Deskriptif

| **Descriptive Statistics** | | | | | |
| --- | --- | --- | --- | --- | --- |
|  | N | Minimum | Maximum | Mean | Std. Deviation |
| STAD | 33 | 12.00 | 18.00 | 15.0303 | 1.74078 |
| JIGSAW | 33 | 11.00 | 18.00 | 15.8788 | 1.91634 |
| KONVENSIONAL | 33 | 9.00 | 14.00 | 11.4848 | 1.27772 |
| Valid N (listwise) | 33 |  |  |  |  |

FREQUENCIES VARIABLES=STAD JIGSAW KONVENSIONAL /STATISTICS=STDDEV VARIANCE MINIMUM MAXIMUM MEAN MEDIAN MODE SUM /ORDER=ANALYSIS.

| **Statistics** | | | | |
| --- | --- | --- | --- | --- |
|  |  | STAD | JIGSAW | KONVENSIONAL |
| N | Valid | 33 | 33 | 33 |
| Missing | 0 | 0 | 0 |
| Mean | | 15.0303 | 15.8788 | 11.4848 |
| Median | | 15.0000 | 16.0000 | 12.0000 |
| Mode | | 14.00 | 15.00a | 12.00 |
| Std. Deviation | | 1.74078 | 1.91634 | 1.27772 |
| Variance | | 3.030 | 3.672 | 1.633 |
| Minimum | | 12.00 | 11.00 | 9.00 |
| Maximum | | 18.00 | 18.00 | 14.00 |
| Sum | | 496.00 | 524.00 | 379.00 |
| a. Multiple modes exist. The smallest value is shown | | | | |

**Frequency Table**

| **STAD** | | | | | |
| --- | --- | --- | --- | --- | --- |
|  |  | Frequency | Percent | Valid Percent | Cumulative Percent |
| Valid | 12.00 | 2 | 6.1 | 6.1 | 6.1 |
| 13.00 | 5 | 15.2 | 15.2 | 21.2 |
| 14.00 | 8 | 24.2 | 24.2 | 45.5 |
| 15.00 | 4 | 12.1 | 12.1 | 57.6 |
| 16.00 | 5 | 15.2 | 15.2 | 72.7 |
| 17.00 | 7 | 21.2 | 21.2 | 93.9 |
| 18.00 | 2 | 6.1 | 6.1 | 100.0 |
| Total | 33 | 100.0 | 100.0 |  |
| **JIGSAW** | | | | | |
|  |  | Frequency | Percent | Valid Percent | Cumulative Percent |
| Valid | 11.00 | 2 | 6.1 | 6.1 | 6.1 |
| 12.00 | 1 | 3.0 | 3.0 | 9.1 |
| 14.00 | 2 | 6.1 | 6.1 | 15.2 |
| 15.00 | 8 | 24.2 | 24.2 | 39.4 |
| 16.00 | 5 | 15.2 | 15.2 | 54.5 |
| 17.00 | 8 | 24.2 | 24.2 | 78.8 |
| 18.00 | 7 | 21.2 | 21.2 | 100.0 |
| Total | 33 | 100.0 | 100.0 |  |

| **KONVENSIONAL** | | | | | |
| --- | --- | --- | --- | --- | --- |
|  |  | Frequency | Percent | Valid Percent | Cumulative Percent |
| Valid | 9.00 | 1 | 3.0 | 3.0 | 3.0 |
| 10.00 | 9 | 27.3 | 27.3 | 30.3 |
| 11.00 | 5 | 15.2 | 15.2 | 45.5 |
| 12.00 | 10 | 30.3 | 30.3 | 75.8 |
| 13.00 | 7 | 21.2 | 21.2 | 97.0 |
| 14.00 | 1 | 3.0 | 3.0 | 100.0 |
| Total | 33 | 100.0 | 100.0 |  |

T-TEST /TESTVAL=0 /MISSING=ANALYSIS /VARIABLES=STAD JIGSAW KONVENSIONAL /CRITERIA=CI(.95).

**T-Test**

[DataSet0]

| **One-Sample Statistics** | | | | | | | | | |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | | N | | Mean | | Std. Deviation | | Std. Error Mean | |
| STAD | | 33 | | 15.0303 | | 1.74078 | | .30303 | |
| JIGSAW | | 33 | | 15.8788 | | 1.91634 | | .33359 | |
| KONVENSIONAL | | 33 | | 11.4848 | | 1.27772 | | .22242 | |
| **One-Sample Test** | | | | | | | | | | | |
|  | Test Value = 0 | | | | | | | | | | |
|  |  | | | | | | | | 95% Confidence Interval of the Difference | | |
|  | t | | df | | Sig. (2-tailed) | | Mean Difference | | Lower | | Upper |
| STAD | 49.600 | | 32 | | .000 | | 15.03030 | | 14.4131 | | 15.6476 |
| JIGSAW | 47.599 | | 32 | | .000 | | 15.87879 | | 15.1993 | | 16.5583 |
| KONVENSIONAL | 51.635 | | 32 | | .000 | | 11.48485 | | 11.0318 | | 11.9379 |

GLM STAD JIGSAW KONVENSIONAL /METHOD=SSTYPE(3) /INTERCEPT=INCLUDE /PRINT=DESCRIPTIVE HOMOGENEITY /CRITERIA=ALPHA(.05).

| **Descriptive Statistics** | | | |
| --- | --- | --- | --- |
|  | Mean | Std. Deviation | N |
| STAD | 15.0303 | 1.74078 | 33 |
| JIGSAW | 15.8788 | 1.91634 | 33 |
| KONVENSIONAL | 11.4848 | 1.27772 | 33 |

| **Multivariate Testsb** | | | | | | |
| --- | --- | --- | --- | --- | --- | --- |
| Effect | | Value | F | Hypothesis df | Error df | Sig. |
| Intercept | Pillai's Trace | .996 | 2329.192a | 3.000 | 30.000 | .000 |
| Wilks' Lambda | .004 | 2329.192a | 3.000 | 30.000 | .000 |
| Hotelling's Trace | 232.919 | 2329.192a | 3.000 | 30.000 | .000 |
| Roy's Largest Root | 232.919 | 2329.192a | 3.000 | 30.000 | .000 |
| a. Exact statistic | | | | | | |
| b. Design: Intercept | | | | | | |

| **Tests of Between-Subjects Effects** | | | | | | |
| --- | --- | --- | --- | --- | --- | --- |
| Source | Dependent Variable | Type III Sum of Squares | df | Mean Square | F | Sig. |
| Corrected Model | STAD | .000a | 0 | . | . | . |
| JIGSAW | .000b | 0 | . | . | . |
| KONVENSIONAL | .000c | 0 | . | . | . |
| Intercept | STAD | 7455.030 | 1 | 7455.030 | 2460.160 | .000 |
| JIGSAW | 8320.485 | 1 | 8320.485 | 2265.712 | .000 |
| KONVENSIONAL | 4352.758 | 1 | 4352.758 | 2666.190 | .000 |
| Error | STAD | 96.970 | 32 | 3.030 |  |  |
| JIGSAW | 117.515 | 32 | 3.672 |  |  |
| KONVENSIONAL | 52.242 | 32 | 1.633 |  |  |
| Total | STAD | 7552.000 | 33 |  |  |  |
| JIGSAW | 8438.000 | 33 |  |  |  |
| KONVENSIONAL | 4405.000 | 33 |  |  |  |
| Corrected Total | STAD | 96.970 | 32 |  |  |  |
| JIGSAW | 117.515 | 32 |  |  |  |
| KONVENSIONAL | 52.242 | 32 |  |  |  |
| a. R Squared = .000 (Adjusted R Squared = .000) | | | | | | |
| b. R Squared = .000 (Adjusted R Squared = .000) | | | | | | |
| c. R Squared = .000 (Adjusted R Squared = .000) | | | | | | |

| **Tests of Between-Subjects Effects** | | | | | | |
| --- | --- | --- | --- | --- | --- | --- |
| Source | Dependent Variable | Type III Sum of Squares | df | Mean Square | F | Sig. |
| Corrected Model | STAD | .000a | 0 | . | . | . |
| JIGSAW | .000b | 0 | . | . | . |
| KONVENSIONAL | .000c | 0 | . | . | . |
| Intercept | STAD | 7455.030 | 1 | 7455.030 | 2460.160 | .000 |
| JIGSAW | 8320.485 | 1 | 8320.485 | 2265.712 | .000 |
| KONVENSIONAL | 4352.758 | 1 | 4352.758 | 2666.190 | .000 |
| Error | STAD | 96.970 | 32 | 3.030 |  |  |
| JIGSAW | 117.515 | 32 | 3.672 |  |  |
| KONVENSIONAL | 52.242 | 32 | 1.633 |  |  |
| Total | STAD | 7552.000 | 33 |  |  |  |
| JIGSAW | 8438.000 | 33 |  |  |  |
| KONVENSIONAL | 4405.000 | 33 |  |  |  |
| Corrected Total | STAD | 96.970 | 32 |  |  |  |
| JIGSAW | 117.515 | 32 |  |  |  |
| KONVENSIONAL | 52.242 | 32 |  |  |  |
| a. R Squared = .000 (Adjusted R Squared = .000) | | | | | | |
| b. R Squared = .000 (Adjusted R Squared = .000) | | | | | | |
| c. R Squared = .000 (Adjusted R Squared = .000) | | | | | | |

| **Test of Homogeneity of Variances** | | | | |
| --- | --- | --- | --- | --- |
|  | Levene Statistic | df1 | df2 | Sig. |
| STAD | 2.192a | 3 | 27 | .112 |
| JIGSAW | 3.365b | 3 | 27 | .033 |
| a. Groups with only one case are ignored in computing the test of homogeneity of variance for STAD. | | | | |
| b. Groups with only one case are ignored in computing the test of homogeneity of variance for JIGSAW. | | | | |

| **ANOVA** | | | | | | |
| --- | --- | --- | --- | --- | --- | --- |
|  |  | Sum of Squares | df | Mean Square | F | Sig. |
| STAD | Between Groups | 8.800 | 5 | 1.760 | .539 | .745 |
| Within Groups | 88.170 | 27 | 3.266 |  |  |
| Total | 96.970 | 32 |  |  |  |
| JIGSAW | Between Groups | 12.169 | 5 | 2.434 | .624 | .683 |
| Within Groups | 105.346 | 27 | 3.902 |  |  |
| Total | 117.515 | 32 |  |  |  |