```
* Encoding: UTF-8.
* Syntax for Analysis Example Replication ASDA3 C8, Winter 2025.


* Section 8.7, Analysis Application.

* Analysis Preparation Wizard.
CSPLAN ANALYSIS
  /PLAN FILE='P:\asda3\data sets for analysis examples and stata r code\ncsr_p2wt.csaplan'
  /PLANVARS ANALYSISWEIGHT=ncsrwtlg
  /SRSESTIMATOR TYPE=WOR
  /PRINT PLAN
  /DESIGN STRATA=sestrat CLUSTER=seclustr
  /ESTIMATOR TYPE=WR.
```

Complex Samples: Plan

Notes

Output Created		26-FEB-2025 15:23:10
Comments		
Input	Active Dataset	NCSR
	Filter	<none>
	Weight	<none>
	Split File	<none>
Syntax		CSPLAN ANALYSIS /PLAN FILE='P:\asda3\data sets for analysis examples and stata r code\ncsr_p2wt.csaplan' /PLANVARS ANALYSISWEIGHT=ncsrwtlg /SRSESTIMATOR TYPE=WOR /PRINT PLAN /DESIGN STRATA=sestrat CLUSTER=seclustr /ESTIMATOR TYPE=WR.
Resources	Processor Time	00:00:00.00
	Elapsed Time	00:00:00.20
Files Saved	Plan File	P:\asda3\data sets for analysis examples and stata r code/ncsr_p2wt.csaplan

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	SAMPLING ERROR STRATUM
	Cluster	1	SAMPLING ERROR CLUSTER
Analysis Information	Estimator Assumption		Sampling with replacement

Plan File: P:\asda3\data sets for analysis examples and stata r code\ncsr_p2wt.csaplan
Weight Variable: NCSR sample part 2 weight
SRS Estimator: Sampling without replacement

```
* Table 8.5, Tabulation of Age, Marital Status, Sex, Education and Alcohol Dependence by MDE.
CSTABULATE
  /PLAN FILE='P:\ASDA3\Data Sets for Analysis Examples and Stata R Code\ncsr_p2wt.csaplan'
 /TABLES VARIABLES=ag4cat MAR3CAT SEX ED4CAT ald BY mde
 /CELLS ROWPCT
 /STATISTICS SE CIN(95)
 /TEST INDEPENDENCE
 /MISSING SCOPE=TABLE CLASSMISSING=EXCLUDE.
```

Complex Samples: Tables Notes

Output Created		26-FEB-2025 15:23:21
Comments		
Input	Active 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_p2wt.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_p2wt.csaplan' /TABLES VARIABLES=ag4cat MAR3CAT SEX ED4CAT ald BY mde /CELLS ROWPCT /STATISTICS SE CIN(95) /TEST INDEPENDENCE /MISSING SCOPE=TABLE CLASSMISSING=EXCLUDE.
Resources	Processor Time	00:00:00.02
	Elapsed Time	00:00:00.25

Age 1=17-29 2=30-44 3=45-59 4=60+ * Major Depressive Episode 1=Yes 0=No

				Major Depressive Episode 1=Yes 0=No		
Age 1=17-29 2=30-44 3=45-59 4=60+				0	1	Total
1	% within Age 1=17-29 2=30-44 3=45-59 4=60+	Estimate		81.6%	18.4%	100.0%
		Standard Error		0.9%	0.9%	0.0%
		95% Confidence Interval	Lower	79.7%	16.7%	100.0%
			Upper	83.3%	20.3%	100.0%
2	% within Age 1=17-29 2=30-44 3=45-59 4=60+	Estimate		77.1%	22.9%	100.0%
		Standard Error		1.1%	1.1%	0.0%
		95% Confidence Interval	Lower	74.8%	20.7%	100.0%
			Upper	79.3%	25.2%	100.0%
3	% within Age 1=17-29 2=30-44 3=45-59 4=60+	Estimate		77.7%	22.3%	100.0%
		Standard Error		1.3%	1.3%	0.0%
		95% Confidence Interval	Lower	75.0%	19.9%	100.0%
			Upper	80.1%	25.0%	100.0%
4	% within Age 1=17-29 2=30-44 3=45-59 4=60+	Estimate		88.9%	11.1%	100.0%
		Standard Error		1.0%	1.0%	0.0%
		95% Confidence Interval	Lower	86.9%	9.3%	100.0%
			Upper	90.7%	13.1%	100.0%
Total	% within Age 1=17-29 2=30-44 3=45-59 4=60+	Estimate		80.8%	19.2%	100.0%
		Standard Error		0.6%	0.6%	0.0%
		95% Confidence Interval	Lower	79.5%	17.9%	100.0%
			Upper	82.1%	20.5%	100.0%

Marital Status 1=Married 2=Previously Married 3=Never Married * Major Depressive Episode 1=Yes 0=No

Marital Status 1=Married 2=Previously Married 3=Never Married				Major Depressive Episode 1=Yes 0=No: 0	1
1	% within Marital Status 1=Married 2=Previously Married 3=Never Married	Estimate		82.7%	17.3%
		Standard Error		0.7%	0.7%
		95% Confidence Interval	Lower	81.1%	15.9%
			Upper	84.1%	18.9%
2	% within Marital Status 1=Married 2=Previously Married 3=Never Married	Estimate		76.1%	23.9%
		Standard Error		1.4%	1.4%
		95% Confidence Interval	Lower	73.1%	21.1%
			Upper	78.9%	26.9%
3	% within Marital Status 1=Married 2=Previously Married 3=Never Married	Estimate		80.6%	19.4%
		Standard Error		1.2%	1.2%
		95% Confidence Interval	Lower	78.2%	17.2%
			Upper	82.8%	21.8%
Total	% within Marital Status 1=Married 2=Previously Married 3=Never Married	Estimate		80.8%	19.2%
		Standard Error		0.6%	0.6%
		95% Confidence Interval	Lower	79.5%	17.9%
			Upper	82.1%	20.5%

Marital Status 1=Married 2=Previously Married 3=Never Married * Major Depressive Episode 1=Yes 0=No

Marital Status 1=Married 2=Previously Married 3=Never Married				Major Depressive Episode 1=Yes 0=No: Total
1	% within Marital Status 1=Married 2=Previously Married 3=Never Married	Estimate		100.0%
		Standard Error		0.0%
		95% Confidence Interval	Lower	100.0%
			Upper	100.0%
2	% within Marital Status 1=Married 2=Previously Married 3=Never Married	Estimate		100.0%
		Standard Error		0.0%
		95% Confidence Interval	Lower	100.0%
			Upper	100.0%
3	% within Marital Status 1=Married 2=Previously Married 3=Never Married	Estimate		100.0%
		Standard Error		0.0%
		95% Confidence Interval	Lower	100.0%
			Upper	100.0%
Total	% within Marital Status 1=Married 2=Previously Married 3=Never Married	Estimate		100.0%
		Standard Error		0.0%
		95% Confidence Interval	Lower	100.0%
			Upper	100.0%

Sex 1=Male 2=Female * Major Depressive Episode 1=Yes 0=No

Sex 1=Male 2=Female				Major Depressive Episode 1=Yes 0=No: 0	1	Total
1	% within Sex 1=Male 2=Female	Estimate		84.7%	15.3%	100.0%
		Standard Error		0.9%	0.9%	0.0%
		95% Confidence Interval	Lower	82.8%	13.5%	100.0%
			Upper	86.5%	17.2%	100.0%
2	% within Sex 1=Male 2=Female	Estimate		77.4%	22.6%	100.0%
		Standard Error		0.7%	0.7%	0.0%
		95% Confidence Interval	Lower	76.0%	21.3%	100.0%
			Upper	78.7%	24.0%	100.0%
Total	% within Sex 1=Male 2=Female	Estimate		80.8%	19.2%	100.0%
		Standard Error		0.6%	0.6%	0.0%
		95% Confidence Interval	Lower	79.5%	17.9%	100.0%
			Upper	82.1%	20.5%	100.0%

Education 1=0-11 2=12 3=13-15 4=16+ Yrs * Major Depressive Episode 1=Yes 0=No

Education 1=0-11 2=12 3=13-15 4=16+ Yrs				Major Depressive Episode 1=Yes 0=No 0	1	Total
1	% within Education 1=0-11 2=12 3=13-15 4=16+ Yrs	Estimate		83.7%	16.3%	100.0%
		Standard Error		1.2%	1.2%	0.0%
		95% Confidence Interval	Lower	81.1%	14.0%	100.0%
			Upper	86.0%	18.9%	100.0%
2	% within Education 1=0-11 2=12 3=13-15 4=16+ Yrs	Estimate		81.5%	18.5%	100.0%
		Standard Error		0.8%	0.8%	0.0%
		95% Confidence Interval	Lower	79.7%	16.9%	100.0%
			Upper	83.1%	20.3%	100.0%
3	% within Education 1=0-11 2=12 3=13-15 4=16+ Yrs	Estimate		78.8%	21.2%	100.0%
		Standard Error		1.0%	1.0%	0.0%
		95% Confidence Interval	Lower	76.6%	19.2%	100.0%
			Upper	80.8%	23.4%	100.0%
4	% within Education 1=0-11 2=12 3=13-15 4=16+ Yrs	Estimate		80.3%	19.7%	100.0%
		Standard Error		1.1%	1.1%	0.0%
		95% Confidence Interval	Lower	78.0%	17.6%	100.0%
			Upper	82.4%	22.0%	100.0%
Total	% within Education 1=0-11 2=12 3=13-15 4=16+ Yrs	Estimate		80.8%	19.2%	100.0%
		Standard Error		0.6%	0.6%	0.0%
		95% Confidence Interval	Lower	79.5%	17.9%	100.0%
			Upper	82.1%	20.5%	100.0%

Alcohol Dependence 1=Yes 0=No * Major Depressive Episode 1=Yes 0=No

Alcohol Dependence 1=Yes 0=No				Major Depressive Episode 1=Yes 0=No 0	1	Total
0	% within Alcohol Dependence 1=Yes 0=No	Estimate		82.3%	17.7%	100.0%
		Standard Error		0.7%	0.7%	0.0%
		95% Confidence Interval	Lower	81.0%	16.4%	100.0%
			Upper	83.6%	19.0%	100.0%
1	% within Alcohol Dependence 1=Yes 0=No	Estimate		54.8%	45.2%	100.0%
		Standard Error		2.9%	2.9%	0.0%
		95% Confidence Interval	Lower	48.9%	39.4%	100.0%
			Upper	60.6%	51.1%	100.0%
Total	% within Alcohol Dependence 1=Yes 0=No	Estimate		80.8%	19.2%	100.0%
		Standard Error		0.6%	0.6%	0.0%
		95% Confidence Interval	Lower	79.5%	17.9%	100.0%
			Upper	82.1%	20.5%	100.0%

Tests of Independence

		Chi-Square	Adjusted F	df1	df2	Sig.
Age 1=17-29 2=30-44 3=45-59 4=60+ * Major Depressive Episode 1=Yes 0=No	Pearson	75.970	26.390	2.761	115.970	<.001
	Likelihood Ratio	82.167	28.543	2.761	115.970	<.001
Marital Status 1=Married 2=Previously Married 3=Never Married * Major Depressive Episode 1=Yes 0=No	Pearson	24.142	11.085	1.899	79.745	<.001
	Likelihood Ratio	23.378	10.734	1.899	79.745	<.001
Sex 1=Male 2=Female * Major Depressive Episode 1=Yes 0=No	Pearson	49.117	44.834	1	42	<.001
	Likelihood Ratio	49.666	45.335	1	42	<.001
Education 1=0-11 2=12 3=13-15 4=16+ Yrs * Major Depressive Episode 1=Yes 0=No	Pearson	10.081	4.304	2.903	121.925	.007
	Likelihood Ratio	10.180	4.347	2.903	121.925	.007
Alcohol Dependence 1=Yes 0=No * Major Depressive Episode 1=Yes 0=No	Pearson	141.704	120.028	1	42	<.001
	Likelihood Ratio	114.974	97.387	1	42	<.001

The adjusted F is a variant of the second-order Rao-Scott adjusted chi-square statistic. Significance is based on the adjusted F and its degrees of freedom.

```
* Reverse Coding and Variable Creation.
compute revag4cat=5-ag4cat.
compute reved4cat=5-ed4cat.
compute revmar3cat=4-mar3cat.
compute sexm=(sex=1).
execute.
* Complex Samples Logistic Regression. Prepare Numbers for Table 8.6, 8.7, 8.8.

* Model Estimation. Logistic Regression with Part 2 Weight and Design Variables.
CSLOGISTIC mde(LOW) BY revag4cat reved4cat revmar3cat WITH sexm ald
 /PLAN FILE='P:\ASDA3\Data Sets for Analysis Examples and Stata R Code\ncsr_p2wt.csaplan'
 /MODEL revag4cat sexm ald reved4cat revmar3cat
 /INTERCEPT INCLUDE=YES SHOW=YES
 /STATISTICS PARAMETER EXP SE CINTERVAL TTEST
 /TEST TYPE=F PADJUST=LSD
 /MISSING CLASSMISSING=EXCLUDE
 /CRITERIA MXITER=100 MXSTEP=5 PCONVERGE=[1E-006 RELATIVE] LCONVERGE=[0] CHKSEP=20 CILEVEL=95
 /PRINT SUMMARY SAMPLEINFO.
```

Complex Samples: Logistic Regression

Notes

Output Created		26-FEB-2025 15:23:54
Comments		
Input	Active 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_p2wt.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		CSLOGISTIC mde(LOW) BY revag4cat reved4cat revmar3cat WITH sexm ald /PLAN FILE='P:\ASDA3\Data Sets for Analysis Examples and Stata R Code\ncsr_p2wt.csaplan' /MODEL revag4cat sexm ald reved4cat revmar3cat /INTERCEPT INCLUDE=YES SHOW=YES /STATISTICS PARAMETER EXP SE CINTERVAL TTEST /TEST TYPE=F PADJUST=LSD /MISSING CLASSMISSING=EXCLUDE /CRITERIA MXITER=100 MXSTEP=5 PCONVERGE=[1E-006 RELATIVE] LCONVERGE=[0] CHKSEP=20 CILEVEL=95 /PRINT SUMMARY SAMPLEINFO.
Resources	Processor Time	00:00:00.08
	Elapsed Time	00:00:00.34

Sample Design Information

		N
Unweighted Cases	Valid	5692
	Invalid	3590
	Total	9282
Population Size		5692.000
Stage 1	Strata	42
	Units	84
Sampling Design Degrees of Freedom		42

Pseudo R Squares

Cox and Snell	.051
Nagelkerke	.081
McFadden	.053

Dependent Variable: Major Depressive Episode 1=Yes 0=No (reference category = 0)
Model: (Intercept), revag4cat, sexm, ald, reved4cat, revmar3cat

Tests of Model Effects

Source	df1	df2	Wald F	Sig.
(Corrected Model)	10.000	33.000	28.070	<.001
(Intercept)	1.000	42.000	937.702	<.001
revag4cat	3.000	40.000	19.031	<.001
sexm	1.000	42.000	55.907	<.001
ald	1.000	42.000	85.285	<.001
reved4cat	3.000	40.000	2.130	.112
revmar3cat	2.000	41.000	16.603	<.001

Dependent Variable: Major Depressive Episode 1=Yes 0=No (reference category = 0)
Model: (Intercept), revag4cat, sexm, ald, reved4cat, revmar3cat

Parameter Estimates

Major Depressive Episode 1=Yes 0=No	Parameter	B	Std. Error	95% Confidence Interval		Hypothesis Test	
				Lower	Upper	t	df
1	(Intercept)	-1.583	.121	-1.827	-1.340	-13.120	42.000
	[revag4cat=1.00]	-.676	.141	-.961	-.391	-4.783	42.000
	[revag4cat=2.00]	.206	.092	.022	.391	2.256	42.000
	[revag4cat=3.00]	.256	.094	.065	.446	2.708	42.000
	[revag4cat=4.00]	.000[a]	.	.	.	.	.
	sexm	-.577	.077	-.733	-.422	-7.477	42.000
	ald	1.424	.154	1.113	1.735	9.235	42.000
	[reved4cat=1.00]	.163	.111	-.060	.386	1.473	42.000
	[reved4cat=2.00]	.231	.093	.043	.418	2.477	42.000
	[reved4cat=3.00]	.079	.097	-.116	.275	.818	42.000
	[reved4cat=4.00]	.000[a]	.	.	.	.	.
	[revmar3cat=1.00]	.116	.108	-.102	.333	1.071	42.000
	[revmar3cat=2.00]	.486	.085	.314	.659	5.695	42.000
	[revmar3cat=3.00]	.000[a]	.	.	.	.	.

Parameter Estimates

Major Depressive Episode 1=Yes 0=No	Parameter	Hypothesis Test Sig.	Exp(B)	95% Confidence Interval for Exp(B) Lower	Upper
1	(Intercept)	<.001	.205	.161	.262
	[revag4cat=1.00]	<.001	.509	.383	.677
	[revag4cat=2.00]	.029	1.229	1.022	1.479
	[revag4cat=3.00]	.010	1.291	1.067	1.562
	[revag4cat=4.00]	.	1.000	.	.
	sexm	<.001	.561	.480	.656
	ald	<.001	4.152	3.042	5.668
	[reved4cat=1.00]	.148	1.177	.941	1.471
	[reved4cat=2.00]	.017	1.259	1.044	1.519
	[reved4cat=3.00]	.418	1.082	.890	1.316
	[reved4cat=4.00]	.	1.000	.	.
	[revmar3cat=1.00]	.290	1.123	.903	1.396
	[revmar3cat=2.00]	<.001	1.626	1.369	1.932
	[revmar3cat=3.00]	.	1.000	.	.

Dependent Variable: Major Depressive Episode 1=Yes 0=No (reference category = 0)
Model: (Intercept), revag4cat, sexm, ald, reved4cat, revmar3cat

a. Set to zero because this parameter is redundant.

```
*Tables 8.9 and 8.10, Logistic model with Interaction Testing of Sex*(age education, ALD, and marital status).
CSLOGISTIC mde(LOW) BY revag4cat reved4cat revmar3cat WITH sexm ald
 /PLAN FILE='P:\ASDA3\Data Sets for Analysis Examples and Stata R Code\ncsr_p2wt.csaplan'
 /MODEL revag4cat reved4cat revmar3cat sexm ald
   sexm*revag4cat sexm*reved4cat sexm*ald revmar3cat*sexm
 /INTERCEPT INCLUDE=YES SHOW=YES
 /STATISTICS PARAMETER EXP SE CINTERVAL TTEST
 /TEST TYPE=F PADJUST=LSD
 /MISSING CLASSMISSING=EXCLUDE
 /CRITERIA MXITER=100 MXSTEP=5 PCONVERGE=[1E-006 RELATIVE] LCONVERGE=[0] CHKSEP=20 CILEVEL=95
 /PRINT SUMMARY SAMPLEINFO.
```

Complex Samples: Logistic Regression

Notes

Output Created		26-FEB-2025 15:24:15
Comments		
Input	Active 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_p2wt.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		CSLOGISTIC mde(LOW) BY revag4cat reved4cat revmar3cat WITH sexm ald /PLAN FILE='P:\ASDA3\Data Sets for Analysis Examples and Stata R Code\ncsr_p2wt.csaplan' /MODEL revag4cat reved4cat revmar3cat sexm ald sexm*revag4cat sexm*reved4cat sexm*ald revmar3cat*sexm /INTERCEPT INCLUDE=YES SHOW=YES /STATISTICS PARAMETER EXP SE CINTERVAL TTEST /TEST TYPE=F PADJUST=LSD /MISSING CLASSMISSING=EXCLUDE /CRITERIA MXITER=100 MXSTEP=5 PCONVERGE=[1E-006 RELATIVE] LCONVERGE=[0] CHKSEP=20 CILEVEL=95 /PRINT SUMMARY SAMPLEINFO.
Resources	Processor Time	00:00:00.08
	Elapsed Time	00:00:00.33

Sample Design Information

		N
Unweighted Cases	Valid	5692
	Invalid	3590
	Total	9282
Population Size		5692.000
Stage 1	Strata	42
	Units	84
Sampling Design Degrees of Freedom		42

Pseudo R Squares

Cox and Snell	.051
Nagelkerke	.082
McFadden	.054

Dependent Variable: Major Depressive Episode 1=Yes 0=No (reference category = 0)
Model: (Intercept), revag4cat, reved4cat, revmar3cat, sexm, ald, revag4cat * sexm, reved4cat * sexm, sexm * ald, revmar3cat * sexm

Tests of Model Effects

Source	df1	df2	Wald F	Sig.
(Corrected Model)	19.000	24.000	17.150	<.001
(Intercept)	1.000	42.000	959.904	<.001
revag4cat	3.000	40.000	12.750	<.001
reved4cat	3.000	40.000	2.253	.097
revmar3cat	2.000	41.000	7.045	.002
sexm	1.000	42.000	26.929	<.001
ald	1.000	42.000	54.170	<.001
revag4cat * sexm	3.000	40.000	.248	.863
reved4cat * sexm	3.000	40.000	.126	.944
sexm * ald	1.000	42.000	.684	.413
revmar3cat * sexm	2.000	41.000	.765	.472

Dependent Variable: Major Depressive Episode 1=Yes 0=No (reference category = 0)
Model: (Intercept), revag4cat, reved4cat, revmar3cat, sexm, ald, revag4cat * sexm, reved4cat * sexm, sexm * ald, revmar3cat * sexm

Parameter Estimates

Major Depressive Episode 1=Yes 0=No	Parameter	B	Std. Error	95% Confidence Interval Lower	95% Confidence Interval Upper	Hypothesis Test t
1	(Intercept)	-1.600	.134	-1.870	-1.329	-11.939
	[revag4cat=1.00]	-.646	.175	-.999	-.292	-3.685
	[revag4cat=2.00]	.215	.102	.008	.421	2.094
	[revag4cat=3.00]	.220	.114	-.009	.450	1.937
	[revag4cat=4.00]	.000[a]	.	.	.	.
	[reved4cat=1.00]	.242	.152	-.064	.549	1.595
	[reved4cat=2.00]	.297	.117	.061	.534	2.540
	[reved4cat=3.00]	.131	.084	-.038	.299	1.559
	[reved4cat=4.00]	.000[a]	.	.	.	.
	[revmar3cat=1.00]	.017	.130	-.245	.279	.134
	[revmar3cat=2.00]	.418	.111	.195	.641	3.780
	[revmar3cat=3.00]	.000[a]	.	.	.	.
	sexm	-.546	.357	-1.267	.174	-1.530
	ald	1.553	.211	1.127	1.979	7.360
	[revag4cat=1.00] * sexm	-.038	.302	-.647	.572	-.125
	[revag4cat=2.00] * sexm	.003	.213	-.427	.432	.012
	[revag4cat=3.00] * sexm	.097	.201	-.309	.502	.482
	[revag4cat=4.00] * sexm	.000[a]	.	.	.	.
	[reved4cat=1.00] * sexm	-.194	.344	-.889	.501	-.564
	[reved4cat=2.00] * sexm	-.169	.269	-.712	.375	-.627
	[reved4cat=3.00] * sexm	-.138	.271	-.685	.409	-.508
	[reved4cat=4.00] * sexm	.000[a]	.	.	.	.
	sexm * ald	-.200	.242	-.689	.288	-.827
	[revmar3cat=1.00] * sexm	.232	.212	-.196	.660	1.094
	[revmar3cat=2.00] * sexm	.183	.208	-.237	.602	.878
	[revmar3cat=3.00] * sexm	.000[a]	.	.	.	.

Parameter Estimates

Major Depressive Episode 1=Yes 0=No	Parameter	Hypothesis Test df	Hypothesis Test Sig.	Exp(B)	95% Confidence Interval for Exp(B) Lower
1	(Intercept)	42.000	<.001	.202	.154
	[revag4cat=1.00]	42.000	<.001	.524	.368
	[revag4cat=2.00]	42.000	.042	1.239	1.008
	[revag4cat=3.00]	42.000	.059	1.247	.991
	[revag4cat=4.00]	.	.	1.000	.
	[reved4cat=1.00]	42.000	.118	1.274	.938
	[reved4cat=2.00]	42.000	.015	1.346	1.063
	[reved4cat=3.00]	42.000	.126	1.139	.962
	[reved4cat=4.00]	.	.	1.000	.
	[revmar3cat=1.00]	42.000	.894	1.017	.783
	[revmar3cat=2.00]	42.000	<.001	1.519	1.215
	[revmar3cat=3.00]	.	.	1.000	.
	sexm	42.000	.134	.579	.282
	ald	42.000	<.001	4.726	3.087
	[revag4cat=1.00] * sexm	42.000	.901	.963	.523
	[revag4cat=2.00] * sexm	42.000	.990	1.003	.653
	[revag4cat=3.00] * sexm	42.000	.633	1.102	.734
	[revag4cat=4.00] * sexm	.	.	1.000	.
	[reved4cat=1.00] * sexm	42.000	.576	.824	.411
	[reved4cat=2.00] * sexm	42.000	.534	.845	.490
	[reved4cat=3.00] * sexm	42.000	.614	.871	.504
	[reved4cat=4.00] * sexm	.	.	1.000	.
	sexm * ald	42.000	.413	.818	.502
	[revmar3cat=1.00] * sexm	42.000	.280	1.261	.822
	[revmar3cat=2.00] * sexm	42.000	.385	1.200	.789
	[revmar3cat=3.00] * sexm	.	.	1.000	.

Parameter Estimates

Major Depressive Episode 1=Yes 0=No	Parameter	95% Confidence Interval for Exp(B) Upper
1	(Intercept)	.265
	[revag4cat=1.00]	.747
	[revag4cat=2.00]	1.524
	[revag4cat=3.00]	1.568
	[revag4cat=4.00]	.
	[reved4cat=1.00]	1.731
	[reved4cat=2.00]	1.705
	[reved4cat=3.00]	1.349
	[reved4cat=4.00]	.
	[revmar3cat=1.00]	1.322
	[revmar3cat=2.00]	1.898
	[revmar3cat=3.00]	.
	sexm	1.190
	ald	7.236
	[revag4cat=1.00] * sexm	1.771
	[revag4cat=2.00] * sexm	1.541
	[revag4cat=3.00] * sexm	1.652
	[revag4cat=4.00] * sexm	.
	[reved4cat=1.00] * sexm	1.650
	[reved4cat=2.00] * sexm	1.455
	[reved4cat=3.00] * sexm	1.506
	[reved4cat=4.00] * sexm	.
	sexm * ald	1.334
	[revmar3cat=1.00] * sexm	1.934
	[revmar3cat=2.00] * sexm	1.826
	[revmar3cat=3.00] * sexm	.

Dependent Variable: Major Depressive Episode 1=Yes 0=No (reference category = 0)
Model: (Intercept), revag4cat, reved4cat, revmar3cat, sexm, ald, revag4cat * sexm, reved4cat * sexm, sexm * ald, revmar3cat * sexm

a. Set to zero because this parameter is redundant.

```
* Result Show: No significant interactions.  Dropped from model.
```

```
* Test Need for Weighted Estimation.
* Prepare Plan File with Design Variables but no Weight.
COMPUTE wt1=1.
EXECUTE.
* Analysis Preparation Wizard.
CSPLAN ANALYSIS
  /PLAN FILE='P:\asda3\data sets for analysis examples and stata r code\ncsr_des_nowt.csaplan'
  /PLANVARS ANALYSISWEIGHT=wt1
  /SRSESTIMATOR TYPE=WOR
  /PRINT PLAN
  /DESIGN STRATA=sestrat CLUSTER=seclustr
  /ESTIMATOR TYPE=WR.
```

Complex Samples: Plan

Notes

Output Created		26-FEB-2025 15:24:38
Comments		
Input	Active Dataset	NCSR
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	9282
Syntax		CSPLAN ANALYSIS /PLAN FILE='P:\asda3\data sets for analysis examples and stata r code\ncsr_des_nowt.csaplan' /PLANVARS ANALYSISWEIGHT=wt1 /SRSESTIMATOR TYPE=WOR /PRINT PLAN /DESIGN STRATA=sestrat CLUSTER=seclustr /ESTIMATOR TYPE=WR.
Resources	Processor Time	00:00:00.00
	Elapsed Time	00:00:00.19
Files Saved	Plan File	P:\asda3\data sets for analysis examples and stata r code/ncsr_des_nowt.csaplan

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	SAMPLING ERROR STRATUM
	Cluster	1	SAMPLING ERROR CLUSTER
Analysis Information	Estimator Assumption		Sampling with replacement

Plan File: P:\asda3\data sets for analysis examples and stata r code\ncsr_des_nowt.csaplan
Weight Variable: wt1
SRS Estimator: Sampling without replacement

```
CSLOGISTIC mde(LOW) BY revag4cat reved4cat revmar3cat WITH sexm ald ncsrwtlg
 /PLAN FILE='P:\ASDA3\Data Sets for Analysis Examples and Stata R Code\ncsr_des_nowt.csaplan'
 /MODEL revag4cat  sexm ald reved4cat revmar3cat ncsrwtlg
   ncsrwtlg*revag4cat  ncsrwtlg*sexm   ncsrwtlg*reved4cat  ncsrwtlg*ald ncsrwtlg*revmar3cat
 /INTERCEPT INCLUDE=YES SHOW=YES
 /STATISTICS PARAMETER EXP SE CINTERVAL TTEST
 /TEST TYPE=F PADJUST=LSD
 /MISSING CLASSMISSING=EXCLUDE
 /CRITERIA MXITER=100 MXSTEP=5 PCONVERGE=[1E-006 RELATIVE] LCONVERGE=[0] CHKSEP=20 CILEVEL=95
 /PRINT SUMMARY SAMPLEINFO
  /CUSTOM LABEL="Test Need for Weighted Estimation "
LMATRIX=
 revag4cat*ncsrwtlg  1 0 0 -1  ;
 revag4cat*ncsrwtlg  1 0 -1  0 ;
 revag4cat*ncsrwtlg  1 -1 0 0  ;
 sexm*ncsrwtlg  1  ;
 ald*ncsrwtlg  1   ;
 reved4cat*ncsrwtlg  1 0 0 -1 ;
 reved4cat*ncsrwtlg  1 0 -1 0 ;
 reved4cat*ncsrwtlg  1 -1 0 0  ;
 revmar3cat * ncsrwtlg  1 0 -1  ;
 revmar3cat * ncsrwtlg  1 -1 0
KMATRIX=0; 0; 0; 0; 0; 0; 0; 0; 0;0.
```

Complex Samples: Logistic Regression

Notes

Output Created		26-FEB-2025 15:24:56
Comments		
Input	Active 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_des_nowt.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		CSLOGISTIC mde(LOW) BY revag4cat reved4cat revmar3cat WITH sexm ald ncsrwtlg /PLAN FILE='P:\ASDA3\Data Sets for Analysis Examples and Stata R Code\ncsr_des_nowt.csaplan' /MODEL revag4cat sexm ald reved4cat revmar3cat ncsrwtlg ncsrwtlg*revag4cat ncsrwtlg*sexm ncsrwtlg*reved4cat ncsrwtlg*ald ncsrwtlg*revmar3cat /INTERCEPT INCLUDE=YES SHOW=YES /STATISTICS PARAMETER EXP SE CINTERVAL TTEST /TEST TYPE=F PADJUST=LSD /MISSING CLASSMISSING=EXCLUDE /CRITERIA MXITER=100 MXSTEP=5 PCONVERGE=[1E-006

		RELATIVE] LCONVERGE=[0] CHKSEP=20 CILEVEL=95 /PRINT SUMMARY SAMPLEINFO /CUSTOM LABEL="Test Need for Weighted Estimation " LMATRIX= revag4cat*ncsrwtlg 1 0 0 -1 ; revag4cat*ncsrwtlg 1 0 -1 0 ; revag4cat*ncsrwtlg 1 -1 0 0 ; sexm*ncsrwtlg 1 ; ald*ncsrwtlg 1 ; reved4cat*ncsrwtlg 1 0 0 -1 ; reved4cat*ncsrwtlg 1 0 -1 0 ; reved4cat*ncsrwtlg 1 -1 0 0 ; revmar3cat * ncsrwtlg 1 0 -1 ; revmar3cat * ncsrwtlg 1 -1 0 KMATRIX=0; 0; 0; 0; 0; 0; 0; 0; 0;0.
Resources	Processor Time	00:00:00.11
	Elapsed Time	00:00:00.37

Sample Design Information

		N
Unweighted Cases	Valid	5692
	Invalid	3590
	Total	9282
Population Size		5692.000
Stage 1	Strata	42
	Units	84
Sampling Design Degrees of Freedom		42

Pseudo R Squares

Cox and Snell	.147
Nagelkerke	.207
McFadden	.128

Dependent Variable: Major Depressive Episode 1=Yes 0=No (reference category = 0)
Model: (Intercept), revag4cat, sexm, ald, reved4cat, revmar3cat, ncsrwtlg, revag4cat * ncsrwtlg, sexm * ncsrwtlg, reved4cat * ncsrwtlg, ald * ncsrwtlg, revmar3cat * ncsrwtlg

Tests of Model Effects

Source	df1	df2	Wald F	Sig.
(Corrected Model)	21.000	22.000	7.713	<.001
(Intercept)	1.000	42.000	17.118	<.001
revag4cat	3.000	40.000	.769	.518
sexm	1.000	42.000	7.318	.010
ald	1.000	42.000	.552	.461
reved4cat	3.000	40.000	3.006	.041
revmar3cat	2.000	41.000	2.273	.116
ncsrwtlg	1.000	42.000	41.176	<.001
revag4cat * ncsrwtlg	3.000	40.000	3.520	.023
sexm * ncsrwtlg	1.000	42.000	.078	.781
reved4cat * ncsrwtlg	3.000	40.000	1.931	.140
ald * ncsrwtlg	1.000	42.000	7.443	.009
revmar3cat * ncsrwtlg	2.000	41.000	.826	.445

Dependent Variable: Major Depressive Episode 1=Yes 0=No (reference category = 0)
Model: (Intercept), revag4cat, sexm, ald, reved4cat, revmar3cat, ncsrwtlg, revag4cat * ncsrwtlg, sexm * ncsrwtlg, reved4cat * ncsrwtlg, ald * ncsrwtlg, revmar3cat * ncsrwtlg

Parameter Estimates

Major Depressive Episode 1=Yes 0=No	Parameter	B	Std. Error	95% Confidence Interval		Hypothesis Test
				Lower	Upper	t
1	(Intercept)	-.069	.239	-.552	.414	-.288
	[revag4cat=1.00]	.190	.238	-.291	.671	.797
	[revag4cat=2.00]	.297	.205	-.116	.711	1.453
	[revag4cat=3.00]	.175	.159	-.145	.495	1.104
	[revag4cat=4.00]	.000[a]	.	.	.	.
	sexm	-.398	.147	-.696	-.101	-2.705
	ald	-.194	.261	-.720	.332	-.743
	[reved4cat=1.00]	.444	.224	-.009	.897	1.979
	[reved4cat=2.00]	.446	.167	.109	.783	2.667
	[reved4cat=3.00]	.370	.137	.094	.646	2.701
	[reved4cat=4.00]	.000[a]	.	.	.	.
	[revmar3cat=1.00]	.277	.162	-.050	.605	1.709
	[revmar3cat=2.00]	.268	.161	-.057	.594	1.663
	[revmar3cat=3.00]	.000[a]	.	.	.	.
	ncsrwtlg	-1.366	.373	-2.119	-.612	-3.658
	[revag4cat=1.00] * ncsrwtlg	-.402	.280	-.966	.163	-1.436
	[revag4cat=2.00] * ncsrwtlg	.159	.222	-.288	.606	.718
	[revag4cat=3.00] * ncsrwtlg	.213	.193	-.178	.603	1.100
	[revag4cat=4.00] * ncsrwtlg	.000[a]	.	.	.	.
	sexm * ncsrwtlg	.048	.173	-.301	.398	.279
	[reved4cat=1.00] * ncsrwtlg	-.596	.323	-1.247	.056	-1.846
	[reved4cat=2.00] * ncsrwtlg	-.489	.207	-.906	-.071	-2.363
	[reved4cat=3.00] * ncsrwtlg	-.329	.185	-.702	.044	-1.780
	[reved4cat=4.00] * ncsrwtlg	.000[a]	.	.	.	.
	ald * ncsrwtlg	1.212	.444	.315	2.108	2.728
	[revmar3cat=1.00] * ncsrwtlg	.116	.183	-.254	.486	.632
	[revmar3cat=2.00] * ncsrwtlg	.210	.166	-.124	.544	1.267
	[revmar3cat=3.00] * ncsrwtlg	.000[a]	.	.	.	.

Parameter Estimates

Major Depressive Episode 1=Yes 0=No	Parameter	Hypothesis Test		Exp(B)	95% Confidence Interval for Exp(B)
		df	Sig.		Lower
1	(Intercept)	42.000	.775	.933	.576
	[revag4cat=1.00]	42.000	.430	1.209	.747
	[revag4cat=2.00]	42.000	.154	1.346	.891
	[revag4cat=3.00]	42.000	.276	1.191	.865
	[revag4cat=4.00]	.	.	1.000	.
	sexm	42.000	.010	.671	.499
	ald	42.000	.461	.824	.487
	[reved4cat=1.00]	42.000	.054	1.559	.991
	[reved4cat=2.00]	42.000	.011	1.562	1.115
	[reved4cat=3.00]	42.000	.010	1.447	1.098
	[reved4cat=4.00]	.	.	1.000	.
	[revmar3cat=1.00]	42.000	.095	1.320	.951
	[revmar3cat=2.00]	42.000	.104	1.308	.944
	[revmar3cat=3.00]	.	.	1.000	.
	ncsrwtlg	42.000	<.001	.255	.120
	[revag4cat=1.00] * ncsrwtlg	42.000	.158	.669	.381
	[revag4cat=2.00] * ncsrwtlg	42.000	.477	1.172	.750

	[revag4cat=3.00] * ncsrwtlg	42.000	.278	1.237	.837
	[revag4cat=4.00] * ncsrwtlg	.	.	1.000	.
	sexm * ncsrwtlg	42.000	.781	1.050	.740
	[reved4cat=1.00] * ncsrwtlg	42.000	.072	.551	.287
	[reved4cat=2.00] * ncsrwtlg	42.000	.023	.614	.404
	[reved4cat=3.00] * ncsrwtlg	42.000	.082	.720	.496
	[reved4cat=4.00] * ncsrwtlg	.	.	1.000	.
	ald * ncsrwtlg	42.000	.009	3.359	1.371
	[revmar3cat=1.00] * ncsrwtlg	42.000	.531	1.123	.775
	[revmar3cat=2.00] * ncsrwtlg	42.000	.212	1.233	.883
	[revmar3cat=3.00] * ncsrwtlg	.	.	1.000	.

Parameter Estimates

Major Depressive Episode 1=Yes 0=No	Parameter	95% Confidence Interval for Exp(B) Upper
1	(Intercept)	1.513
	[revag4cat=1.00]	1.956
	[revag4cat=2.00]	2.035
	[revag4cat=3.00]	1.641
	[revag4cat=4.00]	.
	sexm	.904
	ald	1.394
	[reved4cat=1.00]	2.452
	[reved4cat=2.00]	2.189
	[reved4cat=3.00]	1.908
	[reved4cat=4.00]	.
	[revmar3cat=1.00]	1.831
	[revmar3cat=2.00]	1.811
	[revmar3cat=3.00]	.
	ncsrwtlg	.542
	[revag4cat=1.00] * ncsrwtlg	1.177
	[revag4cat=2.00] * ncsrwtlg	1.833
	[revag4cat=3.00] * ncsrwtlg	1.828
	[revag4cat=4.00] * ncsrwtlg	.
	sexm * ncsrwtlg	1.488
	[reved4cat=1.00] * ncsrwtlg	1.057
	[reved4cat=2.00] * ncsrwtlg	.931
	[reved4cat=3.00] * ncsrwtlg	1.045
	[reved4cat=4.00] * ncsrwtlg	.
	ald * ncsrwtlg	8.230
	[revmar3cat=1.00] * ncsrwtlg	1.626
	[revmar3cat=2.00] * ncsrwtlg	1.723
	[revmar3cat=3.00] * ncsrwtlg	.

Dependent Variable: Major Depressive Episode 1=Yes 0=No (reference category = 0)
Model: (Intercept), revag4cat, sexm, ald, reved4cat, revmar3cat, ncsrwtlg, revag4cat * ncsrwtlg, sexm * ncsrwtlg, reved4cat * ncsrwtlg, ald * ncsrwtlg, revmar3cat * ncsrwtlg

a. Set to zero because this parameter is redundant.

Custom Hypothesis Tests : Test Need for Weighted Estimation

Contrast Coefficients

Parameter	L1	L2	L3	L4	L5	L6	L7	L8
(Intercept)	.000	.000	.000	.000	.000	.000	.000	
[revag4cat=1.00]	.000	.000	.000	.000	.000	.000	.000	
[revag4cat=2.00]	.000	.000	.000	.000	.000	.000	.000	
[revag4cat=3.00]	.000	.000	.000	.000	.000	.000	.000	
[revag4cat=4.00]	.000	.000	.000	.000	.000	.000	.000	
sexm	.000	.000	.000	.000	.000	.000	.000	
ald	.000	.000	.000	.000	.000	.000	.000	
[reved4cat=1.00]	.000	.000	.000	.000	.000	.000	.000	
[reved4cat=2.00]	.000	.000	.000	.000	.000	.000	.000	
[reved4cat=3.00]	.000	.000	.000	.000	.000	.000	.000	
[reved4cat=4.00]	.000	.000	.000	.000	.000	.000	.000	
[revmar3cat=1.00]	.000	.000	.000	.000	.000	.000	.000	
[revmar3cat=2.00]	.000	.000	.000	.000	.000	.000	.000	
[revmar3cat=3.00]	.000	.000	.000	.000	.000	.000	.000	
ncsrwtlg	.000	.000	.000	.000	.000	.000	.000	
[revag4cat=1.00] * ncsrwtlg	1.000	1.000	1.000	.000	.000	.000	.000	
[revag4cat=2.00] * ncsrwtlg	.000	.000	-1.000	.000	.000	.000	.000	
[revag4cat=3.00] * ncsrwtlg	.000	-1.000	.000	.000	.000	.000	.000	
[revag4cat=4.00] * ncsrwtlg	-1.000	.000	.000	.000	.000	.000	.000	
sexm * ncsrwtlg	.000	.000	.000	1.000	.000	.000	.000	
[reved4cat=1.00] * ncsrwtlg	.000	.000	.000	.000	.000	1.000	1.000	
[reved4cat=2.00] * ncsrwtlg	.000	.000	.000	.000	.000	.000	.000	
[reved4cat=3.00] * ncsrwtlg	.000	.000	.000	.000	.000	.000	-1.000	
[reved4cat=4.00] * ncsrwtlg	.000	.000	.000	.000	.000	-1.000	.000	
ald * ncsrwtlg	.000	.000	.000	.000	1.000	.000	.000	
[revmar3cat=1.00] * ncsrwtlg	.000	.000	.000	.000	.000	.000	.000	
[revmar3cat=2.00] * ncsrwtlg	.000	.000	.000	.000	.000	.000	.000	
[revmar3cat=3.00] * ncsrwtlg	.000	.000	.000	.000	.000	.000	.000	

Contrast Coefficients

Parameter	L9	L10
(Intercept)	.000	.000
[revag4cat=1.00]	.000	.000
[revag4cat=2.00]	.000	.000
[revag4cat=3.00]	.000	.000
[revag4cat=4.00]	.000	.000
sexm	.000	.000
ald	.000	.000
[reved4cat=1.00]	.000	.000
[reved4cat=2.00]	.000	.000
[reved4cat=3.00]	.000	.000
[reved4cat=4.00]	.000	.000
[revmar3cat=1.00]	.000	.000
[revmar3cat=2.00]	.000	.000
[revmar3cat=3.00]	.000	.000
ncsrwtlg	.000	.000
[revag4cat=1.00] * ncsrwtlg	.000	.000
[revag4cat=2.00] * ncsrwtlg	.000	.000
[revag4cat=3.00] * ncsrwtlg	.000	.000
[revag4cat=4.00] * ncsrwtlg	.000	.000
sexm * ncsrwtlg	.000	.000
[reved4cat=1.00] * ncsrwtlg	.000	.000

[reved4cat=2.00] * ncsrwtlg	.000	.000
[reved4cat=3.00] * ncsrwtlg	.000	.000
[reved4cat=4.00] * ncsrwtlg	.000	.000
ald * ncsrwtlg	.000	.000
[revmar3cat=1.00] * ncsrwtlg	1.000	1.000
[revmar3cat=2.00] * ncsrwtlg	.000	-1.000
[revmar3cat=3.00] * ncsrwtlg	-1.000	.000

Individual Test Results

Contrast	Contrast Estimate	Hypothesized Value	Difference (Estimate - Hypothesized)	Std. Error	df1	df2	Wald F	Sig.
L1	-.402	.000	-.402	.280	1.000	42.000	2.063	.158
L2	-.614	.000	-.614	.238	1.000	42.000	6.691	.013
L3	-.561	.000	-.561	.188	1.000	42.000	8.938	.005
L4	.048	.000	.048	.173	1.000	42.000	.078	.781
L5	1.212	.000	1.212	.444	1.000	42.000	7.443	.009
L6	-.596	.000	-.596	.323	1.000	42.000	3.407	.072
L7	-.267	.000	-.267	.280	1.000	42.000	.907	.346
L8	-.107	.000	-.107	.177	1.000	42.000	.365	.549
L9	.116	.000	.116	.183	1.000	42.000	.399	.531
L10	-.094	.000	-.094	.211	1.000	42.000	.198	.659

Overall Test Results

df1	df2	Wald F	Sig.
10.000	33.000	5.667	<.001

```
* Weights are Informative, Proceed with Final Models.
* Numbers for Table 8.12.
CSLOGISTIC ald (LOW) BY revag4cat reved4cat revmar3cat WITH sexm
 /PLAN FILE='P:\ASDA3\Data Sets for Analysis Examples and Stata R Code\ncsr_p2wt.csaplan'
 /MODEL revag4cat reved4cat revmar3cat sexm
 /INTERCEPT INCLUDE=YES SHOW=YES
 /STATISTICS PARAMETER SE CINTERVAL TTEST
 /TEST TYPE=F PADJUST=LSD
 /MISSING CLASSMISSING=EXCLUDE
 /CRITERIA MXITER=100 MXSTEP=5 PCONVERGE=[1e-006 RELATIVE] LCONVERGE=[0] CHKSEP=20 CILEVEL=95
 /PRINT SUMMARY SAMPLEINFO.
```

Complex Samples: Logistic Regression

Notes

Output Created		26-FEB-2025 15:25:08
Comments		
Input	Active 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_p2wt.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		CSLOGISTIC ald (LOW) BY revag4cat reved4cat revmar3cat WITH sexm /PLAN FILE='P:\ASDA3\Data Sets for Analysis Examples and Stata R Code\ncsr_p2wt.csaplan' /MODEL revag4cat reved4cat revmar3cat sexm /INTERCEPT INCLUDE=YES SHOW=YES /STATISTICS PARAMETER SE CINTERVAL TTEST /TEST TYPE=F PADJUST=LSD /MISSING CLASSMISSING=EXCLUDE /CRITERIA MXITER=100 MXSTEP=5 PCONVERGE=[1e-006 RELATIVE] LCONVERGE=[0] CHKSEP=20 CILEVEL=95 /PRINT SUMMARY SAMPLEINFO.
Resources	Processor Time	00:00:00.13
	Elapsed Time	00:00:00.33

Sample Design Information

		N
Unweighted Cases	Valid	5692
	Invalid	3590
	Total	9282
Population Size		5692.000
Stage 1	Strata	42
	Units	84

Sampling Design Degrees of Freedom	42

Pseudo R Squares

Cox and Snell	.022
Nagelkerke	.063
McFadden	.052

Dependent Variable: Alcohol Dependence 1=Yes 0=No (reference category = 0)
Model: (Intercept), revag4cat, reved4cat, revmar3cat, sexm

Tests of Model Effects

Source	df1	df2	Wald F	Sig.
(Corrected Model)	9.000	34.000	23.481	<.001
(Intercept)	1.000	42.000	1513.799	<.001
revag4cat	3.000	40.000	12.058	<.001
reved4cat	3.000	40.000	4.797	.006
revmar3cat	2.000	41.000	6.537	.003
sexm	1.000	42.000	70.210	<.001

Dependent Variable: Alcohol Dependence 1=Yes 0=No (reference category = 0)
Model: (Intercept), revag4cat, reved4cat, revmar3cat, sexm

Parameter Estimates

				95% Confidence Interval		Hypothesis Test	
Alcohol Dependence 1=Yes 0=No	Parameter	B	Std. Error	Lower	Upper	t	df
1	(Intercept)	-3.124	.225	-3.579	-2.670	-13.869	42.000
	[revag4cat=1.00]	-1.120	.212	-1.549	-.692	-5.273	42.000
	[revag4cat=2.00]	-.051	.144	-.341	.240	-.352	42.000
	[revag4cat=3.00]	.146	.178	-.213	.506	.821	42.000
	[revag4cat=4.00]	.000[a]	.	.	.	.	.
	[reved4cat=1.00]	-.736	.197	-1.134	-.338	-3.734	42.000
	[reved4cat=2.00]	-.264	.176	-.620	.091	-1.502	42.000
	[reved4cat=3.00]	-.268	.194	-.659	.123	-1.386	42.000
	[reved4cat=4.00]	.000[a]	.	.	.	.	.
	[revmar3cat=1.00]	.065	.169	-.275	.406	.387	42.000
	[revmar3cat=2.00]	.518	.142	.231	.805	3.645	42.000
	[revmar3cat=3.00]	.000[a]	.	.	.	.	.
	sexm	.998	.119	.758	1.238	8.379	42.000

Parameter Estimates

Alcohol Dependence 1=Yes 0=No	Parameter	Hypothesis Test Sig.
1	(Intercept)	<.001
	[revag4cat=1.00]	<.001
	[revag4cat=2.00]	.726
	[revag4cat=3.00]	.416
	[revag4cat=4.00]	.
	[reved4cat=1.00]	<.001
	[reved4cat=2.00]	.141
	[reved4cat=3.00]	.173
	[reved4cat=4.00]	.
	[revmar3cat=1.00]	.701
	[revmar3cat=2.00]	<.001
	[revmar3cat=3.00]	.
	sexm	<.001

Dependent Variable: Alcohol Dependence 1=Yes 0=No (reference category = 0)
Model: (Intercept), revag4cat, reved4cat, revmar3cat, sexm

a. Set to zero because this parameter is redundant.

```
* Complex Samples Ordinal Regression: Logistic Regression.
CSORDINAL ald (ASCENDING) BY revag4cat reved4cat revmar3cat WITH sexm
 /PLAN FILE='P:\ASDA3\Data Sets for Analysis Examples and Stata R Code\ncsr_p2wt.csaplan'
 /LINK FUNCTION=LOGIT
 /MODEL revag4cat reved4cat revmar3cat sexm
 /STATISTICS PARAMETER SE CINTERVAL TTEST
 /TEST TYPE=F PADJUST=LSD
 /MISSING CLASSMISSING=EXCLUDE
 /CRITERIA MXITER=100 MXSTEP=5 PCONVERGE=[1e-006 RELATIVE] LCONVERGE=[0] METHOD=NEWTON CHKSEP=20 CILEVEL=95
 /PRINT SUMMARY SAMPLEINFO.
```

Complex Samples: Ordinal Regression

Notes

Output Created		26-FEB-2025 15:25:08
Comments		
Input	Active 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_p2wt.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		CSORDINAL ald (ASCENDING) BY revag4cat reved4cat revmar3cat WITH sexm /PLAN FILE='P:\ASDA3\Data Sets for Analysis Examples and Stata R Code\ncsr_p2wt.csaplan' /LINK FUNCTION=LOGIT /MODEL revag4cat reved4cat revmar3cat sexm /STATISTICS PARAMETER SE CINTERVAL TTEST /TEST TYPE=F PADJUST=LSD /MISSING CLASSMISSING=EXCLUDE /CRITERIA MXITER=100 MXSTEP=5 PCONVERGE=[1e-006 RELATIVE] LCONVERGE=[0] METHOD=NEWTON CHKSEP=20 CILEVEL=95 /PRINT SUMMARY SAMPLEINFO.
Resources	Processor Time	00:00:00.05
	Elapsed Time	00:00:00.25

Sample Design Information

		N
Unweighted Cases	Valid	5692
	Invalid	3590
	Total	9282
Population Size		5692.000
Stage 1	Strata	42

Units	84
Sampling Design Degrees of Freedom	42

Pseudo R Squares

Cox and Snell	.022
Nagelkerke	.063
McFadden	.052

Dependent Variable: Alcohol Dependence 1=Yes 0=No (Ascending)
Model: (Threshold), revag4cat, reved4cat, revmar3cat, sexm
Link function: Logit

Tests of Model Effects

Source	df1	df2	Wald F	Sig.
revag4cat	3.000	40.000	12.058	<.001
reved4cat	3.000	40.000	4.797	.006
revmar3cat	2.000	41.000	6.537	.003
sexm	1.000	42.000	70.210	<.001

Dependent Variable: Alcohol Dependence 1=Yes 0=No (Ascending)
Model: (Threshold), revag4cat, reved4cat, revmar3cat, sexm
Link function: Logit

Parameter Estimates

				95% Confidence Interval		Hypothesis Test		
Parameter		B	Std. Error	Lower	Upper	t	df	Sig.
Threshold	[ald=0]	3.124	.225	2.670	3.579	13.869	42.000	<.001
Regression	[revag4cat=1.00]	-1.120	.212	-1.549	-.692	-5.273	42.000	<.001
	[revag4cat=2.00]	-.051	.144	-.341	.240	-.352	42.000	.726
	[revag4cat=3.00]	.146	.178	-.213	.506	.821	42.000	.416
	[revag4cat=4.00]	.000[a]	.	.	.	.	.	.
	[reved4cat=1.00]	-.736	.197	-1.134	-.338	-3.734	42.000	<.001
	[reved4cat=2.00]	-.264	.176	-.620	.091	-1.502	42.000	.141
	[reved4cat=3.00]	-.268	.194	-.659	.123	-1.386	42.000	.173
	[reved4cat=4.00]	.000[a]	.	.	.	.	.	.
	[revmar3cat=1.00]	.065	.169	-.275	.406	.387	42.000	.701
	[revmar3cat=2.00]	.518	.142	.231	.805	3.645	42.000	<.001
	[revmar3cat=3.00]	.000[a]	.	.	.	.	.	.
	sexm	.998	.119	.758	1.238	8.379	42.000	<.001

Dependent Variable: Alcohol Dependence 1=Yes 0=No (Ascending)
Model: (Threshold), revag4cat, reved4cat, revmar3cat, sexm
Link function: Logit

a. Set to zero because this parameter is redundant.

```
* Complex Samples Ordinal Regression: Probit Regression.
CSORDINAL ald (ASCENDING) BY revag4cat reved4cat revmar3cat WITH sexm
 /PLAN FILE='P:\ASDA3\Data Sets for Analysis Examples and Stata R Code\ncsr_p2wt.csaplan'
 /LINK FUNCTION=PROBIT
 /MODEL revag4cat reved4cat revmar3cat sexm
 /STATISTICS PARAMETER SE CINTERVAL TTEST
 /TEST TYPE=F PADJUST=LSD
 /MISSING CLASSMISSING=EXCLUDE
 /CRITERIA MXITER=100 MXSTEP=5 PCONVERGE=[1e-006 RELATIVE] LCONVERGE=[0] METHOD=NEWTON CHKSEP=20 CILEVEL=95
 /PRINT SUMMARY SAMPLEINFO.
```

Complex Samples: Ordinal Regression

Notes

Output Created		26-FEB-2025 15:25:25
Comments		
Input	Active 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_p2wt.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		CSORDINAL ald (ASCENDING) BY revag4cat reved4cat revmar3cat WITH sexm /PLAN FILE='P:\ASDA3\Data Sets for Analysis Examples and Stata R Code\ncsr_p2wt.csaplan' /LINK FUNCTION=PROBIT /MODEL revag4cat reved4cat revmar3cat sexm /STATISTICS PARAMETER SE CINTERVAL TTEST /TEST TYPE=F PADJUST=LSD /MISSING CLASSMISSING=EXCLUDE /CRITERIA MXITER=100 MXSTEP=5 PCONVERGE=[1e-006 RELATIVE] LCONVERGE=[0] METHOD=NEWTON CHKSEP=20 CILEVEL=95 /PRINT SUMMARY SAMPLEINFO.
Resources	Processor Time	00:00:00.08
	Elapsed Time	00:00:00.34

Sample Design Information

		N
Unweighted Cases	Valid	5692
	Invalid	3590
	Total	9282
Population Size		5692.000
Stage 1	Strata	42
	Units	84
Sampling Design Degrees of Freedom		42

Pseudo R Squares

Cox and Snell	.022
Nagelkerke	.064
McFadden	.053

Dependent Variable: Alcohol Dependence 1=Yes 0=No (Ascending)
Model: (Threshold), revag4cat, reved4cat, revmar3cat, sexm
Link function: Probit

Tests of Model Effects

Source	df1	df2	Wald F	Sig.
revag4cat	3.000	40.000	15.256	<.001
reved4cat	3.000	40.000	4.787	.006
revmar3cat	2.000	41.000	6.660	.003
sexm	1.000	42.000	69.832	<.001

Dependent Variable: Alcohol Dependence 1=Yes 0=No (Ascending)
Model: (Threshold), revag4cat, reved4cat, revmar3cat, sexm
Link function: Probit

Parameter Estimates

				95% Confidence Interval		Hypothesis Test		
Parameter		B	Std. Error	Lower	Upper	t	df	Sig.
Threshold	[ald=0]	1.719	.105	1.507	1.932	16.320	42.000	<.001
Regression	[revag4cat=1.00]	-.531	.093	-.720	-.343	-5.694	42.000	<.001
	[revag4cat=2.00]	-.034	.067	-.170	.101	-.515	42.000	.609
	[revag4cat=3.00]	.065	.085	-.105	.236	.772	42.000	.444
	[revag4cat=4.00]	.000[a]	.	.	.	.	.	.
	[reved4cat=1.00]	-.340	.092	-.526	-.153	-3.672	42.000	<.001
	[reved4cat=2.00]	-.124	.085	-.296	.047	-1.461	42.000	.152
	[reved4cat=3.00]	-.124	.095	-.316	.068	-1.302	42.000	.200
	[reved4cat=4.00]	.000[a]	.	.	.	.	.	.
	[revmar3cat=1.00]	.039	.077	-.117	.194	.506	42.000	.616
	[revmar3cat=2.00]	.255	.070	.114	.396	3.652	42.000	<.001
	[revmar3cat=3.00]	.000[a]	.	.	.	.	.	.
	sexm	.471	.056	.357	.585	8.357	42.000	<.001

Dependent Variable: Alcohol Dependence 1=Yes 0=No (Ascending)
Model: (Threshold), revag4cat, reved4cat, revmar3cat, sexm
Link function: Probit

a. Set to zero because this parameter is redundant.

```
* Complex Samples Ordinal Regression: CLL Regression: Note use of DESCENDING in Dependent Variable,
     Signs are Reversed from Stata, Interpretation is Affected.
CSORDINAL ald (DESCENDING) BY revag4cat reved4cat revmar3cat WITH sexm
 /PLAN FILE='P:\ASDA3\Data Sets for Analysis Examples and Stata R Code\ncsr_p2wt.csaplan'
 /LINK FUNCTION=CLOGLOG
 /MODEL revag4cat reved4cat revmar3cat sexm
 /STATISTICS PARAMETER SE CINTERVAL TTEST
 /TEST TYPE=F PADJUST=LSD
 /MISSING CLASSMISSING=EXCLUDE
 /CRITERIA MXITER=100 MXSTEP=5 PCONVERGE=[1e-006 RELATIVE] LCONVERGE=[0] METHOD=NEWTON CHKSEP=20 CILEVEL=95
 /PRINT SUMMARY SAMPLEINFO.
```

Complex Samples: Ordinal Regression

Notes

Output Created		26-FEB-2025 15:25:25
Comments		
Input	Active 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_p2wt.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		CSORDINAL ald (DESCENDING) BY revag4cat reved4cat revmar3cat WITH sexm /PLAN FILE='P:\ASDA3\Data Sets for Analysis Examples and Stata R Code\ncsr_p2wt.csaplan' /LINK FUNCTION=CLOGLOG /MODEL revag4cat reved4cat revmar3cat sexm /STATISTICS PARAMETER SE CINTERVAL TTEST /TEST TYPE=F PADJUST=LSD /MISSING CLASSMISSING=EXCLUDE /CRITERIA MXITER=100 MXSTEP=5 PCONVERGE=[1e-006 RELATIVE] LCONVERGE=[0] METHOD=NEWTON CHKSEP=20 CILEVEL=95 /PRINT SUMMARY SAMPLEINFO.
Resources	Processor Time	00:00:00.09
	Elapsed Time	00:00:00.25

Sample Design Information

		N
Unweighted Cases	Valid	5692
	Invalid	3590
	Total	9282
Population Size		5692.000
Stage 1	Strata	42
	Units	84
Sampling Design Degrees of Freedom		42

Pseudo R Squares

Cox and Snell	.022
Nagelkerke	.063
McFadden	.052

Dependent Variable: Alcohol Dependence 1=Yes 0=No (Descending)
Model: (Threshold), revag4cat, reved4cat, revmar3cat, sexm
Link function: Complementary log-log

Tests of Model Effects

Source	df1	df2	Wald F	Sig.
revag4cat	3.000	40.000	11.515	<.001
reved4cat	3.000	40.000	4.771	.006
revmar3cat	2.000	41.000	6.500	.004
sexm	1.000	42.000	70.326	<.001

Dependent Variable: Alcohol Dependence 1=Yes 0=No (Descending)
Model: (Threshold), revag4cat, reved4cat, revmar3cat, sexm
Link function: Complementary log-log

Parameter Estimates

				95% Confidence Interval		Hypothesis Test		
Parameter		B	Std. Error	Lower	Upper	t	df	Sig.
Threshold	[ald=1]	-3.148	.218	-3.588	-2.709	-14.469	42.000	<.001
Regression	[revag4cat=1.00]	1.083	.209	.662	1.504	5.191	42.000	<.001
	[revag4cat=2.00]	.045	.140	-.237	.327	.324	42.000	.748
	[revag4cat=3.00]	-.143	.171	-.488	.202	-.836	42.000	.408
	[revag4cat=4.00]	.000[a]	.	.	.	.	.	.
	[reved4cat=1.00]	.713	.190	.328	1.097	3.741	42.000	<.001
	[reved4cat=2.00]	.256	.169	-.085	.596	1.516	42.000	.137
	[reved4cat=3.00]	.260	.185	-.113	.633	1.406	42.000	.167
	[reved4cat=4.00]	.000[a]	.	.	.	.	.	.
	[revmar3cat=1.00]	-.060	.164	-.391	.270	-.370	42.000	.713
	[revmar3cat=2.00]	-.494	.136	-.767	-.220	-3.638	42.000	<.001
	[revmar3cat=3.00]	.000[a]	.	.	.	.	.	.
	sexm	-.965	.115	-1.198	-.733	-8.386	42.000	<.001

Dependent Variable: Alcohol Dependence 1=Yes 0=No (Descending)
Model: (Threshold), revag4cat, reved4cat, revmar3cat, sexm
Link function: Complementary log-log

a. Set to zero because this parameter is redundant.

```
* Export Output.
OUTPUT EXPORT
  /CONTENTS  EXPORT=ALL  LAYERS=PRINTSETTING  MODELVIEWS=PRINTSETTING
  /DOC  DOCUMENTFILE='P:\ASDA3\Replication SPSS 29\Chapter 8\Analysis Example Replication ASDA3 '+
    'SPSS C8 Code and Results.docx'
     NOTESCAPTIONS=YES  WIDETABLES=WRAP PAGEBREAKS=YES
     PAGESIZE=INCHES(8.5, 11.0)  TOPMARGIN=INCHES(.5)  BOTTOMMARGIN=INCHES(.5)
```