=Female			Estimate	Standard Error	95% Confidence Interval Lower
.00	1	Mean	1=Yes Diabetes 0=No Diabetes	.21	.007	.20

	2	Mean	1=Yes Diabetes 0=No Diabetes	.19	.006	.18
1.00	1	Mean	1=Yes Diabetes 0=No Diabetes	.27	.007	.26
	2	Mean	1=Yes Diabetes 0=No Diabetes	.23	.009	.21

Univariate Statistics

age70	Gender 1=Male 2=Female			95% Confidence Interval Upper	Design Effect
.00	1	Mean	1=Yes Diabetes 0=No Diabetes	.22	1.800
	2	Mean	1=Yes Diabetes 0=No Diabetes	.20	1.690
1.00	1	Mean	1=Yes Diabetes 0=No Diabetes	.29	.711
	2	Mean	1=Yes Diabetes 0=No Diabetes	.24	1.417

```
* Activate NHANES Data.
DATASET ACTIVATE DATASET_NHANES.
COMPUTE age45 = age > 45.

* Analysis Example 5.14.
CSDESCRIPTIVES
  /PLAN FILE='P:\asda3\data sets for analysis examples and stata r code\nhanes_csplan.csaplan'
 /SUMMARY VARIABLES=BPXSY1
 /SUBPOP TABLE=riagendr BY age45 DISPLAY=LAYERED
 /MEAN
 /STATISTICS SE DEFF CIN(95)
 /MISSING SCOPE=ANALYSIS CLASSMISSING=EXCLUDE.
```

Complex Samples: Descriptives

Notes

Output Created		26-FEB-2025 12:23:17
Comments		
Input	Active Dataset	DataSet nhanes
	Filter	<none>
	Weight	Full sample 2 year MEC exam weight
	Split File	<none>
	N of Rows in Working Data File	9756
	Plan File	P:\asda3\data sets for analysis examples and stata r code\nhanes_csplan.csaplan
Missing Value Handling	Definition of Missing	User-defined missing values among the strata, cluster, or subpopulation variables are treated as missing.
	Cases Used	Each statistic is based on all valid data for the analysis variable(s) used in computing the statistic.

Syntax		CSDESCRIPTIVES /PLAN FILE='P:\asda3\data sets for analysis examples and stata r code\nhanes_csplan.csaplan' /SUMMARY VARIABLES=BPXSY1 /SUBPOP TABLE=riagendr BY age45 DISPLAY=LAYERED /MEAN /STATISTICS SE DEFF CIN(95) /MISSING SCOPE=ANALYSIS CLASSMISSING=EXCLUDE.
Resources	Processor Time	00:00:00.03
	Elapsed Time	00:00:00.14

[DataSet_nhanes]

Warnings

This procedure ignores the weight variable.

Univariate Statistics

		Estimate	Standard Error	95% Confidence Interval Lower	95% Confidence Interval Upper	Design Effect
Mean	Systolic: Blood pres (1st rdg) mm Hg	119.53	.547	118.38	120.68	6.626

Subpopulation Descriptives

Univariate Statistics

Gender	age45			Estimate	Standard Error	95% Confidence Interval Lower
1	.00	Mean	Systolic: Blood pres (1st rdg) mm Hg	115.91	.455	114.95
	1.00	Mean	Systolic: Blood pres (1st rdg) mm Hg	128.30	.869	126.47
2	.00	Mean	Systolic: Blood pres (1st rdg) mm Hg	109.79	.492	108.75
	1.00	Mean	Systolic: Blood pres (1st rdg) mm Hg	128.18	.946	126.19

Univariate Statistics

Gender	age45			95% Confidence Interval Upper	Design Effect
1	.00	Mean	Systolic: Blood pres (1st rdg) mm Hg	116.87	2.660
	1.00	Mean	Systolic: Blood pres (1st rdg) mm Hg	130.13	3.014
2	.00	Mean	Systolic: Blood pres (1st rdg) mm Hg	110.83	3.149
	1.00	Mean	Systolic: Blood pres (1st rdg) mm Hg	130.18	3.638

```
* Activate HRS Data.
DATASET ACTIVATE DATASET_HRS.
* Analysis Example 5.15 HRS Data to Estimate Total HH Assets and Differences by Education.
* Linear Differences Using CSGLM.

CSGLM H11ATOTA BY EDCAT
 /PLAN FILE='P:\asda3\data sets for analysis examples and stata r code\hrs_HHwgt.csaplan'
 /DOMAIN VARIABLE=FINR(1)
 /MODEL EDCAT
 /INTERCEPT INCLUDE=YES SHOW=YES
 /PRINT SUMMARY VARIABLEINFO SAMPLEINFO
 /TEST TYPE=F PADJUST=LSD
 /EMMEANS TABLES=EDCAT COMPARE CONTRAST=SIMPLE(4)
 /MISSING CLASSMISSING=EXCLUDE
 /CRITERIA CILEVEL=95.
```

Complex Samples: General Linear Model

Notes

Output Created		26-FEB-2025 12:23:17
Comments		
Input	Active Dataset	DataSet_hrs
	Filter	<none>
	Weight	2012 WEIGHT: HOUSEHOLD LEVEL
	Split File	<none>
	N of Rows in Working Data File	20554
	Plan File	P:\asda3\data sets for analysis examples and stata r code\hrs HHwgt.csaplan
Missing Value Handling	Definition of Missing	User-defined missing values among the strata, cluster, subpopulation and factor variables are treated as missing.
	Cases Used	Only cases with valid data for all analysis variables are used in computing any statistics.

Syntax		CSGLM H11ATOTA BY EDCAT /PLAN FILE='P:\asda3\data sets for analysis examples and stata r code\hrs_HHwgt.csaplan' /DOMAIN VARIABLE=FINR(1) /MODEL EDCAT /INTERCEPT INCLUDE=YES SHOW=YES /PRINT SUMMARY VARIABLEINFO SAMPLEINFO /TEST TYPE=F PADJUST=LSD /EMMEANS TABLES=EDCAT COMPARE CONTRAST=SIMPLE(4) /MISSING CLASSMISSING=EXCLUDE /CRITERIA CILEVEL=95.
Resources	Processor Time	00:00:00.02
	Elapsed Time	00:00:00.45

[DataSet_hrs]

Warnings

This procedure ignores the weight variable.

Sample Design Information

		N
Unweighted Cases	Valid	20454
	Invalid	100
	Total	20554
Population Size		88762778.000
Subpopulation Size		58685309.000[a]
Stage 1	Strata	56
	Units	112
Sampling Design Degrees of Freedom		56

a. Subpopulation: finr = 1.00

Variable Information

		Mean
Dependent Variable	H11ATOTA:W11 Total of all Assets--Cross-wave	429464.8249

Subpopulation: finr = 1.00

Factor Information

		Weighted Count	Weighted Percent
Education 1=0-11 Yrs 2=12 Yrs 3=13-15 Yrs 4=16+ Yrs	1	9008461.000	15.4%
	2	17514052.000	29.8%
	3	14586188.000	24.9%
	4	17576608.000	30.0%
Subpopulation Size		58685309.000	100.0%

Subpopulation: finr = 1.00

Model Summary[a]

R Square	.060

Subpopulation: finr = 1.00[a]

a. Model: H11ATOTA:W11 Total of all Assets--Cross-wave = (Intercept) + edcat

Tests of Model Effects[a]

Source	df1	df2	Wald F	Sig.
(Corrected Model)	3.000	54.000	96.231	<.001
(Intercept)	1.000	56.000	753.978	<.001
edcat	3.000	54.000	96.231	<.001

Subpopulation: finr = 1.00[a]

a. Model: H11ATOTA:W11 Total of all Assets--Cross-wave = (Intercept) + edcat

Estimated Marginal Means: Education 1=0-11 Yrs 2=12 Yrs 3=13-15 Yrs 4=16+ Yrs

Estimates

Education 1=0-11 Yrs 2=12 Yrs 3=13-15 Yrs 4=16+ Yrs	Mean	Std. Error	95% Confidence Interval	
			Lower	Upper
1	122088.6402	10595.59982	100863.1032	143314.1772
2	259027.1608	9802.47002	239390.4537	278663.8679
3	336308.6214	17201.78590	301849.3035	370767.9394
4	834140.9934	46477.79022	741034.7915	927247.1953

Subpopulation: finr = 1.00

Individual Test Results

Education 1=0-11 Yrs 2=12 Yrs 3=13-15 Yrs 4=16+ Yrs Simple Contrast[a]	Contrast Estimate	Hypothesized Value	Difference (Estimate - Hypothesized)	Std. Error	df1
Level 1 vs. Level 4	-712052.353	.000	-712052.353	48886.056	1.000
Level 2 vs. Level 4	-575113.833	.000	-575113.833	47089.549	1.000
Level 3 vs. Level 4	-497832.372	.000	-497832.372	46277.446	1.000

Individual Test Results

Education 1=0-11 Yrs 2=12 Yrs 3=13-15 Yrs 4=16+ Yrs Simple Contrast[a]	df2	Wald F	Sig.
Level 1 vs. Level 4	56.000	212.155	<.001
Level 2 vs. Level 4	56.000	149.162	<.001
Level 3 vs. Level 4	56.000	115.725	<.001

Subpopulation: finr = 1.00

a. Reference Category = 4

Overall Test Results

df1	df2	Wald F	Sig.
3.000	54.000	96.231	<.001

Subpopulation: finr = 1.00

```
* Analysis Example 5.16 HRS Data for 2010 and 2012, Stacked Vertically.
GET
  SAS DATA='P:\asda3\data sets for analysis examples and stata r code\hrs_2010_2012_both.sas7bdat'.
DATASET NAME DataSet_HRSBOTH WINDOW=FRONT.
```

Dataset Name

Notes

Output Created		26-FEB-2025 12:23:20
Comments		
Input	Filter	<none>
	Weight	<none>
	Split File	<none>
Syntax		DATASET NAME DataSet HRSBOTH WINDOW=FRONT.
Resources	Processor Time	00:00:00.00
	Elapsed Time	00:00:00.00

Warnings

The active dataset will replace the existing dataset named DataSet_HRSBOTH.

```
* Compute needed variables.
COMPUTE HHWEIGHT=MWGTHH.
if year=2012 hhweight=nwgthh.

COMPUTE totwealth=h10atota.
if year=2012 totwealth=h11atota.

COMPUTE finr2010=0.
 if (year = 2010 & mfinr=1) finr2010=1.

COMPUTE  finr2012=0.
 if (year = 2012 & nfinr=1) finr2012=1.

COMPUTE finr2010_2010=0.
 if finr2010=1 | finr2012=1 finr2010_2012=1.
EXECUTE.
```

```
CSPLAN ANALYSIS
  /PLAN FILE='P:\asda3\data sets for analysis examples and stata r code\hrs_10_12.csaplan'
  /PLANVARS ANALYSISWEIGHT=hhweight
  /SRSESTIMATOR TYPE=WOR
  /PRINT PLAN
  /DESIGN STRATA=STRATUM CLUSTER=SECU
  /ESTIMATOR TYPE=WR.
```

Complex Samples: Plan

Notes

Output Created		26-FEB-2025 12:23:20
Comments		
Input	Active Dataset	DataSet_HRSBOTH
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	37950
Syntax		CSPLAN ANALYSIS /PLAN FILE='P:\asda3\data sets for analysis examples and stata r code\hrs 10 12.csaplan' /PLANVARS ANALYSISWEIGHT=hhweight /SRSESTIMATOR TYPE=WOR /PRINT PLAN /DESIGN STRATA=STRATUM CLUSTER=SECU /ESTIMATOR TYPE=WR.
Resources	Processor Time	00:00:00.00
	Elapsed Time	00:00:00.80
Files Saved	Plan File	P:\asda3\data sets for analysis examples and stata r code\hrs_10_12.csaplan

[DataSet_HRSBOTH]

Warnings

This procedure does not check the consistency of the working data file with the plan file. We recommend looking at the output table or the plan file to check consistency before performing selection or analysis.

Summary

			Stage 1
Design Variables	Stratification	1	STRATUM ID
	Cluster	1	SAMPLING ERROR COMPUTATION UNIT
Analysis Information	Estimator Assumption		Sampling with replacement

Plan File: P:\asda3\data sets for analysis examples and stata r code\hrs 10 12.csaplan

Weight Variable: HHWEIGHT

SRS Estimator: Sampling without replacement

```
CSGLM totassets BY year
  /PLAN FILE='P:\asda3\data sets for analysis examples and stata r code\hrs_10_12.csaplan'
 /DOMAIN VARIABLE=finr2010_2012(1)
 /MODEL year
 /INTERCEPT INCLUDE=YES SHOW=YES
 /STATISTICS PARAMETER SE CINTERVAL
 /PRINT VARIABLEINFO
 /TEST TYPE=F PADJUST=LSD
 /EMMEANS TABLES=year COMPARE CONTRAST=SIMPLE(2010)
 /EMMEANS
 /MISSING CLASSMISSING=EXCLUDE
 /CRITERIA CILEVEL=95.
```

Complex Samples: General Linear Model

Notes

Output Created		26-FEB-2025 12:23:21
Comments		
Input	Active Dataset	DataSet HRSBOTH
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	37950

	Plan File	P:\asda3\data sets for analysis examples and stata r code\hrs_10_12.csaplan
Missing Value Handling	Definition of Missing	User-defined missing values among the strata, cluster, subpopulation and factor variables are treated as missing.
	Cases Used	Only cases with valid data for all analysis variables are used in computing any statistics.
Syntax		CSGLM totassets BY year /PLAN FILE='P:\asda3\data sets for analysis examples and stata r code\hrs 10 12.csaplan' /DOMAIN VARIABLE=finr2010_2012(1) /MODEL year /INTERCEPT INCLUDE=YES SHOW=YES /STATISTICS PARAMETER SE CINTERVAL /PRINT VARIABLEINFO /TEST TYPE=F PADJUST=LSD /EMMEANS TABLES=year COMPARE CONTRAST=SIMPLE(2010) /EMMEANS /MISSING CLASSMISSING=EXCLUDE /CRITERIA CILEVEL=95.
Resources	Processor Time	00:00:00.08
	Elapsed Time	00:00:00.30

Variable Information

	Mean

Dependent Variable	totassets	435340.6791

Subpopulation: finr2010_2012 = 1.00

Factor Information

		Weighted Count	Weighted Percent
year	2010	53162953.000	49.6%
	2012	54114670.000	50.4%
Subpopulation Size		107277623.000	100.0%

Subpopulation: finr2010_2012 = 1.00

Tests of Model Effects[a]

Source	df1	df2	Wald F	Sig.
(Corrected Model)	1.000	56.000	.393	.533
(Intercept)	1.000	56.000	736.797	<.001
year	1.000	56.000	.393	.533

Subpopulation: finr2010_2012 = 1.00[a]

a. Model: totassets = (Intercept) + year

Parameter Estimates[a]

			95% Confidence Interval	
Parameter	Estimate	Std. Error	Lower	Upper
(Intercept)	437807.631	17016.294	403719.897	471895.364
[year=2010]	-4978.066	7936.797	-20877.382	10921.249
[year=2012]	.000[b]	.	.	.

Subpopulation: finr2010_2012 = 1.00[a]

a. Model: totassets = (Intercept) + year

b. Set to zero because this parameter is redundant.

Estimated Marginal Means 1: year

Estimates

			95% Confidence Interval	
year	Mean	Std. Error	Lower	Upper
2010	432829.5644	16010.53325	400756.6122	464902.5165
2012	437807.6308	17016.29428	403719.8973	471895.3644

Subpopulation: finr2010_2012 = 1.00

Individual Test Results

year Simple Contrast[a]	Contrast Estimate	Hypothesized Value	Difference (Estimate - Hypothesized)	Std. Error	df1
Level 2012 vs. Level 2010	4978.066	.000	4978.066	7936.797	1.000

Individual Test Results

year Simple Contrast[a]	df2	Wald F	Sig.
Level 2012 vs. Level 2010	56.000	.393	.533

Subpopulation: finr2010_2012 = 1.00

a. Reference Category = 2010

Overall Test Results

df1	df2	Wald F	Sig.
1.000	56.000	.393	.533

Subpopulation: finr2010_2012 = 1.00

Estimated Marginal Means 2: Grand Mean

Estimates

		95% Confidence Interval	
Mean	Std. Error	Lower	Upper
435318.5976	16037.37929	403191.8664	467445.3288

Subpopulation: finr2010_2012 = 1.00

```
* Export Output.
OUTPUT EXPORT
  /CONTENTS  EXPORT=ALL  LAYERS=PRINTSETTING  MODELVIEWS=PRINTSETTING
  /DOC  DOCUMENTFILE='P:\ASDA3\Replication SPSS 29\Chapter 5\Analysis Example Replication '+
    'ASDA3 SPSS C5 Code and Results.doc'
     NOTESCAPTIONS=YES  WIDETABLES=WRAP PAGEBREAKS=YES
     PAGESIZE=INCHES(8.5, 11.0)  TOPMARGIN=INCHES(1.0)  BOTTOMMARGIN=INCHES(1.0)
```