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

	Notes	
Output Created		21-SEP-2016 16:30:14
Comments		
Input	Data	/Users/PauloGarcia/Des ktop/blendingbox/Anal ysis/First Study/SPSS Files/q1_anal.sav
	Active Dataset	DataSet1
	Filter	<none></none>
	Weight	<none></none>
	Split File	<none></none>
	N of Rows in Working Data File	19
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.
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 Elapsed Time	00:00:03,27 00:00:03,00

Case Processing Summary

	Cases						
	Va	alid	Mis	sing	To	Total	
	N	Percent	N	Percent	N	Percent	
distance_expected C1C2	19	100,0%	0	0,0%	19	100,0%	
distance_HSV	19	100,0%	0	0,0%	19	100,0%	
distance_LCh	19	100,0%	0	0,0%	19	100,0%	
distance_CMYK	19	100,0%	0	0,0%	19	100,0%	
distance_RGB	19	100,0%	0	0,0%	19	100,0%	
distance_Lab	19	100,0%	0	0,0%	19	100,0%	

Descriptives

			Statistic	Std. Error
distance_expected	Mean		.3768	.04654
C1C2	95% Confidence	Lower Bound	.2791	
	Interval for Mean	Upper Bound	.4746	
	5% Trimmed Mean		.3820	
	Median		.3800	
•	Variance		,041	
•	Std. Deviation		.20284	
•	Minimum		.02	
•	Maximum		.64	
	Range		.62	
	Interquartile Range		.30	
	Skewness	-,539	,524	
	Kurtosis	-,813	1,014	
distance_HSV	Mean		.1258	.01898
	95% Confidence Interval for Mean	Lower Bound	.0859	
		Upper Bound	.1657	
•	5% Trimmed Mean		.1248	
•	Median		.1400	
•	Variance		,007	
•	Std. Deviation		.08275	
•	Minimum		.01	
•	Maximum		.26	
•	Range		.25	
•	Interquartile Range		.12	
•	Skewness		,002	,524
•	Kurtosis		-1,182	1,014
distance_LCh	Mean		.2042	.01478
	95% Confidence	Lower Bound	.1732	
	Interval for Mean	Upper Bound	.2353	
	5% Trimmed Mean		.1986	
	Median		.1800	
	Variance		,004	

Descriptives

			Statistic	Std. Error
	Std. Deviation		.06440	
	Minimum		.14	
	Maximum		.37	
	Range		.23	
	Interquartile Range		.06	
	Skewness		1,375	,524
	Kurtosis		1,493	1,014
distance_CMYK	Mean		.0926	.01404
		ower Bound	.0631	
	Interval for Mean U	pper Bound	.1221	
	5% Trimmed Mean		.0896	
	Median		.0700	
	Variance		,004	
	Std. Deviation		.06118	
	Minimum		.03	
	Maximum		.21	
	Range		.18	
	Interquartile Range		.11	
	Skewness		,871	,524
	Kurtosis		-,561	1,014
distance_RGB	Mean		.1237	.01818
		ower Bound	.0855	
	Interval for Mean	pper Bound	.1619	
	5% Trimmed Mean		.1213	
	Median		.1100	
	Variance		,006	
	Std. Deviation		.07925	
	Minimum		.01	
	Maximum		.28	
	Range		.27	
	Interquartile Range		.13	
	Skewness		,300	,524
	Kurtosis		-,633	1,014
distance_Lab	Mean		.1232	.01851
		ower Bound	.0843	
	Interval for Mean U	pper Bound	.1621	
	5% Trimmed Mean		.1218	
	Median		.1100	
	Variance		,007	
	Std. Deviation		.08070	
	Minimum		.01	
	Maximum		.26	
	Range		.25	
	Interquartile Range		.16	

Descriptives

	Statistic	Std. Error
Skewness	,222	,524
Kurtosis	-,953	1,014

Tests of Normality

	Kolmogorov-Smirnov ^a			Shapiro-Wilk		
	Statistic	df	Sig.	Statistic	df	Sig.
distance_expected C1C2	,158	19	,200 [*]	,911	19	,079
distance_HSV	,147	19	,200 [*]	,929	19	,167
distance_LCh	,201	19	,042	,849	19	,006
distance_CMYK	,189	19	,073	,855	19	,008
distance_RGB	,107	19	,200 [*]	,958	19	,532
distance_Lab	,139	19	,200 [*]	,932	19	,187

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

NPAR TESTS

 $/ {\tt FRIEDMAN\!=\!distance_expectedC1C2distance_HSV\,distance_LCh\,distance_CMYK\,distance_RGB\,distance_Lab}$

/STATISTICS QUARTILES /MISSING LISTWISE.

NPar Tests

Notes

1		
Output Created		21-SEP-2016 16:31:53
Comments		
Input	Data	/Users/PauloGarcia/Des ktop/blendingbox/Anal ysis/First Study/SPSS Files/q1_anal.sav
	Active Dataset	DataSet1
	Filter	<none></none>
	Weight	<none></none>
	Split File	<none></none>
	N of Rows in Working Data File	19
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.
Syntax		NPAR TESTS
		/FRIEDMAN=distance_e xpectedC1C2 distance_HSV distance_LCh distance_CMYK distance_CMSE distance_Lab /STATISTICS QUARTILES /MISSING LISTWISE.
Resources	Processor Time	00:00:00,00
	Elapsed Time	00:00:00,00
	Number of Cases Allowed ^a	71493

a. Based on availability of workspace memory.

Descriptive Statistics

		Percentiles				
	N	25th	50th (Median)	75th		
distance_expected C1C2	19	.2700	.3800	.5700		
distance_HSV	19	.0700	.1400	.1900		
distance_LCh	19	.1600	.1800	.2200		
distance_CMYK	19	.0500	.0700	.1600		
distance_RGB	19	.0500	.1100	.1800		
distance_Lab	19	.0300	.1100	.1900		

Friedman Test

Ranks

	Mean Rank
distance_expected C1C2	5,47
distance_HSV	3,03
distance_LCh	4,63
distance_CMYK	1,82
distance_RGB	2,97
distance_Lab	3,08

Test Statistics^a

N	19
Chi-Square	48,568
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_CMYK distance_CMYK distance_RGB WITH distance_LCh distance_CMYK distance_RGB distance_Lab distance_CMYK distance_RGB distance_Lab distance_Lab distance_RGB distance_Lab distance_Lab (PAIRED)

/STATISTICS DESCRIPTIVES QUARTILES /MISSING ANALYSIS.

NPar Tests

Notes

Comments Input Data Jusers/PauloGarcia/Desktop/blendingbox/Analysis/First Study/SPSS Files/q1_anal.sav	Output Created		21-SEP-2016 16:33:32
Active Dataset Filter Weight Split File N of Rows in Working Data File Handling Missing Value Handling Missing Cases Used Syntax NPAR TESTS /WILCOXON=distance_HSV distance_LSV distance_LCh distance_LCh distance_LCh distance_CMYK distance_CMYK distance_CMYK distance_LCh distance_CMYK distance_LCh distance_LCh distance_CMYK distance_RGB distance_Lab d	-		
Filter Weight Split File N of Rows in Working Data File Definition of Missing Cases Used Cases Used Syntax User-defined missing values are treated as missing. Statistics for each test are based on all cases with valid data for the variable(s) used in that test. NPAR TESTS /WILCOXON=distance_H SV distance_HSV distance_HSV distance_LCh distance_LCh distance_LCh distance_LCh distance_CMYK distance_CMYK distance_CMYK distance_CMYK distance_CMYK distance_CMYK distance_CMYK distance_Lab distance_Lab distance_Lab distance_Lab distance_Lab distance_Lab distance_Lab (PAIRED) /STATISTICS DESCRIPTIVES QUARTILES /MISSING ANALYSIS. Resources Processor Time Elapsed Time Number of Cases	Input	Data	ktop/blendingbox/Anal ysis/First Study/SPSS
Weight Split File N of Rows in Working Data File Wissing Value Handling Definition of Missing Cases Used User-defined missing values are treated as missing. Statistics for each test are based on all cases with valid data for the variable(s) used in that test. NPAR TESTS /WILCOXON=distance_H SV distance_HSV distance_LSh distance_LCh distance_LCh distance_CMYK distance_CMYK distance_CMYK distance_CMYK distance_CMYK distance_RGB distance_Lab distance_Lab distance_Lab distance_Lab distance_Lab (Stance_Lab distance_Lab (Stance_LBC) //STATISTICS DESCRIPTIVES QUARTILES /MISSING ANALYSIS. Resources Processor Time Elapsed Time Number of Cases		Active Dataset	DataSet1
Split File N of Rows in Working Data File Handling Definition of 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_LCh distance_LCh distance_CMYK distance_Lab distance_Lab distance_Lab distance_Lab distance_Lab (Mistance_Lab distance_Lab (Mistance_Lab) (Mistan		Filter	<none></none>
Missing Value Handling Missing Value Handling Definition of Missing Cases Used Cases Used Statistics for each test are based on all cases with valid data for the variable(s) used in that test. NPAR TESTS /WILCOXON=distance_HS V distance_HSV distance_LCh distance_LCh distance_LCh distance_LCh distance_CMYK distance_Lab distance_Lab distance_Lab (Mistance_Lab		Weight	<none></none>
Missing Value Handling Definition of Missing Cases Used Statistics for each test are based on all cases with valid data for the variable(s) used in that test. NPAR TESTS /WILCOXON=distance_H SV distance_HSV distance_HSV distance_LCh distance_LCh distance_CMYK distance_CBB distance_Lab distance_Lab distance_Lab distance_Lab distance_Lab distance_Lab contains a distance_Lab cont		Split File	<none></none>
Handling Missing Cases Used Statistics for each test are based on all cases with valid data for the variable(s) used in that test. NPAR TESTS /WILCOXON=distance_H SV distance_HSV distance_HSV distance_LCh distance_LCh distance_LCh distance_CMYK distance_CMYK distance_CMYK distance_RGB WITH distance_CMYK distance_RGB distance_Lab distance_Lab distance_Lab distance_Lab distance_Lab distance_Lab Compared distance			19
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_LCh distance_CMYK distance_CMYK distance_CMYK distance_CMYK distance_CMYK distance_LCh distance_LCh distance_LCh distance_LCh distance_CMYK distance_RGB distance_Lab distance_AB distance_Lab distance_ABB distance_Lab distance_BB distance_Lab distance_Lab distance_ABB distance_Lab distance_BB distance_Lab distance_Lab distance_ABB distance_Lab distance_BB distance_Lab distance_ABB distance_Lab distance_DYK distance_BB distance_Lab distance_DYK distance_CMYK distance_Lab distance_Lab distance_Lab distance_Lab distance_Lab distance_Lab distance_Lab distance_Lab distance_Lab distance_DON distance_CMYK dista			values are treated as
/WILCOXON=distance_H SV distance_HSV distance_HSV distance_LCh distance_LCh distance_CMYK distance_CMYK distance_CMYK distance_CMYK distance_CMYK distance_CMYK distance_CMYK distance_RGB distance_Lab distance_Lab distance_Lab distance_Lab distance_Lab distance_LB distan		Cases Used	are based on all cases with valid data for the variable(s) used in that
SV distance_HSV distance_HSV distance_LCh distance_LCh distance_CMYK distance_CMYK distance_CMYK distance_CMYK distance_CMYK distance_LCh distance_CMYK distance_RGB distance_Lab distance_Lab distance_RGB distance_Lab distance_RGB distance_Lab distance_Lab fistance_Lab distance_Lab Mistance_Lab Mistance_Lab Mistance_Lab Mistance_Lab Mistance_Lab Mistance_Lab Oscarrices Resources Processor Time Elapsed Time Number of Cases	Syntax		NPAR TESTS
Elapsed Time 00:00:00,00 Number of Cases			SV distance_HSV distance_HSV distance_HSV distance_LCh distance_LCh distance_LCh distance_CMYK distance_CMYK distance_CMYK distance_CMYK distance_LCh distance_LCh distance_LCh distance_CMYK distance_CMYK distance_RGB distance_Lab distance_Lab distance_RGB distance_Lab distance_RGB distance_Lab
Elapsed Time 00:00:00,00 Number of Cases	Resources	Processor Time	00:00:00,01
		Elapsed Time	00:00:00,00
			78643

a. Based on availability of workspace memory.

Descriptive Statistics

						Percentile
	N	Mean	Std. Deviation	Minimum	Maximum	25th
distance_HSV	19	.1258	.08275	.01	.26	.0700
distance_LCh	19	.2042	.06440	.14	.37	.1600
distance_CMYK	19	.0926	.06118	.03	.21	.0500
distance_RGB	19	.1237	.07925	.01	.28	.0500
distance_Lab	19	.1232	.08070	.01	.26	.0300

Descriptive Statistics

	Percentiles		
	50th (Median)	75th	
distance_HSV	.1400	.1900	
distance_LCh	.1800	.2200	
distance_CMYK	.0700	.1600	
distance_RGB	.1100	.1800	
distance_Lab	.1100	.1900	

Wilcoxon Signed Ranks Test

Ranks

		N	Mean Rank	Sum of Ranks
distance_LCh -	Negative Ranks	3 ^a	5,00	15,00
distance_HSV	Positive Ranks	15 ^b	10,40	156,00
	Ties	1 ^c		
	Total	19		
distance_CMYK -	Negative Ranks	14 ^d	10,54	147,50
distance_HSV	Positive Ranks	4 ^e	5,88	23,50
	Ties	1 ^f		
	Total	19		
distance_RGB -	Negative Ranks	9 g	8,50	76,50
distance_HSV	Positive Ranks	7 ^h	8,50	59,50
	Ties	3 ⁱ		
	Total	19		
distance_Lab -	Negative Ranks	7 ^j	11,36	79,50
distance_HSV	Positive Ranks	10 ^k	7,35	73,50
	Ties	2		
	Total	19		
distance_CMYK -	Negative Ranks	18 ^m	10,44	188,00
distance_LCh	Positive Ranks	1 ⁿ	2,00	2,00
	Ties	0°		
	Total	19		
distance_RGB -	Negative Ranks	16 ^p	10,09	161,50
distance_LCh	Positive Ranks	2 ^q	4,75	9,50

Ranks

		N	Mean Rank	Sum of Ranks
	Ties	1 ^r		
	Total	19		
distance_Lab -	Negative Ranks	16 ^s	11,09	177,50
distance_LCh	Positive Ranks	3 ^t	4,17	12,50
	Ties	0 u		
	Total	19		
distance_RGB -	Negative Ranks	2 ^v	3,00	6,00
distance_CMYK	Positive Ranks	14 ^w	9,29	130,00
	Ties	3 ^x		
	Total	19		
distance_Lab -	Negative Ranks	3 ^y	2,00	6,00
distance_CMYK	Positive Ranks	14 ^z	10,50	147,00
	Ties	2 ^{aa}		
	Total	19		
distance_Lab - distance_RGB	Negative Ranks	7 ^{ab}	9,64	67,50
	Positive Ranks	9 ac	7,61	68,50
	Ties	3 ad		
	Total	19		

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	-3,075 ^b	-2,713 ^c	-,447 ^c	-,143 ^c	-3,746 ^c
Asymp. Sig. (2-tailed)	,002	,007	,655	,886	,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	-3,316 ^c	-3,324 ^c	-3,215 ^b	-3,359 ^b	-,026 ^b
Asymp. Sig. (2- tailed)	,001	,001	,001	,001	,979

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