

```

SORT CASES BY database.
SPLIT FILE SEPARATE BY database.
REGRESSION
  /MISSING LISTWISE
  /STATISTICS COEFF OUTS R ANOVA CHANGE ZPP
  /CRITERIA=PIN(.05) POUT(.10)
  /NOORIGIN
  /DEPENDENT scaled_valence
  /METHOD=ENTER word_length letter_freq
  /METHOD=ENTER rha switch
  /METHOD=ENTER interaction.

```

Regression

[DataSet1] /Users/Erin/Dropbox/E_K projects/D QWERTY/revised_paper/stimuli/stim_analysis.sav

database = afinn

Variables Entered/Removed^{a,b}

Model	Variables Entered	Variables Removed	Method
1	letter_freq, word_length ^c	.	Enter
2	rha, switch ^c	.	Enter
3	interaction ^c	.	Enter

a. database = afinn

b. Dependent Variable: scaled_valence

c. All requested variables entered.

Model Summary^a

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics			
					R Square Change	F Change	df1	df2
1	.036 ^b	.001	.000	1.69699	.001	1.560	2	2449
2	.088 ^c	.008	.006	1.69223	.006	7.897	2	2447
3	.088 ^d	.008	.006	1.69248	.000	.289	1	2446

Model Summary^a

Model	Change ...
	Sig. F Change
1	.210
2	.000
3	.591

a. database = afinn

b. Predictors: (Constant), letter_freq, word_length

c. Predictors: (Constant), letter_freq, word_length, rha, switch

d. Predictors: (Constant), letter_freq, word_length, rha, switch, interaction

ANOVA^{a,b}

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	8.984	2	4.492	1.560	.210 ^c
	Residual	7052.552	2449	2.880		
	Total	7061.537	2451			
2	Regression	54.211	4	13.553	4.733	.001 ^d
	Residual	7007.326	2447	2.864		
	Total	7061.537	2451			
3	Regression	55.037	5	11.007	3.843	.002 ^e
	Residual	7006.499	2446	2.864		
	Total	7061.537	2451			

a. database = afinn

b. Dependent Variable: scaled_valence

c. Predictors: (Constant), letter_freq, word_length

d. Predictors: (Constant), letter_freq, word_length, rha, switch

e. Predictors: (Constant), letter_freq, word_length, rha, switch, interaction

Coefficients^{a,b}

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Correlations		
		B	Std. Error	Beta			Zero-order	Partial	Part
1	(Constant)	3.473	.218		15.950	.000			
	word_length	-.019	.015	-.025	-1.231	.218	-.019	-.025	-.025
	letter_freq	.049	.033	.031	1.488	.137	.026	.030	.030
2	(Constant)	3.053	.242		12.618	.000			
	word_length	-.014	.020	-.019	-.687	.492	-.019	-.014	-.014
	letter_freq	.129	.039	.081	3.329	.001	.026	.067	.067
	rha	.059	.015	.096	3.855	.000	.054	.078	.078
	switch	-.006	.029	-.005	-.192	.847	-.004	-.004	-.004
3	(Constant)	3.045	.242		12.565	.000			
	word_length	-.015	.021	-.021	-.746	.456	-.019	-.015	-.015
	letter_freq	.128	.039	.080	3.298	.001	.026	.067	.066
	rha	.048	.024	.079	1.979	.048	.054	.040	.040
	switch	.002	.032	.002	.064	.949	-.004	.001	.001
	interaction	.004	.007	.019	.537	.591	.054	.011	.011

a. database = afinn

b. Dependent Variable: scaled_valence

Excluded Variables^{a,b}

Model		Beta In	t	Sig.	Partial Correlation	Collinearity Statistics
						Tolerance
1	rha	.095 ^c	3.970	.000	.080	.709
	switch	.026 ^c	.962	.336	.019	.566
	interaction	.073 ^c	3.259	.001	.066	.817
2	interaction	.019 ^d	.537	.591	.011	.314

a. database = affinn

b. Dependent Variable: scaled_valence

c. Predictors in the Model: (Constant), letter_freq, word_length

d. Predictors in the Model: (Constant), letter_freq, word_length, rha, switch

database = anew

Variables Entered/Removed^{a,b}

Model	Variables Entered	Variables Removed	Method
1	letter_freq, word_length ^c	.	Enter
2	rha, switch ^c	.	Enter
3	interaction ^c	.	Enter

a. database = anew

b. Dependent Variable: scaled_valence

c. All requested variables entered.

Model Summary^a

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics			
					R Square Change	F Change	df1	df2
1	.047 ^b	.002	.000	1.99296	.002	1.136	2	1031
2	.075 ^c	.006	.002	1.99149	.003	1.763	2	1029
3	.082 ^d	.007	.002	1.99141	.001	1.078	1	1028

Model Summary^a

Model	Change ...
	Sig. F Change
1	.321
2	.172
3	.299

a. database = anew

b. Predictors: (Constant), letter_freq, word_length

c. Predictors: (Constant), letter_freq, word_length, rha, switch

d. Predictors: (Constant), letter_freq, word_length, rha, switch, interaction

ANOVA^{a,b}

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	9.025	2	4.512	1.136	.321 ^c
	Residual	4095.012	1031	3.972		
	Total	4104.036	1033			
2	Regression	23.006	4	5.752	1.450	.215 ^d
	Residual	4081.030	1029	3.966		
	Total	4104.036	1033			
3	Regression	27.280	5	5.456	1.376	.231 ^e
	Residual	4076.757	1028	3.966		
	Total	4104.036	1033			

a. database = anew

b. Dependent Variable: scaled_valence

c. Predictors: (Constant), letter_freq, word_length

d. Predictors: (Constant), letter_freq, word_length, rha, switch

e. Predictors: (Constant), letter_freq, word_length, rha, switch, interaction

Coefficients^{a,b}

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Correlations		
		B	Std. Error	Beta			Zero-order	Partial	Part
1	(Constant)	5.386	.354		15.227	.000			
	word_length	-.052	.035	-.048	-1.507	.132	-.046	-.047	-.047
	letter_freq	.014	.052	.008	.264	.792	-.001	.008	.008
2	(Constant)	5.095	.388		13.118	.000			
	word_length	-.034	.045	-.032	-.768	.443	-.046	-.024	-.024
	letter_freq	.062	.059	.037	1.040	.299	-.001	.032	.032
	rha	.054	.029	.069	1.876	.061	.055	.058	.058
	switch	-.021	.056	-.015	-.372	.710	-.027	-.012	-.012
3	(Constant)	5.111	.389		13.149	.000			
	word_length	-.033	.045	-.030	-.732	.464	-.046	-.023	-.023
	letter_freq	.067	.059	.041	1.124	.261	-.001	.035	.035
	rha	.091	.046	.116	1.991	.047	.055	.062	.062
	switch	-.044	.060	-.032	-.726	.468	-.027	-.023	-.023
	interaction	-.018	.017	-.056	-1.038	.299	.034	-.032	-.032

a. database = anew

b. Dependent Variable: scaled_valence

Excluded Variables^{a,b}

Model		Beta In	t	Sig.	Partial Correlation	Collinearity Statistics
						Tolerance
1	rha	.066 ^c	1.841	.066	.057	.756
	switch	.003 ^c	.066	.947	.002	.621
	interaction	.027 ^c	.790	.430	.025	.840
2	interaction	-.056 ^d	-1.038	.299	-.032	.334

a. database = anew

b. Dependent Variable: scaled_valence

c. Predictors in the Model: (Constant), letter_freq, word_length

d. Predictors in the Model: (Constant), letter_freq, word_length, rha, switch

database = f

Variables Entered/Removed^{a,b}

Model	Variables Entered	Variables Removed	Method
1	letter_freq, word_length ^c	.	Enter
2	rha, switch ^c	.	Enter
3	interaction ^c	.	Enter

a. database = f

b. Dependent Variable: scaled_valence

c. All requested variables entered.

Model Summary^a

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics			
					R Square Change	F Change	df1	df2
1	.042 ^b	.002	-.005	2.13372	.002	.255	2	285
2	.111 ^c	.012	-.002	2.12994	.011	1.506	2	283
3	.115 ^d	.013	-.004	2.13271	.001	.264	1	282

Model Summary^a

Model	Change ...
	Sig. F Change
1	.775
2	.224
3	.608

a. database = f

b. Predictors: (Constant), letter_freq, word_length

c. Predictors: (Constant), letter_freq, word_length, rha, switch

d. Predictors: (Constant), letter_freq, word_length, rha, switch, interaction

ANOVA^{a,b}

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	2.318	2	1.159	.255	.775 ^c
	Residual	1297.533	285	4.553		
	Total	1299.851	287			
2	Regression	15.983	4	3.996	.881	.476 ^d
	Residual	1283.868	283	4.537		
	Total	1299.851	287			
3	Regression	17.183	5	3.437	.756	.583 ^e
	Residual	1282.667	282	4.548		
	Total	1299.851	287			

a. database = f

b. Dependent Variable: scaled_valence

c. Predictors: (Constant), letter_freq, word_length

d. Predictors: (Constant), letter_freq, word_length, rha, switch

e. Predictors: (Constant), letter_freq, word_length, rha, switch, interaction

Coefficients^{a,b}

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Correlations		
		B	Std. Error	Beta			Zero-order	Partial	Part
1	(Constant)	3.699	1.110		3.332	.001			
	word_length	.046	.070	.039	.655	.513	.037	.039	.039
	letter_freq	-.053	.152	-.021	-.346	.730	-.017	-.020	-.020
2	(Constant)	3.635	1.186		3.066	.002			
	word_length	.146	.091	.124	1.608	.109	.037	.095	.095
	letter_freq	-.050	.169	-.020	-.295	.768	-.017	-.018	-.017
	rha	.064	.064	.075	.990	.323	.013	.059	.059
	switch	-.199	.116	-.136	-1.719	.087	-.047	-.102	-.102
3	(Constant)	3.760	1.211		3.103	.002			
	word_length	.154	.092	.131	1.670	.096	.037	.099	.099
	letter_freq	-.051	.169	-.020	-.302	.763	-.017	-.018	-.018
	rha	.107	.107	.126	1.007	.315	.013	.060	.060
	switch	-.269	.179	-.185	-1.501	.134	-.047	-.089	-.089
	interaction	-.020	.039	-.062	-.514	.608	.036	-.031	-.030

a. database = f

b. Dependent Variable: scaled_valence

Excluded Variables^{a,b}

Model		Beta In	t	Sig.	Partial Correlation	Collinearity Statistics
						Tolerance
1	rha	.016 ^c	.240	.810	.014	.769
	switch	-.101 ^c	-1.425	.155	-.084	.696
	interaction	.066 ^c	.968	.334	.057	.753
2	interaction	-.062 ^d	-.514	.608	-.031	.237

a. database = f

b. Dependent Variable: scaled_valence

c. Predictors in the Model: (Constant), letter_freq, word_length

d. Predictors in the Model: (Constant), letter_freq, word_length, rha, switch

database = w

Variables Entered/Removed^{a,b}

Model	Variables Entered	Variables Removed	Method
1	letter_freq, word_length ^c	.	Enter
2	rha, switch ^c	.	Enter
3	interaction ^c	.	Enter

a. database = w

b. Dependent Variable: scaled_valence

c. All requested variables entered.

Model Summary^a

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics			
					R Square Change	F Change	df1	df2
1	.047 ^b	.002	.002	1.27345	.002	15.553	2	13805
2	.058 ^c	.003	.003	1.27282	.001	7.843	2	13803
3	.060 ^d	.004	.003	1.27274	.000	2.780	1	13802

Model Summary^a

Model	Change ...
	Sig. F Change
1	.000
2	.000
3	.095

a. database = w

b. Predictors: (Constant), letter_freq, word_length

c. Predictors: (Constant), letter_freq, word_length, rha, switch

d. Predictors: (Constant), letter_freq, word_length, rha, switch, interaction

ANOVA^{a,b}

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	50.443	2	25.221	15.553	.000 ^c
	Residual	22387.299	13805	1.622		
	Total	22437.741	13807			
2	Regression	75.856	4	18.964	11.706	.000 ^d
	Residual	22361.886	13803	1.620		
	Total	22437.741	13807			
3	Regression	80.359	5	16.072	9.922	.000 ^e
	Residual	22357.382	13802	1.620		
	Total	22437.741	13807			

a. database = w

b. Dependent Variable: scaled_valence

c. Predictors: (Constant), letter_freq, word_length

d. Predictors: (Constant), letter_freq, word_length, rha, switch

e. Predictors: (Constant), letter_freq, word_length, rha, switch, interaction

Coefficients^{a,b}

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Correlations		
		B	Std. Error	Beta			Zero-order	Partial	Part
1	(Constant)	4.932	.063		77.857	.000			
	word_length	-.019	.005	-.036	-4.109	.000	-.028	-.035	-.035
	letter_freq	.043	.010	.039	4.511	.000	.032	.038	.038
2	(Constant)	4.851	.068		71.064	.000			
	word_length	-.030	.007	-.056	-4.649	.000	-.028	-.040	-.040
	letter_freq	.061	.011	.055	5.615	.000	.032	.048	.048
	rha	.013	.005	.026	2.627	.009	.009	.022	.022
	switch	.022	.009	.029	2.465	.014	-.006	.021	.021
3	(Constant)	4.850	.068		71.040	.000			
	word_length	-.030	.007	-.055	-4.591	.000	-.028	-.039	-.039
	letter_freq	.063	.011	.057	5.767	.000	.032	.049	.049
	rha	.023	.008	.048	2.899	.004	.009	.025	.025
	switch	.018	.009	.023	1.890	.059	-.006	.016	.016
	interaction	-.004	.002	-.026	-1.667	.095	.003	-.014	-.014

a. database = w

b. Dependent Variable: scaled_valence

Excluded Variables^{a,b}

Model		Beta In	t	Sig.	Partial Correlation	Collinearity Statistics
						Tolerance
1	rha	.030 ^c	3.100	.002	.026	.786
	switch	.035 ^c	2.963	.003	.025	.525
	interaction	.009 ^c	1.023	.307	.009	.875
2	interaction	-.026 ^d	-1.667	.095	-.014	.306

a. database = w

b. Dependent Variable: scaled_valence

c. Predictors in the Model: (Constant), letter_freq, word_length

d. Predictors in the Model: (Constant), letter_freq, word_length, rha, switch

database = 5.00

Variables Entered/Removed^{a,b}

Model	Variables Entered	Variables Removed	Method
1	letter_freq, word_length ^c	.	Enter
2	rha, switch ^c	.	Enter
3	interaction ^c	.	Enter

a. database = 5.00

b. Dependent Variable: scaled_valence

c. All requested variables entered.

Model Summary^a

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics			
					R Square Change	F Change	df1	df2
1	.118 ^b	.014	.014	1.08593	.014	69.384	2	9909
2	.120 ^c	.015	.014	1.08566	.001	3.503	2	9907
3	.121 ^d	.015	.014	1.08565	.000	1.129	1	9906

Model Summary^a

Model	Change ...
	Sig. F Change
1	.000
2	.030
3	.288

a. database = 5.00

b. Predictors: (Constant), letter_freq, word_length

c. Predictors: (Constant), letter_freq, word_length, rha, switch

d. Predictors: (Constant), letter_freq, word_length, rha, switch, interaction

ANOVA^{a,b}

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	163.642	2	81.821	69.384	.000 ^c
	Residual	11685.170	9909	1.179		
	Total	11848.812	9911			
2	Regression	171.900	4	42.975	36.461	.000 ^d
	Residual	11676.913	9907	1.179		
	Total	11848.812	9911			
3	Regression	173.230	5	34.646	29.395	.000 ^e
	Residual	11675.582	9906	1.179		
	Total	11848.812	9911			

a. database = 5.00

b. Dependent Variable: scaled_valence

c. Predictors: (Constant), letter_freq, word_length

d. Predictors: (Constant), letter_freq, word_length, rha, switch

e. Predictors: (Constant), letter_freq, word_length, rha, switch, interaction

Coefficients^{a,b}

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Correlations		
		B	Std. Error	Beta			Zero-order	Partial	Part
1	(Constant)	5.013	.057		87.492	.000			
	word_length	.054	.005	.116	11.421	.000	.117	.114	.114
	letter_freq	.005	.009	.005	.537	.591	.029	.005	.005
2	(Constant)	4.970	.061		81.124	.000			
	word_length	.047	.007	.101	6.865	.000	.117	.069	.068
	letter_freq	.014	.010	.016	1.459	.145	.029	.015	.015
	rha	.009	.005	.019	1.707	.088	-.002	.017	.017
	switch	.016	.010	.023	1.593	.111	.095	.016	.016
3	(Constant)	4.970	.061		81.129	.000			
	word_length	.047	.007	.102	6.913	.000	.117	.069	.069
	letter_freq	.015	.010	.017	1.549	.121	.029	.016	.015
	rha	.015	.008	.034	1.916	.055	-.002	.019	.019
	switch	.012	.010	.018	1.176	.240	.095	.012	.012
	interaction	-.003	.003	-.018	-1.063	.288	-.028	-.011	-.011

a. database = 5.00

b. Dependent Variable: scaled_valence

Excluded Variables^{a,b}

Model	Beta In	t	Sig.	Partial Correlation	Collinearity Statistics
					Tolerance
1	rha	.023 ^c	2.114	.035	.021
	switch	.029 ^c	2.023	.043	.020
	interaction	.005 ^c	.513	.608	.005
2	interaction	-.018 ^d	-1.063	.288	-.011

a. database = 5.00

b. Dependent Variable: scaled_valence

c. Predictors in the Model: (Constant), letter_freq, word_length

d. Predictors in the Model: (Constant), letter_freq, word_length, rha, switch

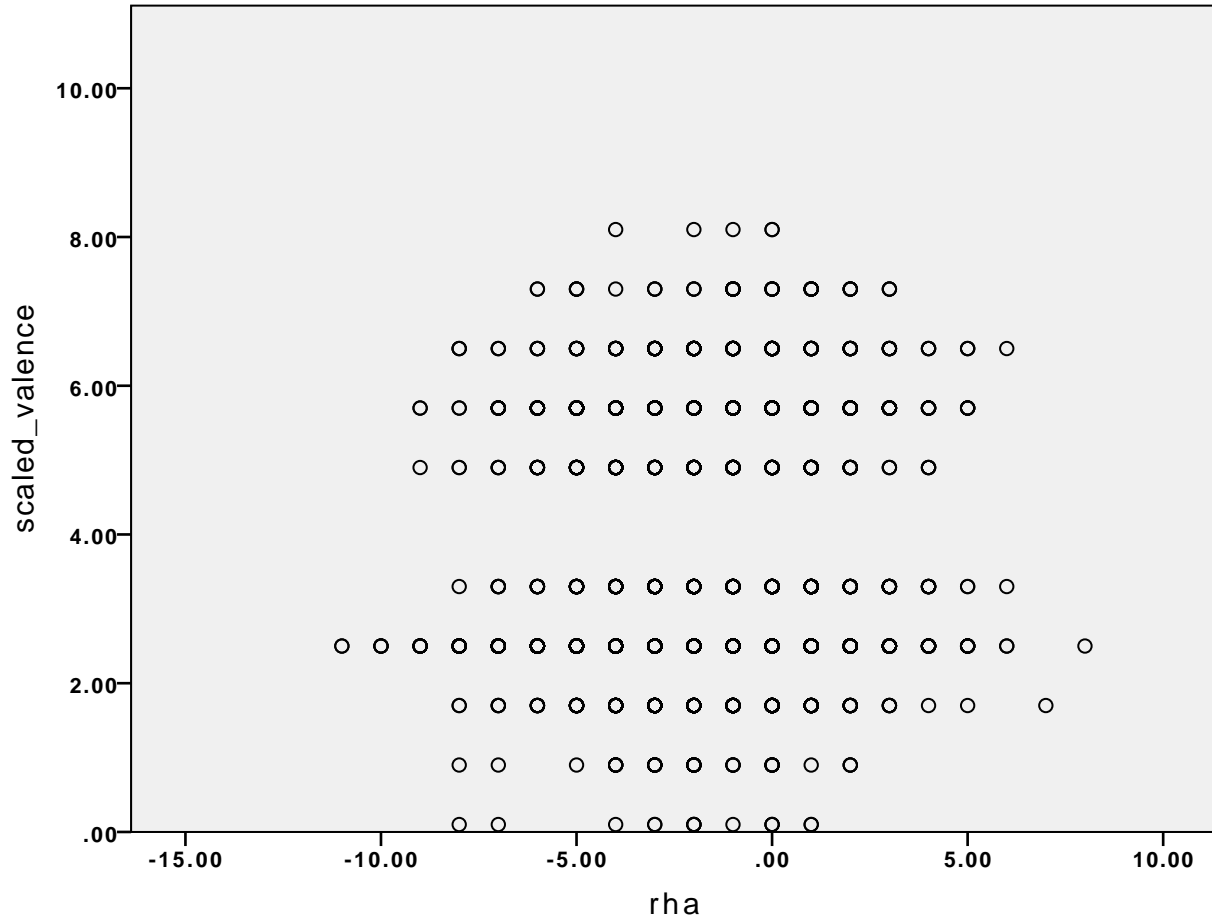
* Chart Builder.

```
GGRAPH
  /GRAPHDATASET NAME="graphdataset" VARIABLES=rha scaled_valence MISSING=LISTWISE REPORTMISSING=
  /GRAPHSPEC SOURCE=INLINE.
BEGIN GPL
  SOURCE: s=userSource(id("graphdataset"))
  DATA: rha=col(source(s), name("rha"))
  DATA: scaled_valence=col(source(s), name("scaled_valence"))
  GUIDE: axis(dim(1), label("rha"))
  GUIDE: axis(dim(2), label("scaled_valence"))
  ELEMENT: point(position(rha*scaled_valence))
END GPL.
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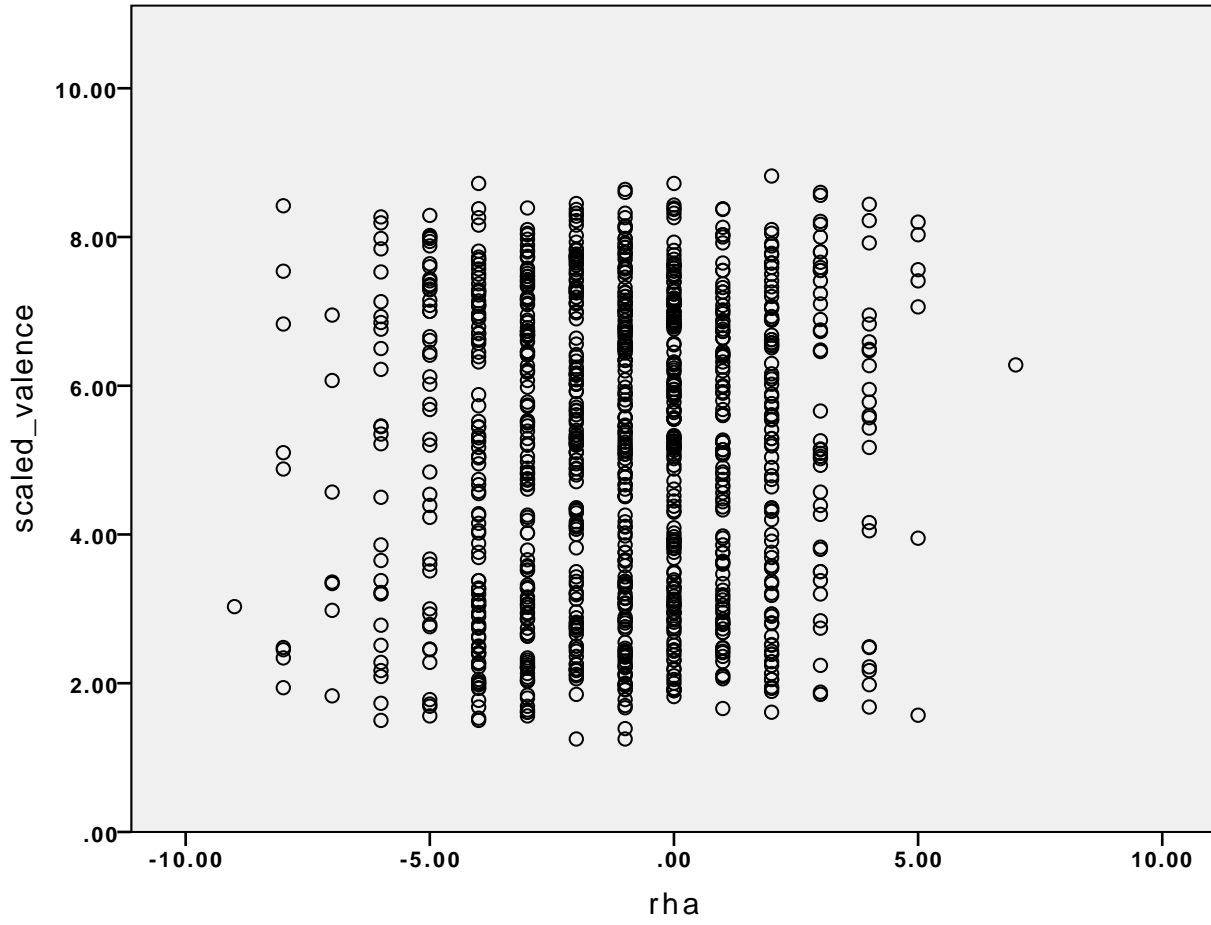
GGraph

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[DataSet1] /Users/Erin/Dropbox/E_K projects/D QWERTY/revised_paper/stimuli/stim_analysis.sav
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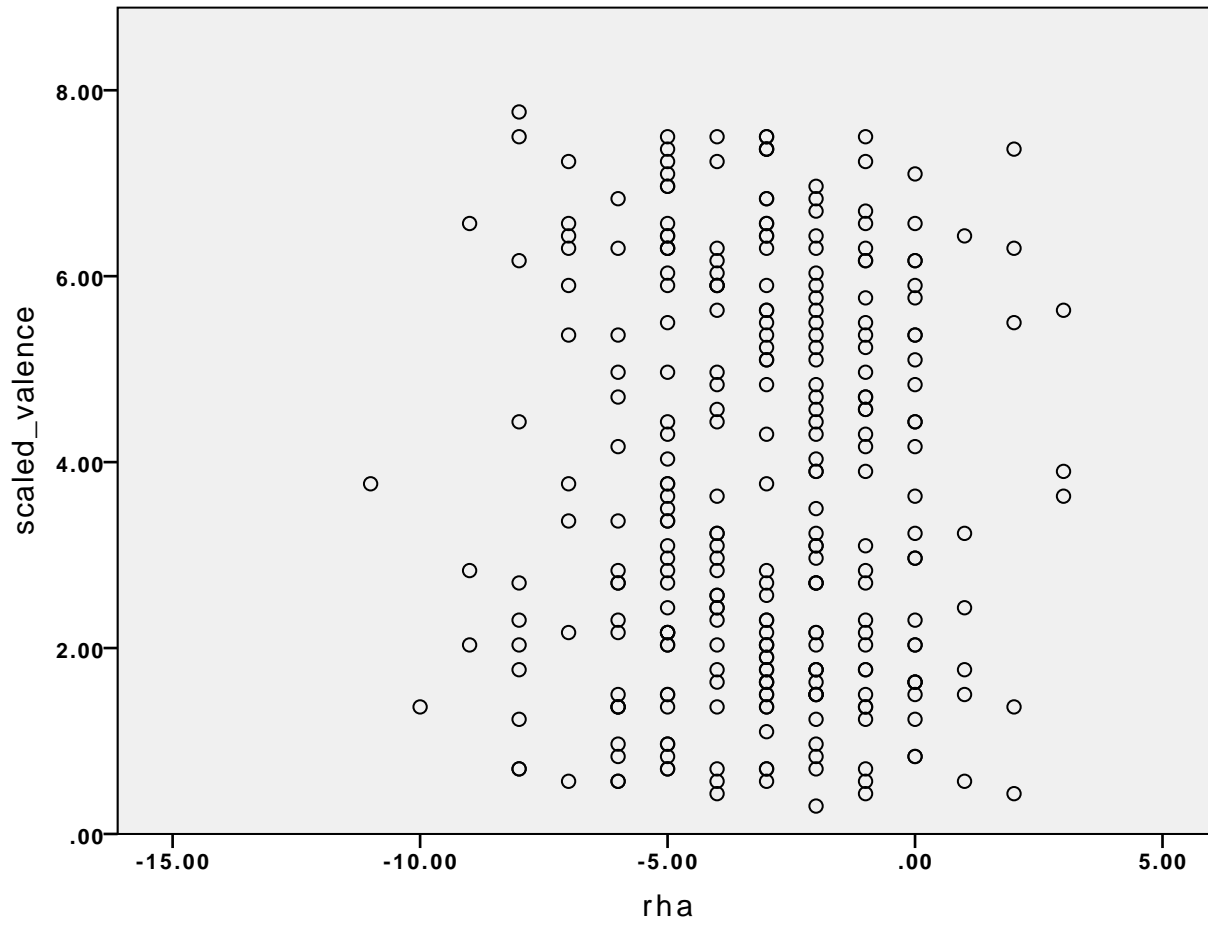
database: afinn



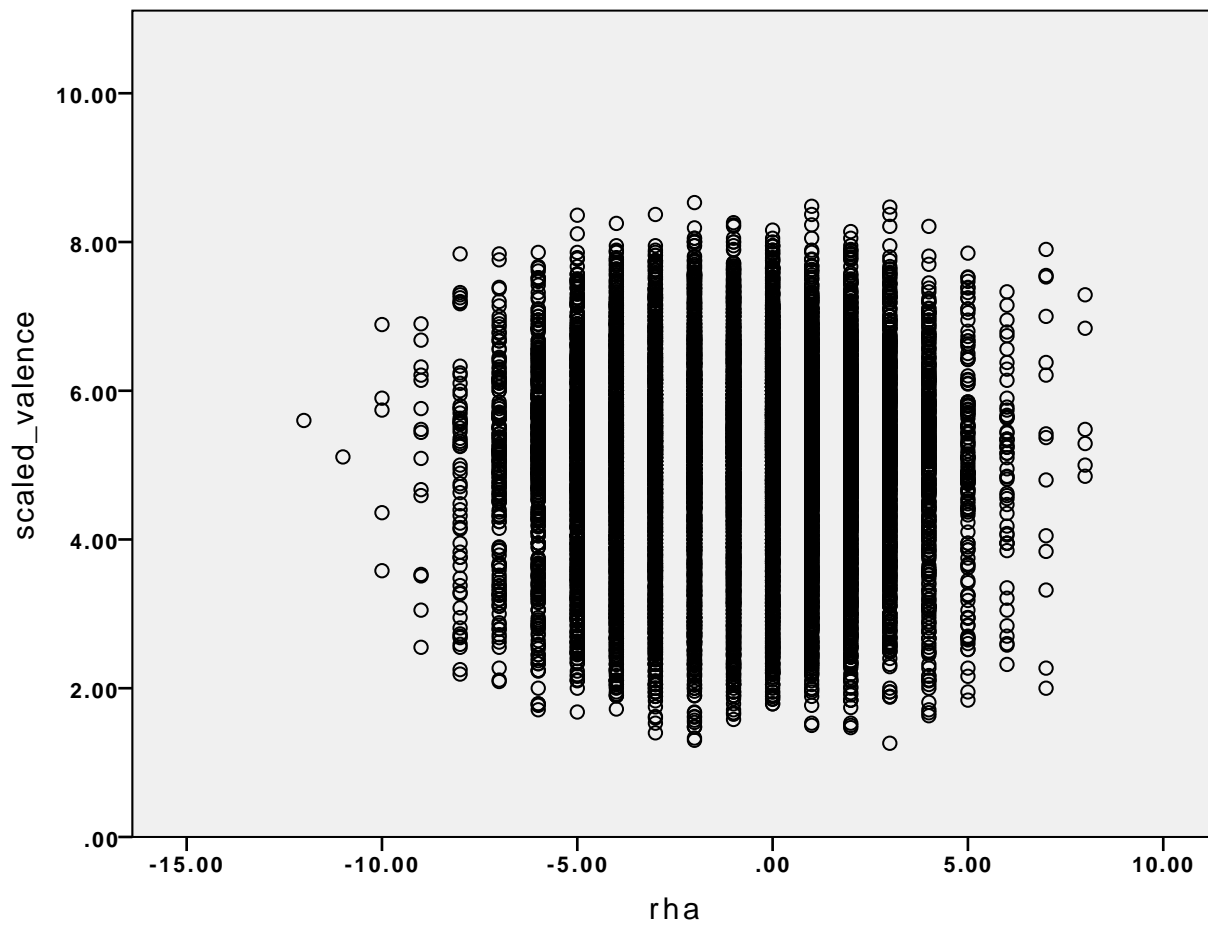
database: anew



database: f



database: w



database: 5

