

Host

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Lilliefors Test

Lilliefors Test
Import data

Lilliefors / fitted-normal normality context

>Warning # 2004. Command name: SUBTITLE

>The subtitle given exceeds 60 characters in length. The first 60 characters
>will be used.

Lilliefors / fitted-normal normality context
 SPSS Explore reports Kolmogorov-Smirnov with Lilliefors sign

Explore

[LillieforsData] D:\DATA ANALYSIS\B Normality and Assumption Tests\Lilliefors Test\SPSS_Output\sav\Lilliefors-Test-data.sav

Case Processing Summary

	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
G3	649	100.0%	0	0.0%	649	100.0%

Descriptives

		Statistic	Std. Error	
G3	Mean	11.91	.127	
	95% Confidence Interval for Mean	Lower Bound	11.66	
		Upper Bound	12.16	
	5% Trimmed Mean	12.06		
	Median	12.00		
	Variance	10.437		
	Std. Deviation	3.231		
	Minimum	0		
	Maximum	19		
	Range	19		
	Interquartile Range	4		
	Skewness	-.913	.096	
	Kurtosis	2.712	.192	

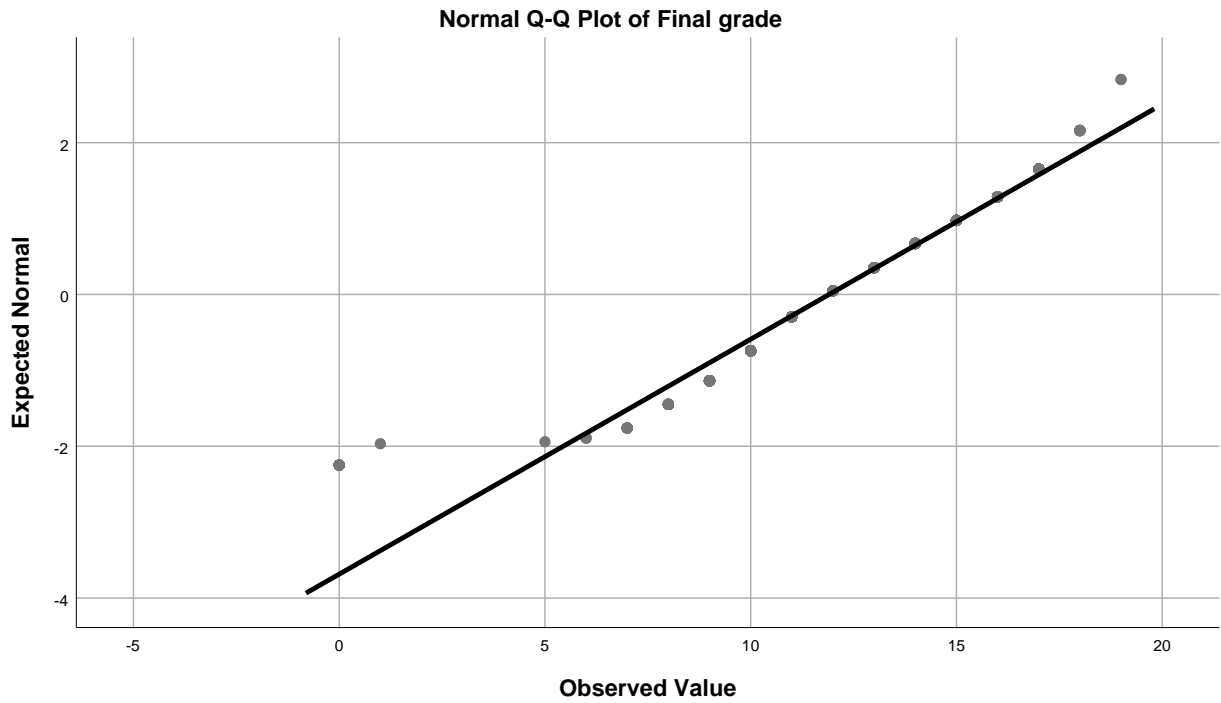
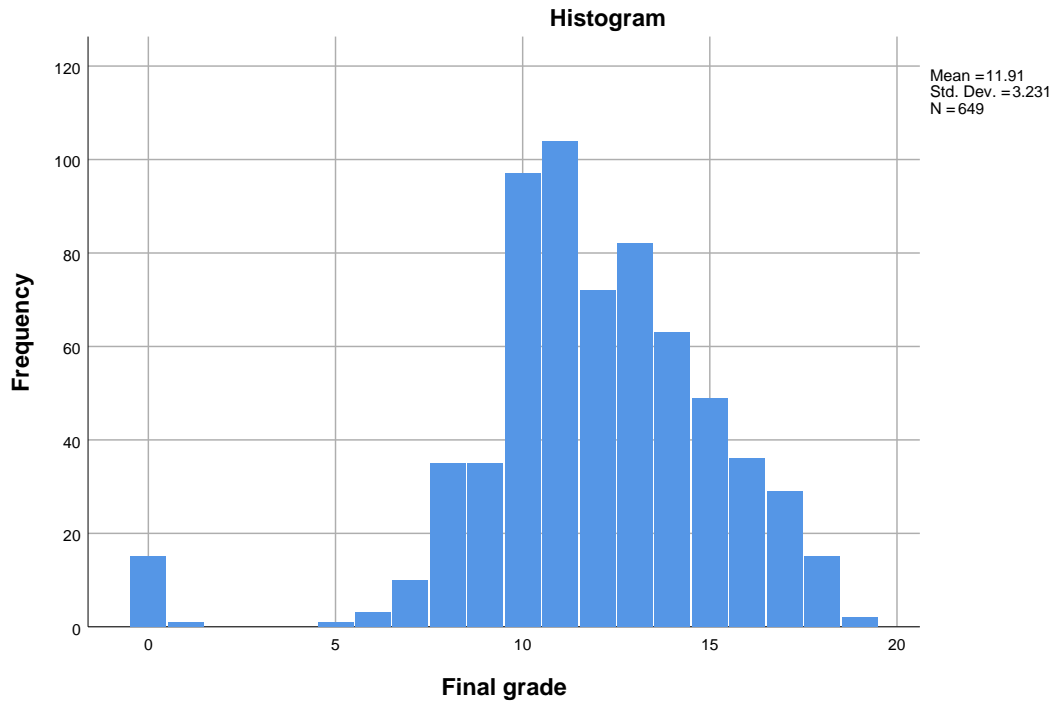
Tests of Normality

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
G3	.124	649	.000	.926	649	.000

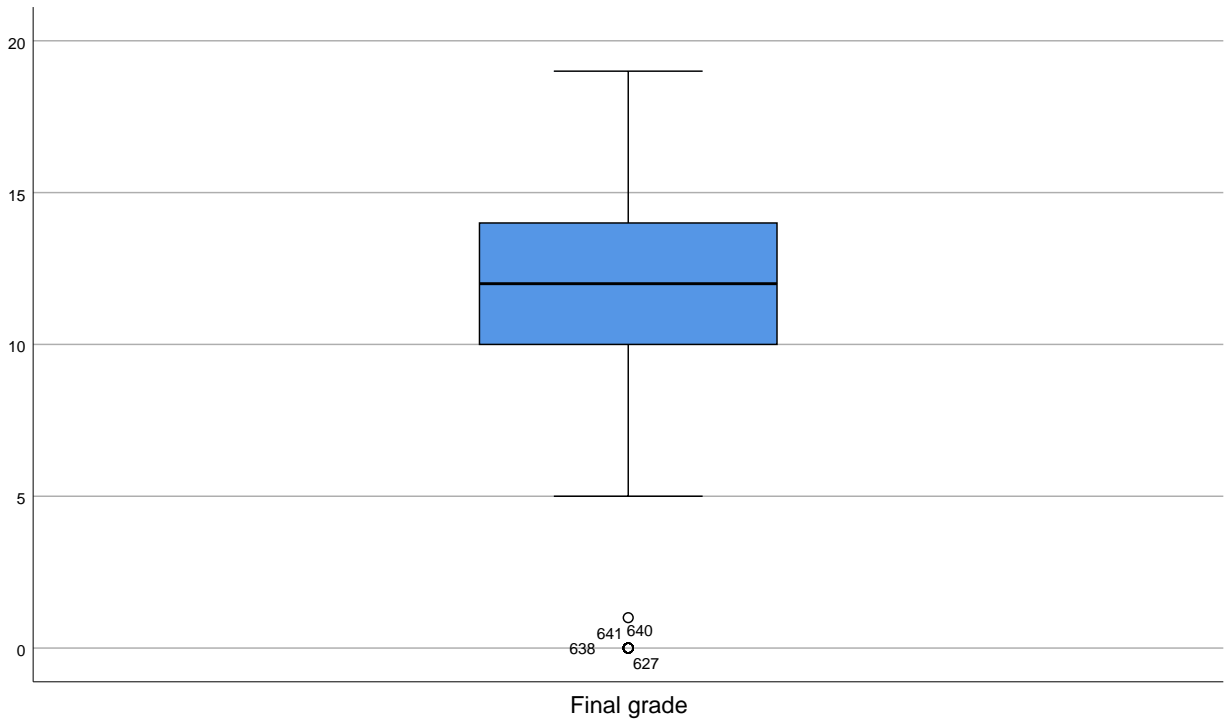
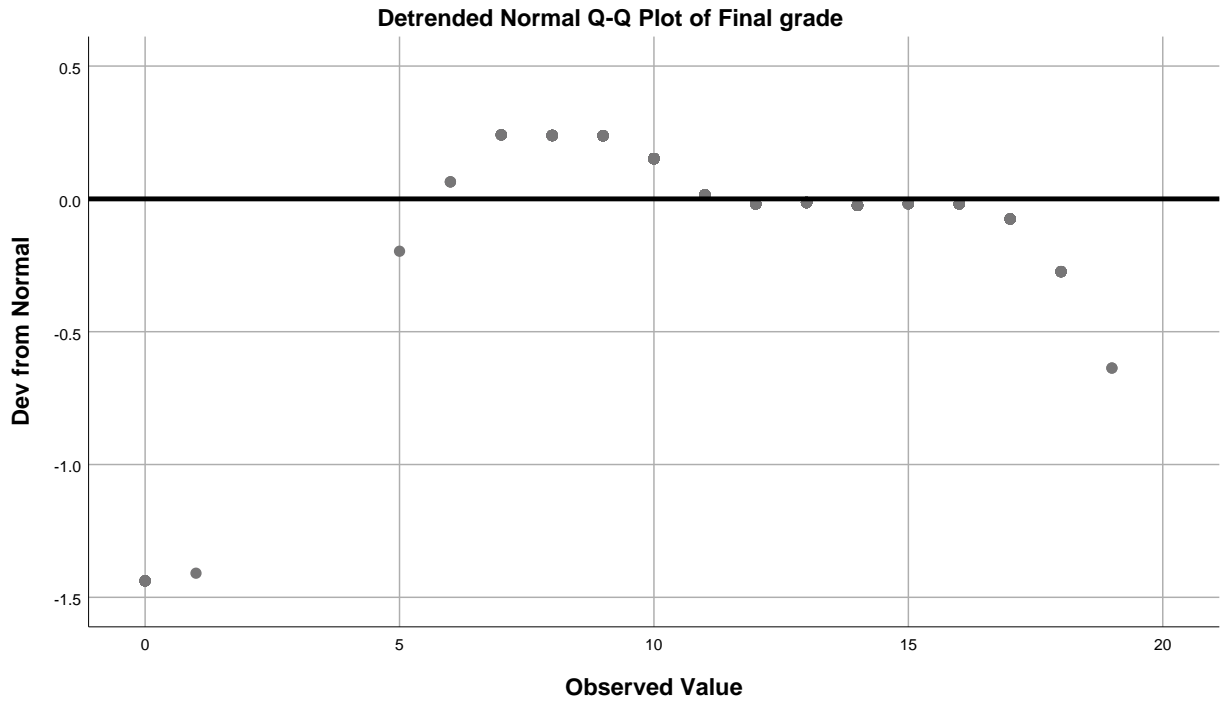
a. Lilliefors Significance Correction

Final grade

Lilliefors / fitted-normal normality context
SPSS Explore reports Kolmogorov-Smirnov with Lilliefors sign



Lilliefors / fitted-normal normality context
SPSS Explore reports Kolmogorov-Smirnov with Lilliefors sign



>Error # 10910. Command name: AGGREGATE

Lilliefors / fitted-normal normality context
SPSS Explore reports Kolmogorov-Smirnov with Lilliefors sign

>The definition of a new variable on the AGGREGATE command specifies a new
>variable name that duplicates the name of an existing variable. To replace
>existing variables, specify OVERWRITE=YES in the OUTFILE subcommand.
>Execution of this command stops.
>New variable lf_D_plus caused the error.

>Error # 10910. Command name: AGGREGATE
>The definition of a new variable on the AGGREGATE command specifies a new
>variable name that duplicates the name of an existing variable. To replace
>existing variables, specify OVERWRITE=YES in the OUTFILE subcommand.
>New variable lf_D_minus caused the error.

Manual Lilliefors D calculation

Manual Lilliefors D calculation
G3 fitted-normal D statistic

List

[LillieforsData] D:\DATA ANALYSIS\B Normality and Assumption Tests\Lilliefors
Test\SPSS_Output\sav\Lilliefors-Test-with-calculation.sav

Manual Lilliefors D calculation
G3 fitted-normal D statistic

lf_n	lf_mean	lf_sd	lf_d_plus	lf_d_minus	lilliefors_D
649	11.91	3.23	.00143	.00011	.00143

Number of cases read: 1 Number of cases listed: 1

Manual Lilliefors detail

Manual Lilliefors detail
First 20 sorted cases

List

Manual Lilliefors detail
 First 20 sorted cases

lf_rank	G3	lf_z	lf_fitted_cdf	lf_ecdf_lower	lf_ecdf_upper	lf_d_p
1.00	0	-3.68532	.00011	.00000	.00154	.00
143						
2.00	0	-3.68532	.00011	.00154	.00308	.00
297						
3.00	0	-3.68532	.00011	.00308	.00462	.00
451						
4.00	0	-3.68532	.00011	.00462	.00616	.00
605						
5.00	0	-3.68532	.00011	.00616	.00770	.00
759						
6.00	0	-3.68532	.00011	.00770	.00924	.00
913						
7.00	0	-3.68532	.00011	.00924	.01079	.01
067						
8.00	0	-3.68532	.00011	.01079	.01233	.01
221						
9.00	0	-3.68532	.00011	.01233	.01387	.01
375						
10.00	0	-3.68532	.00011	.01387	.01541	.01
529						
11.00	0	-3.68532	.00011	.01541	.01695	.01
683						
12.00	0	-3.68532	.00011	.01695	.01849	.01
838						
13.00	0	-3.68532	.00011	.01849	.02003	.01
992						
14.00	0	-3.68532	.00011	.02003	.02157	.02
146						
15.00	0	-3.68532	.00011	.02157	.02311	.02
300						
16.00	1	-3.37579	.00037	.02311	.02465	.02
429						

Manual Lilliefors detail
First 20 sorted cases

17.00	5	-2.13765	.01627	.02465	.02619	.00
992						
18.00	6	-1.82811	.03377	.02619	.02773	-.00
603						
19.00	6	-1.82811	.03377	.02773	.02928	-.00
449						
20.00	6	-1.82811	.03377	.02928	.03082	-.00
295						

Number of cases read: 20 Number of cases listed: 20

Grouped Lilliefors context

Grouped Lilliefors context
G3 by sex

Explore

Sex group

Case Processing Summary

	sex	Valid		Missing		Total	
		N	Percent	N	Percent	N	Percent
G3	F	383	100.0%	0	0.0%	383	100.0%
	M	266	100.0%	0	0.0%	266	100.0%

Descriptives

sex		Statistic	Std. Error		
G3	F	Mean	12.25	.160	
		95% Confidence Interval for Mean	Lower Bound	11.94	
			Upper Bound	12.57	
		5% Trimmed Mean	12.37		
		Median	12.00		
		Variance	9.760		
		Std. Deviation	3.124		
		Minimum	0		
		Maximum	19		
		Range	19		
		Interquartile Range	4		
		Skewness	-.857	.125	
		Kurtosis	2.683	.249	
		M	M	Mean	11.41
95% Confidence Interval for Mean	Lower Bound			11.01	
	Upper Bound			11.81	
5% Trimmed Mean	11.60				
Median	11.00				
Variance	11.027				
Std. Deviation	3.321				
Minimum	0				
Maximum	19				

Grouped Lilliefors context
G3 by sex

Descriptives

sex		Statistic	Std. Error
Range		19	
Interquartile Range		3	
Skewness		-.980	.149
Kurtosis		2.803	.298

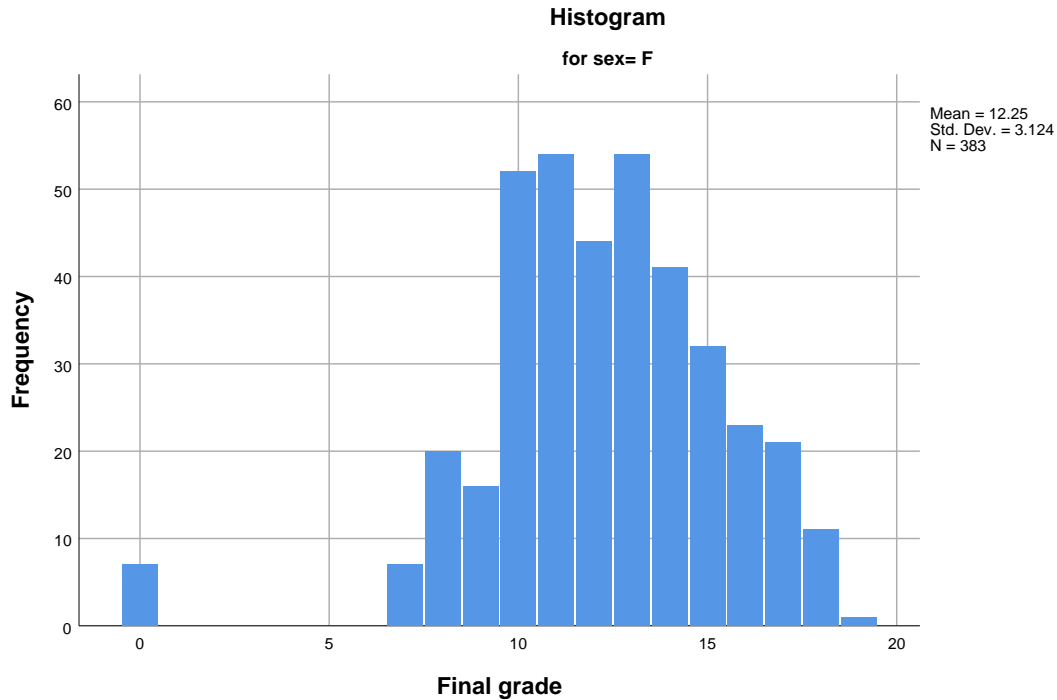
Tests of Normality

		Kolmogorov-Smirnov ^a			Shapiro-Wilk		
sex		Statistic	df	Sig.	Statistic	df	Sig.
G3	F	.105	383	.000	.934	383	.000
	M	.148	266	.000	.913	266	.000

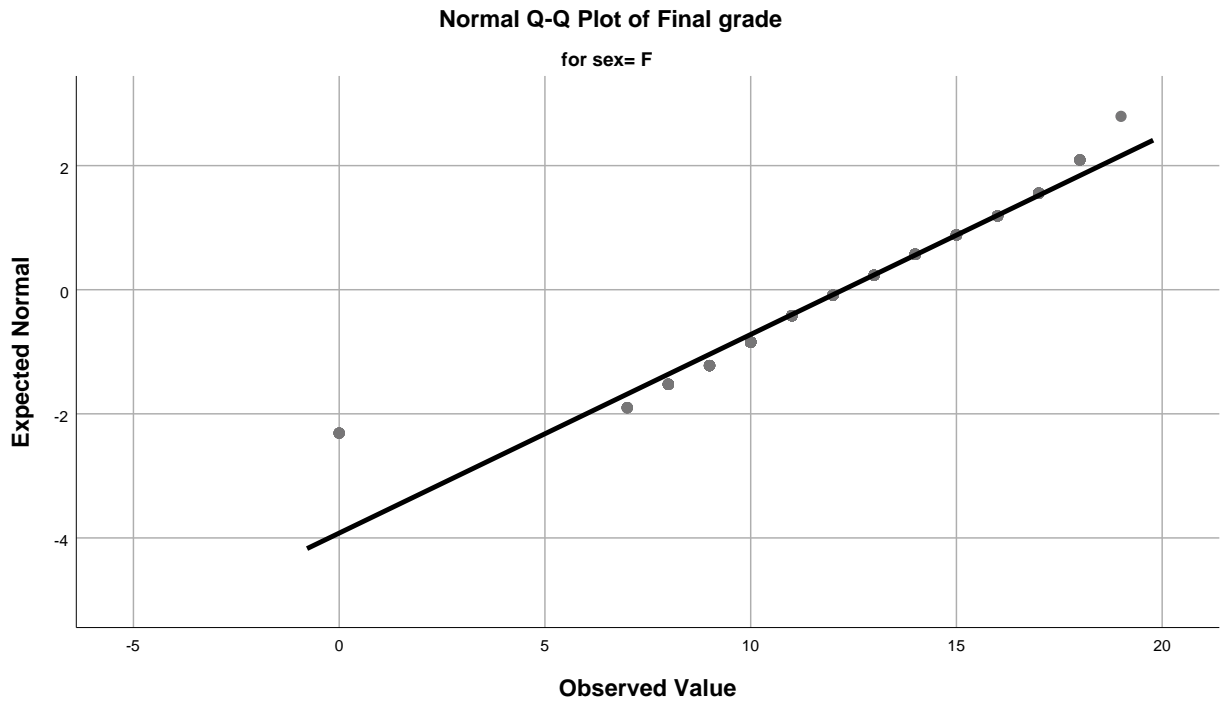
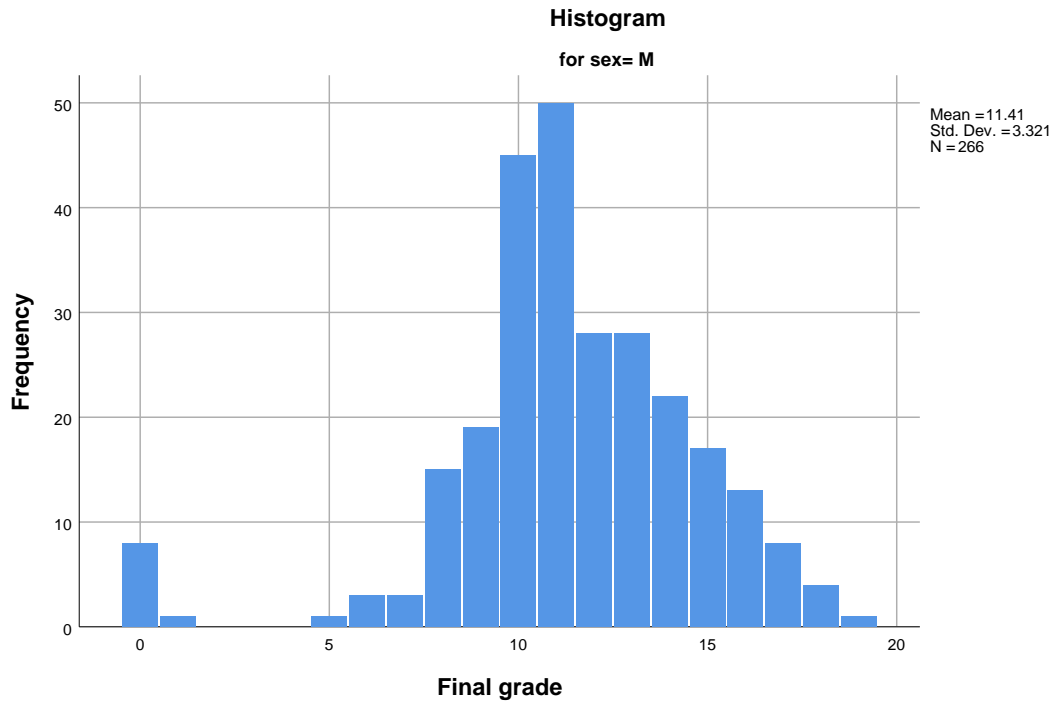
a. Lilliefors Significance Correction

Final grade

Histograms

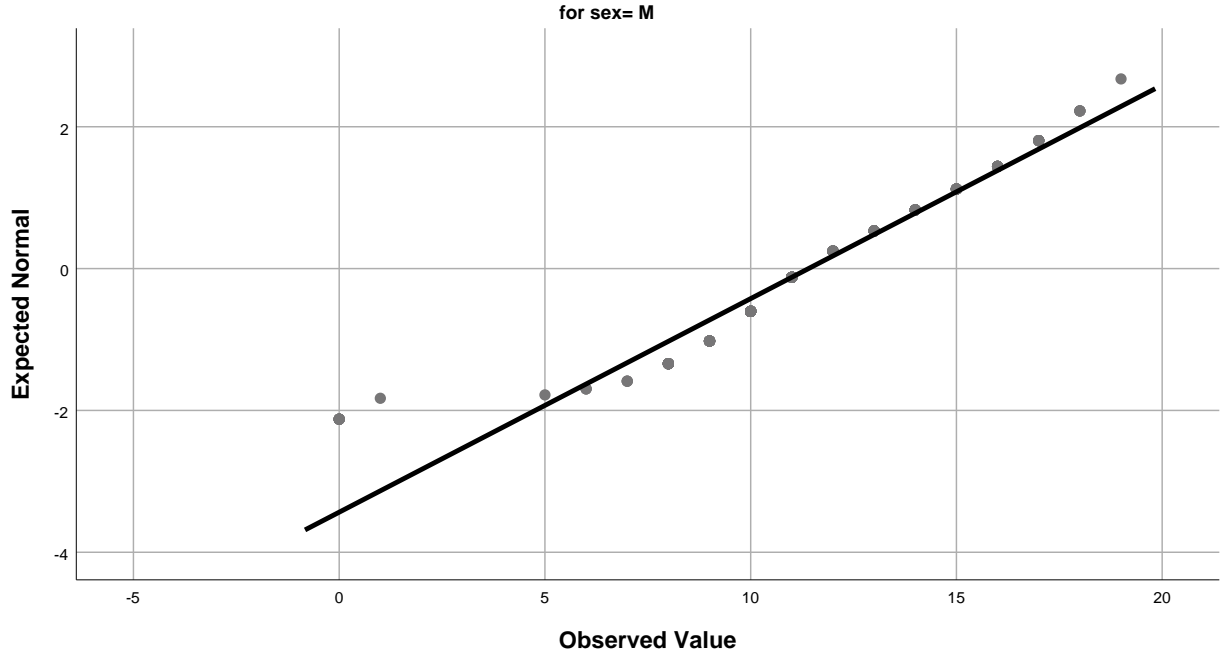


Grouped Lilliefors context
G3 by sex

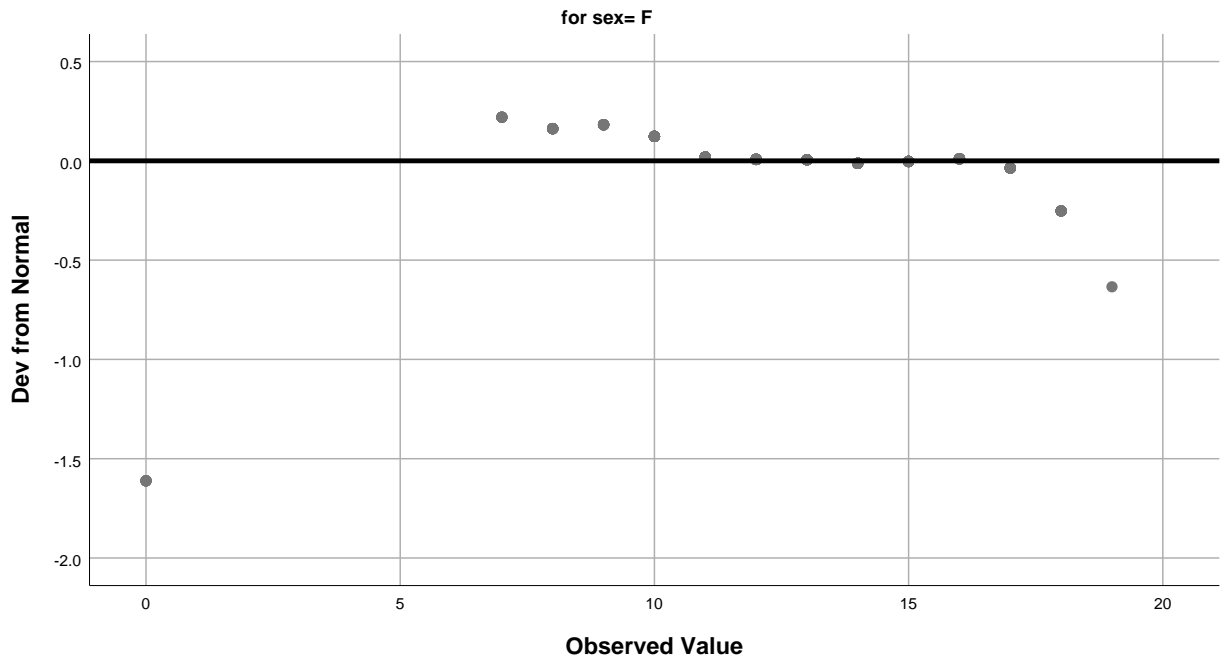


Grouped Lilliefors context
G3 by sex

Normal Q-Q Plot of Final grade



Detrended Normal Q-Q Plot of Final grade



Grouped Lilliefors context
G3 by sex

