

# LAMPIRAN



## LAMPIRAN 1 HASIL PRE TEST SISWA

HASIL PEMBELAJARAN PRE TEST																					
no	P1	P2	P3	P4	P5	P6	P7	P8	P9	P10	P11	P12	P13	P14	P15	P16	P17	P18	P19	P20	JML
1	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	60
2	4	3	3	3	3	4	3	4	3	4	3	4	4	3	4	4	3	4	3	4	70
3	3	3	4	3	4	3	3	3	3	3	4	3	4	3	4	3	3	3	3	3	65
4	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	60
5	4	4	4	5	3	4	4	3	3	4	3	3	4	4	3	3	4	5	4	4	75
6	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	60
7	3	2	3	2	2	3	2	3	2	3	2	3	3	2	2	3	2	3	2	3	50
8	3	3	2	2	2	2	3	2	3	3	2	3	3	2	2	2	3	2	3	3	50
9	4	4	4	4	4	4	4	4	4	3	4	4	3	4	4	3	4	4	3	4	75
10	3	3	3	3	4	3	4	4	3	3	4	3	3	3	3	3	3	3	3	4	65
11	3	3	3	3	3	3	3	2	2	2	3	3	2	2	2	3	2	3	4	4	55
12	4	4	4	4	4	4	3	4	3	3	3	4	4	4	4	4	3	4	5	3	75
13	5	5	5	4	4	4	4	4	4	4	5	3	3	4	5	4	3	4	3	3	80
14	3	4	5	3	4	4	3	3	3	3	3	3	3	4	3	3	2	3	2	4	65
15	3	3	3	3	3	2	4	3	3	3	3	3	3	3	3	3	3	3	3	3	60
16	3	3	2	3	3	2	2	2	2	2	3	2	4	3	3	4	3	3	3	3	55
17	3	3	2	2	2	2	3	3	2	3	2	3	2	4	3	2	2	2	2	3	50
18	3	3	2	3	2	3	2	2	2	3	3	4	2	2	2	3	4	3	4	3	55
19	2	2	3	2	2	2	3	3	3	3	3	3	3	3	3	3	3	3	3	3	55
20	3	2	2	2	2	3	3	3	2	3	3	2	3	2	3	2	2	3	2	3	50
21	4	5	4	4	4	4	4	3	4	4	4	5	4	4	5	3	5	3	4	3	80
22	3	5	5	2	5	4	4	3	4	4	4	2	4	4	4	5	4	4	5	4	79



## LAMPIRAN 2 HASIL POST TEST SISWA

HASIL MEDIA PEMBELAJARAN POST TEST																					
NO	P1	P2	P3	P4	P5	P6	P7	P8	P9	P10	P11	P12	P13	P14	P15	P16	P17	P18	P19	P20	JML
1	5	5	4	5	5	4	5	5	5	5	5	5	4	4	3	3	5	4	5	4	90
2	4	5	3	5	5	5	4	5	5	4	5	4	5	5	3	5	4	4	5	5	90
3	5	4	5	4	5	5	4	4	4	5	5	4	3	4	4	4	3	4	4	5	85
4	4	4	3	4	4	4	4	3	3	4	4	3	3	3	4	4	5	4	4	4	75
5	4	4	4	4	5	4	4	4	5	4	5	5	5	5	4	5	5	5	4	5	90
6	3	3	4	3	3	5	3	4	3	3	3	3	3	3	3	4	3	3	3	3	65
7	4	4	4	3	4	4	4	4	5	3	5	4	3	5	5	4	3	4	3	5	80
8	4	5	3	4	5	5	4	3	3	4	5	5	4	5	5	5	4	4	4	4	85
9	5	4	5	4	5	4	5	5	4	5	5	4	3	4	3	4	3	4	5	4	85
10	4	4	4	5	4	5	5	4	5	5	5	5	5	5	5	5	5	5	5	5	95
11	3	3	3	3	4	3	3	4	3	3	3	3	3	3	3	3	3	4	5	3	65
12	4	3	4	5	3	3	4	4	4	3	5	4	4	4	4	4	4	5	4	5	80
13	3	4	3	4	3	5	4	4	5	4	4	4	4	5	4	4	4	4	4	4	80
14	5	4	5	4	5	5	5	5	5	5	5	5	5	5	4	5	4	4	5	5	95
15	4	5	5	4	4	5	5	4	4	3	4	5	4	5	5	5	5	4	5	5	90
16	5	5	3	3	4	3	3	3	3	3	4	3	4	3	5	4	4	4	5	4	75
17	5	3	4	5	5	5	4	4	3	5	3	4	3	4	4	4	3	4	4	4	80
18	5	4	3	3	4	4	3	4	3	5	4	4	5	4	4	4	4	4	4	5	80
19	5	5	4	5	4	5	3	4	4	4	4	4	3	5	4	4	3	3	3	4	80
20	4	3	3	3	3	3	3	4	3	4	4	3	4	3	3	3	3	3	3	3	65
21	4	5	4	5	4	4	5	5	4	4	4	4	4	4	5	5	5	5	5	5	90
22	4	5	4	4	5	5	4	4	5	5	4	5	5	5	5	4	5	4	5	4	91







	Sig. (2-tailed)	.124	.011	.007	.269	.001	.022	.515	.184	.030	.160	.018	.864	.008	.067	.021		.134	.002	.004	.194	.002
	N	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22
P17 pre	Pearson Correlation	.358	.589**	.291	.520	.400	.381	.440*	.089	.582*	.526*	.481*	.501	.440	.381	.472*	.330	1	.422	.627*	.087	.643*
	Sig. (2-tailed)	.102	.004	.189	.013	.065	.080	.041	.695	.005	.012	.023	.018	.041	.080	.026	.134		.050	.002	.701	.001
	N	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22
P18 pre	Pearson Correlation	.621*	.498*	.609*	.681*	.494	.746*	.428*	.508*	.400	.536*	.483*	.129	.532	.477	.469*	.618*	.422	1	.496	.497	.753*
	Sig. (2-tailed)	.002	.018	.003	.000	.019	.000	.047	.016	.065	.010	.023	.567	.011	.025	.028	.002	.050		.019	.019	.000
	N	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22
P19 pre	Pearson Correlation	.257	.545**	.335	.410	.468	.393	.275	-.016	.397	.245	.326	.272	.359	.249	.263	.586**	.627*	.496	1	.202	.563*
	Sig. (2-tailed)	.248	.009	.127	.058	.028	.070	.215	.945	.067	.273	.139	.221	.101	.264	.237	.004	.002	.019		.367	.006
	N	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22
P20 pre	Pearson Correlation	.173	.310	.415	.245	.455	.522	.410	.257	.149	.186	.235	.006	.109	.264	.047	.288	.087	.497	.202	1	.442
	Sig. (2-tailed)	.442	.160	.055	.272	.034	.013	.058	.248	.508	.406	.291	.977	.628	.235	.835	.194	.701	.019	.367		.064
	N	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22
JML pre	Pearson Correlation	.730*	.872*	.829*	.703*	.838*	.821*	.696**	.606*	.808*	.688*	.755*	.395	.593*	.762*	.830*	.632*	.643*	.753*	.563*	.402	
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	.000	.003	.000	.000	.000	.069	.004	.000	.000	.002	.001	.000	.006	.064	
	N	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22

\*\* . Correlation is significant at the 0.01 level (2-tailed).

\* . Correlation is significant at the 0.05 level (2-tailed).

### UJI VALIDITAS POSTTEST

#### Correlations

	P1 post	P2 post	P3 post	P4 post	P5 post	P6 post	P7 post	P8 post	P9 post	P10 post	P11 post	P12 post	P13 post	P14 post	P15 post	P16 post	P17 post	P18 post	P19 post	P20 post	JML post
P1 post Pearson Correlation	1	.298	.371	.245	.542*	.036	.184	.176	0.000	.657*	.239	.325	-.027	.148	-.068	.088	-.064	-.027	.148	.331	.682



	Sig. (2-tailed)		.178	.089	.271	.009	.872	.413	.433	1.000	.001	.285	.140	.907	.510	.762	.698	.778	.904	.510	.133	.092
	N	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22
P2 post	Pearson Correlation	.298	1	.046	.303	.435	.319	.325	.073	.352	.206	.255	.571	.252	.576	.324	.477	.520	.092	.415	.347	.599
	Sig. (2-tailed)	.178		.840	.171	.043	.148	.139	.746	.108	.358	.252	.006	.259	.005	.141	.025	.013	.683	.055	.113	.003
	N	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22
P3 post	Pearson Correlation	.371	.046	1	.263	.338	.356	.602	.465	.372	.214	.347	.416	-.043	.262	.233	.181	-.014	.133	.177	.388	.493
	Sig. (2-tailed)	.089	.840		.236	.124	.104	.003	.029	.088	.340	.114	.054	.851	.239	.296	.420	.951	.554	.430	.075	.020
	N	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22
P4 post	Pearson Correlation	.245	.303	.263	1	.304	.364	.561	.388	.417	.303	.374	.415	.228	.374	.235	.245	.362	.417	.295	.396	.615
	Sig. (2-tailed)	.271	.171	.236		.169	.096	.007	.074	.054	.171	.087	.055	.307	.087	.292	.271	.097	.054	.183	.068	.002
	N	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22
P5 post	Pearson Correlation	.542	.435	.338	.304	1	.358	.419	.264	.290	.599	.383	.564	.204	.383	.099	.265	.167	.195	.465	.302	.620
	Sig. (2-tailed)	.009	.043	.124	.169		.102	.052	.235	.190	.003	.079	.006	.363	.079	.661	.234	.457	.384	.029	.173	.002
	N	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22
P6 post	Pearson Correlation	.036	.319	.356	.364	.358	1	.323	.136	.350	.319	.166	.434	.216	.564	.413	.393	.095	-.140	.007	.236	.500
	Sig. (2-tailed)	.872	.148	.104	.096	.102		.142	.545	.111	.148	.459	.044	.333	.006	.056	.071	.673	.535	.975	.290	.018
	N	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22
P7 post	Pearson Correlation	.184	.325	.602	.561	.419	.323	1	.516	.577	.325	.575	.621	.302	.410	.401	.368	.523	.547	.575	.528	.793
	Sig. (2-tailed)	.413	.139	.003	.007	.052	.142		.014	.005	.139	.005	.002	.172	.058	.064	.092	.013	.008	.005	.012	.000
	N	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22
P8 post	Pearson Correlation	.176	.073	.465	.388	.264	.136	.516	1	.536	.275	.351	.190	.306	.148	-.190	-.052	.008	.123	.351	.258	.430
	Sig. (2-tailed)	.433	.746	.029	.074	.235	.545	.014		.010	.216	.109	.397	.165	.511	.398	.819	.970	.585	.109	.247	.046
	N	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22
P9 post	Pearson Correlation	0.000	.352	.372	.417	.290	.350	.577	.536	1	.211	.640	.615	.524	.711	.278	.239	.388	.379	.284	.533	.723
	Sig. (2-tailed)	1.000	.108	.088	.054	.190	.111	.005	.010		.345	.001	.002	.012	.000	.211	.284	.074	.082	.200	.011	.000





P18 post	Pearson Correlation	-.027	.092	.133	.417	.195	-.140	.547*	.123	.379	.092	.402	.450	.411	.294	.426	.456	.593*	1	.510	.656*	.568*
	Sig. (2-tailed)	.904	.683	.554	.054	.384	.535	.008	.585	.082	.683	.064	.036	.058	.184	.048	.033	.004		.015	.001	.006
	N	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22
P19 post	Pearson Correlation	.148	.415	.177	.295	.465	.007	.575*	.351	.284	.335	.110	.453	.359	.191	.022	.329	.535	.510	1	.268	.558*
	Sig. (2-tailed)	.510	.055	.430	.183	.029	.975	.005	.109	.200	.127	.625	.034	.101	.394	.924	.135	.010	.015		.228	.007
	N	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22
P20 post	Pearson Correlation	.331	.347	.388	.396	.302	.236	.528	.258	.533	.176	.614*	.566*	.475	.614*	.535	.622*	.419	.656*	.268	1	.755*
	Sig. (2-tailed)	.133	.113	.075	.068	.173	.290	.012	.247	.011	.434	.002	.006	.026	.002	.010	.002	.052	.001	.228		.000
	N	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22
JML post	Pearson Correlation	.368	.599**	.493*	.615**	.620**	.500*	.793**	.430*	.723**	.498*	.653**	.874**	.613**	.761**	.520*	.596**	.607**	.568**	.558**	.755**	
	Sig. (2-tailed)	.092	.003	.020	.002	.002	.018	.000	.046	.000	.018	.001	.000	.002	.000	.013	.003	.003	.006	.007	.000	
	N	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22	22

\*\* . Correlation is significant at the 0.01 level (2-tailed).

\* . Correlation is significant at the 0.05 level (2-tailed).



## LAMPIRAN 5 UJI VALIDITAS

### UJI VALIDITAS

#### 1. PRETEST

<b>Pernyataan</b>	<b>r<sub>hitung</sub></b>	<b>r<sub>tabel</sub></b>	<b>Kondisi</b>	<b>Keterangan</b>
Pernyataan 1	0,730	0.4227	$r_{hitung} > r_{tabel}$	Valid
Pernyataan 2	0,872	0.4227	$r_{hitung} > r_{tabel}$	Valid
Pernyataan 3	0,829	0.4227	$r_{hitung} > r_{tabel}$	Valid
Pernyataan 4	0,703	0.4227	$r_{hitung} > r_{tabel}$	Valid
Pernyataan 5	0,838	0.4227	$r_{hitung} > r_{tabel}$	Valid
Pernyataan 6	0,821	0.4227	$r_{hitung} > r_{tabel}$	Valid
Pernyataan 7	0,696	0.4227	$r_{hitung} > r_{tabel}$	Valid
Pernyataan 8	0,606	0.4227	$r_{hitung} > r_{tabel}$	Valid
Pernyataan 9	0,808	0.4227	$r_{hitung} > r_{tabel}$	Valid
Pernyataan 10	0,688	0.4227	$r_{hitung} > r_{tabel}$	Valid
Pernyataan 11	0,755	0.4227	$r_{hitung} > r_{tabel}$	Valid
Pernyataan 12	0,695	0.4227	$r_{hitung} > r_{tabel}$	Valid
Pernyataan 13	0,593	0.4227	$r_{hitung} > r_{tabel}$	Valid
Pernyataan 14	0,762	0.4227	$r_{hitung} > r_{tabel}$	Valid
Pernyataan 15	0,830	0.4227	$r_{hitung} > r_{tabel}$	Valid
Pernyataan 16	0,632	0.4227	$r_{hitung} > r_{tabel}$	Valid
Pernyataan 17	0,643	0.4227	$r_{hitung} > r_{tabel}$	Valid
Pernyataan 18	0,753	0.4227	$r_{hitung} > r_{tabel}$	Valid
Pernyataan 19	0,563	0.4227	$r_{hitung} > r_{tabel}$	Valid
Pernyataan 20	0,442	0.4227	$r_{hitung} > r_{tabel}$	Valid

## 2. POSTTEST

<b>Pernyataan</b>	<b>r<sub>hitung</sub></b>	<b>r<sub>tabel</sub></b>	<b>Kondisi</b>	<b>Keterangan</b>
Pernyataan 1	0,682	0.4227	$r_{hitung} > r_{tabel}$	Valid
Pernyataan 2	0,599	0.4227	$r_{hitung} > r_{tabel}$	Valid
Pernyataan 3	0,493	0.4227	$r_{hitung} > r_{tabel}$	Valid
Pernyataan 4	0,615	0.4227	$r_{hitung} > r_{tabel}$	Valid
Pernyataan 5	0,620	0.4227	$r_{hitung} > r_{tabel}$	Valid
Pernyataan 6	0,500	0.4227	$r_{hitung} > r_{tabel}$	Valid
Pernyataan 7	0,793	0.4227	$r_{hitung} > r_{tabel}$	Valid
Pernyataan 8	0,430	0.4227	$r_{hitung} > r_{tabel}$	Valid
Pernyataan 9	0,723	0.4227	$r_{hitung} > r_{tabel}$	Valid
Pernyataan 10	0,498	0.4227	$r_{hitung} > r_{tabel}$	Valid
Pernyataan 11	0,653	0.4227	$r_{hitung} > r_{tabel}$	Valid
Pernyataan 12	0,454	0.4227	$r_{hitung} > r_{tabel}$	Valid
Pernyataan 13	0,874	0.4227	$r_{hitung} > r_{tabel}$	Valid
Pernyataan 14	0,761	0.4227	$r_{hitung} > r_{tabel}$	Valid
Pernyataan 15	0,520	0.4227	$r_{hitung} > r_{tabel}$	Valid
Pernyataan 16	0,596	0.4227	$r_{hitung} > r_{tabel}$	Valid
Pernyataan 17	0,607	0.4227	$r_{hitung} > r_{tabel}$	Valid
Pernyataan 18	0,568	0.4227	$r_{hitung} > r_{tabel}$	Valid
Pernyataan 19	0,558	0.4227	$r_{hitung} > r_{tabel}$	Valid
Pernyataan 20	0,755	0.4227	$r_{hitung} > r_{tabel}$	Valid

## LAMPIRAN 6 UJI RELIABILITAS

### UJI RELIABILITAS

#### 1. PRETEST

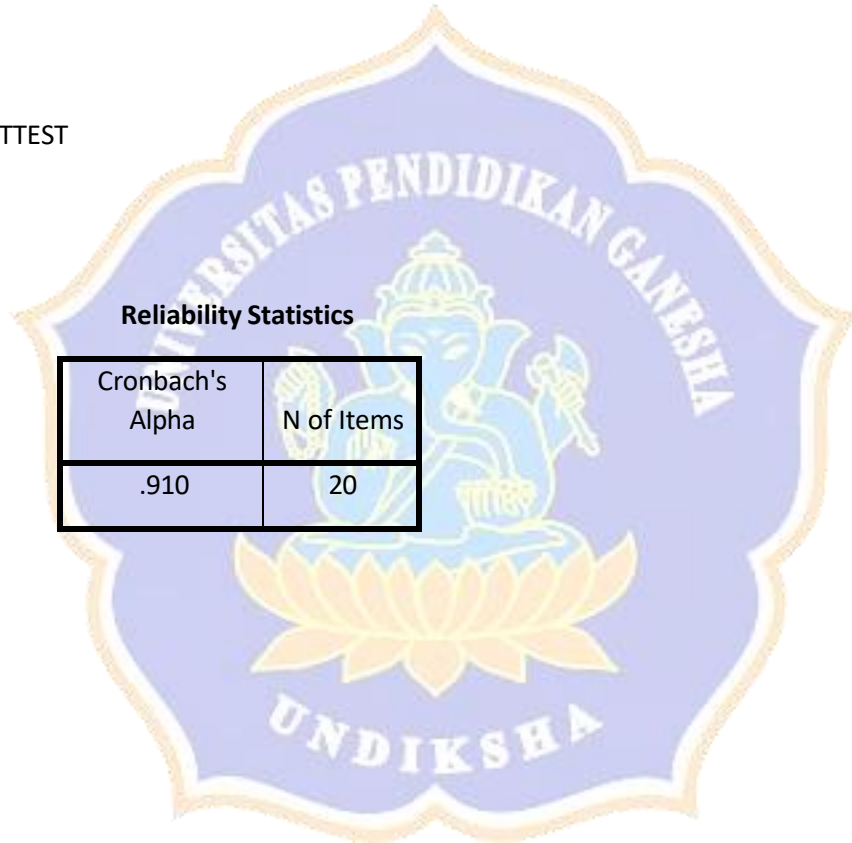
##### Reliability Statistics

Cronbach's Alpha	N of Items
.945	20

#### 2. POSTTEST

##### Reliability Statistics

Cronbach's Alpha	N of Items
.910	20



## LAMPIRAN 7 UJI NORMALITAS

### Uji normalitas data

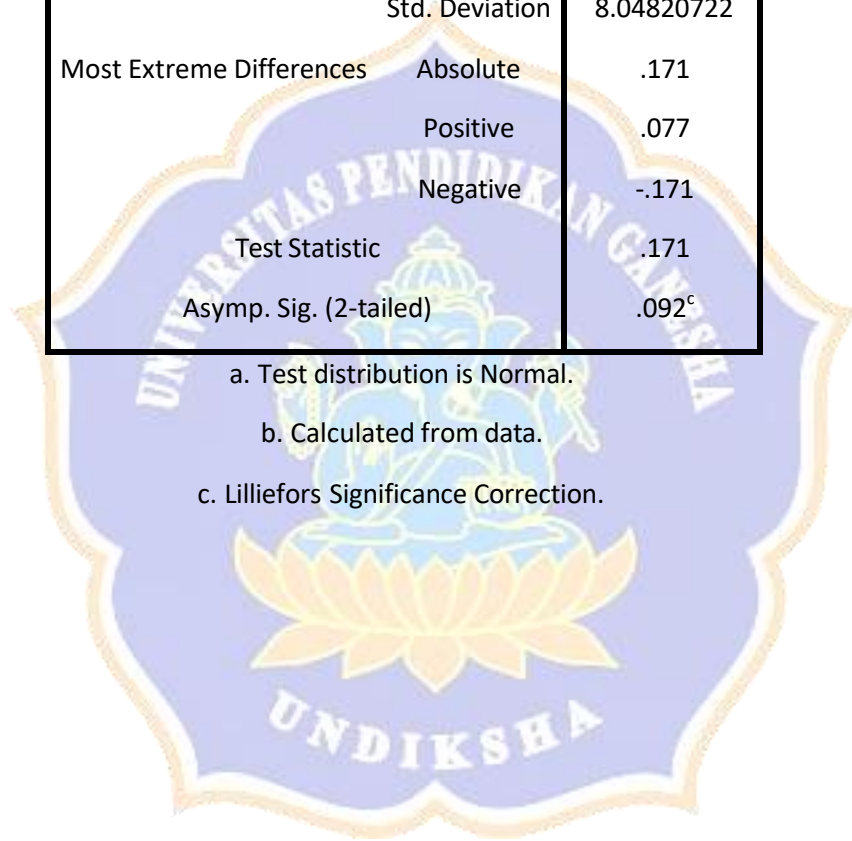
#### One-Sample Kolmogorov-Smirnov Test

		Unstandardized Residual
N		22
Normal Parameters <sup>a,b</sup>	Mean	.0000000
	Std. Deviation	8.04820722
Most Extreme Differences	Absolute	.171
	Positive	.077
	Negative	-.171
Test Statistic		.171
Asymp. Sig. (2-tailed)		.092 <sup>c</sup>

a. Test distribution is Normal.

b. Calculated from data.

c. Lilliefors Significance Correction.



## LAMPIRAN 8 UJI t

### UJI t

#### Paired Samples Statistics

	Mean	N	Std. Deviation	Std. Error Mean
Pair 1 PRETEST	63.14	22	10.453	2.229
POSTTEST	82.32	22	9.136	1.948

#### Paired Samples Correlations

	N	Correlation	Sig.
Pair 1 PRETEST & POSTTEST	22	.473	.026

#### Paired Samples Test

	Paired Differences						t	df	Sig. (2-tailed)
	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference					
				Lower	Upper				
Pair 1 PRETEST - POSTTEST	-19.182	10.117	2.157	-23.667	-14.696	-8.893	21	.000	