

The SAS System

The LOGISTIC Procedure

Model Information	
Data Set	WORK.SKILL
Response Variable	LeagueIndex
Number of Response Levels	7
Model	cumulative logit
Optimization Technique	Fisher's scoring

Number of Observations Read	3395
Number of Observations Used	3338

Response Profile		
Ordered Value	LeagueIndex	Total Frequency
1	1	167
2	2	347
3	3	553
4	4	811
5	5	804
6	6	621
7	7	35
	8	.

Probabilities modeled are cumulated over the lower Ordered Values.

Note: 57 observations were deleted due to missing values for the response or explanatory variables.

Note: 1 response level was deleted due to missing or invalid values for its explanatory, frequency, or weight variables.

Model Convergence Status
Convergence criterion (GCONV=1E-8) satisfied.

Score Test for the Proportional Odds Assumption		
Chi-Square	DF	Pr > ChiSq
217.6706	90	<.0001

Deviance and Pearson Goodness-of-Fit Statistics				
Criterion	Value	DF	Value/DF	Pr > ChiSq
Deviance	8929.0458	2E4	0.4465	1.0000
Pearson	15623.0557	2E4	0.7812	1.0000

Number of unique profiles: 3337

Model Fit Statistics		
Criterion	Intercept Only	Intercept and Covariates
AIC	11563.555	8977.046
SC	11600.234	9123.761
-2 Log L	11551.555	8929.046

Testing Global Null Hypothesis: BETA=0			
Test	Chi-Square	DF	Pr > ChiSq
Likelihood Ratio	2622.5095	18	<.0001
Score	1773.7723	18	<.0001
Wald	1929.8811	18	<.0001

Analysis of Maximum Likelihood Estimates						
Parameter		DF	Estimate	Standard Error	Wald Chi-Square	Pr > ChiSq
Intercept	1	1	-3.2700	0.6661	24.0995	<.0001
Intercept	2	1	-1.5246	0.6535	5.4421	0.0197
Intercept	3	1	-0.0529	0.6490	0.0066	0.9350
Intercept	4	1	1.6246	0.6496	6.2548	0.0124
Intercept	5	1	3.4951	0.6562	28.3728	<.0001
Intercept	6	1	7.6648	0.7037	118.6375	<.0001
Age		1	-0.0191	0.00809	5.5635	0.0183
HoursPerWeek		1	-0.0187	0.00292	41.3149	<.0001
TotalHours		1	2.596E-6	1.864E-6	1.9408	0.1636
APM		1	0.00429	0.00418	1.0489	0.3058
SelectByHotkeys		1	-99.4162	24.6039	16.3269	<.0001
AssignToHotkeys		1	-1540.7	199.0	59.9143	<.0001
UniqueHotkeys		1	-0.0615	0.0157	15.2581	<.0001
MinimapAttacks		1	-2355.8	234.1	101.2327	<.0001
MinimapRightClicks		1	-64.3688	102.8	0.3919	0.5313

NumberOfPACs		1	-657.4	127.8	26.4733	<.0001
GapBetweenPACs		1	0.0204	0.00297	47.2831	<.0001
ActionLatency		1	0.0371	0.00424	76.4902	<.0001
ActionsInPAC		1	-0.1034	0.0616	2.8155	0.0934
TotalMapExplored		1	0.0107	0.00590	3.2917	0.0696
WorkersMade		1	-407.2	71.9631	32.0252	<.0001
UniqueUnitsMade		1	0.0470	0.0224	4.3913	0.0361
ComplexUnitsMade		1	-384.3	391.0	0.9663	0.3256
ComplexAbilitiesUsed		1	-128.8	159.4	0.6532	0.4190

Odds Ratio Estimates			
Effect	Point Estimate	95% Wald Confidence Limits	
Age	0.981	0.966	0.997
HoursPerWeek	0.981	0.976	0.987
TotalHours	1.000	1.000	1.000
APM	1.004	0.996	1.013
SelectByHotkeys	<0.001	<0.001	<0.001
AssignToHotkeys	<0.001	<0.001	<0.001
UniqueHotkeys	0.940	0.912	0.970
MinimapAttacks	<0.001	<0.001	<0.001
MinimapRightClicks	<0.001	<0.001	>999.999
NumberOfPACs	<0.001	<0.001	<0.001
GapBetweenPACs	1.021	1.015	1.027
ActionLatency	1.038	1.029	1.046
ActionsInPAC	0.902	0.799	1.018
TotalMapExplored	1.011	0.999	1.022
WorkersMade	<0.001	<0.001	<0.001
UniqueUnitsMade	1.048	1.003	1.095
ComplexUnitsMade	<0.001	<0.001	>999.999
ComplexAbilitiesUsed	<0.001	<0.001	>999.999

Association of Predicted Probabilities and Observed Responses			
Percent Concordant	82.6	Somers' D	0.654
Percent Discordant	17.2	Gamma	0.656
Percent Tied	0.3	Tau-a	0.528
Pairs	4498567	c	0.827

