

**HASIL ANALISIS DATA**

**Statistics**

nilai pre test

N	Valid	54
	Missing	0
Mean		48.6420
Median		46.6667
Std. Deviation		11.77209
Minimum		26.67
Maximum		80.00

nilai pre test

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 26.66666667	1	1.9	1.9	1.9
33.33333333	5	9.3	9.3	11.1
40	14	25.9	25.9	37.0
46.66666667	13	24.1	24.1	61.1
53.33333333	11	20.4	20.4	81.5
60	4	7.4	7.4	88.9
66.66666667	2	3.7	3.7	92.6
73.33333333	2	3.7	3.7	96.3
80	2	3.7	3.7	100.0
Total	54	100.0	100.0	

**Statistics**

nilai post test

N	Valid	54
	Missing	0
Mean		83.7037
Median		86.6667
Std. Deviation		12.86385
Minimum		46.67
Maximum		100.00

nilai post test

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid 46.66666667	1	1.9	1.9	1.9
53.33333333	2	3.7	3.7	5.6
66.66666667	7	13.0	13.0	18.5
73.33333333	5	9.3	9.3	27.8
80	3	5.6	5.6	33.3
86.66666667	15	27.8	27.8	61.1
93.33333333	16	29.6	29.6	90.7
100	5	9.3	9.3	100.0
Total	54	100.0	100.0	

	<i>Kolmogorov-Smirnov<sup>a</sup></i>			<i>Shapiro-Wilk</i>		
	Statistic	df	Sig.	Statistic	df	Sig.
<i>Pretest</i>	.167	54	.001	.933	54	.005
<i>Posttest</i>	.194	54	.000	.912	54	.001

**Ranks**

		N	Mean Rank	Sum of Ranks
post test - pre test	Negative Ranks	0 <sup>a</sup>	.00	.00
	Positive Ranks	53 <sup>b</sup>	27.00	1431.00
	Ties	1 <sup>c</sup>		
	Total	54		

a. post test < pre test

b. post test > pre test

c. post test = pre test

**Test Statistics<sup>b</sup>**

	post test - pre test
Z	-6.346 <sup>a</sup>
Asymp. Sig. (2-tailed)	.000

a. Based on negative ranks.

b. Wilcoxon Signed Ranks Test