

```

DATASET ACTIVATE DataSet5.
ONEWAY FindTime LocateMinMax CompareValues CompareRanges BY VisType
/STATISTICS DESCRIPTIVES
/MISSING ANALYSIS
/POSTHOC=BONFERRONI ALPHA(0.0125).

```

Oneway ANOVA - Exp2 - AC

Notes

| | | |
|-------------------------------|---------------------------------------|---|
| Output Created | | 26-AUG-2020 10:11:... |
| Comments | | |
| Input | Data | /Users/niklas/Documents/Doktorandhandledning/Kahin/radvis/statistik/exp2_ac.sav |
| | Active Dataset | DataSet5 |
| | Filter | <none> |
| | Weight | <none> |
| | Split File | <none> |
| | N of Rows in Working Data File | 153 |
| Missing Value Handling | Definition of Missing | User-defined missing values are treated as missing. |
| | Cases Used | Statistics for each analysis are based on cases with no missing data for any variable in the analysis. |
| Syntax | | ONEWAY FindTime LocateMinMax CompareValues CompareRanges BY VisType /STATISTICS DESCRIPTIVES /MISSING ANALYSIS /POSTHOC=BONFERRO NI ALPHA(0.0125). |
| Resources | Processor Time | 00:00:00.01 |
| | Elapsed Time | 00:00:00.00 |

[DataSet5] /Users/niklas/Documents/Doktorandhandledning/Kahin/radvis/statistik/exp2_ac.sav

Descriptives

| | | N | Mean | Std. Deviation | Std. Error | 95% Confidence Interval for Mean Lower Bound |
|---------------|-------|-----|-------|----------------|------------|---|
| FindTime | Ovr | 51 | .9882 | .03254 | .00456 | .9791 |
| | Lay | 51 | .9961 | .01960 | .00275 | .9906 |
| | Ros | 51 | .5902 | .43784 | .06131 | .4671 |
| | Total | 153 | .8582 | .31573 | .02553 | .8077 |
| LocateMinMax | Ovr | 51 | .9314 | .12551 | .01757 | .8961 |
| | Lay | 51 | .9412 | .09901 | .01386 | .9133 |
| | Ros | 51 | .9837 | .06014 | .00842 | .9667 |
| | Total | 153 | .9521 | .10057 | .00813 | .9360 |
| CompareValues | Ovr | 51 | .8137 | .26383 | .03694 | .7395 |
| | Lay | 51 | .8137 | .29935 | .04192 | .7295 |
| | Ros | 51 | .6569 | .32389 | .04535 | .5658 |
| | Total | 153 | .7614 | .30395 | .02457 | .7129 |
| CompareRanges | Ovr | 51 | .9118 | .13480 | .01888 | .8739 |
| | Lay | 51 | .9020 | .13407 | .01877 | .8643 |
| | Ros | 51 | .9150 | .11725 | .01642 | .8821 |
| | Total | 153 | .9096 | .12823 | .01037 | .8891 |

Descriptives

| | | 95% Confidence Interval for ... Upper Bound | Minimum | Maximum |
|---------------|-------|--|---------|---------|
| FindTime | Ovr | .9974 | .90 | 1.00 |
| | Lay | 1.0016 | .90 | 1.00 |
| | Ros | .7133 | .00 | 1.00 |
| | Total | .9086 | .00 | 1.00 |
| LocateMinMax | Ovr | .9667 | .50 | 1.00 |
| | Lay | .9690 | .67 | 1.00 |
| | Ros | 1.0006 | .67 | 1.00 |
| | Total | .9681 | .50 | 1.00 |
| CompareValues | Ovr | .8879 | .00 | 1.00 |
| | Lay | .8979 | .00 | 1.00 |
| | Ros | .7480 | .00 | 1.00 |
| | Total | .8100 | .00 | 1.00 |
| CompareRanges | Ovr | .9497 | .50 | 1.00 |
| | Lay | .9397 | .50 | 1.00 |
| | Ros | .9480 | .67 | 1.00 |
| | Total | .9301 | .50 | 1.00 |

ANOVA

| | | Sum of Squares | df | Mean Square | F |
|---------------|----------------|----------------|-----|-------------|--------|
| FindTime | Between Groups | 5.495 | 2 | 2.748 | 42.675 |
| | Within Groups | 9.657 | 150 | .064 | |
| | Total | 15.152 | 152 | | |
| LocateMinMax | Between Groups | .079 | 2 | .039 | 4.052 |
| | Within Groups | 1.459 | 150 | .010 | |
| | Total | 1.537 | 152 | | |
| CompareValues | Between Groups | .837 | 2 | .418 | 4.751 |
| | Within Groups | 13.206 | 150 | .088 | |
| | Total | 14.042 | 152 | | |
| CompareRanges | Between Groups | .005 | 2 | .002 | .142 |
| | Within Groups | 2.495 | 150 | .017 | |
| | Total | 2.499 | 152 | | |

ANOVA

| | | Sig. |
|---------------|----------------|------|
| FindTime | Between Groups | .000 |
| | Within Groups | |
| | Total | |
| LocateMinMax | Between Groups | .019 |
| | Within Groups | |
| | Total | |
| CompareValues | Between Groups | .010 |
| | Within Groups | |
| | Total | |
| CompareRanges | Between Groups | .868 |
| | Within Groups | |
| | Total | |

Post Hoc Tests

Multiple Comparisons

Bonferroni

| Dependent Variable | (I) VisType | (J) VisType | Mean Difference (I-J) | Std. Error | Sig. |
|--------------------|-------------|-------------|-----------------------|------------|-------|
| FindTime | Ovr | Lay | -.00784 | .05025 | 1.000 |
| | | Ros | .39804 * | .05025 | .000 |
| | Lay | Ovr | .00784 | .05025 | 1.000 |
| | | Ros | .40588 * | .05025 | .000 |
| | Ros | Ovr | -.39804 * | .05025 | .000 |
| | | Lay | -.40588 * | .05025 | .000 |
| LocateMinMax | Ovr | Lay | -.00980 | .01953 | 1.000 |
| | | Ros | -.05229 | .01953 | .025 |
| | Lay | Ovr | .00980 | .01953 | 1.000 |
| | | Ros | -.04248 | .01953 | .093 |
| | Ros | Ovr | .05229 | .01953 | .025 |
| | | Lay | .04248 | .01953 | .093 |
| CompareValues | Ovr | Lay | .00000 | .05876 | 1.000 |
| | | Ros | .15686 | .05876 | .025 |
| | Lay | Ovr | .00000 | .05876 | 1.000 |
| | | Ros | .15686 | .05876 | .025 |
| | Ros | Ovr | -.15686 | .05876 | .025 |
| | | Lay | -.15686 | .05876 | .025 |
| CompareRanges | Ovr | Lay | .00980 | .02554 | 1.000 |
| | | Ros | -.00327 | .02554 | 1.000 |
| | Lay | Ovr | -.00980 | .02554 | 1.000 |
| | | Ros | -.01307 | .02554 | 1.000 |
| | Ros | Ovr | .00327 | .02554 | 1.000 |
| | | Lay | .01307 | .02554 | 1.000 |

Multiple Comparisons

Bonferroni

| Dependent Variable | (I) VisType | (J) VisType | 98.75% Confidence Interval | |
|--------------------|-------------|-------------|----------------------------|-------------|
| | | | Lower Bound | Upper Bound |
| FindTime | Ovr | Lay | -.1541 | .1384 |
| | | Ros | .2518 | .5443 |
| | Lay | Ovr | -.1384 | .1541 |
| | | Ros | .2597 | .5521 |
| | Ros | Ovr | -.5443 | -.2518 |
| | | Lay | -.5521 | -.2597 |
| LocateMinMax | Ovr | Lay | -.0666 | .0470 |
| | | Ros | -.1091 | .0045 |
| | Lay | Ovr | -.0470 | .0666 |
| | | Ros | -.0993 | .0143 |
| | Ros | Ovr | -.0045 | .1091 |
| | | Lay | -.0143 | .0993 |
| CompareValues | Ovr | Lay | -.1710 | .1710 |
| | | Ros | -.0141 | .3278 |
| | Lay | Ovr | -.1710 | .1710 |
| | | Ros | -.0141 | .3278 |
| | Ros | Ovr | -.3278 | .0141 |
| | | Lay | -.3278 | .0141 |
| CompareRanges | Ovr | Lay | -.0645 | .0841 |
| | | Ros | -.0776 | .0710 |
| | Lay | Ovr | -.0841 | .0645 |
| | | Ros | -.0874 | .0612 |
| | Ros | Ovr | -.0710 | .0776 |
| | | Lay | -.0612 | .0874 |

*. The mean difference is significant at the 0.0125 level.

```

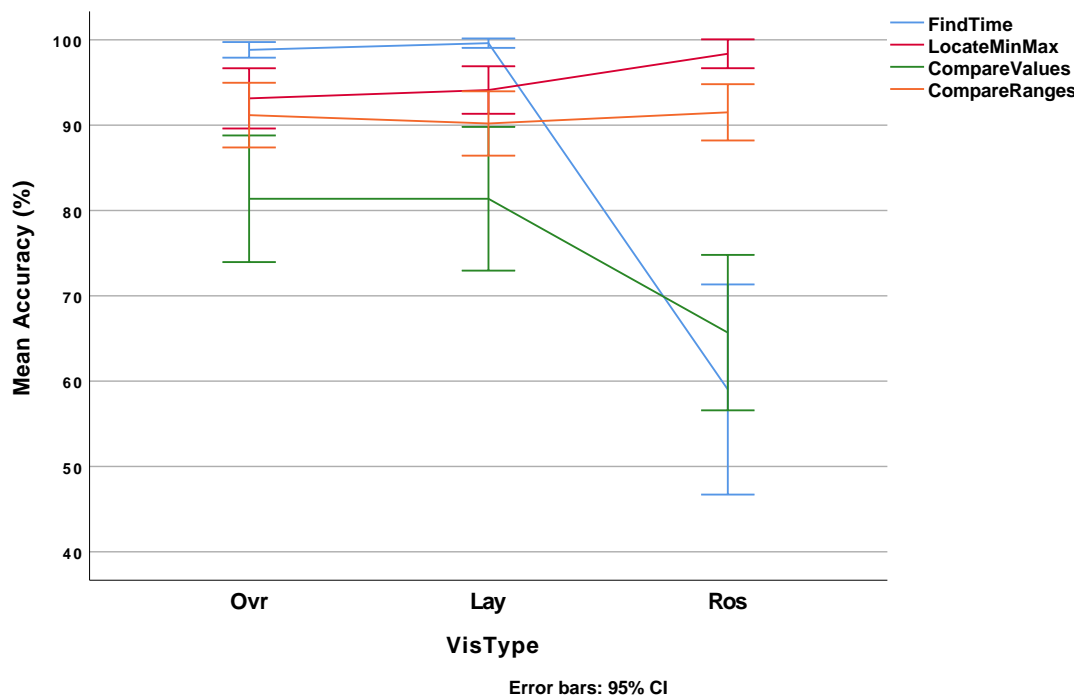
GRAPH
  /LINE(MULTIPLE)=MEAN(FindTime) MEAN(LocateMinMax) MEAN(CompareValues) MEAN(CompareR
anges) BY
    VisType
  /MISSING=LISTWISE
  /INTERVAL CI(95.0).

```

Graph

Notes

| | | |
|----------------|-----------------------------------|--|
| Output Created | | 26-AUG-2020 10:13:... |
| Comments | | |
| Input | Data | /Users/niklas/Document s/Doktorandhandlednin g/Kahin/radvis/statistik/ exp2_ac.sav |
| | Active Dataset | DataSet5 |
| | Filter | <none> |
| | Weight | <none> |
| | Split File | <none> |
| | N of Rows in Working Data File | 153 |
| Syntax | | GRAPH /LINE(MULTIPLE) =MEAN(FindTime) MEAN (LocateMinMax) MEAN (CompareValues) MEAN (CompareRanges) BY VisType /MISSING=LISTWISE /INTERVAL CI(95.0). |
| Resources | Processor Time | 00:00:00.15 |
| | Elapsed Time | 00:00:00.00 |



DATASET ACTIVATE DataSet6.
 ONEWAY FindTime LocateMinMax CompareValues CompareRanges BY VisType
 /STATISTICS DESCRIPTIVES
 /MISSING ANALYSIS

/POSTHOC=BONFERRONI ALPHA(0.0125).

Oneway ANOVA - Exp2 - CT

Notes

| | | |
|-------------------------------|---------------------------------------|---|
| Output Created | | 26-AUG-2020 10:16:... |
| Comments | | |
| Input | Data | /Users/niklas/Documents/Doktorandhandledning/Kahin/radvis/statistik/exp2_ct.sav |
| | Active Dataset | DataSet6 |
| | Filter | <none> |
| | Weight | <none> |
| | Split File | <none> |
| | N of Rows in Working Data File | 153 |
| Missing Value Handling | Definition of Missing | User-defined missing values are treated as missing. |
| | Cases Used | Statistics for each analysis are based on cases with no missing data for any variable in the analysis. |
| Syntax | | ONEWAY FindTime LocateMinMax CompareValues CompareRanges BY VisType /STATISTICS DESCRIPTIVES /MISSING ANALYSIS /POSTHOC=BONFERRO NI ALPHA(0.0125). |
| Resources | Processor Time | 00:00:00.01 |
| | Elapsed Time | 00:00:00.00 |

[DataSet6] /Users/niklas/Documents/Doktorandhandledning/Kahin/radvis/statistik/exp2_ct.sav

Descriptives

| | | N | Mean | Std. Deviation | Std. Error | 95% Confidence Interval for Mean Lower Bound |
|---------------|-------|-----|---------|----------------|------------|---|
| FindTime | Ovr | 51 | 4.3217 | 1.70216 | .23835 | 3.8429 |
| | Lay | 51 | 3.2180 | 1.02510 | .14354 | 2.9296 |
| | Ros | 51 | 5.2451 | 2.35385 | .32961 | 4.5831 |
| | Total | 153 | 4.2616 | 1.95257 | .15786 | 3.9497 |
| LocateMinMax | Ovr | 51 | 7.2870 | 3.55557 | .49788 | 6.2870 |
| | Lay | 51 | 6.8939 | 3.21263 | .44986 | 5.9903 |
| | Ros | 51 | 5.6994 | 2.34740 | .32870 | 5.0392 |
| | Total | 153 | 6.6268 | 3.13449 | .25341 | 6.1261 |
| CompareValues | Ovr | 51 | 10.1136 | 7.48131 | 1.04759 | 8.0095 |
| | Lay | 51 | 14.5212 | 7.12304 | .99743 | 12.5179 |
| | Ros | 51 | 13.9326 | 7.35291 | 1.02961 | 11.8645 |
| | Total | 153 | 12.8558 | 7.53183 | .60891 | 11.6528 |
| CompareRanges | Ovr | 51 | 9.5839 | 6.06888 | .84981 | 7.8770 |
| | Lay | 51 | 10.0983 | 5.42742 | .75999 | 8.5718 |
| | Ros | 51 | 8.4883 | 3.98094 | .55744 | 7.3686 |
| | Total | 153 | 9.3901 | 5.24139 | .42374 | 8.5530 |

Descriptives

| | | 95% Confidence Interval for Mean Upper Bound | Minimum | Maximum |
|---------------|-------|---|---------|---------|
| FindTime | Ovr | 4.8004 | 2.42 | 13.47 |
| | Lay | 3.5063 | 1.84 | 6.53 |
| | Ros | 5.9071 | 2.61 | 12.94 |
| | Total | 4.5735 | 1.84 | 13.47 |
| LocateMinMax | Ovr | 8.2871 | 2.69 | 22.08 |
| | Lay | 7.7975 | 2.49 | 22.79 |
| | Ros | 6.3596 | 1.90 | 12.28 |
| | Total | 7.1274 | 1.90 | 22.79 |
| CompareValues | Ovr | 12.2178 | 3.44 | 44.16 |
| | Lay | 16.5246 | 5.10 | 35.89 |
| | Ros | 16.0006 | 3.81 | 34.50 |
| | Total | 14.0588 | 3.44 | 44.16 |
| CompareRanges | Ovr | 11.2908 | 3.77 | 33.38 |
| | Lay | 11.6248 | 3.52 | 24.83 |
| | Ros | 9.6079 | 3.51 | 22.50 |
| | Total | 10.2273 | 3.51 | 33.38 |

ANOVA

| | | Sum of Squares | df | Mean Square | F |
|---------------|----------------|----------------|-----|-------------|--------|
| FindTime | Between Groups | 105.066 | 2 | 52.533 | 16.609 |
| | Within Groups | 474.440 | 150 | 3.163 | |
| | Total | 579.506 | 152 | | |
| LocateMinMax | Between Groups | 69.735 | 2 | 34.867 | 3.674 |
| | Within Groups | 1423.667 | 150 | 9.491 | |
| | Total | 1493.402 | 152 | | |
| CompareValues | Between Groups | 584.081 | 2 | 292.041 | 5.449 |
| | Within Groups | 8038.648 | 150 | 53.591 | |
| | Total | 8622.730 | 152 | | |
| CompareRanges | Between Groups | 68.969 | 2 | 34.485 | 1.260 |
| | Within Groups | 4106.803 | 150 | 27.379 | |
| | Total | 4175.772 | 152 | | |

ANOVA

| | | Sig. |
|---------------|----------------|------|
| FindTime | Between Groups | .000 |
| | Within Groups | |
| | Total | |
| LocateMinMax | Between Groups | .028 |
| | Within Groups | |
| | Total | |
| CompareValues | Between Groups | .005 |
| | Within Groups | |
| | Total | |
| CompareRanges | Between Groups | .287 |
| | Within Groups | |
| | Total | |

Post Hoc Tests

Multiple Comparisons

Bonferroni

| Dependent Variable | (I) VisType | (J) VisType | Mean Difference (I-J) | Std. Error | Sig. |
|--------------------|-------------|-------------|-----------------------|------------|-------|
| FindTime | Ovr | Lay | 1.10372 * | .35219 | .006 |
| | | Ros | -.92345 | .35219 | .029 |
| | Lay | Ovr | -1.10372 * | .35219 | .006 |
| | | Ros | -2.02717 * | .35219 | .000 |
| | Ros | Ovr | .92345 | .35219 | .029 |
| | | Lay | 2.02717 * | .35219 | .000 |
| LocateMinMax | Ovr | Lay | .39315 | .61008 | 1.000 |
| | | Ros | 1.58765 | .61008 | .031 |
| | Lay | Ovr | -.39315 | .61008 | 1.000 |
| | | Ros | 1.19451 | .61008 | .156 |
| | Ros | Ovr | -1.58765 | .61008 | .031 |
| | | Lay | -1.19451 | .61008 | .156 |
| CompareValues | Ovr | Lay | -4.40761 * | 1.44969 | .008 |
| | | Ros | -3.81892 | 1.44969 | .028 |
| | Lay | Ovr | 4.40761 * | 1.44969 | .008 |
| | | Ros | .58869 | 1.44969 | 1.000 |
| | Ros | Ovr | 3.81892 | 1.44969 | .028 |
| | | Lay | -.58869 | 1.44969 | 1.000 |
| CompareRanges | Ovr | Lay | -.51441 | 1.03618 | 1.000 |
| | | Ros | 1.09558 | 1.03618 | .876 |
| | Lay | Ovr | .51441 | 1.03618 | 1.000 |
| | | Ros | 1.61000 | 1.03618 | .367 |
| | Ros | Ovr | -1.09558 | 1.03618 | .876 |
| | | Lay | -1.61000 | 1.03618 | .367 |

Multiple Comparisons

Bonferroni

| Dependent Variable | (I) VisType | (J) VisType | 98.75% Confidence Interval | |
|--------------------|-------------|-------------|----------------------------|-------------|
| | | | Lower Bound | Upper Bound |
| FindTime | Ovr | Lay | .0789 | 2.1285 |
| | | Ros | -1.9483 | .1014 |
| | Lay | Ovr | -2.1285 | -.0789 |
| | | Ros | -3.0520 | -1.0023 |
| | Ros | Ovr | -.1014 | 1.9483 |
| | | Lay | 1.0023 | 3.0520 |
| LocateMinMax | Ovr | Lay | -1.3821 | 2.1684 |
| | | Ros | -.1876 | 3.3629 |
| | Lay | Ovr | -2.1684 | 1.3821 |
| | | Ros | -.5808 | 2.9698 |
| | Ros | Ovr | -3.3629 | .1876 |
| | | Lay | -2.9698 | .5808 |
| CompareValues | Ovr | Lay | -8.6260 | -.1892 |
| | | Ros | -8.0373 | .3995 |
| | Lay | Ovr | .1892 | 8.6260 |
| | | Ros | -3.6297 | 4.8071 |
| | Ros | Ovr | -.3995 | 8.0373 |
| | | Lay | -4.8071 | 3.6297 |
| CompareRanges | Ovr | Lay | -3.5296 | 2.5007 |
| | | Ros | -1.9196 | 4.1107 |
| | Lay | Ovr | -2.5007 | 3.5296 |
| | | Ros | -1.4052 | 4.6252 |
| | Ros | Ovr | -4.1107 | 1.9196 |
| | | Lay | -4.6252 | 1.4052 |

*. The mean difference is significant at the 0.0125 level.

```

GRAPH
  /LINE(MULTIPLE)=MEAN(FindTime) MEAN(LocateMinMax) MEAN(CompareValues) MEAN(CompareR
anges) BY
    VisType
  /MISSING=LISTWISE
  /INTERVAL CI(95.0).

```

Graph

Notes

| | | |
|----------------|--|---|
| Output Created | | 26-AUG-2020 10:17:.... |
| Comments | | |
| Input | Data | /Users/niklas/Document s/Doktorandhandl ed in g/Kahin/radviz/statistik/ exp2_ct.sav |
| | Active Dataset | DataSet6 |
| | Filter | <none> |
| | Weight | <none> |
| | Split File | <none> |
| | N of Rows in Working Data File | 153 |
| Syntax | GRAPH /LINE(MULTIPLE) =MEAN(FindTime) MEAN (LocateMinMax) MEAN (CompareValues) MEAN (CompareRanges) BY VisType /MISSING=LISTWISE /INTERVAL CI(95.0). | |
| Resources | Processor Time | 00:00:00.14 |
| | Elapsed Time | 00:00:00.00 |

