**Lampiran 2**

**Analisis data hasil skor muatan kognitif selama fase belajar (*acquisition phase*)**

|  |
| --- |
| **Between-Subjects Factors** |
|  | Value Label | N |
| Grouping | 1 | Individu | 50 |
| 2 | Group | 61 |
| Instructions | 1 | Goal\_given | 54 |
| 2 | Goal\_free | 57 |

|  |
| --- |
| **Descriptive Statistics** |
| Dependent Variable: CL\_acquisition  |
| Grouping | Instructions | Mean | Std. Deviation | N |
| Individu | Goal\_given | 4.1125 | 1.19903 | 24 |
| Goal\_free | 4.6808 | 1.55023 | 26 |
| Total | 4.4080 | 1.40826 | 50 |
| Group | Goal\_given | 3.0267 | 1.35187 | 30 |
| Goal\_free | 3.9668 | 1.39863 | 31 |
| Total | 3.5044 | 1.44429 | 61 |
| Total | Goal\_given | 3.5093 | 1.38581 | 54 |
| Goal\_free | 4.2925 | 1.49984 | 57 |
| Total | 3.9114 | 1.49170 | 111 |

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| --- |
| **Levene's Test of Equality of Error Variances** |
| Dependent Variable: CL\_acquisition  |
| F | df1 | df2 | Sig. |
| .420 | 3 | 107 | .739 |

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| --- |
| **Tests of Between-Subjects Effects** |
| Dependent Variable: CL\_acquisition  |
| Source | Type III Sum of Squares | df | Mean Square | F | Sig. | Partial Eta Squared |
| Corrected Model | 39.938 | 3 | 13.313 | 6.954 | .000 | .163 |
| Intercept | 1710.272 | 1 | 1710.272 | 893.420 | .000 | .893 |
| Grouping | 22.230 | 1 | 22.230 | 11.613 | .001 | .098 |
| Instructions | 15.614 | 1 | 15.614 | 8.156 | .005 | .071 |
| Grouping \* Instructions | .949 | 1 | .949 | .496 | .483 | .005 |
| Error | 204.830 | 107 | 1.914 |  |  |  |
| Total | 1942.999 | 111 |  |  |  |  |
| Corrected Total | 244.768 | 110 |  |  |  |  |

**Lampiran 3**

**Analisis data hasil penilaian *retention/near-transfer test***

|  |
| --- |
| **Between-Subjects Factors** |
|  | Value Label | N |
| Grouping | 1 | Individu | 50 |
| 2 | Group | 61 |
| Instructions | 1 | Goal\_given | 54 |
| 2 | Goal\_free | 57 |

|  |
| --- |
| **Descriptive Statistics** |
| Dependent Variable: Retention  |
| Grouping | Instructions | Mean | Std. Deviation | N |
| Individu | Goal\_given | 2.5000 | 1.44463 | 24 |
| Goal\_free | 3.0385 | 1.54223 | 26 |
| Total | 2.7800 | 1.50564 | 50 |
| Group | Goal\_given | 2.2167 | .70324 | 30 |
| Goal\_free | 3.1129 | 1.33360 | 31 |
| Total | 2.6721 | 1.15429 | 61 |
| Total | Goal\_given | 2.3426 | 1.09383 | 54 |
| Goal\_free | 3.0789 | 1.41985 | 57 |
| Total | 2.7207 | 1.31889 | 111 |

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| --- |
| **Levene's Test of Equality of Error Variances** |
| Dependent Variable: Retention  |
| F | df1 | df2 | Sig. |
| 5.947 | 3 | 107 | .001 |

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| --- |
| **Tests of Between-Subjects Effects** |
| Dependent Variable: Retention  |
| Source | Type III Sum of Squares | df | Mean Square | F | Sig. | Partial Eta Squared |
| Corrected Model | 16.184 | 3 | 5.395 | 3.296 | .023 | .085 |
| Intercept | 810.557 | 1 | 810.557 | 495.151 | .000 | .822 |
| Grouping | .299 | 1 | .299 | .183 | .670 | .002 |
| Instructions | 14.125 | 1 | 14.125 | 8.629 | .004 | .075 |
| Grouping \* Instructions | .878 | 1 | .878 | .537 | .465 | .005 |
| Error | 175.158 | 107 | 1.637 |  |  |  |
| Total | 1013.000 | 111 |  |  |  |  |
| Corrected Total | 191.342 | 110 |  |  |  |  |

**Lampiran 4**

**Analisis data hasil skor muatan kognitif *retention/near-transfer test***

|  |
| --- |
| **Between-Subjects Factors** |
|  | Value Label | N |
| Grouping | 1 | Individu | 50 |
| 2 | Group | 61 |
| Instructions | 1 | Goal\_given | 54 |
| 2 | Goal\_free | 57 |

|  |
| --- |
| **Descriptive Statistics** |
| Dependent Variable: CL\_retention  |
| Grouping | Instructions | Mean | Std. Deviation | N |
| Individu | Goal\_given | 3.2667 | 1.20962 | 24 |
| Goal\_free | 3.7827 | 1.89499 | 26 |
| Total | 3.5350 | 1.60834 | 50 |
| Group | Goal\_given | 2.8933 | 1.44865 | 30 |
| Goal\_free | 3.5258 | 1.27488 | 31 |
| Total | 3.2148 | 1.38874 | 61 |
| Total | Goal\_given | 3.0593 | 1.34845 | 54 |
| Goal\_free | 3.6430 | 1.57813 | 57 |
| Total | 3.3590 | 1.49328 | 111 |

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| --- |
| **Levene's Test of Equality of Error Variances** |
| Dependent Variable: CL\_retention  |
| F | df1 | df2 | Sig. |
| 3.618 | 3 | 107 | .016 |

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| --- |
| **Tests of Between-Subjects Effects** |
| Dependent Variable: CL\_retention  |
| Source | Type III Sum of Squares | df | Mean Square | F | Sig. | Partial Eta Squared |
| Corrected Model | 12.240 | 3 | 4.080 | 1.873 | .138 | .050 |
| Intercept | 1244.860 | 1 | 1244.860 | 571.561 | .000 | .842 |
| Grouping | 2.726 | 1 | 2.726 | 1.251 | .266 | .012 |
| Instructions | 9.052 | 1 | 9.052 | 4.156 | .044 | .037 |
| Grouping \* Instructions | .093 | 1 | .093 | .043 | .837 | .000 |
| Error | 233.046 | 107 | 2.178 |  |  |  |
| Total | 1497.692 | 111 |  |  |  |  |
| Corrected Total | 245.286 | 110 |  |  |  |  |

**Lampiran 5**

**Analisis data hasil penilaian *far-transfer test***

|  |
| --- |
| **Between-Subjects Factors** |
|  | Value Label | N |
| Grouping | 1 | Individu | 50 |
| 2 | Group | 61 |
| Instructions | 1 | Goal\_given | 54 |
| 2 | Goal\_free | 57 |

|  |
| --- |
| **Descriptive Statistics** |
| Dependent Variable: Transfer  |
| Grouping | Instructions | Mean | Std. Deviation | N |
| Individu | Goal\_given | 1.7500 | 1.59483 | 24 |
| Goal\_free | 2.0962 | 1.28078 | 26 |
| Total | 1.9300 | 1.43573 | 50 |
| Group | Goal\_given | .1500 | .39719 | 30 |
| Goal\_free | 1.3387 | 1.30631 | 31 |
| Total | .7541 | 1.13513 | 61 |
| Total | Goal\_given | .8611 | 1.35430 | 54 |
| Goal\_free | 1.6842 | 1.33841 | 57 |
| Total | 1.2838 | 1.40231 | 111 |

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| --- |
| **Levene's Test of Equality of Error Variances** |
| Dependent Variable: Transfer  |
| F | df1 | df2 | Sig. |
| 14.836 | 3 | 107 | .000 |

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| --- |
| **Tests of Between-Subjects Effects** |
| Dependent Variable: Transfer  |
| Source | Type III Sum of Squares | df | Mean Square | F | Sig. | Partial Eta Squared |
| Corrected Model | 61.033 | 3 | 20.344 | 14.019 | .000 | .282 |
| Intercept | 195.312 | 1 | 195.312 | 134.587 | .000 | .557 |
| Grouping | 38.139 | 1 | 38.139 | 26.281 | .000 | .197 |
| Instructions | 16.167 | 1 | 16.167 | 11.140 | .001 | .094 |
| Grouping \* Instructions | 4.872 | 1 | 4.872 | 3.357 | .070 | .030 |
| Error | 155.278 | 107 | 1.451 |  |  |  |
| Total | 399.250 | 111 |  |  |  |  |
| Corrected Total | 216.311 | 110 |  |  |  |  |

**Lampiran 6**

**Analisis data hasil skor muatan kognitif *far-transfer test***

|  |
| --- |
| **Between-Subjects Factors** |
|  | Value Label | N |
| Grouping | 1 | Individu | 50 |
| 2 | Group | 61 |
| Instructions | 1 | Goal\_given | 54 |
| 2 | Goal\_free | 57 |

|  |
| --- |
| **Descriptive Statistics** |
| Dependent Variable: CL\_transfer  |
| Grouping | Instructions | Mean | Std. Deviation | N |
| Individu | Goal\_given | 5.04167 | 1.864990 | 24 |
| Goal\_free | 5.55385 | 1.691681 | 26 |
| Total | 5.30800 | 1.777506 | 50 |
| Group | Goal\_given | 5.13667 | 2.027821 | 30 |
| Goal\_free | 4.57419 | 1.457616 | 31 |
| Total | 4.85082 | 1.769239 | 61 |
| Total | Goal\_given | 5.09444 | 1.939502 | 54 |
| Goal\_free | 5.02105 | 1.630374 | 57 |
| Total | 5.05676 | 1.779613 | 111 |

|  |
| --- |
| **Levene's Test of Equality of Error Variances** |
| Dependent Variable: CL\_transfer  |
| F | df1 | df2 | Sig. |
| 1.714 | 3 | 107 | .168 |

|  |
| --- |
| **Tests of Between-Subjects Effects** |
| Dependent Variable: CL\_transfer  |
| Source | Type III Sum of Squares | df | Mean Square | F | Sig. | Partial Eta Squared |
| Corrected Model | 13.840 | 3 | 4.613 | 1.476 | .225 | .040 |
| Intercept | 2829.741 | 1 | 2829.741 | 905.092 | .000 | .894 |
| Grouping | 5.371 | 1 | 5.371 | 1.718 | .193 | .016 |
| Instructions | .017 | 1 | .017 | .006 | .941 | .000 |
| Grouping \* Instructions | 7.925 | 1 | 7.925 | 2.535 | .114 | .023 |
| Error | 334.532 | 107 | 3.126 |  |  |  |
| Total | 3186.730 | 111 |  |  |  |  |
| Corrected Total | 348.372 | 110 |  |  |  |  |

Table 1. Score of Cognitive Load Based on Instructional and Setting Type

|  |  |  |  |
| --- | --- | --- | --- |
|  | Acquisition Phase | Near Transfer Phase | Far Transfer Phase |
|  | GGN=54 | GFN=57 | GGN=54 | GFN=57 | GGN=54 | GFN=57 |
| IndividuN=50 | 4.113 (1.199) | 4.681 (1.550) | 3.267 (1.210) | 3.783 (1.895) | 5.042 (1.865) | 5.554 (1.692) |
| CollaborativeN=61 | 3.027 (1.352) | 3.967 (1.399) | 2.893 (1.449) | 3.526 (1.275) | 5.137 (2.028) | 4.574 (1.458) |

Table 2. Score of Mathematics Based on Instructional and Setting Type

|  |  |  |
| --- | --- | --- |
|  | Near Transfer Phase | Far Transfer Phase |
|  | GGN=54 | GFN=57 | GGN=54 | GFN=57 |
| IndividuN=50 | 2,500(1,445) | 3,039(1,542) | 1,750 (1,595) | 2,096 (1,281) |
| ColaborativeN=61 | 2,217(0,703) | 3,113(1,334) | 0,150 (3,97) | 1,339 (1,306) |