

Appendix 18. Random Test of Pre Test and Post Test

Random Test of the Pre Test Data

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
PRETEST	33	26	76	53.52	13.565

Runs Test

	PRETEST
Test Value(a)	53.52
Cases < Test Value	20
Cases >= Test Value	13
Total Cases	33
Number of Runs	16
Z	-.096
Asymp. Sig. (2-tailed)	.924

a Mean

Random Test of the Post Test Data

Descriptive Statistics

	N	Minimum	Maximum	Mean	Std. Deviation
POSTTEST	33	50	90	69.15	10.759

Runs Test

	POSTTEST
Test Value(a)	69.15
Cases < Test Value	16
Cases >= Test Value	17
Total Cases	33
Number of Runs	20
Z	.713
Asymp. Sig. (2-tailed)	.476

a Mean