**HASIL OLAHDATA EXCEL DAN SPSS**

1. UJI VALIDITAS DAN RELIABILITAS

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
|  | PRETEST | | | |  | |
| Aitem | Rxy hitung | | r tabel | | Kesimpulan | |
| 1 | 0,978 | | 0,413 | | Valid | |
| 2 | 0,623 | | 0,413 | | Valid | |
| 3 | 0,471 | | 0,413 | | Valid | |
| 4 | 0,978 | | 0,413 | | Valid | |
| 5 | 0,978 | | 0,413 | | Valid | |
| 6 | 0,559 | | 0,413 | | Valid | |
| 7 | 0,978 | | 0,413 | | Valid | |
| 8 | 0,978 | | 0,413 | | Valid | |
| 9 | 0,552 | | 0,413 | | Valid | |
| 10 | 0,713 | | 0,413 | | Valid | |
| 11 | 0,978 | | 0,413 | | Valid | |
| 12 | 0,978 | | 0,413 | | Valid | |
| Cronbach' Alpha | | | N of Item | | | |
| 0,942 | | | 12 | | | |
|  | POSTTEST | | |  | |
| Aitem | Rxy hitung | r tabel | | Kesimpulan | |
| 1 | 0,455 | 0,413 | | Valid | |
| 2 | 0,625 | 0,413 | | Valid | |
| 3 | 0,519 | 0,413 | | Valid | |
| 4 | 0,522 | 0,413 | | Valid | |
| 5 | 0,636 | 0,413 | | Valid | |
| 6 | 0,528 | 0,413 | | Valid | |
| 7 | 0,417 | 0,413 | | Valid | |
| 8 | 0,561 | 0,413 | | Valid | |
| 9 | 0,509 | 0,413 | | Valid | |
| 10 | 0,448 | 0,413 | | Valid | |
| 11 | 0,457 | 0,413 | | Valid | |
| 12 | 0,426 | 0,413 | | Valid | |
| Cronbach' Alpha | | N of Item | | | |
| 0,727 | | 12 | | | |

1. UJI NORMALITAS

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Tests of Normality** | | | | | | |
|  | Kolmogorov-Smirnova | | | Shapiro-Wilk | | |
| Statistic | df | Sig. | Statistic | df | Sig. |
| pretest | .201 | 23 | .016 | .905 | 23 | .032 |
| posttest | .204 | 23 | .014 | .850 | 23 | .003 |
| a. Lilliefors Significance Correction | | | | | | |

1. UJI N-GAIN

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Number for Subject | Score | | Score N-gain | Category |
| Pretest | Posttest |
| 23 | 59,783 | 84,565 | 0,673 | Moderate |

1. UJI WILCOXON

|  |  |
| --- | --- |
| **Test Statisticsa** | |
|  | posttest - pretest |
| Z | -4.262b |
| Asymp. Sig. (2-tailed) | .000 |
| a. Wilcoxon Signed Ranks Test | |
| b. Based on negative ranks. | |