## Level of Experience in Statically-typed Languages

# **Case Processing Summary**

		Cases			
	Level of Experience in	Valid		Missing	
	Statically-typed Languages	N	Percent	N	Percent
Grdaes With Type Hints	Beginner	8	100.0%	0	0.0%
	Intermediate	34	100.0%	0	0.0%
	Advanced	46	100.0%	0	0.0%
	Proficent	24	100.0%	0	0.0%

## **Case Processing Summary**

		Cases		
	Level of Experience in	Total		
	Statically-typed Languages	N	Percent	
Grdaes With Type Hints	Beginner	8	100.0%	
	Intermediate	34	100.0%	
	Advanced	46	100.0%	
	Proficent	24	100.0%	

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	Level of Experie	ence in Statically-typed Languag	jes	Statistic
Grdaes With Type Hints	Beginner	Mean		4.75
		95% Confidence Interval for	Lower Bound	1.38
		Mean	Upper Bound	8.12
		5% Trimmed Mean		4.67
		Median		4.00
		Variance		16.214
		Std. Deviation		4.027
		Minimum		0
		Maximum	11	
		Range		11
		Interquartile Range		8
		Skewness		.610
		Kurtosis		919
	Intermediate	Mean		3.26
		95% Confidence Interval for Mean	Lower Bound	2.33
			Upper Bound	4.20
		5% Trimmed Mean		3.08
		Median		2.00
		Variance		7.170
		Std. Deviation		2.678

	Level of Experie	ence in Statically-typed Languag	jes	Std. Error
Grdaes With Type Hints	Beginner	Mean	1.424	
		95% Confidence Interval for	Lower Bound	
		Mean	Upper Bound	
		5% Trimmed Mean		
		Median		
		Variance		
		Std. Deviation		
		Minimum		
		Maximum		
		Range		
		Interquartile Range		
		Skewness		.752
		Kurtosis		1.481
	Intermediate	Mean		.459
		95% Confidence Interval for	Lower Bound	
		Mean	Upper Bound	
		5% Trimmed Mean		
		Median		
		Variance		
		Std. Deviation		

	Level of Experi	ence in Statically-typed Languag	ges	Statistic
		Minimum		0
		Maximum		11
		Range		11
		Interquartile Range		4
		Skewness		.997
		Kurtosis		.475
	Advanced	Mean		7.50
		95% Confidence Interval for	Lower Bound	5.86
		Mean	Upper Bound	9.14
		5% Trimmed Mean		7.44
		Median		6.00
		Variance		30.656
		Std. Deviation		5.537
		Minimum		0
		Maximum		16
		Range		16
		Interquartile Range		11
		Skewness	.216	
		Kurtosis		-1.498
	Proficent	Mean		7.67
		95% Confidence Interval for	Lower Bound	5.47
		Mean	Upper Bound	9.86
		5% Trimmed Mean		7.50
		Median		6.50
		Variance		27.101
		Std. Deviation		5.206
		Minimum		0
		Maximum		18
		Range		18
		Interquartile Range		9
		Skewness		.611
		Kurtosis		578

Level of Expe	erience in Statically-typed Languag	es	Std. Erro
	Minimum		
	Maximum		
	Range		
	Interquartile Range		
	Skewness		.403
	Kurtosis		.788
Advanced	Mean		.816
	95% Confidence Interval for	Lower Bound	
	Mean	Upper Bound	
	5% Trimmed Mean		
	Median		
	Variance		
	Std. Deviation		
	Minimum		
	Maximum		
	Range		
	Interquartile Range		
	Skewness		.350
	Kurtosis		.688
Proficent	Mean		1.063
	95% Confidence Interval for	Lower Bound	
	Mean	Upper Bound	
	5% Trimmed Mean		
	Median		
	Variance		
	Std. Deviation		
	Minimum		
	Maximum		
	Range		
	Interquartile Range		
	Skewness		.472
	Kurtosis		.918

## Extreme Values<sup>a</sup>

	Level of Experi	ence in Statica	lly-typed Languages	Case Number	Value
Grdaes With Type Hints	Beginner	Highest	_1	8	11
			2	50	10
			3	51	6
			4	100	4 <sup>b</sup>
		Lowest	1	75	0
			2	60	1
			3	52	2
			4	103	4 <sup>c</sup>
	Intermediate	Highest	1	63	11
			2	108	8
			3	37	7
			4	82	7
			5	97	7
		Lowest	1	46	0
			2	14	0
			3	112	1
		<u>4</u> 5	84	1	
			72	1 <sup>d</sup>	
	Advanced	Highest	1	3	16
			2	4	16
			3	33	16
		4	49	16	
			5	5	15 <sup>e</sup>
		Lowest	1	56	0
			2	45	0
			3	107	1
			4	105	1
			5	65	1 <sup>d</sup>
	Proficent	Highest	1	26	18
			2	30	18
			3	31	16
			4	35	13
			5	77	12 <sup>f</sup>
		Lowest	1	29	0
			2	71	2
			3	64	2
			4	94	3
			5	83	3 <sup>g</sup>

- 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 4 are shown in the table of lower 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 15 are shown in the table of upper extremes.
- f. Only a partial list of cases with the value 12 are shown in the table of upper extremes.
- g. Only a partial list of cases with the value 3 are shown in the table of lower extremes.

### **Tests of Normality**

	Level of Experience in	Kolmogorov-Smirnov <sup>a</sup>			Shapiro
	Statically-typed Languages	Statistic	df	Sig.	Statistic
Grdaes With Type Hints	Beginner	.199	8	.200*	.917
	Intermediate	.211	34	<.001	.879
	Advanced	.144	46	.018	.894
	Proficent	.134	24	.200*	.930

### **Tests of Normality**

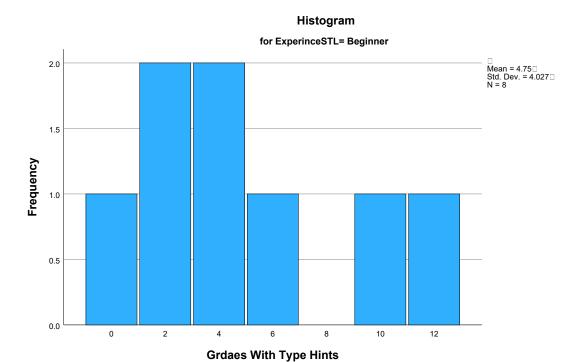
	Level of Experience in	Shapiro-Wilk		
	Statically-typed Languages	df	Sig.	
Grdaes With Type Hints	Beginner	8	.407	
	Intermediate	34	.001	
	Advanced	46	<.001	
	Proficent	24	.096	

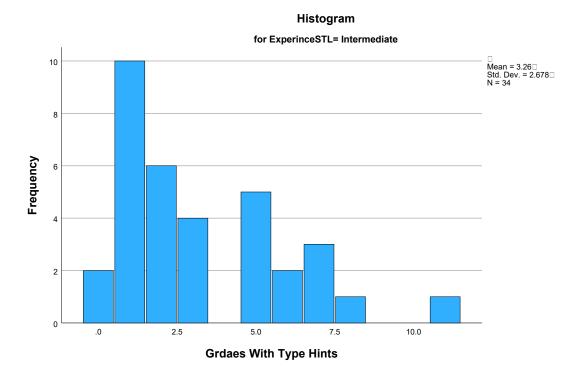
<sup>\*.</sup> This is a lower bound of the true significance.

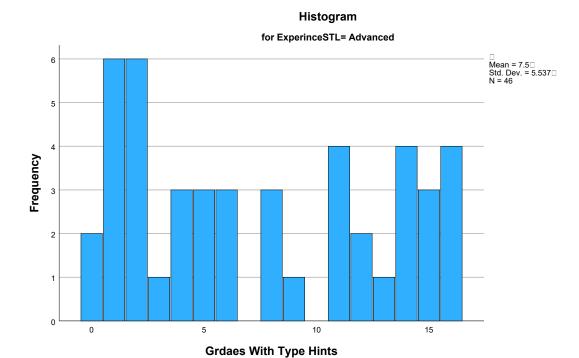
### **Grdaes With Type Hints**

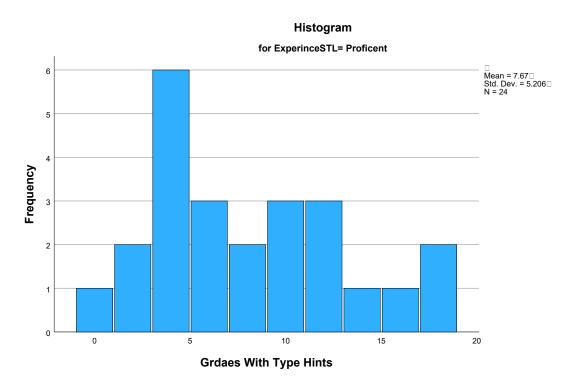
#### **Histograms**

a. Lilliefors Significance Correction





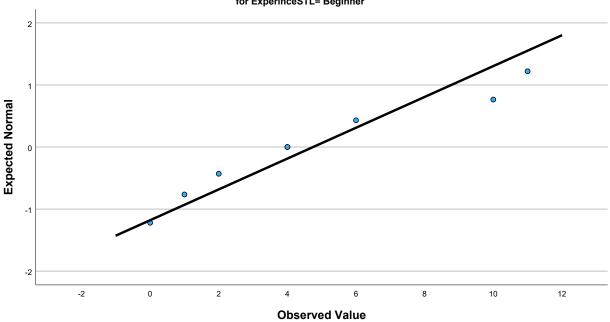




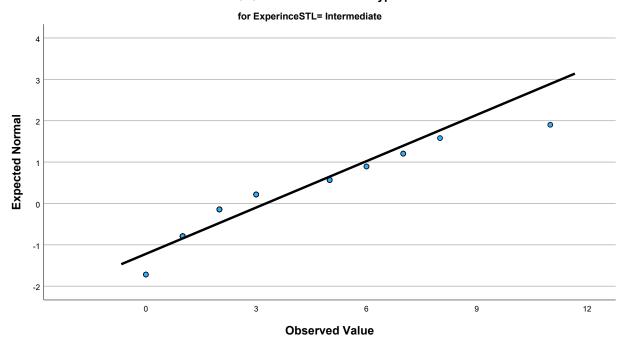
**Normal Q-Q Plots** 

### Normal Q-Q Plot of Grdaes With Type Hints

for ExperinceSTL= Beginner

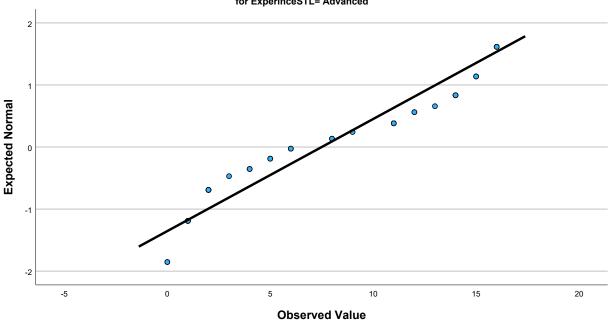


Normal Q-Q Plot of Grdaes With Type Hints



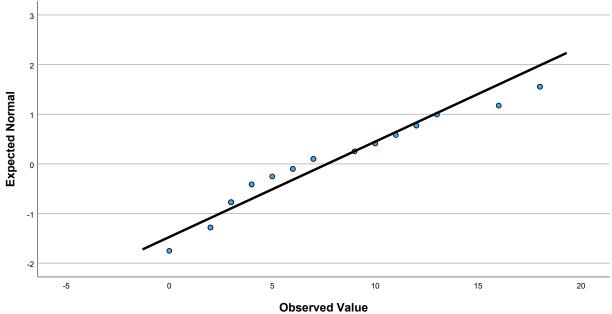
### Normal Q-Q Plot of Grdaes With Type Hints

for ExperinceSTL= Advanced



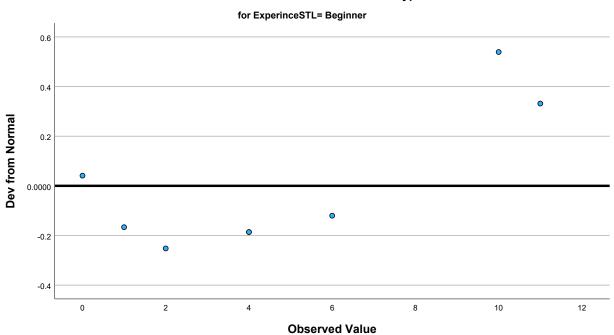
Normal Q-Q Plot of Grdaes With Type Hints



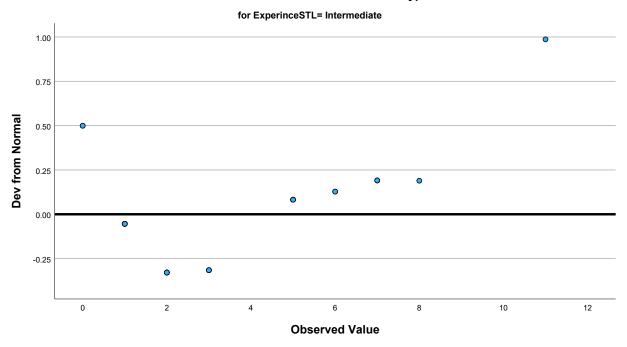


**Detrended Normal Q-Q Plots** 

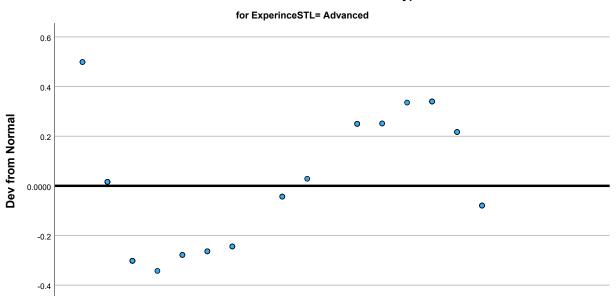
### **Detrended Normal Q-Q Plot of Grdaes With Type Hints**



### **Detrended Normal Q-Q Plot of Grdaes With Type Hints**



### **Detrended Normal Q-Q Plot of Grdaes With Type Hints**



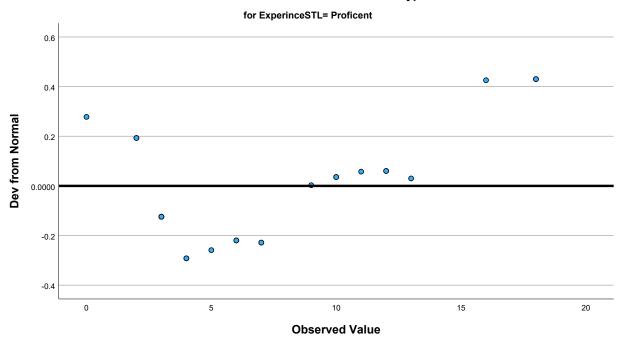
### **Detrended Normal Q-Q Plot of Grdaes With Type Hints**

5

10

**Observed Value** 

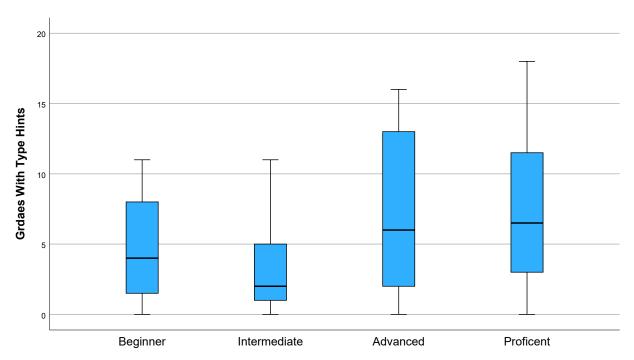
15



**Boxplots** 

0

20



Level of Experience in Statically-typed Languages