

## GLM WITH CONTINUOUS PREDICTORS

The GLM Procedure

Number of Observations Read	16
Number of Observations Used	16

## GLM WITH CONTINUOUS PREDICTORS

The GLM Procedure

Dependent Variable: conv

Source	DF	Anova SS	Mean Square	F Value	Pr > F
Model	15	2781.000	185.400	.	.
Error	0	0.000	.	.	.
Corrected Total	15	2781.000	.	.	.

R-Square

1.000

Source	DF	Type III SS	Mean Square	F Value	Pr > F
A	1	256.000	256.000	.	.
B	1	2304.000	2304.000	.	.
A*B	1	4.000	4.000	.	.
C	1	0.250	0.250	.	.
A*C	1	2.250	2.250	.	.
B*C	1	6.250	6.250	.	.
A*B*C	1	2.250	2.250	.	.
D	1	121.000	121.000	.	.
A*D	1	0.000	0.000	.	.
B*D	1	81.000	81.000	.	.
A*B*D	1	1.000	1.000	.	.
C*D	1	0.250	0.250	.	.
A*C*D	1	0.250	0.250	.	.
B*C*D	1	2.250	2.250	.	.
A*B*C*D	1	0.250	0.250	.	.

Parameter	Estimate	Standard Error	t Value	Pr >  t
Intercept	72.250	.	.	.
A	-4.000	.	.	.
B	12.000	.	.	.
A*B	0.500	.	.	.
C	-0.125	.	.	.
A*C	0.375	.	.	.
B*C	-0.625	.	.	.
A*B*C	-0.375	.	.	.
D	-2.750	.	.	.
A*D	0.000	.	.	.
B*D	2.250	.	.	.
A*B*D	0.250	.	.	.
C*D	-0.125	.	.	.
A*C*D	-0.125	.	.	.
B*C*D	-0.375	.	.	.

Parameter	Estimate	Standard Error	t Value	Pr >  t
A*B*C*D	-0.125	.	.	.

### Data--ModelAnova

Obs	Dependent	HypothesisType	Source	DF	SS	MS	FValue	ProbF
1	conv	3	A	1	256.000	256.000	.	.
2	conv	3	B	1	2304.000	2304.000	.	.
3	conv	3	A*B	1	4.000	4.000	.	.
4	conv	3	C	1	0.250	0.250	.	.
5	conv	3	A*C	1	2.250	2.250	.	.
6	conv	3	B*C	1	6.250	6.250	.	.
7	conv	3	A*B*C	1	2.250	2.250	.	.
8	conv	3	D	1	121.000	121.000	.	.
9	conv	3	A*D	1	0.000	0.000	.	.
10	conv	3	B*D	1	81.000	81.000	.	.
11	conv	3	A*B*D	1	1.000	1.000	.	.
12	conv	3	C*D	1	0.250	0.250	.	.
13	conv	3	A*C*D	1	0.250	0.250	.	.
14	conv	3	B*C*D	1	2.250	2.250	.	.
15	conv	3	A*B*C*D	1	0.250	0.250	.	.

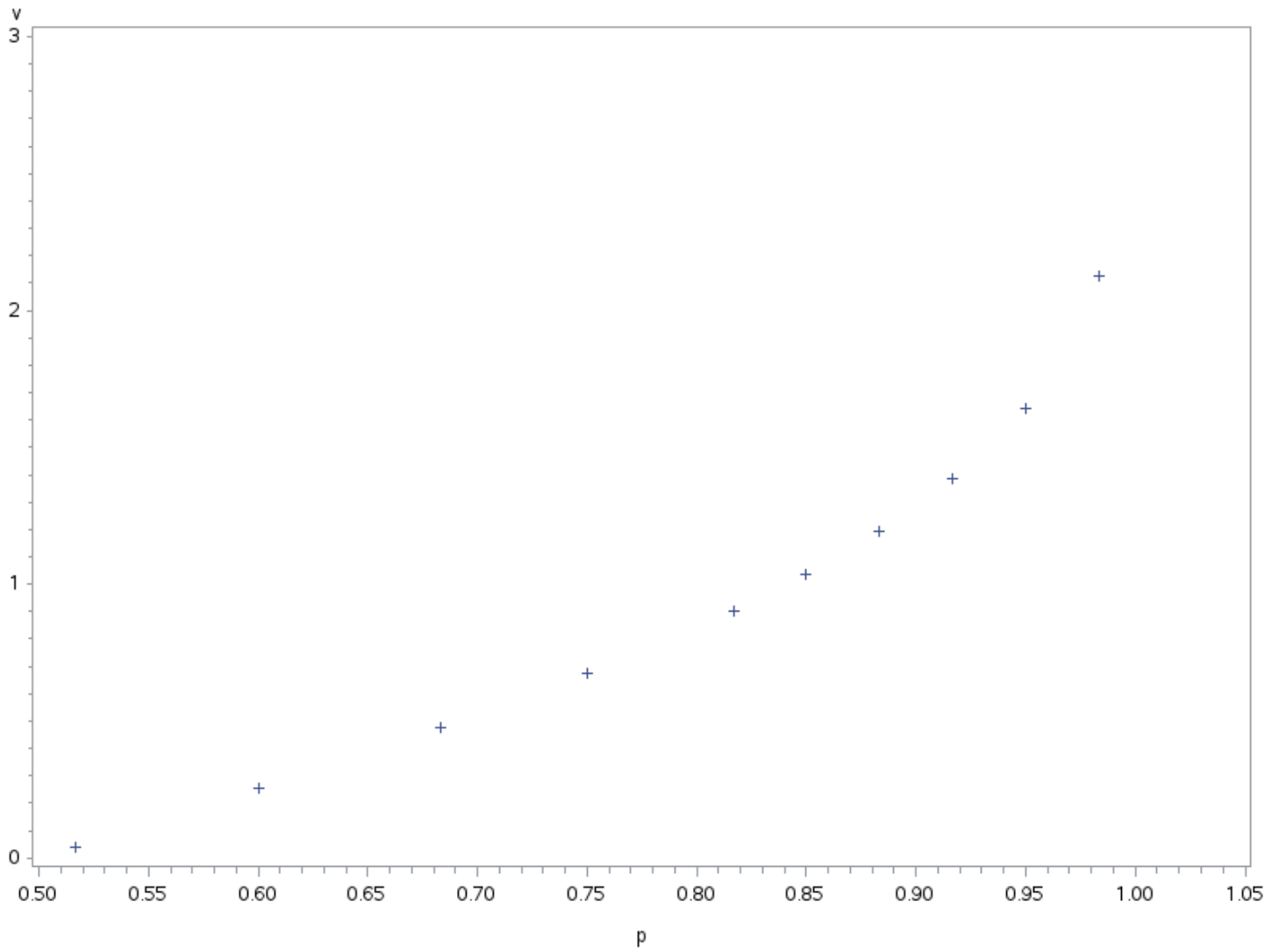
### Data--ModelAnova2

Obs	Dependent	HypothesisType	Source	DF	SS	MS	FValue	ProbF
1	conv	3	A	1	256.000	256.000	.	.
2	conv	3	B	1	2304.000	2304.000	.	.
3	conv	3	A*B	1	4.000	4.000	.	.
4	conv	3	C	1	0.250	0.250	.	.
5	conv	3	A*C	1	2.250	2.250	.	.
6	conv	3	B*C	1	6.250	6.250	.	.
7	conv	3	A*B*C	1	2.250	2.250	.	.
8	conv	3	D	1	121.000	121.000	.	.
9	conv	3	A*D	1	0.000	0.000	.	.
10	conv	3	B*D	1	81.000	81.000	.	.
11	conv	3	A*B*D	1	1.000	1.000	.	.
12	conv	3	C*D	1	0.250	0.250	.	.
13	conv	3	A*C*D	1	0.250	0.250	.	.
14	conv	3	B*C*D	1	2.250	2.250	.	.
15	conv	3	A*B*C*D	1	0.250	0.250	.	.

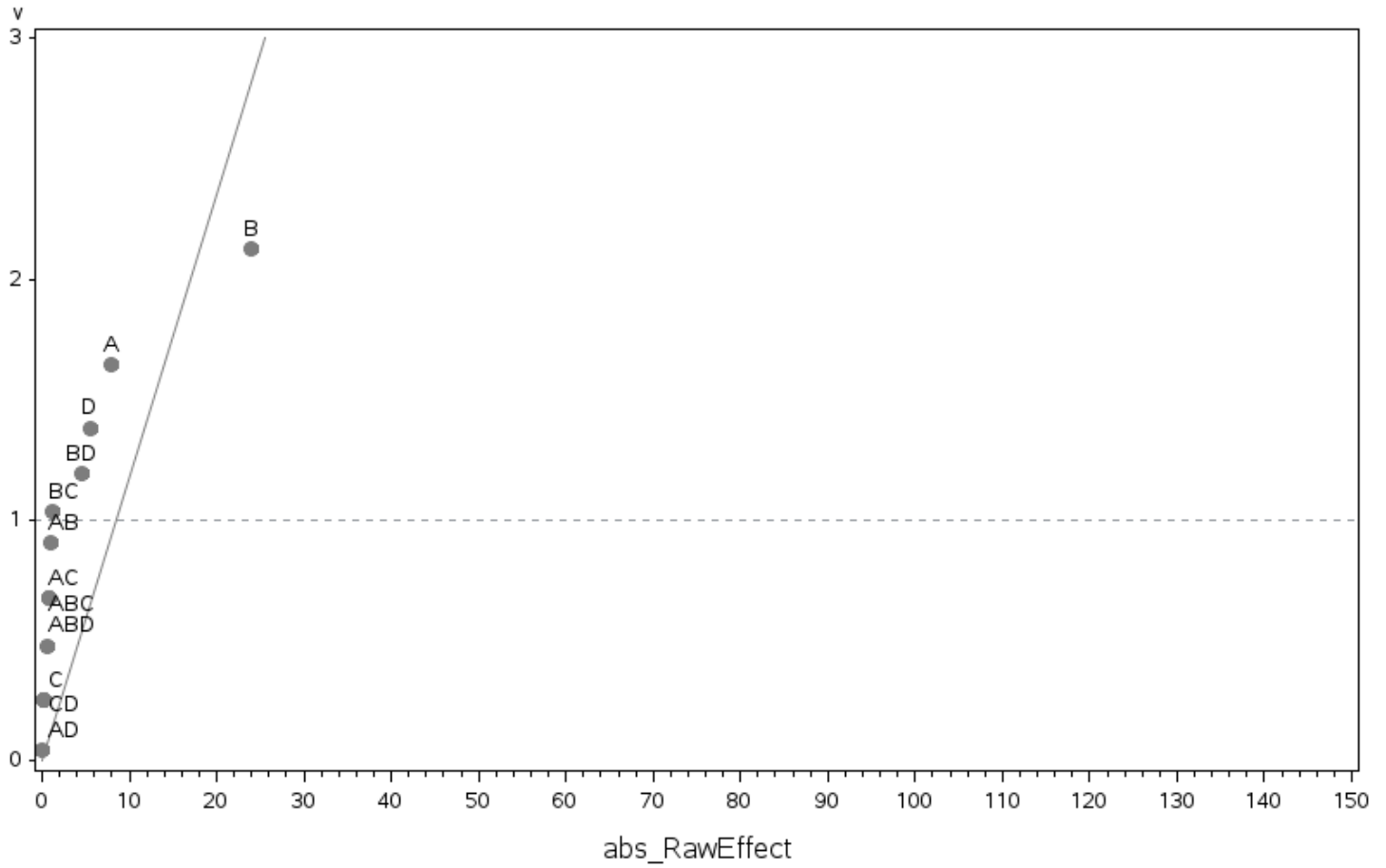
### Data--BetaEstimates

Obs	Parameter	Estimate	source	RawEffect
1	Intercept	72.250	Intercept	144.50
2	A	-4.000	A	-8.00
3	B	12.000	B	24.00
4	A*B	0.500	AB	1.00
5	C	-0.125	C	-0.25
6	A*C	0.375	AC	0.75
7	B*C	-0.625	BC	-1.25

Obs	Parameter	Estimate	source	RawEffect
8	A*B*C	-0.375	ABC	-0.75
9	D	-2.750	D	-5.50
10	A*D	0.000	AD	0.00
11	B*D	2.250	BD	4.50
12	A*B*D	0.250	ABD	0.50
13	C*D	-0.125	CD	-0.25
14	A*C*D	-0.125	ACD	-0.25
15	B*C*D	-0.375	BCD	-0.75
16	A*B*C*D	-0.125	ABCD	-0.25



## HALF-NORMAL PLOT FITTED LINE THROUGH THE ORIGIN



Regression Equation:  
 $v = 0 + 0.117094 \cdot \text{abs\_RawEffect}$

Obs	conv	key
1	70	1
2	60	2
3	89	3
4	81	4
5	69	5
6	62	6
7	88	7
8	81	8
9	60	9
10	49	10
11	88	11
12	82	12
13	60	13
14	52	14
15	86	15
16	79	16

Obs	Parameter	Estimate	source	RawEffect	key
1	Intercept	72.250	Intercept	144.50	1
2	A	-4.000	A	-8.00	2

Obs	Parameter	Estimate	source	RawEffect	key
3	B	12.000	B	24.00	3
4	A*B	0.500	AB	1.00	4
5	C	-0.125	C	-0.25	5
6	A*C	0.375	AC	0.75	6
7	B*C	-0.625	BC	-1.25	7
8	A*B*C	-0.375	ABC	-0.75	8
9	D	-2.750	D	-5.50	9
10	A*D	0.000	AD	0.00	10
11	B*D	2.250	BD	4.50	11
12	A*B*D	0.250	ABD	0.50	12
13	C*D	-0.125	CD	-0.25	13
14	A*C*D	-0.125	ACD	-0.25	14
15	B*C*D	-0.375	BCD	-0.75	15
16	A*B*C*D	-0.125	ABCD	-0.25	16

Obs	conv	key	HypothesisType	Source	MS	StdzEffect	Parameter	Estimate	RawEffect
1	70	1	3	Intercept	256.000	16.0	Intercept	72.250	144.50
2	60	2	3	A	2304.000	48.0	A	-4.000	-8.00
3	89	3	3	B	2304.000	48.0	B	12.000	24.00
4	81	4	3	AB	4.000	2.0	A*B	0.500	1.00
5	69	5	3	C	4.000	2.0	C	-0.125	-0.25
6	62	6	3	AC	4.000	2.0	A*C	0.375	0.75
7	88	7	3	BC	0.250	0.5	B*C	-0.625	-1.25
8	81	8	3	ABC	0.250	0.5	A*B*C	-0.375	-0.75
9	60	9	3	D	0.250	0.5	D	-2.750	-5.50
10	49	10	3	AD	0.250	0.5	A*D	0.000	0.00
11	88	11	3	BD	2.250	1.5	B*D	2.250	4.50
12	82	12	3	ABD	2.250	1.5	A*B*D	0.250	0.50
13	60	13	3	CD	2.250	1.5	C*D	-0.125	-0.25
14	52	14	3	ACD	2.250	1.5	A*C*D	-0.125	-0.25
15	86	15	3	BCD	2.250	1.5	B*C*D	-0.375	-0.75
16	79	16	3	ABCD	6.250	2.5	A*B*C*D	-0.125	-0.25
17	.	3	3	BC	6.250	2.5		.	.
18	.	4	3	BC	6.250	2.5		.	.
19	.	5	3	BC	6.250	2.5		.	.
20	.	6	3	BC	6.250	2.5		.	.
21	.	7	3	BC	6.250	2.5		.	.
22	.	2	3	ABC	2.250	1.5		.	.
23	.	3	3	ABC	2.250	1.5		.	.
24	.	4	3	ABC	2.250	1.5		.	.
25	.	5	3	ABC	2.250	1.5		.	.
26	.	6	3	ABC	2.250	1.5		.	.
27	.	7	3	ABC	2.250	1.5		.	.
28	.	8	3	ABC	2.250	1.5		.	.
29	.	2	3	D	121.000	11.0		.	.
30	.	3	3	D	121.000	11.0		.	.
31	.	4	3	D	121.000	11.0		.	.
32	.	5	3	D	121.000	11.0		.	.
33	.	6	3	D	121.000	11.0		.	.
34	.	7	3	D	121.000	11.0		.	.
35	.	8	3	D	121.000	11.0		.	.
36	.	9	3	D	121.000	11.0		.	.
37	.	2	3	AD	0.000	0.0		.	.

Obs	conv	key	HypothesisType	Source	MS	StdzEffect	Parameter	Estimate	RawEffect
38	.	3	3	AD	0.000	0.0		.	.
39	.	4	3	AD	0.000	0.0		.	.
40	.	5	3	AD	0.000	0.0		.	.
41	.	6	3	AD	0.000	0.0		.	.
42	.	7	3	AD	0.000	0.0		.	.
43	.	8	3	AD	0.000	0.0		.	.
44	.	9	3	AD	0.000	0.0		.	.
45	.	10	3	AD	0.000	0.0		.	.
46	.	2	3	BD	81.000	9.0		.	.
47	.	3	3	BD	81.000	9.0		.	.
48	.	4	3	BD	81.000	9.0		.	.
49	.	5	3	BD	81.000	9.0		.	.
50	.	6	3	BD	81.000	9.0		.	.
51	.	7	3	BD	81.000	9.0		.	.
52	.	8	3	BD	81.000	9.0		.	.
53	.	9	3	BD	81.000	9.0		.	.
54	.	10	3	BD	81.000	9.0		.	.
55	.	11	3	BD	81.000	9.0		.	.
56	.	2	3	ABD	1.000	1.0		.	.
57	.	3	3	ABD	1.000	1.0		.	.
58	.	4	3	ABD	1.000	1.0		.	.
59	.	5	3	ABD	1.000	1.0		.	.
60	.	6	3	ABD	1.000	1.0		.	.
61	.	7	3	ABD	1.000	1.0		.	.
62	.	8	3	ABD	1.000	1.0		.	.
63	.	9	3	ABD	1.000	1.0		.	.
64	.	10	3	ABD	1.000	1.0		.	.
65	.	11	3	ABD	1.000	1.0		.	.
66	.	12	3	ABD	1.000	1.0		.	.
67	.	2	3	CD	0.250	0.5		.	.
68	.	3	3	CD	0.250	0.5		.	.
69	.	4	3	CD	0.250	0.5		.	.
70	.	5	3	CD	0.250	0.5		.	.
71	.	6	3	CD	0.250	0.5		.	.
72	.	7	3	CD	0.250	0.5		.	.
73	.	8	3	CD	0.250	0.5		.	.
74	.	9	3	CD	0.250	0.5		.	.
75	.	10	3	CD	0.250	0.5		.	.
76	.	11	3	CD	0.250	0.5		.	.
77	.	12	3	CD	0.250	0.5		.	.
78	.	13	3	CD	0.250	0.5		.	.
79	.	2	3	ACD	0.250	0.5		.	.
80	.	3	3	ACD	0.250	0.5		.	.
81	.	4	3	ACD	0.250	0.5		.	.
82	.	5	3	ACD	0.250	0.5		.	.
83	.	6	3	ACD	0.250	0.5		.	.
84	.	7	3	ACD	0.250	0.5		.	.
85	.	8	3	ACD	0.250	0.5		.	.
86	.	9	3	ACD	0.250	0.5		.	.
87	.	10	3	ACD	0.250	0.5		.	.
88	.	11	3	ACD	0.250	0.5		.	.
89	.	12	3	ACD	0.250	0.5		.	.
90	.	13	3	ACD	0.250	0.5		.	.
91	.	14	3	ACD	0.250	0.5		.	.

Obs	conv	key	HypothesisType	Source	MS	StdzEffect	Parameter	Estimate	RawEffect
92	.	2	3	BCD	2.250	1.5		.	.
93	.	3	3	BCD	2.250	1.5		.	.
94	.	4	3	BCD	2.250	1.5		.	.
95	.	5	3	BCD	2.250	1.5		.	.
96	.	6	3	BCD	2.250	1.5		.	.
97	.	7	3	BCD	2.250	1.5		.	.
98	.	8	3	BCD	2.250	1.5		.	.
99	.	9	3	BCD	2.250	1.5		.	.
100	.	10	3	BCD	2.250	1.5		.	.
101	.	11	3	BCD	2.250	1.5		.	.
102	.	12	3	BCD	2.250	1.5		.	.
103	.	13	3	BCD	2.250	1.5		.	.
104	.	14	3	BCD	2.250	1.5		.	.
105	.	15	3	BCD	2.250	1.5		.	.
106	.	2	3	ABCD	0.250	0.5		.	.
107	.	3	3	ABCD	0.250	0.5		.	.
108	.	4	3	ABCD	0.250	0.5		.	.
109	.	5	3	ABCD	0.250	0.5		.	.
110	.	6	3	ABCD	0.250	0.5		.	.
111	.	7	3	ABCD	0.250	0.5		.	.
112	.	8	3	ABCD	0.250	0.5		.	.
113	.	9	3	ABCD	0.250	0.5		.	.
114	.	10	3	ABCD	0.250	0.5		.	.
115	.	11	3	ABCD	0.250	0.5		.	.
116	.	12	3	ABCD	0.250	0.5		.	.
117	.	13	3	ABCD	0.250	0.5		.	.
118	.	14	3	ABCD	0.250	0.5		.	.
119	.	15	3	ABCD	0.250	0.5		.	.
120	.	16	3	ABCD	0.250	0.5		.	.