* Normality test

|  |  |  |
| --- | --- | --- |
| **One-Sample Kolmogorov-Smirnov Test** | | |
|  | | Unstandardized Residual |
| N | | 20 |
| Normal Parametersa,b | Mean | ,0000000 |
| Std. Deviation | 3,82379743 |
| Most Extreme Differences | Absolute | ,161 |
| Positive | ,161 |
| Negative | -,092 |
| Test Statistic | | ,161 |
| Asymp. Sig. (2-tailed) | | ,185c |
| a. Test distribution is Normal. | | |
| b. Calculated from data. | | |
| c. Lilliefors Significance Correction. | | |

* Paired T test

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Paired Samples Statistics** | | | | | |
|  | | Mean | N | Std. Deviation | Std. Error Mean |
| Pair 1 | Pretest | 65,5500 | 20 | 6,93181 | 1,55000 |
| Posttest | 81,0000 | 20 | 4,58831 | 1,02598 |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Paired Samples Correlations** | | | | |
|  | | N | Correlation | Sig. |
| Pair 1 | Pretest & Posttest | 20 | ,553 | ,011 |

|  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **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 | -15,45000 | 5,82621 | 1,30278 | -18,17675 | -12,72325 | -11,859 | 19 | ,000 |