

## **WesVar Analysis Example Replication C10**

WesVar 5.1 is primarily a point and click application and though a text file of commands can be used in the WesVar (V5.1) batch processing environment, all examples presented here use the GUI method. For more information on the batch processing approach, see the WesVar documentation addendum for V5.1.

Due to use of GUI method, no syntax is presented prior to results. Typically, WesVar results and setups are stored in WesVar workbooks. The analysis example replication documents include selected parts of the workbook output to highlight key results. For more on additional outputs and program features, see the WesVar documentation.

**Output WesVar Analysis Example Replication C10**

**Note: WesVar does not offer Kaplan-Meier Curves or Cox PH models and so, these examples are not included here.**

## Example 10.2 Discrete Time Logistic Regression

**Note:** all data management previously done in SAS, see SAS examples for syntax and details.

```
WESVAR VERSION NUMBER :      v5.1.18
TIME THE JOB EXECUTED :      09:24:21 07/04/2017
INPUT DATASET NAME : P:\ASDA 2\Data sets\NCSR\c10_expanded1_sub.var
TIME THE INPUT DATASET CREATED :      10:43:25 07/03/2017
FULL SAMPLE WEIGHT : NCSRWTSH
REPLICATE WEIGHTS : RPL01...RPL42
VARIANCE ESTIMATION METHOD : JK2

TYPE OF ANALYSIS : LOGISTIC
CONVERGENCE CRITERION :      1e-06
MAXIMUM NUMBER OF ITERATIONS :      25
VALUE OF ALPHA (CONFIDENCE LEVEL %) :      0.05000 (95.00000 %)
OPTION OUTPUT REPLICATE COEFFICIENTS :      OFF
OPTION OUTPUT ITERATION HISTORY :      OFF

MODEL(S):      mdetv = intwage pyr sexm ed4cat.2 ed4cat.3 ed4cat.4 racecat.2 racecat.3 racecat.4 mar3cat.2 mar3cat.3

NUMBER OF REPLICATES :      42
NUMBER OF OBSERVATIONS READ :      385696
WEIGHTED NUMBER OF OBSERVATIONS READ :      386866.047

MODEL :      mdetv = intwage pyr sexm ed4cat.2 ed4cat.3 ed4cat.4 racecat.2 racecat.3 racecat.4 mar3cat.2 mar3cat.3
Class Variable Index :
  ED4CAT.1 : 1
  ED4CAT.2 : 2
  ED4CAT.3 : 3
  ED4CAT.4 : 4
  racecat.1 : 1
  racecat.2 : 2
  racecat.3 : 3
  racecat.4 : 4
  MAR3CAT.1 : 1
  MAR3CAT.2 : 2
  MAR3CAT.3 : 3
```

Model Output

Negative log-likelihood:	0.046		
Likelihood ratio(Cox-Snell):	0.003	Maximum possible value:	0.057
Likelihood ratio(Estrella):	0.003		

PARAMETER	STANDARD ERROR	TEST FOR H0:			
PARAMETER	ESTIMATE	OF ESTIMATE	PARAMETER=0	PROB> T	LOWER 95%
INTERCEPT	-3.436	0.161	-21.314	0.000	-3.761
intwage	-0.058	0.002	-23.836	0.000	-0.063
pyr	0.033	0.002	15.880	0.000	0.029
sexm	-0.445	0.061	-7.244	0.000	-0.569
ed4cat.2	-0.020	0.065	-0.308	0.759	-0.152
ed4cat.3	0.093	0.057	1.631	0.110	-0.022
ed4cat.4	-0.019	0.063	-0.307	0.760	-0.147
racecat.2	-0.248	0.135	-1.844	0.072	-0.520
racecat.3	-0.457	0.149	-3.059	0.004	-0.758
racecat.4	0.074	0.119	0.623	0.536	-0.166
mar3cat.2	0.494	0.060	8.187	0.000	0.372
mar3cat.3	-0.035	0.088	-0.401	0.691	-0.213

PARAMETER	ESTIMATE	LOWER 95%	UPPER 95%
intwage	0.943	0.939	0.948
pyr	1.033	1.029	1.038
sexm	0.641	0.566	0.725
ed4cat.2	0.980	0.859	1.118
ed4cat.3	1.097	0.978	1.231
ed4cat.4	0.981	0.863	1.114
racecat.2	0.780	0.594	1.024
racecat.3	0.633	0.468	0.856
racecat.4	1.077	0.847	1.368
mar3cat.2	1.639	1.451	1.852
mar3cat.3	0.965	0.808	1.153

Note: CLOGLOG model not available in WesVar.