

### The GLMSELECT Procedure

<b>Data Set</b>	WORK.DENTALCLEAN
<b>Dependent Variable</b>	attachchange
<b>Selection Method</b>	Stepwise
<b>Select Criterion</b>	Significance Level
<b>Stop Criterion</b>	Significance Level
<b>Entry Significance Level (SLE)</b>	0.15
<b>Stay Significance Level (SLS)</b>	0.05
<b>Effect Hierarchy Enforced</b>	None

<b>Number of Observations Read</b>	130
<b>Number of Observations Used</b>	101

Class Level Information		
Class	Levels	Values
trtgroup	5	1 2 3 4 5
sex	2	1 2
race	4	1 2 4 5
smoker	2	0 1

Dimensions	
<b>Number of Effects</b>	128
<b>Number of Parameters</b>	1368

### The GLMSELECT Procedure

Stepwise Selection Summary						
Step	Effect Entered	Effect Removed	Number Effects In	Number Parms In	F Value	Pr > F
0	Intercept		1	1	0.00	1.0000
1	attachbase*smoker		2	3	15.47	<.0001
2	smoker		3	4	9.77	0.0023

Selection stopped because the candidate for entry has SLE > 0.15 and the candidate for removal has SLS < 0.05.

Stop Details					
Candidate For	Effect	Candidate Significance		Compare Significance	
Entry	attachbase*sex	0.1771	>	0.1500	(SLE)
Removal	smoker	0.0023	<	0.0500	(SLS)

### The GLMSELECT Procedure Selected Model

The selected model is the model at the last step (Step 2).

<b>Effects:</b>	Intercept smoker attachbase*smoker
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Analysis of Variance				
Source	DF	Sum of Squares	Mean Square	F Value
Model	3	2.34261	0.78087	14.49
Error	97	5.22730	0.05389	
Corrected Total	100	7.56992		

Root MSE	0.23214
Dependent Mean	-0.09561
R-Square	0.3095
Adj R-Sq	0.2881
AIC	-188.08370
AICC	-187.45213
SBC	-280.62322

Parameter Estimates				
Parameter	DF	Estimate	Standard Error	t Value
Intercept	1	-0.052165	0.109709	-0.48
smoker 0	1	0.427770	0.136863	3.13
smoker 1	0	0	.	.
attachbase*smoker 0	1	-0.235320	0.036459	-6.45
attachbase*smoker 1	1	-0.000705	0.043601	-0.02

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<b>Selection Method</b>	Stepwise
<b>Select Criterion</b>	Significance Level
<b>Stop Criterion</b>	Significance Level
<b>Entry Significance Level (SLE)</b>	0.15
<b>Stay Significance Level (SLS)</b>	0.05
<b>Effect Hierarchy Enforced</b>	None

<b>Number of Observations Read</b>	130
<b>Number of Observations Used</b>	101

Class Level Information		
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trtgroup	5	1 2 3 4 5
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Dimensions	
<b>Number of Effects</b>	128
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### The GLMSELECT Procedure

Stepwise Selection Summary						
Step	Effect Entered	Effect Removed	Number Effects In	Number Params In	F Value	Pr > F
0	Intercept		1	1	0.00	1.0000
1	pdbase*age*sites*sex		2	3	4.54	0.0131
2	trtgroup		3	7	1.85	0.1260
3		trtgroup	2	3	1.85	0.1260

Stepwise selection stopped because the sequence of effect additions and removals is cycling.

### The GLMSELECT Procedure Selected Model

The selected model is the model at the last step (Step 3).

<b>Effects:</b>	Intercept pdbase*age*sites*sex
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Analysis of Variance				
Source	DF	Sum of Squares	Mean Square	F Value
Model	2	0.61681	0.30841	4.54
Error	98	6.66259	0.06799	
Corrected Total	100	7.27940		

Root MSE	0.26074
Dependent Mean	-0.29549
R-Square	0.0847
Adj R-Sq	0.0661
AIC	-165.57986
AICC	-165.16319
SBC	-260.73450

Parameter Estimates				
Parameter	DF	Estimate	Standard Error	t Value
Intercept	1	-0.117468	0.115327	-1.02
pdbase*age*sites*sex 1	1	-0.000003812	0.000004948	-0.77
pdbase*age*sites*sex 2	1	-0.000008793	0.000004434	-1.98

**The GLM Procedure**

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Number of Observations Read	130
Number of Observations Used	102

## The GLM Procedure

Dependent Variable: attachchange

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	7	2.71321381	0.38760197	7.21	<.0001
Error	94	5.05532843	0.05378009		
Corrected Total	101	7.76854225			

R-Square	Coeff Var	Root MSE	attachchange Mean
0.349256	-231.9145	0.231905	-0.099996

Source	DF	Type I SS	Mean Square	F Value	Pr > F
attachbase	1	1.33138024	1.33138024	24.76	<.0001
trtgroup	4	0.50892322	0.12723080	2.37	0.0584
smoker	1	0.23125696	0.23125696	4.30	0.0408
attachbase*smoker	1	0.64165339	0.64165339	11.93	0.0008

Source	DF	Type III SS	Mean Square	F Value	Pr > F
attachbase	1	0.84986209	0.84986209	15.80	0.0001
trtgroup	4	0.17548072	0.04387018	0.82	0.5183
smoker	1	0.34774201	0.34774201	6.47	0.0126
attachbase*smoker	1	0.64165339	0.64165339	11.93	0.0008

Parameter	Estimate		Standard Error	t Value	Pr >  t
Intercept	-.0557964030	B	0.12833734	-0.43	0.6647
attachbase	-.0145346110	B	0.04633604	-0.31	0.7545
trtgroup 1	0.0182707017	B	0.07741583	0.24	0.8139
trtgroup 2	-.0152554893	B	0.07584207	-0.20	0.8410
trtgroup 3	0.0679688055	B	0.07864681	0.86	0.3897
trtgroup 4	0.1024068595	B	0.07976906	1.28	0.2024
trtgroup 5	0.0000000000	B	.	.	.
smoker 0	0.3673137987	B	0.14445062	2.54	0.0126
smoker 1	0.0000000000	B	.	.	.
attachbase*smoker 0	-.2063128074	B	0.05972920	-3.45	0.0008
attachbase*smoker 1	0.0000000000	B	.	.	.

**Note:** The X'X matrix has been found to be singular, and a generalized inverse was used to solve the normal equations. Terms whose estimates are followed by the letter 'B' are not uniquely estimable.



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## The GLM Procedure

## Dependent Variable: pdchange

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	7	1.14231141	0.16318734	2.47	0.0226
Error	93	6.13708992	0.06599021		
Corrected Total	100	7.27940133			

R-Square	Coeff Var	Root MSE	pdchange Mean
0.156924	-86.93455	0.256886	-0.295493

Source	DF	Type I SS	Mean Square	F Value	Pr > F
pdbase	1	0.30035981	0.30035981	4.55	0.0355
trtgroup	4	0.52406935	0.13101734	1.99	0.1031
pdbase*age*sites*sex	2	0.31788226	0.15894113	2.41	0.0955

Source	DF	Type III SS	Mean Square	F Value	Pr > F
pdbase	1	0.03954990	0.03954990	0.60	0.4408
trtgroup	4	0.48245352	0.12061338	1.83	0.1301
pdbase*age*sites*sex	2	0.31788226	0.15894113	2.41	0.0955

Parameter	Estimate		Standard Error	t Value	Pr >  t
Intercept	-.0511354501	B	0.19915704	-0.26	0.7979
pdbase	-.0499461498		0.06451624	-0.77	0.4408
trtgroup 1	-.0165411004	B	0.08644838	-0.19	0.8487
trtgroup 2	0.0328487972	B	0.08452069	0.39	0.6984
trtgroup 3	0.1527332208	B	0.08656917	1.76	0.0810
trtgroup 4	0.1329387050	B	0.08872449	1.50	0.1374
trtgroup 5	0.0000000000	B	.	.	.
pdbase*age*sites*sex 1	-.0000031046		0.00000532	-0.58	0.5611
pdbase*age*sites*sex 2	-.0000072671		0.00000510	-1.42	0.1575

**Note:** The X'X matrix has been found to be singular, and a generalized inverse was used to solve the normal equations. Terms whose estimates are followed by the letter 'B' are not uniquely estimable.