

Hierarchical logistic regression model - Shiraya

The LOGISTIC Procedure

Model Information	
Data Set	PYEAR.PREGEV_DATAALL
Response Variable	NEURO
Number of Response Levels	2
Model	binary logit
Optimization Technique	Fisher's scoring

Number of Observations Read	37887
Number of Observations Used	37887

Response Profile		
Ordered Value	NEURO	Total Frequency
1	1	43
2	0	37844

Probability modeled is NEURO='1'.

Model Convergence Status
Quasi-complete separation of data points detected.

Warning: The maximum likelihood estimate may not exist.

Warning: The LOGISTIC procedure continues in spite of the above warning. Results shown are based on the last maximum likelihood iteration. Validity of the model fit is questionable.

Model Fit Statistics		
Criterion	Intercept Only	Intercept and Covariates
AIC	671.131	623.203
SC	679.674	1127.202
-2 Log L	669.131	505.203

Testing Global Null Hypothesis: BETA=0			
Test	Chi-Square	DF	Pr > ChiSq
Likelihood Ratio	163.9287	58	<.0001
Score	175.5917	58	<.0001
Wald	108.5877	58	<.0001

Note: The following parameters have been set to 0, since the variables are a linear combination of other variables as shown.

mraco = 0

Analysis of Maximum Likelihood Estimates					
Parameter	DF	Estimate	Standard Error	Wald Chi-Square	Pr > ChiSq
Intercept	1	-692.7	94.6621	53.5544	<.0001
ResExp2	1	0.1292	0.7172	0.0325	0.8570
ResExp3	1	-0.4046	0.7256	0.3109	0.5771
ResExp4	1	-0.9429	0.5286	3.1822	0.0744
ResExp5	1	-9.4021	361.8	0.0007	0.9793
ResExp6	1	-9.2315	127.8	0.0052	0.9424

ResExp7	1	-10.2605	432.8	0.0006	0.9811
ResExp8	1	0.9942	0.5733	3.0073	0.0829
ResExp9	1	-7.5097	918.3	0.0001	0.9935
ResExp10	1	-10.6693	249.5	0.0018	0.9659
ResExp11	1	1.1265	1.1274	0.9985	0.3177
ResExp12	1	1.1372	0.7456	2.3261	0.1272
ResExp13	1	-9.9721	85.6303	0.0136	0.9073
ResExp14	1	-0.2777	0.6105	0.2069	0.6492
ResExp15	1	-9.8507	145.3	0.0046	0.9460
ResExp16	1	-9.0007	261.7	0.0012	0.9726
ResExp17	1	-0.1486	0.8124	0.0335	0.8548
ResExp18	1	-9.2296	172.7	0.0029	0.9574
ResExp19	1	0.6463	0.5330	1.4705	0.2253
ResExp20	1	-0.3713	1.1367	0.1067	0.7439
ResExp21	1	1.7985	1.1746	2.3445	0.1257
ResExp22	1	0.4041	1.1564	0.1221	0.7267
ResExp23	1	1.0221	0.7367	1.9249	0.1653
ResExp24	1	-10.0989	656.6	0.0002	0.9877
ResExp25	1	0.0404	1.1843	0.0012	0.9728
ResExp26	1	0.1640	0.5756	0.0812	0.7757
ResExp27	1	-9.5156	686.3	0.0002	0.9889
ResExp28	1	-9.4552	364.9	0.0007	0.9793
ResExp29	1	-0.1992	0.7375	0.0729	0.7871
ResExp30	1	-0.0773	1.0689	0.0052	0.9423
ResExp31	1	-8.6945	97.9397	0.0079	0.9293
ResExp32	1	-1.8831	1.0888	2.9910	0.0837
ResExp33	1	-0.00241	0.4529	0.0000	0.9958
ResExp34	1	-8.8417	94.7058	0.0087	0.9256
ResExp35	1	-0.0408	1.1047	0.0014	0.9705
ResExp36	1	0.4365	0.6323	0.4766	0.4900
ResExp37	1	-10.2803	116.9	0.0077	0.9299
ResExp38	1	-10.4146	473.9	0.0005	0.9825
ResExp39	1	1.1250	0.6375	3.1145	0.0776
ResExp40	1	-0.2218	1.0571	0.0440	0.8338
ResExp41	1	-0.5714	0.6338	0.8129	0.3673
ResExp42	1	-1.2736	1.1772	1.1706	0.2793
ResExp43	1	-7.8465	2623.3	0.0000	0.9976
ResExp44	1	1.2123	0.4367	7.7050	0.0055
ResExp45	1	-9.6975	580.4	0.0003	0.9867
ResExp46	1	1.3760	1.1856	1.3469	0.2458
ResExp47	1	2.1574	1.2527	2.9660	0.0850
ResExp48	1	18.6656	14026.6	0.0000	0.9989
ResExp49	1	-0.3409	1.1639	0.0858	0.7696
ResExp50	1	-11.6470	616.5	0.0004	0.9849
ResExp51	1	0.8843	0.5746	2.3687	0.1238
ResExp52	1	0.7827	1.1203	0.4882	0.4848
birthyear	1	0.3416	0.0471	52.6899	<.0001
quin2	1	-0.2739	0.4625	0.3507	0.5537
quin3	1	-0.6420	0.5246	1.4976	0.2210
quin4	1	-0.2485	0.4920	0.2552	0.6135
quin5	1	0.2137	0.5595	0.1459	0.7025
mraco					

	0	0			
mracw	1	1.0779	0.3402	10.0367	0.0015
mage	1	-0.1775	0.1381	1.6525	0.1986

Odds Ratio Estimates			
Effect	Point Estimate	95% Wald Confidence Limits	
ResExp2	1.138	0.279	4.641
ResExp3	0.667	0.161	2.766
ResExp4	0.389	0.138	1.098
ResExp5	<0.001	<0.001	>999.999
ResExp6	<0.001	<0.001	>999.999
ResExp7	<0.001	<0.001	>999.999
ResExp8	2.703	0.879	8.313
ResExp9	<0.001	<0.001	>999.999
ResExp10	<0.001	<0.001	>999.999
ResExp11	3.085	0.339	28.109
ResExp12	3.118	0.723	13.444
ResExp13	<0.001	<0.001	>999.999
ResExp14	0.758	0.229	2.506
ResExp15	<0.001	<0.001	>999.999
ResExp16	<0.001	<0.001	>999.999
ResExp17	0.862	0.175	4.236
ResExp18	<0.001	<0.001	>999.999
ResExp19	1.908	0.671	5.424
ResExp20	0.690	0.074	6.401
ResExp21	6.040	0.604	60.375
ResExp22	1.498	0.155	14.449
ResExp23	2.779	0.656	11.776
ResExp24	<0.001	<0.001	>999.999
ResExp25	1.041	0.102	10.607
ResExp26	1.178	0.381	3.641
ResExp27	<0.001	<0.001	>999.999
ResExp28	<0.001	<0.001	>999.999
ResExp29	0.819	0.193	3.478
ResExp30	0.926	0.114	7.522
ResExp31	<0.001	<0.001	>999.999
ResExp32	0.152	0.018	1.285
ResExp33	0.998	0.411	2.424
ResExp34	<0.001	<0.001	>999.999
ResExp35	0.960	0.110	8.368
ResExp36	1.547	0.448	5.343
ResExp37	<0.001	<0.001	>999.999
ResExp38	<0.001	<0.001	>999.999
ResExp39	3.080	0.883	10.745
ResExp40	0.801	0.101	6.360
ResExp41	0.565	0.163	1.956
ResExp42	0.280	0.028	2.811
ResExp43	<0.001	<0.001	>999.999
ResExp44	3.361	1.428	7.912
ResExp45	<0.001	<0.001	>999.999
ResExp46	3.959	0.388	40.438

ResExp47	8.649	0.742	100.755
ResExp48	>999.999	<0.001	>999.999
ResExp49	0.711	0.073	6.961
ResExp50	<0.001	<0.001	>999.999
ResExp51	2.421	0.785	7.467
ResExp52	2.187	0.243	19.657
birthyear	1.407	1.283	1.543
quin2	0.760	0.307	1.882
quin3	0.526	0.188	1.471
quin4	0.780	0.297	2.046
quin5	1.238	0.414	3.707
mracw	2.938	1.508	5.724
mage	0.837	0.639	1.098

Association of Predicted Probabilities and Observed Responses			
Percent Concordant	93.2	Somers' D	0.864
Percent Discordant	6.8	Gamma	0.864
Percent Tied	0.0	Tau-a	0.002
Pairs	1627292	c	0.932

Hierarchical logistic regression model - Shiraya

Ordinary logistic regression estimates:

bnames	b_lr	SE_lr	P_value
INTERCEPT	-692.7452	94.6621	0.0000
RESEXP2	0.1292	0.7172	0.8570
RESEXP3	-0.4046	0.7256	0.5771
RESEXP4	-0.9429	0.5286	0.0744
RESEXP5	-9.4021	361.8469	0.9793
RESEXP6	-9.2315	127.7820	0.9424
RESEXP7	-10.2605	432.7654	0.9811
RESEXP8	0.9942	0.5733	0.0829
RESEXP9	-7.5097	918.2886	0.9935
RESEXP10	-10.6693	249.4853	0.9659
RESEXP11	1.1265	1.1274	0.3177
RESEXP12	1.1372	0.7456	0.1272
RESEXP13	-9.9721	85.6303	0.9073
RESEXP14	-0.2777	0.6105	0.6492
RESEXP15	-9.8507	145.3290	0.9460
RESEXP16	-9.0007	261.7191	0.9726
RESEXP17	-0.1486	0.8124	0.8548
RESEXP18	-9.2296	172.7231	0.9574
RESEXP19	0.6463	0.5330	0.2253
RESEXP20	-0.3713	1.1367	0.7439
RESEXP21	1.7985	1.1746	0.1257
RESEXP22	0.4041	1.1564	0.7267
RESEXP23	1.0221	0.7367	0.1653
RESEXP24	-10.0989	656.5976	0.9877
RESEXP25	0.0404	1.1843	0.9728
RESEXP26	0.1640	0.5756	0.7757
RESEXP27	-9.5156	686.3481	0.9889
RESEXP28	-9.4552	364.8829	0.9793
RESEXP29	-0.1992	0.7375	0.7871
RESEXP30	-0.0773	1.0689	0.9423
RESEXP31	-8.6945	97.9397	0.9293
RESEXP32	-1.8831	1.0888	0.0837
RESEXP33	-0.0024	0.4529	0.9958
RESEXP34	-8.8417	94.7058	0.9256
RESEXP35	-0.0408	1.1047	0.9705
RESEXP36	0.4365	0.6323	0.4900
RESEXP37	-10.2803	116.9365	0.9299
RESEXP38	-10.4146	473.9248	0.9825
RESEXP39	1.1250	0.6375	0.0776
RESEXP40	-0.2218	1.0571	0.8338
RESEXP41	-0.5714	0.6338	0.3673
RESEXP42	-1.2736	1.1772	0.2793
RESEXP43	-7.8465	2623.2704	0.9976
RESEXP44	1.2123	0.4367	0.0055
RESEXP45	-9.6975	580.3987	0.9867
RESEXP46	1.3760	1.1856	0.2458
RESEXP47	2.1574	1.2527	0.0850

RESEXP48	18.6656	14026.5636	0.9989
RESEXP49	-0.3409	1.1639	0.7696
RESEXP50	-11.6470	616.4686	0.9849
RESEXP51	0.8843	0.5746	0.1238
RESEXP52	0.7827	1.1203	0.4848
BIRTHYEAR	0.3416	0.0471	0.0000
QUIN2	-0.2739	0.4625	0.5537
QUIN3	-0.6420	0.5246	0.2210
QUIN4	-0.2485	0.4920	0.6135
QUIN5	0.2137	0.5595	0.7025
MRACO	0.0000		
MRACW	1.0779	0.3402	0.0015
MAGE	-0.1775	0.1381	0.1986

bnames2
_2_6_DINITROANILINE
AMIDE
ANILIDE
ANTHRANILIC_DIAMIDE
AZOLE
CHLOROACETANILIDE
DICARBOXIMIDE
HALOGENATED_ORGANIC
N_METHYL_CARBAMATE
ORGANOCHLORINE
ORGANOPHOSPHORUS
PYRAZOLE
PYRIDINE
PYRETHROID
SUBSTITUTED_BENZENE
TRIAZINE
UNCLASSIFIED
UREA

Z_mat																		
	COL1	COL2	COL3	COL4	COL5	COL6	COL7	COL8	COL9	COL10	COL11	COL12	COL13	COL14	COL15	COL16	COL17	COL18
ROW1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
ROW2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
ROW3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
ROW4	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
ROW5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
ROW6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
ROW7	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
ROW8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
ROW9	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
ROW10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
ROW11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
ROW12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
ROW13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
ROW14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
ROW15	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
ROW16	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0

ROW17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
ROW18	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
ROW19	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
ROW20	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
ROW21	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
ROW22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
ROW23	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
ROW24	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
ROW25	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
ROW26	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
ROW27	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
ROW28	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
ROW29	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0
ROW30	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ROW31	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ROW32	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ROW33	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
ROW34	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
ROW35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
ROW36	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0
ROW37	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
ROW38	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
ROW39	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
ROW40	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
ROW41	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
ROW42	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
ROW43	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
ROW44	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
ROW45	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
ROW46	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
ROW47	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
ROW48	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
ROW49	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
ROW50	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
ROW51	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0
ROW52	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
ROW53	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
ROW54	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
ROW55	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
ROW56	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
ROW57	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
ROW58	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
ROW59	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
ROW60	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
ROW61	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
ROW62	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
ROW63	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
ROW64	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
ROW65	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
ROW66	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
ROW67	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0
ROW68																		

	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
ROW69	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
ROW70	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0
ROW71	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0
ROW72	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
ROW73	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
ROW74	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0
ROW75	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ROW76	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ROW77	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
ROW78	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
ROW79	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
ROW80	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
ROW81	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
ROW82	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
ROW83	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
ROW84	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
ROW85	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
ROW86	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
ROW87	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
ROW88	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
ROW89	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0
ROW90	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ROW91	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ROW92	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ROW93	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ROW94	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ROW95	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ROW96	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ROW97	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ROW98	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ROW99	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ROW100	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ROW101	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ROW102	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ROW103	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ROW104	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ROW105	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ROW106	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ROW107	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ROW108	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ROW109	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ROW110	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ROW111	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ROW112	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ROW113	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ROW114	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ROW115	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ROW116	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ROW117	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ROW118	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ROW119																		

	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ROW120	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ROW121	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ROW122	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ROW123	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ROW124	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ROW125	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ROW126	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ROW127	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ROW128	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ROW129	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ROW130	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ROW131	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ROW132	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ROW133	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ROW134	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ROW135	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ROW136	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ROW137	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ROW138	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ROW139	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ROW140	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ROW141	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ROW142	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ROW143	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ROW144	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ROW145	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ROW146	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ROW147	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ROW148	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ROW149	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ROW150	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ROW151	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ROW152	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ROW153	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ROW154	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ROW155	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ROW156	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ROW157	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ROW158	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ROW159	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ROW160	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ROW161	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ROW162	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ROW163	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ROW164	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ROW165																			

np		ncolz	
51	first stage parameters were regressed on	1	second stage covariate(s)

	t2
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using semi-Bayes estimation with prior variance (t2) fixed at 0.5000

Hierarchical logistic regression estimates:

bnames_hm	b_hm	SE_hm	P_value
RESEXP2	0.2753	0.4900	0.5742
RESEXP3	0.1317	0.4932	0.7895
RESEXP4	-0.4788	0.4180	0.2520
RESEXP5	0.2661	0.7239	0.7132
RESEXP6	0.2659	0.7239	0.7134
RESEXP7	0.2661	0.7239	0.7131
RESEXP8	0.7064	0.4213	0.0936
RESEXP9	0.2662	0.7239	0.7131
RESEXP10	0.2661	0.7239	0.7132
RESEXP11	0.4951	0.6029	0.4116
RESEXP12	0.6117	0.4970	0.2184
RESEXP13	0.2655	0.7239	0.7138
RESEXP14	-0.0319	0.4515	0.9437
RESEXP15	0.2659	0.7239	0.7134
RESEXP16	0.2661	0.7239	0.7132
RESEXP17	0.1901	0.5275	0.7186
RESEXP18	0.2660	0.7239	0.7133
RESEXP19	0.3821	0.4089	0.3501
RESEXP20	-0.0030	0.5960	0.9960
RESEXP21	0.6085	0.6031	0.3130
RESEXP22	0.2187	0.5966	0.7139
RESEXP23	0.6870	0.4947	0.1649
RESEXP24	0.2662	0.7239	0.7131
RESEXP25	0.1683	0.6040	0.7805
RESEXP26	0.1597	0.4240	0.7065
RESEXP27	0.2662	0.7239	0.7131
RESEXP28	0.2661	0.7239	0.7132
RESEXP29	0.0975	0.4826	0.8399
RESEXP30	0.1131	0.5952	0.8493
RESEXP31	0.2657	0.7239	0.7136
RESEXP32	-0.3766	0.5915	0.5243
RESEXP33	0.1312	0.3719	0.7242
RESEXP34	0.2657	0.7239	0.7136
RESEXP35	0.0745	0.5967	0.9006
RESEXP36	0.3334	0.4619	0.4704
RESEXP37	0.2658	0.7239	0.7135
RESEXP38	0.2662	0.7239	0.7131
RESEXP39	0.6589	0.4625	0.1543
RESEXP40	0.0150	0.5941	0.9799
RESEXP41	-0.0244	0.4573	0.9575
RESEXP42	-0.1211	0.6021	0.8405
RESEXP43	0.2662	0.7239	0.7131
RESEXP44	0.9368	0.3570	0.0087
RESEXP45	0.2662	0.7239	0.7131
RESEXP46	0.5538	0.6069	0.3615
RESEXP47	0.7231	0.6177	0.2417
RESEXP48	0.2662	0.7239	0.7131

RESEXP49	0.1349	0.6062	0.8239
RESEXP50	0.2662	0.7239	0.7131
RESEXP51	0.5554	0.4423	0.2092
RESEXP52	0.3283	0.5979	0.5830

lowerArg	upperArg	logbig
-1.276494	1.5348976	709.78271
-1.826695	1.0175689	
-1.978988	0.093103	
-718.6219	699.81777	
-259.6842	241.22123	
-858.4806	837.95966	
-0.129482	2.117857	
-1807.355	1792.336	
-499.6605	478.32189	
-1.08314	3.3361176	
-0.324218	2.5985964	
-177.8076	157.86326	
-1.474138	0.9188262	
-294.6956	274.99407	
-521.9703	503.9688	
-1.740837	1.4436043	
-347.7668	329.30768	
-0.398306	1.6909054	
-2.599132	1.8565646	
-0.503702	4.100618	
-1.862358	2.6706331	
-0.421829	2.4661227	
-1297.03	1276.8324	
-2.280816	2.3615297	
-0.964192	1.2921532	
-1354.758	1335.7267	
-724.6258	705.7154	
-1.644776	1.246397	
-2.172436	2.0178178	
-200.6564	183.26728	
-4.017237	0.2510384	
-0.890086	0.8852684	
-194.4649	176.78163	
-2.206094	2.1244643	
-0.802756	1.6757877	
-239.4759	218.91526	
-939.3072	918.47794	
-0.124436	2.3744296	
-2.293683	1.8499993	
-1.813712	0.6708274	
-3.580882	1.0336344	
-5149.457	5133.7635	
0.3562968	2.0683535	
-1147.279	1127.8841	
-0.947821	3.6998055	
-0.297874	4.6127323	

-27473.4	27510.73	
-2.622156	1.9404105	
-1219.926	1196.6314	
-0.241869	2.0105097	
-1.413048	2.9784931	

Second stage parameter estimates using hierarchical model.

bnames2	b_hm2
INTERCEPT	0.2662

Odds Ratios and 95% CIs

Conventional Model Hierarchical Model