

## Level of Experience in Dynamically-typed Languages

### Case Processing Summary

Level of Experience in Dynamically-typed Languages		Cases			
		Valid		Missing	
		N	Percent	N	Percent
Grdaes With Type Hints	Beginner	56	100.0%	0	0.0%
	Intermediate	33	100.0%	0	0.0%
	Advanced	18	100.0%	0	0.0%
	Proficient	5	100.0%	0	0.0%

### Case Processing Summary

Level of Experience in Dynamically-typed Languages		Cases	
		Total	
		N	Percent
Grdaes With Type Hints	Beginner	56	100.0%
	Intermediate	33	100.0%
	Advanced	18	100.0%
	Proficient	5	100.0%

### Descriptives

Level of Experience in Dynamically-typed Languages			Statistic
Grdaes With Type Hints	Beginner	Mean	3.73
		95% Confidence Interval for Mean	Lower Bound
			Upper Bound
		5% Trimmed Mean	3.52
		Median	3.00
		Variance	10.527
		Std. Deviation	3.245
		Minimum	0
		Maximum	12
		Range	12
		Interquartile Range	5
		Skewness	.991
		Kurtosis	.066
	Intermediate	Mean	7.48
		95% Confidence Interval for Mean	Lower Bound
			Upper Bound
		5% Trimmed Mean	7.34
		Median	6.00
		Variance	28.383
		Std. Deviation	5.328

## Descriptives

Level of Experience in Dynamically-typed Languages			Std. Error
Grdaes With Type Hints	Beginner	Mean	.434
		95% Confidence Interval for Mean	Lower Bound
			Upper Bound
		5% Trimmed Mean	
		Median	
		Variance	
		Std. Deviation	
		Minimum	
		Maximum	
		Range	
		Interquartile Range	
		Skewness	.319
		Kurtosis	.628
	Intermediate	Mean	.927
		95% Confidence Interval for Mean	Lower Bound
			Upper Bound
		5% Trimmed Mean	
		Median	
		Variance	
		Std. Deviation	

## Descriptives

Level of Experience in Dynamically-typed Languages			Statistic	
		Minimum	0	
		Maximum	18	
		Range	18	
		Interquartile Range	10	
		Skewness	.478	
		Kurtosis	-1.116	
	Advanced	Mean	9.67	
		95% Confidence Interval for Mean	Lower Bound	6.98
			Upper Bound	12.36
		5% Trimmed Mean	9.69	
		Median	11.00	
		Variance	29.294	
		Std. Deviation	5.412	
		Minimum	1	
		Maximum	18	
		Range	17	
	Interquartile Range	10		
	Skewness	-.358		
	Kurtosis	-1.097		
	Proficient	Mean	9.60	
		95% Confidence Interval for Mean	Lower Bound	2.33
Upper Bound			16.87	
5% Trimmed Mean		9.67		
Median		8.00		
Variance		34.300		
Std. Deviation		5.857		
Minimum		2		
Maximum		16		
Range		14		
Interquartile Range		11		
Skewness		-.085		
Kurtosis		-1.714		

## Descriptives

Level of Experience in Dynamically-typed Languages			Std. Error
	Advanced	Minimum	
		Maximum	
		Range	
		Interquartile Range	
		Skewness	.409
		Kurtosis	.798
		Mean	1.276
		95% Confidence Interval for Mean	Lower Bound
			Upper Bound
		5% Trimmed Mean	
		Median	
		Variance	
		Std. Deviation	
		Minimum	
		Maximum	
	Proficient	Range	
		Interquartile Range	
		Skewness	.536
		Kurtosis	1.038
		Mean	2.619
		95% Confidence Interval for Mean	Lower Bound
			Upper Bound
		5% Trimmed Mean	
		Median	
		Variance	
		Std. Deviation	
		Minimum	
		Maximum	
		Range	
		Interquartile Range	
		Skewness	.913
		Kurtosis	2.000

### Extreme Values<sup>d</sup>

Level of Experience in Dynamically-typed Languages				Case Number	Value
Grdaes With Type Hints	Beginner	Highest	1	96	12
			2	8	11
			3	34	11
			4	38	11
			5	57	9 <sup>a</sup>
		Lowest	1	75	0
			2	56	0
			3	46	0
			4	45	0
			5	14	0
	Intermediate	Highest	1	30	18
			2	3	16
			3	31	16
			4	33	16
			5	67	14 <sup>b</sup>
		Lowest	1	29	0
			2	112	1
			3	22	1
			4	87	2
			5	79	2 <sup>c</sup>
	Advanced	Highest	1	26	18
			2	49	16
			3	5	15
			4	80	15
			5	53	14 <sup>b</sup>
		Lowest	1	42	1
			2	1	1
			3	23	2
			4	99	4
			5	90	4
	Proficient	Highest	1	4	16
			2	16	15
		Lowest	1	64	2
			2	20	7

a. Only a partial list of cases with the value 9 are shown in the table of upper extremes.

b. Only a partial list of cases with the value 14 are shown in the table of upper extremes.

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

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

### Tests of Normality

		Kolmogorov-Smirnov <sup>a</sup>			Shapiro-...
Level of Experience in Dynamically-typed Languages		Statistic	df	Sig.	Statistic
Grdaes With Type Hints	Beginner	.196	56	<.001	.879
	Intermediate	.186	33	.005	.908
	Advanced	.191	18	.081	.920
	Proficient	.222	5	.200*	.920

### Tests of Normality

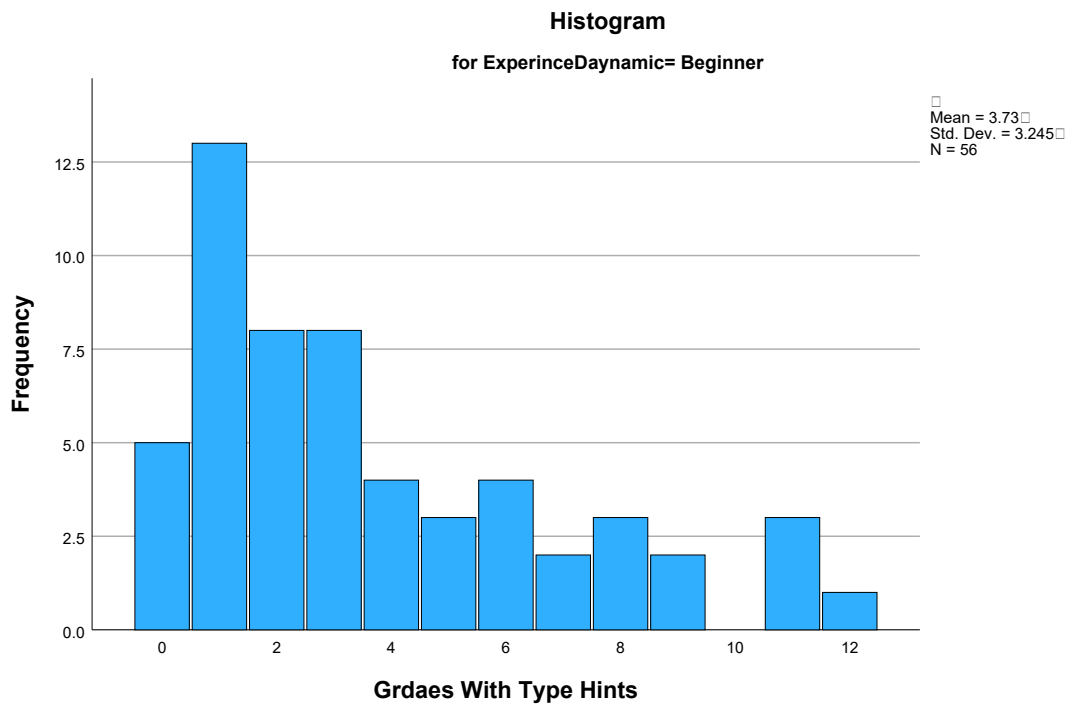
Level of Experience in Dynamically-typed Languages		Shapiro-Wilk	
		df	Sig.
Grdaes With Type Hints	Beginner	56	<.001
	Intermediate	33	.009
	Advanced	18	.132
	Proficient	5	.531

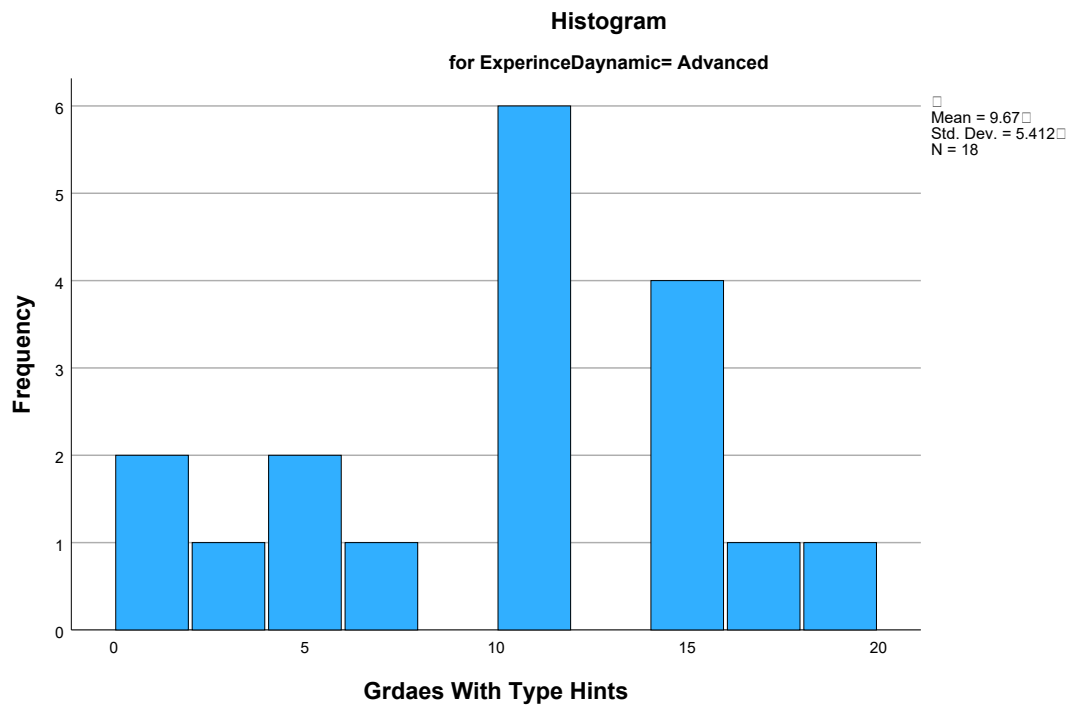
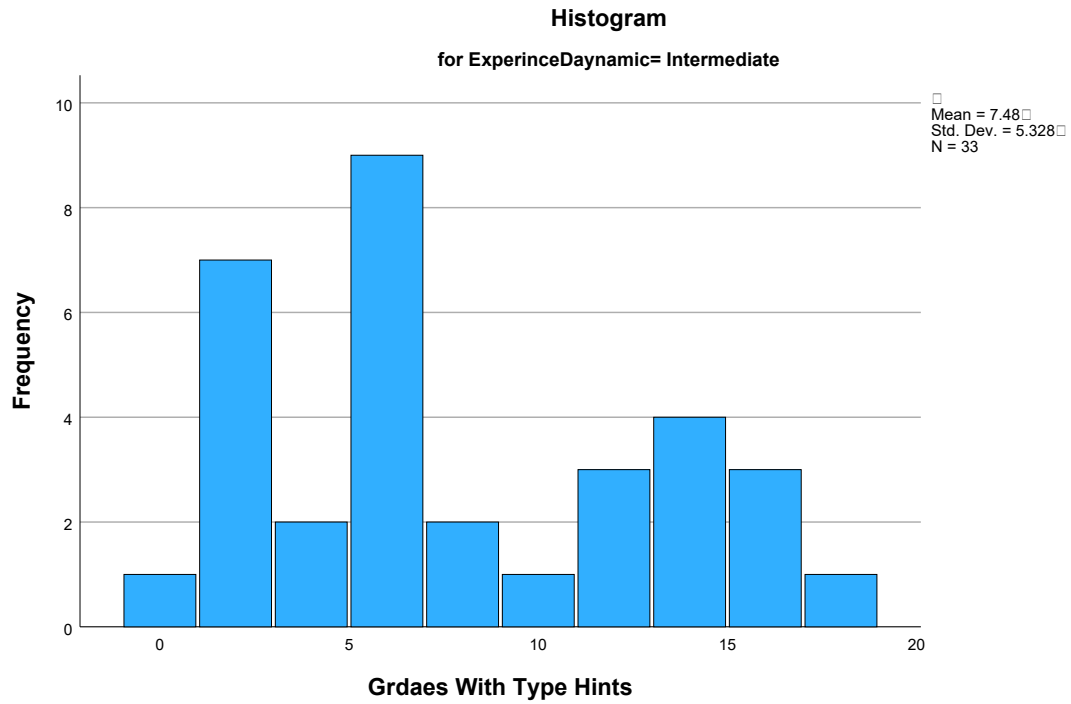
\*. This is a lower bound of the true significance.

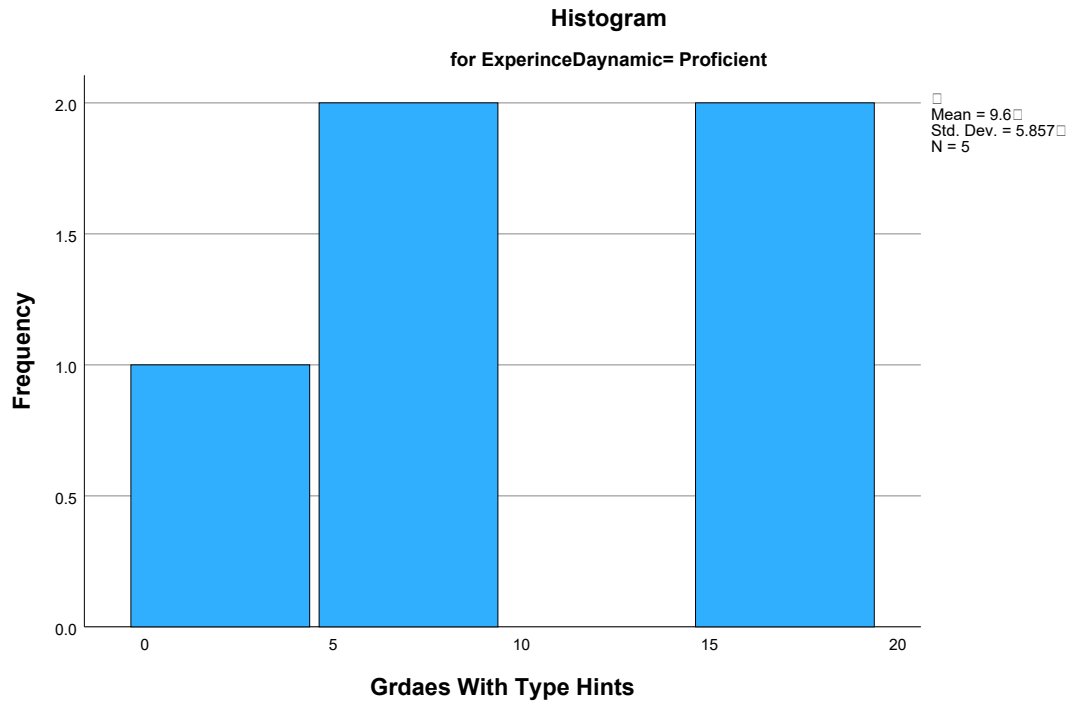
a. Lilliefors Significance Correction

## Grdaes With Type Hints

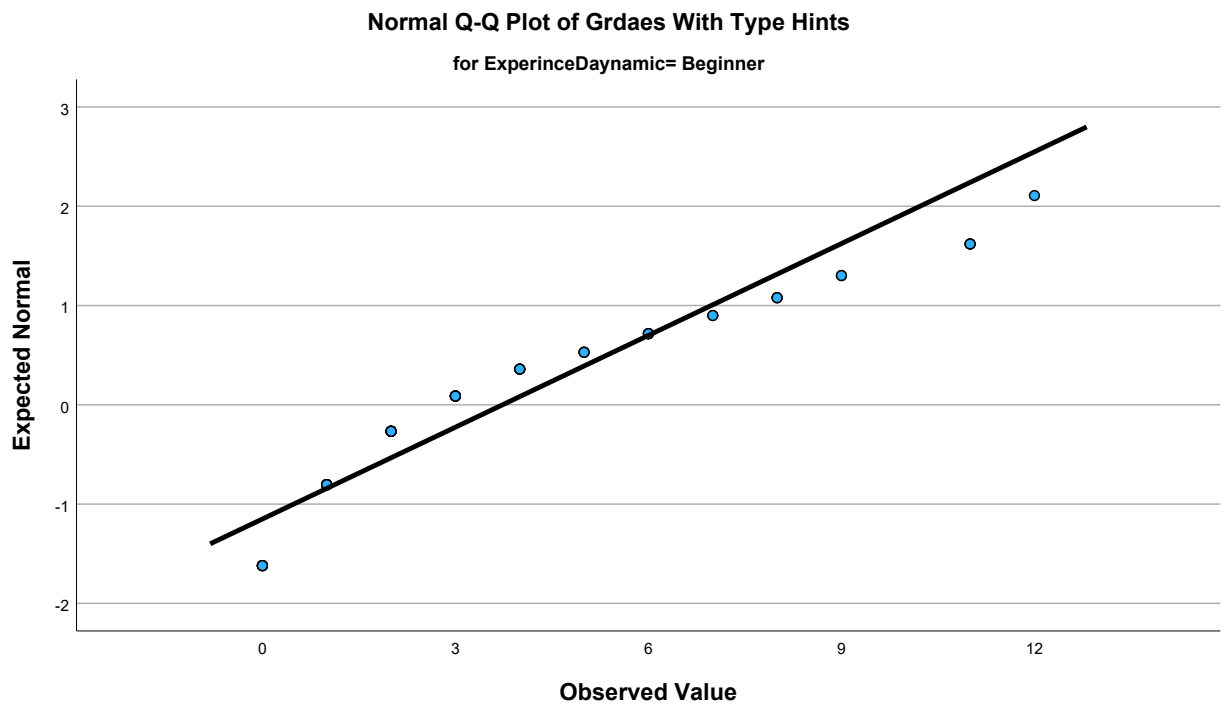
### Histograms



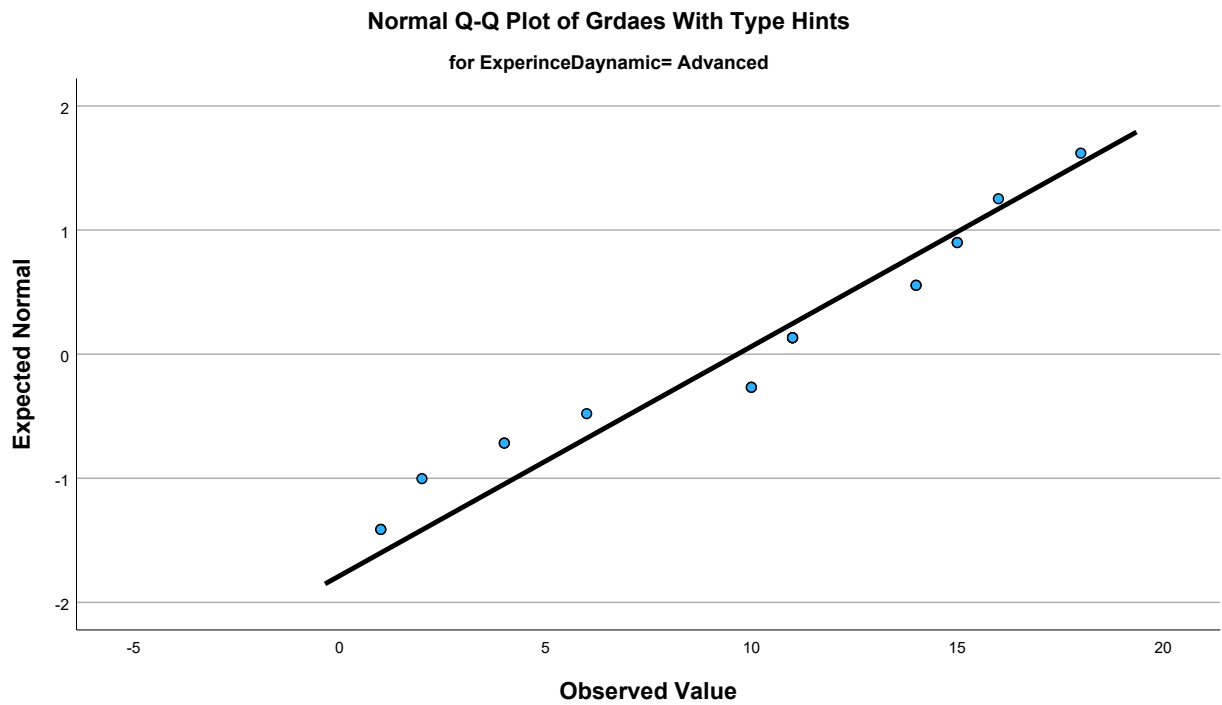
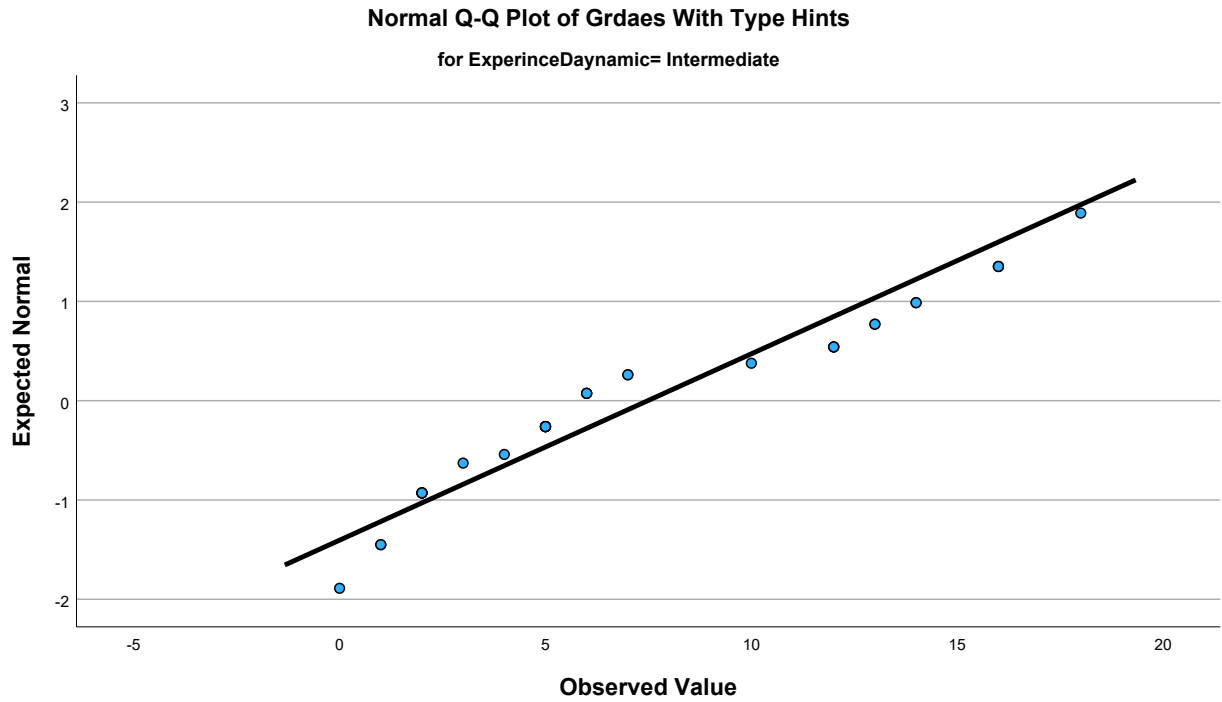


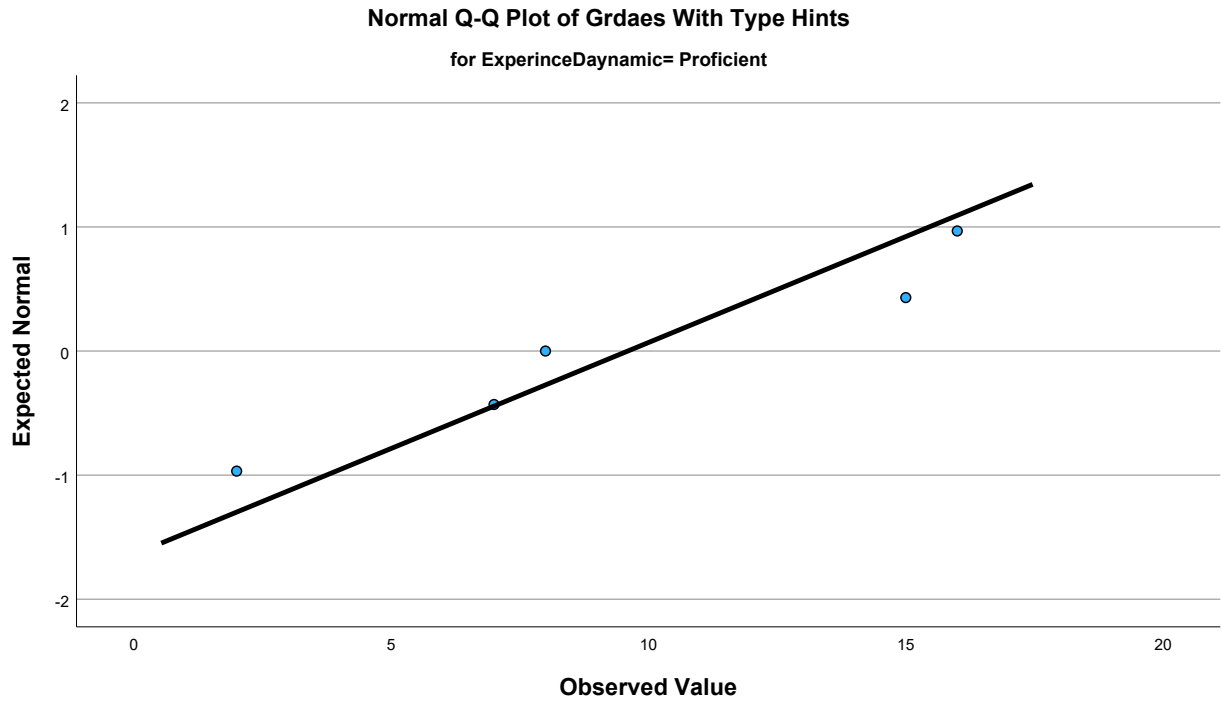


## Normal Q-Q Plots

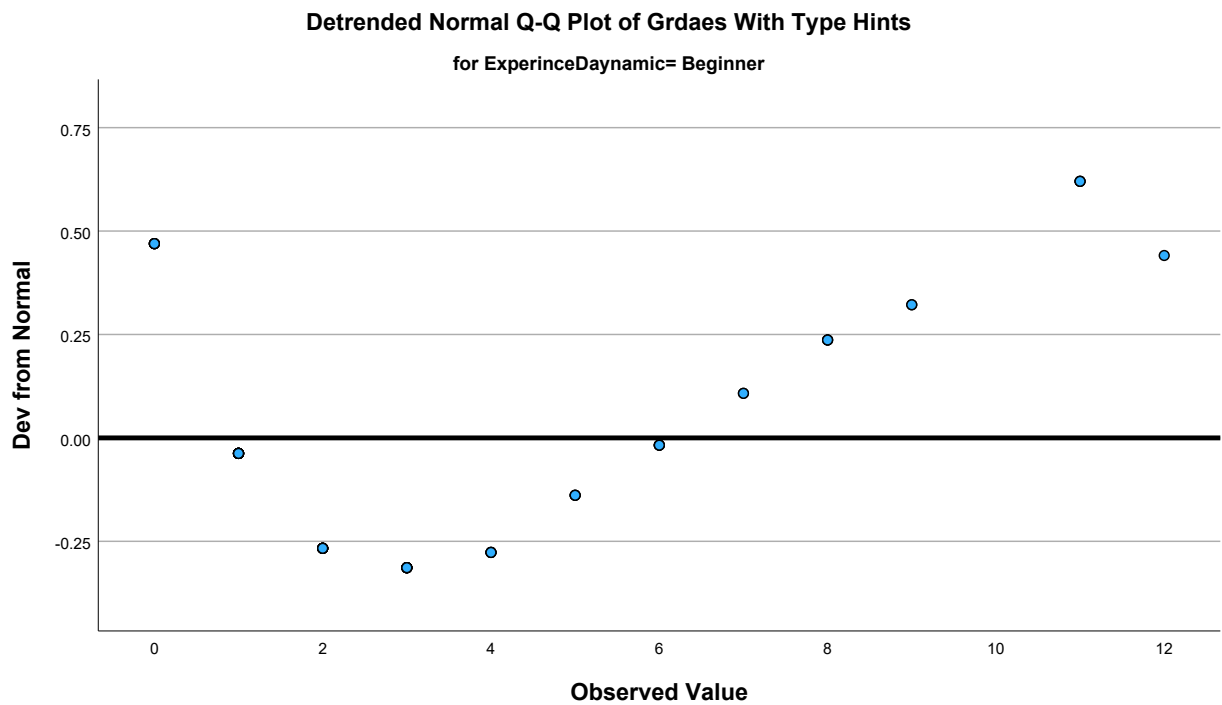


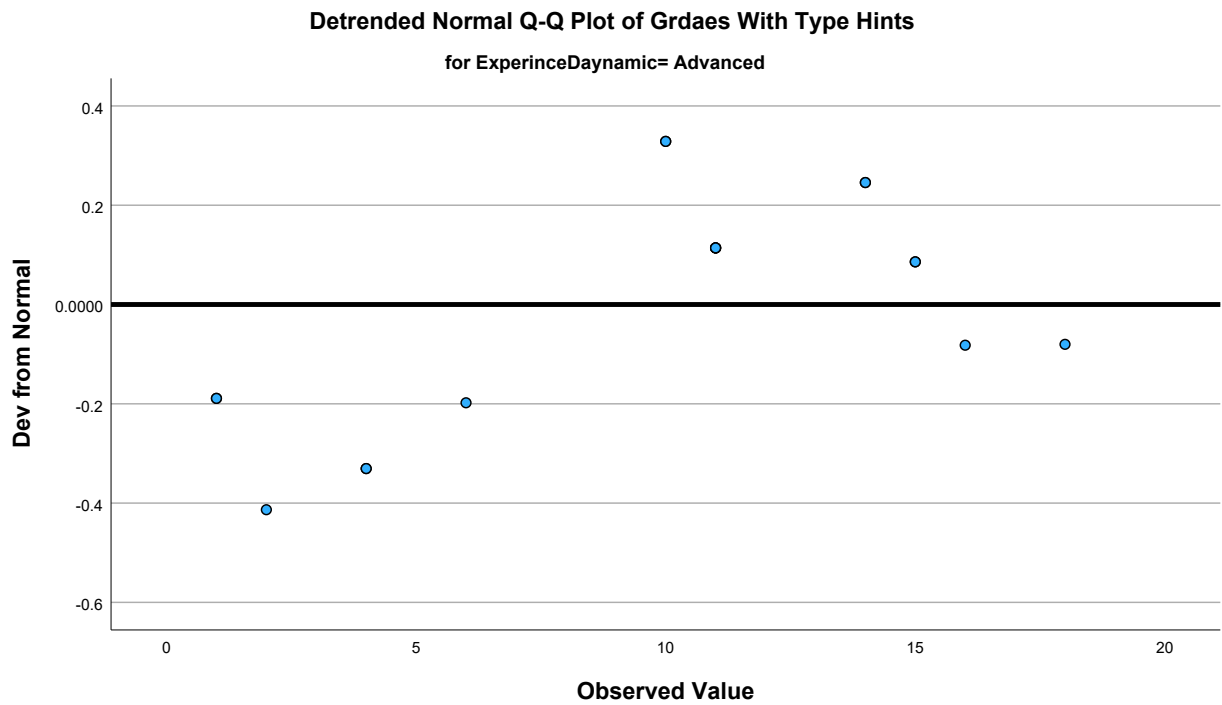
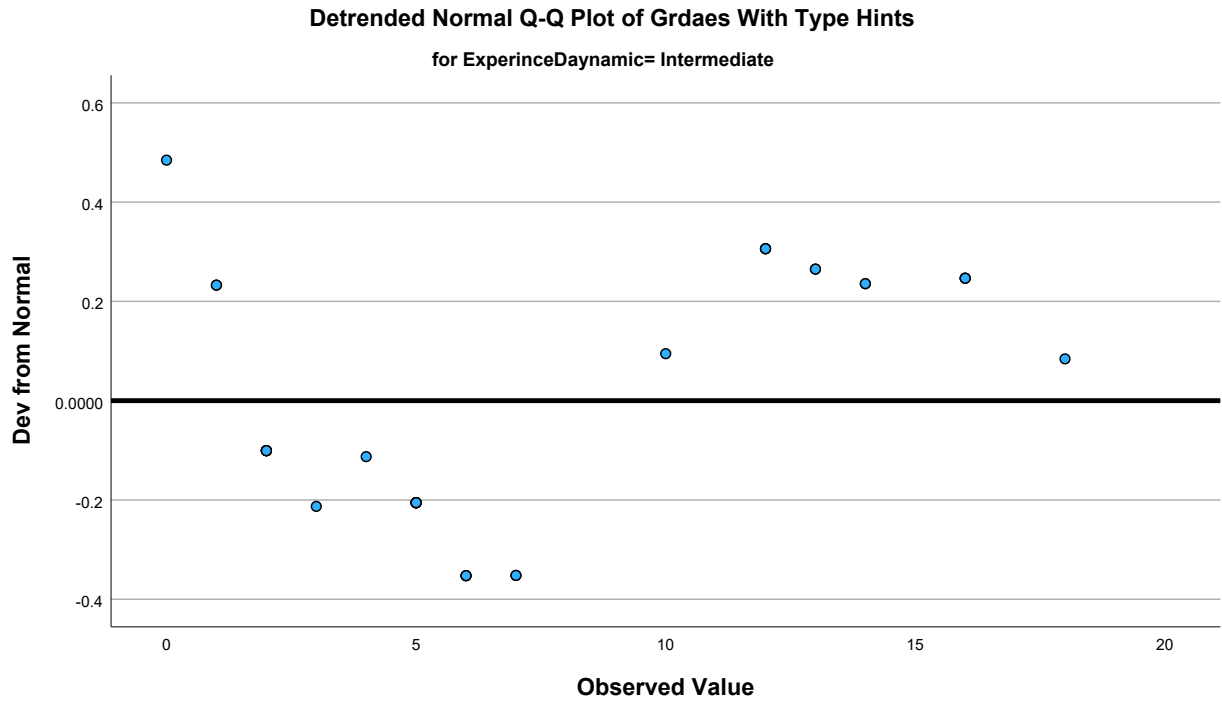


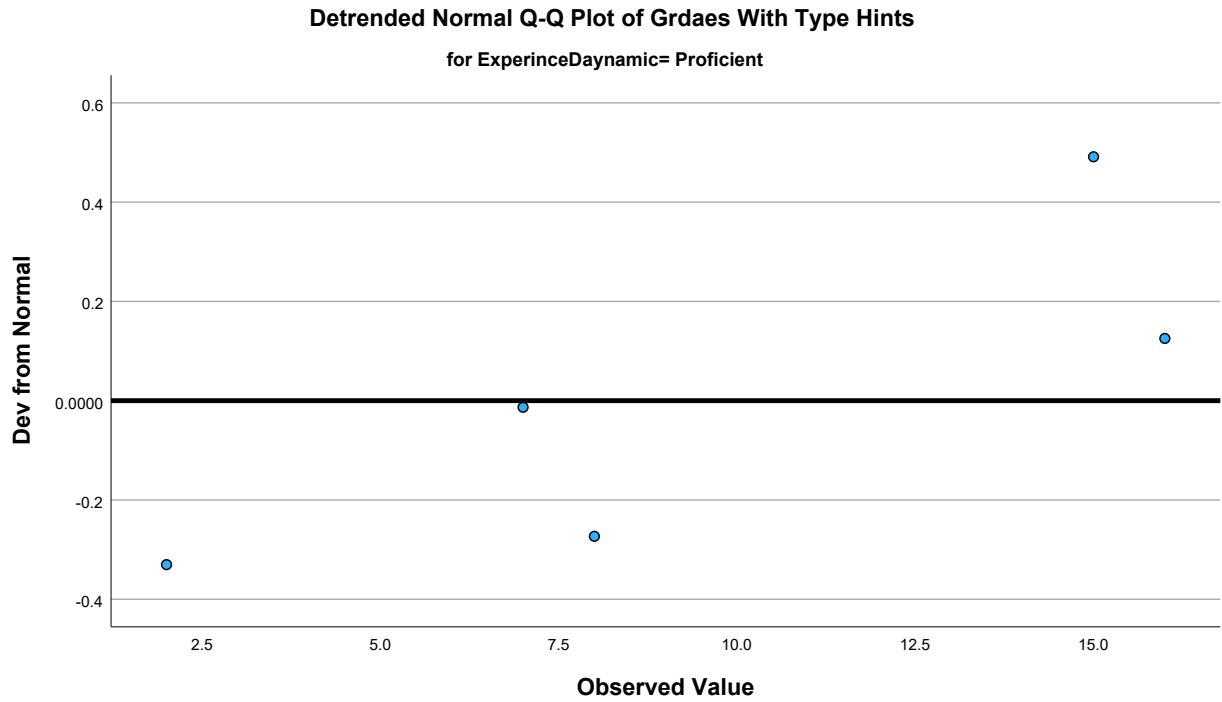




### Detrended Normal Q-Q Plots







### Boxplots

