

Host

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Kendalls Tau-b

Kendalls Tau-b
Import data

Kendalls Tau-b Variable Screening

>Warning # 2004. Command name: SUBTITLE

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

Kendalls Tau-b Variable Screening
Descriptive statistics for ordinal and numeric variables use

Descriptives

[KendallsTauBData] D:\DATA ANALYSIS\G Correlation Tests\Kendalls Tau b\SPSS_Output\sav\Kendalls-Tau-b-data.sav

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
Student age	649	15	22	16.74	1.218
Mother education level	649	0	4	2.51	1.135
Father education level	649	0	4	2.31	1.100
Home to school travel time	649	1	4	1.57	.749
Weekly study time	649	1	4	1.93	.830
Number of past class failures	649	0	3	.22	.593
Family relationship quality	649	1	5	3.93	.956
Free time after school	649	1	5	3.18	1.051
Going out with friends	649	1	5	3.18	1.176
Workday alcohol consumption	649	1	5	1.50	.925
Weekend alcohol consumption	649	1	5	2.28	1.284
Current health status	649	1	5	3.54	1.446
School absences	649	0	32	3.66	4.641
First period grade	649	0	19	11.40	2.745
Second period grade	649	0	19	11.57	2.914
Final grade	649	0	19	11.91	3.231
Valid N (listwise)	649				

Kendalls Tau-b Tie and Distribution Screening

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Kendalls Tau-b Tie and Distribution Screening
Frequencies identify tied ranks, which are handled by Kendal

Frequencies

Statistics

		Mother education level	Father education level	Home to school travel time	Weekly study time	Number of past class failures
N	Valid	649	649	649	649	649
	Missing	0	0	0	0	0

Statistics

		Family relationship quality	Free time after school	Going out with friends	Workday alcohol consumption	Weekend alcohol consumption
N	Valid	649	649	649	649	649
	Missing	0	0	0	0	0

Statistics

		Current health status	First period grade	Second period grade	Final grade
N	Valid	649	649	649	649
	Missing	0	0	0	0

Frequency Table

Mother education level

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	0	6	.9	.9	.9
	1	143	22.0	22.0	23.0
	2	186	28.7	28.7	51.6
	3	139	21.4	21.4	73.0
	4	175	27.0	27.0	100.0
	Total	649	100.0	100.0	

Kendalls Tau-b Tie and Distribution Screening
 Frequencies identify tied ranks, which are handled by Kendal

Father education level

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	0	7	1.1	1.1	1.1
	1	174	26.8	26.8	27.9
	2	209	32.2	32.2	60.1
	3	131	20.2	20.2	80.3
	4	128	19.7	19.7	100.0
	Total	649	100.0	100.0	

Home to school travel time

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	366	56.4	56.4	56.4
	2	213	32.8	32.8	89.2
	3	54	8.3	8.3	97.5
	4	16	2.5	2.5	100.0
	Total	649	100.0	100.0	

Weekly study time

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	212	32.7	32.7	32.7
	2	305	47.0	47.0	79.7
	3	97	14.9	14.9	94.6
	4	35	5.4	5.4	100.0
	Total	649	100.0	100.0	

Kendalls Tau-b Tie and Distribution Screening
 Frequencies identify tied ranks, which are handled by Kendal

Number of past class failures

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	0	549	84.6	84.6	84.6
	1	70	10.8	10.8	95.4
	2	16	2.5	2.5	97.8
	3	14	2.2	2.2	100.0
	Total	649	100.0	100.0	

Family relationship quality

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	22	3.4	3.4	3.4
	2	29	4.5	4.5	7.9
	3	101	15.6	15.6	23.4
	4	317	48.8	48.8	72.3
	5	180	27.7	27.7	100.0
	Total	649	100.0	100.0	

Free time after school

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	45	6.9	6.9	6.9
	2	107	16.5	16.5	23.4
	3	251	38.7	38.7	62.1
	4	178	27.4	27.4	89.5
	5	68	10.5	10.5	100.0
	Total	649	100.0	100.0	

Kendalls Tau-b Tie and Distribution Screening
 Frequencies identify tied ranks, which are handled by Kendal

Going out with friends

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	48	7.4	7.4	7.4
	2	145	22.3	22.3	29.7
	3	205	31.6	31.6	61.3
	4	141	21.7	21.7	83.1
	5	110	16.9	16.9	100.0
	Total	649	100.0	100.0	

Workday alcohol consumption

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	451	69.5	69.5	69.5
	2	121	18.6	18.6	88.1
	3	43	6.6	6.6	94.8
	4	17	2.6	2.6	97.4
	5	17	2.6	2.6	100.0
	Total	649	100.0	100.0	

Weekend alcohol consumption

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	247	38.1	38.1	38.1
	2	150	23.1	23.1	61.2
	3	120	18.5	18.5	79.7
	4	87	13.4	13.4	93.1
	5	45	6.9	6.9	100.0
	Total	649	100.0	100.0	

Kendalls Tau-b Tie and Distribution Screening
Frequencies identify tied ranks, which are handled by Kendal

Current health status

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	90	13.9	13.9	13.9
	2	78	12.0	12.0	25.9
	3	124	19.1	19.1	45.0
	4	108	16.6	16.6	61.6
	5	249	38.4	38.4	100.0
	Total	649	100.0	100.0	

First period grade

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	0	1	.2	.2	.2
	4	2	.3	.3	.5
	5	5	.8	.8	1.2
	6	9	1.4	1.4	2.6
	7	33	5.1	5.1	7.7
	8	42	6.5	6.5	14.2
	9	65	10.0	10.0	24.2
	10	95	14.6	14.6	38.8
	11	91	14.0	14.0	52.9
	12	82	12.6	12.6	65.5
	13	72	11.1	11.1	76.6
	14	71	10.9	10.9	87.5
	15	35	5.4	5.4	92.9
	16	22	3.4	3.4	96.3
	17	16	2.5	2.5	98.8
	18	7	1.1	1.1	99.8
	19	1	.2	.2	100.0
	Total	649	100.0	100.0	

Kendalls Tau-b Tie and Distribution Screening
 Frequencies identify tied ranks, which are handled by Kendal

Second period grade

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	0	7	1.1	1.1	1.1
	5	3	.5	.5	1.5
	6	7	1.1	1.1	2.6
	7	16	2.5	2.5	5.1
	8	40	6.2	6.2	11.2
	9	72	11.1	11.1	22.3
	10	83	12.8	12.8	35.1
	11	103	15.9	15.9	51.0
	12	86	13.3	13.3	64.3
	13	80	12.3	12.3	76.6
	14	54	8.3	8.3	84.9
	15	38	5.9	5.9	90.8
	16	25	3.9	3.9	94.6
	17	20	3.1	3.1	97.7
	18	14	2.2	2.2	99.8
	19	1	.2	.2	100.0
	Total	649	100.0	100.0	

Kendalls Tau-b Tie and Distribution Screening
Frequencies identify tied ranks, which are handled by Kendal

Final grade

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	0	15	2.3	2.3	2.3
	1	1	.2	.2	2.5
	5	1	.2	.2	2.6
	6	3	.5	.5	3.1
	7	10	1.5	1.5	4.6
	8	35	5.4	5.4	10.0
	9	35	5.4	5.4	15.4
	10	97	14.9	14.9	30.4
	11	104	16.0	16.0	46.4
	12	72	11.1	11.1	57.5
	13	82	12.6	12.6	70.1
	14	63	9.7	9.7	79.8
	15	49	7.6	7.6	87.4
	16	36	5.5	5.5	92.9
	17	29	4.5	4.5	97.4
	18	15	2.3	2.3	99.7
	19	2	.3	.3	100.0
	Total	649	100.0	100.0	

Kendalls Tau-b Correlation Matrix

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Kendalls Tau-b Correlation Matrix
Kendall Tau-b is suitable for monotonic ordinal association

Nonparametric Correlations

Correlations

		Student age		Mother education level
Kendall's tau_b	Student age	Correlation Coefficient	1.000	-.085
		Sig. (2-tailed)	.	.009
		N	649	649
	Mother education level	Correlation Coefficient	-.085	1.000
		Sig. (2-tailed)	.009	.
		N	649	649
	Father education level	Correlation Coefficient	-.092	.570
		Sig. (2-tailed)	.005	.000
		N	649	649
	Home to school travel time	Correlation Coefficient	.058	-.231
		Sig. (2-tailed)	.088	.000
		N	649	649
	Weekly study time	Correlation Coefficient	.015	.084
		Sig. (2-tailed)	.661	.012
		N	649	649
	Number of past class failures	Correlation Coefficient	.258	-.187
		Sig. (2-tailed)	.000	.000
		N	649	649
	Family relationship quality	Correlation Coefficient	-.016	.021
		Sig. (2-tailed)	.624	.521
		N	649	649
	Free time after school	Correlation Coefficient	-.008	-.023
		Sig. (2-tailed)	.806	.477
		N	649	649
	Going out with friends	Correlation Coefficient	.107	.008
		Sig. (2-tailed)	.001	.795
		N	649	649

Kendalls Tau-b Correlation Matrix
Kendall Tau-b is suitable for monotonic ordinal association

Correlations

			Father education level	Home to school travel time
Kendall's tau_b	Student age	Correlation Coefficient	-.092	.058
		Sig. (2-tailed)	.005	.088
		N	649	649
	Mother education level	Correlation Coefficient	.570	-.231
		Sig. (2-tailed)	.000	.000
		N	649	649
	Father education level	Correlation Coefficient	1.000	-.196
		Sig. (2-tailed)	.	.000
		N	649	649
	Home to school travel time	Correlation Coefficient	-.196	1.000
		Sig. (2-tailed)	.000	.
		N	649	649
	Weekly study time	Correlation Coefficient	.059	-.081
		Sig. (2-tailed)	.079	.023
		N	649	649
	Number of past class failures	Correlation Coefficient	-.145	.116
		Sig. (2-tailed)	.000	.002
		N	649	649
	Family relationship quality	Correlation Coefficient	.018	-.023
		Sig. (2-tailed)	.587	.510
		N	649	649
	Free time after school	Correlation Coefficient	.000	-.001
		Sig. (2-tailed)	.999	.981
		N	649	649
	Going out with friends	Correlation Coefficient	.024	.035
		Sig. (2-tailed)	.461	.302
		N	649	649

Kendalls Tau-b Correlation Matrix
Kendall Tau-b is suitable for monotonic ordinal association

Correlations

			Weekly study time	Number of past class failures
Kendall's tau_b	Student age	Correlation Coefficient	.015	.258
		Sig. (2-tailed)	.661	.000
		N	649	649
	Mother education level	Correlation Coefficient	.084	-.187
		Sig. (2-tailed)	.012	.000
		N	649	649
	Father education level	Correlation Coefficient	.059	-.145
		Sig. (2-tailed)	.079	.000
		N	649	649
	Home to school travel time	Correlation Coefficient	-.081	.116
		Sig. (2-tailed)	.023	.002
		N	649	649
	Weekly study time	Correlation Coefficient	1.000	-.148
		Sig. (2-tailed)	.	.000
		N	649	649
	Number of past class failures	Correlation Coefficient	-.148	1.000
		Sig. (2-tailed)	.000	.
		N	649	649
	Family relationship quality	Correlation Coefficient	.017	-.053
		Sig. (2-tailed)	.617	.137
		N	649	649
	Free time after school	Correlation Coefficient	-.067	.090
		Sig. (2-tailed)	.045	.010
		N	649	649
	Going out with friends	Correlation Coefficient	-.072	.037
		Sig. (2-tailed)	.031	.288
		N	649	649

Kendalls Tau-b Correlation Matrix
Kendall Tau-b is suitable for monotonic ordinal association

Correlations

			Family relationship quality	Free time after school
Kendall's tau_b	Student age	Correlation Coefficient	-.016	-.008
		Sig. (2-tailed)	.624	.806
		N	649	649
	Mother education level	Correlation Coefficient	.021	-.023
		Sig. (2-tailed)	.521	.477
		N	649	649
	Father education level	Correlation Coefficient	.018	.000
		Sig. (2-tailed)	.587	.999
		N	649	649
	Home to school travel time	Correlation Coefficient	-.023	-.001
		Sig. (2-tailed)	.510	.981
		N	649	649
	Weekly study time	Correlation Coefficient	.017	-.067
		Sig. (2-tailed)	.617	.045
		N	649	649
	Number of past class failures	Correlation Coefficient	-.053	.090
		Sig. (2-tailed)	.137	.010
		N	649	649
	Family relationship quality	Correlation Coefficient	1.000	.123
		Sig. (2-tailed)	.	.000
		N	649	649
	Free time after school	Correlation Coefficient	.123	1.000
		Sig. (2-tailed)	.000	.
		N	649	649
	Going out with friends	Correlation Coefficient	.075	.304
		Sig. (2-tailed)	.024	.000
		N	649	649

Kendalls Tau-b Correlation Matrix
Kendall Tau-b is suitable for monotonic ordinal association

Correlations

			Going out with friends	Workday alcohol consumption
Kendall's tau_b	Student age	Correlation Coefficient	.107	.071
		Sig. (2-tailed)	.001	.038
		N	649	649
	Mother education level	Correlation Coefficient	.008	.002
		Sig. (2-tailed)	.795	.952
		N	649	649
	Father education level	Correlation Coefficient	.024	-.004
		Sig. (2-tailed)	.461	.900
		N	649	649
	Home to school travel time	Correlation Coefficient	.035	.063
		Sig. (2-tailed)	.302	.080
		N	649	649
	Weekly study time	Correlation Coefficient	-.072	-.155
		Sig. (2-tailed)	.031	.000
		N	649	649
	Number of past class failures	Correlation Coefficient	.037	.103
		Sig. (2-tailed)	.288	.005
		N	649	649
	Family relationship quality	Correlation Coefficient	.075	-.088
		Sig. (2-tailed)	.024	.012
		N	649	649
	Free time after school	Correlation Coefficient	.304	.113
		Sig. (2-tailed)	.000	.001
		N	649	649
	Going out with friends	Correlation Coefficient	1.000	.205
		Sig. (2-tailed)	.	.000
		N	649	649

Kendalls Tau-b Correlation Matrix
Kendall Tau-b is suitable for monotonic ordinal association

Correlations

			Weekend alcohol consumption	Current health status
Kendall's tau_b	Student age	Correlation Coefficient	.078	-.015
		Sig. (2-tailed)	.016	.640
		N	649	649
	Mother education level	Correlation Coefficient	-.015	.013
		Sig. (2-tailed)	.643	.687
		N	649	649
	Father education level	Correlation Coefficient	.025	.038
		Sig. (2-tailed)	.447	.244
		N	649	649
	Home to school travel time	Correlation Coefficient	.028	-.055
		Sig. (2-tailed)	.419	.105
		N	649	649
	Weekly study time	Correlation Coefficient	-.192	-.064
		Sig. (2-tailed)	.000	.056
		N	649	649
	Number of past class failures	Correlation Coefficient	.058	.037
		Sig. (2-tailed)	.097	.296
		N	649	649
	Family relationship quality	Correlation Coefficient	-.087	.080
		Sig. (2-tailed)	.009	.017
		N	649	649
	Free time after school	Correlation Coefficient	.101	.080
		Sig. (2-tailed)	.002	.013
		N	649	649
	Going out with friends	Correlation Coefficient	.315	-.010
		Sig. (2-tailed)	.000	.753
		N	649	649

Kendalls Tau-b Correlation Matrix
Kendall Tau-b is suitable for monotonic ordinal association

Correlations

			School absences	First period grade
Kendall's tau_b	Student age	Correlation Coefficient	.099	-.128
		Sig. (2-tailed)	.002	.000
		N	649	649
	Mother education level	Correlation Coefficient	-.006	.218
		Sig. (2-tailed)	.862	.000
		N	649	649
	Father education level	Correlation Coefficient	.026	.185
		Sig. (2-tailed)	.422	.000
		N	649	649
	Home to school travel time	Correlation Coefficient	.019	-.136
		Sig. (2-tailed)	.564	.000
		N	649	649
	Weekly study time	Correlation Coefficient	-.096	.219
		Sig. (2-tailed)	.003	.000
		N	649	649
	Number of past class failures	Correlation Coefficient	.105	-.366
		Sig. (2-tailed)	.002	.000
		N	649	649
	Family relationship quality	Correlation Coefficient	-.086	.022
		Sig. (2-tailed)	.008	.493
		N	649	649
	Free time after school	Correlation Coefficient	-.023	-.082
		Sig. (2-tailed)	.469	.007
		N	649	649
	Going out with friends	Correlation Coefficient	.084	-.061
		Sig. (2-tailed)	.008	.046
		N	649	649

Kendalls Tau-b Correlation Matrix
Kendall Tau-b is suitable for monotonic ordinal association

Correlations

			Second period grade	Final grade
Kendall's tau_b	Student age	Correlation Coefficient	-.079	-.048
		Sig. (2-tailed)	.010	.111
		N	649	649
	Mother education level	Correlation Coefficient	.223	.223
		Sig. (2-tailed)	.000	.000
		N	649	649
	Father education level	Correlation Coefficient	.195	.186
		Sig. (2-tailed)	.000	.000
		N	649	649
	Home to school travel time	Correlation Coefficient	-.137	-.121
		Sig. (2-tailed)	.000	.000
		N	649	649
	Weekly study time	Correlation Coefficient	.209	.222
		Sig. (2-tailed)	.000	.000
		N	649	649
	Number of past class failures	Correlation Coefficient	-.368	-.379
		Sig. (2-tailed)	.000	.000
		N	649	649
	Family relationship quality	Correlation Coefficient	.048	.039
		Sig. (2-tailed)	.130	.213
		N	649	649
	Free time after school	Correlation Coefficient	-.095	-.101
		Sig. (2-tailed)	.002	.001
		N	649	649
	Going out with friends	Correlation Coefficient	-.088	-.083
		Sig. (2-tailed)	.004	.006
		N	649	649

Kendalls Tau-b Correlation Matrix
Kendall Tau-b is suitable for monotonic ordinal association

Correlations

		Student age	Mother education level
Workday alcohol consumption	Correlation Coefficient	.071	.002
	Sig. (2-tailed)	.038	.952
	N	649	649
Weekend alcohol consumption	Correlation Coefficient	.078	-.015
	Sig. (2-tailed)	.016	.643
	N	649	649
Current health status	Correlation Coefficient	-.015	.013
	Sig. (2-tailed)	.640	.687
	N	649	649
School absences	Correlation Coefficient	.099	-.006
	Sig. (2-tailed)	.002	.862
	N	649	649
First period grade	Correlation Coefficient	-.128	.218
	Sig. (2-tailed)	.000	.000
	N	649	649
Second period grade	Correlation Coefficient	-.079	.223
	Sig. (2-tailed)	.010	.000
	N	649	649
Final grade	Correlation Coefficient	-.048	.223
	Sig. (2-tailed)	.111	.000
	N	649	649

Kendalls Tau-b Correlation Matrix
Kendall Tau-b is suitable for monotonic ordinal association

Correlations

			Father education level	Home to school travel time
	Workday alcohol consumption	Correlation Coefficient	-.004	.063
		Sig. (2-tailed)	.900	.080
		N	649	649
	Weekend alcohol consumption	Correlation Coefficient	.025	.028
		Sig. (2-tailed)	.447	.419
		N	649	649
	Current health status	Correlation Coefficient	.038	-.055
		Sig. (2-tailed)	.244	.105
		N	649	649
	School absences	Correlation Coefficient	.026	.019
		Sig. (2-tailed)	.422	.564
		N	649	649
	First period grade	Correlation Coefficient	.185	-.136
		Sig. (2-tailed)	.000	.000
		N	649	649
	Second period grade	Correlation Coefficient	.195	-.137
		Sig. (2-tailed)	.000	.000
		N	649	649
	Final grade	Correlation Coefficient	.186	-.121
		Sig. (2-tailed)	.000	.000
		N	649	649

Kendalls Tau-b Correlation Matrix
Kendall Tau-b is suitable for monotonic ordinal association

Correlations

			Weekly study time	Number of past class failures
	Workday alcohol consumption	Correlation Coefficient	-.155	.103
		Sig. (2-tailed)	.000	.005
		N	649	649
	Weekend alcohol consumption	Correlation Coefficient	-.192	.058
		Sig. (2-tailed)	.000	.097
		N	649	649
	Current health status	Correlation Coefficient	-.064	.037
		Sig. (2-tailed)	.056	.296
		N	649	649
	School absences	Correlation Coefficient	-.096	.105
		Sig. (2-tailed)	.003	.002
		N	649	649
	First period grade	Correlation Coefficient	.219	-.366
		Sig. (2-tailed)	.000	.000
		N	649	649
	Second period grade	Correlation Coefficient	.209	-.368
		Sig. (2-tailed)	.000	.000
		N	649	649
	Final grade	Correlation Coefficient	.222	-.379
		Sig. (2-tailed)	.000	.000
		N	649	649

Kendalls Tau-b Correlation Matrix
Kendall Tau-b is suitable for monotonic ordinal association

Correlations

		Family relationship quality	Free time after school
Workday alcohol consumption	Correlation Coefficient	-.088	.113
	Sig. (2-tailed)	.012	.001
	N	649	649
Weekend alcohol consumption	Correlation Coefficient	-.087	.101
	Sig. (2-tailed)	.009	.002
	N	649	649
Current health status	Correlation Coefficient	.080	.080
	Sig. (2-tailed)	.017	.013
	N	649	649
School absences	Correlation Coefficient	-.086	-.023
	Sig. (2-tailed)	.008	.469
	N	649	649
First period grade	Correlation Coefficient	.022	-.082
	Sig. (2-tailed)	.493	.007
	N	649	649
Second period grade	Correlation Coefficient	.048	-.095
	Sig. (2-tailed)	.130	.002
	N	649	649
Final grade	Correlation Coefficient	.039	-.101
	Sig. (2-tailed)	.213	.001
	N	649	649

Kendalls Tau-b Correlation Matrix
Kendall Tau-b is suitable for monotonic ordinal association

Correlations

		Going out with friends	Workday alcohol consumption
Workday alcohol consumption	Correlation Coefficient	.205	1.000
	Sig. (2-tailed)	.000	.
	N	649	649
	Correlation Coefficient	.315	.555
	Sig. (2-tailed)	.000	.000
	N	649	649
	Correlation Coefficient	-.010	.074
	Sig. (2-tailed)	.753	.031
	N	649	649
	Correlation Coefficient	.084	.088
	Sig. (2-tailed)	.008	.008
	N	649	649
	Correlation Coefficient	-.061	-.165
	Sig. (2-tailed)	.046	.000
	N	649	649
	Correlation Coefficient	-.088	-.165
	Sig. (2-tailed)	.004	.000
	N	649	649
	Correlation Coefficient	-.083	-.171
	Sig. (2-tailed)	.006	.000
	N	649	649

Kendalls Tau-b Correlation Matrix
Kendall Tau-b is suitable for monotonic ordinal association

Correlations

		Weekend alcohol consumption	Current health status
Workday alcohol consumption	Correlation Coefficient	.555	.074
	Sig. (2-tailed)	.000	.031
	N	649	649
Weekend alcohol consumption	Correlation Coefficient	1.000	.094
	Sig. (2-tailed)	.	.004
	N	649	649
Current health status	Correlation Coefficient	.094	1.000
	Sig. (2-tailed)	.004	.
	N	649	649
School absences	Correlation Coefficient	.117	-.009
	Sig. (2-tailed)	.000	.779
	N	649	649
First period grade	Correlation Coefficient	-.124	-.049
	Sig. (2-tailed)	.000	.108
	N	649	649
Second period grade	Correlation Coefficient	-.132	-.078
	Sig. (2-tailed)	.000	.010
	N	649	649
Final grade	Correlation Coefficient	-.133	-.083
	Sig. (2-tailed)	.000	.007
	N	649	649

Kendalls Tau-b Correlation Matrix
Kendall Tau-b is suitable for monotonic ordinal association

Correlations

			School absences	First period grade
	Workday alcohol consumption	Correlation Coefficient	.088	-.165
		Sig. (2-tailed)	.008	.000
		N	649	649
	Weekend alcohol consumption	Correlation Coefficient	.117	-.124
		Sig. (2-tailed)	.000	.000
		N	649	649
	Current health status	Correlation Coefficient	-.009	-.049
		Sig. (2-tailed)	.779	.108
		N	649	649
	School absences	Correlation Coefficient	1.000	-.130
		Sig. (2-tailed)	.	.000
		N	649	649
	First period grade	Correlation Coefficient	-.130	1.000
		Sig. (2-tailed)	.000	.
		N	649	649
	Second period grade	Correlation Coefficient	-.126	.781
		Sig. (2-tailed)	.000	.000
		N	649	649
	Final grade	Correlation Coefficient	-.123	.766
		Sig. (2-tailed)	.000	.000
		N	649	649

Kendalls Tau-b Correlation Matrix
Kendall Tau-b is suitable for monotonic ordinal association

Correlations

		Second period grade	Final grade
Workday alcohol consumption	Correlation Coefficient	-.165	-.171
	Sig. (2-tailed)	.000	.000
	N	649	649
Weekend alcohol consumption	Correlation Coefficient	-.132	-.133
	Sig. (2-tailed)	.000	.000
	N	649	649
Current health status	Correlation Coefficient	-.078	-.083
	Sig. (2-tailed)	.010	.007
	N	649	649
School absences	Correlation Coefficient	-.126	-.123
	Sig. (2-tailed)	.000	.000
	N	649	649
First period grade	Correlation Coefficient	.781	.766
	Sig. (2-tailed)	.000	.000
	N	649	649
Second period grade	Correlation Coefficient	1.000	.870
	Sig. (2-tailed)	.	.000
	N	649	649
Final grade	Correlation Coefficient	.870	1.000
	Sig. (2-tailed)	.000	.
	N	649	649

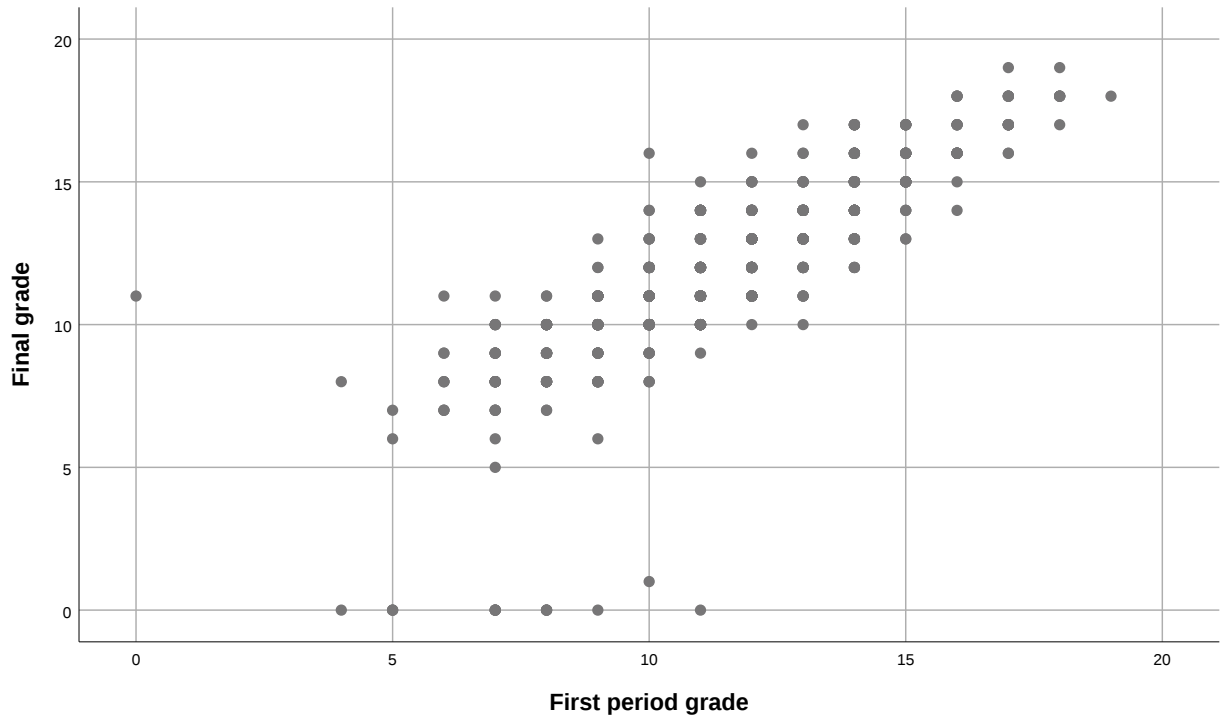
Kendalls Tau-b Worked Relationship: G1 with G3

>Warning # 2004. Command name: SUBTITLE

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

Kendalls Tau-b Worked Relationship: G1 with G3
Use the scatterplot to check whether the relationship is mon

Graph



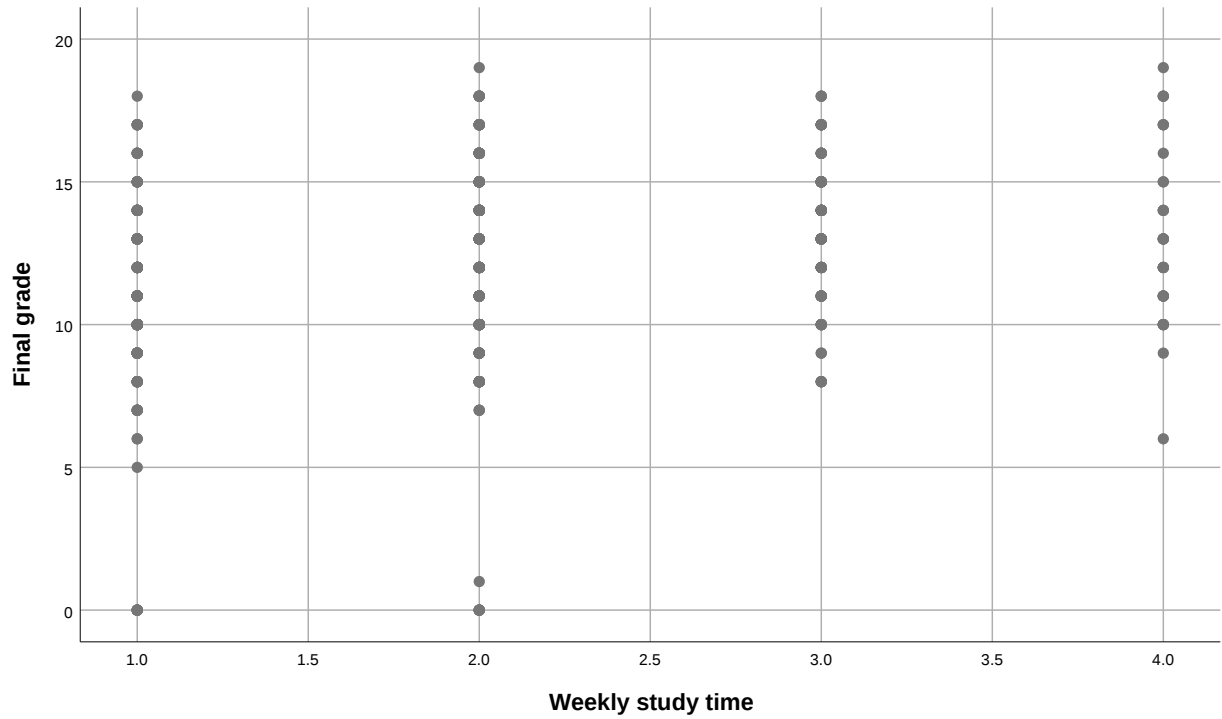
Kendalls Tau-b Worked Relationship: Studytime with G3

>Warning # 2004. Command name: SUBTITLE

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

Kendalls Tau-b Worked Relationship: Studytime with G3
Ordinal x scale example; Kendall Tau-b tests monotonic rank

Graph



Kendalls Tau-b Distribution Checks

>Warning # 2004. Command name: SUBTITLE

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

Kendalls Tau-b Distribution Checks
Boxplots and normality plots are provided as context; Kendal

Explore

Weekly study time

Case Processing Summary

		Cases				
		Valid		Missing		Total
	Weekly study time	N	Percent	N	Percent	N
First period grade	1	212	100.0%	0	0.0%	212
	2	305	100.0%	0	0.0%	305
	3	97	100.0%	0	0.0%	97
	4	35	100.0%	0	0.0%	35
Second period grade	1	212	100.0%	0	0.0%	212
	2	305	100.0%	0	0.0%	305
	3	97	100.0%	0	0.0%	97
	4	35	100.0%	0	0.0%	35
Final grade	1	212	100.0%	0	0.0%	212
	2	305	100.0%	0	0.0%	305
	3	97	100.0%	0	0.0%	97
	4	35	100.0%	0	0.0%	35
School absences	1	212	100.0%	0	0.0%	212
	2	305	100.0%	0	0.0%	305
	3	97	100.0%	0	0.0%	97
	4	35	100.0%	0	0.0%	35

Kendalls Tau-b Distribution Checks
 Boxplots and normality plots are provided as context; Kendal

Case Processing Summary

	Weekly study time	Cases Total Percent
First period grade	1	100.0%
	2	100.0%
	3	100.0%
	4	100.0%
Second period grade	1	100.0%
	2	100.0%
	3	100.0%
	4	100.0%
Final grade	1	100.0%
	2	100.0%
	3	100.0%
	4	100.0%
School absences	1	100.0%
	2	100.0%
	3	100.0%
	4	100.0%

Kendalls Tau-b Distribution Checks
Boxplots and normality plots are provided as context; Kendal

Descriptives

	Weekly study time		Statistic	Std. Error	
First period grade	1	Mean		10.50	.176
		95% Confidence Interval for Mean	Lower Bound	10.16	
			Upper Bound	10.85	
		5% Trimmed Mean		10.45	
		Median		10.00	
		Variance		6.583	
		Std. Deviation		2.566	
		Minimum		4	
		Maximum		18	
		Range		14	
		Interquartile Range		3	
		Skewness		.338	.167
		Kurtosis		.121	.333
		2	Mean		11.54
	95% Confidence Interval for Mean		Lower Bound	11.23	
			Upper Bound	11.85	
	5% Trimmed Mean		11.57		
	Median		12.00		
	Variance		7.493		
	Std. Deviation		2.737		
	Minimum		0		
	Maximum		18		
	Range		18		
	Interquartile Range		3		
	Skewness		-.240	.140	
	Kurtosis		.386	.278	
	3		Mean		12.42
		95% Confidence Interval for Mean	Lower Bound	11.93	
			Upper Bound	12.92	
		5% Trimmed Mean		12.42	
		Median		13.00	
		Variance		6.038	

Kendalls Tau-b Distribution Checks
Boxplots and normality plots are provided as context; Kendal

Descriptives

Weekly study time		Statistic	Std. Error
		Std. Deviation	2.457
		Minimum	7
		Maximum	19
		Range	12
		Interquartile Range	3
		Skewness	.022
		Kurtosis	-.244
	4	Mean	12.77
		95% Confidence Interval for Mean	Lower Bound
			Upper Bound
		5% Trimmed Mean	12.82
		Median	13.00
		Variance	8.652
		Std. Deviation	2.941
		Minimum	5
		Maximum	18
		Range	13
		Interquartile Range	4
		Skewness	-.034
		Kurtosis	.203
Second period grade	1	Mean	10.70
		95% Confidence Interval for Mean	Lower Bound
			Upper Bound
		5% Trimmed Mean	10.72
		Median	11.00
		Variance	7.271
		Std. Deviation	2.697
		Minimum	0
		Maximum	18
		Range	18
		Interquartile Range	3
		Skewness	-.437

Kendalls Tau-b Distribution Checks
Boxplots and normality plots are provided as context; Kendal

Descriptives

Weekly study time		Statistic	Std. Error
2	Kurtosis	2.648	.333
	Mean	11.66	.171
	95% Confidence Interval for Mean	Lower Bound	11.33
		Upper Bound	12.00
	5% Trimmed Mean	11.73	
	Median	12.00	
	Variance	8.895	
	Std. Deviation	2.983	
	Minimum	0	
	Maximum	18	
	Range	18	
	Interquartile Range	3	
	Skewness	-.524	.140
	Kurtosis	1.938	.278
3	Mean	12.79	.250
	95% Confidence Interval for Mean	Lower Bound	12.30
		Upper Bound	13.29
	5% Trimmed Mean	12.81	
	Median	13.00	
	Variance	6.061	
	Std. Deviation	2.462	
	Minimum	7	
	Maximum	18	
	Range	11	
	Interquartile Range	4	
	Skewness	-.044	.245
	Kurtosis	-.274	.485
4	Mean	12.63	.530
	95% Confidence Interval for Mean	Lower Bound	11.55
		Upper Bound	13.71
	5% Trimmed Mean	12.62	
	Median	12.00	

Kendalls Tau-b Distribution Checks
Boxplots and normality plots are provided as context; Kendal

Descriptives

Weekly study time			Statistic	Std. Error	
	Variance		9.829		
	Std. Deviation		3.135		
	Minimum		6		
	Maximum		19		
	Range		13		
	Interquartile Range		5		
	Skewness		.262	.398	
	Kurtosis		-.467	.778	
Final grade	1	Mean		10.84	.221
		95% Confidence Interval for Mean	Lower Bound	10.41	
			Upper Bound	11.28	
		5% Trimmed Mean		11.04	
		Median		11.00	
		Variance		10.360	
		Std. Deviation		3.219	
		Minimum		0	
		Maximum		18	
		Range		18	
		Interquartile Range		3	
		Skewness		-1.078	.167
		Kurtosis		3.117	.333
	2	Mean		12.09	.186
		95% Confidence Interval for Mean	Lower Bound	11.73	
			Upper Bound	12.46	
		5% Trimmed Mean		12.25	
		Median		12.00	
		Variance		10.518	
		Std. Deviation		3.243	
		Minimum		0	
		Maximum		19	
		Range		19	
		Interquartile Range		4	

Kendalls Tau-b Distribution Checks
Boxplots and normality plots are provided as context; Kendal

Descriptives

Weekly study time		Statistic	Std. Error
3	Skewness	-1.028	.140
	Kurtosis	3.044	.278
	Mean	13.23	.254
	95% Confidence Interval for Mean	Lower Bound	12.72
		Upper Bound	13.73
	5% Trimmed Mean	13.27	
	Median	13.00	
	Variance	6.261	
	Std. Deviation	2.502	
	Minimum	8	
	Maximum	18	
	Range	10	
	Interquartile Range	4	
	Skewness	-.190	.245
	Kurtosis	-.502	.485
4	Mean	13.06	.514
	95% Confidence Interval for Mean	Lower Bound	12.01
		Upper Bound	14.10
	5% Trimmed Mean	13.07	
	Median	13.00	
	Variance	9.232	
	Std. Deviation	3.038	
	Minimum	6	
	Maximum	19	
	Range	13	
	Interquartile Range	4	
	Skewness	.209	.398
	Kurtosis	-.339	.778
School absences	1	Mean	4.34
		95% Confidence Interval for Mean	Lower Bound
			Upper Bound
		5% Trimmed Mean	3.72

Kendalls Tau-b Distribution Checks
Boxplots and normality plots are provided as context; Kendal

Descriptives

Weekly study time		Statistic	Std. Error
	Median	4.00	
	Variance	25.619	
	Std. Deviation	5.061	
	Minimum	0	
	Maximum	30	
	Range	30	
	Interquartile Range	6	
	Skewness	1.947	.167
	Kurtosis	5.182	.333
2	Mean	3.60	.273
	95% Confidence Interval for Mean	Lower Bound	3.06
		Upper Bound	4.14
	5% Trimmed Mean	3.01	
	Median	2.00	
	Variance	22.767	
	Std. Deviation	4.771	
	Minimum	0	
	Maximum	32	
	Range	32	
	Interquartile Range	6	
	Skewness	2.014	.140
	Kurtosis	5.538	.278
3	Mean	2.62	.342
	95% Confidence Interval for Mean	Lower Bound	1.94
		Upper Bound	3.30
	5% Trimmed Mean	2.26	
	Median	2.00	
	Variance	11.343	
	Std. Deviation	3.368	
	Minimum	0	
	Maximum	14	
	Range	14	

Kendalls Tau-b Distribution Checks
Boxplots and normality plots are provided as context; Kendal

Descriptives

Weekly study time		Statistic	Std. Error
4	Interquartile Range	4	
	Skewness	1.439	.245
	Kurtosis	1.482	.485
	Mean	2.94	.517
	95% Confidence Interval for Mean	Lower Bound	1.89
		Upper Bound	3.99
	5% Trimmed Mean	2.71	
	Median	2.00	
	Variance	9.350	
	Std. Deviation	3.058	
	Minimum	0	
	Maximum	10	
	Range	10	
	Interquartile Range	6	
	Skewness	.863	.398
	Kurtosis	-.220	.778

Kendalls Tau-b Distribution Checks
 Boxplots and normality plots are provided as context; Kendal

Tests of Normality

	Weekly study time	Kolmogorov-Smirnov ^a			Shapiro-Wilk	
		Statistic	df	Sig.	Statistic	df
First period grade	1	.111	212	.000	.976	212
	2	.079	305	.000	.980	305
	3	.121	97	.001	.974	97
	4	.116	35	.200 [*]	.951	35
Second period grade	1	.112	212	.000	.946	212
	2	.084	305	.000	.955	305
	3	.101	97	.017	.978	97
	4	.127	35	.168	.969	35
Final grade	1	.161	212	.000	.898	212
	2	.125	305	.000	.917	305
	3	.103	97	.013	.970	97
	4	.136	35	.099	.955	35
School absences	1	.196	212	.000	.796	212
	2	.228	305	.000	.758	305
	3	.235	97	.000	.778	97
	4	.221	35	.000	.854	35

Kendalls Tau-b Distribution Checks
 Boxplots and normality plots are provided as context; Kendal

Tests of Normality

	Weekly study time	Shapiro-... Sig.
First period grade	1	.001
	2	.000
	3	.050
	4	.124
Second period grade	1	.000
	2	.000
	3	.111
	4	.415
Final grade	1	.000
	2	.000
	3	.025
	4	.166
School absences	1	.000
	2	.000
	3	.000
	4	.000

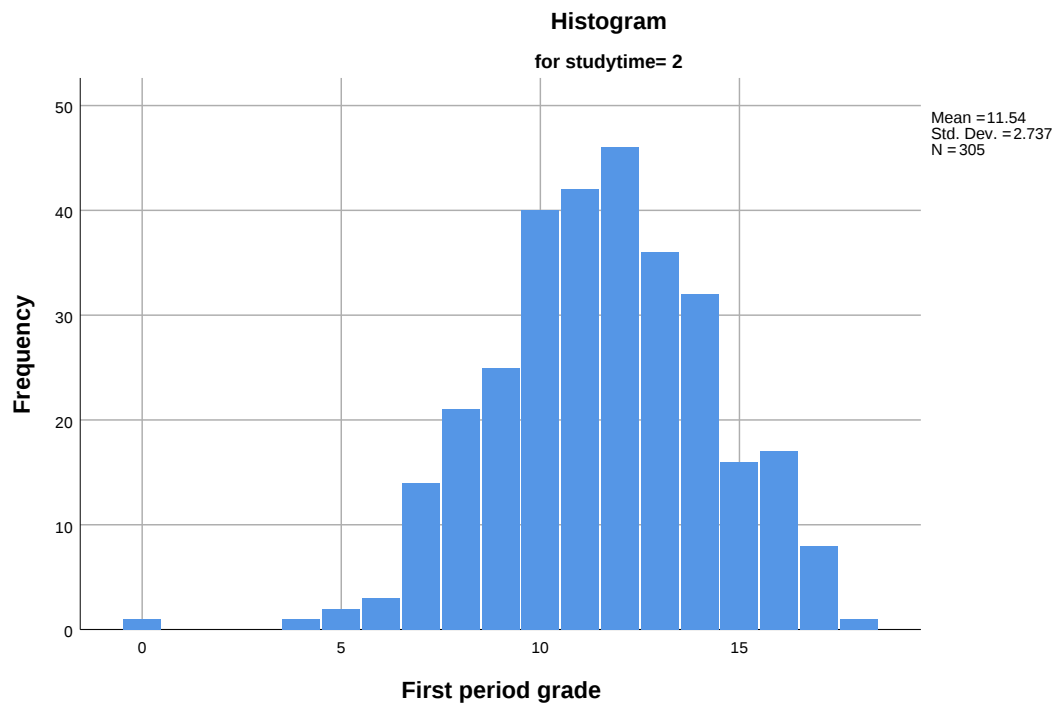
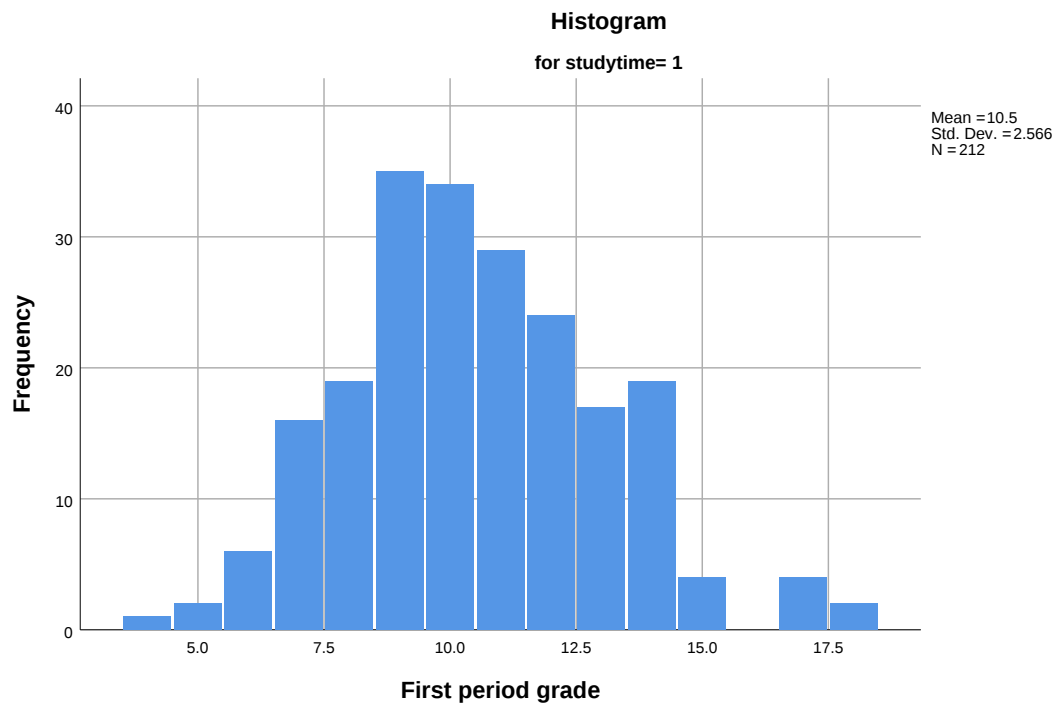
*. This is a lower bound of the true significance.

a. Lilliefors Significance Correction

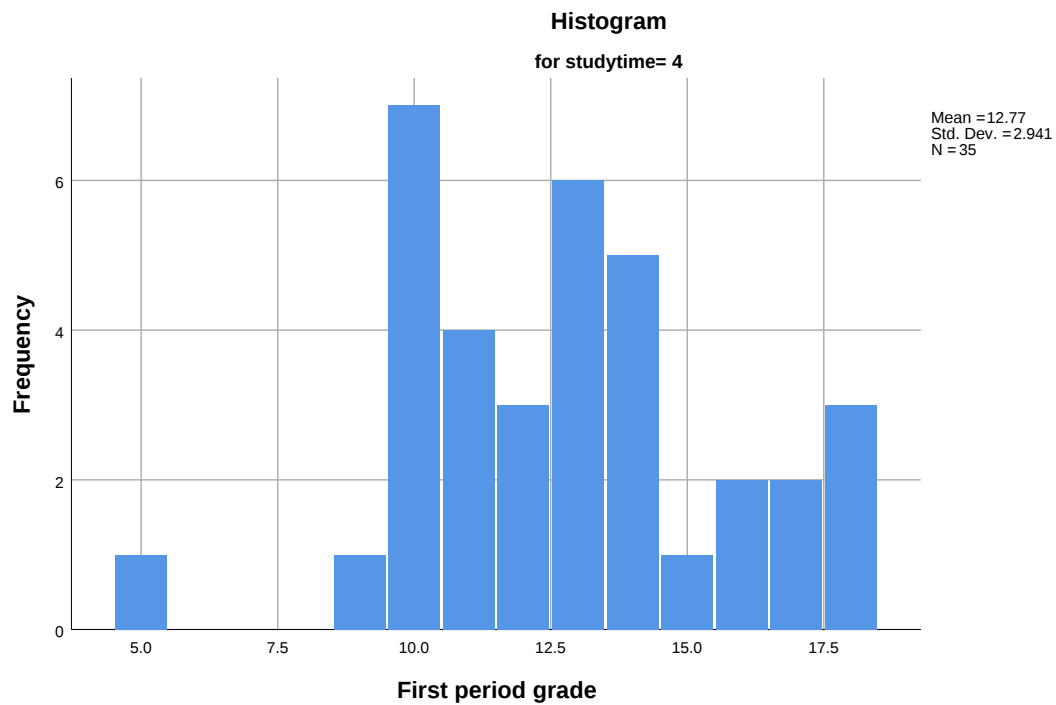
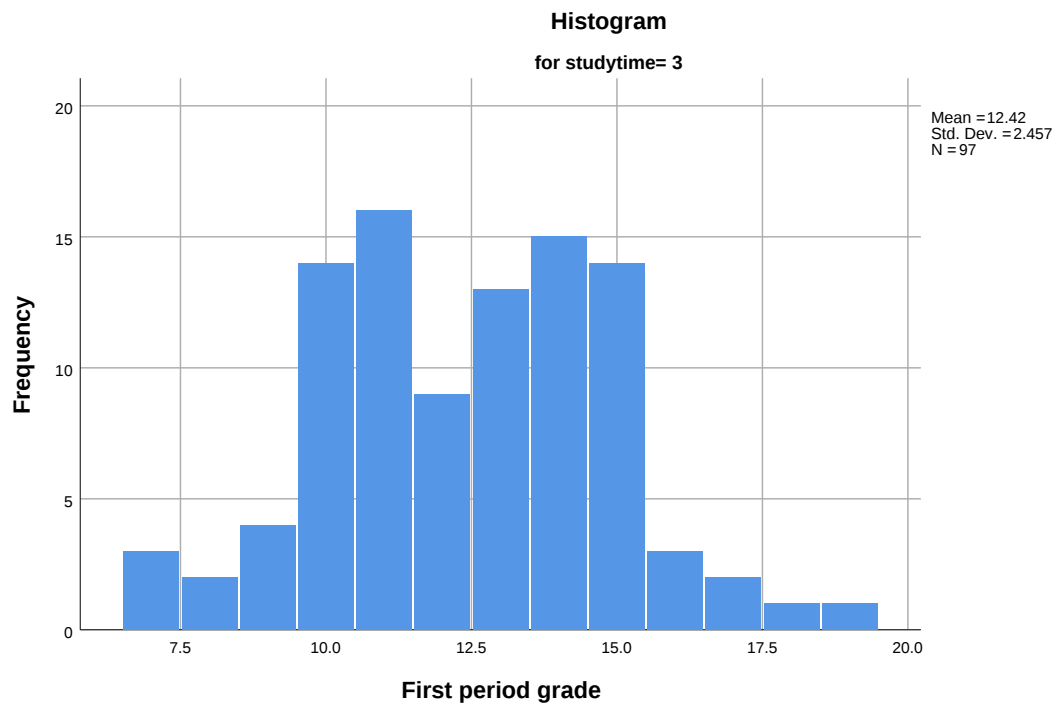
First period grade

Histograms

Kendalls Tau-b Distribution Checks
Boxplots and normality plots are provided as context; Kendal

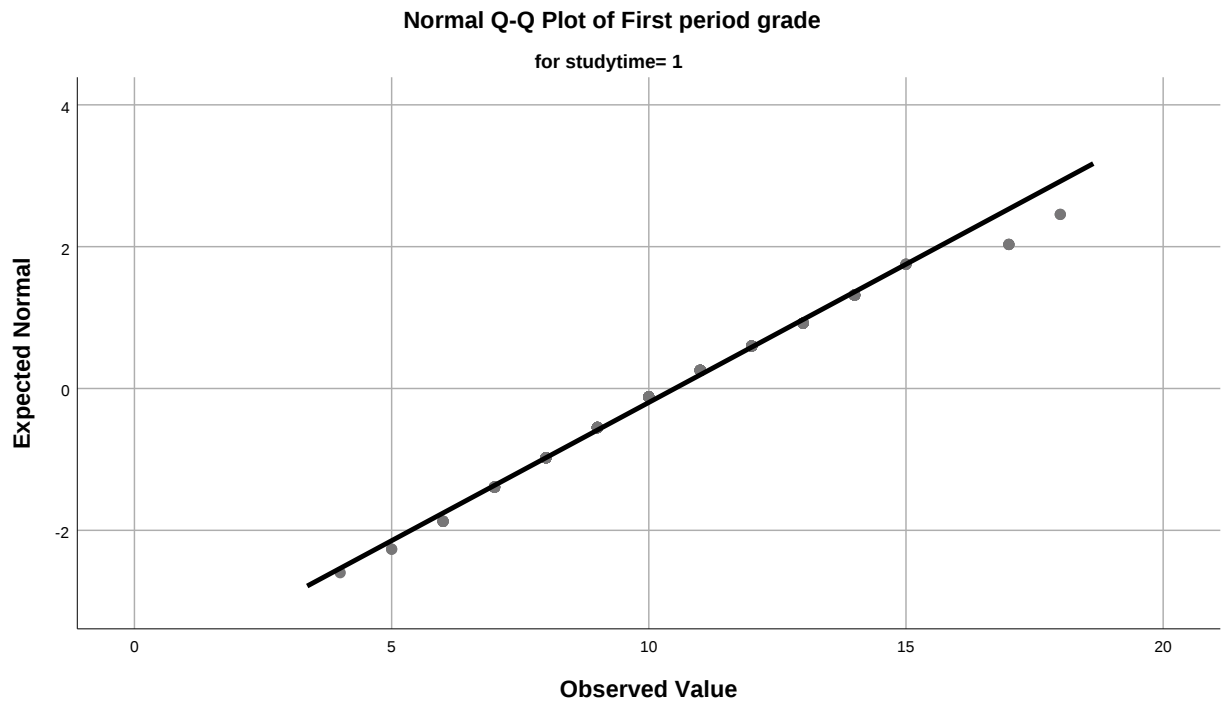


Kendalls Tau-b Distribution Checks
Boxplots and normality plots are provided as context; Kendal

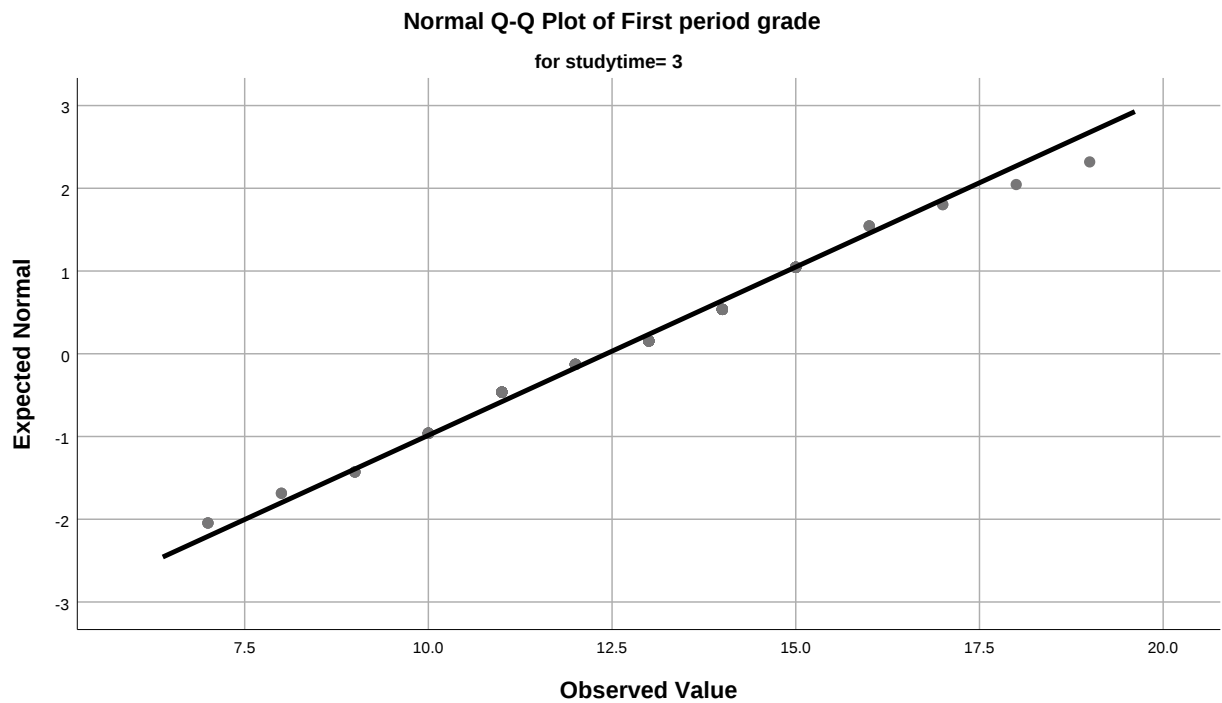
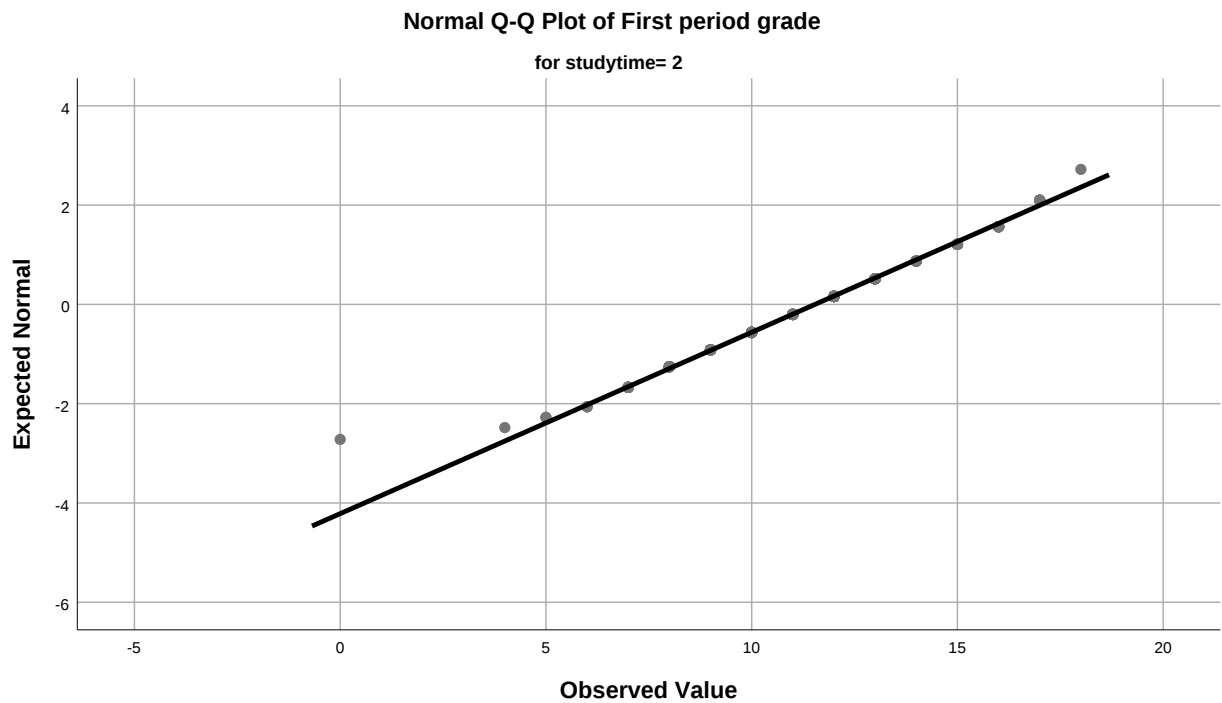


Kendalls Tau-b Distribution Checks
Boxplots and normality plots are provided as context; Kendal

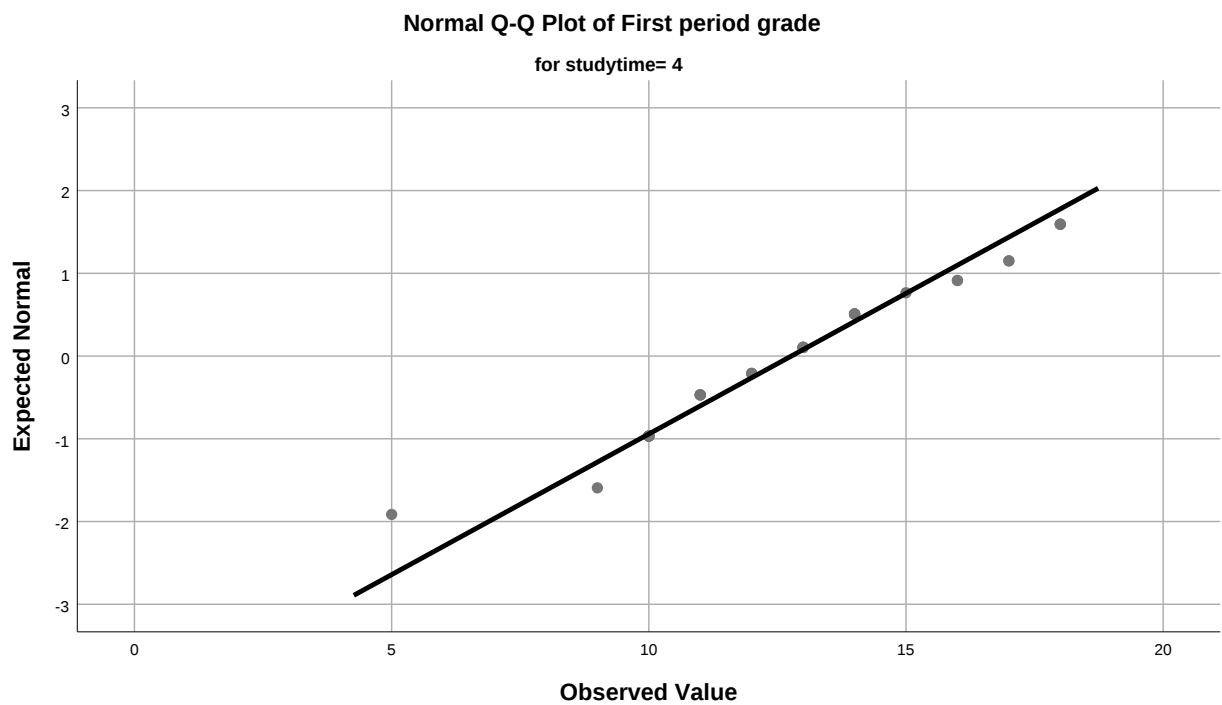
Normal Q-Q Plots



Kendalls Tau-b Distribution Checks
Boxplots and normality plots are provided as context; Kendal

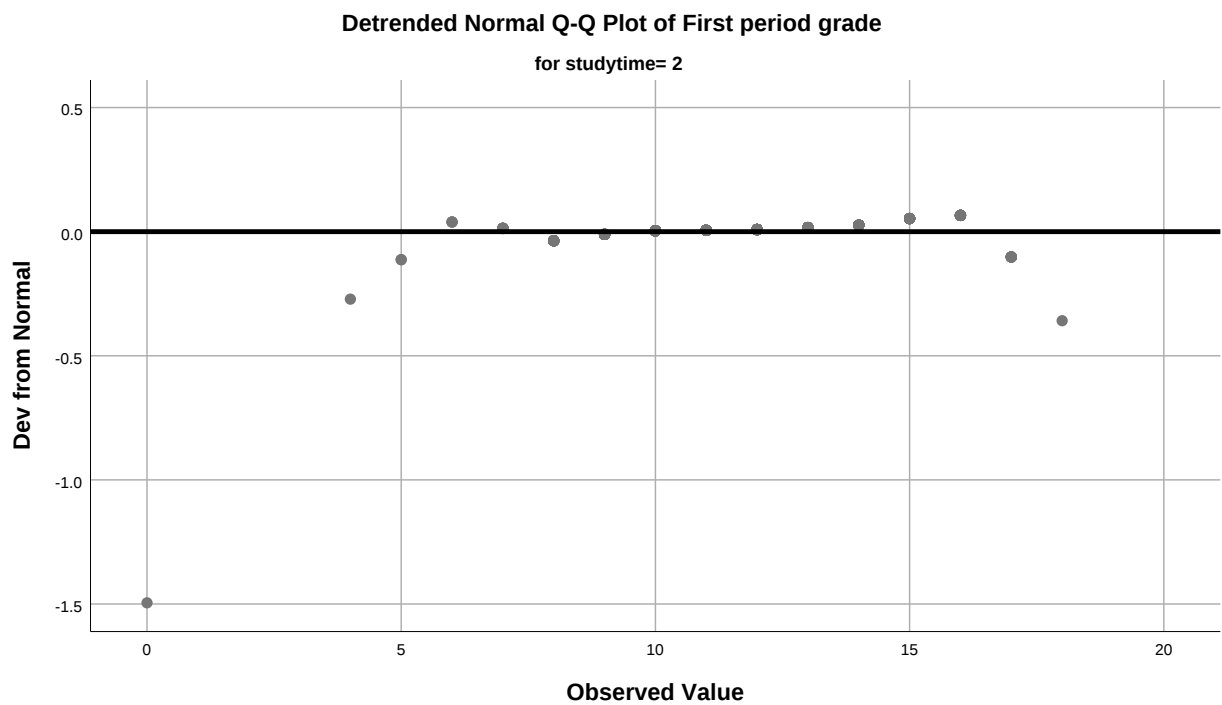
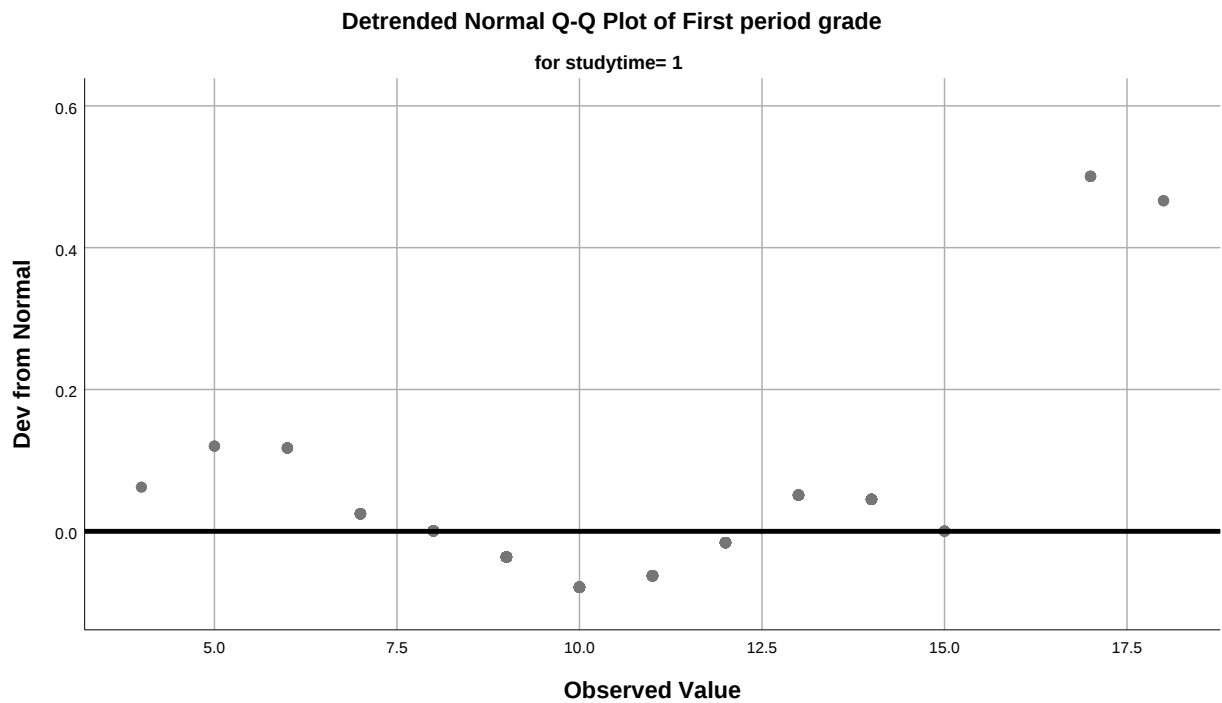


Kendalls Tau-b Distribution Checks
Boxplots and normality plots are provided as context; Kendal

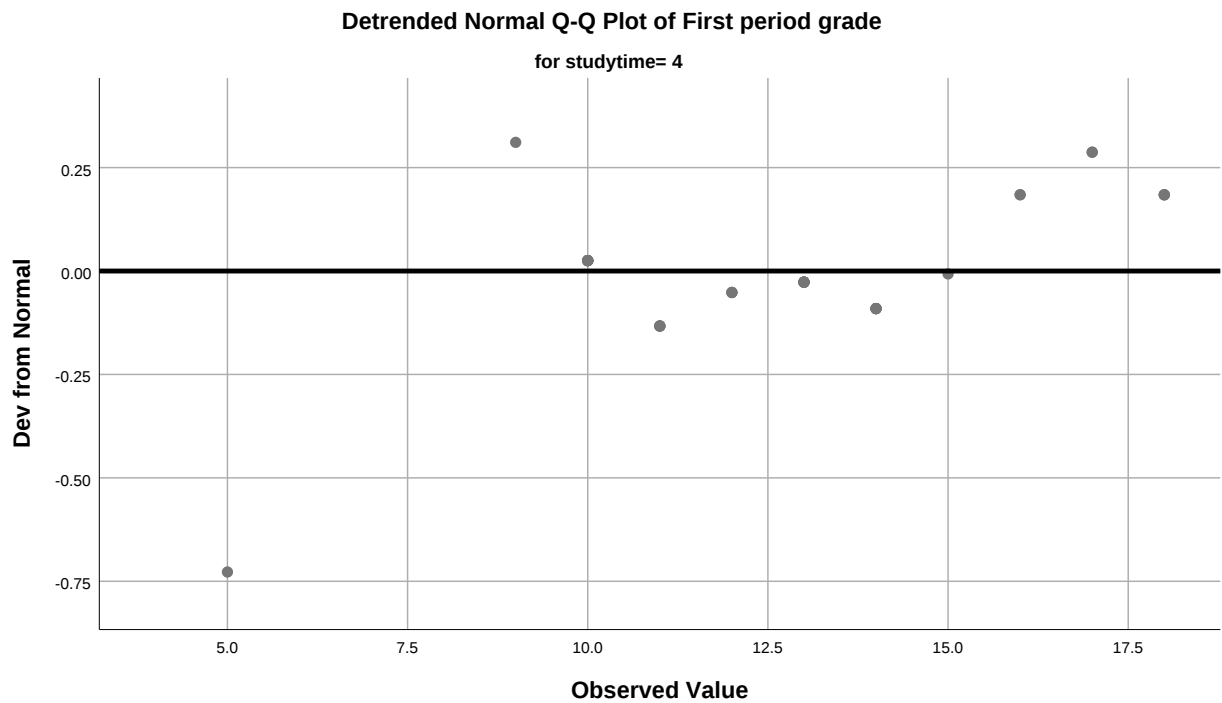
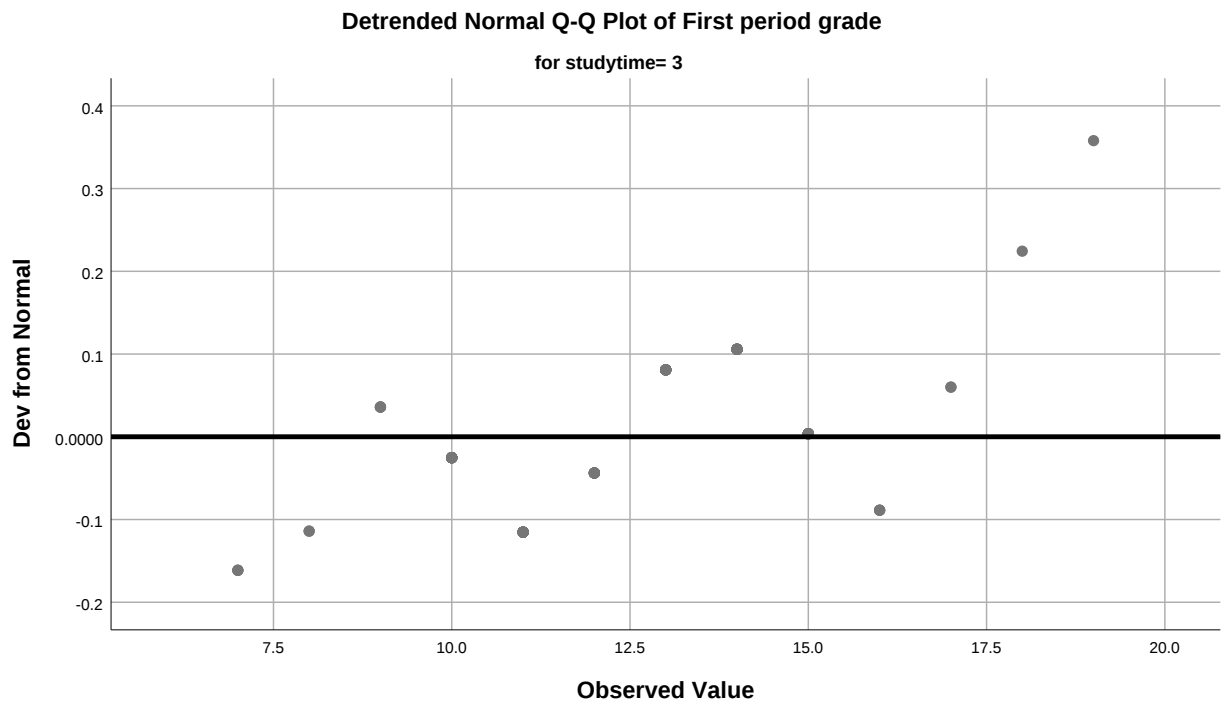


Detrended Normal Q-Q Plots

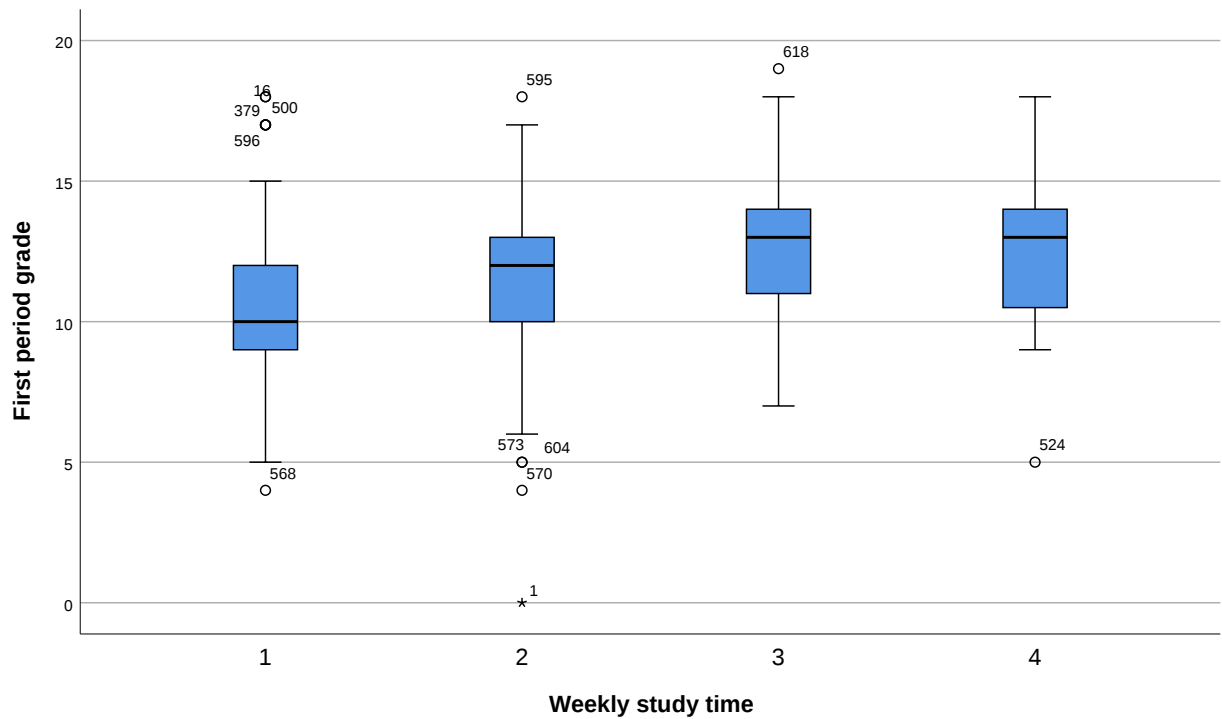
Kendalls Tau-b Distribution Checks
Boxplots and normality plots are provided as context; Kendal



Kendalls Tau-b Distribution Checks
Boxplots and normality plots are provided as context; Kendal



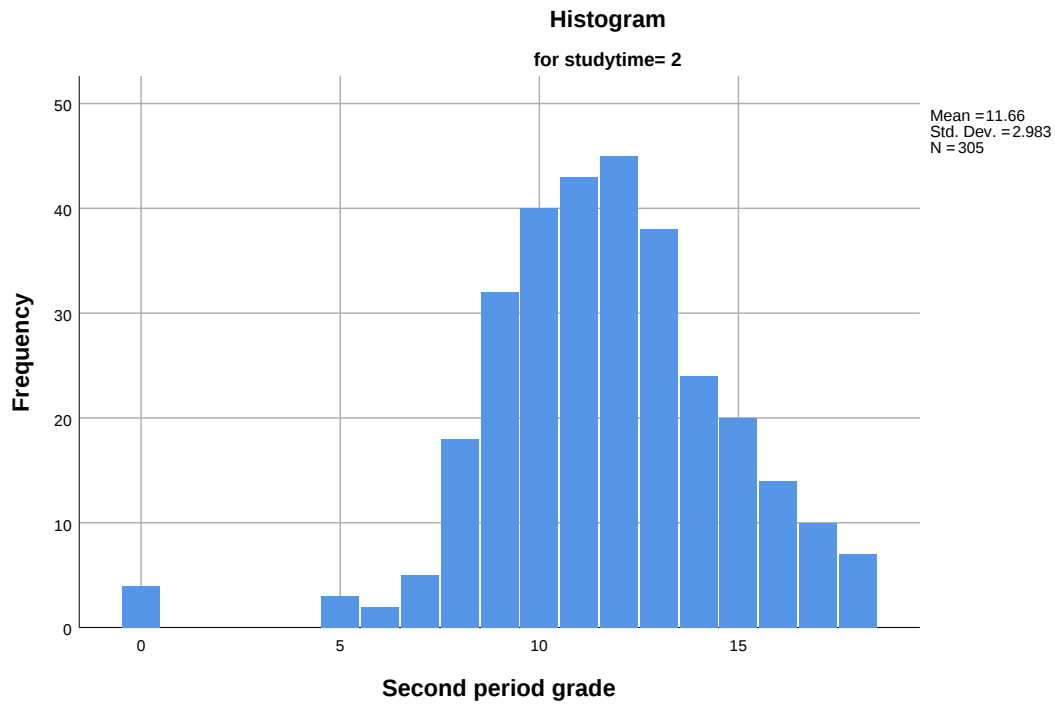
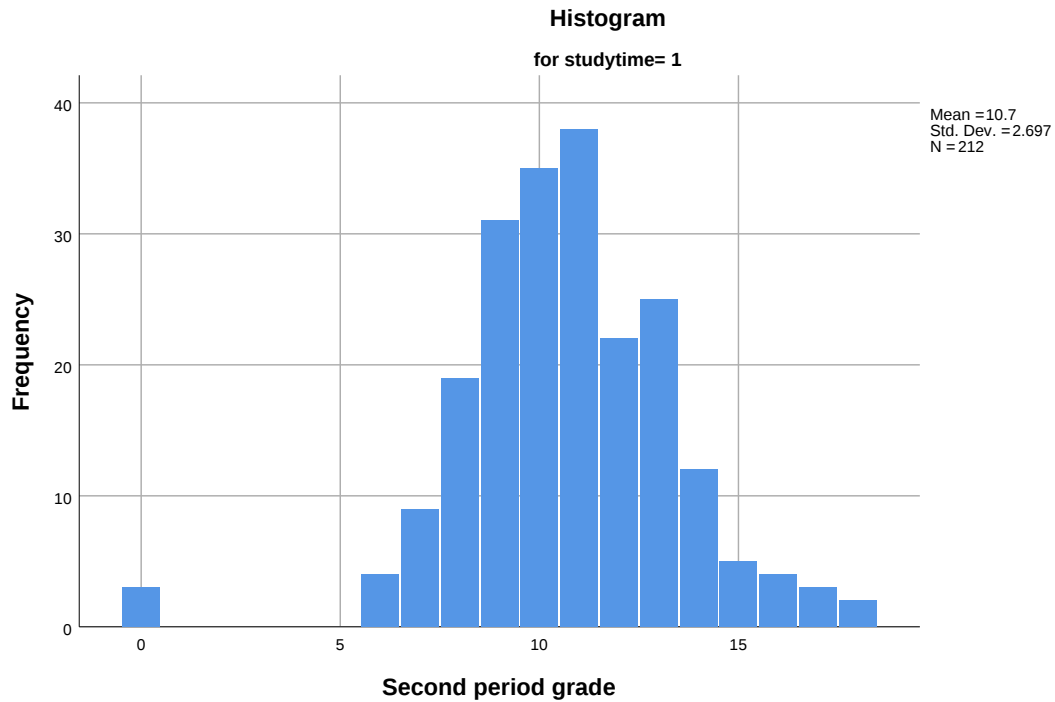
Kendalls Tau-b Distribution Checks
Boxplots and normality plots are provided as context; Kendal



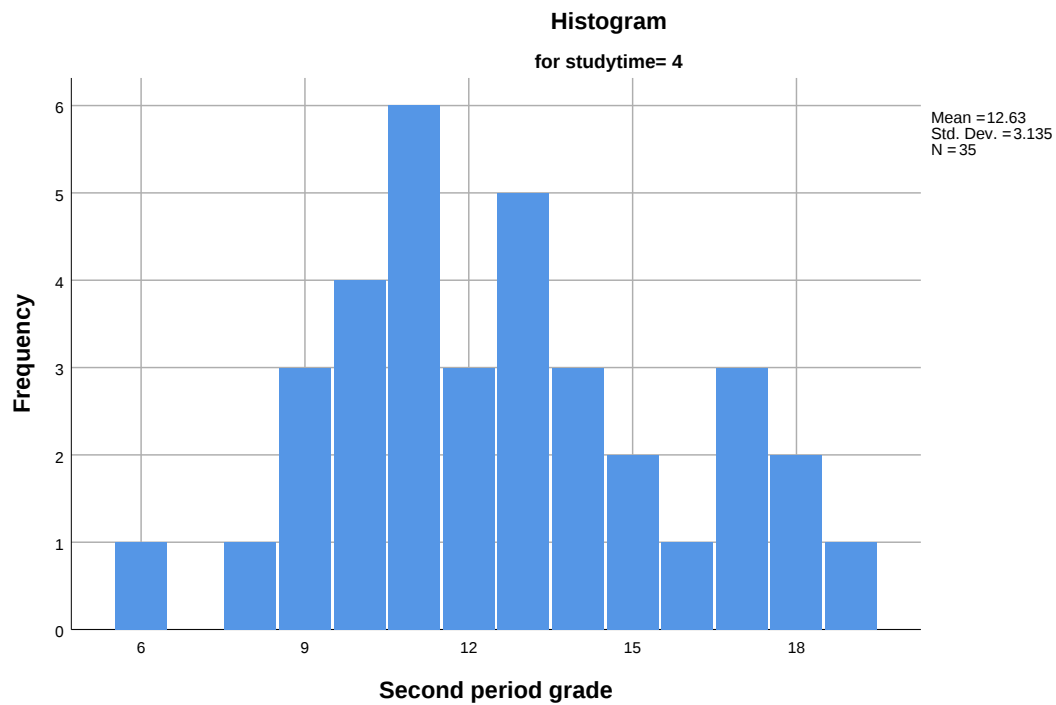
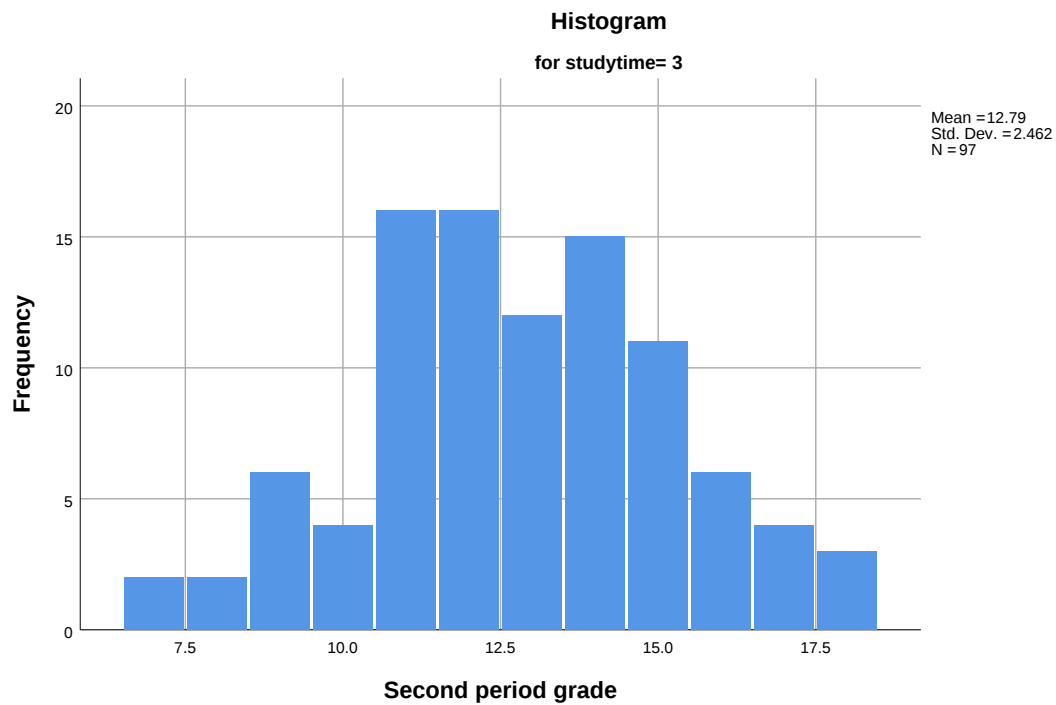
Second period grade

Histograms

Kendalls Tau-b Distribution Checks
Boxplots and normality plots are provided as context; Kendal

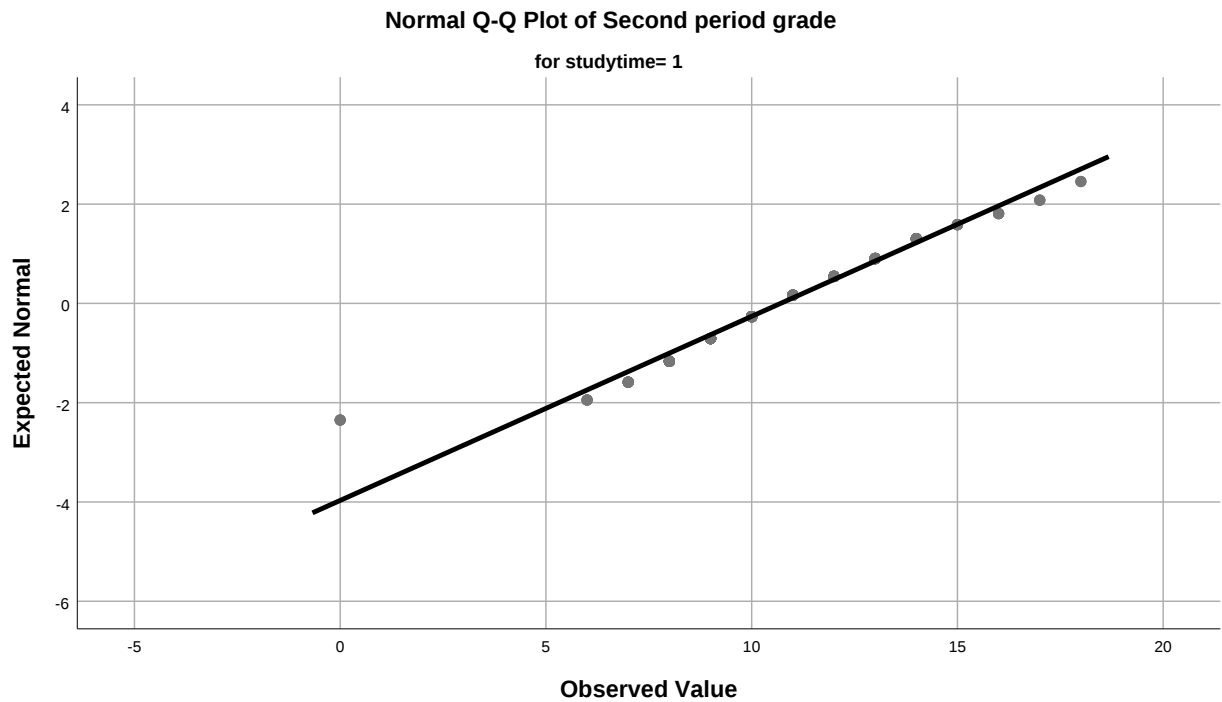


Kendalls Tau-b Distribution Checks
Boxplots and normality plots are provided as context; Kendal

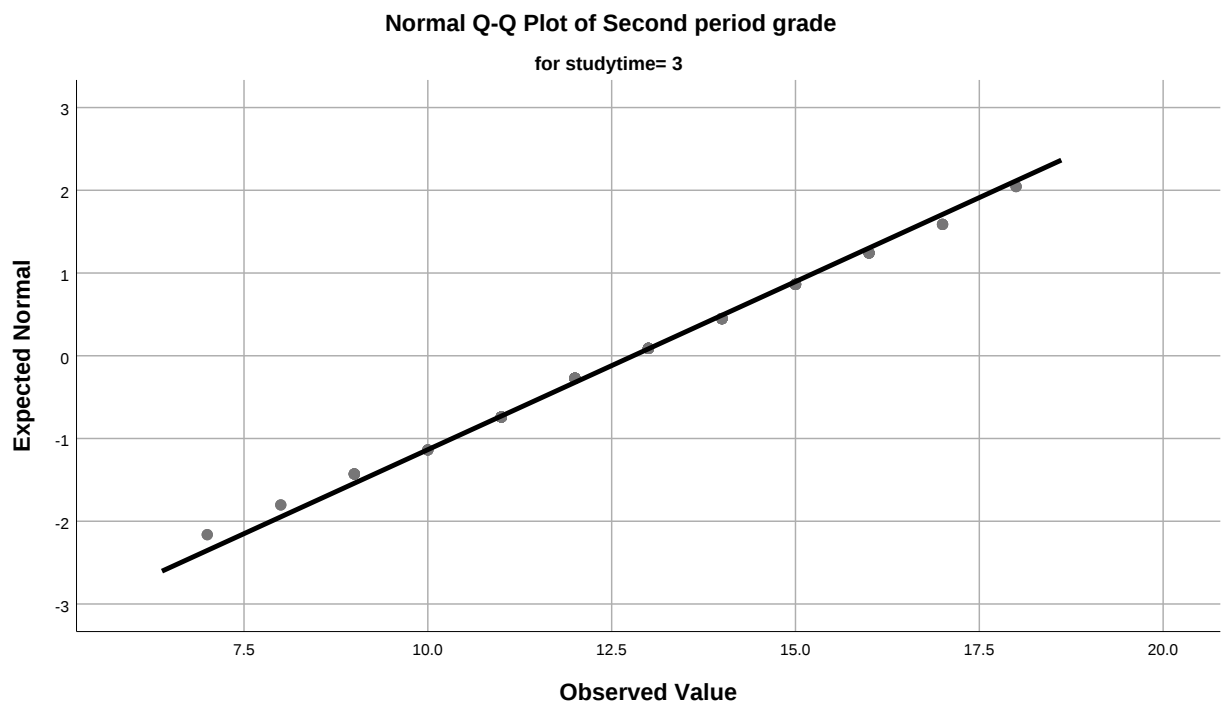
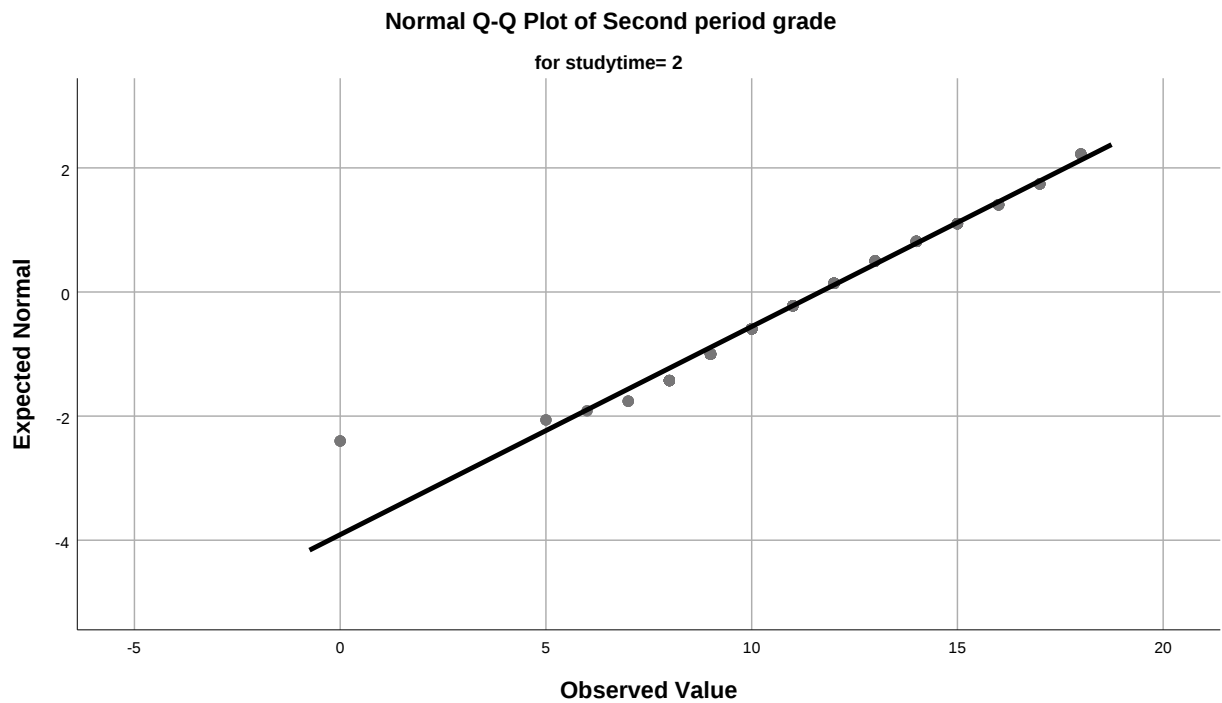


Kendalls Tau-b Distribution Checks
Boxplots and normality plots are provided as context; Kendal

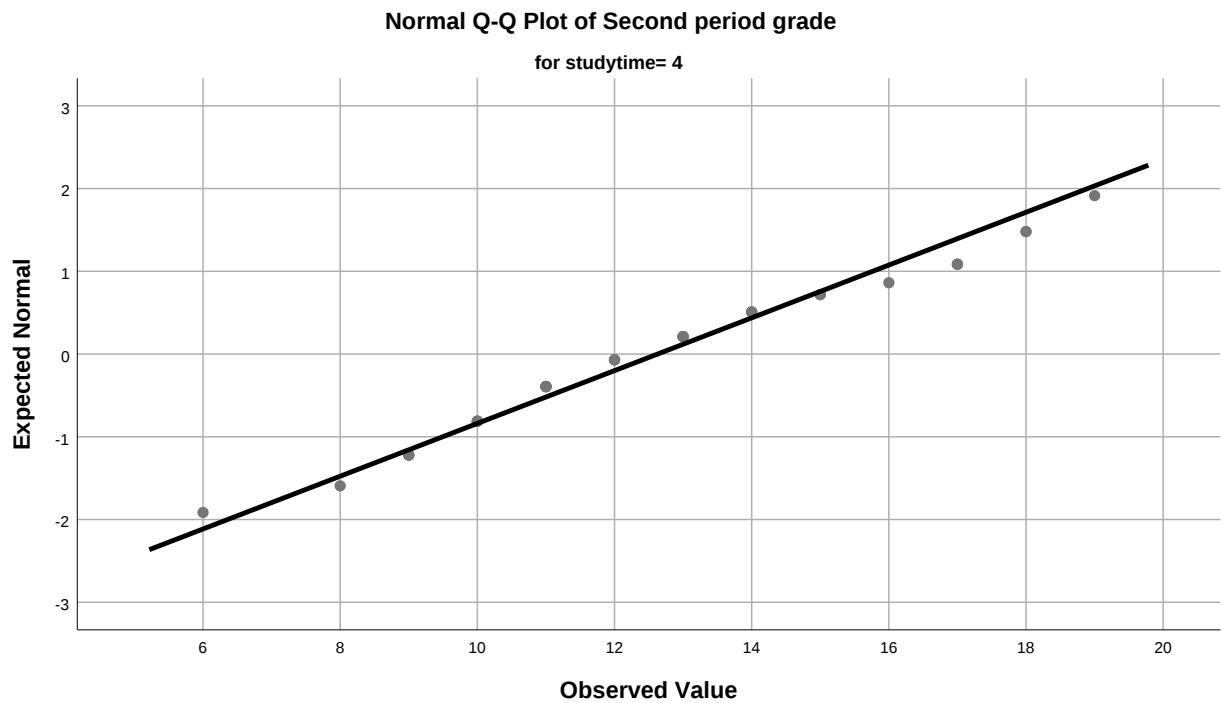
Normal Q-Q Plots



Kendalls Tau-b Distribution Checks
Boxplots and normality plots are provided as context; Kendal

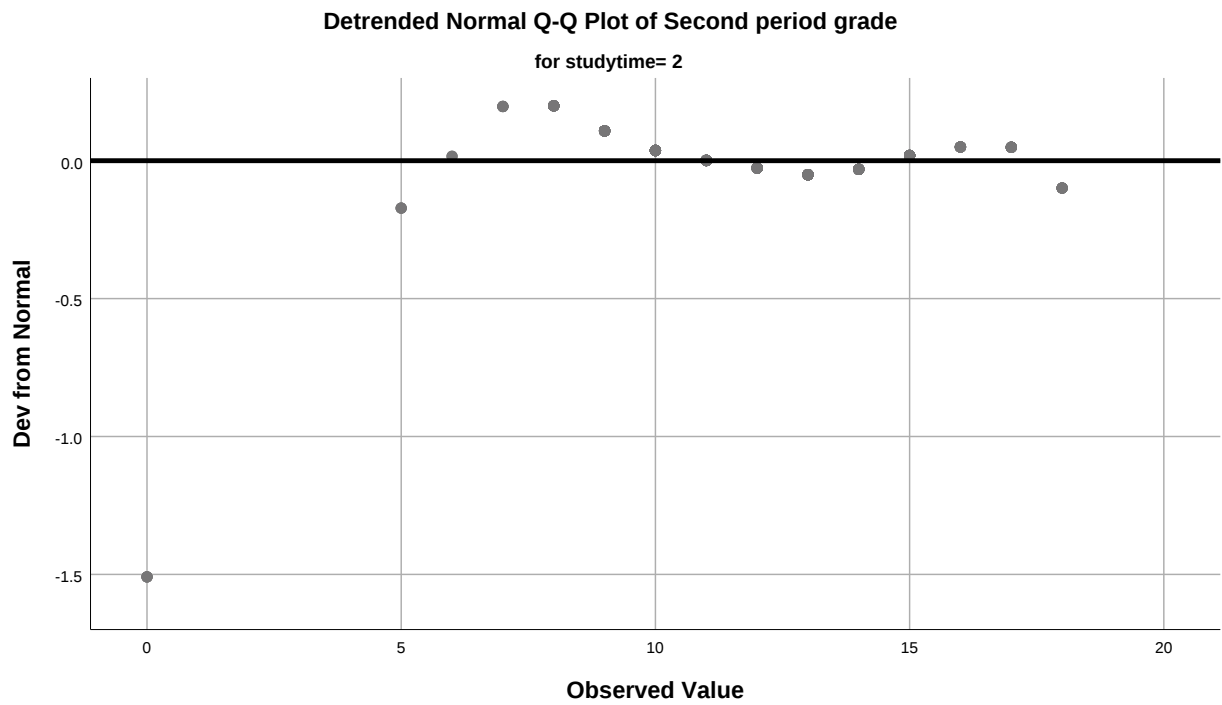
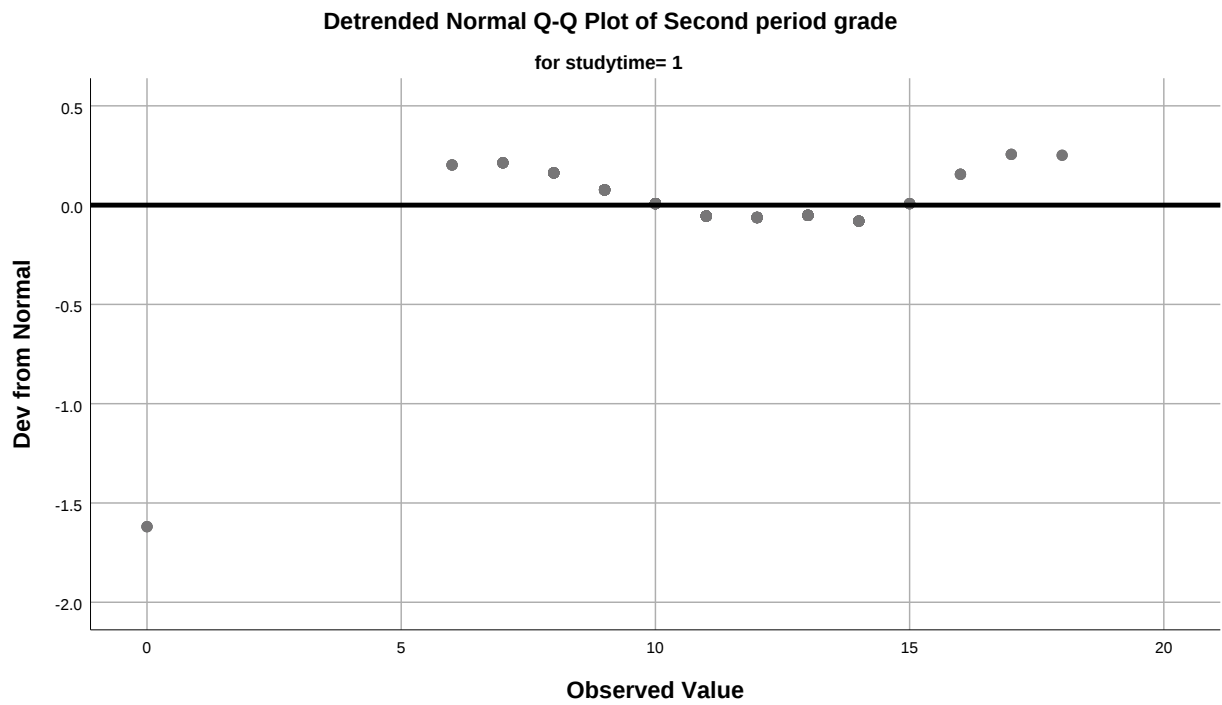


Kendalls Tau-b Distribution Checks
Boxplots and normality plots are provided as context; Kendal

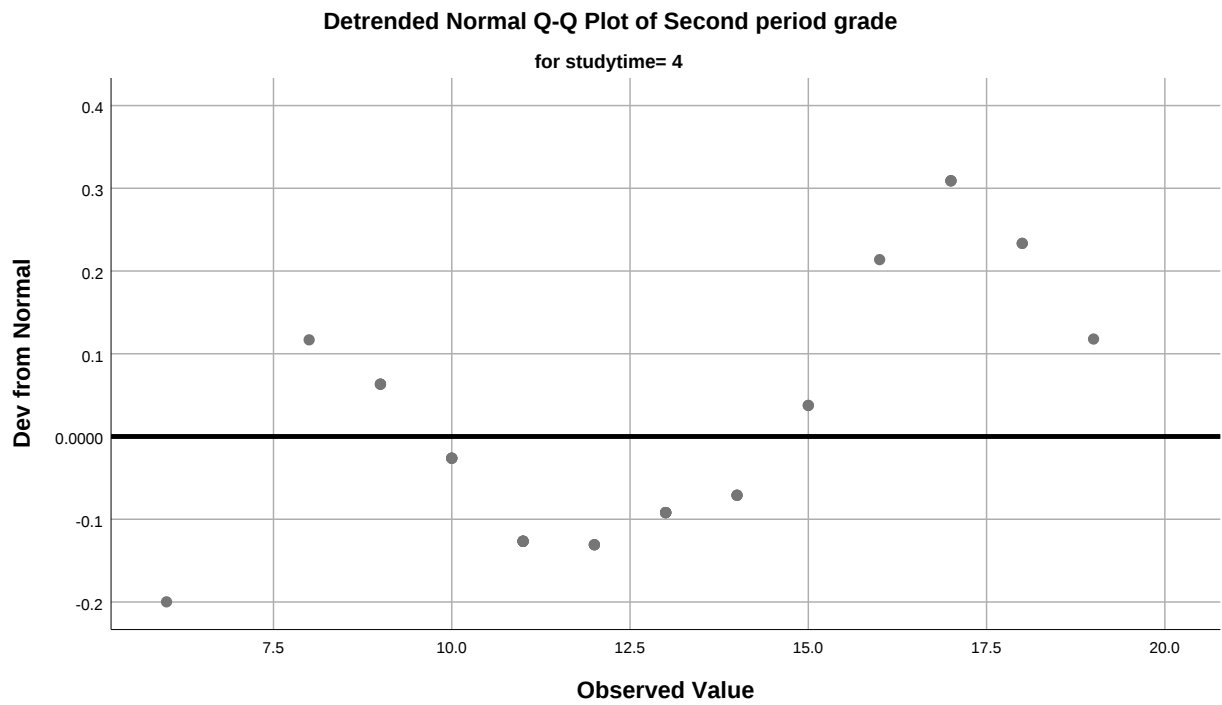
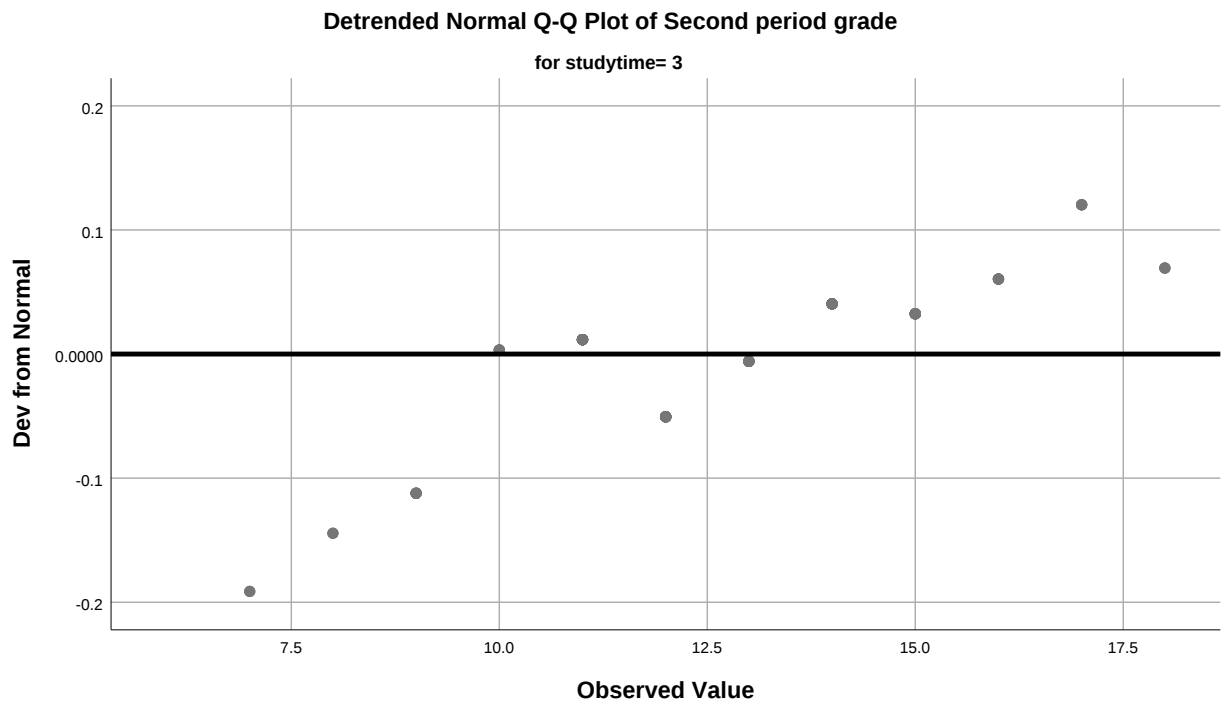


Detrended Normal Q-Q Plots

Kendalls Tau-b Distribution Checks
Boxplots and normality plots are provided as context; Kendal

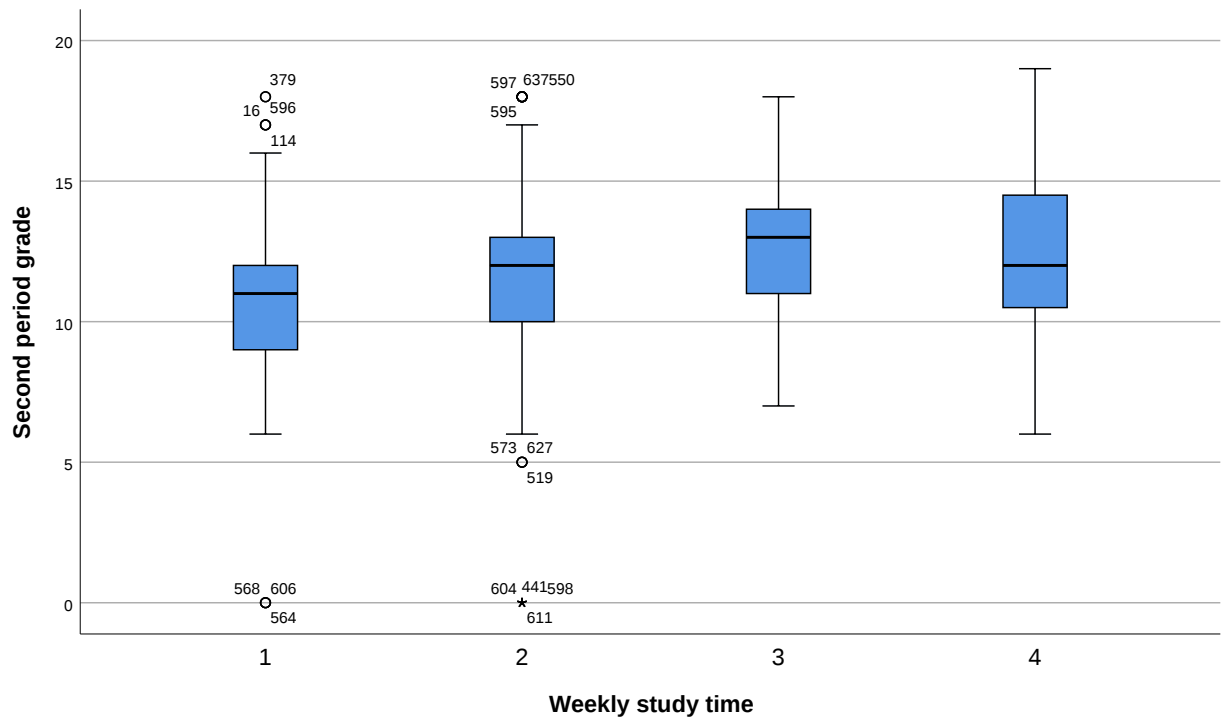


Kendalls Tau-b Distribution Checks
Boxplots and normality plots are provided as context; Kendal



Kendalls Tau-b Distribution Checks

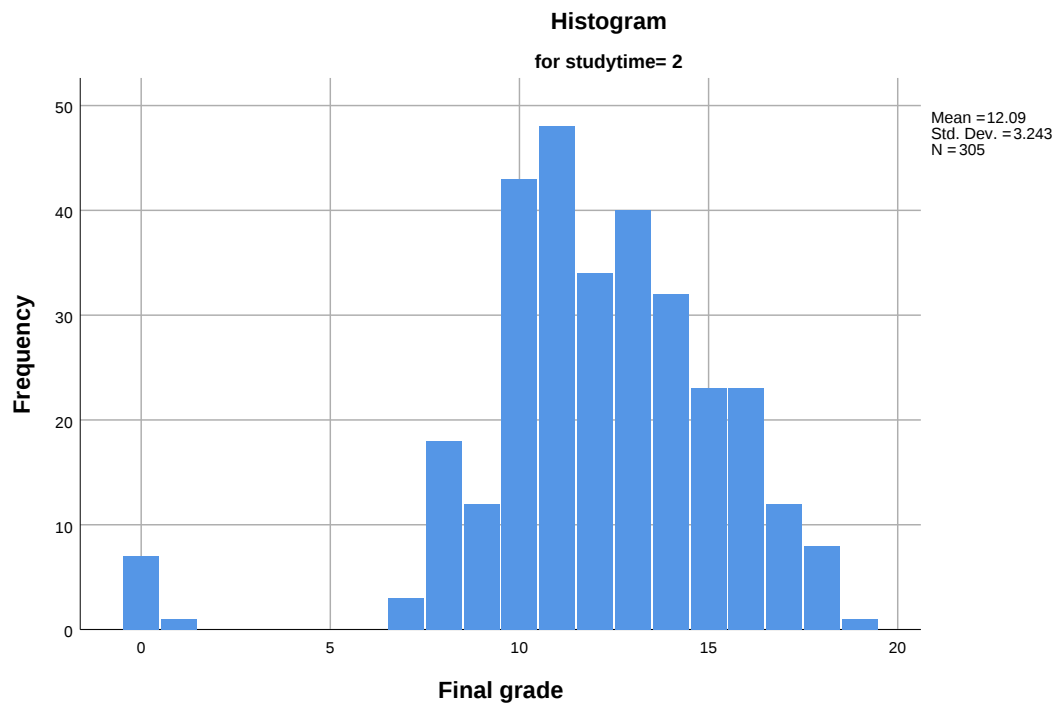
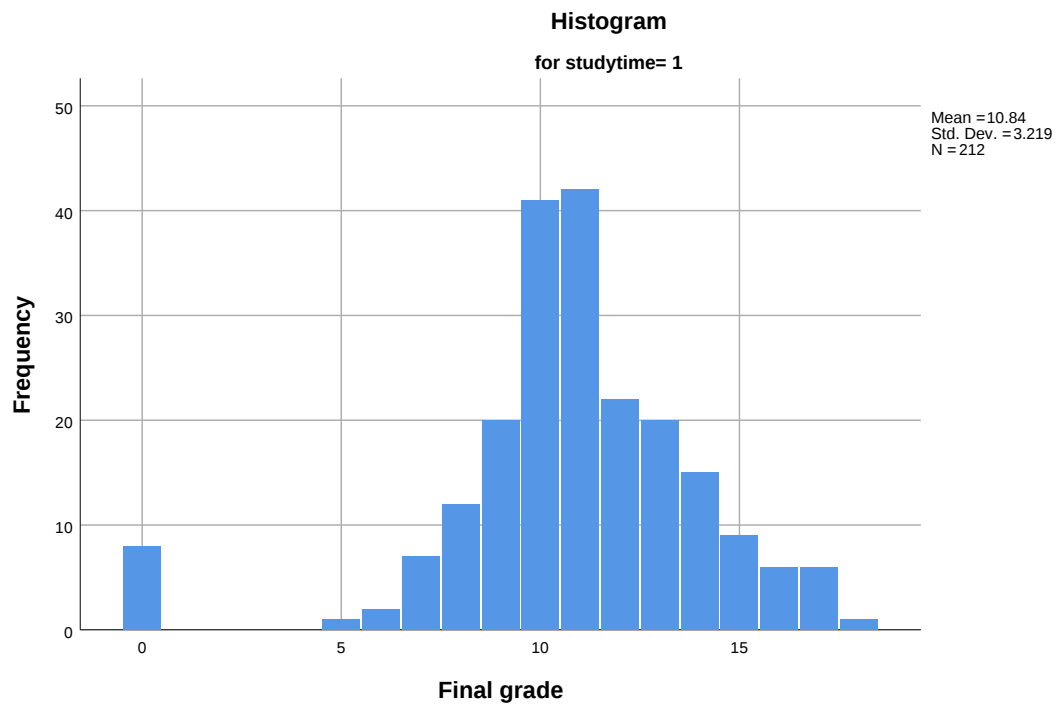
Boxplots and normality plots are provided as context; Kendal



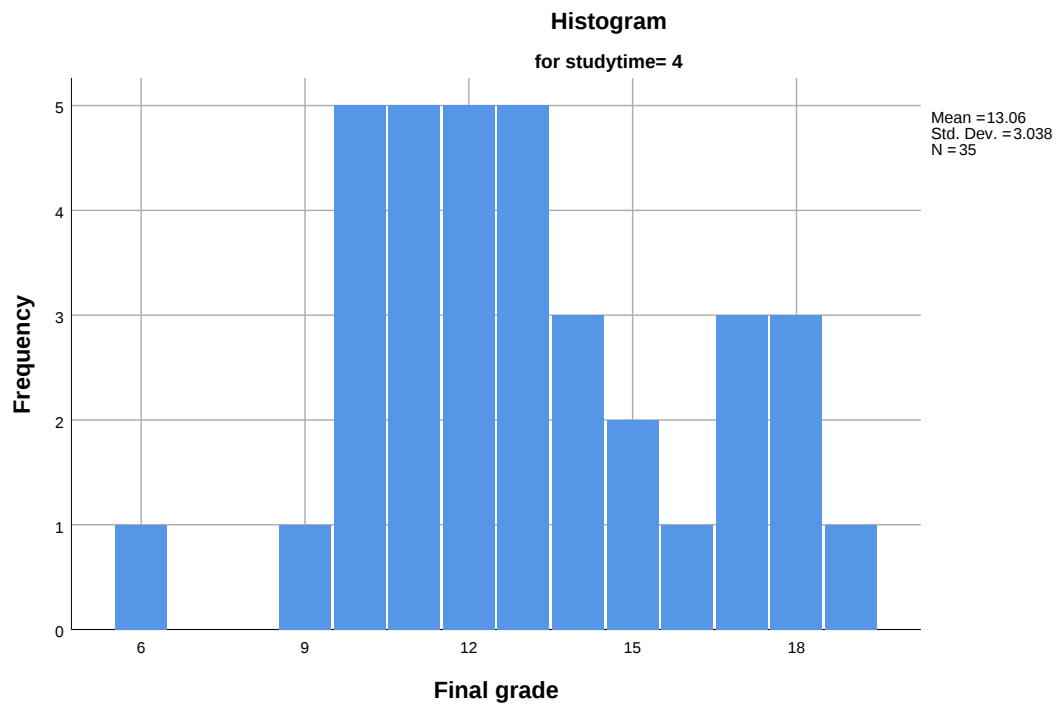
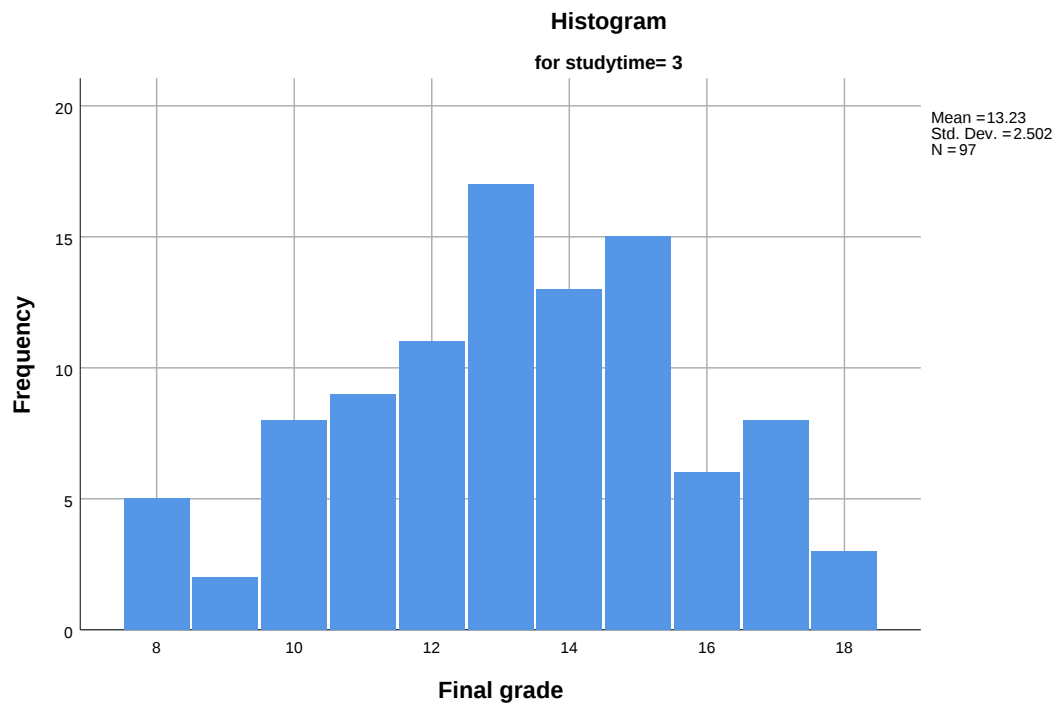
Final grade

Histograms

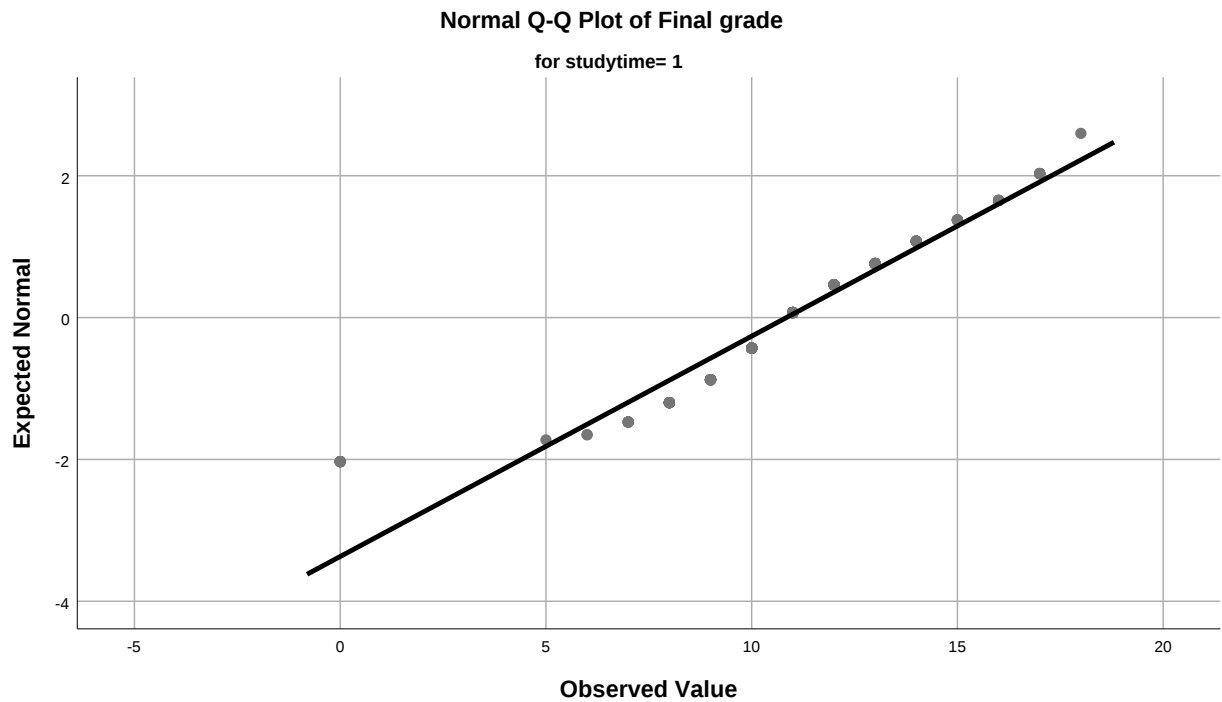
Kendalls Tau-b Distribution Checks
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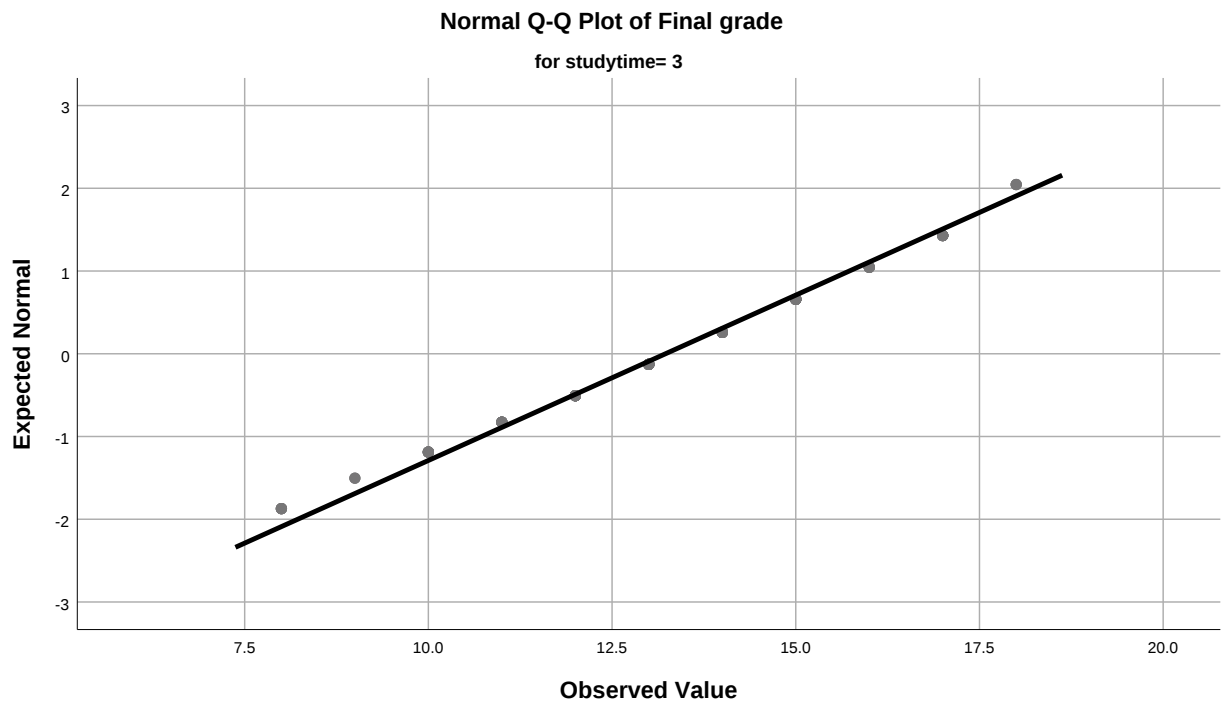
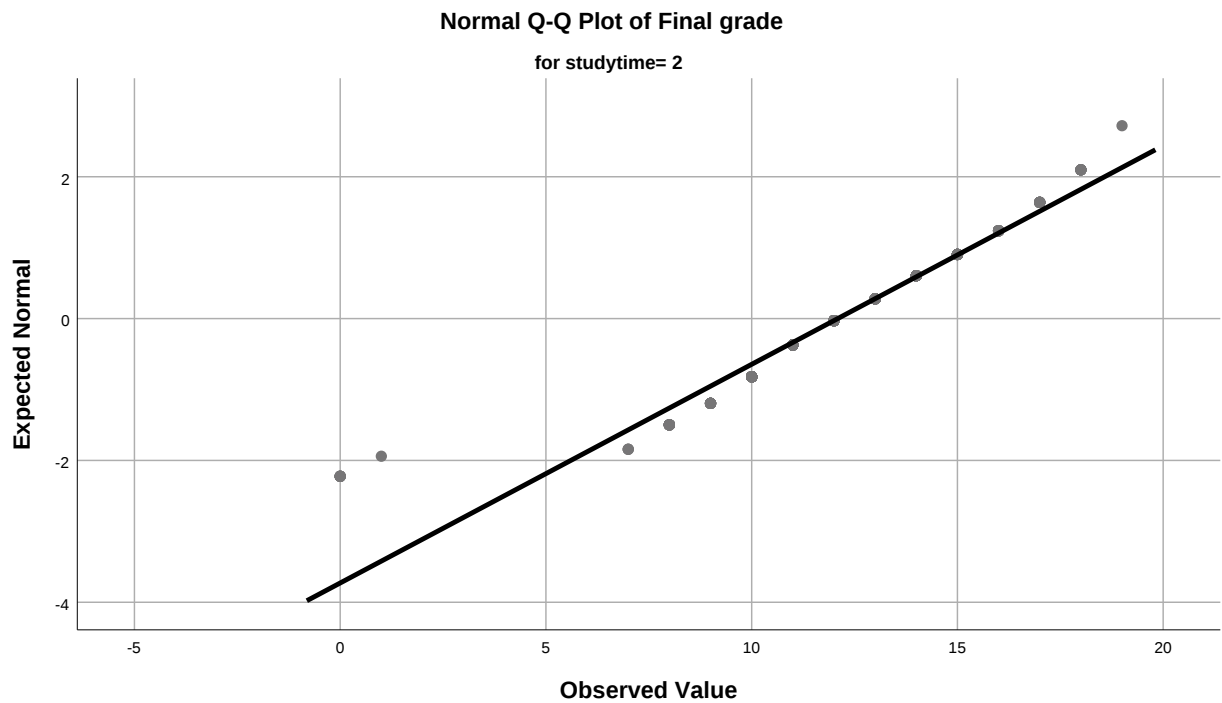
Kendalls Tau-b Distribution Checks
Boxplots and normality plots are provided as context; Kendal



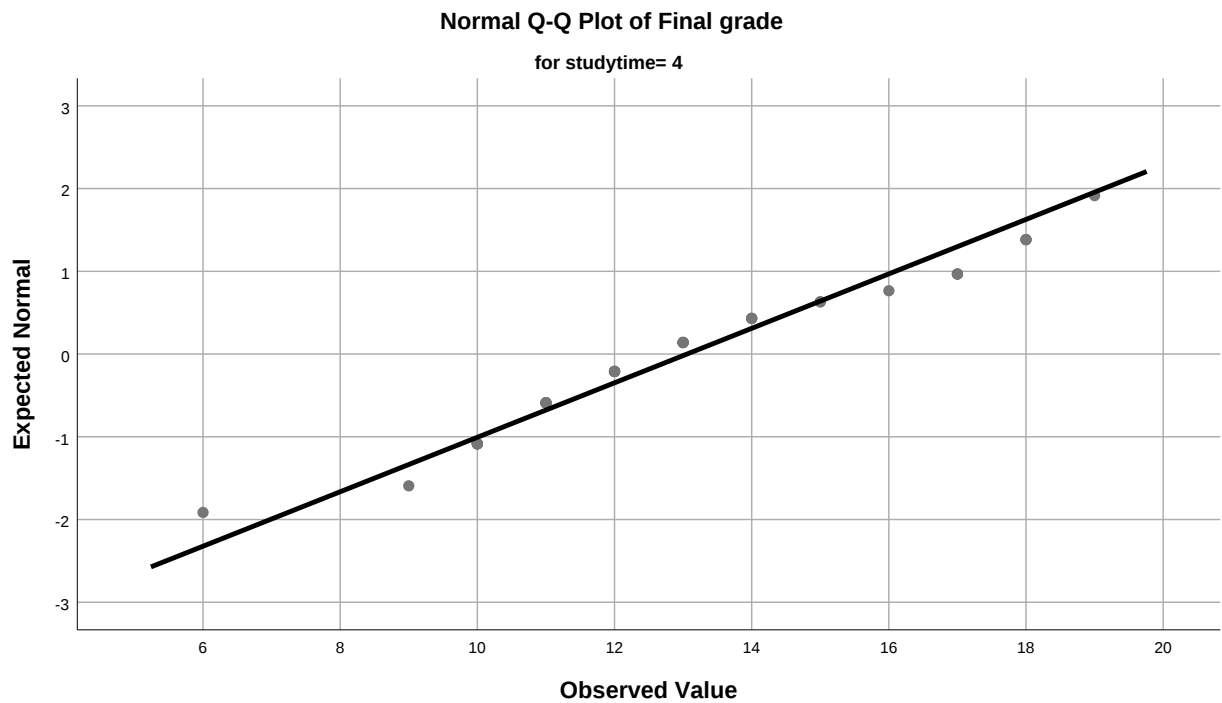
Normal Q-Q Plots



Kendalls Tau-b Distribution Checks
Boxplots and normality plots are provided as context; Kendal

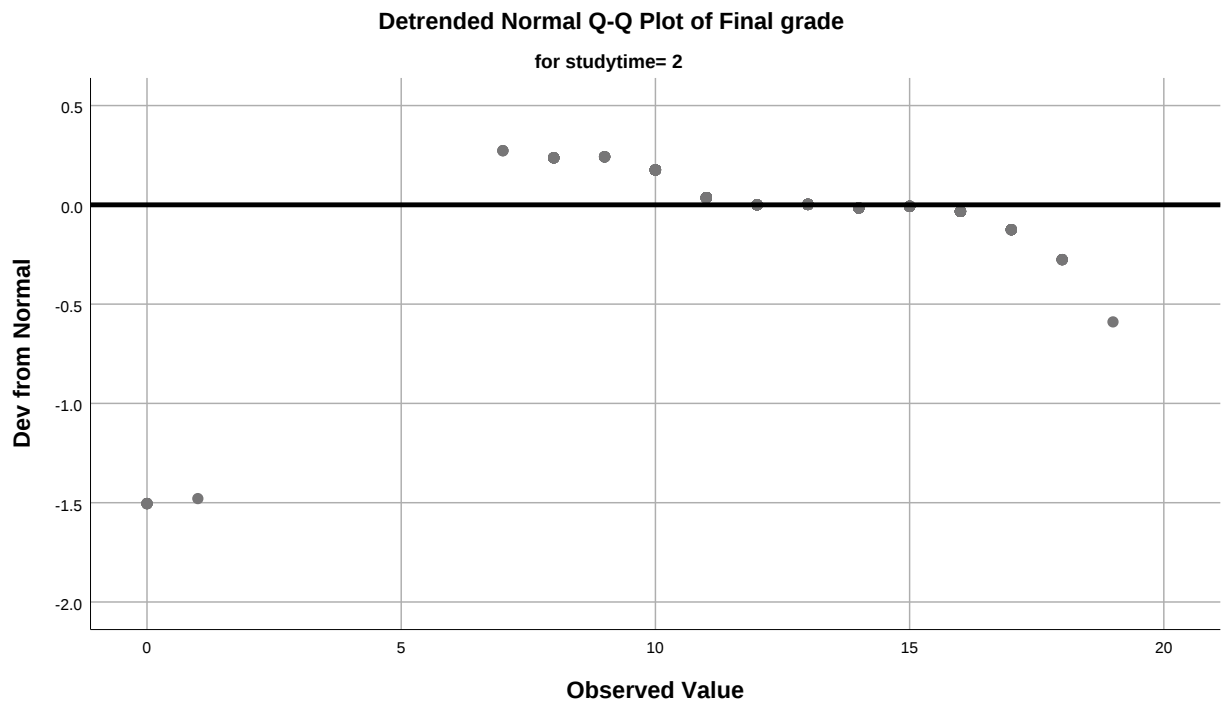
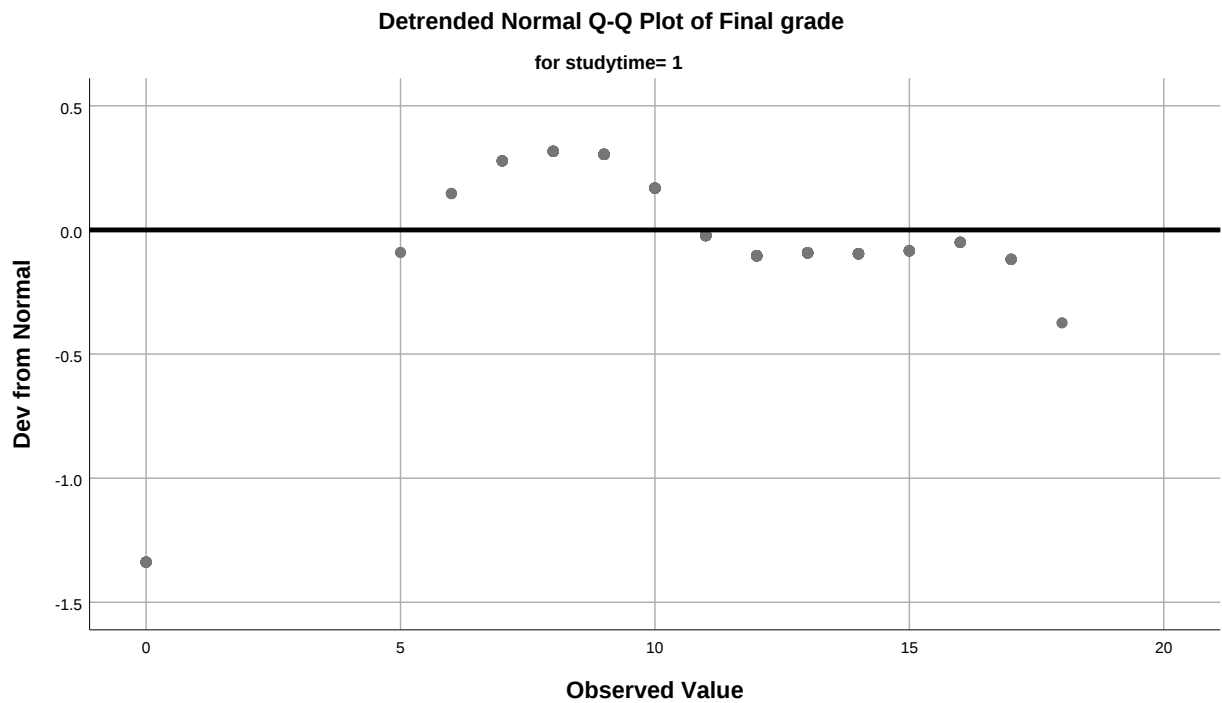


Kendalls Tau-b Distribution Checks
Boxplots and normality plots are provided as context; Kendal

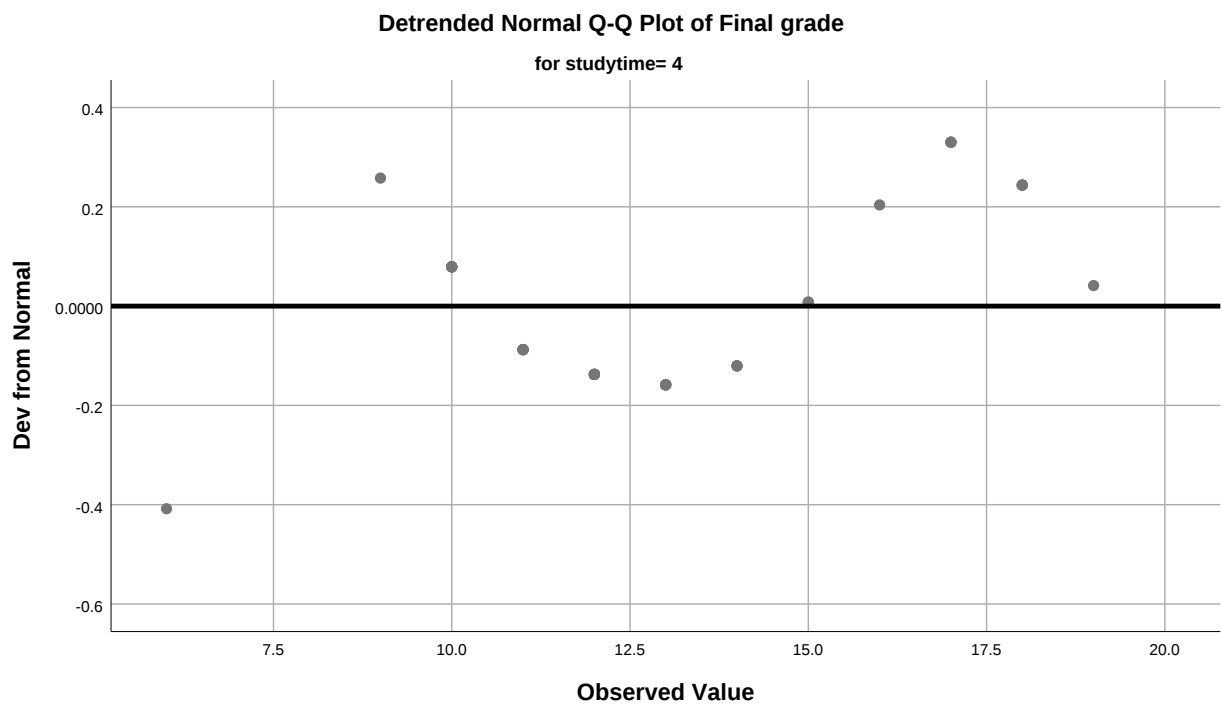
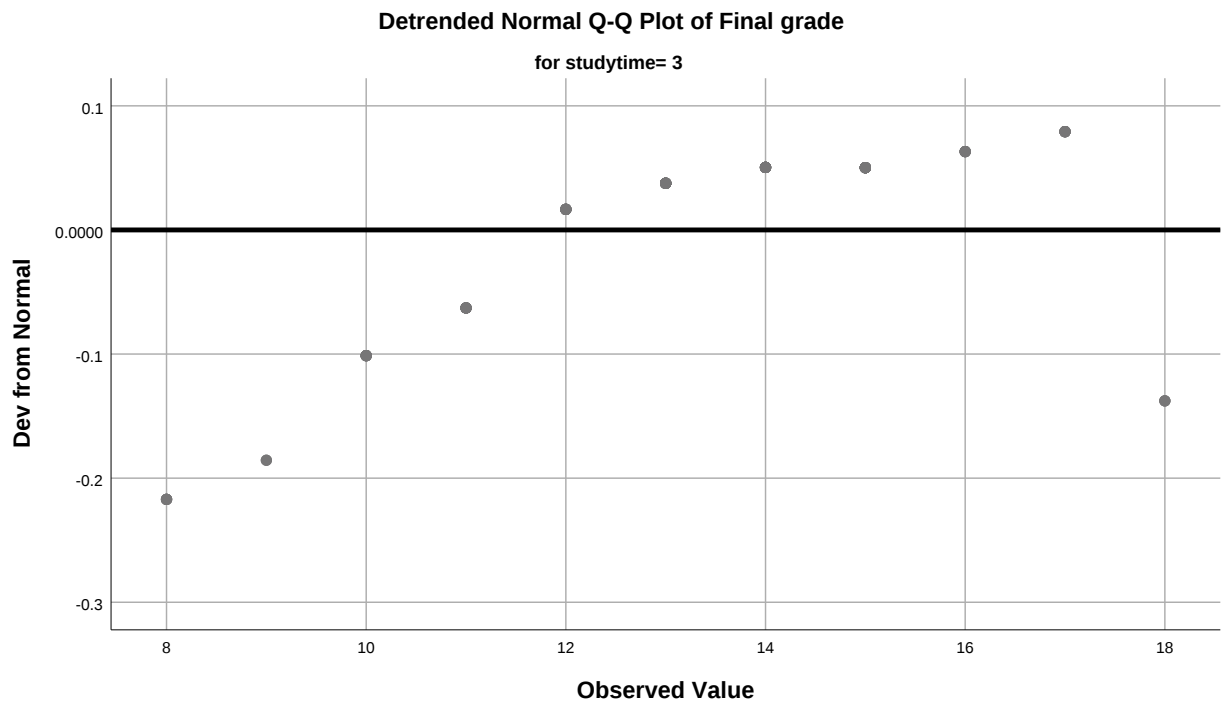


Detrended Normal Q-Q Plots

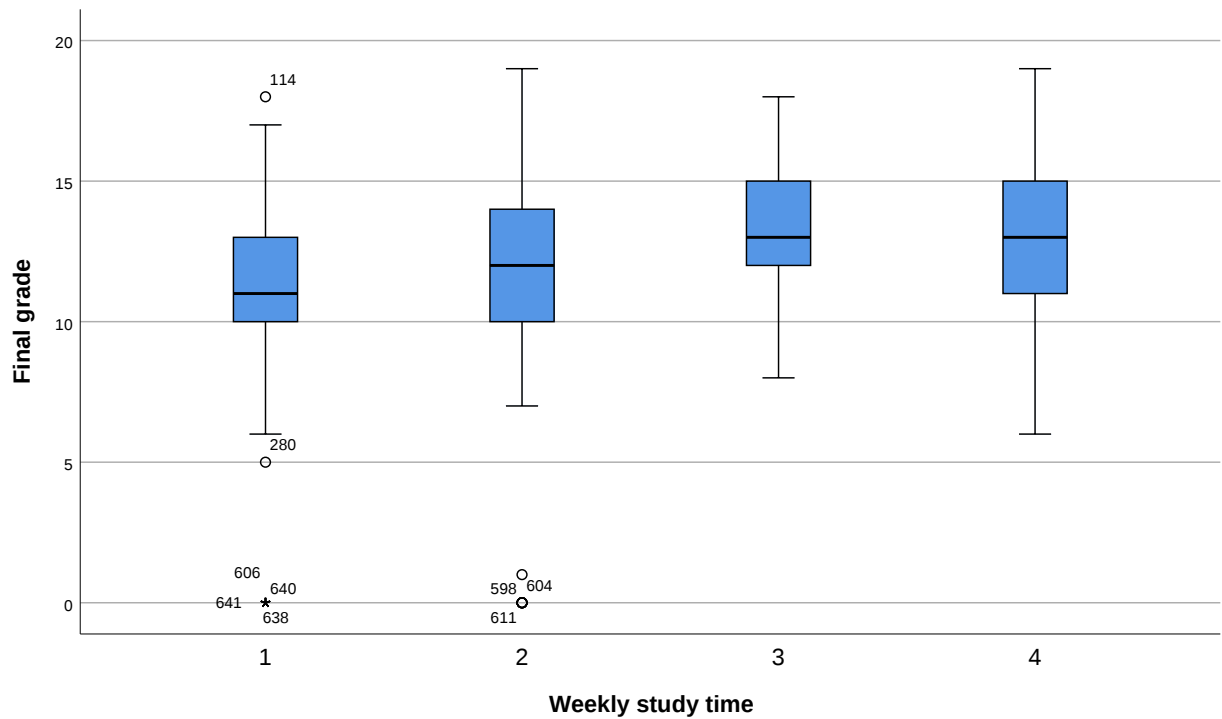
Kendalls Tau-b Distribution Checks
Boxplots and normality plots are provided as context; Kendal



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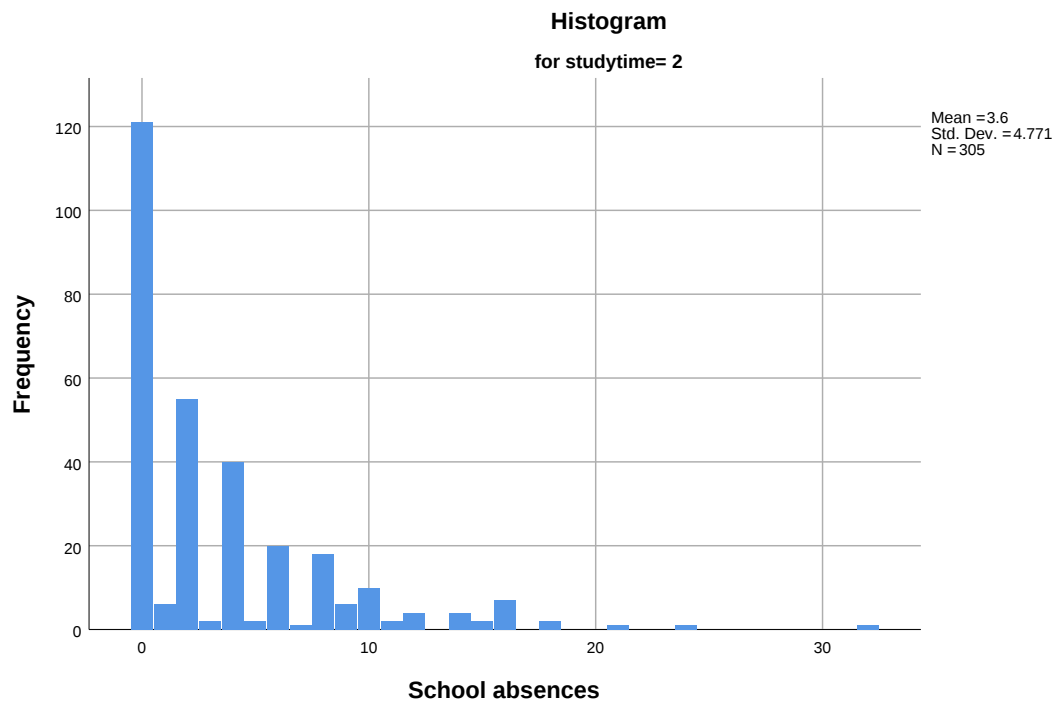
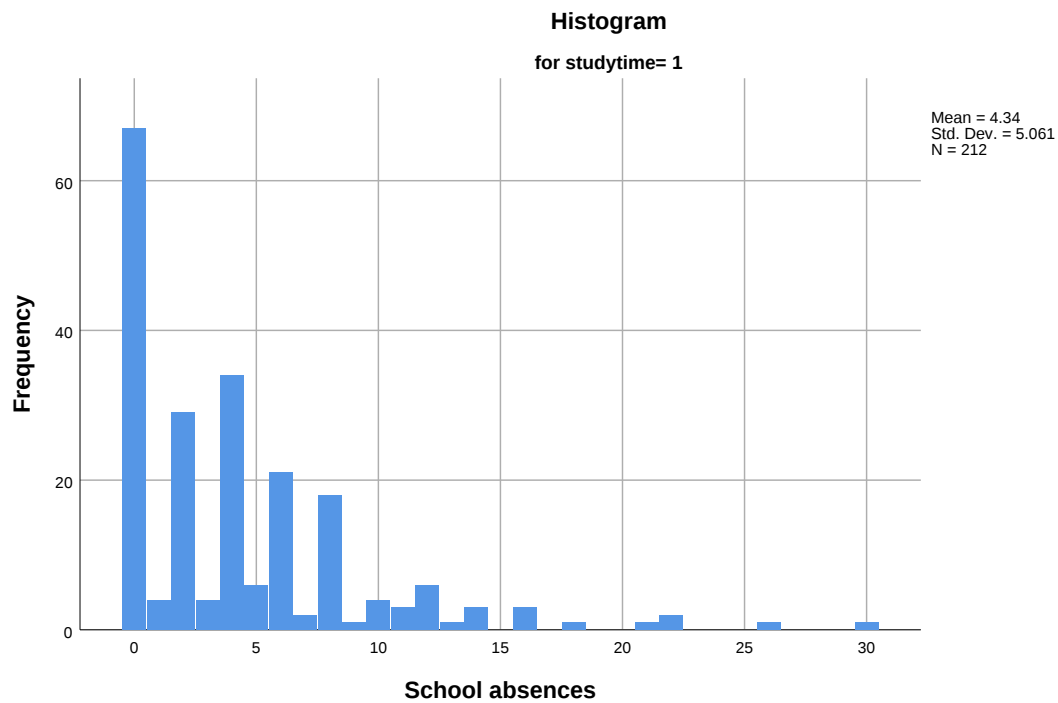
Kendalls Tau-b Distribution Checks
Boxplots and normality plots are provided as context; Kendal



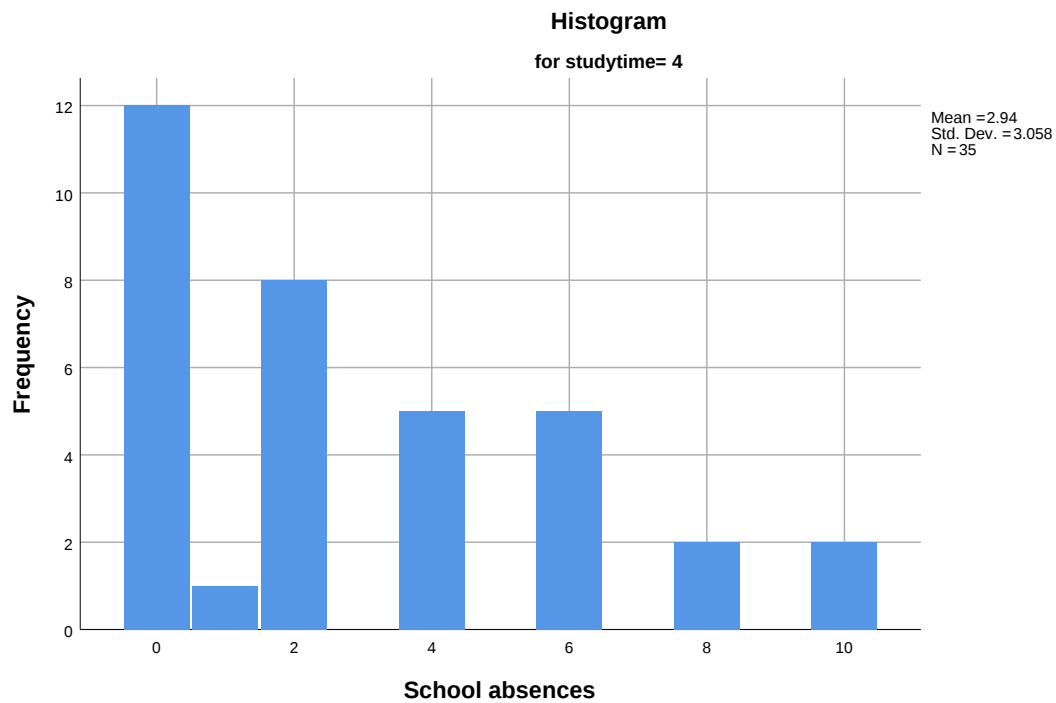
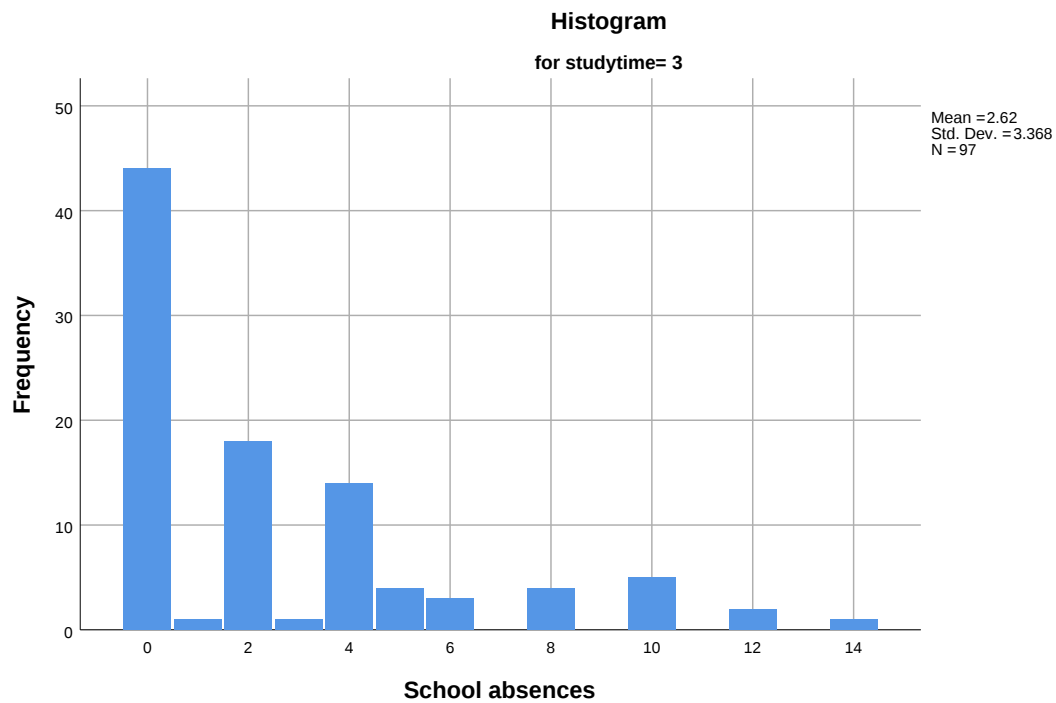
School absences

Histograms

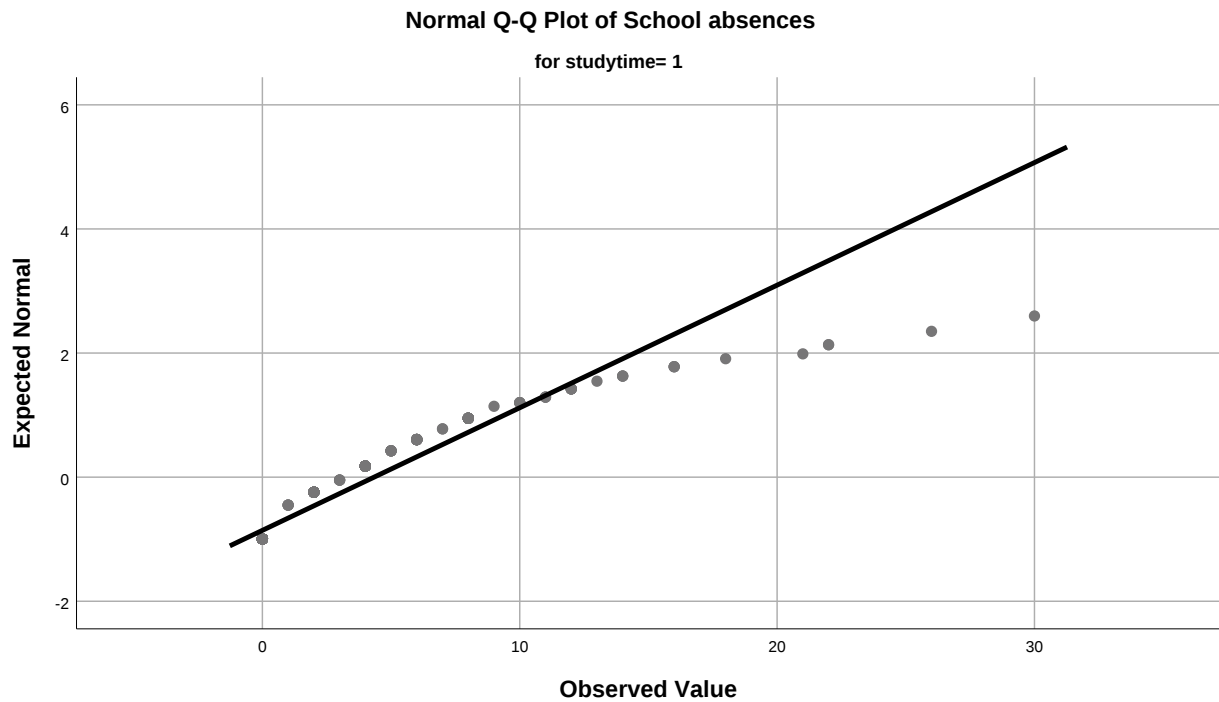
Kendalls Tau-b Distribution Checks
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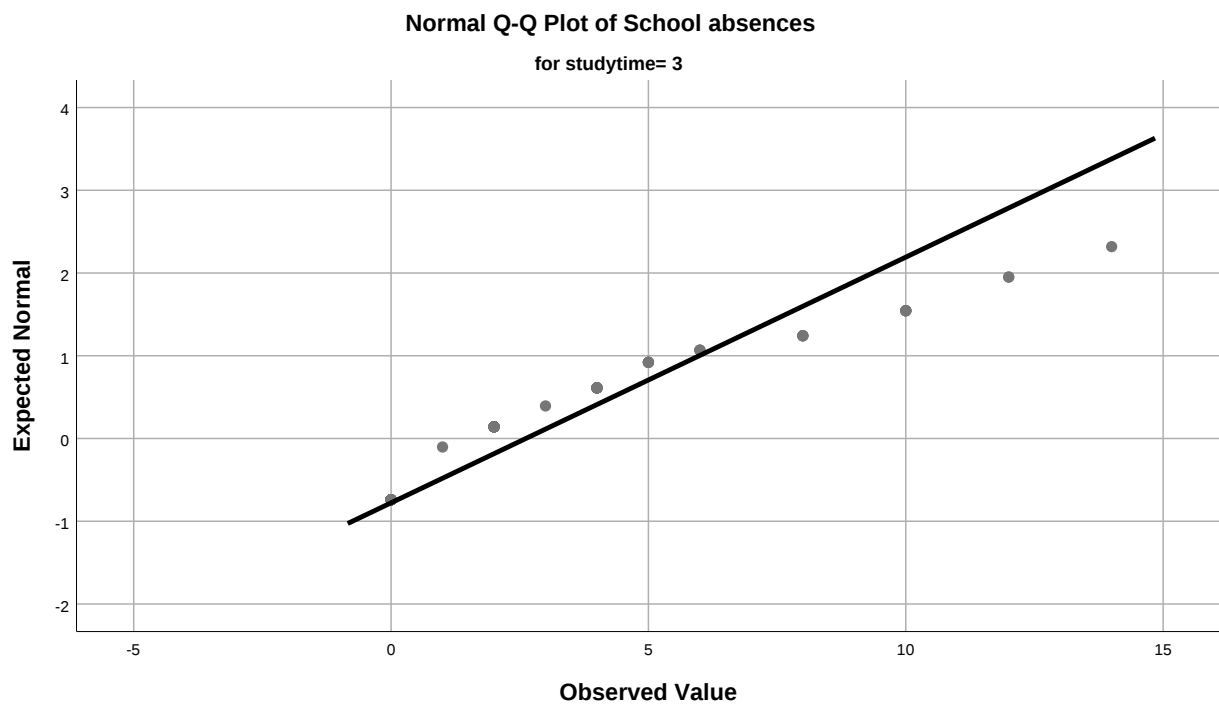
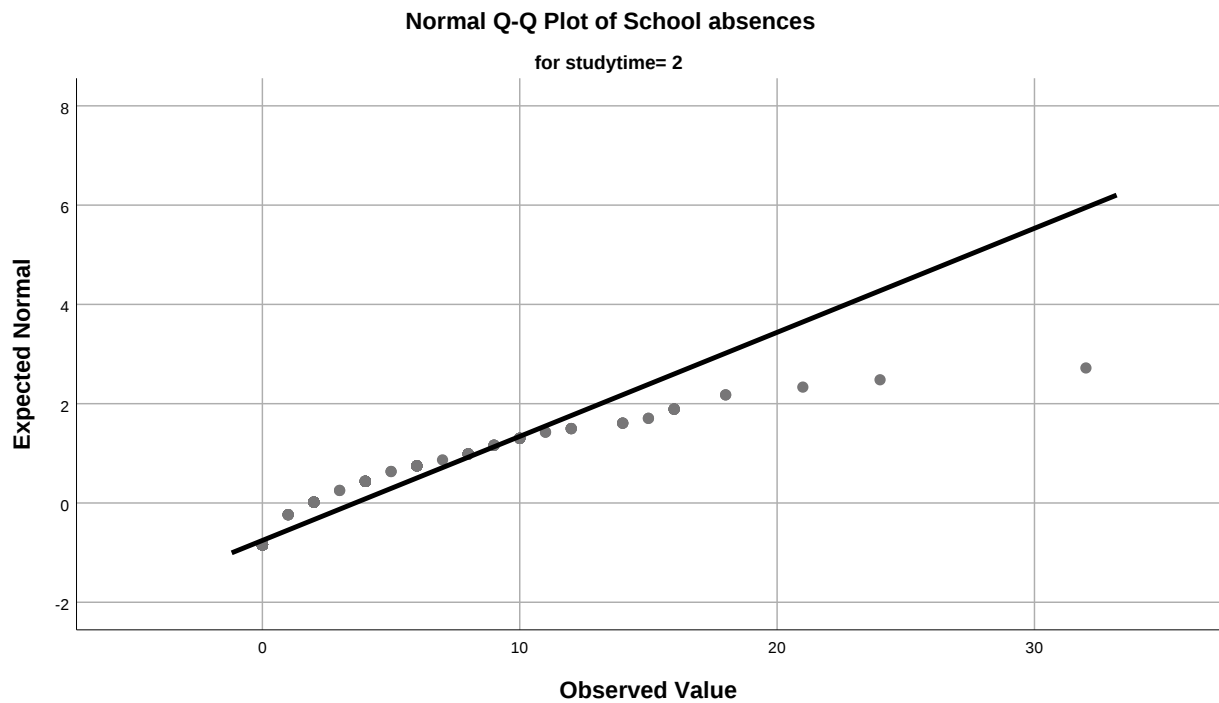
Kendalls Tau-b Distribution Checks
Boxplots and normality plots are provided as context; Kendal



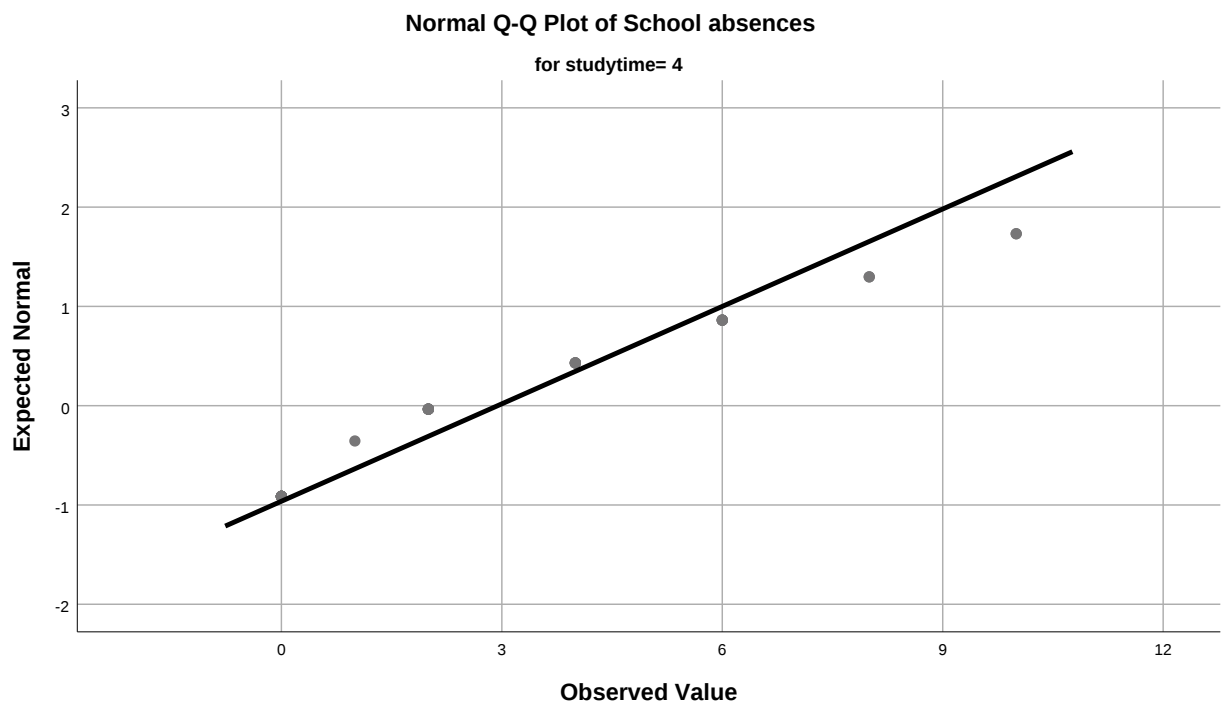
Normal Q-Q Plots



Kendalls Tau-b Distribution Checks
Boxplots and normality plots are provided as context; Kendal

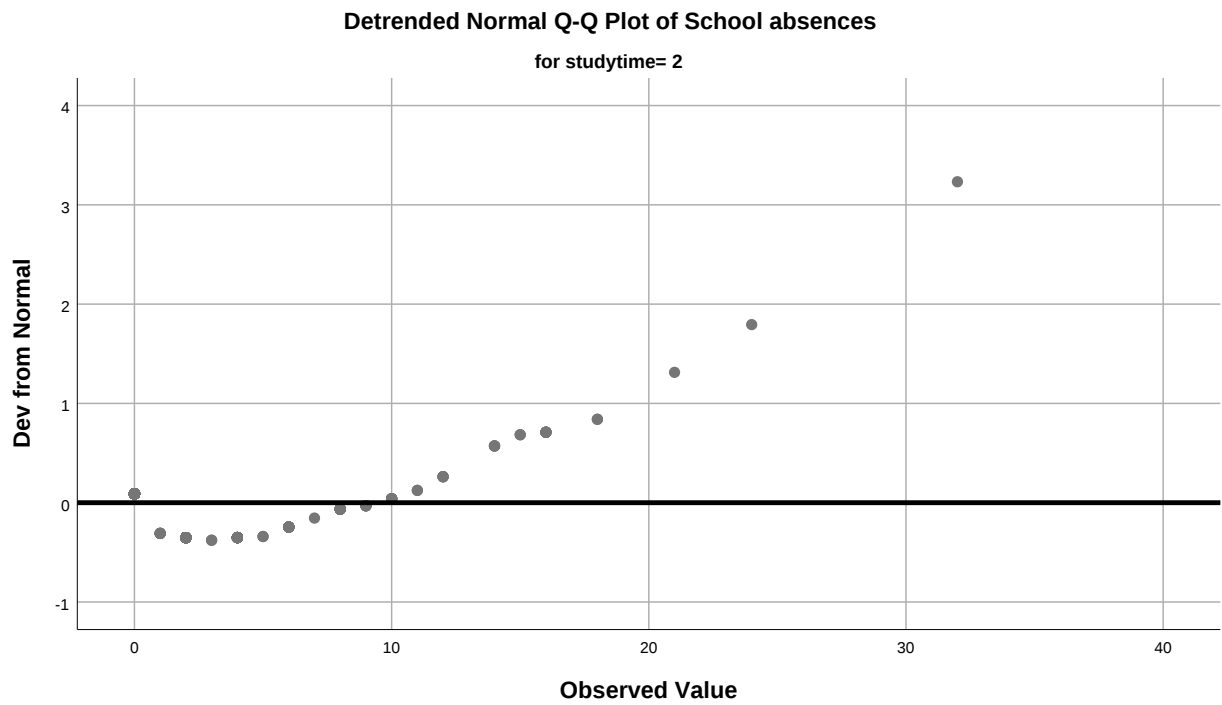
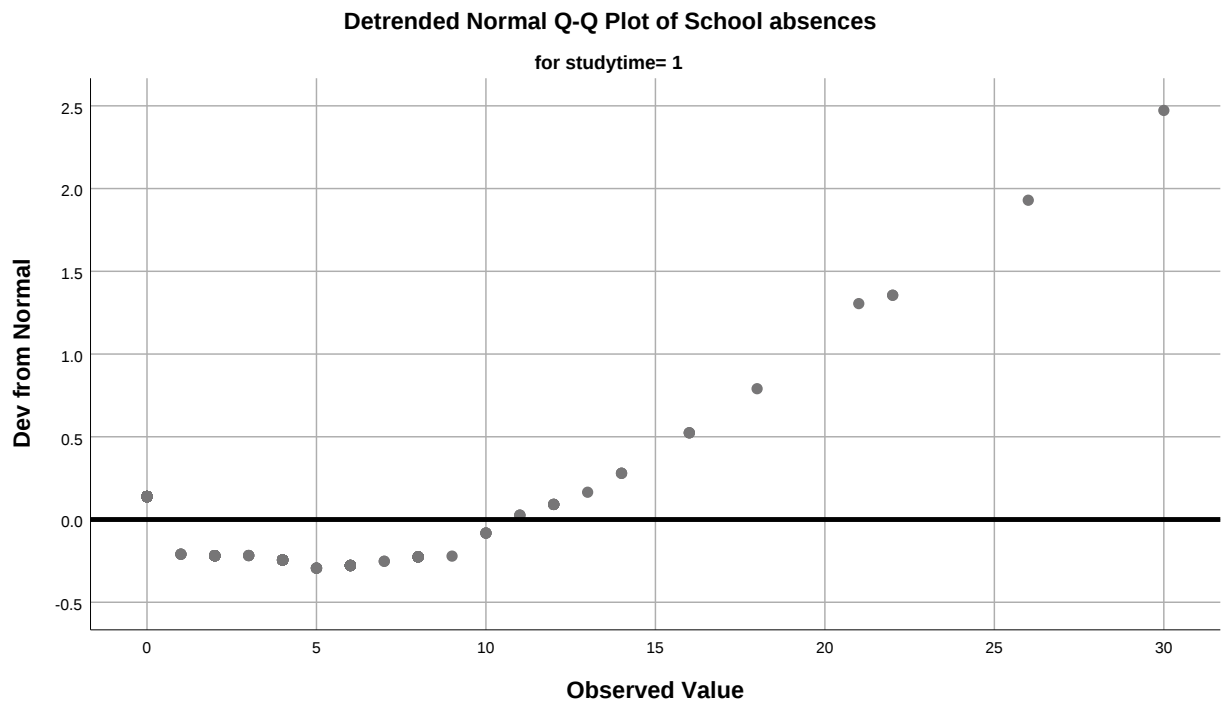


Kendalls Tau-b Distribution Checks
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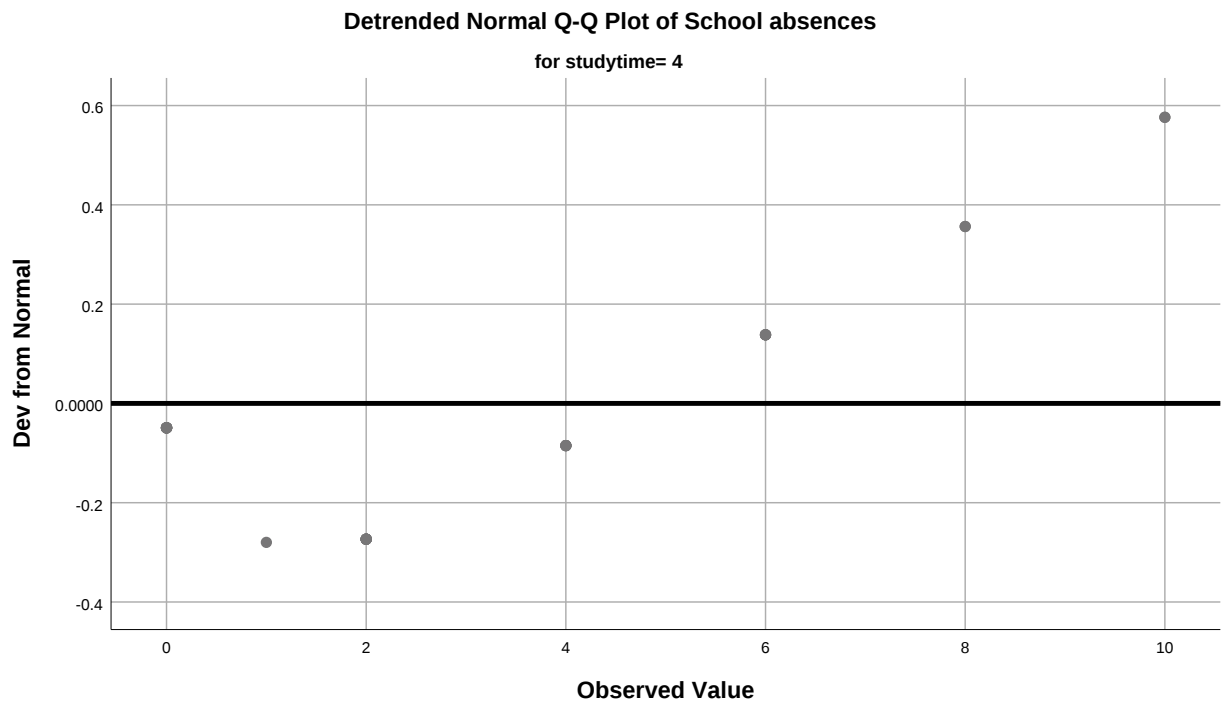
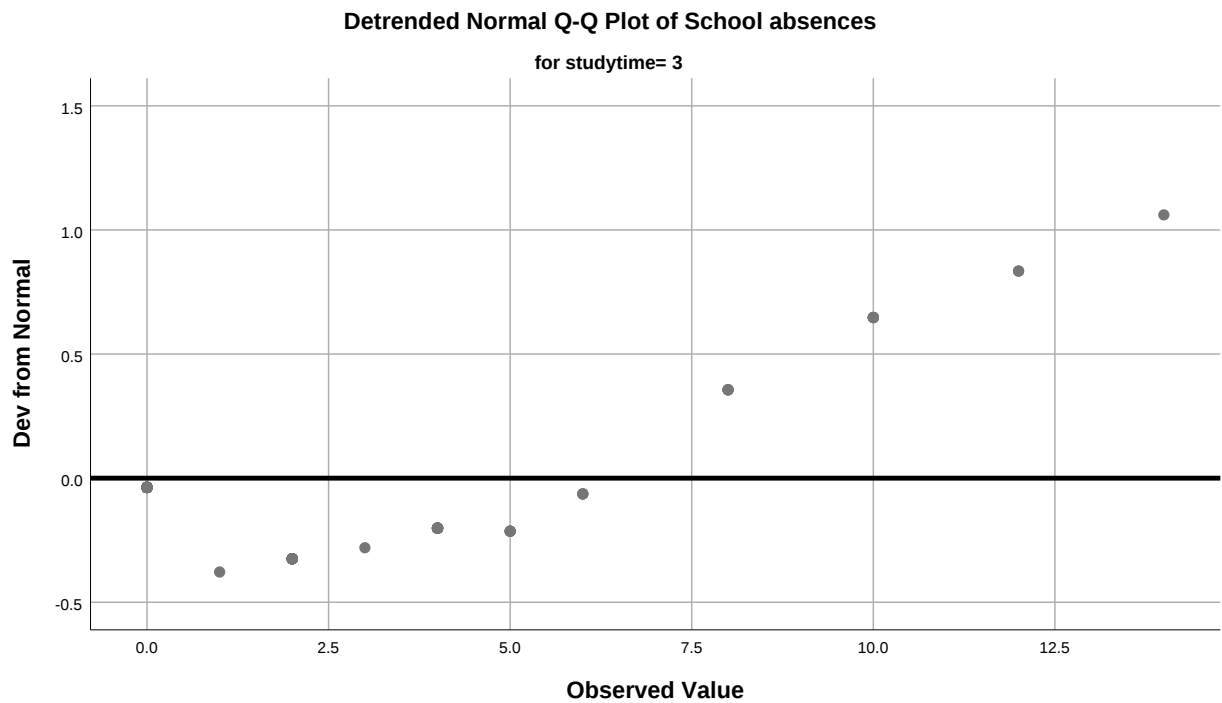


Detrended Normal Q-Q Plots

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