GET

FILE='/Users/PauloGarcia/Desktop/blendingbox/Analysis/First Study/SPSS Files /datasets/q17 anal lab.sav'.

DATASET NAME DataSet8 WINDOW=FRONT.

EXAMINE VARIABLES-distance_expectedC1C2distance_HSV distance_LCh distance_CMY K distance_RGB distance_Lab

/PLOT $BO\overline{XPLOT}$ STEMLEAF NPPLOT

/COMPARE GROUPS

/STATISTICS DESCRIPTIVES

/CINTERVAL 95

/MISSING LISTWISE

/NOTOTAL.

Explore

Notes

| Output Created | | 21-SEP-2016 17:51:52 |
|---------------------------|-----------------------------------|---|
| Comments | | |
| Input | Data | /Users/PauloGarcia/Des ktop/blendingbox/Anal ysis/First Study/SPSS Files/datasets/q17_anal _lab.sav |
| | Active Dataset | DataSet8 |
| | Filter | <none></none> |
| | Weight | <none></none> |
| | Split File | <none></none> |
| | N of Rows in Working Data File | 23 |
| Missing Value Handling | Definition of Missing | User-defined missing values for dependent variables are treated as missing. |
| | Cases Used | Statistics are based on cases with no missing values for any dependent variable or factor used. |

Notes

| Syntax | | EXAMINE VARIABLES=distance_ex pectedC1C2 distance_HSV distance_LCh distance_CMYK distance_RGB distance_Lab /PLOT BOXPLOT STEMLEAF NPPLOT /COMPARE GROUPS /STATISTICS DESCRIPTIVES /CINTERVAL 95 /MISSING LISTWISE /NOTOTAL. |
|-----------|----------------|---|
| Resources | Processor Time | 00:00:02,86 |
| | Elapsed Time | 00:00:04,00 |

Case Processing Summary

| | | Cases | | | | |
|------------------------|----|---------|-----|---------|----|---------|
| | Va | alid | Mis | sing | To | otal |
| | N | Percent | N | Percent | N | Percent |
| distance_expected C1C2 | 23 | 100,0% | 0 | 0,0% | 23 | 100,0% |
| distance_HSV | 23 | 100,0% | 0 | 0,0% | 23 | 100,0% |
| distance_LCh | 23 | 100,0% | 0 | 0,0% | 23 | 100,0% |
| distance_CMYK | 23 | 100,0% | 0 | 0,0% | 23 | 100,0% |
| distance_RGB | 23 | 100,0% | 0 | 0,0% | 23 | 100,0% |
| distance_Lab | 23 | 100,0% | 0 | 0,0% | 23 | 100,0% |

Descriptives

| | | | Statistic | Std. Error |
|-------------------|---------------------|--------------------|-----------|------------|
| distance_expected | Mean | | .4900 | .03870 |
| C1C2 | 95% Confidence | Lower Bound | .4097 | |
| | Interval for Mean | Upper Bound | .5703 | |
| • | 5% Trimmed Mean | | .4956 | |
| • | Median | | .5000 | |
| | Variance | | ,034 | |
| | Std. Deviation | | .18559 | |
| | Minimum | | .14 | |
| | Maximum | | .74 | |
| | Range | | .60 | |
| | Interquartile Range | | .36 | |
| | Skewness | | -,297 | ,481 |
| • | Kurtosis | | -,878 | ,935 |
| distance_HSV | Mean | | .0683 | .02133 |
| | 95% Confidence | Lower Bound | .0240 | |
| | Interval for Mean | Upper Bound | .1125 | |
| • | 5% Trimmed Mean | | .0536 | |
| • | Median | | .0200 | |
| • | Variance | | ,010 | |
| • | Std. Deviation | | .10228 | |
| • | Minimum | | .02 | |
| • | Maximum | | .38 | |
| • | Range | | .36 | |
| • | Interquartile Range | | .05 | |
| • | Skewness | | 2,763 | ,481 |
| • | Kurtosis | | 6,901 | ,935 |
| distance_LCh | Mean | | .1626 | .01231 |
| • | 95% Confidence | Lower Bound | .1371 | |
| | Interval for Mean | Upper Bound | .1881 | |
| • | 5% Trimmed Mean | | .1590 | |
| • | Median | | .1400 | |
| • | Variance | | ,003 | |
| | Std. Deviation | | .05902 | |
| • | Minimum | | .08 | |
| • | Maximum | | .31 | |
| • | Range | | .23 | |
| • | Interquartile Range | | .02 | |
| • | Skewness | | 1,477 | ,481 |
| • | Kurtosis | | 1,716 | ,935 |
| distance_CMYK | Mean | | .0452 | .00338 |
| • | 95% Confidence | Lower Bound | .0382 | |
| | Interval for Mean | Upper Bound | .0522 | |
| • | 5% Trimmed Mean | | .0452 | |
| | Median | | .0500 | |

Descriptives

| | | | Statistic | Std. Error |
|--------------|---------------------|--------------------|-----------|------------|
| | Variance | | ,000 | |
| | Std. Deviation | | .01620 | |
| | Minimum | | .02 | |
| | Maximum | | .07 | |
| | Range | | .05 | |
| | Interquartile Range | | .03 | |
| | Skewness | | -,183 | ,481 |
| | Kurtosis | | -1,266 | ,935 |
| distance_RGB | Mean | | .1030 | .01197 |
| | 95% Confidence | Lower Bound | .0782 | |
| | Interval for Mean | Upper Bound | .1279 | |
| | 5% Trimmed Mean | | .1017 | |
| | Median | | .0800 | |
| | Variance | | ,003 | |
| | Std. Deviation | | .05740 | |
| | Minimum | | .03 | |
| | Maximum | | .20 | |
| | Range | | .17 | |
| | Interquartile Range | | .10 | |
| | Skewness | | ,480 | ,481 |
| | Kurtosis | | -1,267 | ,935 |
| distance_Lab | Mean | | .1130 | .01066 |
| | 95% Confidence | Lower Bound | .0909 | |
| | Interval for Mean | Upper Bound | .1351 | |
| | 5% Trimmed Mean | | .1139 | |
| | Median | | .1100 | |
| | Variance | | ,003 | |
| | Std. Deviation | | .05112 | |
| | Minimum | | .03 | |
| | Maximum | | .18 | |
| | Range | | .15 | |
| | Interquartile Range | | .10 | |
| | Skewness | | -,191 | ,481 |
| | Kurtosis | | -1,565 | ,935 |

Tests of Normality

| | Kolmogorov-Smirnov ^a | | | Shapiro-Wilk | | k |
|------------------------|---------------------------------|----|-------------------|--------------|----|------|
| | Statistic | df | Sig. | Statistic | df | Sig. |
| distance_expected C1C2 | ,132 | 23 | ,200 [*] | ,938 | 23 | ,163 |
| distance_HSV | ,324 | 23 | ,000 | ,516 | 23 | ,000 |
| distance_LCh | ,301 | 23 | ,000 | ,765 | 23 | ,000 |
| distance_CMYK | ,181 | 23 | ,048 | ,908 | 23 | ,037 |
| distance_RGB | ,221 | 23 | ,005 | ,892 | 23 | ,017 |
| distance_Lab | ,200 | 23 | ,018 | ,897 | 23 | ,022 |

- *. This is a lower bound of the true significance.
- a. Lilliefors Significance Correction

NPAR TESTS

 $/ {\tt FRIEDMAN\!=} distance_expected {\tt C1C2} distance_HSV \ distance_LCh \ distance_CMYK \ distance_RGB \ distance_Lab$

/STATISTICS DESCRIPTIVES QUARTILES

/MISSING LISTWISE.

NPar Tests

Notes

| Output Created | | 21-SEP-2016 17:52:05 |
|---------------------------|-----------------------------------|---|
| Comments | | |
| Input | Data | /Users/PauloGarcia/Des ktop/blendingbox/Anal ysis/First Study/SPSS Files/datasets/q17_anal _lab.sav |
| | Active Dataset | DataSet8 |
| | Filter | <none></none> |
| | Weight | <none></none> |
| | Split File | <none></none> |
| | N of Rows in Working Data File | 23 |
| Missing Value Handling | Definition of Missing | User-defined missing values are treated as missing. |
| | Cases Used | Statistics for all tests are based on cases with no missing data for any variables used. |

Notes

| Syntax | | NPAR TESTS |
|-----------|---|--|
| | | /FRIEDMAN=distance_e xpectedC1C2 distance_HSV distance_LCh distance_CMYK distance_RGB distance_Lab /STATISTICS DESCRIPTIVES QUARTILES /MISSING LISTWISE. |
| Resources | Processor Time Elapsed Time Number of Cases Allowed ^a | 00:00:00,01 00:00:00,00 71493 |

a. Based on availability of workspace memory.

Descriptive Statistics

| | | | | | | Percentile |
|------------------------|----|-------|----------------|---------|---------|------------|
| | N | Mean | Std. Deviation | Minimum | Maximum | 25th |
| distance_expected C1C2 | 23 | .4900 | .18559 | .14 | .74 | .3400 |
| distance_HSV | 23 | .0683 | .10228 | .02 | .38 | .0200 |
| distance_LCh | 23 | .1626 | .05902 | .08 | .31 | .1400 |
| distance_CMYK | 23 | .0452 | .01620 | .02 | .07 | .0300 |
| distance_RGB | 23 | .1030 | .05740 | .03 | .20 | .0600 |
| distance_Lab | 23 | .1130 | .05112 | .03 | .18 | .0600 |

Descriptive Statistics

| | Percentiles | | |
|------------------------|---------------|-------|--|
| | 50th (Median) | 75th | |
| distance_expected C1C2 | .5000 | .7000 | |
| distance_HSV | .0200 | .0700 | |
| distance_LCh | .1400 | .1600 | |
| distance_CMYK | .0500 | .0600 | |
| distance_RGB | .0800 | .1600 | |
| distance_Lab | .1100 | .1600 | |

Friedman Test

Ranks

| | Mean Rank |
|------------------------|-----------|
| distance_expected C1C2 | 5,96 |
| distance_HSV | 1,76 |
| distance_LCh | 4,39 |
| distance_CMYK | 1,76 |
| distance_RGB | 3,30 |
| distance_Lab | 3,83 |

Test Statistics^a

| N | 23 |
|-------------|--------|
| Chi-Square | 86,654 |
| df | 5 |
| Asymp. Sig. | ,000 |

a. Friedman Test

NPAR TESTS

/WILCOXON=distance_HSV distance_HSV distance_HSV distance_LCh d istance_LCh distance_LCh distance_LCh distance_CMYK distance_RGB WITH distance_LCh distance_CMYK distance_RGB distance_Lab distance_CMYK distance_RGB distance_Lab distance_LCh distance_RGB distance_Lab distance_LCh distance_RGB distance_RCh distance_RCh

/STATISTICS DESCRIPTIVES QUARTILES /MISSING ANALYSIS.

NPar Tests

Notes

| Comments | | |
|---------------|------------------------------------|--|
| | | |
| Input Dat | ta | /Users/PauloGarcia/Des ktop/blendingbox/Anal ysis/First Study/SPSS Files/datasets/q17_anal _lab.sav |
| Act | ive Dataset | DataSet8 |
| Filt | er | <none></none> |
| We | ight | <none></none> |
| Spl | it File | <none></none> |
| _ | f Rows in rking Data File | 23 |
| 3 | finition of ssing | User-defined missing values are treated as missing. |
| Cas | ses Used | Statistics for each test are based on all cases with valid data for the variable(s) used in that test. |
| Syntax | | NPAR TESTS |
| | | /WILCOXON=distance_H SV distance_HSV distance_HSV distance_HSV distance_LCh distance_LCh distance_CMYK distance_CMYK distance_CMYK distance_CMYK distance_LCh distance_LAb dis |
| Resources Pro | cessor Time | 00:00:00,01 |
| | psed Time | 00:00:00,01 |
| Nui | mber of Cases owed ^a | 78643 |

a. Based on availability of workspace memory.

Descriptive Statistics

| | | | | | | Percentile |
|---------------|----|-------|----------------|---------|---------|------------|
| | N | Mean | Std. Deviation | Minimum | Maximum | 25th |
| distance_HSV | 23 | .0683 | .10228 | .02 | .38 | .0200 |
| distance_LCh | 23 | .1626 | .05902 | .08 | .31 | .1400 |
| distance_CMYK | 23 | .0452 | .01620 | .02 | .07 | .0300 |
| distance_RGB | 23 | .1030 | .05740 | .03 | .20 | .0600 |
| distance_Lab | 23 | .1130 | .05112 | .03 | .18 | .0600 |

Descriptive Statistics

| | Percentiles | | |
|---------------|---------------|-------|--|
| | 50th (Median) | 75th | |
| distance_HSV | .0200 | .0700 | |
| distance_LCh | .1400 | .1600 | |
| distance_CMYK | .0500 | .0600 | |
| distance_RGB | .0800 | .1600 | |
| distance_Lab | .1100 | .1600 | |

Wilcoxon Signed Ranks Test

Ranks

| | | N | Mean Rank | Sum of Ranks |
|--------------------------------|-----------------------|-----------------|-----------|--------------|
| distance_LCh - | Negative Ranks | 3 ^a | 9,00 | 27,00 |
| distance_HSV | Positive Ranks | 20 ^b | 12,45 | 249,00 |
| | Ties | 0° | | |
| | Total | 23 | | |
| distance_CMYK - | Negative Ranks | 6 ^d | 12,75 | 76,50 |
| distance_HSV | Positive Ranks | 14 ^e | 9,54 | 133,50 |
| | Ties | 3 ^f | | |
| | Total | 23 | | |
| distance_RGB - | Negative Ranks | 3 ^g | 19,00 | 57,00 |
| distance_HSV | Positive Ranks | 20 ^h | 10,95 | 219,00 |
| | Ties | 0 ⁱ | | |
| | Total | 23 | | |
| distance_Lab - distance_HSV | Negative Ranks | 3 ^j | 16,83 | 50,50 |
| | Positive Ranks | 20 ^k | 11,28 | 225,50 |
| | Ties | 0 ¹ | | |
| | Total | 23 | | |
| distance_CMYK - | Negative Ranks | 23 ^m | 12,00 | 276,00 |
| distance_LCh | Positive Ranks | 0 ⁿ | ,00 | ,00 |
| | Ties | 0° | | |
| | Total | 23 | | |
| distance_RGB - | Negative Ranks | 18 ^p | 12,83 | 231,00 |
| distance_LCh | Positive Ranks | 4 ^q | 5,50 | 22,00 |
| | | | | |

Ranks

| | | N | Mean Rank | Sum of Ranks |
|----------------|----------------|------------------|-----------|--------------|
| | Ties | 1 r | | |
| | Total | 23 | | |
| distance_Lab - | Negative Ranks | 16 ^s | 14,31 | 229,00 |
| distance_LCh | Positive Ranks | 6 ^t | 4,00 | 24,00 |
| | Ties | 1 ^u | | |
| | Total | 23 | | |
| distance_RGB - | Negative Ranks | 1 ^v | 2,50 | 2,50 |
| distance_CMYK | Positive Ranks | 22 ^w | 12,43 | 273,50 |
| | Ties | 0 × | | |
| | Total | 23 | | |
| distance_Lab - | Negative Ranks | 1 ^y | 1,50 | 1,50 |
| distance_CMYK | Positive Ranks | 2 2 ^z | 12,48 | 274,50 |
| | Ties | 0 ^{aa} | | |
| | Total | 23 | | |
| distance_Lab - | Negative Ranks | 4 ^{ab} | 11,63 | 46,50 |
| distance_RGB | Positive Ranks | 14 ^{ac} | 8,89 | 124,50 |
| | Ties | 5 ^{ad} | | |
| | Total | 23 | | |

a. distance_LCh < distance_HSV

b. distance_LCh > distance_HSV

c. distance_LCh = distance_HSV

- d. distance_CMYK < distance_HSV
- e. distance_CMYK > distance_HSV
- f. distance CMYK = distance HSV
- g. distance_RGB < distance_HSV
- h. distance RGB > distance HSV
- i. distance_RGB = distance_HSV
- j. distance_Lab < distance_HSV
- k. distance_Lab > distance_HSV
- I. distance_Lab = distance_HSV
- m. distance CMYK < distance LCh
- n. distance_CMYK > distance_LCh
- o. distance_CMYK = distance_LCh
- p. distance_RGB < distance_LCh
- q. distance_RGB > distance_LCh
- r. distance_RGB = distance_LCh
- s. distance_Lab < distance_LCh
- t. distance_Lab > distance_LCh
- u. distance_Lab = distance_LCh
- v. distance_RGB < distance_CMYK
- w. distance_RGB > distance_CMYK
- x. distance_RGB = distance_CMYK
- y. distance_Lab < distance_CMYK
- z. distance_Lab > distance_CMYK
- aa. distance_Lab = distance_CMYK
- ab. distance_Lab < distance_RGB
- ac. distance_Lab > distance_RGB
- ad. distance_Lab = distance_RGB

Test Statistics^a

| | distance_LCh - distance_HSV | distance_CMY K - distance_HSV | distance_RGB - distance_HSV | distance_Lab - distance_HSV | distance_CMY K - distance_LCh |
|------------------------|-----------------------------------|-------------------------------------|-----------------------------------|--------------------------------|-------------------------------------|
| Z | -3,385 ^b | -1,093 ^b | -2,467 ^b | -2,665 ^b | -4,202 ^c |
| Asymp. Sig. (2-tailed) | ,001 | ,275 | ,014 | ,008 | ,000 |

Test Statistics^a

| | distance_RGB - distance_LCh | distance_Lab - distance_LCh | distance_RGB - distance_CMY K | distance_Lab - distance_CMY K | distance_Lab - distance_RGB |
|------------------------|-----------------------------------|--------------------------------|--|-------------------------------------|--------------------------------|
| Z | -3,398 ^c | -3,331 ^c | -4,138 ^b | -4,164 ^b | -1,747 ^b |
| Asymp. Sig. (2-tailed) | ,001 | ,001 | ,000 | ,000 | ,081 |

- a. Wilcoxon Signed Ranks Test
- b. Based on negative ranks.
- c. Based on positive ranks.