```
GET DATA
  /TYPE=XLSX
  /FILE='Z:\Desktop\lab_crowd_speech_quality.xlsx'
  /SHEET=name 'crowd_vs_lab'
  /CELLRANGE=FULL
  /READNAMES=ON
  /DATATYPEMIN PERCENTAGE=95.0
  /HIDDEN IGNORE=YES.
EXECUTE.
DATASET NAME DataSet4 WINDOW=FRONT.
DATASET ACTIVATE DataSet4.
DATASET CLOSE DataSet3.
EXAMINE VARIABLES=Quality BY Environment
  /PLOT BOXPLOT HISTOGRAM NPPLOT
  /COMPARE GROUPS
  /STATISTICS DESCRIPTIVES EXTREME
  /CINTERVAL 95
  /MISSING LISTWISE
  /NOTOTAL.
```

Explore

Environment

Case Processing Summary

		Cases					
		Valid		Missing		Total	
	Environment	N	Percent	N	Percent	N	Percent
Quality	0	213	100,0%	0	0,0%	213	100,0%
	1	192	100,0%	0	0,0%	192	100,0%

Descriptives

	Environment			Statistic	Std. Error
Quality	0	Mean		3,12	,059
		95% Confidence Interval for Mean	Lower Bound	3,00	
			Upper Bound	3,23	
		5% Trimmed Mean		3,10	
		Median		3,00	
		Variance		,736	
		Std. Deviation		,858	
		Minimum		1	
		Maximum		5	
		Range		4	
		Interquartile Range		1	
		Skewness		,043	,167
		Kurtosis		-,040	,332
	1	Mean		2,83	,060
		95% Confidence Interval for Mean	Lower Bound	2,71	
			Upper Bound	2,95	
		5% Trimmed Mean		2,86	
		Median		3,00	
		Variance		,688	
		Std. Deviation		,829	
		Minimum		1	
		Maximum		4	
		Range		3	
		Interquartile Range		1	
		Skewness		-,281	,175
		Kurtosis		-,480	,349

Extreme Values

	Environment			Case Number	Value
Quality	0	Highest	1	14	5
			2	65	5
			3	67	5
			4	92	5
			5	104	5[a]
		Lowest	1	211	1
			2	209	1
			3	208	1
			4	206	1
			5	198	1
	1	Highest	1	222	4
			2	235	4
			3	236	4
			4	247	4
			5	248	4[b]
		Lowest	1	405	1
			2	404	1
			3	395	1
			4	381	1
			5	340	1[c]

a. Only a partial list of cases with the value 5 are shown in the table of upper extremes.

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 1 are shown in the table of lower extremes.

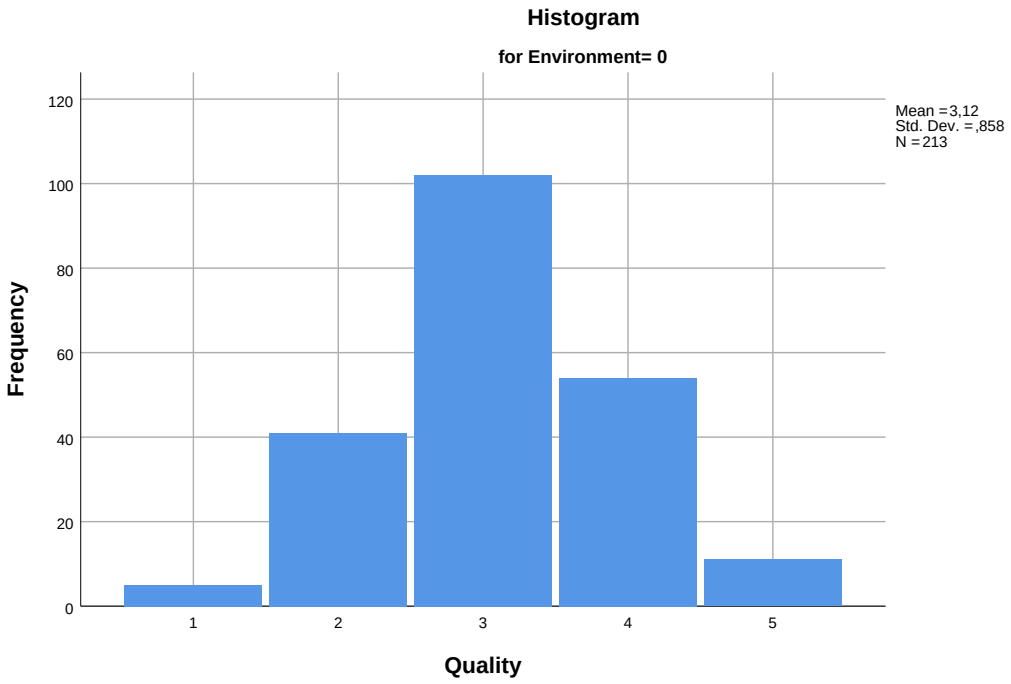
Tests of Normality

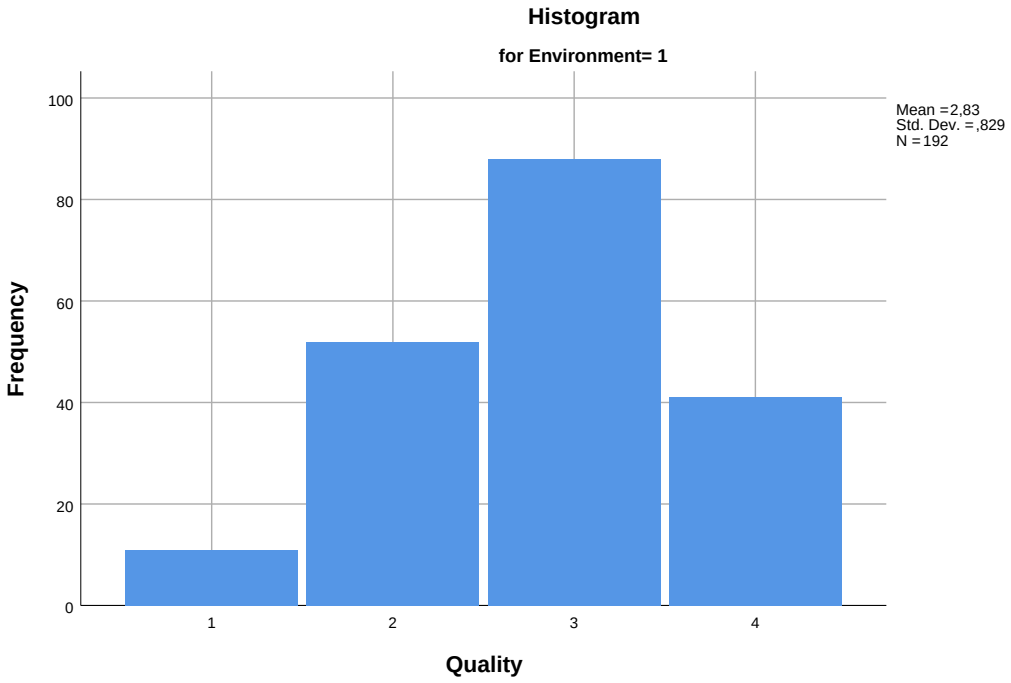
		Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	Environment	Statistic	df	Sig.	Statistic	df	Sig.
Quality	0	,249	213	,000	,884	213	,000
	1	,254	192	,000	,860	192	,000

a. Lilliefors Significance Correction

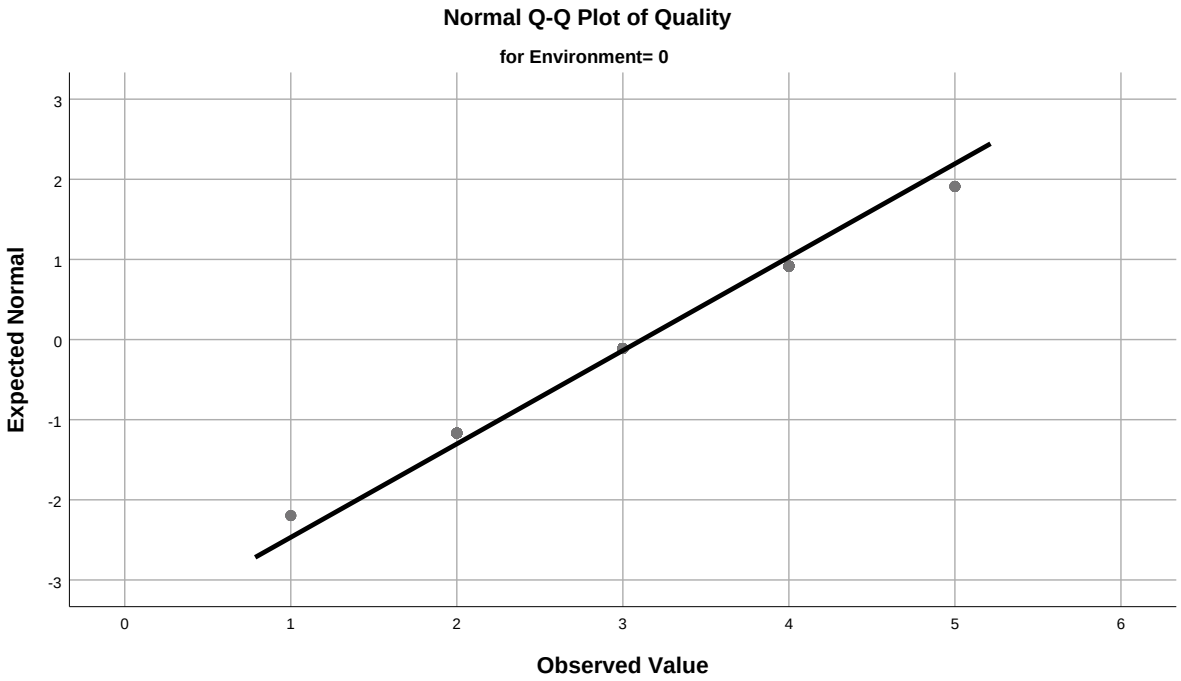
Quality

Histograms

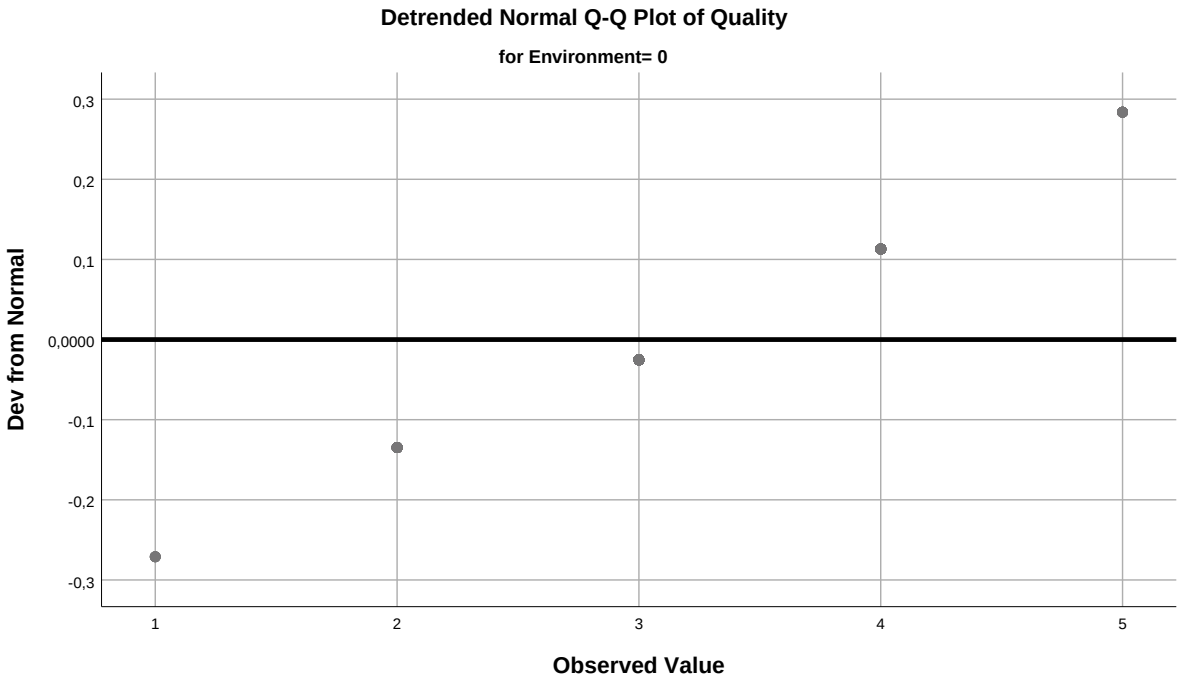


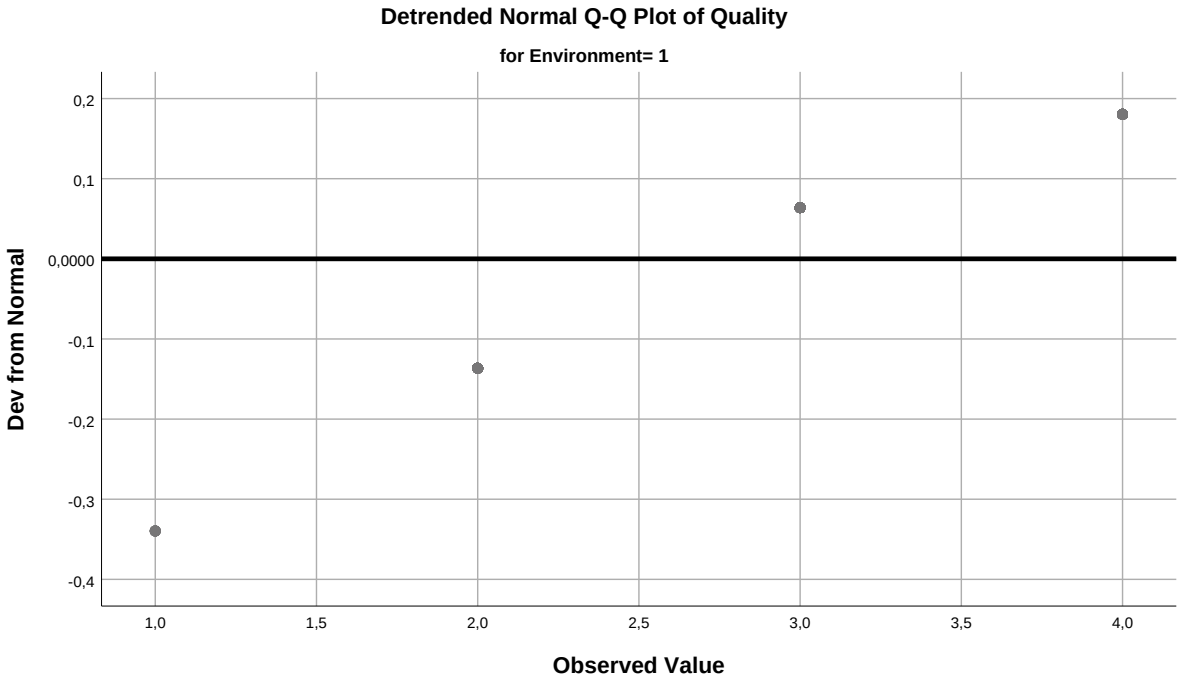


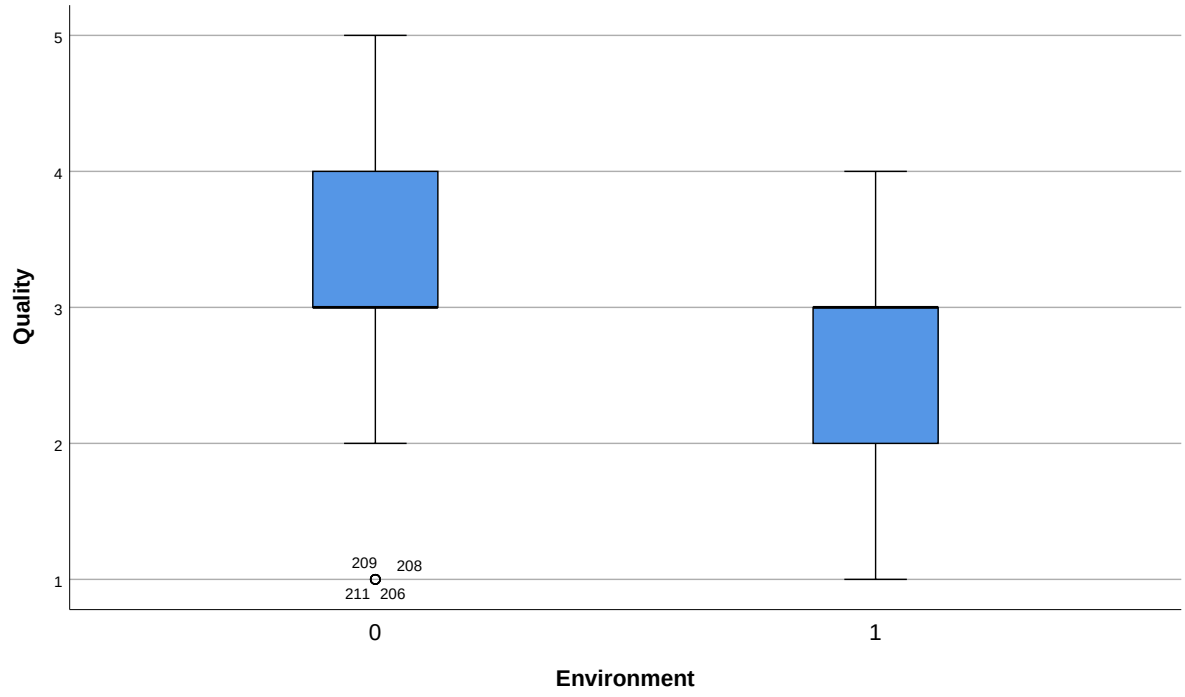
Normal Q-Q Plots



Detrended Normal Q-Q Plots


Detrended Normal Q-Q Plot of Quality
for Environment= 0
Dev from Normal
0,3
0,2
0,1
0,0000
-0,1
-0,2
-0,3
1
2
3
4
5
Observed Value


Detrended Normal Q-Q Plot of Quality
for Environment= 1
Dev from Normal
0,2
0,1
0,0000
-0,1
-0,2
-0,3
-0,4
1,0
1,5
2,0
2,5
3,0
3,5
4,0
Observed Value




```
T-TEST GROUPS=Environment(0 1)
  /MISSING=ANALYSIS
  /VARIABLES=Quality
  /CRITERIA=CI(.95).
```

T-Test

Group Statistics

	Environment	N	Mean	Std. Deviation	Std. Error Mean
Quality	0	213	3,12	,858	,059
	1	192	2,83	,829	,060

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means	
		F	Sig.	t	df
Quality	Equal variances assumed	,090	,764	3,442	403
	Equal variances not assumed			3,448	401,037

Independent Samples Test

		t-test for Equality of Means			
		Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence ... Lower
Quality	Equal variances assumed	,001	,289	,084	,124
	Equal variances not assumed	,001	,289	,084	,124

Independent Samples Test

		t-test for Equality of Means	
		95% Confidence Interval of the ... Upper
Quality	Equal variances assumed	,454
	Equal variances not assumed	,454