GET

FILE='/Users/PauloGarcia/Desktop/blendingbox/Analysis/First Study/SPSS Files /datasets/q5 anal lab.sav'.

DATASET NAME DataSet5 WINDOW=FRONT.

DATASET ACTIVATE DataSet5.

DATASET CLOSE DataSet4.

EXAMINE VARIABLES-distance_expectedC1C2distance_HSV distance_LCh distance_CMY K distance RGB distance Lab

/PLOT BOXPLOT STEMLEAF NPPLOT

/COMPARE GROUPS

/STATISTICS DESCRIPTIVES

/CINTERVAL 95

/MISSING LISTWISE

/NOTOTAL.

Explore

Notes

| Output Created | | 21-SEP-2016 16:56:10 |
|---------------------------|-----------------------------------|--|
| Comments | | |
| Input | Data | /Users/PauloGarcia/Des ktop/blendingbox/Anal ysis/First Study/SPSS Files/datasets/q5_anal_I ab.sav |
| | Active Dataset | DataSet5 |
| | Filter | <none></none> |
| | Weight | <none></none> |
| | Split File | <none></none> |
| | N of Rows in Working Data File | 18 |
| 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 | 00:00:03,00 |

Case Processing Summary

| | Cases | | | | | |
|---------------------------|-------|---------|-----|---------|----|---------|
| | Va | alid | Mis | sing | To | otal |
| | N | Percent | N | Percent | N | Percent |
| distance_expected C1C2 | 18 | 100,0% | 0 | 0,0% | 18 | 100,0% |
| distance_HSV | 18 | 100,0% | 0 | 0,0% | 18 | 100,0% |
| distance_LCh | 18 | 100,0% | 0 | 0,0% | 18 | 100,0% |
| distance_CMYK | 18 | 100,0% | 0 | 0,0% | 18 | 100,0% |
| distance_RGB | 18 | 100,0% | 0 | 0,0% | 18 | 100,0% |
| distance_Lab | 18 | 100,0% | 0 | 0,0% | 18 | 100,0% |

Descriptives

| | | | Statistic | Std. Error |
|-------------------|---------------------|--------------------|-----------|------------|
| distance_expected | Mean | | .3183 | .04376 |
| C1C2 | 95% Confidence | Lower Bound | .2260 | |
| | Interval for Mean | Upper Bound | .4106 | |
| | 5% Trimmed Mean | | .3104 | |
| | Median | | .3100 | |
| | Variance | | ,034 | |
| | Std. Deviation | | .18564 | |
| | Minimum | | .05 | |
| | Maximum | | .73 | |
| | Range | | .68 | |
| | Interquartile Range | | .31 | |
| | Skewness | | ,453 | ,536 |
| | Kurtosis | | -,236 | 1,038 |
| distance_HSV | Mean | | .1683 | .02384 |
| | 95% Confidence | Lower Bound | .1180 | |
| | Interval for Mean | Upper Bound | .2186 | |
| | 5% Trimmed Mean | | .1631 | |
| | Median | | .1500 | |
| | Variance | | ,010 | |
| | Std. Deviation | | .10113 | |
| | Minimum | | .03 | |
| | Maximum | | .40 | |
| | Range | | .37 | |
| | Interquartile Range | | .12 | |
| | Skewness | | ,732 | ,536 |
| | Kurtosis | | ,442 | 1,038 |
| distance_LCh | Mean | | .1500 | .01886 |
| | 95% Confidence | Lower Bound | .1102 | |
| | Interval for Mean | Upper Bound | .1898 | |
| | 5% Trimmed Mean | | .1461 | |
| | Median | | .1500 | |
| | Variance | | ,006 | |
| | Std. Deviation | | .08000 | |
| | Minimum | | .03 | |
| | Maximum | | .34 | |
| | Range | | .31 | |
| | Interquartile Range | | .12 | |
| | Skewness | | ,621 | ,536 |
| | Kurtosis | | ,412 | 1,038 |
| distance_CMYK | Mean | | .1322 | .01600 |
| | 95% Confidence | Lower Bound | .0985 | |
| | Interval for Mean | Upper Bound | .1660 | |
| | 5% Trimmed Mean | | .1319 | |
| | Median | | .1400 | |

Descriptives

| | | | Statistic | Std. Error |
|--------------|---------------------|--------------------|-----------|------------|
| | Variance | | ,005 | |
| | Std. Deviation | | .06787 | |
| | Minimum | | .01 | |
| | Maximum | | .26 | |
| | Range | | .25 | |
| | Interquartile Range | | .11 | |
| | Skewness | | -,026 | ,536 |
| | Kurtosis | | -,482 | 1,038 |
| distance_RGB | Mean | | .1389 | .02146 |
| | 95% Confidence | Lower Bound | .0936 | |
| | Interval for Mean | Upper Bound | .1842 | |
| | 5% Trimmed Mean | | .1354 | |
| | Median | | .1200 | |
| | Variance | | ,008 | |
| | Std. Deviation | | .09106 | |
| | Minimum | | .02 | |
| | Maximum | | .32 | |
| | Range | | .30 | |
| | Interquartile Range | 1 | .14 | |
| | Skewness | | ,661 | ,536 |
| | Kurtosis | | -,407 | 1,038 |
| distance_Lab | Mean | | .1350 | .01786 |
| | 95% Confidence | Lower Bound | .0973 | |
| | Interval for Mean | Upper Bound | .1727 | |
| | 5% Trimmed Mean | | .1322 | |
| | Median | | .1350 | |
| | Variance | | ,006 | |
| | Std. Deviation | | .07579 | |
| | Minimum | | .03 | |
| | Maximum | | .29 | |
| | Range | | .26 | |
| | Interquartile Range | | .11 | |
| | Skewness | | ,496 | ,536 |
| | Kurtosis | | -,192 | 1,038 |

Tests of Normality

| | Kolmogorov-Smirnov ^a | | | Shapiro-Wilk | | |
|------------------------|---------------------------------|----|-------------------|--------------|----|------|
| | Statistic | df | Sig. | Statistic | df | Sig. |
| distance_expected C1C2 | ,127 | 18 | ,200 [*] | ,957 | 18 | ,537 |
| distance_HSV | ,160 | 18 | ,200 [*] | ,926 | 18 | ,165 |
| distance_LCh | ,124 | 18 | ,200 [*] | ,965 | 18 | ,691 |
| distance_CMYK | ,101 | 18 | ,200 [*] | ,985 | 18 | ,985 |
| distance_RGB | ,193 | 18 | ,074 | ,926 | 18 | ,162 |
| distance_Lab | ,196 | 18 | ,066 | ,941 | 18 | ,298 |

- *. 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 16:56:27 |
|---------------------------|-----------------------------------|--|
| Comments | | |
| Input | Data | /Users/PauloGarcia/Des ktop/blendingbox/Anal ysis/First Study/SPSS Files/datasets/q5_anal_l ab.sav |
| | Active Dataset | DataSet5 |
| | Filter | <none></none> |
| | Weight | <none></none> |
| | Split File | <none></none> |
| | N of Rows in Working Data File | 18 |
| 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 | 18 | .3183 | .18564 | .05 | .73 | .1875 |
| distance_HSV | 18 | .1683 | .10113 | .03 | .40 | .1025 |
| distance_LCh | 18 | .1500 | .08000 | .03 | .34 | .0875 |
| distance_CMYK | 18 | .1322 | .06787 | .01 | .26 | .0750 |
| distance_RGB | 18 | .1389 | .09106 | .02 | .32 | .0700 |
| distance_Lab | 18 | .1350 | .07579 | .03 | .29 | .0750 |

Descriptive Statistics

| | Percentiles | |
|------------------------|---------------|-------|
| | 50th (Median) | 75th |
| distance_expected C1C2 | .3100 | .5025 |
| distance_HSV | .1500 | .2200 |
| distance_LCh | .1500 | .2050 |
| distance_CMYK | .1400 | .1825 |
| distance_RGB | .1200 | .2125 |
| distance_Lab | .1350 | .1875 |

Friedman Test

Ranks

| | Mean Rank |
|------------------------|-----------|
| distance_expected C1C2 | 5,61 |
| distance_HSV | 3,86 |
| distance_LCh | 3,08 |
| distance_CMYK | 2,69 |
| distance_RGB | 2,94 |
| distance_Lab | 2,81 |

Test Statistics^a

| N | 18 |
|-------------|--------|
| Chi-Square | 32,720 |
| df | 5 |
| Asymp. Sig. | ,000 |

a. Friedman Test

NPAR TESTS

/WILCOXON=distance_HSV distance_HSV distance_HSV distance_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_RGB distance_RGB

/STATISTICS DESCRIPTIVES QUARTILES /MISSING ANALYSIS.

NPar Tests

Notes

| Comments Input Data | /Users/PauloGarcia/Des |
|--|--|
| Input Data | /Users/PauloGarcia/Des |
| | ktop/blendingbox/Anal ysis/First Study/SPSS Files/datasets/q5_anal_l ab.sav |
| Active Data | set DataSet5 |
| Filter | <none></none> |
| Weight | <none></none> |
| Split File | <none></none> |
| N of Rows Working Da | 1 10 |
| Missing Value Definition of Handling Missing | of User-defined missing values are treated as missing. |
| Cases 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_LSV distance_LCh distance_LCh distance_CMYK distance_CMYK distance_CMYK distance_RGB WITH distance_LCh distance_LAb |
| Resources Processor | Time 00:00:00,01 |
| Elapsed Tir | , |
| Number of Allowed ^a | · · · · · · · · · · · · · · · · · · · |

a. Based on availability of workspace memory.

Descriptive Statistics

| | | | | | | Percentile |
|---------------|----|-------|----------------|---------|---------|------------|
| | N | Mean | Std. Deviation | Minimum | Maximum | 25th |
| distance_HSV | 18 | .1683 | .10113 | .03 | .40 | .1025 |
| distance_LCh | 18 | .1500 | .08000 | .03 | .34 | .0875 |
| distance_CMYK | 18 | .1322 | .06787 | .01 | .26 | .0750 |
| distance_RGB | 18 | .1389 | .09106 | .02 | .32 | .0700 |
| distance_Lab | 18 | .1350 | .07579 | .03 | .29 | .0750 |

Descriptive Statistics

| | Percentiles | | | | |
|---------------|---------------|-------|--|--|--|
| | 50th (Median) | 75th | | | |
| distance_HSV | .1500 | .2200 | | | |
| distance_LCh | .1500 | .2050 | | | |
| distance_CMYK | .1400 | .1825 | | | |
| distance_RGB | .1200 | .2125 | | | |
| distance_Lab | .1350 | .1875 | | | |

Wilcoxon Signed Ranks Test

Ranks

| | | N | Mean Rank | Sum of Ranks |
|-----------------|----------------|------------------|-----------|--------------|
| distance_LCh - | Negative Ranks | 10 ^a | 9,00 | 90,00 |
| distance_HSV | Positive Ranks | 7 ^b | 9,00 | 63,00 |
| | Ties | 1 ^c | | |
| | Total | 18 | | |
| distance_CMYK - | Negative Ranks | 12 ^d | 9,46 | 113,50 |
| distance_HSV | Positive Ranks | 4 ^e | 5,63 | 22,50 |
| | Ties | 2 ^f | | |
| | Total | 18 | | |
| distance_RGB - | Negative Ranks | 1 2 ^g | 10,71 | 128,50 |
| distance_HSV | Positive Ranks | 5 ^h | 4,90 | 24,50 |
| | Ties | 1 ⁱ | | |
| | Total | 18 | | |
| distance_Lab - | Negative Ranks | 1 4 ^j | 9,32 | 130,50 |
| distance_HSV | Positive Ranks | 3 ^k | 7,50 | 22,50 |
| | Ties | 1 ¹ | | |
| | Total | 18 | | |
| distance_CMYK - | Negative Ranks | 9 ^m | 10,89 | 98,00 |
| distance_LCh | Positive Ranks | 8 ⁿ | 6,88 | 55,00 |
| | Ties | 1° | | |
| | Total | 18 | | |
| distance_RGB - | Negative Ranks | 8 ^p | 11,75 | 94,00 |
| distance_LCh | Positive Ranks | 10 ^q | 7,70 | 77,00 |
| | | | | |

Ranks

| | | N | Mean Rank | Sum of Ranks |
|----------------|----------------|-----------------|-----------|--------------|
| | Ties | 0 ^r | | |
| | Total | 18 | | |
| distance_Lab - | Negative Ranks | 9 ^s | 10,28 | 92,50 |
| distance_LCh | Positive Ranks | 8 ^t | 7,56 | 60,50 |
| | Ties | 1 ^u | | |
| | Total | 18 | | |
| distance_RGB - | Negative Ranks | 7 ^v | 9,07 | 63,50 |
| distance_CMYK | Positive Ranks | 10 ^w | 8,95 | 89,50 |
| | Ties | 1 ^x | | |
| | Total | 18 | | |
| distance_Lab - | Negative Ranks | 7 ^y | 9,93 | 69,50 |
| distance_CMYK | Positive Ranks | 10 ^z | 8,35 | 83,50 |
| | Ties | 1 ^{aa} | | |
| | Total | 18 | | |
| distance_Lab - | Negative Ranks | 6 ^{ab} | 9,17 | 55,00 |
| distance_RGB | Positive Ranks | 8 ac | 6,25 | 50,00 |
| | Ties | 4 ^{ad} | | |
| | Total | 18 | | |

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 | -,640 ^b | -2,358 ^b | -2,475 ^b | -2,579 ^b | -1,021 ^b |
| Asymp. Sig. (2-tailed) | ,522 | ,018 | ,013 | ,010 | ,307 |

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 | -,372 ^b | -,758 ^b | -,619 ^c | -,334 ^c | -,158 ^b |
| Asymp. Sig. (2-tailed) | ,710 | ,448 | ,536 | ,739 | ,874 |

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