

Explore

Case Processing Summary

	Valid		Cases Missing		Total	
	N	Percent	N	Percent	N	Percent
PreTest	11	100.0%	0	0.0%	11	100.0%
PostTest	11	100.0%	0	0.0%	11	100.0%

Descriptives

		Statistic	Std. Error
PreTest	Mean	70.82	3.938
	95% Confidence Interval for Mean	Lower Bound	62.04
		Upper Bound	79.59
	5% Trimmed Mean	71.74	
	Median	75.00	
	Variance	170.564	
	Std. Deviation	13.060	
	Minimum	40	
	Maximum	85	
	Range	45	
	Interquartile Range	17	
	Skewness	-1.333	.661
	Kurtosis	2.134	1.279
PostTest	Mean	94.00	1.940
	95% Confidence Interval for Mean	Lower Bound	89.68
		Upper Bound	98.32
	5% Trimmed Mean	94.17	
	Median	96.00	
	Variance	41.400	
	Std. Deviation	6.434	
	Minimum	85	
	Maximum	100	
	Range	15	
	Interquartile Range	12	
	Skewness	-.328	.661
	Kurtosis	-1.875	1.279

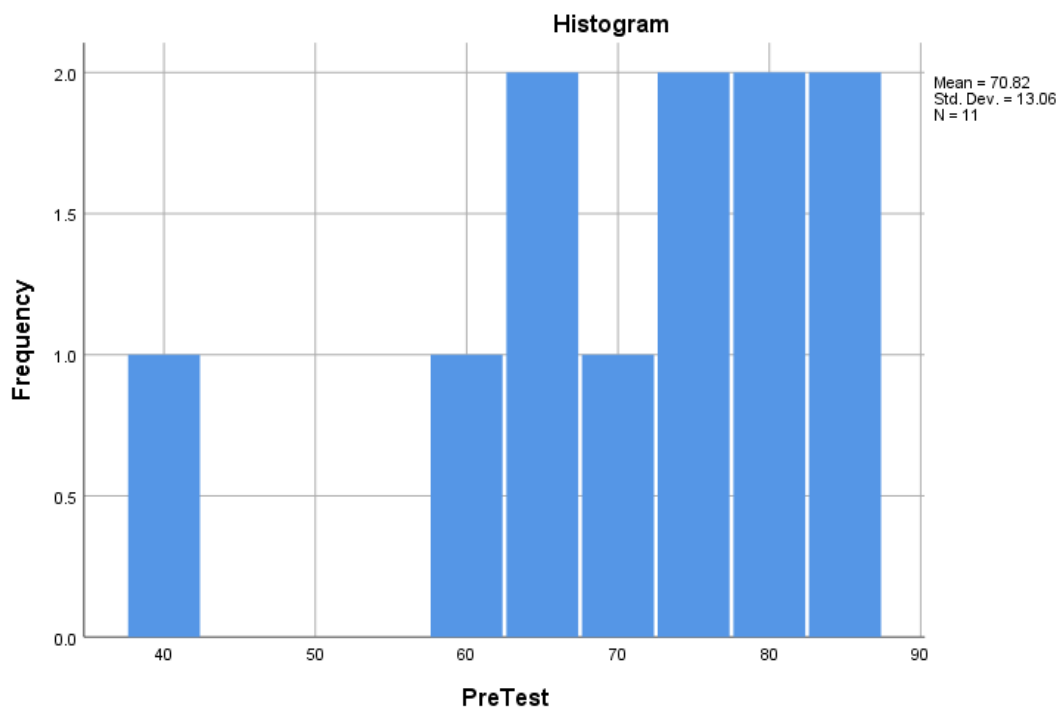
Tests of Normality

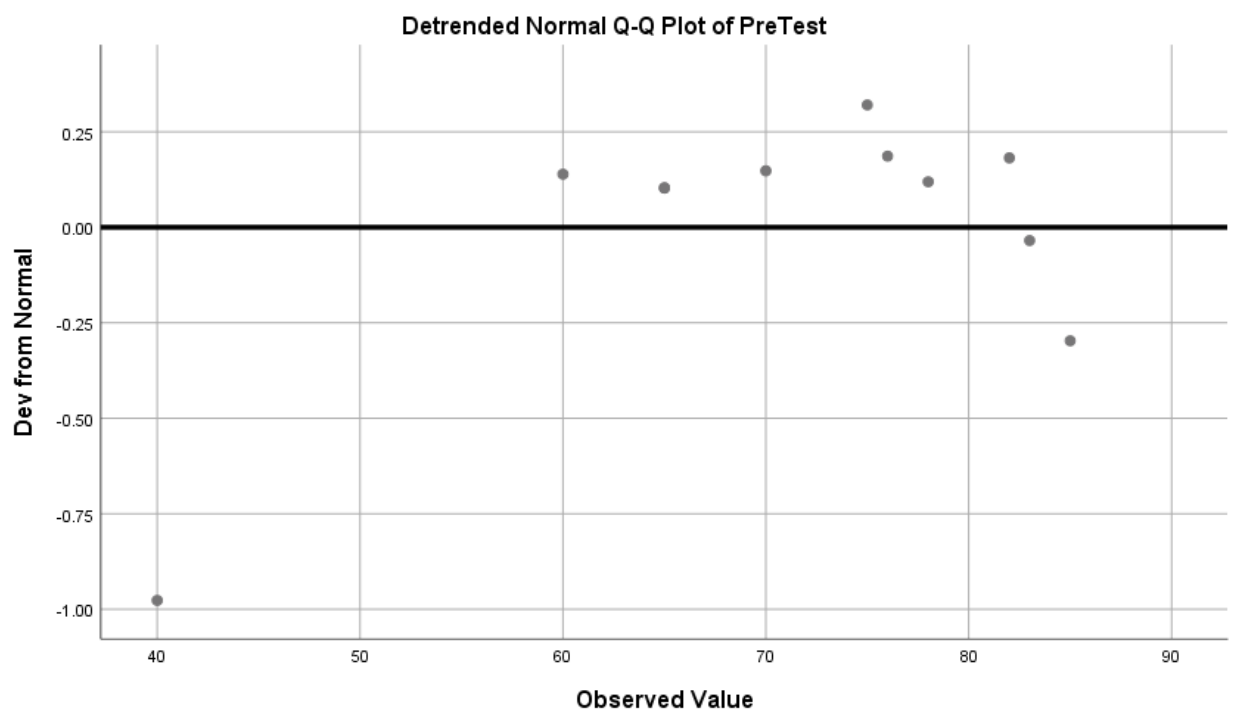
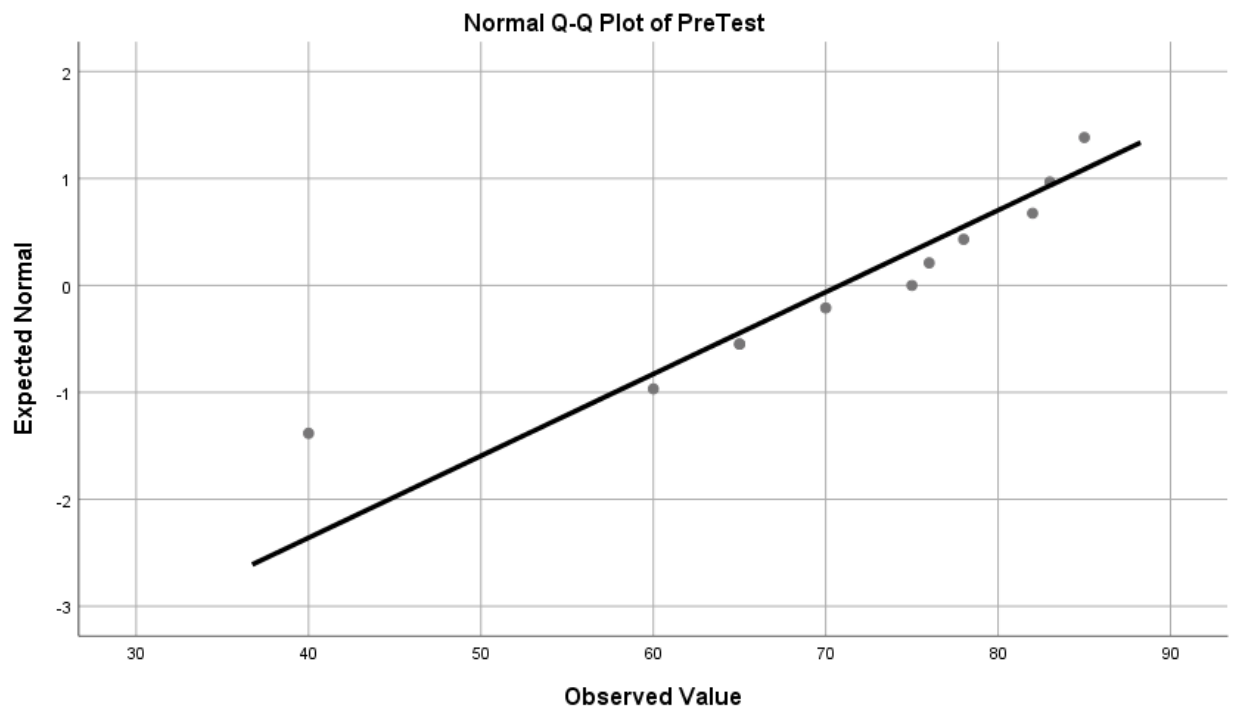
	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
PreTest	.171	11	.200*	.889	11	.137
PostTest	.279	11	.017	.801	11	.010

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

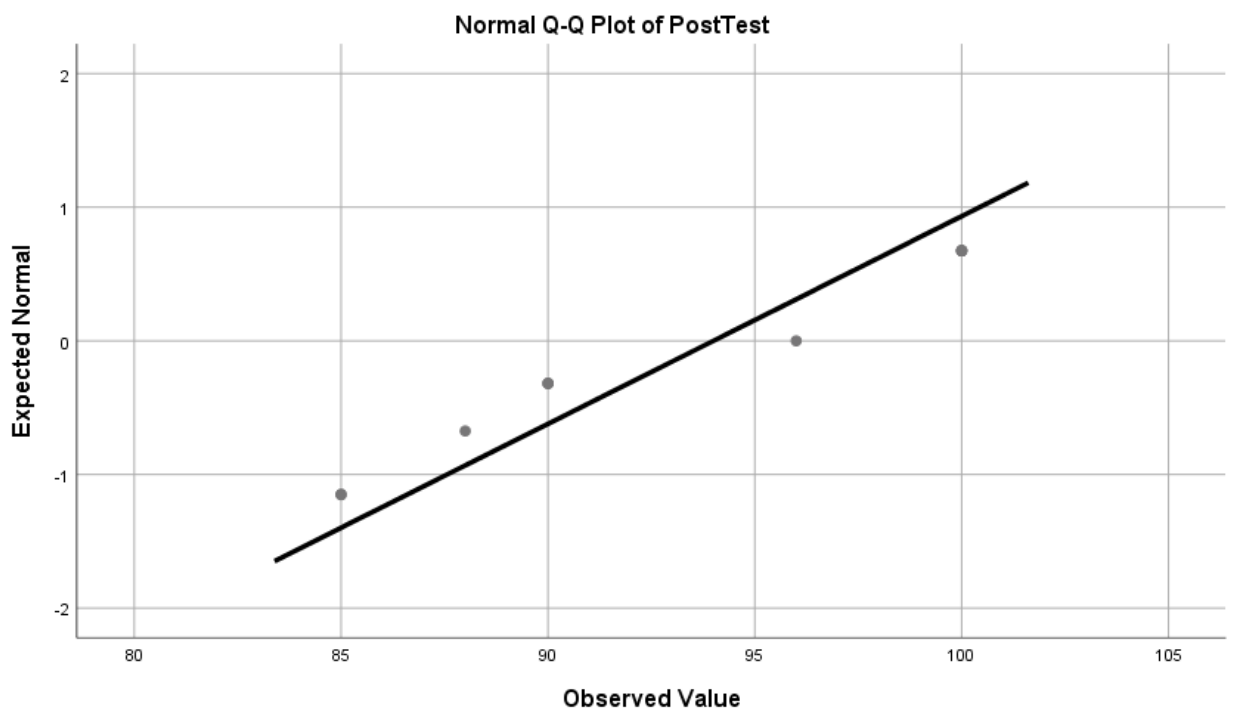
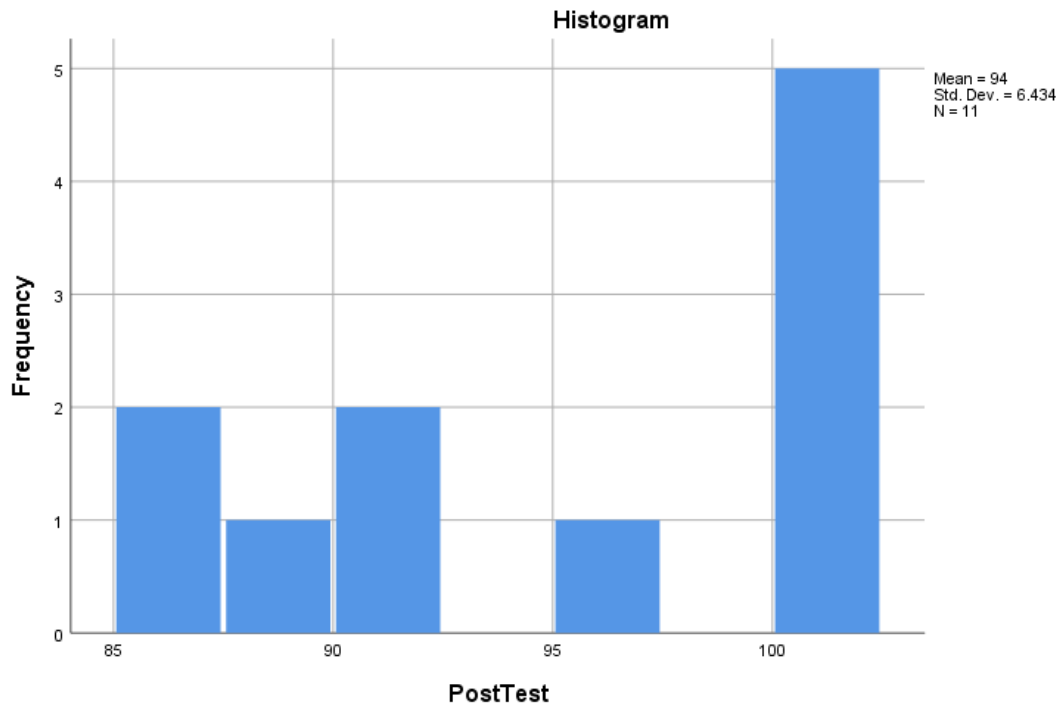
a. Lilliefors Significance Correction

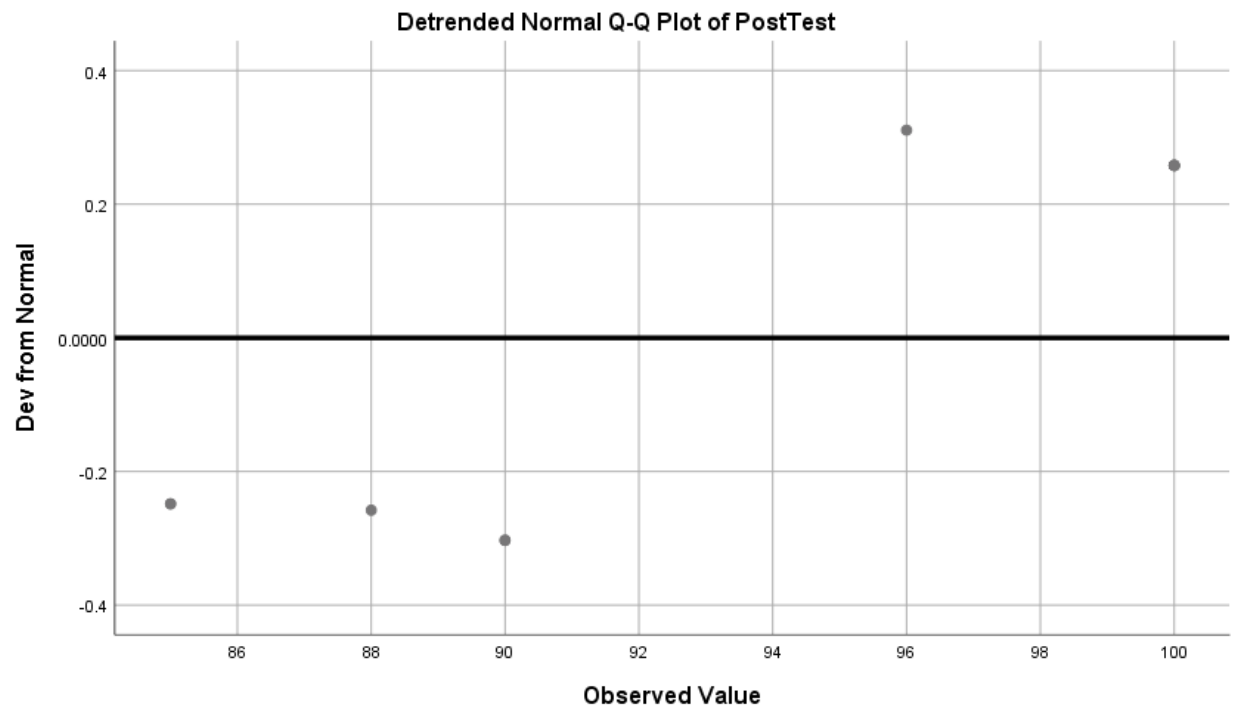
PreTest





PostTest





NPar Tests

Wilcoxon Signed Ranks Test

		Ranks		
		N	Mean Rank	Sum of Ranks
PostTest - PreTest	Negative Ranks	0 ^a	.00	.00
	Positive Ranks	11 ^b	6.00	66.00
	Ties	0 ^c		
	Total	11		

- a. PostTest < PreTest
- b. PostTest > PreTest
- c. PostTest = PreTest

Test Statistics^a

	PostTest - PreTest
Z	-2.934 ^b
Asymp. Sig. (2-tailed)	.003

- a. Wilcoxon Signed Ranks Test
- b. Based on negative ranks.