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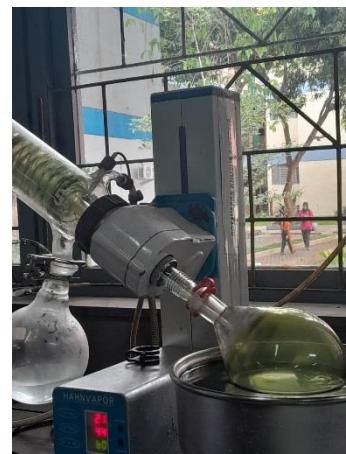
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LAMPIRAN

Lampiran 1. Dokumentasi Pelaksanaan Kegiatan



Ket. Pengovenan Bunga Telang



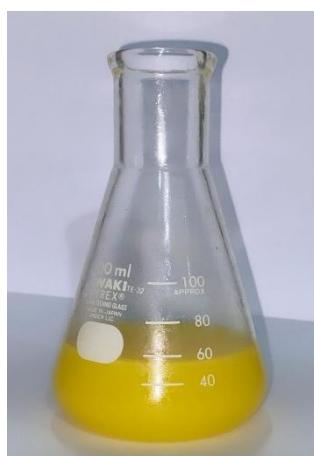
Ket. Proses Ekstraksi Bunga Telang



Ket. Ekstrak Bunga Telang



Ket. Penampungan Semen



Ket. Pembuatan Pengencer



Ket. Pengamatan Spermatozoa

Lampiran 2. Hasil Analisis Repeated Measure Anova

Motilitas :

Descriptive Statistics

| PERLAKUA | | N | Mean | Std. Deviation | N |
|----------|---------|----------|----------|----------------|---|
| HARI1 | | | 79.6840 | 7.17155 | 5 |
| P0 | 81.2380 | 5.68968 | 5 | | |
| | 80.1140 | 5.98657 | 5 | | |
| | 80.6460 | 5.24503 | 5 | | |
| | Total | 80.4205 | 5.59788 | 20 | |
| | | | | | |
| HARI2 | 73.1880 | 8.56997 | 5 | | |
| | 78.1940 | 5.30268 | 5 | | |
| | 79.7780 | 4.14692 | 5 | | |
| | 77.5700 | 2.75483 | 5 | | |
| | Total | 77.1825 | 5.73413 | 20 | |
| HARI3 | 71.0720 | 12.85056 | 5 | | |
| | 76.6760 | 1.20243 | 5 | | |
| | 75.8760 | 5.71610 | 5 | | |
| | 76.9180 | 8.31118 | 5 | | |
| | Total | 75.1355 | 7.90198 | 20 | |
| HARI4 | 64.9920 | 8.00265 | 5 | | |
| | 70.6840 | 13.61834 | 5 | | |
| | 74.7480 | 9.80754 | 5 | | |
| | 75.5080 | 9.41429 | 5 | | |
| | Total | 71.4830 | 10.47663 | 20 | |

Tests of Within-Subjects Effects

Measure: MOTILITAS

| Source | Type III Sum of | | | Mean | |
|------------------|--------------------|---------|-------------|---------|-------|
| | Squares | df | Mean Square | F | |
| HARI | Sphericity Assumed | 841.550 | 3 | 280.517 | 5.367 |
| | Greenhouse-Geisser | 841.550 | 2.432 | 346.025 | 5.367 |
| | Huynh-Feldt | 841.550 | 3.000 | 280.517 | 5.367 |
| | Lower-bound | 841.550 | 1.000 | 841.550 | 5.367 |
| HARI * PERLAKUAN | Sphericity Assumed | 185.951 | 9 | 20.661 | .395 |
| | Greenhouse-Geisser | 185.951 | 7.296 | 25.486 | .395 |
| | Huynh-Feldt | 185.951 | 9.000 | 20.661 | .395 |

| | | | | | |
|-------------|--------------------|----------|--------|---------|------|
| | Lower-bound | 185.951 | 3.000 | 61.984 | .395 |
| Error(HARI) | Sphericity Assumed | 2508.878 | 48 | 52.268 | |
| | Greenhouse-Geisser | 2508.878 | 38.913 | 64.474 | |
| | Huynh-Feldt | 2508.878 | 48.000 | 52.268 | |
| | Lower-bound | 2508.878 | 16.000 | 156.805 | |

Tests of Within-Subjects Effects

Measure: MOTILITAS

| Source | | Sig. |
|------------------|--------------------|------|
| HARI | Sphericity Assumed | .003 |
| | Greenhouse-Geisser | .006 |
| | Huynh-Feldt | .003 |
| | Lower-bound | .034 |
| HARI * PERLAKUAN | Sphericity Assumed | .931 |
| | Greenhouse-Geisser | .905 |
| | Huynh-Feldt | .931 |
| | Lower-bound | .758 |
| Error(HARI) | Sphericity Assumed | |
| | Greenhouse-Geisser | |
| | Huynh-Feldt | |
| | Lower-bound | |

Tests of Within-Subjects Contrasts

Measure: MOTILITAS

| Source | HARI | Type III Sum | | F | Sig. |
|-------------|-----------|--------------|----|---------|-------------|
| | | of Squares | df | | |
| HARI | Linear | 832.871 | 1 | 832.871 | 10.274 .006 |
| | Quadratic | .859 | 1 | .859 | .020 .890 |
| | Cubic | 7.820 | 1 | 7.820 | .241 .630 |
| HARI * | Linear | 140.312 | 3 | 46.771 | .577 .638 |
| | PERLAKUAN | 14.474 | 3 | 4.825 | .111 .952 |
| | Cubic | 31.165 | 3 | 10.388 | .320 .811 |
| Error(HARI) | Linear | 1297.109 | 16 | 81.069 | |
| | Quadratic | 692.749 | 16 | 43.297 | |
| | Cubic | 519.020 | 16 | 32.439 | |

Tests of Between-Subjects Effects

Measure: MOTILITAS

Transformed Variable: Average

| Source | Type III Sum of | | Mean Square | F | Sig. |
|-----------|-----------------|----|-------------|----------|------|
| | Squares | df | | | |
| Intercept | 462753.605 | 1 | 462753.605 | 5304.784 | .000 |
| PERLAKUAN | 401.372 | 3 | 133.791 | 1.534 | .244 |
| Error | 1395.732 | 16 | 87.233 | | |

Estimated Marginal Means

PERLAKUAN

Estimates

Measure: MOTILITAS

| PERLAKUAN | Mean | Std. Error | 95% Confidence Interval | |
|-----------|--------|------------|-------------------------|-------------|
| | | | Lower Bound | Upper Bound |
| P0 | 72.234 | 2.088 | 67.807 | 76.661 |
| P1 | 76.698 | 2.088 | 72.271 | 81.125 |
| P2 | 77.629 | 2.088 | 73.202 | 82.056 |
| P3 | 77.661 | 2.088 | 73.233 | 82.088 |

Pairwise Comparisons

Measure: MOTILITAS

| (I) PERLAKUAN | (J) PERLAKUAN | Mean Difference (I-J) | 95% Confidence | | |
|---------------|---------------|--------------------------|----------------|-------------------|---|
| | | | Std. Error | Sig. ^a | Interval for Difference ^a |
| P0 | P1 | -4.464 | 2.954 | .901 | -13.349 |
| | P2 | -5.395 | 2.954 | .519 | -14.280 |
| | P3 | -5.427 | 2.954 | .509 | -14.312 |
| P1 | P0 | 4.464 | 2.954 | .901 | -4.421 |
| | P2 | -.931 | 2.954 | 1.000 | -9.816 |
| | P3 | -.963 | 2.954 | 1.000 | -9.848 |
| P2 | P0 | 5.395 | 2.954 | .519 | -3.490 |
| | P1 | .931 | 2.954 | 1.000 | -7.954 |
| | P3 | -.032 | 2.954 | 1.000 | -8.917 |
| P3 | P0 | 5.427 | 2.954 | .509 | -3.459 |
| | P1 | .963 | 2.954 | 1.000 | -7.923 |
| | P2 | .032 | 2.954 | 1.000 | -8.854 |

Pairwise Comparisons

Measure: MOTILITAS

| | | 95% Confidence Interval for Difference | |
|---------------|---------------|---|--------|
| (I) PERLAKUAN | (J) PERLAKUAN | Upper Bound | |
| P0 | P1 | | 4.421 |
| | P2 | | 3.490 |
| | P3 | | 3.459 |
| P1 | P0 | | 13.349 |
| | P2 | | 7.954 |
| | P3 | | 7.923 |
| P2 | P0 | | 14.280 |
| | P1 | | 9.816 |
| | P3 | | 8.854 |
| P3 | P0 | | 14.312 |
| | P1 | | 9.848 |
| | P2 | | 8.917 |

Based on estimated marginal means

a. Adjustment for multiple comparisons: Bonferroni.

Univariate Tests

Measure: MOTILITAS

| | Sum of Squares | df | Mean Square | F | Sig. |
|----------|----------------|----|-------------|-------|------|
| Contrast | 100.343 | 3 | 33.448 | 1.534 | .244 |
| Error | 348.933 | 16 | 21.808 | | |

The F tests the effect of PERLAKUAN. This test is based on the linearly independent pairwise comparisons among the estimated marginal means.

Kinematika :

DCL (*Distance curvilinear*)

Descriptive Statistics

| | PERLAKUAN | Mean | Std. Deviation | N |
|-------|-----------|---------|----------------|----|
| HARI1 | P0 | 43.2500 | 3.95479 | 5 |
| | P1 | 45.0500 | 4.53705 | 5 |
| | P2 | 42.1100 | 5.91056 | 5 |
| | P3 | 45.5900 | 4.51484 | 5 |
| | Total | 44.0000 | 4.61691 | 20 |
| HARI2 | P0 | 38.6500 | 5.05742 | 5 |
| | P1 | 39.4800 | 1.23905 | 5 |
| | P2 | 40.9200 | 1.48262 | 5 |
| | P3 | 44.3100 | 4.59008 | 5 |
| | Total | 40.8400 | 3.94024 | 20 |
| HARI3 | P0 | 34.7000 | 3.24702 | 5 |
| | P1 | 37.5000 | 2.56049 | 5 |
| | P2 | 38.6500 | 3.26570 | 5 |
| | P3 | 39.6900 | 1.10166 | 5 |
| | Total | 37.6350 | 3.12325 | 20 |
| HARI4 | P0 | 32.6100 | 2.93554 | 5 |
| | P1 | 36.4000 | 2.22583 | 5 |
| | P2 | 36.2700 | 5.31886 | 5 |
| | P3 | 38.0000 | 3.14849 | 5 |
| | Total | 35.8200 | 3.87351 | 20 |

Tests of Within-Subjects Effects

Measure: DCL

| Source | Type III Sum | | df | Mean Square | F |
|---------------------|--------------------|---------|-------|-------------|--------|
| | of Squares | | | | |
| factor1 | Sphericity Assumed | 780.889 | 3 | 260.296 | 37.601 |
| | Greenhouse-Geisser | 780.889 | 2.306 | 338.619 | 37.601 |
| | Huynh-Feldt | 780.889 | 3.000 | 260.296 | 37.601 |
| | Lower-bound | 780.889 | 1.000 | 780.889 | 37.601 |
| factor1 * PERLAKUAN | Sphericity Assumed | 68.357 | 9 | 7.595 | 1.097 |
| | Greenhouse-Geisser | 68.357 | 6.918 | 9.881 | 1.097 |
| | Huynh-Feldt | 68.357 | 9.000 | 7.595 | 1.097 |
| | Lower-bound | 68.357 | 3.000 | 22.786 | 1.097 |

| | | | | | |
|----------------|--------------------|---------|--------|--------|--|
| Error(factor1) | Sphericity Assumed | 332.283 | 48 | 6.923 | |
| | Greenhouse-Geisser | 332.283 | 36.898 | 9.006 | |
| | Huynh-Feldt | 332.283 | 48.000 | 6.923 | |
| | Lower-bound | 332.283 | 16.000 | 20.768 | |

Tests of Within-Subjects Effects

Measure: DCL

| Source | | Sig. |
|---------------------|--------------------|------|
| factor1 | Sphericity Assumed | .000 |
| | Greenhouse-Geisser | .000 |
| | Huynh-Feldt | .000 |
| | Lower-bound | .000 |
| factor1 * PERLAKUAN | Sphericity Assumed | .383 |
| | Greenhouse-Geisser | .385 |
| | Huynh-Feldt | .383 |
| | Lower-bound | .379 |
| Error(factor1) | Sphericity Assumed | |
| | Greenhouse-Geisser | |
| | Huynh-Feldt | |
| | Lower-bound | |

Tests of Within-Subjects Contrasts

Measure: DCL

| Source | factor1 | Type III Sum | | Mean Square | F | Sig. |
|---------------------|-----------|--------------|----|-------------|--------|------|
| | | of Squares | df | | | |
| factor1 | Linear | 769.785 | 1 | 769.785 | 83.823 | .000 |
| | Quadratic | 9.045 | 1 | 9.045 | 1.226 | .285 |
| | Cubic | 2.059 | 1 | 2.059 | .490 | .494 |
| factor1 * PERLAKUAN | Linear | 32.364 | 3 | 10.788 | 1.175 | .350 |
| | Quadratic | 25.786 | 3 | 8.595 | 1.165 | .354 |
| | Cubic | 10.206 | 3 | 3.402 | .809 | .507 |
| Error(factor1) | Linear | 146.935 | 16 | 9.183 | | |
| | Quadratic | 118.069 | 16 | 7.379 | | |
| | Cubic | 67.279 | 16 | 4.205 | | |

Tests of Between-Subjects Effects

Measure: DCL

Transformed Variable: Average

| Source | Type III Sum of | | Mean Square | F | Sig. |
|-----------|-----------------|----|-------------|----------|------|
| | Squares | df | | | |
| Intercept | 125286.535 | 1 | 125286.535 | 3589.732 | .000 |
| PERLAKUAN | 211.339 | 3 | 70.446 | 2.018 | .152 |
| Error | 558.422 | 16 | 34.901 | | |

Estimated Marginal Means

PERLAKUAN

Estimates

Measure: DCL

| PERLAKUAN | Mean | Std. Error | 95% Confidence Interval | |
|-----------|--------|------------|-------------------------|-------------|
| | | | Lower Bound | Upper Bound |
| P0 | 37.303 | 1.321 | 34.502 | 40.103 |
| P1 | 39.608 | 1.321 | 36.807 | 42.408 |
| P2 | 39.488 | 1.321 | 36.687 | 42.288 |
| P3 | 41.898 | 1.321 | 39.097 | 44.698 |

Pairwise Comparisons

Measure: DCL

| (I) PERLAKUAN | (J) PERLAKUAN | Mean Difference (I-J) | 95% Confidence Interval for Difference ^a | | |
|---------------|---------------|--------------------------|---|-------------------|-------------|
| | | | Std. Error | Sig. ^a | Lower Bound |
| P0 | P1 | -2.305 | 1.868 | 1.000 | -7.925 |
| | P2 | -2.185 | 1.868 | 1.000 | -7.805 |
| | P3 | -4.595 | 1.868 | .154 | -10.215 |
| P1 | P0 | 2.305 | 1.868 | 1.000 | -3.315 |
| | P2 | .120 | 1.868 | 1.000 | -5.500 |
| | P3 | -2.290 | 1.868 | 1.000 | -7.910 |
| P2 | P0 | 2.185 | 1.868 | 1.000 | -3.435 |
| | P1 | -.120 | 1.868 | 1.000 | -5.740 |
| | P3 | -2.410 | 1.868 | 1.000 | -8.030 |
| P3 | P0 | 4.595 | 1.868 | .154 | -1.025 |
| | P1 | 2.290 | 1.868 | 1.000 | -3.330 |
| | P2 | 2.410 | 1.868 | 1.000 | -3.210 |

Pairwise Comparisons

Measure: DCL

| | | 95% Confidence Interval for Difference | |
|---------------|---------------|--|--------|
| (I) PERLAKUAN | (J) PERLAKUAN | Upper Bound | |
| P0 | P1 | | 3.315 |
| | P2 | | 3.435 |
| | P3 | | 1.025 |
| P1 | P0 | | 7.925 |
| | P2 | | 5.740 |
| | P3 | | 3.330 |
| P2 | P0 | | 7.805 |
| | P1 | | 5.500 |
| | P3 | | 3.210 |
| P3 | P0 | | 10.215 |
| | P1 | | 7.910 |
| | P2 | | 8.030 |

Univariate Tests

Measure: DCL

| | Sum of Squares | df | Mean Square | F | Sig. |
|----------|----------------|----|-------------|-------|------|
| Contrast | 52.835 | 3 | 17.612 | 2.018 | .152 |
| Error | 139.605 | 16 | 8.725 | | |

Post Hoc Tests

PERLAKUAN

DCL

Duncan^{a,b}

| PERLAKUAN | N | Subset | |
|-----------|---|---------|---------|
| | | 1 | 2 |
| P0 | 5 | 37.3025 | |
| P2 | 5 | 39.4875 | 39.4875 |
| P1 | 5 | 39.6075 | 39.6075 |
| P3 | 5 | | 41.8975 |
| Sig. | | .259 | .239 |

DAP (*Distance Average Path*)

Descriptive Statistics

| | PERLAKUAN | Mean | Std. Deviation | N |
|-------|-----------|---------|----------------|----|
| HARI1 | P0 | 20.7700 | 5.76849 | 5 |
| | P1 | 20.8700 | 1.17892 | 5 |
| | P2 | 20.9400 | .69394 | 5 |
| | P3 | 21.0700 | .37901 | 5 |
| | Total | 20.9125 | 2.72803 | 20 |
| HARI2 | P0 | 19.5700 | 5.66273 | 5 |
| | P1 | 19.9100 | .75153 | 5 |
| | P2 | 20.1600 | .48636 | 5 |
| | P3 | 20.9600 | .25749 | 5 |
| | Total | 20.1500 | 2.68512 | 20 |
| HARI3 | P0 | 19.0500 | 6.01246 | 5 |
| | P1 | 19.5500 | .32619 | 5 |
| | P2 | 19.9500 | .65708 | 5 |
| | P3 | 20.5900 | .46211 | 5 |
| | Total | 19.7850 | 2.84660 | 20 |
| HARI4 | P0 | 18.2800 | 5.51923 | 5 |
| | P1 | 18.5000 | .93185 | 5 |
| | P2 | 19.5000 | .91916 | 5 |
| | P3 | 20.2000 | .50095 | 5 |
| | Total | 19.1200 | 2.73099 | 20 |

Tests of Within-Subjects Effects

Measure: MEASURE_1

| Source | Type III Sum of | | df | Mean Square | F |
|---------------------|--------------------|--------|-------|-------------|--------|
| | Squares | | | | |
| factor1 | Sphericity Assumed | 33.510 | 3 | 11.170 | 30.422 |
| | Greenhouse-Geisser | 33.510 | 1.560 | 21.477 | 30.422 |
| | Huynh-Feldt | 33.510 | 2.023 | 16.568 | 30.422 |
| | Lower-bound | 33.510 | 1.000 | 33.510 | 30.422 |
| factor1 * PERLAKUAN | Sphericity Assumed | 5.036 | 9 | .560 | 1.524 |
| | Greenhouse-Geisser | 5.036 | 4.681 | 1.076 | 1.524 |
| | Huynh-Feldt | 5.036 | 6.068 | .830 | 1.524 |
| | Lower-bound | 5.036 | 3.000 | 1.679 | 1.524 |

| | | | | | |
|----------------|--------------------|--------|--------|-------|--|
| Error(factor1) | Sphericity Assumed | 17.624 | 48 | .367 | |
| | Greenhouse-Geisser | 17.624 | 24.965 | .706 | |
| | Huynh-Feldt | 17.624 | 32.362 | .545 | |
| | Lower-bound | 17.624 | 16.000 | 1.102 | |

Tests of Within-Subjects Effects

Measure: MEASURE_1

| Source | | Sig. |
|---------------------|--------------------|------|
| factor1 | Sphericity Assumed | .000 |
| | Greenhouse-Geisser | .000 |
| | Huynh-Feldt | .000 |
| | Lower-bound | .000 |
| factor1 * PERLAKUAN | Sphericity Assumed | .167 |
| | Greenhouse-Geisser | .221 |
| | Huynh-Feldt | .201 |
| | Lower-bound | .247 |
| Error(factor1) | Sphericity Assumed | |
| | Greenhouse-Geisser | |
| | Huynh-Feldt | |
| | Lower-bound | |

Tests of Within-Subjects Contrasts

Measure: MEASURE_1

| Source | factor1 | Type III Sum of | df | Mean Square | F | Sig. |
|---------------------|-----------|-----------------|----|-------------|--------|------|
| | | Squares | | | | |
| factor1 | Linear | 32.976 | 1 | 32.976 | 39.461 | .000 |
| | Quadratic | .048 | 1 | .048 | .252 | .622 |
| | Cubic | .487 | 1 | .487 | 6.295 | .023 |
| factor1 * PERLAKUAN | Linear | 4.284 | 3 | 1.428 | 1.709 | .205 |
| | Quadratic | .428 | 3 | .143 | .756 | .535 |
| | Cubic | .324 | 3 | .108 | 1.398 | .280 |
| Error(factor1) | Linear | 13.371 | 16 | .836 | | |
| | Quadratic | 3.017 | 16 | .189 | | |
| | Cubic | 1.237 | 16 | .077 | | |

Tests of Between-Subjects Effects

Measure: MEASURE_1

Transformed Variable: Average

| Type III Sum of | | | | | |
|-----------------|-----------|----|-------------|---------|------|
| Source | Squares | df | Mean Square | F | Sig. |
| Intercept | 31974.005 | 1 | 31974.005 | 960.569 | .000 |
| PERLAKUAN | 18.811 | 3 | 6.270 | .188 | .903 |
| Error | 532.585 | 16 | 33.287 | | |

Estimated Marginal Means

PERLAKUAN

Estimates

Measure: MEASURE_1

| PERLAKUAN | Mean | Std. Error | 95% Confidence Interval | |
|-----------|--------|------------|-------------------------|-------------|
| | | | Lower Bound | Upper Bound |
| P0 | 19.418 | 1.290 | 16.683 | 22.152 |
| P1 | 19.708 | 1.290 | 16.973 | 22.442 |
| P2 | 20.138 | 1.290 | 17.403 | 22.872 |
| P3 | 20.705 | 1.290 | 17.970 | 23.440 |

Pairwise Comparisons

Measure: MEASURE_1

| (I) PERLAKUAN | (J) PERLAKUAN | Mean Difference | | Sig. ^a | 95% Confidence Interval for Difference ^a |
|---------------|---------------|-----------------|------------|-------------------|---|
| | | (I-J) | Std. Error | | |
| P0 | P1 | -.290 | 1.824 | 1.000 | -5.779 |
| | P2 | -.720 | 1.824 | 1.000 | -6.209 |
| | P3 | -1.288 | 1.824 | 1.000 | -6.776 |
| P1 | P0 | .290 | 1.824 | 1.000 | -5.199 |
| | P2 | -.430 | 1.824 | 1.000 | -5.919 |
| | P3 | -.998 | 1.824 | 1.000 | -6.486 |
| P2 | P0 | .720 | 1.824 | 1.000 | -4.769 |
| | P1 | .430 | 1.824 | 1.000 | -5.059 |
| | P3 | -.568 | 1.824 | 1.000 | -6.056 |
| P3 | P0 | 1.288 | 1.824 | 1.000 | -4.201 |
| | P1 | .998 | 1.824 | 1.000 | -4.491 |
| | P2 | .568 | 1.824 | 1.000 | -4.921 |

Pairwise Comparisons

Measure: MEASURE_1

95% Confidence Interval for Difference

| (I) PERLAKUAN | (J) PERLAKUAN | Upper Bound |
|---------------|---------------|-------------|
| P0 | P1 | 5.199 |
| | P2 | 4.769 |
| | P3 | 4.201 |
| P1 | P0 | 5.779 |
| | P2 | 5.059 |
| | P3 | 4.491 |
| P2 | P0 | 6.209 |
| | P1 | 5.919 |
| | P3 | 4.921 |
| P3 | P0 | 6.776 |
| | P1 | 6.486 |
| | P2 | 6.056 |

Univariate Tests

Measure: MEASURE_1

| | Sum of Squares | df | Mean Square | F | Sig. |
|----------|----------------|----|-------------|------|------|
| Contrast | 4.703 | 3 | 1.568 | .188 | .903 |
| Error | 133.146 | 16 | 8.322 | | |

Post Hoc Tests

PERLAKUAN

MEASURE_1

Duncan^{a,b}

| PERLAKUAN | N | Subset |
|-----------|---|---------|
| | | 1 |
| P0 | 5 | 19.4175 |
| P1 | 5 | 19.7075 |
| P2 | 5 | 20.1375 |
| P3 | 5 | 20.7050 |
| Sig. | | .526 |

DSL (*Distance Straight Line*)

Descriptive Statistics

| | PERLAKUAN | Mean | Std. Deviation | N |
|-------|-----------|---------|----------------|----|
| HARI1 | P0 | 13.8800 | .56555 | 5 |
| | P1 | 13.9000 | .17306 | 5 |
| | P2 | 13.9700 | .60840 | 5 |
| | P3 | 14.0500 | .40218 | 5 |
| | Total | 13.9500 | .43624 | 20 |
| HARI2 | P0 | 13.7200 | 1.46089 | 5 |
| | P1 | 13.8600 | .16279 | 5 |
| | P2 | 13.9300 | .59152 | 5 |
| | P3 | 14.0300 | .39351 | 5 |
| | Total | 13.8850 | .75799 | 20 |
| HARI3 | P0 | 13.5800 | 1.41981 | 5 |
| | P1 | 13.7900 | .14353 | 5 |
| | P2 | 13.8800 | .58634 | 5 |
| | P3 | 13.8800 | .39516 | 5 |
| | Total | 13.7825 | .74148 | 20 |
| HARI4 | P0 | 12.9600 | 1.18131 | 5 |
| | P1 | 12.9600 | .39459 | 5 |
| | P2 | 13.1800 | .38190 | 5 |
| | P3 | 13.4800 | .29155 | 5 |
| | Total | 13.1450 | .65041 | 20 |

Tests of Within-Subjects Effects

Measure: DSL

| Source | Type III Sum of | | | Mean Square | F |
|---------------------|--------------------|--------|--------|-------------|--------|
| | Squares | df | | | |
| factor1 | Sphericity Assumed | 8.224 | 3 | 2.741 | 10.810 |
| | Greenhouse-Geisser | 8.224 | 1.310 | 6.276 | 10.810 |
| | Huynh-Feldt | 8.224 | 1.648 | 4.990 | 10.810 |
| | Lower-bound | 8.224 | 1.000 | 8.224 | 10.810 |
| factor1 * PERLAKUAN | Sphericity Assumed | .367 | 9 | .041 | .161 |
| | Greenhouse-Geisser | .367 | 3.931 | .093 | .161 |
| | Huynh-Feldt | .367 | 4.944 | .074 | .161 |
| | Lower-bound | .367 | 3.000 | .122 | .161 |
| Error(factor1) | Sphericity Assumed | 12.173 | 48 | .254 | |
| | Greenhouse-Geisser | 12.173 | 20.967 | .581 | |

| | | | |
|-------------|--------|--------|------|
| Huynh-Feldt | 12.173 | 26.368 | .462 |
| Lower-bound | 12.173 | 16.000 | .761 |

Tests of Within-Subjects Effects

Measure: DSL

| Source | | Sig. |
|---------------------|--------------------|------|
| factor1 | Sphericity Assumed | .000 |
| | Greenhouse-Geisser | .002 |
| | Huynh-Feldt | .001 |
| | Lower-bound | .005 |
| factor1 * PERLAKUAN | Sphericity Assumed | .997 |
| | Greenhouse-Geisser | .954 |
| | Huynh-Feldt | .974 |
| | Lower-bound | .921 |
| Error(factor1) | Sphericity Assumed | |
| | Greenhouse-Geisser | |
| | Huynh-Feldt | |
| | Lower-bound | |

Tests of Within-Subjects Contrasts

Measure: DSL

| Source | factor1 | Type III Sum of | | Mean Square | F | Sig. |
|---------------------|-----------|-----------------|----|-------------|--------|------|
| | | Squares | df | | | |
| factor1 | Linear | 6.338 | 1 | 6.338 | 17.761 | .001 |
| | Quadratic | 1.639 | 1 | 1.639 | 4.661 | .046 |
| | Cubic | .248 | 1 | .248 | 4.724 | .045 |
| factor1 * PERLAKUAN | Linear | .182 | 3 | .061 | .170 | .915 |
| | Quadratic | .131 | 3 | .044 | .124 | .945 |
| | Cubic | .054 | 3 | .018 | .345 | .793 |
| Error(factor1) | Linear | 5.709 | 16 | .357 | | |
| | Quadratic | 5.625 | 16 | .352 | | |
| | Cubic | .838 | 16 | .052 | | |

Tests of Between-Subjects Effects

Measure: DSL

Transformed Variable: Average

| Type III Sum of | | | | | |
|-----------------|-----------|----|-------------|-----------|------|
| Source | Squares | df | Mean Square | F | Sig. |
| Intercept | 14994.657 | 1 | 14994.657 | 12437.506 | .000 |
| PERLAKUAN | 1.187 | 3 | .396 | .328 | .805 |
| Error | 19.290 | 16 | 1.206 | | |

Estimated Marginal Means PERLAKUAN

Estimates

Measure: DSL

| PERLAKUAN | Mean | Std. Error | 95% Confidence Interval | |
|-----------|--------|------------|-------------------------|-------------|
| | | | Lower Bound | Upper Bound |
| P0 | 13.535 | .246 | 13.015 | 14.055 |
| P1 | 13.628 | .246 | 13.107 | 14.148 |
| P2 | 13.740 | .246 | 13.220 | 14.260 |
| P3 | 13.860 | .246 | 13.340 | 14.380 |

Pairwise Comparisons

Measure: DSL

| (I) PERLAKUAN | (J) PERLAKUAN | Mean Difference | | Sig. ^a | Lower Bound | 95% Confidence Interval for Difference ^a |
|---------------|---------------|-----------------|------------|-------------------|-------------|---|
| | | (I-J) | Std. Error | | | |
| P0 | P1 | -.092 | .347 | 1.000 | | -1.137 |
| | P2 | -.205 | .347 | 1.000 | | -1.250 |
| | P3 | -.325 | .347 | 1.000 | | -1.370 |
| P1 | P0 | .092 | .347 | 1.000 | | -.952 |
| | P2 | -.113 | .347 | 1.000 | | -1.157 |
| | P3 | -.232 | .347 | 1.000 | | -1.277 |
| P2 | P0 | .205 | .347 | 1.000 | | -.840 |
| | P1 | .113 | .347 | 1.000 | | -.932 |
| | P3 | -.120 | .347 | 1.000 | | -1.165 |
| P3 | P0 | .325 | .347 | 1.000 | | -.720 |
| | P1 | .232 | .347 | 1.000 | | -.812 |
| | P2 | .120 | .347 | 1.000 | | -.925 |

Pairwise Comparisons

Measure: DSL

95% Confidence Interval for
Difference

| (I) PERLAKUAN | (J) PERLAKUAN | Upper Bound |
|---------------|---------------|-------------|
| P0 | P1 | .952 |
| | P2 | .840 |
| | P3 | .720 |
| P1 | P0 | 1.137 |
| | P2 | .932 |
| | P3 | .812 |
| P2 | P0 | 1.250 |
| | P1 | 1.157 |
| | P3 | .925 |
| P3 | P0 | 1.370 |
| | P1 | 1.277 |
| | P2 | 1.165 |

Univariate Tests

Measure: DSL

| | Sum of Squares | df | Mean Square | F | Sig. |
|----------|----------------|----|-------------|------|------|
| Contrast | .297 | 3 | .099 | .328 | .805 |
| Error | 4.822 | 16 | .301 | | |

Post Hoc Tests

PERLAKUAN

Homogeneous Subsets

DSL

Duncan^{a,b}

| PERLAKUAN | N | Subset |
|-----------|---|---------|
| | | 1 |
| P0 | 5 | 13.5350 |
| P1 | 5 | 13.6275 |
| P2 | 5 | 13.7400 |
| P3 | 5 | 13.8600 |
| Sig. | | .402 |

VCL (*Velocity Curvilinear*)

Descriptive Statistics

| | PERLAKUAN | Mean | Std. Deviation | N |
|-------|-----------|----------|----------------|----|
| HARI1 | P0 | 109.7700 | 1.76010 | 5 |
| | P1 | 105.3600 | 4.13973 | 5 |
| | P2 | 107.5000 | 1.11765 | 5 |
| | P3 | 111.5000 | 4.97465 | 5 |
| | Total | 108.5325 | 3.92205 | 20 |
| HARI2 | P0 | 104.2700 | 6.44906 | 5 |
| | P1 | 100.2700 | .71638 | 5 |
| | P2 | 104.7000 | 2.72375 | 5 |
| | P3 | 107.9700 | 4.25857 | 5 |
| | Total | 104.3025 | 4.70154 | 20 |
| HARI3 | P0 | 99.1200 | 3.82222 | 5 |
| | P1 | 97.5600 | 1.67075 | 5 |
| | P2 | 100.4000 | 3.52590 | 5 |
| | P3 | 105.9200 | 3.86697 | 5 |
| | Total | 100.7500 | 4.45779 | 20 |
| HARI4 | P0 | 90.4600 | 4.70874 | 5 |
| | P1 | 90.5900 | 1.63986 | 5 |
| | P2 | 98.2200 | 3.05523 | 5 |
| | P3 | 100.8700 | 1.45722 | 5 |
| | Total | 95.0350 | 5.47568 | 20 |

Tests of Within-Subjects Effects

Measure: VCL

| Source | Type III Sum of | | | Mean Square | F |
|---------------------|--------------------|----------|-------|-------------|--------|
| | Squares | df | | | |
| factor1 | Sphericity Assumed | 1959.054 | 3 | 653.018 | 63.966 |
| | Greenhouse-Geisser | 1959.054 | 1.879 | 1042.617 | 63.966 |
| | Huynh-Feldt | 1959.054 | 2.520 | 777.521 | 63.966 |
| | Lower-bound | 1959.054 | 1.000 | 1959.054 | 63.966 |
| factor1 * PERLAKUAN | Sphericity Assumed | 177.973 | 9 | 19.775 | 1.937 |
| | Greenhouse-Geisser | 177.973 | 5.637 | 31.573 | 1.937 |
| | Huynh-Feldt | 177.973 | 7.559 | 23.545 | 1.937 |
| | Lower-bound | 177.973 | 3.000 | 59.324 | 1.937 |

| | | | | | |
|----------------|--------------------|---------|--------|--------|--|
| Error(factor1) | Sphericity Assumed | 490.024 | 48 | 10.209 | |
| | Greenhouse-Geisser | 490.024 | 30.064 | 16.300 | |
| | Huynh-Feldt | 490.024 | 40.314 | 12.155 | |
| | Lower-bound | 490.024 | 16.000 | 30.627 | |

Tests of Within-Subjects Effects

Measure: VCL

| Source | | Sig. |
|---------------------|--------------------|------|
| factor1 | Sphericity Assumed | .000 |
| | Greenhouse-Geisser | .000 |
| | Huynh-Feldt | .000 |
| | Lower-bound | .000 |
| factor1 * PERLAKUAN | Sphericity Assumed | .069 |
| | Greenhouse-Geisser | .111 |
| | Huynh-Feldt | .084 |
| | Lower-bound | .164 |
| Error(factor1) | Sphericity Assumed | |
| | Greenhouse-Geisser | |
| | Huynh-Feldt | |
| | Lower-bound | |

Tests of Within-Subjects Contrasts

Measure: VCL

| Source | factor1 | Type III Sum | | F | Sig. |
|---------------------|-----------|--------------|----|----------|--------------|
| | | of Squares | df | | |
| factor1 | Linear | 1939.962 | 1 | 1939.962 | 190.306 .000 |
| | Quadratic | 11.026 | 1 | 11.026 | .614 .445 |
| | Cubic | 8.066 | 1 | 8.066 | 3.257 .090 |
| factor1 * PERLAKUAN | Linear | 153.755 | 3 | 51.252 | 5.028 .012 |
| | Quadratic | 9.242 | 3 | 3.081 | .172 .914 |
| | Cubic | 14.975 | 3 | 4.992 | 2.016 .152 |
| Error(factor1) | Linear | 163.102 | 16 | 10.194 | |
| | Quadratic | 287.297 | 16 | 17.956 | |
| | Cubic | 39.625 | 16 | 2.477 | |

Tests of Between-Subjects Effects

Measure: VCL

Transformed Variable: Average

| Source | Type III Sum of | | Mean Square | F | Sig. |
|-----------|-----------------|----|-------------|-----------|------|
| | Squares | df | | | |
| Intercept | 834851.522 | 1 | 834851.522 | 46067.962 | .000 |
| PERLAKUAN | 701.544 | 3 | 233.848 | 12.904 | .000 |
| Error | 289.955 | 16 | 18.122 | | |

Estimated Marginal Means PERLAKUAN

Estimates

Measure: VCL

| PERLAKUAN | Mean | Std. Error | 95% Confidence Interval | |
|-----------|---------|------------|-------------------------|-------------|
| | | | Lower Bound | Upper Bound |
| P0 | 100.905 | .952 | 98.887 | 102.923 |
| P1 | 98.445 | .952 | 96.427 | 100.463 |
| P2 | 102.705 | .952 | 100.687 | 104.723 |
| P3 | 106.565 | .952 | 104.547 | 108.583 |

Pairwise Comparisons

Measure: VCL

| (I) PERLAKUAN | (J) PERLAKUAN | Mean Difference | | Sig. ^b | Lower Bound | 95% Confidence |
|---------------|---------------|-----------------|------------|-------------------|-------------|--------------------------------------|
| | | (I-J) | Std. Error | | | Interval for Difference ^b |
| P0 | P1 | 2.460 | 1.346 | .518 | -1.590 | |
| | P2 | -1.800 | 1.346 | 1.000 | -5.850 | |
| | P3 | -5.660* | 1.346 | .004 | -9.710 | |
| P1 | P0 | -2.460 | 1.346 | .518 | -6.510 | |
| | P2 | -4.260* | 1.346 | .036 | -8.310 | |
| | P3 | -8.120* | 1.346 | .000 | -12.170 | |
| P2 | P0 | 1.800 | 1.346 | 1.000 | -2.250 | |
| | P1 | 4.260* | 1.346 | .036 | .210 | |
| | P3 | -3.860 | 1.346 | .067 | -7.910 | |
| P3 | P0 | 5.660* | 1.346 | .004 | 1.610 | |
| | P1 | 8.120* | 1.346 | .000 | 4.070 | |
| | P2 | 3.860 | 1.346 | .067 | -.190 | |

Pairwise Comparisons

Measure: VCL

| (I) PERLAKUAN | (J) PERLAKUAN | 95% Confidence Interval for Difference | |
|---------------|---------------|--|-------------|
| | | | Upper Bound |
| | | | |

| | | |
|----|----|--------|
| P0 | P1 | 6.510 |
| | P2 | 2.250 |
| | P3 | -1.610 |
| P1 | P0 | 1.590 |
| | P2 | -.210 |
| | P3 | -4.070 |
| P2 | P0 | 5.850 |
| | P1 | 8.310 |
| | P3 | .190 |
| P3 | P0 | 9.710 |
| | P1 | 12.170 |
| | P2 | 7.910 |

Univariate Tests

Measure: VCL

| | Sum of Squares | df | Mean Square | F | Sig. |
|----------|----------------|----|-------------|--------|------|
| Contrast | 175.386 | 3 | 58.462 | 12.904 | .000 |
| Error | 72.489 | 16 | 4.531 | | |

Post Hoc Tests

PERLAKUAN

Homogeneous Subsets

VCL

Duncan^{a,b}

| PERLAKUAN | N | Subset | | |
|-----------|---|----------|----------|----------|
| | | 1 | 2 | 3 |
| P1 | 5 | 98.4450 | | |
| P0 | 5 | 100.9050 | 100.9050 | |
| P2 | 5 | | 102.7050 | |
| P3 | 5 | | | 106.5650 |
| Sig. | | .086 | .200 | 1.000 |

VAP (*Velocity Average Path*)
Descriptive Statistics

| PERLAKUAN | | Mean | Std. Deviation | N |
|-----------|-------|---------|----------------|----|
| HARI1 | P0 | 52.9700 | 1.09362 | 5 |
| | P1 | 53.8400 | .94345 | 5 |
| | P2 | 54.6700 | .56387 | 5 |
| | P3 | 55.2800 | 5.51563 | 5 |
| | Total | 54.1900 | 2.77633 | 20 |
| HARI2 | P0 | 49.9000 | .45442 | 5 |
| | P1 | 52.6300 | 2.09964 | 5 |
| | P2 | 52.7200 | 1.57177 | 5 |
| | P3 | 54.4000 | 4.01524 | 5 |
| | Total | 52.4125 | 2.76114 | 20 |
| HARI3 | P0 | 46.1400 | 3.40517 | 5 |
| | P1 | 47.6900 | 4.12537 | 5 |
| | P2 | 49.1100 | 1.57780 | 5 |
| | P3 | 48.6500 | 2.76804 | 5 |
| | Total | 47.8975 | 3.08565 | 20 |
| HARI4 | P0 | 45.6700 | 1.05693 | 5 |
| | P1 | 47.2000 | 3.92955 | 5 |
| | P2 | 48.1200 | 2.02197 | 5 |
| | P3 | 48.5500 | 1.89592 | 5 |
| | Total | 47.3850 | 2.52701 | 20 |

Tests of Within-Subjects Effects

Measure: VAP

| Source | Type III Sum of Squares | df | Mean Square | F |
|----------------|-------------------------|---------|-------------|---------|
| factor1 | Sphericity Assumed | 674.934 | 3 | 224.978 |
| | Greenhouse-Geisser | 674.934 | 1.625 | 415.419 |
| | Huynh-Feldt | 674.934 | 2.121 | 318.171 |
| | Lower-bound | 674.934 | 1.000 | 674.934 |
| factor1 * | Sphericity Assumed | 11.604 | 9 | 1.289 |
| PERLAKUAN | Greenhouse-Geisser | 11.604 | 4.874 | 2.381 |
| | Huynh-Feldt | 11.604 | 6.364 | 1.823 |
| | Lower-bound | 11.604 | 3.000 | 3.868 |
| | Sphericity Assumed | 172.702 | 48 | 3.598 |
| Error(factor1) | Greenhouse-Geisser | 172.702 | 25.995 | 6.644 |
| | Huynh-Feldt | 172.702 | 33.941 | 5.088 |
| | Lower-bound | 172.702 | 16.000 | 10.794 |

Tests of Within-Subjects Effects

Measure: VAP

| Source | | Sig. |
|---------------------|--------------------|------|
| factor1 | Sphericity Assumed | .000 |
| | Greenhouse-Geisser | .000 |
| | Huynh-Feldt | .000 |
| | Lower-bound | .000 |
| factor1 * PERLAKUAN | Sphericity Assumed | .949 |
| | Greenhouse-Geisser | .868 |
| | Huynh-Feldt | .908 |
| | Lower-bound | .784 |
| Error(factor1) | Sphericity Assumed | |
| | Greenhouse-Geisser | |
| | Huynh-Feldt | |
| | Lower-bound | |

Tests of Within-Subjects Contrasts

Measure: VAP

| Source | factor1 | Type III Sum of | | Mean Square | F | Sig. |
|---------------------|-----------|-----------------|----|-------------|--------|------|
| | | Squares | df | | | |
| factor1 | Linear | 621.505 | 1 | 621.505 | 89.362 | .000 |
| | Quadratic | 8.001 | 1 | 8.001 | 7.378 | .015 |
| | Cubic | 45.428 | 1 | 45.428 | 16.492 | .001 |
| factor1 * PERLAKUAN | Linear | 1.087 | 3 | .362 | .052 | .984 |
| | Quadratic | 3.009 | 3 | 1.003 | .925 | .451 |
| | Cubic | 7.508 | 3 | 2.503 | .909 | .459 |
| Error(factor1) | Linear | 111.279 | 16 | 6.955 | | |
| | Quadratic | 17.352 | 16 | 1.085 | | |
| | Cubic | 44.071 | 16 | 2.754 | | |

Tests of Between-Subjects Effects

Measure: VAP

Transformed Variable: Average

| Source | Type III Sum of | | Mean Square | F | Sig. |
|-----------|-----------------|----|-------------|-----------|------|
| | Squares | df | | | |
| Intercept | 203787.766 | 1 | 203787.766 | 10744.765 | .000 |
| PERLAKUAN | 105.772 | 3 | 35.257 | 1.859 | .177 |
| Error | 303.460 | 16 | 18.966 | | |

Estimated Marginal Means

PERLAKUAN

Estimates

Measure: VAP

| PERLAKUAN | Mean | Std. Error | 95% Confidence Interval | |
|-----------|--------|------------|-------------------------|-------------|
| | | | Lower Bound | Upper Bound |
| P0 | 48.670 | .974 | 46.606 | 50.734 |
| P1 | 50.340 | .974 | 48.276 | 52.404 |
| P2 | 51.155 | .974 | 49.091 | 53.219 |
| P3 | 51.720 | .974 | 49.656 | 53.784 |

Pairwise Comparisons

Measure: VAP

| (I) | PERLAKUAN | (J) PERLAKUAN | Mean | Std. Error | Sig. ^a | 95% Confidence |
|-----|-----------|---------------|------------|------------|-------------------|--------------------------------------|
| | | | Difference | | | Interval for Difference ^a |
| P0 | P1 | -1.670 | 1.377 | 1.000 | | -5.813 |
| | | -2.485 | 1.377 | .540 | | -6.628 |
| | | -3.050 | 1.377 | .250 | | -7.193 |
| P1 | P0 | 1.670 | 1.377 | 1.000 | | -2.473 |
| | | -.815 | 1.377 | 1.000 | | -4.958 |
| | | -1.380 | 1.377 | 1.000 | | -5.523 |
| P2 | P0 | 2.485 | 1.377 | .540 | | -1.658 |
| | | .815 | 1.377 | 1.000 | | -3.328 |
| | | -.565 | 1.377 | 1.000 | | -4.708 |
| P3 | P0 | 3.050 | 1.377 | .250 | | -1.093 |
| | | 1.380 | 1.377 | 1.000 | | -2.763 |
| | | .565 | 1.377 | 1.000 | | -3.578 |

Pairwise Comparisons

Measure: VAP

| (I) PERLAKUAN | (J) PERLAKUAN | 95% Confidence Interval for Difference | |
|---------------|---------------|--|--|
| | | Upper Bound | |
| P0 | P1 | 2.473 | |
| | P2 | 1.658 | |
| | P3 | 1.093 | |
| P1 | P0 | 5.813 | |
| | P2 | 3.328 | |
| | P3 | 2.763 | |

| | | |
|----|-----------|-------|
| P2 | <u>P0</u> | 6.628 |
| | <u>P1</u> | 4.958 |
| | P3 | 3.578 |
| P3 | <u>P0</u> | 7.193 |
| | <u>P1</u> | 5.523 |
| | P2 | 4.708 |

Univariate Tests

Measure: VAP

| | Sum of Squares | df | Mean Square | F | Sig. |
|----------|----------------|----|-------------|-------|------|
| Contrast | 26.443 | 3 | 8.814 | 1.859 | .177 |
| Error | 75.865 | 16 | 4.742 | | |

Post Hoc Tests

PERLAKUAN

Homogeneous Subsets

VAP

Duncan^{a,b}

| PERLAKUAN | N | Subset | |
|-----------|---|---------|--|
| | | 1 | |
| P0 | 5 | 48.6700 | |
| P1 | 5 | 50.3400 | |
| P2 | 5 | 51.1550 | |
| P3 | 5 | 51.7200 | |
| Sig. | | .057 | |

VCL (*Straight Line Velocity*)

Descriptive Statistics

| | PERLAKUAN | Mean | Std. Deviation | N |
|-------|-----------|---------|----------------|----|
| HARI1 | P0 | 35.4800 | 2.81634 | 5 |
| | P1 | 35.5900 | 2.26663 | 5 |
| | P2 | 35.6400 | .41431 | 5 |
| | P3 | 35.6500 | .40143 | 5 |
| | Total | 35.5900 | 1.68116 | 20 |
| HARI2 | P0 | 34.5000 | 2.83781 | 5 |
| | P1 | 34.9800 | 1.73391 | 5 |
| | P2 | 34.4240 | .76559 | 5 |
| | P3 | 35.4500 | .48073 | 5 |
| | Total | 34.8385 | 1.63689 | 20 |
| HARI3 | P0 | 33.7600 | 2.48387 | 5 |
| | P1 | 34.3640 | 1.77858 | 5 |
| | P2 | 33.7620 | .96240 | 5 |
| | P3 | 35.1100 | .78470 | 5 |
| | Total | 34.2490 | 1.61659 | 20 |
| HARI4 | P0 | 33.5100 | 2.50630 | 5 |
| | P1 | 33.9500 | 2.28721 | 5 |
| | P2 | 32.9500 | .64719 | 5 |
| | P3 | 34.9900 | .83015 | 5 |
| | Total | 33.8500 | 1.80146 | 20 |

Tests of Within-Subjects Effects

Measure: VCL

| Source | Type III Sum of | | df | Mean Square | F |
|---------------------|--------------------|--------|--------|-------------|--------|
| | Squares | | | | |
| factor1 | Sphericity Assumed | 34.372 | 3 | 11.457 | 71.020 |
| | Greenhouse-Geisser | 34.372 | 2.287 | 15.026 | 71.020 |
| | Huynh-Feldt | 34.372 | 3.000 | 11.457 | 71.020 |
| | Lower-bound | 34.372 | 1.000 | 34.372 | 71.020 |
| factor1 * PERLAKUAN | Sphericity Assumed | 5.862 | 9 | .651 | 4.037 |
| | Greenhouse-Geisser | 5.862 | 6.862 | .854 | 4.037 |
| | Huynh-Feldt | 5.862 | 9.000 | .651 | 4.037 |
| | Lower-bound | 5.862 | 3.000 | 1.954 | 4.037 |
| Error(factor1) | Sphericity Assumed | 7.744 | 48 | .161 | |
| | Greenhouse-Geisser | 7.744 | 36.599 | .212 | |

| | | | |
|-------------|-------|--------|------|
| Huynh-Feldt | 7.744 | 48.000 | .161 |
| Lower-bound | 7.744 | 16.000 | .484 |

Tests of Within-Subjects Effects

Measure: VCL

| Source | Sig. |
|---------------------|-------------------------|
| factor1 | Sphericity Assumed .000 |
| | Greenhouse-Geisser .000 |
| | Huynh-Feldt .000 |
| | Lower-bound .000 |
| factor1 * PERLAKUAN | Sphericity Assumed .001 |
| | Greenhouse-Geisser .002 |
| | Huynh-Feldt .001 |
| | Lower-bound .026 |
| Error(factor1) | Sphericity Assumed |
| | Greenhouse-Geisser |
| | Huynh-Feldt |
| | Lower-bound |

Tests of Within-Subjects Contrasts

Measure: VCL

| Source | factor1 | Type III Sum of | | Mean Square | F | Sig. |
|---------------------|-----------|-----------------|----|-------------|---------|------|
| | | Squares | df | | | |
| factor1 | Linear | 33.750 | 1 | 33.750 | 121.398 | .000 |
| | Quadratic | .621 | 1 | .621 | 4.406 | .052 |
| | Cubic | .001 | 1 | .001 | .013 | .912 |
| factor1 * PERLAKUAN | Linear | 5.375 | 3 | 1.792 | 6.444 | .005 |
| | Quadratic | .305 | 3 | .102 | .721 | .554 |
| | Cubic | .182 | 3 | .061 | .933 | .447 |
| Error(factor1) | Linear | 4.448 | 16 | .278 | | |
| | Quadratic | 2.256 | 16 | .141 | | |
| | Cubic | 1.039 | 16 | .065 | | |

Tests of Between-Subjects Effects

Measure: VCL

Transformed Variable: Average

| Source | Type III Sum of | | F | Sig. |
|--------|-----------------|----|---|------|
| | Squares | df | | |

| | | | | | |
|-----------|-----------|----|-----------|----------|------|
| Intercept | 95949.341 | 1 | 95949.341 | 8193.996 | .000 |
| PERLAKUAN | 14.961 | 3 | 4.987 | .426 | .737 |
| Error | 187.355 | 16 | 11.710 | | |

Estimated Marginal Means

PERLAKUAN

Estimates

Measure: VCL

| PERLAKUAN | Mean | Std. Error | 95% Confidence Interval | |
|-----------|--------|------------|-------------------------|-------------|
| | | | Lower Bound | Upper Bound |
| P0 | 34.313 | .765 | 32.690 | 35.935 |
| P1 | 34.721 | .765 | 33.099 | 36.343 |
| P2 | 34.194 | .765 | 32.572 | 35.816 |
| P3 | 35.300 | .765 | 33.678 | 36.922 |

Pairwise Comparisons

Measure: VCL

| (I) PERLAKUAN | (J) PERLAKUAN | (I-J) | Mean Difference | | | 95% Confidence Interval for Difference ^a |
|---------------|---------------|--------|-----------------|-------------------|-------------|---|
| | | | Std. Error | Sig. ^a | Lower Bound | |
| P0 | P1 | -.408 | 1.082 | 1.000 | -3.664 | |
| | P2 | .118 | 1.082 | 1.000 | -3.137 | |
| | P3 | -.987 | 1.082 | 1.000 | -4.243 | |
| P1 | P0 | .408 | 1.082 | 1.000 | -2.847 | |
| | P2 | .527 | 1.082 | 1.000 | -2.728 | |
| | P3 | -.579 | 1.082 | 1.000 | -3.834 | |
| P2 | P0 | -.118 | 1.082 | 1.000 | -3.374 | |
| | P1 | -.527 | 1.082 | 1.000 | -3.782 | |
| | P3 | -1.106 | 1.082 | 1.000 | -4.361 | |
| P3 | P0 | .987 | 1.082 | 1.000 | -2.268 | |
| | P1 | .579 | 1.082 | 1.000 | -2.676 | |
| | P2 | 1.106 | 1.082 | 1.000 | -2.149 | |

Pairwise Comparisons

Measure: VCL

| (I) PERLAKUAN | (J) PERLAKUAN | 95% Confidence Interval for Difference | |
|---------------|---------------|--|--|
| | | Upper Bound | |
| | | | |

| | | |
|----|----|-------|
| P0 | P1 | 2.847 |
| | P2 | 3.374 |
| | P3 | 2.268 |
| P1 | P0 | 3.664 |
| | P2 | 3.782 |
| | P3 | 2.676 |
| P2 | P0 | 3.137 |
| | P1 | 2.728 |
| | P3 | 2.149 |
| P3 | P0 | 4.243 |
| | P1 | 3.834 |
| | P2 | 4.361 |

Univariate Tests

Measure: VCL

| | Sum of Squares | df | Mean Square | F | Sig. |
|----------|----------------|----|-------------|------|------|
| Contrast | 3.740 | 3 | 1.247 | .426 | .737 |
| Error | 46.839 | 16 | 2.927 | | |

Post Hoc Tests

PERLAKUAN

Homogeneous Subsets

VCL

Duncan^{a,b}

| PERLAKUAN | N | Subset |
|-----------|---|---------|
| | | 1 |
| P2 | 5 | 34.1940 |
| P0 | 5 | 34.3125 |
| P1 | 5 | 34.7210 |
| P3 | 5 | 35.3000 |
| Sig. | | .361 |

LIN (*Linearity*)

Descriptive Statistics

| | PERLAKUAN | Mean | Std. Deviation | N |
|-------|-----------|-------|----------------|----|
| HARI1 | P0 | .3200 | .01000 | 5 |
| | P1 | .3300 | .01414 | 5 |
| | P2 | .3300 | .01414 | 5 |
| | P3 | .3100 | .00707 | 5 |
| | Total | .3225 | .01372 | 20 |
| HARI2 | P0 | .3300 | .00000 | 5 |
| | P1 | .3400 | .02345 | 5 |
| | P2 | .3300 | .02000 | 5 |
| | P3 | .3200 | .01732 | 5 |
| | Total | .3300 | .01777 | 20 |
| HARI3 | P0 | .3400 | .04637 | 5 |
| | P1 | .3600 | .02121 | 5 |
| | P2 | .3200 | .01225 | 5 |
| | P3 | .3200 | .01000 | 5 |
| | Total | .3350 | .02982 | 20 |
| HARI4 | P0 | .3700 | .01581 | 5 |
| | P1 | .3700 | .03317 | 5 |
| | P2 | .3300 | .01225 | 5 |
| | P3 | .3400 | .02000 | 5 |
| | Total | .3525 | .02712 | 20 |

Tests of Within-Subjects Effects

Measure: LIN

| Source | Type III Sum | | | | F |
|-----------|--------------------|------|-------------|------|-------|
| | of Squares | df | Mean Square | | |
| factor1 | Sphericity Assumed | .010 | 3 | .003 | 9.905 |
| | Greenhouse-Geisser | .010 | 2.289 | .004 | 9.905 |
| | Huynh-Feldt | .010 | 3.000 | .003 | 9.905 |
| | Lower-bound | .010 | 1.000 | .010 | 9.905 |
| factor1 * | Sphericity Assumed | .005 | 9 | .001 | 1.693 |
| PERLAKUAN | Greenhouse-Geisser | .005 | 6.868 | .001 | 1.693 |
| | Huynh-Feldt | .005 | 9.000 | .001 | 1.693 |
| | Lower-bound | .005 | 3.000 | .002 | 1.693 |
| | Sphericity Assumed | .016 | 48 | .000 | |

| | | | |
|--------------------|------|--------|------|
| Greenhouse-Geisser | .016 | 36.630 | .000 |
| Huynh-Feldt | .016 | 48.000 | .000 |
| Lower-bound | .016 | 16.000 | .001 |

Tests of Within-Subjects Effects

Measure: LIN

| Source | Sig. |
|---------------------|-------------------------|
| factor1 | Sphericity Assumed .000 |
| | Greenhouse-Geisser .000 |
| | Huynh-Feldt .000 |
| | Lower-bound .006 |
| factor1 * PERLAKUAN | Sphericity Assumed .117 |
| | Greenhouse-Geisser .142 |
| | Huynh-Feldt .117 |
| | Lower-bound .209 |
| Error(factor1) | Sphericity Assumed |
| | Greenhouse-Geisser |
| | Huynh-Feldt |
| | Lower-bound |

Tests of Within-Subjects Contrasts

Measure: LIN

| Source | factor1 | Type III Sum of | | Mean Square | F | Sig. |
|---------------------|-----------|-----------------|----|-------------|--------|------|
| | | Squares | df | | | |
| factor1 | Linear | .009 | 1 | .009 | 21.912 | .000 |
| | Quadratic | .001 | 1 | .001 | 2.025 | .174 |
| | Cubic | .000 | 1 | .000 | .691 | .418 |
| factor1 * PERLAKUAN | Linear | .004 | 3 | .001 | 3.500 | .040 |
| | Quadratic | .000 | 3 | 8.333E-5 | .338 | .798 |
| | Cubic | .000 | 3 | .000 | .435 | .731 |
| Error(factor1) | Linear | .007 | 16 | .000 | | |
| | Quadratic | .004 | 16 | .000 | | |
| | Cubic | .005 | 16 | .000 | | |

Tests of Between-Subjects Effects

Measure: LIN

Transformed Variable: Average

| Type III Sum of | | | | | |
|-----------------|---------|----|-------------|-----------|------|
| Source | Squares | df | Mean Square | F | Sig. |
| Intercept | 8.978 | 1 | 8.978 | 13746.220 | .000 |
| PERLAKUAN | .009 | 3 | .003 | 4.721 | .015 |
| Error | .010 | 16 | .001 | | |

Estimated Marginal Means PERLAKUAN

Estimates

Measure: LIN

| PERLAKUAN | Mean | Std. Error | 95% Confidence Interval | |
|-----------|------|------------|-------------------------|-------------|
| | | | Lower Bound | Upper Bound |
| P0 | .340 | .006 | .328 | .352 |
| P1 | .350 | .006 | .338 | .362 |
| P2 | .328 | .006 | .315 | .340 |
| P3 | .322 | .006 | .310 | .335 |

Pairwise Comparisons

Measure: LIN

| (I) PERLAKUAN | (J) PERLAKUAN | Mean Difference | | Sig. ^b | 95% Confidence Interval for Difference ^b | Lower Bound |
|---------------|---------------|-----------------|------------|-------------------|---|-------------|
| | | (I-J) | Std. Error | | | |
| P0 | P1 | -.010 | .008 | 1.000 | | -.034 |
| | P2 | .013 | .008 | .849 | | -.012 |
| | P3 | .018 | .008 | .275 | | -.007 |
| P1 | P0 | .010 | .008 | 1.000 | | -.014 |
| | P2 | .023 | .008 | .080 | | -.002 |
| | P3 | .028* | .008 | .022 | | .003 |
| P2 | P0 | -.013 | .008 | .849 | | -.037 |
| | P1 | -.023 | .008 | .080 | | -.047 |
| | P3 | .005 | .008 | 1.000 | | -.019 |
| P3 | P0 | -.018 | .008 | .275 | | -.042 |
| | P1 | -.028* | .008 | .022 | | -.052 |
| | P2 | -.005 | .008 | 1.000 | | -.029 |

Pairwise Comparisons

Measure: LIN

| (I) PERLAKUAN | (J) PERLAKUAN | Upper Bound |
|---------------|---------------|-------------|
| | | |

| | | |
|----|----|-------|
| P0 | P1 | .014 |
| | P2 | .037 |
| | P3 | .042 |
| P1 | P0 | .034 |
| | P2 | .047 |
| | P3 | .052 |
| P2 | P0 | .012 |
| | P1 | .002 |
| | P3 | .029 |
| P3 | P0 | .007 |
| | P1 | -.003 |
| | P2 | .019 |

Univariate Tests

| | Sum of Squares | df | Mean Square | F | Sig. |
|----------|----------------|----|-------------|-------|------|
| Contrast | .002 | 3 | .001 | 4.721 | .015 |
| Error | .003 | 16 | .000 | | |

Post Hoc Tests

PERLAKUAN

Homogeneous Subsets

LIN

Duncan^{a,b}

| PERLAKUAN | N | Subset | |
|-----------|---|--------|-------|
| | | 1 | 2 |
| P3 | 5 | .3225 | |
| P2 | 5 | .3275 | |
| P0 | 5 | .3400 | .3400 |
| P1 | 5 | | .3500 |
| Sig. | | .056 | .234 |

STR (*Straightness*)

Between-Subjects Factors

| PERLAKUAN | Value Label | | N |
|-----------|-------------|----|---|
| | 1.00 | P0 | |
| | 2.00 | P1 | 5 |
| | 3.00 | P2 | 5 |
| | 4.00 | P3 | 5 |

Descriptive Statistics

| | PERLAKUAN | Mean | Std. Deviation | N |
|-------|-----------|-------|----------------|----|
| HARI1 | P0 | .6600 | .01581 | 5 |
| | P1 | .9900 | .05701 | 5 |
| | P2 | .6500 | .02828 | 5 |
| | P3 | .6400 | .01581 | 5 |
| | Total | .7350 | .15436 | 20 |
| HARI2 | P0 | .6900 | .05831 | 5 |
| | P1 | .6900 | .04062 | 5 |
| | P2 | .6600 | .01871 | 5 |
| | P3 | .6500 | .02121 | 5 |
| | Total | .6725 | .03959 | 20 |
| HARI3 | P0 | .7300 | .02345 | 5 |
| | P1 | .7300 | .02915 | 5 |
| | P2 | .7100 | .02345 | 5 |
| | P3 | .7200 | .02915 | 5 |
| | Total | .7225 | .02573 | 20 |
| HARI4 | P0 | .7300 | .06892 | 5 |
| | P1 | .7300 | .04528 | 5 |
| | P2 | .6800 | .02345 | 5 |
| | P3 | .7200 | .07416 | 5 |
| | Total | .7150 | .05615 | 20 |

Tests of Within-Subjects Effects

Measure: STR

| Source | Type III Sum | df | Mean Square | F |
|--------|--------------|----|-------------|---|
| | of Squares | | | |

| | | | | | |
|---------------------|--------------------|------|--------|------|--------|
| factor1 | Sphericity Assumed | .044 | 3 | .015 | 8.078 |
| | Greenhouse-Geisser | .044 | 2.246 | .020 | 8.078 |
| | Huynh-Feldt | .044 | 3.000 | .015 | 8.078 |
| | Lower-bound | .044 | 1.000 | .044 | 8.078 |
| factor1 * PERLAKUAN | Sphericity Assumed | .298 | 9 | .033 | 18.162 |
| | Greenhouse-Geisser | .298 | 6.738 | .044 | 18.162 |
| | Huynh-Feldt | .298 | 9.000 | .033 | 18.162 |
| | Lower-bound | .298 | 3.000 | .099 | 18.162 |
| Error(factor1) | Sphericity Assumed | .087 | 48 | .002 | |
| | Greenhouse-Geisser | .087 | 35.936 | .002 | |
| | Huynh-Feldt | .087 | 48.000 | .002 | |
| | Lower-bound | .087 | 16.000 | .005 | |

Tests of Within-Subjects Effects

Measure: STR

| Source | | Sig. |
|---------------------|--------------------|------|
| factor1 | Sphericity Assumed | .000 |
| | Greenhouse-Geisser | .001 |
| | Huynh-Feldt | .000 |
| | Lower-bound | .012 |
| factor1 * PERLAKUAN | Sphericity Assumed | .000 |
| | Greenhouse-Geisser | .000 |
| | Huynh-Feldt | .000 |
| | Lower-bound | .000 |
| Error(factor1) | Sphericity Assumed | |
| | Greenhouse-Geisser | |
| | Huynh-Feldt | |
| | Lower-bound | |

Tests of Within-Subjects Contrasts

Measure: STR

| Source | factor1 | Type III Sum of | | Mean Square | F | Sig. |
|-----------|-----------|-----------------|----|-------------|--------|------|
| | | Squares | df | | | |
| factor1 | Linear | 1.000E-4 | 1 | 1.000E-4 | .062 | .807 |
| | Quadratic | .015 | 1 | .015 | 6.158 | .025 |
| | Cubic | .029 | 1 | .029 | 20.829 | .000 |
| factor1 * | Linear | .181 | 3 | .060 | 37.344 | .000 |

| | | | | | | |
|----------------|-----------|------|----|------|--------|------|
| PERLAKUAN | Quadratic | .101 | 3 | .034 | 13.656 | .000 |
| | Cubic | .016 | 3 | .005 | 3.760 | .032 |
| Error(factor1) | Linear | .026 | 16 | .002 | | |
| | Quadratic | .039 | 16 | .002 | | |
| | Cubic | .022 | 16 | .001 | | |

Tests of Between-Subjects Effects

Measure: STR

Transformed Variable: Average

| Source | Type III Sum of | | Mean Square | F | Sig. |
|-----------|-----------------|----|-------------|-----------|------|
| | Squares | df | | | |
| Intercept | 40.470 | 1 | 40.470 | 38542.976 | .000 |
| PERLAKUAN | .153 | 3 | .051 | 48.611 | .000 |
| Error | .017 | 16 | .001 | | |

Estimated Marginal Means

PERLAKUAN

Estimates

Measure: STR

| PERLAKUAN | Mean | Std. Error | 95% Confidence Interval | |
|-----------|------|------------|-------------------------|-------------|
| | | | Lower Bound | Upper Bound |
| P0 | .703 | .007 | .687 | .718 |
| P1 | .785 | .007 | .770 | .800 |
| P2 | .675 | .007 | .660 | .690 |
| P3 | .682 | .007 | .667 | .698 |

Pairwise Comparisons

Measure: STR

| (I) PERLAKUAN | (J) PERLAKUAN | Mean Difference | | Std. Error | Sig. ^b | 95% Confidence Interval for Difference ^b |
|---------------|---------------|-----------------|-------------|------------|-------------------|---|
| | | (I-J) | Lower Bound | | | |
| P0 | P1 | -.083* | .010 | .000 | | -.113 |
| | P2 | .027 | .010 | .098 | | -.003 |
| | P3 | .020 | .010 | .412 | | -.011 |
| P1 | P0 | .083* | .010 | .000 | | .052 |
| | P2 | .110* | .010 | .000 | | .079 |
| | P3 | .103* | .010 | .000 | | .072 |
| P2 | P0 | -.027 | .010 | .098 | | -.058 |
| | P1 | -.110* | .010 | .000 | | -.141 |
| | P3 | -.007 | .010 | 1.000 | | -.038 |

| | | | | | |
|----|----|--------|------|-------|-------|
| P3 | P0 | -.020 | .010 | .412 | -.051 |
| | P1 | -.103* | .010 | .000 | -.133 |
| | P2 | .007 | .010 | 1.000 | -.023 |

Pairwise Comparisons

Measure: STR

95% Confidence Interval for Difference

| (I) PERLAKUAN | (J) PERLAKUAN | Upper Bound |
|---------------|---------------|-------------|
| P0 | P1 | -.052 |
| | P2 | .058 |
| | P3 | .051 |
| P1 | P0 | .113 |
| | P2 | .141 |
| | P3 | .133 |
| P2 | P0 | .003 |
| | P1 | -.079 |
| | P3 | .023 |
| P3 | P0 | .011 |
| | P1 | -.072 |
| | P2 | .038 |

Univariate Tests

| | Sum of Squares | df | Mean Square | F | Sig. |
|----------|----------------|----|-------------|--------|------|
| Contrast | .038 | 3 | .013 | 48.611 | .000 |
| Error | .004 | 16 | .000 | | |

Post Hoc Tests

PERLAKUAN

Homogeneous Subsets

STR

Duncan^{a,b}

| PERLAKUAN | N | Subset | | |
|-----------|---|--------|-------|-------|
| | | 1 | 2 | 3 |
| P2 | 5 | .6750 | | |
| P3 | 5 | .6825 | .6825 | |
| P0 | 5 | | .7025 | |
| P1 | 5 | | | .7850 |
| Sig. | | .475 | .069 | 1.000 |

WOB (*Wobble*)

Descriptive Statistics

| | PERLAKUAN | Mean | Std. Deviation | N |
|-------|-----------|-------|----------------|----|
| HARI1 | P0 | .4800 | .08573 | 5 |
| | P1 | .5100 | .00707 | 5 |
| | P2 | .5000 | .02915 | 5 |
| | P3 | .4900 | .02449 | 5 |
| | Total | .4950 | .04466 | 20 |
| HARI2 | P0 | .4700 | .04301 | 5 |
| | P1 | .5200 | .03082 | 5 |
| | P2 | .5000 | .03674 | 5 |
| | P3 | .5000 | .02550 | 5 |
| | Total | .4975 | .03669 | 20 |
| HARI3 | P0 | .4600 | .05196 | 5 |
| | P1 | .4900 | .02915 | 5 |
| | P2 | .4800 | .04690 | 5 |
| | P3 | .4500 | .04637 | 5 |
| | Total | .4700 | .04389 | 20 |
| HARI4 | P0 | .5000 | .05339 | 5 |
| | P1 | .5200 | .05148 | 5 |
| | P2 | .4800 | .02550 | 5 |
| | P3 | .4800 | .01732 | 5 |
| | Total | .4950 | .04059 | 20 |

Tests of Within-Subjects Effects

Measure: WOB

| Source | Type III Sum of | | df | Mean Square | F |
|---------------------|--------------------|------|-------|-------------|-------|
| | Squares | | | | |
| factor1 | Sphericity Assumed | .010 | 3 | .003 | 1.907 |
| | Greenhouse-Geisser | .010 | 2.655 | .004 | 1.907 |
| | Huynh-Feldt | .010 | 3.000 | .003 | 1.907 |
| | Lower-bound | .010 | 1.000 | .010 | 1.907 |
| factor1 * PERLAKUAN | Sphericity Assumed | .006 | 9 | .001 | .396 |
| | Greenhouse-Geisser | .006 | 7.966 | .001 | .396 |
| | Huynh-Feldt | .006 | 9.000 | .001 | .396 |
| | Lower-bound | .006 | 3.000 | .002 | .396 |
| Error(factor1) | Sphericity Assumed | .085 | 48 | .002 | |

| | | | |
|--------------------|------|--------|------|
| Greenhouse-Geisser | .085 | 42.486 | .002 |
| Huynh-Feldt | .085 | 48.000 | .002 |
| Lower-bound | .085 | 16.000 | .005 |

Tests of Within-Subjects Effects

Measure: WOB

| Source | | Sig. |
|---------------------|--------------------|------|
| factor1 | Sphericity Assumed | .141 |
| | Greenhouse-Geisser | .149 |
| | Huynh-Feldt | .141 |
| | Lower-bound | .186 |
| factor1 * PERLAKUAN | Sphericity Assumed | .931 |
| | Greenhouse-Geisser | .916 |
| | Huynh-Feldt | .931 |
| | Lower-bound | .758 |
| Error(factor1) | Sphericity Assumed | |
| | Greenhouse-Geisser | |
| | Huynh-Feldt | |
| | Lower-bound | |

Tests of Within-Subjects Contrasts

| Source | factor1 | Type III Sum of | | Mean Square | F | Sig. |
|---------------------|-----------|-----------------|----|-------------|-------|------|
| | | Squares | df | | | |
| factor1 | Linear | .001 | 1 | .001 | .311 | .585 |
| | Quadratic | .003 | 1 | .003 | 2.045 | .172 |
| | Cubic | .007 | 1 | .007 | 4.182 | .058 |
| factor1 * PERLAKUAN | Linear | .003 | 3 | .001 | .421 | .740 |
| | Quadratic | .002 | 3 | .001 | .429 | .735 |
| | Cubic | .002 | 3 | .001 | .332 | .803 |
| Error(factor1) | Linear | .039 | 16 | .002 | | |
| | Quadratic | .020 | 16 | .001 | | |
| | Cubic | .026 | 16 | .002 | | |

Tests of Between-Subjects Effects

Measure: WOB

Transformed Variable: Average

| Source | Type III Sum of | | Mean Square | F | Sig. |
|-----------|-----------------|----|-------------|-----------|------|
| | Squares | df | | | |
| Intercept | 19.159 | 1 | 19.159 | 11228.736 | .000 |

| | | | | | |
|-----------|------|----|------|-------|------|
| PERLAKUAN | .013 | 3 | .004 | 2.558 | .092 |
| Error | .027 | 16 | .002 | | |

Estimated Marginal Means

PERLAKUAN

Estimates

Measure: WOB

| PERLAKUAN | Mean | Std. Error | 95% Confidence Interval | |
|-----------|------|------------|-------------------------|-------------|
| | | | Lower Bound | Upper Bound |
| P0 | .478 | .009 | .458 | .497 |
| P1 | .510 | .009 | .490 | .530 |
| P2 | .490 | .009 | .470 | .510 |
| P3 | .480 | .009 | .460 | .500 |

Pairwise Comparisons

Measure: WOB

| (I) PERLAKUAN | (J) PERLAKUAN | Mean Difference | | Sig. ^a | 95% Confidence Interval for Difference ^a |
|---------------|---------------|-----------------|------------|-------------------|---|
| | | (I-J) | Std. Error | | |
| P0 | P1 | -.032 | .013 | .145 | -.072 |
| | P2 | -.012 | .013 | 1.000 | -.052 |
| | P3 | -.003 | .013 | 1.000 | -.042 |
| P1 | P0 | .032 | .013 | .145 | -.007 |
| | P2 | .020 | .013 | .872 | -.019 |
| | P3 | .030 | .013 | .213 | -.009 |
| P2 | P0 | .012 | .013 | 1.000 | -.027 |
| | P1 | -.020 | .013 | .872 | -.059 |
| | P3 | .010 | .013 | 1.000 | -.029 |
| P3 | P0 | .003 | .013 | 1.000 | -.037 |
| | P1 | -.030 | .013 | .213 | -.069 |
| | P2 | -.010 | .013 | 1.000 | -.049 |

Pairwise Comparisons

Measure: WOB

95% Confidence Interval for

Difference

| (I) PERLAKUAN | (J) PERLAKUAN | Upper Bound |
|---------------|---------------|-------------|
| P0 | P1 | .007 |

| | | |
|----|----|------|
| | P2 | .027 |
| | P3 | .037 |
| P1 | P0 | .072 |
| | P2 | .059 |
| P2 | P3 | .069 |
| | P0 | .052 |
| P3 | P1 | .019 |
| | P3 | .049 |
| P3 | P0 | .042 |
| | P1 | .009 |
| | P2 | .029 |

Univariate Tests

Measure: WOB

| | Sum of Squares | df | Mean Square | F | Sig. |
|----------|----------------|----|-------------|-------|------|
| Contrast | .003 | 3 | .001 | 2.558 | .092 |
| Error | .007 | 16 | .000 | | |

Post Hoc Tests

PERLAKUAN

Homogeneous Subsets

WOB

Duncan^{a,b}

| PERLAKUAN | N | Subset | |
|-----------|---|--------|-------|
| | | 1 | 2 |
| P0 | 5 | .4775 | |
| P3 | 5 | .4800 | |
| P2 | 5 | .4900 | .4900 |
| P1 | 5 | | .5100 |
| Sig. | | .378 | .145 |

BCF (*Beat Cross Frequency*)

Descriptive Statistics

| | PERLAKUAN | Mean | Std. Deviation | N |
|-------|-----------|---------|----------------|----|
| HARI1 | P0 | 24.2400 | 9.73871 | 5 |
| | P1 | 19.1500 | .59414 | 5 |
| | P2 | 18.7700 | .85226 | 5 |
| | P3 | 19.2900 | .90592 | 5 |
| | Total | 20.3625 | 5.06758 | 20 |
| HARI2 | P0 | 18.1300 | 1.23635 | 5 |
| | P1 | 19.0400 | .83988 | 5 |
| | P2 | 18.9600 | .68666 | 5 |
| | P3 | 18.6100 | .75435 | 5 |
| | Total | 18.6850 | .90828 | 20 |
| HARI3 | P0 | 19.8200 | 1.22115 | 5 |
| | P1 | 18.8800 | .83657 | 5 |
| | P2 | 19.0100 | 1.83356 | 5 |
| | P3 | 19.5600 | 1.25899 | 5 |
| | Total | 19.3175 | 1.28838 | 20 |
| HARI4 | P0 | 18.9600 | 1.47469 | 5 |
| | P1 | 19.6500 | .67502 | 5 |
| | P2 | 18.6200 | .83066 | 5 |
| | P3 | 19.4300 | .63510 | 5 |
| | Total | 19.1650 | .97649 | 20 |

Tests of Within-Subjects Effects

Measure: BCF

| Source | Type III Sum of | | | | F |
|---------------------|--------------------|---------|-------------|--------|-------|
| | Squares | df | Mean Square | | |
| factor1 | Sphericity Assumed | 29.969 | 3 | 9.990 | 1.477 |
| | Greenhouse-Geisser | 29.969 | 1.179 | 25.414 | 1.477 |
| | Huynh-Feldt | 29.969 | 1.456 | 20.578 | 1.477 |
| | Lower-bound | 29.969 | 1.000 | 29.969 | 1.477 |
| factor1 * PERLAKUAN | Sphericity Assumed | 86.144 | 9 | 9.572 | 1.416 |
| | Greenhouse-Geisser | 86.144 | 3.538 | 24.351 | 1.416 |
| | Huynh-Feldt | 86.144 | 4.369 | 19.717 | 1.416 |
| | Lower-bound | 86.144 | 3.000 | 28.715 | 1.416 |
| Error(factor1) | Sphericity Assumed | 324.568 | 48 | 6.762 | |
| | Greenhouse-Geisser | 324.568 | 18.867 | 17.203 | |

| | | | |
|-------------|---------|--------|--------|
| Huynh-Feldt | 324.568 | 23.302 | 13.929 |
| Lower-bound | 324.568 | 16.000 | 20.285 |

Tests of Within-Subjects Effects

Measure: BCF

| Source | | Sig. |
|---------------------|--------------------|------|
| factor1 | Sphericity Assumed | .233 |
| | Greenhouse-Geisser | .244 |
| | Huynh-Feldt | .246 |
| | Lower-bound | .242 |
| factor1 * PERLAKUAN | Sphericity Assumed | .208 |
| | Greenhouse-Geisser | .268 |
| | Huynh-Feldt | .258 |
| | Lower-bound | .275 |
| Error(factor1) | Sphericity Assumed | |
| | Greenhouse-Geisser | |
| | Huynh-Feldt | |
| | Lower-bound | |

Tests of Within-Subjects Contrasts

Measure: BCF

| Source | factor1 | Type III Sum of | | Mean Square | F | Sig. |
|---------------------|-----------|-----------------|----|-------------|-------|------|
| | | Squares | df | | | |
| factor1 | Linear | 8.762 | 1 | 8.762 | .604 | .448 |
| | Quadratic | 11.628 | 1 | 11.628 | 2.916 | .107 |
| | Cubic | 9.579 | 1 | 9.579 | 5.331 | .035 |
| factor1 * PERLAKUAN | Linear | 42.252 | 3 | 14.084 | .971 | .431 |
| | Quadratic | 24.592 | 3 | 8.197 | 2.056 | .147 |
| | Cubic | 19.300 | 3 | 6.433 | 3.580 | .037 |
| Error(factor1) | Linear | 232.018 | 16 | 14.501 | | |
| | Quadratic | 63.799 | 16 | 3.987 | | |
| | Cubic | 28.751 | 16 | 1.797 | | |

Tests of Between-Subjects Effects

Measure: BCF

Transformed Variable: Average

| Source | Type III Sum of | | Mean Square | F | Sig. |
|-----------|-----------------|----|-------------|----------|------|
| | Squares | df | | | |
| Intercept | 30054.505 | 1 | 30054.505 | 4042.739 | .000 |

| | | | | | |
|-----------|---------|----|-------|-------|------|
| PERLAKUAN | 23.599 | 3 | 7.866 | 1.058 | .394 |
| Error | 118.947 | 16 | 7.434 | | |

Estimated Marginal Means

PERLAKUAN

Estimates

Measure: BCF

| PERLAKUAN | Mean | Std. Error | 95% Confidence Interval | |
|-----------|--------|------------|-------------------------|-------------|
| | | | Lower Bound | Upper Bound |
| P0 | 20.288 | .610 | 18.995 | 21.580 |
| P1 | 19.180 | .610 | 17.888 | 20.472 |
| P2 | 18.840 | .610 | 17.548 | 20.132 |
| P3 | 19.223 | .610 | 17.930 | 20.515 |

Pairwise Comparisons

Measure: BCF

| (I) PERLAKUAN | (J) PERLAKUAN | Mean Difference (I-J) | 95% Confidence Interval for Difference ^a | | |
|---------------|---------------|-----------------------|---|-------------------|-------------|
| | | | Std. Error | Sig. ^a | Lower Bound |
| P0 | P1 | 1.108 | .862 | 1.000 | -1.486 |
| | P2 | 1.448 | .862 | .676 | -1.146 |
| | P3 | 1.065 | .862 | 1.000 | -1.529 |
| P1 | P0 | -1.108 | .862 | 1.000 | -3.701 |
| | P2 | .340 | .862 | 1.000 | -2.254 |
| | P3 | -.043 | .862 | 1.000 | -2.636 |
| P2 | P0 | -1.448 | .862 | .676 | -4.041 |
| | P1 | -.340 | .862 | 1.000 | -2.934 |
| | P3 | -.383 | .862 | 1.000 | -2.976 |
| P3 | P0 | -1.065 | .862 | 1.000 | -3.659 |
| | P1 | .043 | .862 | 1.000 | -2.551 |
| | P2 | .383 | .862 | 1.000 | -2.211 |

Pairwise Comparisons

Measure: BCF

| (I) PERLAKUAN | (J) PERLAKUAN | 95% Confidence Interval for Difference | |
|---------------|---------------|--|--|
| | | Upper Bound | |
| P0 | P1 | 3.701 | |
| | P2 | 4.041 | |
| | P3 | 3.659 | |
| P1 | P0 | 1.486 | |
| | P2 | 2.934 | |

| | | | |
|----|----|--|-------|
| | P3 | | 2.551 |
| P2 | P0 | | 1.146 |
| | P1 | | 2.254 |
| | P3 | | 2.211 |
| P3 | P0 | | 1.529 |
| | P1 | | 2.636 |
| | P2 | | 2.976 |

Univariate Tests

Measure: BCF

| | Sum of Squares | df | Mean Square | F | Sig. |
|----------|----------------|----|-------------|-------|------|
| Contrast | 5.900 | 3 | 1.967 | 1.058 | .394 |
| Error | 29.737 | 16 | 1.859 | | |

Post Hoc Tests

PERLAKUAN

Homogeneous Subsets

BCF

Duncan^{a,b}

| PERLAKUAN | N | Subset |
|-----------|---|---------|
| | | 1 |
| P2 | 5 | 18.8400 |
| P1 | 5 | 19.1800 |
| P3 | 5 | 19.2225 |
| P0 | 5 | 20.2875 |
| Sig. | | .141 |

ALH (*Amplitudo of Lateral Head movement*)

Descriptive Statistics

| | PERLAKUAN | Mean | Std. Deviation | N |
|-------|-----------|--------|----------------|----|
| HARI1 | P0 | 5.9200 | .46168 | 5 |
| | P1 | 6.0000 | .11446 | 5 |
| | P2 | 6.0900 | .63980 | 5 |
| | P3 | 6.1600 | .53014 | 5 |
| | Total | 6.0425 | .44903 | 20 |
| HARI2 | P0 | 5.8200 | .33764 | 5 |
| | P1 | 5.4620 | .45499 | 5 |
| | P2 | 5.9000 | .59414 | 5 |
| | P3 | 5.9800 | .60465 | 5 |
| | Total | 5.7905 | .51000 | 20 |
| HARI3 | P0 | 5.7500 | .36021 | 5 |
| | P1 | 6.1120 | 1.12311 | 5 |
| | P2 | 5.8800 | .74940 | 5 |
| | P3 | 5.9200 | .70746 | 5 |
| | Total | 5.9155 | .73087 | 20 |
| HARI4 | P0 | 5.6600 | 1.17135 | 5 |
| | P1 | 5.9340 | .75900 | 5 |
| | P2 | 5.8200 | .24156 | 5 |
| | P3 | 5.8600 | .34583 | 5 |
| | Total | 5.8185 | .67688 | 20 |

Tests of Within-Subjects Effects

Measure: ALH

| Source | Type III Sum of | | df | Mean Square | F |
|---------------------|--------------------|--------|--------|-------------|------|
| | Squares | df | | | |
| factor1 | Sphericity Assumed | .778 | 3 | .259 | .730 |
| | Greenhouse-Geisser | .778 | 2.530 | .308 | .730 |
| | Huynh-Feldt | .778 | 3.000 | .259 | .730 |
| | Lower-bound | .778 | 1.000 | .778 | .730 |
| factor1 * PERLAKUAN | Sphericity Assumed | 1.089 | 9 | .121 | .340 |
| | Greenhouse-Geisser | 1.089 | 7.591 | .143 | .340 |
| | Huynh-Feldt | 1.089 | 9.000 | .121 | .340 |
| | Lower-bound | 1.089 | 3.000 | .363 | .340 |
| Error(factor1) | Sphericity Assumed | 17.065 | 48 | .356 | |
| | Greenhouse-Geisser | 17.065 | 40.486 | .422 | |
| | Huynh-Feldt | 17.065 | 48.000 | .356 | |

| | | | | |
|--|-------------|--------|--------|-------|
| | Lower-bound | 17.065 | 16.000 | 1.067 |
|--|-------------|--------|--------|-------|

Tests of Within-Subjects Effects

| Source | | Sig. |
|---------------------|--------------------|------|
| factor1 | Sphericity Assumed | .539 |
| | Greenhouse-Geisser | .519 |
| | Huynh-Feldt | .539 |
| | Lower-bound | .406 |
| factor1 * PERLAKUAN | Sphericity Assumed | .957 |
| | Greenhouse-Geisser | .939 |
| | Huynh-Feldt | .957 |
| | Lower-bound | .797 |
| Error(factor1) | Sphericity Assumed | |
| | Greenhouse-Geisser | |
| | Huynh-Feldt | |
| | Lower-bound | |

Tests of Within-Subjects Contrasts

| Source | factor1 | Type III Sum of | | Mean Square | F | Sig. |
|---------------------|-----------|-----------------|----|-------------|-------|------|
| | | Squares | df | | | |
| factor1 | Linear | .299 | 1 | .299 | .589 | .454 |
| | Quadratic | .120 | 1 | .120 | .390 | .541 |
| | Cubic | .359 | 1 | .359 | 1.432 | .249 |
| factor1 * PERLAKUAN | Linear | .335 | 3 | .112 | .220 | .881 |
| | Quadratic | .081 | 3 | .027 | .088 | .966 |
| | Cubic | .673 | 3 | .224 | .894 | .465 |
| Error(factor1) | Linear | 8.122 | 16 | .508 | | |
| | Quadratic | 4.933 | 16 | .308 | | |
| | Cubic | 4.010 | 16 | .251 | | |

Tests of Between-Subjects Effects

Measure: ALH

Transformed Variable: Average

| Source | Type III Sum of | | F | Sig. |
|-----------|-----------------|----|----------|---------------|
| | Squares | df | | |
| Intercept | 2777.017 | 1 | 2777.017 | 4894.895 .000 |
| PERLAKUAN | .396 | 3 | .132 | .233 .872 |
| Error | 9.077 | 16 | .567 | |

Estimated Marginal Means

PERLAKUAN

Estimates

Measure: ALH

| PERLAKUAN | Mean | Std. Error | 95% Confidence Interval | |
|-----------|-------|------------|-------------------------|-------------|
| | | | Lower Bound | Upper Bound |
| P0 | 5.788 | .168 | 5.430 | 6.145 |
| P1 | 5.877 | .168 | 5.520 | 6.234 |
| P2 | 5.923 | .168 | 5.565 | 6.280 |
| P3 | 5.980 | .168 | 5.623 | 6.337 |

Pairwise Comparisons

Measure: ALH

| (I) | PERLAKUAN | (J) PERLAKUAN | Difference (I-J) | Mean | 95% Confidence Interval for Difference ^a | | |
|-----|-----------|---------------|------------------|------|---|-------------------|-------------|
| | | | | | Std. Error | Sig. ^a | Lower Bound |
| P0 | P1 | | -.089 | .238 | 1.000 | | -.806 |
| | | P2 | -.135 | .238 | 1.000 | | -.852 |
| | | P3 | -.193 | .238 | 1.000 | | -.909 |
| P1 | P0 | | .089 | .238 | 1.000 | | -.627 |
| | | P2 | -.046 | .238 | 1.000 | | -.762 |
| | | P3 | -.103 | .238 | 1.000 | | -.820 |
| P2 | P0 | | .135 | .238 | 1.000 | | -.582 |
| | | P1 | .046 | .238 | 1.000 | | -.671 |
| | | P3 | -.057 | .238 | 1.000 | | -.774 |
| P3 | P0 | | .193 | .238 | 1.000 | | -.524 |
| | | P1 | .103 | .238 | 1.000 | | -.614 |
| | | P2 | .057 | .238 | 1.000 | | -.659 |

Pairwise Comparisons

Measure: ALH

| (I) PERLAKUAN | (J) PERLAKUAN | 95% Confidence Interval for Difference | |
|---------------|---------------|--|-------------|
| | | | Upper Bound |
| P0 | P1 | | .627 |
| | P2 | | .582 |
| | P3 | | .524 |
| P1 | P0 | | .806 |
| | P2 | | .671 |
| | P3 | | .614 |
| P2 | P0 | | .852 |
| | P1 | | .762 |
| | P3 | | .659 |

| | | |
|----|----|------|
| P3 | P0 | .909 |
| | P1 | .820 |
| | P2 | .774 |

Univariate Tests

Measure: ALH

| | Sum of Squares | df | Mean Square | F | Sig. |
|----------|----------------|----|-------------|------|------|
| Contrast | .099 | 3 | .033 | .233 | .872 |
| Error | 2.269 | 16 | .142 | | |

Post Hoc Tests

PERLAKUAN

Homogeneous Subsets

ALH

Duncan^{a,b}

| PERLAKUAN | N | Subset |
|-----------|---|--------|
| | | 1 |
| P0 | 5 | 5.7875 |
| P1 | 5 | 5.8770 |
| P2 | 5 | 5.9225 |
| P3 | 5 | 5.9800 |
| Sig. | | .468 |

BIODATA PENELITI



Qibriyah (I011 20 1023), biasa disapa Qibe, anak bungsu dari dua bersaudara. Lahir di Kariango, 18 Juni 2002 dari pasangan Muhammad Nasyruddin dan Jariyah. Bapak penulis bekerja sebagai wiraswasta dan ibu penulis sebagai IRT. Pada tahun 2006-2008 penulis memulai pendidikan di

TK PGRI 2 Mattiro Bulu, Pinrang. Kemudian dilanjutkan pada tahun 2008-2014 di SDN 166 Kariango, Pinrang. Pada tahun 2014-2017 di SMPN 30 Makassar. Kemudian dilanjutkan pada tahun 2017-2020 di SMAN 18 Makassar dan aktif mengikuti ekstrakurikuler SELASAR (Seni SMAN 18 Makassar) dalam bidang seni tari dan kerap mengikuti perlombaan. Sejak tahun 2020 penulis memasuki jenjang pendidikan di Universitas Hasanuddin, Fakultas Peternakan melalui jalur Seleksi Bersama Masuk Perguruan Tinggi (SBMPTN). Selama menjadi mahasiswa, penulis aktif mengikuti berbagai kegiatan kemahasiswaan menjadi panitia maupun badan eksekutif di Senat Mahasiswa Keluarga Mahasiswa Fakultas Peternakan Universitas Hasanuddin (SEMA KEMA FAPET-UH), Himpunan Mahasiswa Produksi Ternak (HIMAPROTE-UH) dan Unit Kegiatan Mahasiswa Komunitas Olahraga Mahasiswa Peternakan (UKM KOMPAS-UH). Selain itu, penulis juga aktif dan menerima Beasiswa Bakti BCA.