Type Hints Affects in Readability

Case Processing Summary

		Cases			
		Valid		Missing	
	Type Hints Affects in Readability	N	Percent	N	Percent
Grdaes With Type Hints	Strongly Disagree	6	100.0%	0	0.0%
	Disagree	8	100.0%	0	0.0%
	Neutral	16	100.0%	0	0.0%
	Agree	57	100.0%	0	0.0%
	Strongly Agree	25	100.0%	0	0.0%

Case Processing Summary

		Cases	
		Total	
	Type Hints Affects in Readability	N	Percent
Grdaes With Type Hints	Strongly Disagree	6	100.0%
	Disagree	8	100.0%
	Neutral	16	100.0%
	Agree	57	100.0%
	Strongly Agree	25	100.0%

Descriptives

	Type Hints Affects in Readability			Statistic
Grdaes With Type Hints	Strongly Disagree	Mean		5.17
		95% Confidence Interval for Mean	Lower Bound	1.11
			Upper Bound	9.23
		5% Trimmed Mean		5.13
		Median		5.50
		Variance		14.967
		Std. Deviation		3.869
		Minimum		0
		Maximum		11
		Range		11
		Interquartile Range		7
		Skewness		.184
		Kurtosis		-.054
	Disagree	Mean		7.75
		95% Confidence Interval for Mean	Lower Bound	2.70
			Upper Bound	12.80
		5% Trimmed Mean		7.50
		Median		7.00
		Variance		36.500
		Std. Deviation		6.042
		Minimum		2
		Maximum		18
		Range		16
		Interquartile Range		10
		Skewness		.542
		Kurtosis		-1.093
	Neutral	Mean		2.50
		95% Confidence Interval for Mean	Lower Bound	1.63
			Upper Bound	3.37
		5% Trimmed Mean		2.44
		Median		2.00
		Variance		2.667
		Std. Deviation		1.633
		Minimum		0
		Maximum		6
		Range		6
		Interquartile Range		3
		Skewness		.525
		Kurtosis		-.416

Descriptives

	Type Hints Affects in Readability			Std. Error
Grdaes With Type Hints	Strongly Disagree	Mean		1.579
		95% Confidence Interval for Mean	Lower Bound	
			Upper Bound	
		5% Trimmed Mean		
		Median		
		Variance		
		Std. Deviation		
		Minimum		
		Maximum		
		Range		
		Interquartile Range		
		Skewness		.845
		Kurtosis		1.741
	Disagree	Mean		2.136
		95% Confidence Interval for Mean	Lower Bound	
			Upper Bound	
		5% Trimmed Mean		
		Median		
		Variance		
		Std. Deviation		
		Minimum		
		Maximum		
		Range		
		Interquartile Range		
		Skewness		.752
		Kurtosis		1.481
	Neutral	Mean		.408
		95% Confidence Interval for Mean	Lower Bound	
			Upper Bound	
		5% Trimmed Mean		
		Median		
		Variance		
		Std. Deviation		
		Minimum		
		Maximum		
		Range		
		Interquartile Range		
		Skewness		.564
		Kurtosis		1.091

Descriptives

Type Hints Affects in Readability			Statistic
Agree	Mean		6.11
	95% Confidence Interval for Mean	Lower Bound	4.78
		Upper Bound	7.44
	5% Trimmed Mean		5.89
	Median		5.00
	Variance		25.132
	Std. Deviation		5.013
	Minimum		0
	Maximum		16
	Range		16
	Interquartile Range		9
	Skewness		.701
	Kurtosis		-.686
Strongly Agree	Mean		7.88
	95% Confidence Interval for Mean	Lower Bound	5.65
		Upper Bound	10.11
	5% Trimmed Mean		7.72
	Median		8.00
	Variance		29.110
	Std. Deviation		5.395
	Minimum		1
	Maximum		18
	Range		17
	Interquartile Range		11
	Skewness		.175
	Kurtosis		-1.264

Descriptives

Type Hints Affects in Readability			Std. Error
Agree	Mean		.664
	95% Confidence Interval for Mean	Lower Bound	
		Upper Bound	
	5% Trimmed Mean		
	Median		
	Variance		
	Std. Deviation		
	Minimum		
	Maximum		
	Range		
	Interquartile Range		
	Skewness		.316
	Kurtosis		.623
Strongly Agree	Mean		1.079
	95% Confidence Interval for Mean	Lower Bound	
		Upper Bound	
	5% Trimmed Mean		
	Median		
	Variance		
	Std. Deviation		
	Minimum		
	Maximum		
	Range		
	Interquartile Range		
	Skewness		.464
	Kurtosis		.902

Extreme Values[a]

	Type Hints Affects in Readability			Case Number	Value
Grdaes With Type Hints	Strongly Disagree	Highest	1	63	11
			2	24	7
			3	11	6
		Lowest	1	29	0
			2	17	2
			3	12	5
	Disagree	Highest	1	26	18
			2	81	12
			3	6	11
			4	38	11
		Lowest	1	87	2
			2	76	2
			3	83	3
			4	47	3
	Neutral	Highest	1	51	6
			2	89	4
			3	90	4
			4	91	4
			5	100	4[b]
		Lowest	1	56	0
			2	107	1
			3	84	1
			4	48	1
			5	42	1
	Agree	Highest	1	3	16
			2	4	16
			3	33	16
			4	49	16
			5	5	15[c]
		Lowest	1	75	0
			2	46	0
			3	45	0
			4	14	0
			5	112	1[d]
	Strongly Agree	Highest	1	30	18
			2	31	16
			3	80	15
			4	101	14
			5	104	14

Extreme Values[a]

Type Hints Affects in Readability		Case Number	Value
Lowest	1	68	1
	2	60	1
	3	1	1
	4	92	2
	5	71	2[e]

a. The requested number of extreme values exceeds the number of data points. A smaller number of extremes is displayed.

b. Only a partial list of cases with the value 4 are shown in the table of upper extremes.

c. Only a partial list of cases with the value 15 are shown in the table of upper extremes.

d. Only a partial list of cases with the value 1 are shown in the table of lower extremes.

e. Only a partial list of cases with the value 2 are shown in the table of lower extremes.

Tests of Normality

	Type Hints Affects in Readability	Kolmogorov-Smirnov[a]			Shapiro-...
		Statistic	df	Sig.	Statistic
Grdaes With Type Hints	Strongly Disagree	.151	6	.200*	.980
	Disagree	.284	8	.056	.845
	Neutral	.245	16	.011	.898
	Agree	.157	57	.001	.893
	Strongly Agree	.177	25	.042	.920

Tests of Normality

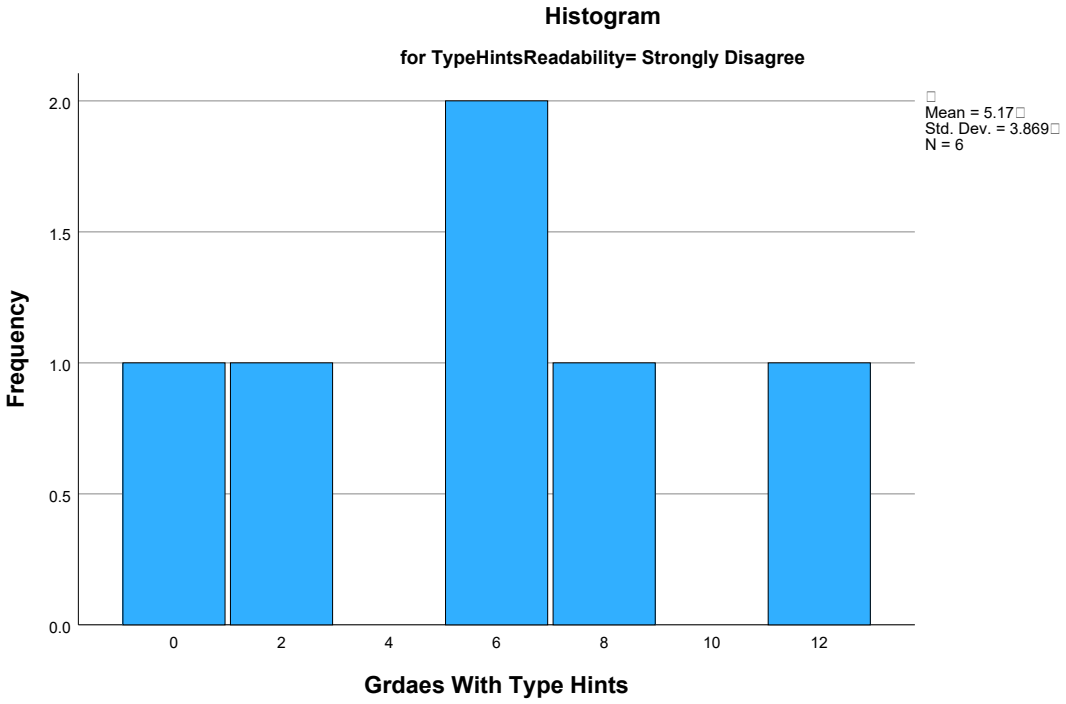
	Type Hints Affects in Readability	Shapiro-Wilk	
		df	Sig.
Grdaes With Type Hints	Strongly Disagree	6	.952
	Disagree	8	.086
	Neutral	16	.075
	Agree	57	<.001
	Strongly Agree	25	.051

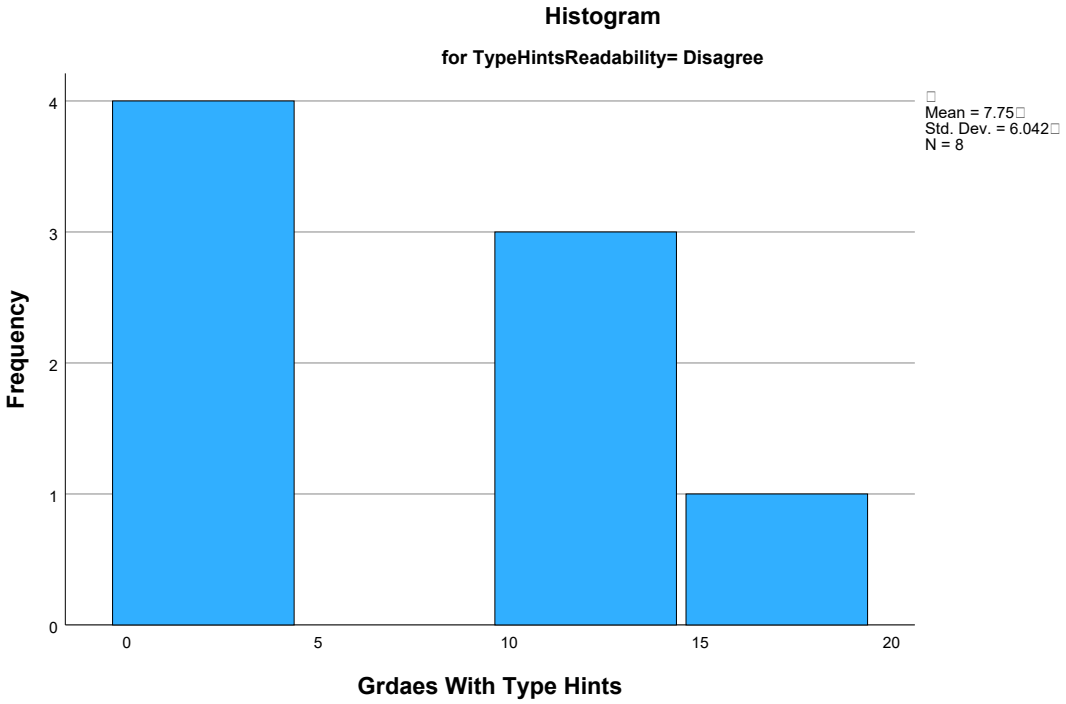
*. This is a lower bound of the true significance.

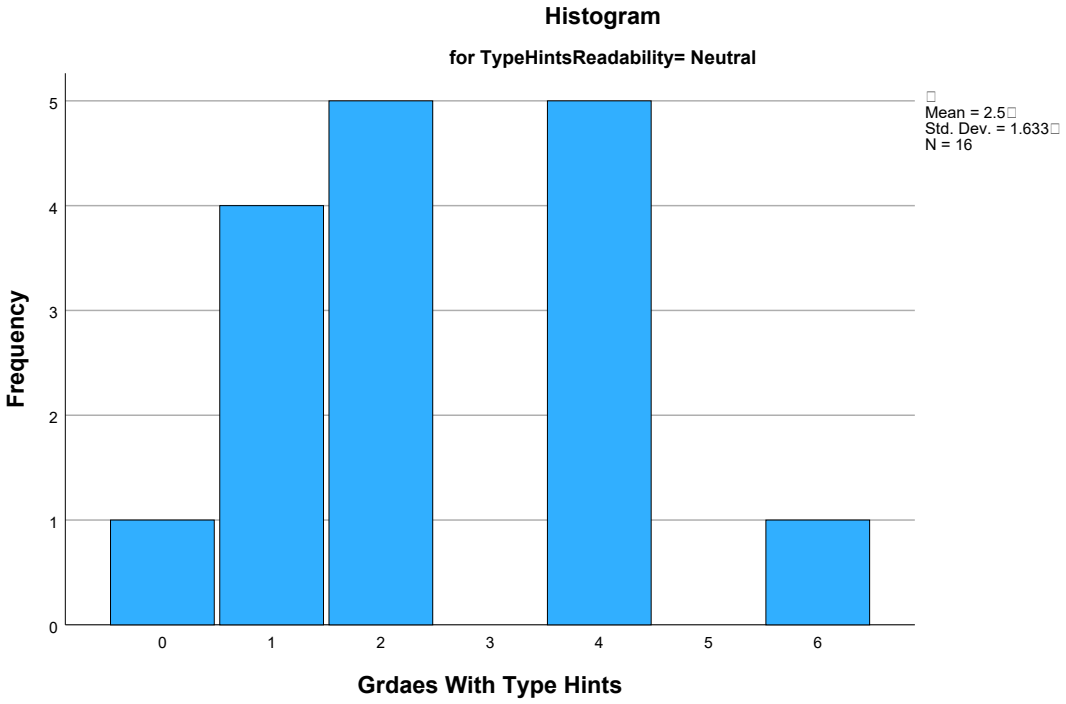
a. Lilliefors Significance Correction

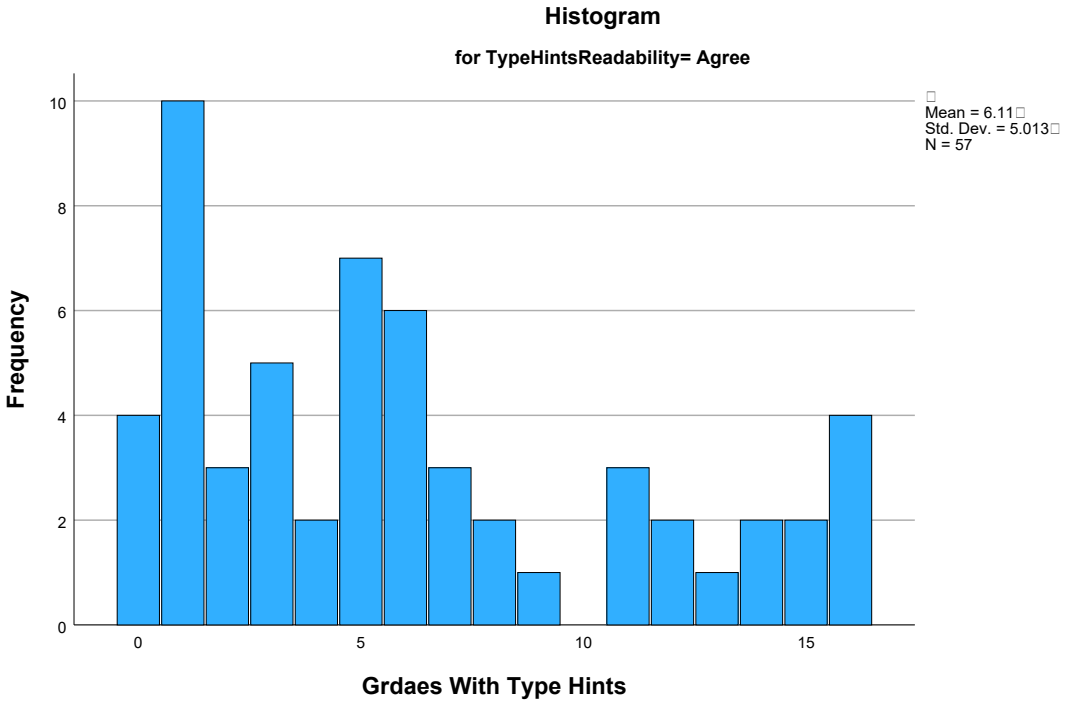
Grdaes With Type Hints

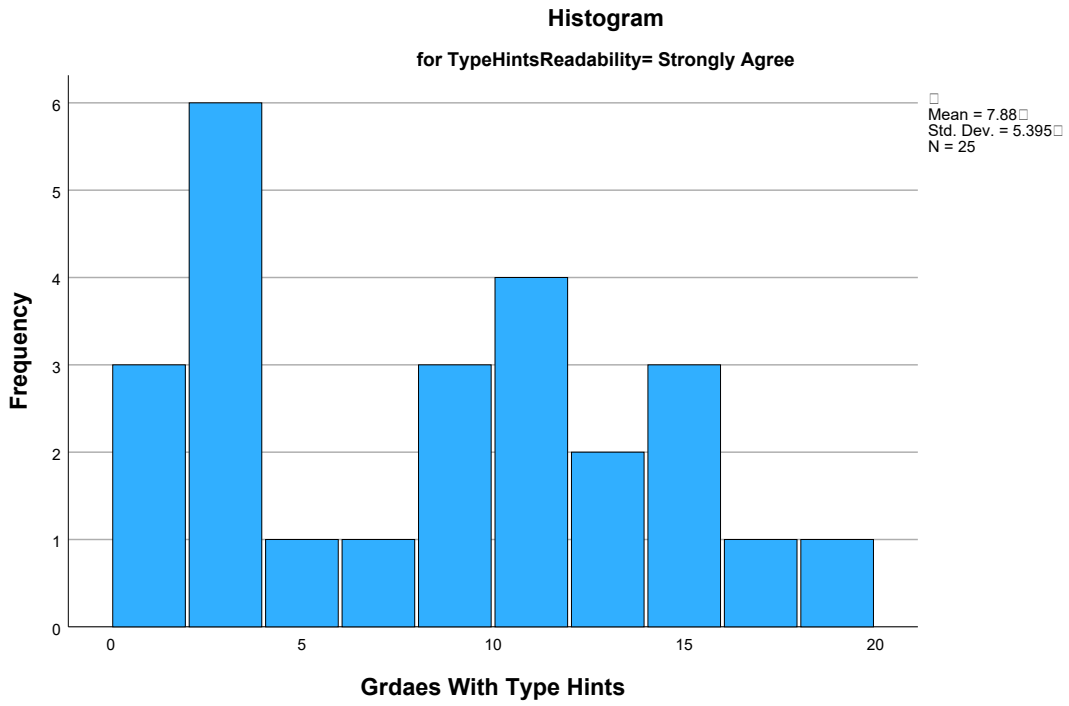
Histograms


Histogram
for TypeHintsReadability= Strongly Disagree
Mean = 5.17
Std. Dev. = 3.869
N = 6
Frequency
2.0
1.5
1.0
0.5
0.0
0
2
4
6
8
10
12
Grdaes With Type Hints

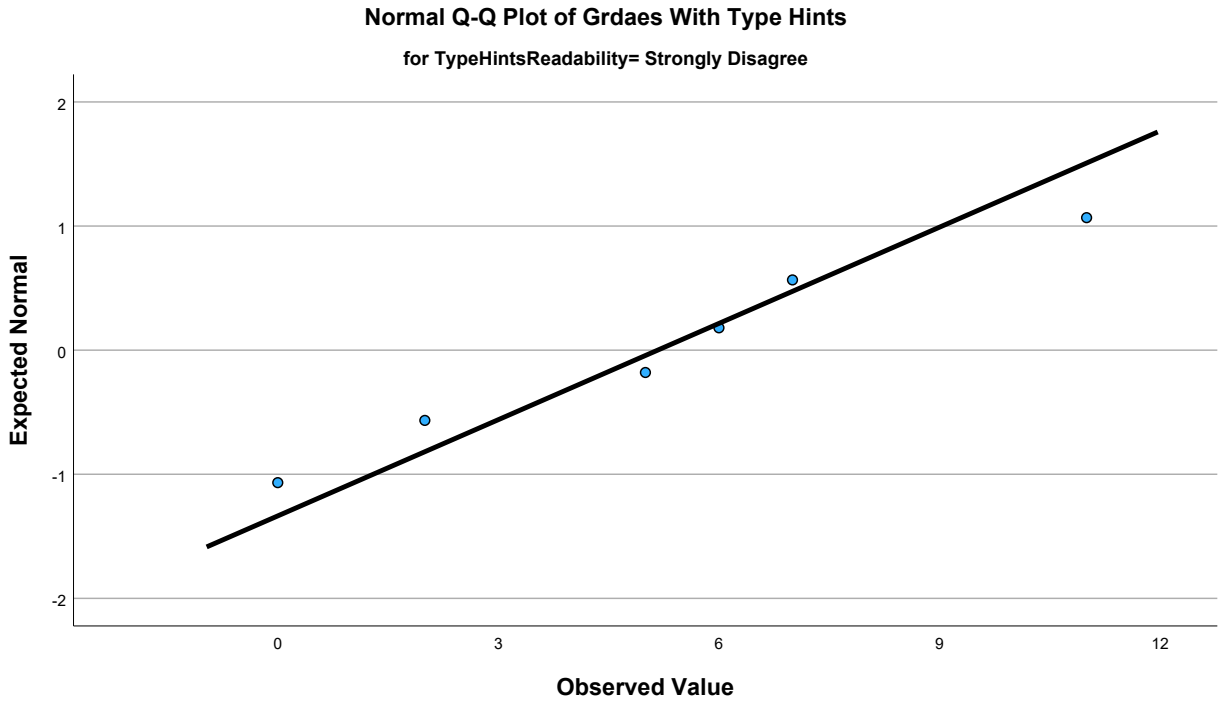

Histogram
for TypeHintsReadability= Disagree
Mean = 7.75
Std. Dev. = 6.042
N = 8
Frequency
4
3
2
1
0
0
5
10
15
20
Grdaes With Type Hints

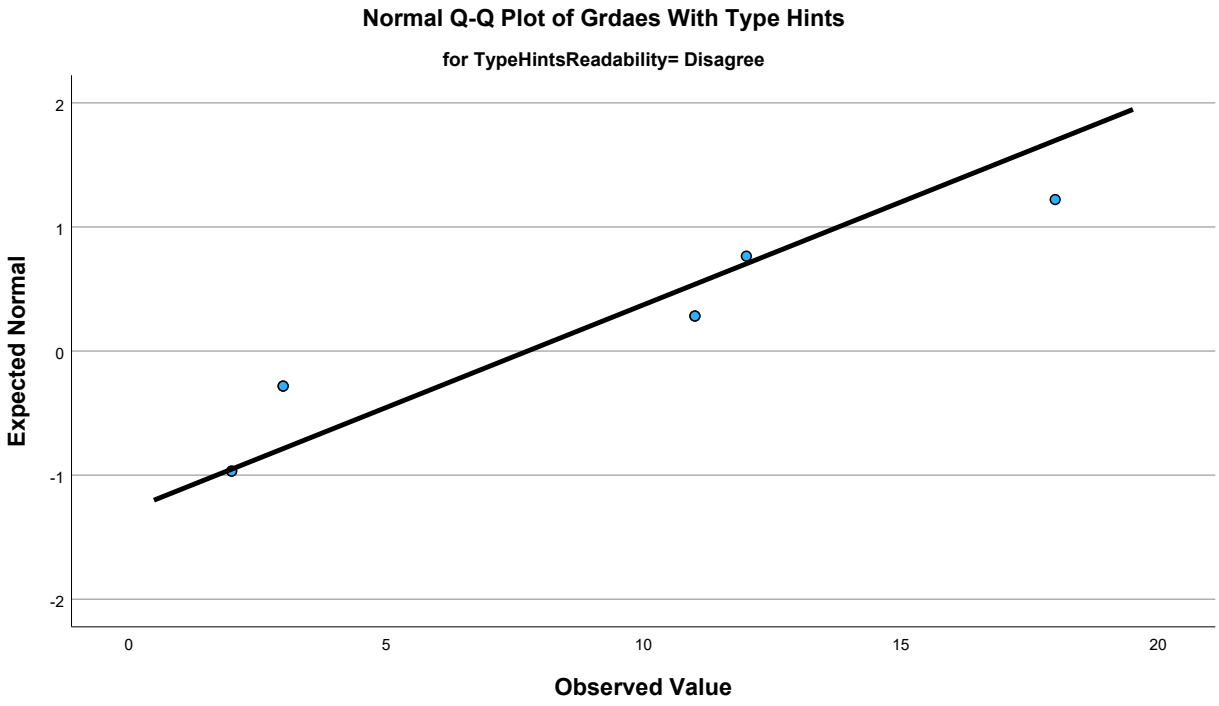

Histogram
for TypeHintsReadability= Neutral
Mean = 2.5
Std. Dev. = 1.633
N = 16
Frequency
0
1
2
3
4
5
6
Grdaes With Type Hints

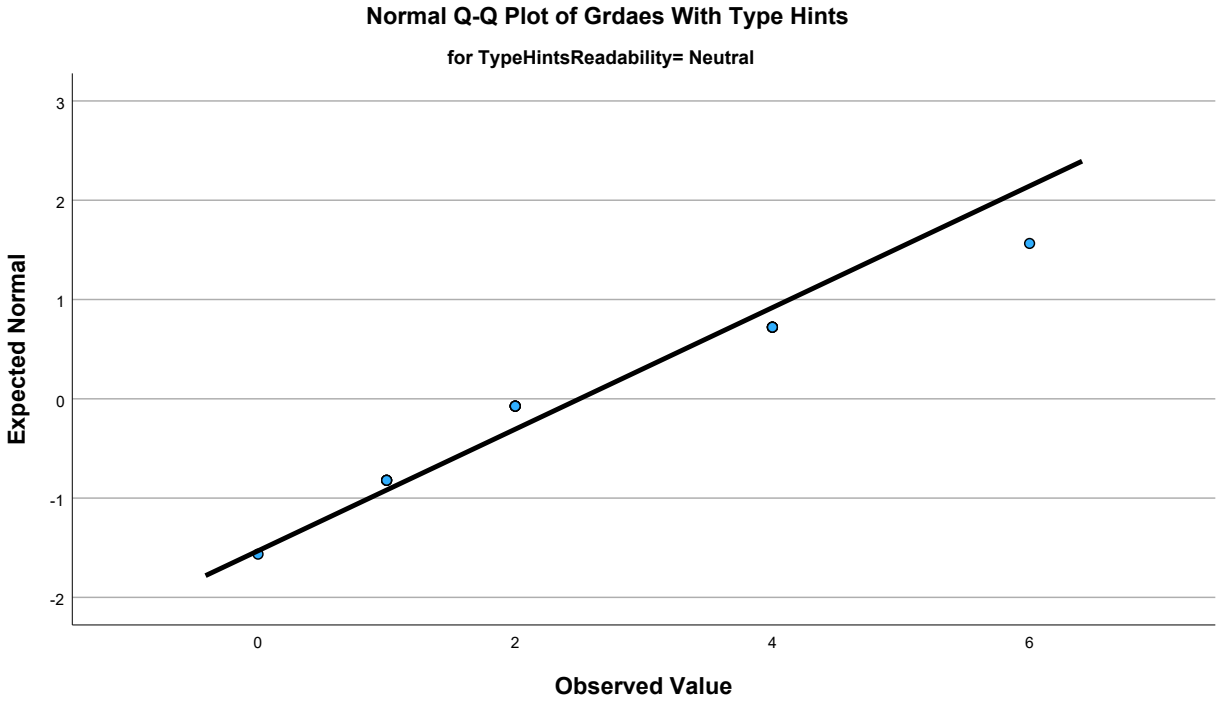

Histogram
for TypeHintsReadability= Agree
Mean = 6.11
Std. Dev. = 5.013
N = 57
Frequency
0
2
4
6
8
10
0
5
10
15
Grdaes With Type Hints

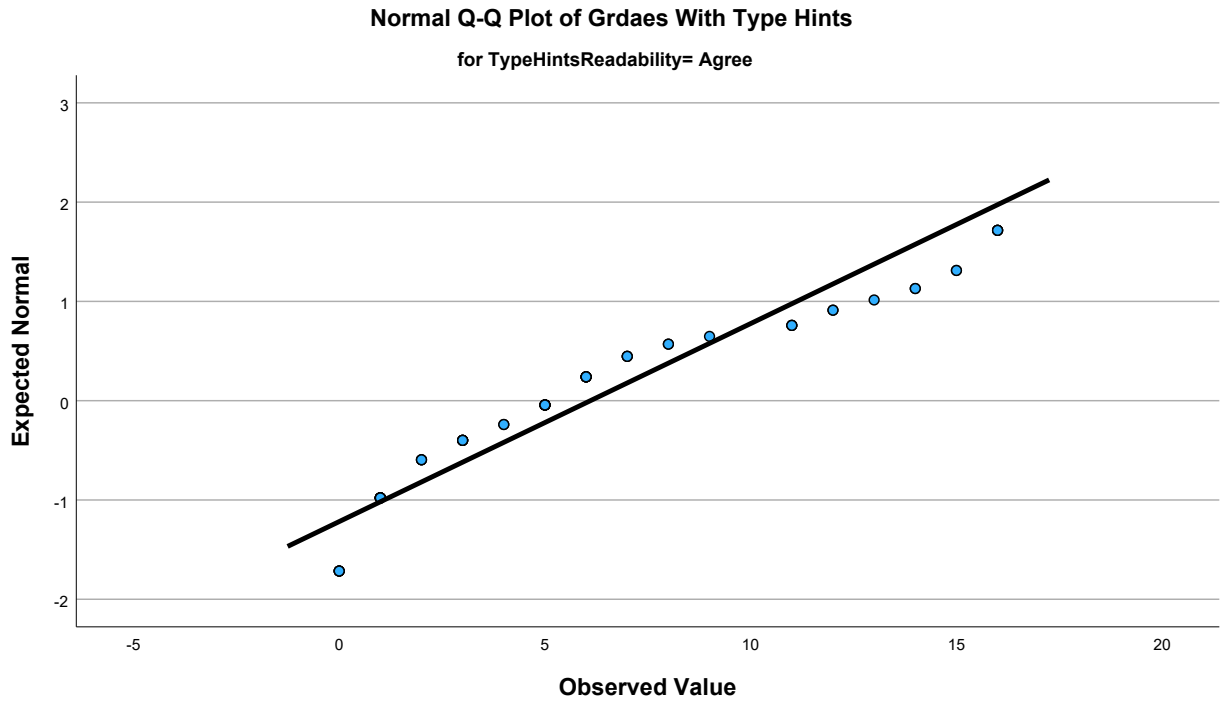


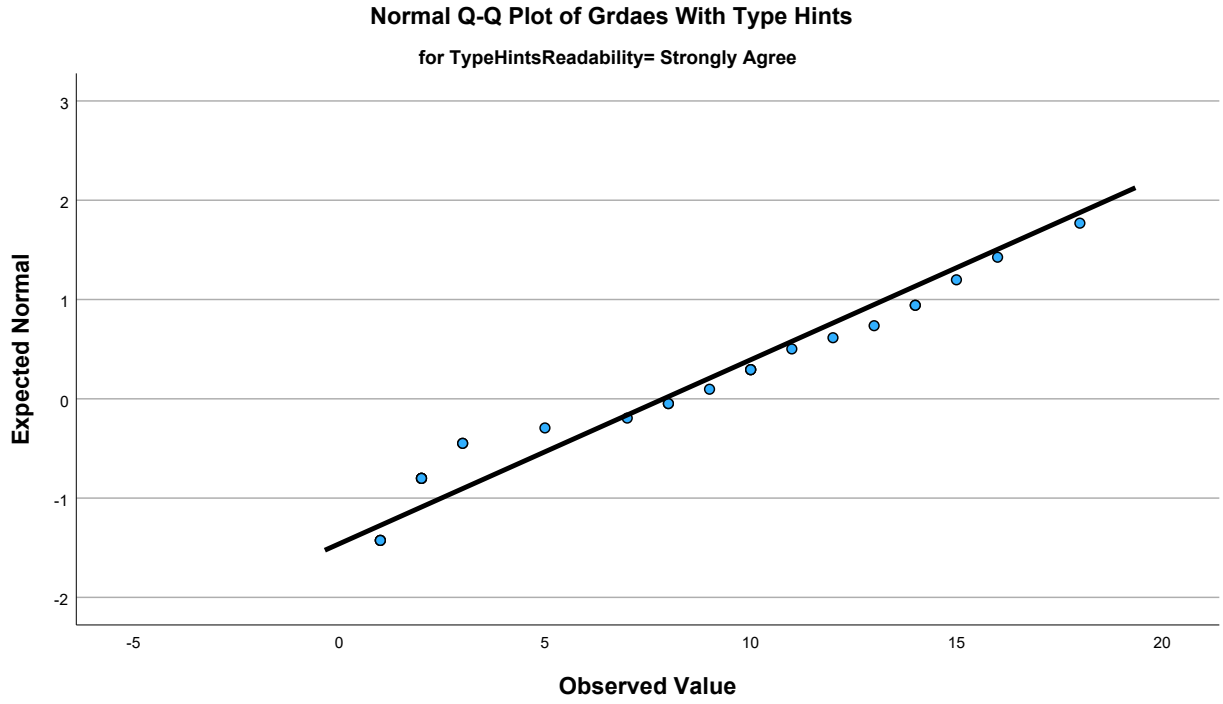
Normal Q-Q Plots



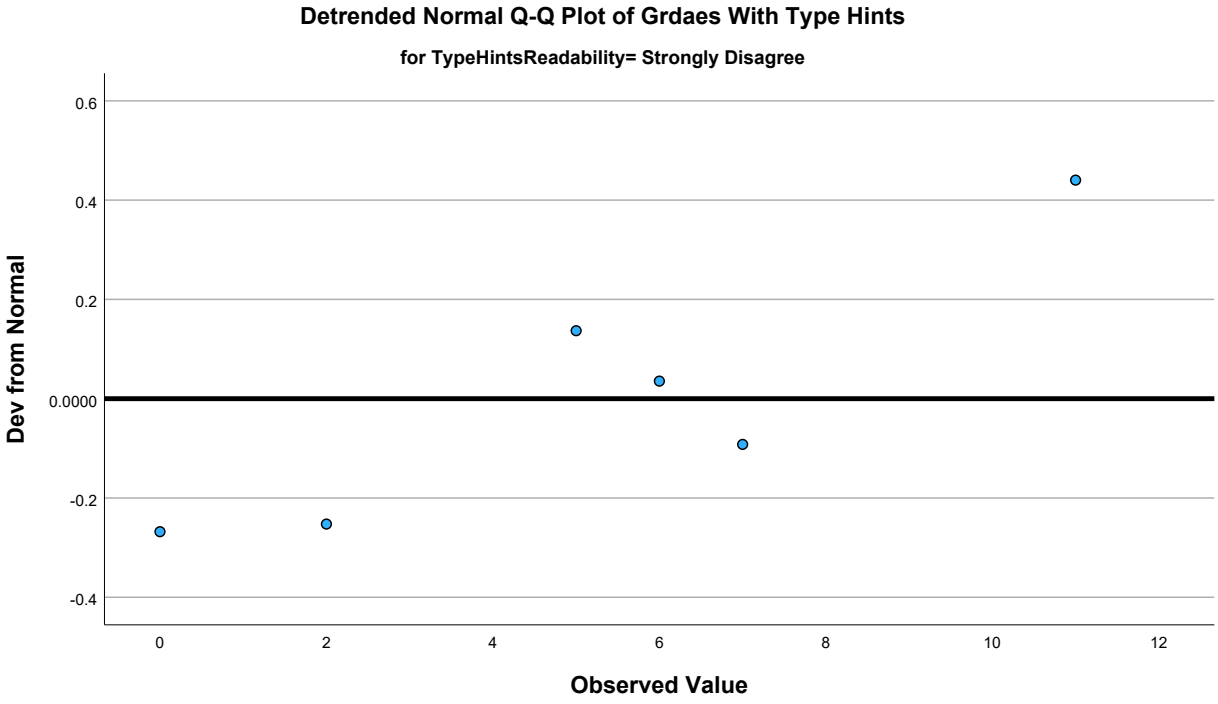

Normal Q-Q Plot of Grdaes With Type Hints
for TypeHintsReadability= Disagree
Expected Normal
2
1
0
-1
-2
0
5
10
15
20
Observed Value

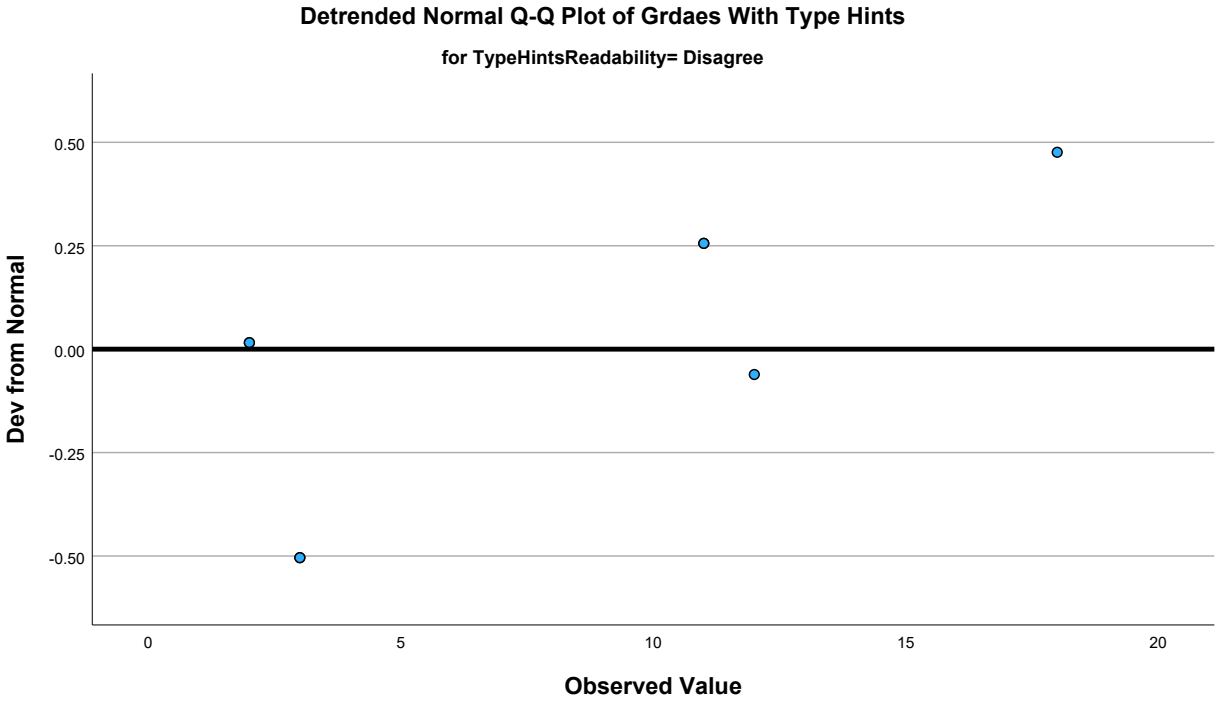

Normal Q-Q Plot of Grdaes With Type Hints
for TypeHintsReadability= Neutral
Expected Normal
3
2
1
0
-1
-2
0
2
4
6
Observed Value

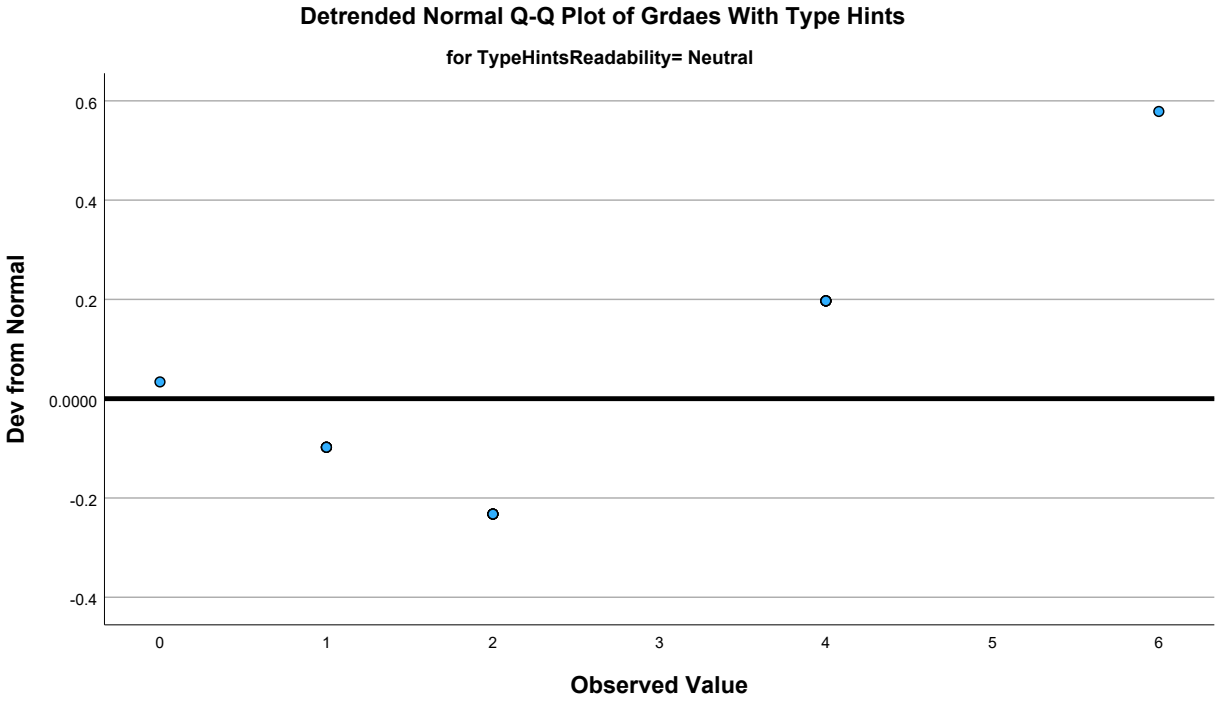


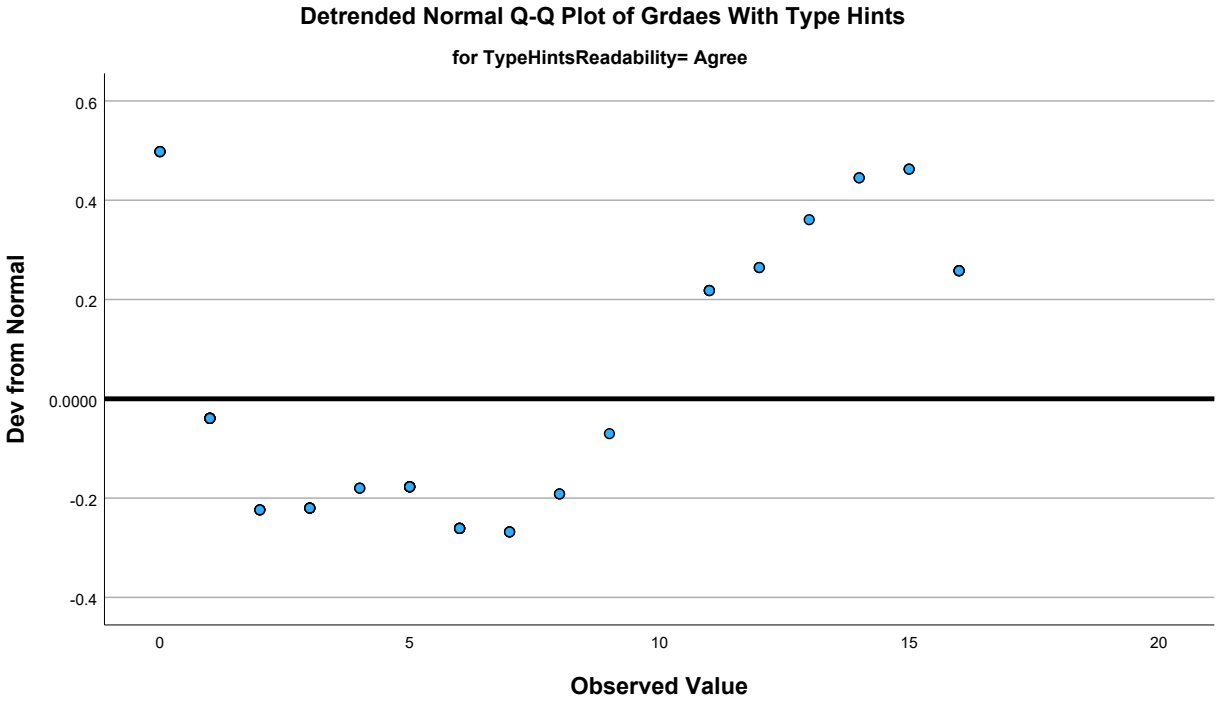


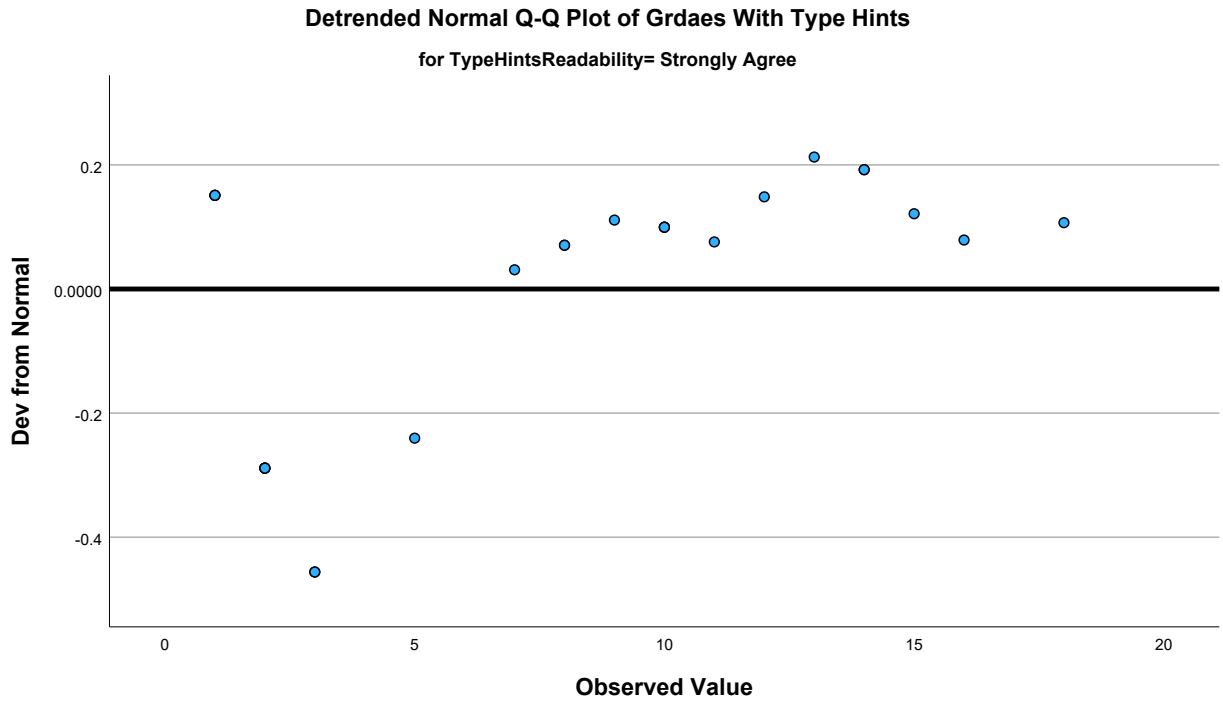
Detrended Normal Q-Q Plots


Detrended Normal Q-Q Plot of Grdaes With Type Hints
for TypeHintsReadability= Strongly Disagree
Dev from Normal
0.6
0.4
0.2
0.0000
-0.2
-0.4
0
2
4
6
8
10
12
Observed Value

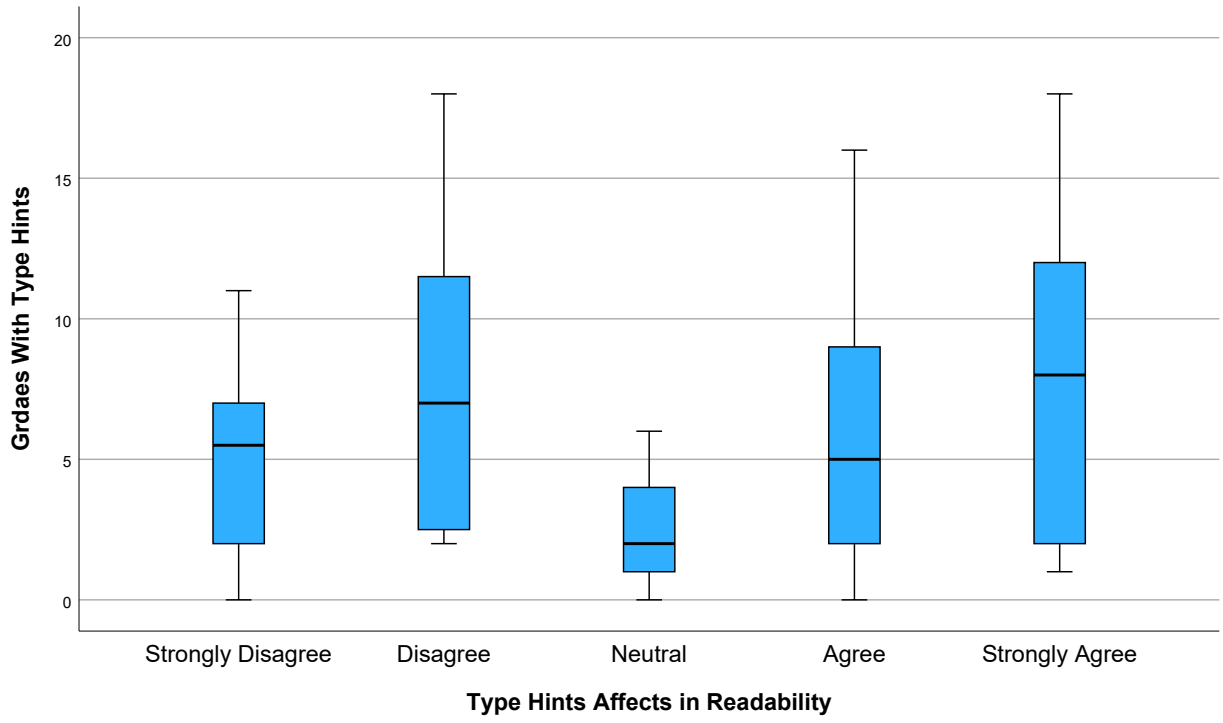

Detrended Normal Q-Q Plot of Grdaes With Type Hints
for TypeHintsReadability= Disagree
Dev from Normal
0.50
0.25
0.00
-0.25
-0.50
0
5
10
15
20
Observed Value


Detrended Normal Q-Q Plot of Grdaes With Type Hints
for TypeHintsReadability= Neutral
Dev from Normal
0.6
0.4
0.2
0.0000
-0.2
-0.4
0
1
2
3
4
5
6
Observed Value


Detrended Normal Q-Q Plot of Grdaes With Type Hints
for TypeHintsReadability= Agree
Dev from Normal
0.6
0.4
0.2
0.0000
-0.2
-0.4
0
5
10
15
20
Observed Value


Detrended Normal Q-Q Plot of Grdaes With Type Hints
for TypeHintsReadability= Strongly Agree
Dev from Normal
0.2
0.0000
-0.2
-0.4
0
5
10
15
20
Observed Value

Boxplots


Grdaes With Type Hints
20
15
10
5
0
Strongly Disagree
Disagree
Neutral
Agree
Strongly Agree
Type Hints Affects in Readability