```
EXAMINE VARIABLES=cUA BY group
  /PLOT BOXPLOT NPPLOT
  /COMPARE GROUPS
  /PERCENTILES(5,10,25,50,75,90,95) HAVERAGE
  /STATISTICS DESCRIPTIVES
  /CINTERVAL 95
  /MISSING LISTWISE
  /NOTOTAL.
```

Explore

Notes

Output Created		01-NOV-2017 19:45:14
Comments		
Input	Data	C:\Users\Hao_Yu\Desktop\abcfspss.sav
	Active Dataset	数据集1
	Filter	<none>
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	Split File	<none>
	N of Rows in Working Data File	22
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=cUA BY group /PLOT BOXPLOT NPPLOT /COMPARE GROUPS /PERCENTILES(5,10,25,50,75,90,95) HAVERAGE /STATISTICS DESCRIPTIVES /CINTERVAL 95 /MISSING LISTWISE /NOTOTAL.

Resources	Processor Time	00:00:01.36
	Elapsed Time	00:00:01.43

[数据集1] C:\Users\Hao_Yu\Desktop\abcfspss.sav

group

Case Processing Summary

	group	Cases					
		Valid		Missing		Total	
		N	Percent	N	Percent	N	Percent
cUA	1	5	100.0%	0	0.0%	5	100.0%
	2	5	100.0%	0	0.0%	5	100.0%
	3	3	100.0%	0	0.0%	3	100.0%
	4	4	100.0%	0	0.0%	4	100.0%
	5	5	100.0%	0	0.0%	5	100.0%

Descriptives

	group			Statistic	Std. Error
cUA	1	Mean		109.3652	18.06128
		95% Confidence Interval for Mean	Lower Bound	59.2190	
			Upper Bound	159.5114	
		5% Trimmed Mean		108.1432	
		Median		100.6210	
		Variance		1631.050	
		Std. Deviation		40.38626	
		Minimum		73.03	
		Maximum		167.69	
		Range		94.66	
		Interquartile Range		75.95	
		Skewness		.738	.913
		Kurtosis		-.905	2.000

2	Mean		60.5656	6.79339
	95% Confidence Interval for Mean	Lower Bound	41.7041	
		Upper Bound	79.4271	
	5% Trimmed Mean		60.1727	
	Median		59.5450	
	Variance		230.751	
	Std. Deviation		15.19049	
	Minimum		45.69	
	Maximum		82.51	
	Range		36.82	
	Interquartile Range		28.43	
	Skewness		.641	.913
	Kurtosis		-.671	2.000
3	Mean		147.0662	14.53463
	95% Confidence Interval for Mean	Lower Bound	84.5288	
		Upper Bound	209.6036	
	5% Trimmed Mean		.	
	Median		135.4845	
	Variance		633.766	
	Std. Deviation		25.17471	
	Minimum		129.77	
	Maximum		175.95	
	Range		46.18	
	Interquartile Range		.	
	Skewness		1.632	1.225
	Kurtosis		.	.
4	Mean		83.5115	5.28513
	95% Confidence Interval for Mean	Lower Bound	66.6918	
		Upper Bound	100.3311	
	5% Trimmed Mean		83.8051	
	Median		86.1542	
	Variance		111.731	
	Std. Deviation		10.57027	
	Minimum		69.02	
	Maximum		92.72	
	Range		23.69	
	Interquartile Range		19.59	
	Skewness		-1.137	1.014

	Kurtosis		.602	2.619
	Mean		75.1460	3.13012
	95% Confidence Interval for Mean	Lower Bound	66.4554	
		Upper Bound	83.8366	
	5% Trimmed Mean		74.9961	
	Median		71.9383	
	Variance		48.988	
5	Std. Deviation		6.99916	
	Minimum		67.93	
	Maximum		85.06	
	Range		17.13	
	Interquartile Range		12.76	
	Skewness		.720	.913
	Kurtosis		-1.170	2.000

Percentiles

		group	Percentiles			
			5	10	25	50
Weighted Average(Definition 1)	cUA	1	73.0318	73.0318	73.5786	100.6210
		2	45.6936	45.6936	46.6048	59.5450
		3	129.7667	129.7667	129.7667	135.4845
		4	69.0222	69.0222	72.3939	86.1542
		5	67.9287	67.9287	69.5690	71.9383
Tukey's Hinges	cUA	1			74.1254	100.6210
		2			47.5161	59.5450
		3			132.6256	135.4845
		4			75.7656	86.1542
		5			71.2093	71.9383

Percentiles

		group	Percentiles		
			75	90	95
Weighted Average(Definition 1)	cUA	1	149.5239	.	.
		2	75.0366	.	.
		3	.	.	.
		4	91.9863	.	.
		5	82.3268	.	.

		1	131.3534		
		2	67.5642		
Tukey's Hinges	cUA	3	155.7160		
		4	91.2573		
		5	79.5930		

Tests of Normality

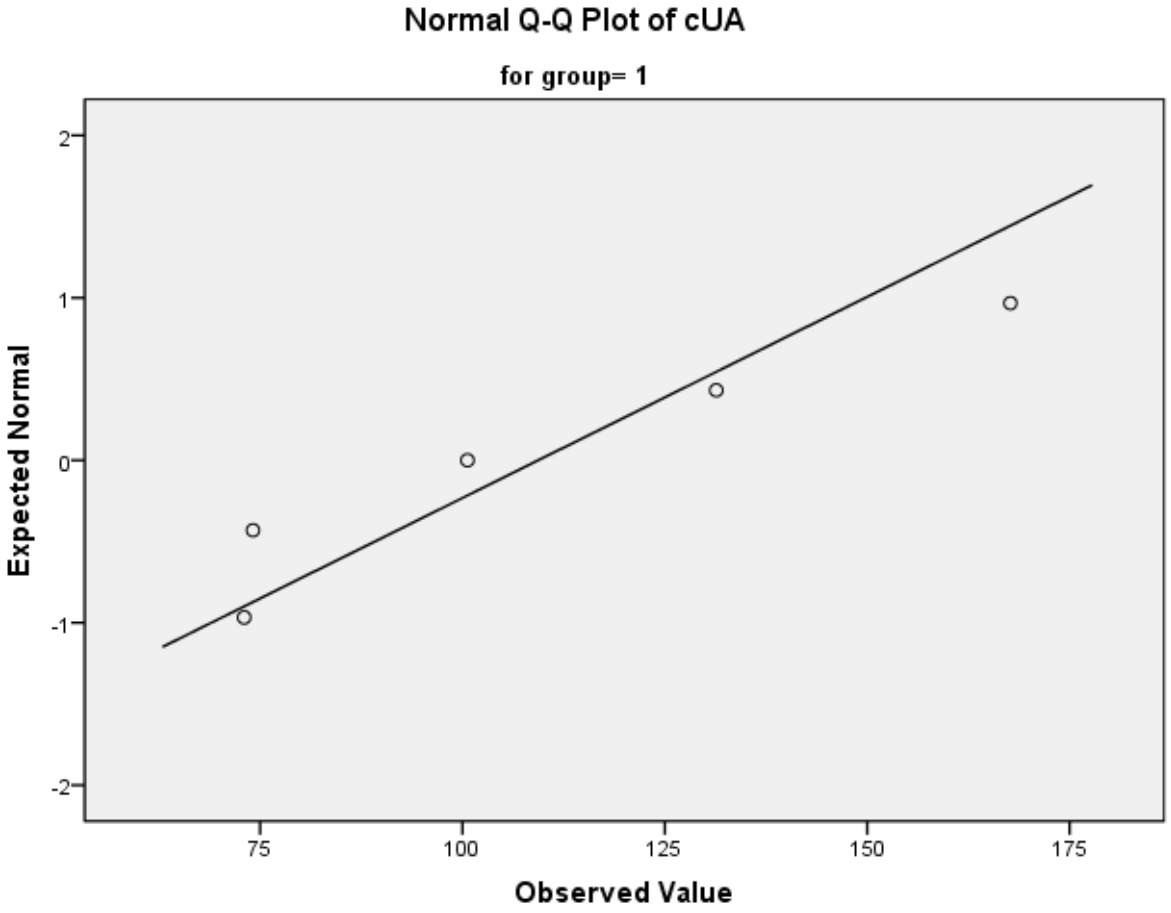
	group	Kolmogorov-Smirnov[a]			Shapiro-Wilk		
		Statistic	df	Sig.	Statistic	df	Sig.
cUA	1	.209	5	.200*	.902	5	.423
	2	.205	5	.200*	.931	5	.600
	3	.344	3	.	.841	3	.217
	4	.224	4	.	.913	4	.500
	5	.277	5	.200*	.918	5	.515

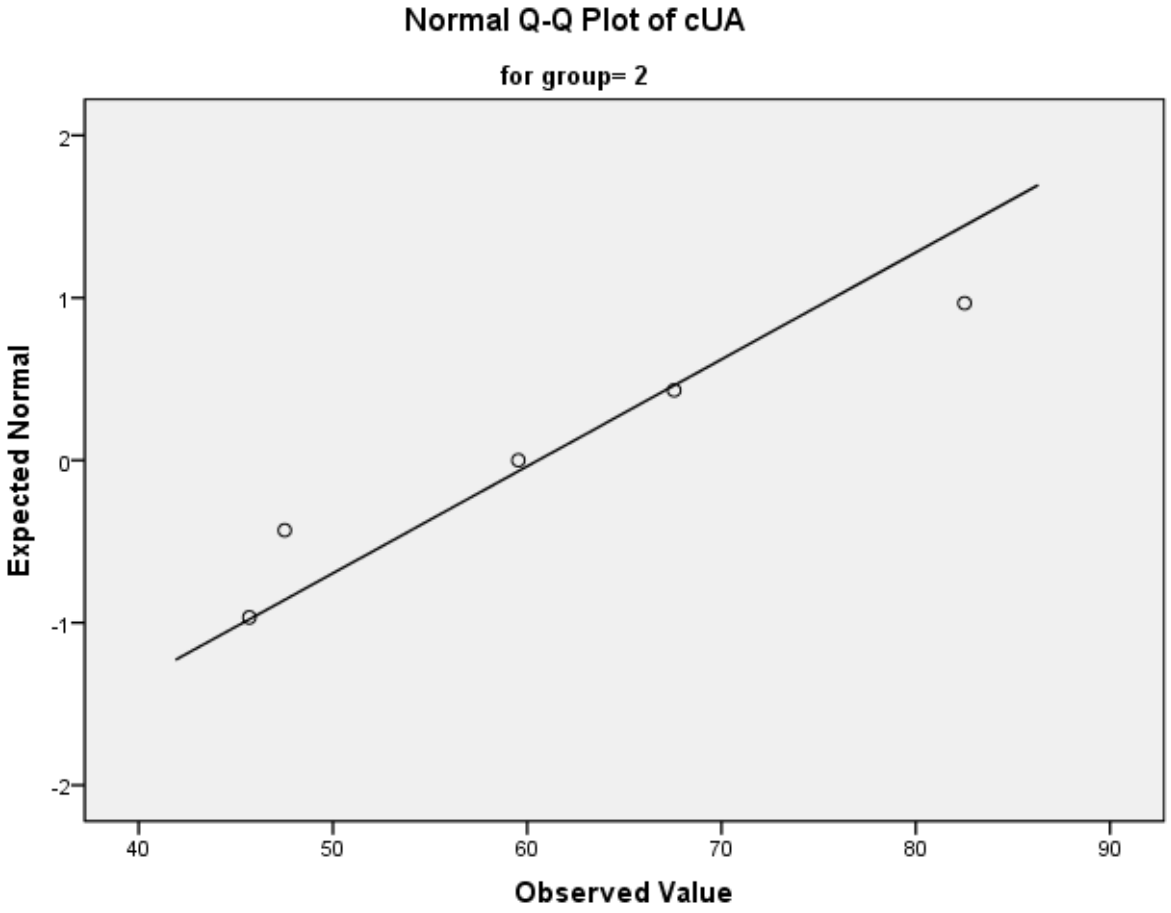
*. This is a lower bound of the true significance.

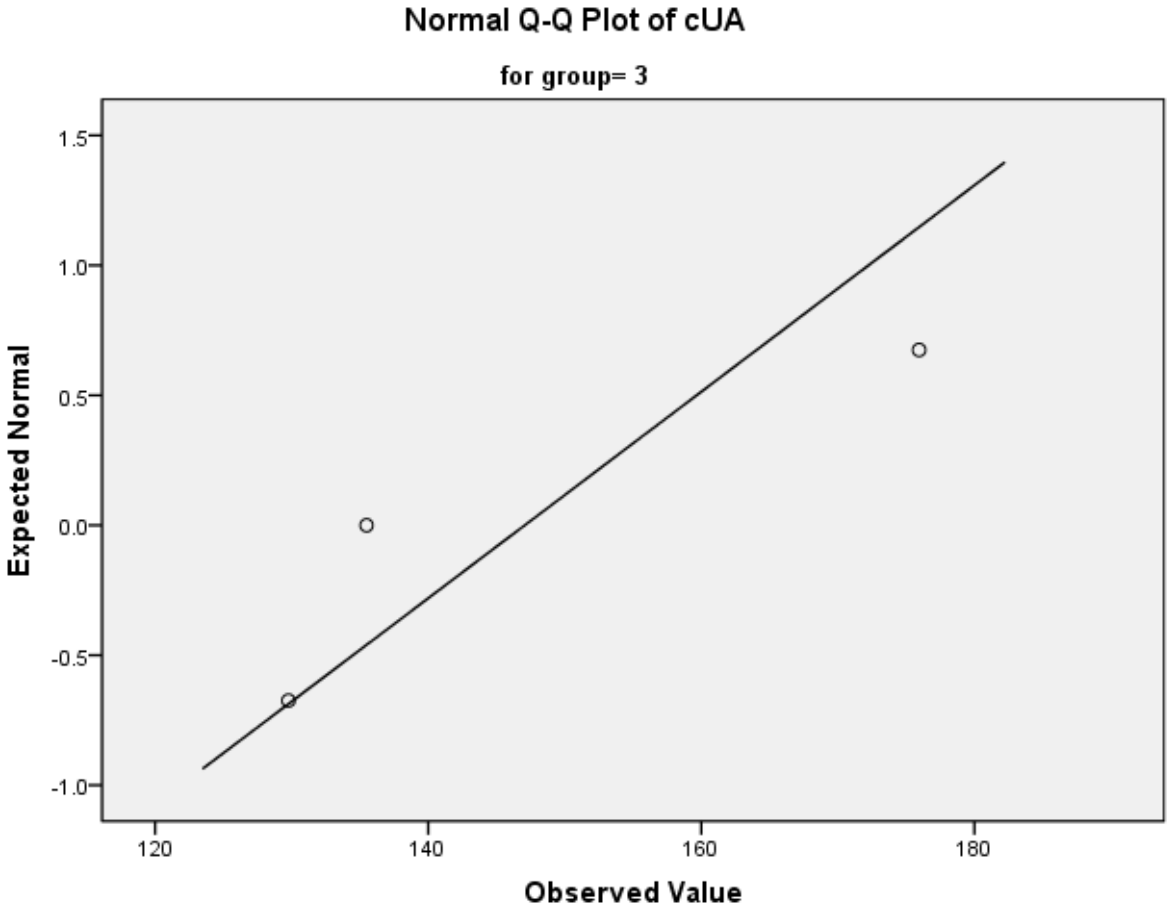
a. Lilliefors Significance Correction

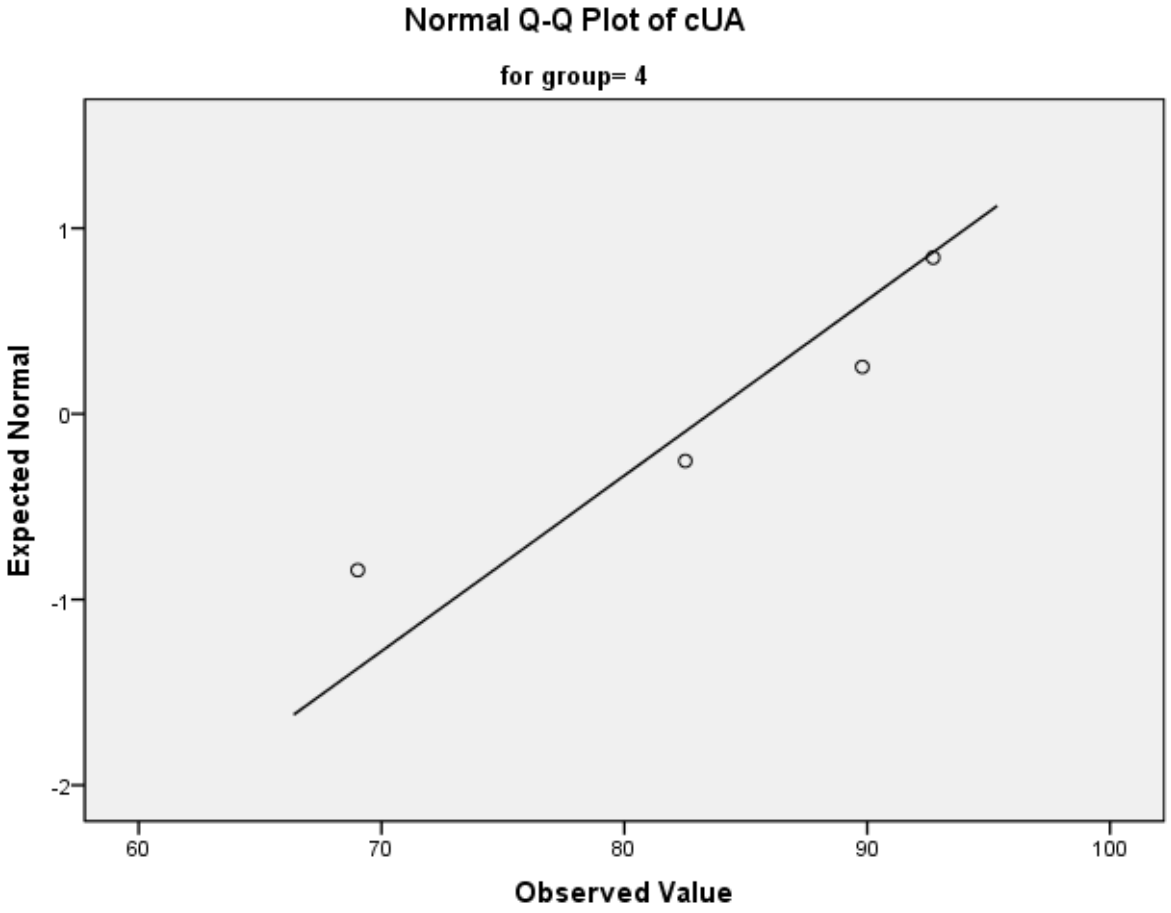
cUA

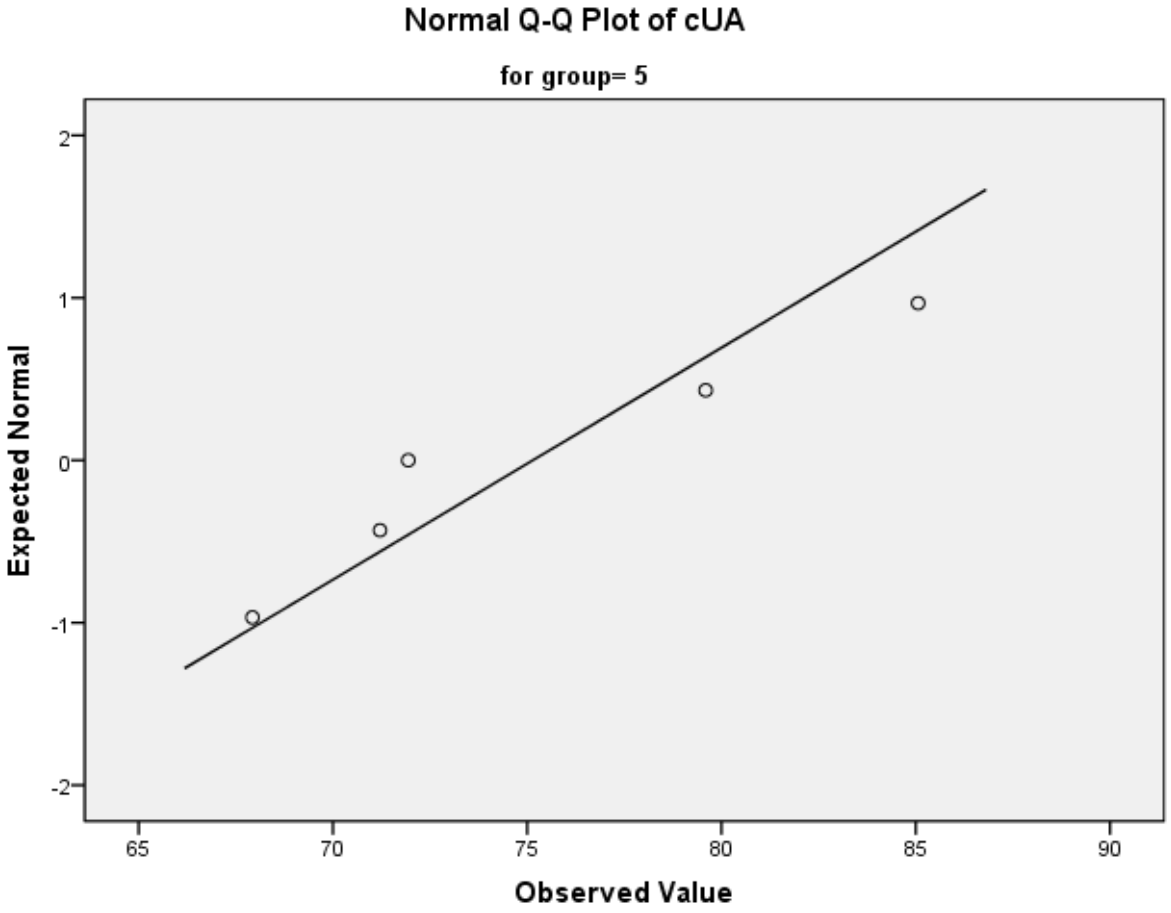
Normal Q-Q Plots


Normal Q-Q Plot of cUA
for group= 1
Expected Normal
2
1
0
-1
-2
75
100
125
150
175
Observed Value

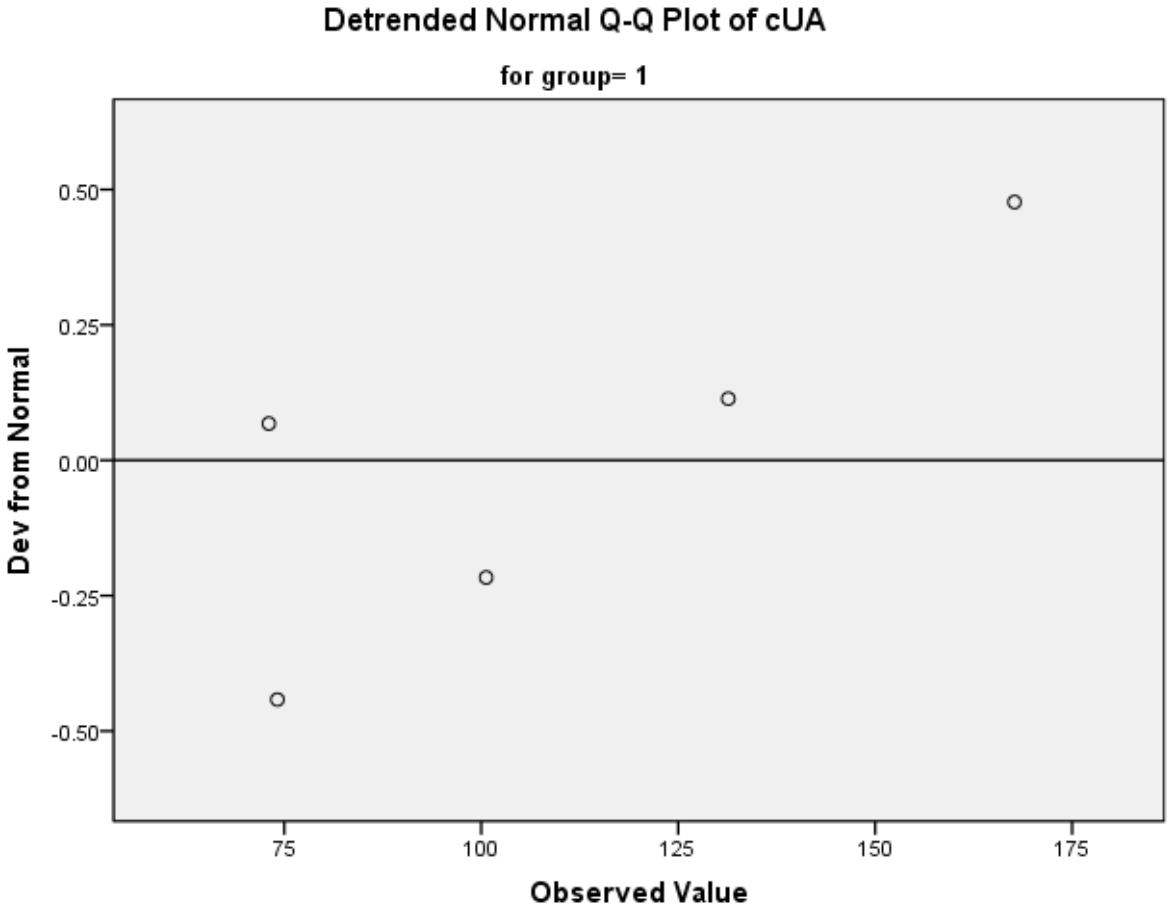

Normal Q-Q Plot of cUA
for group= 2
Expected Normal
2
1
0
-1
-2
40
50
60
70
80
90
Observed Value

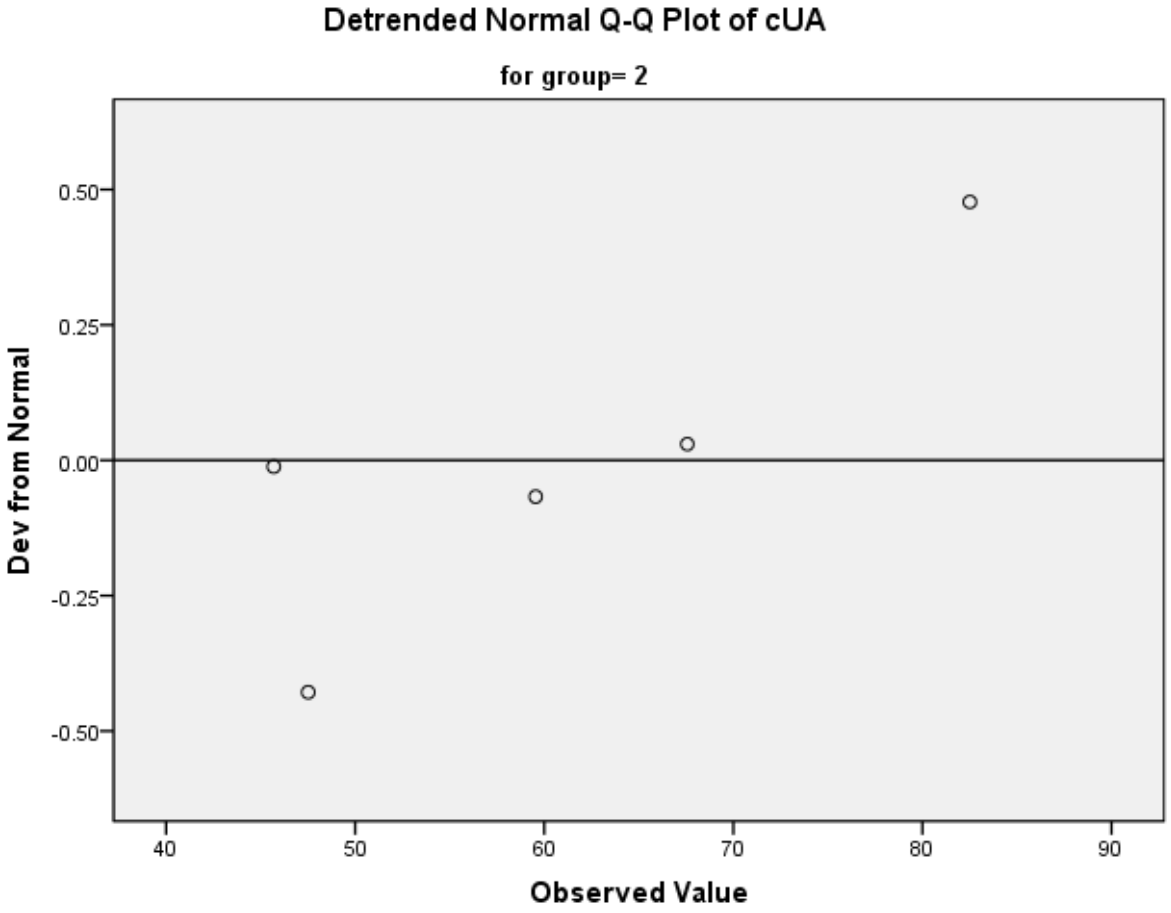

Normal Q-Q Plot of cUA
for group= 3
Expected Normal
1.5
1.0
0.5
0.0
-0.5
-1.0
120
140
160
180
Observed Value

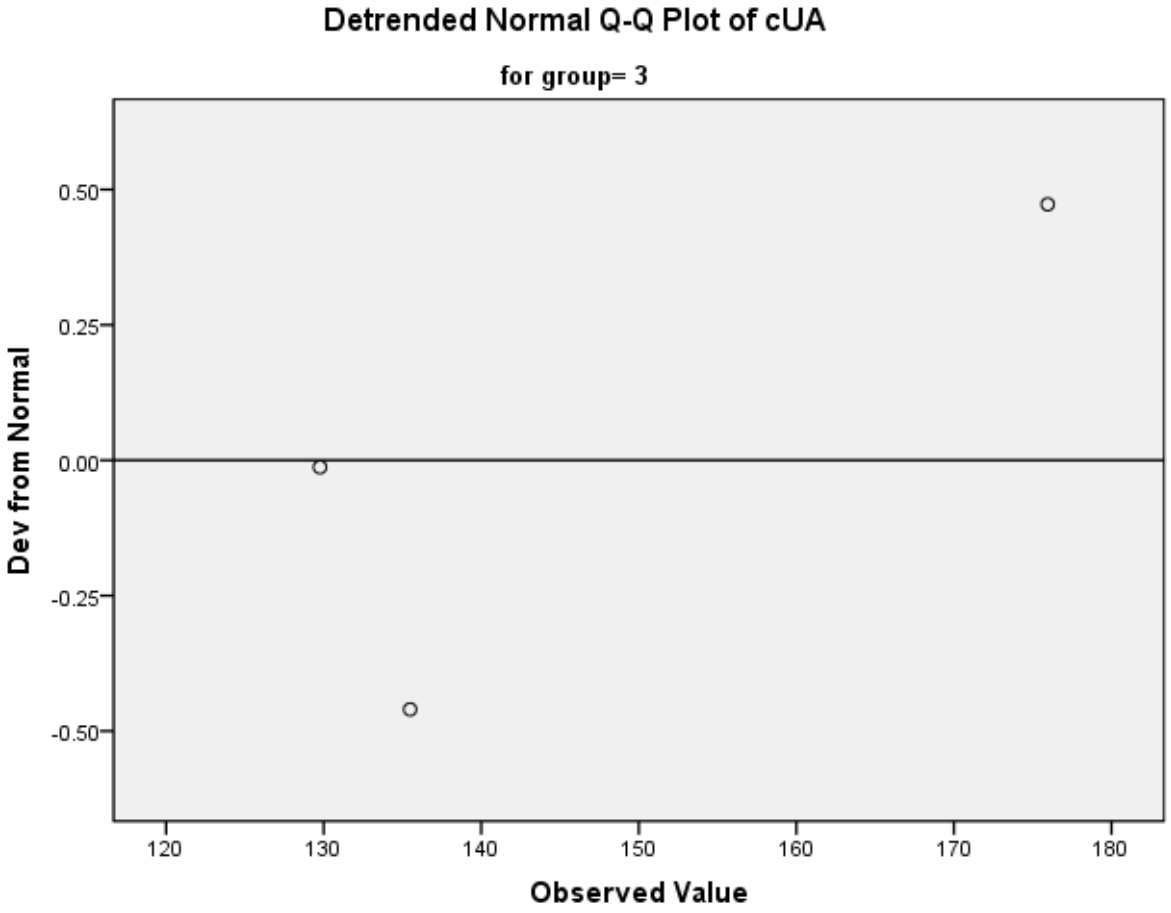

Normal Q-Q Plot of cUA
for group= 4
Expected Normal
1
0
-1
-2
60
70
80
90
100
Observed Value

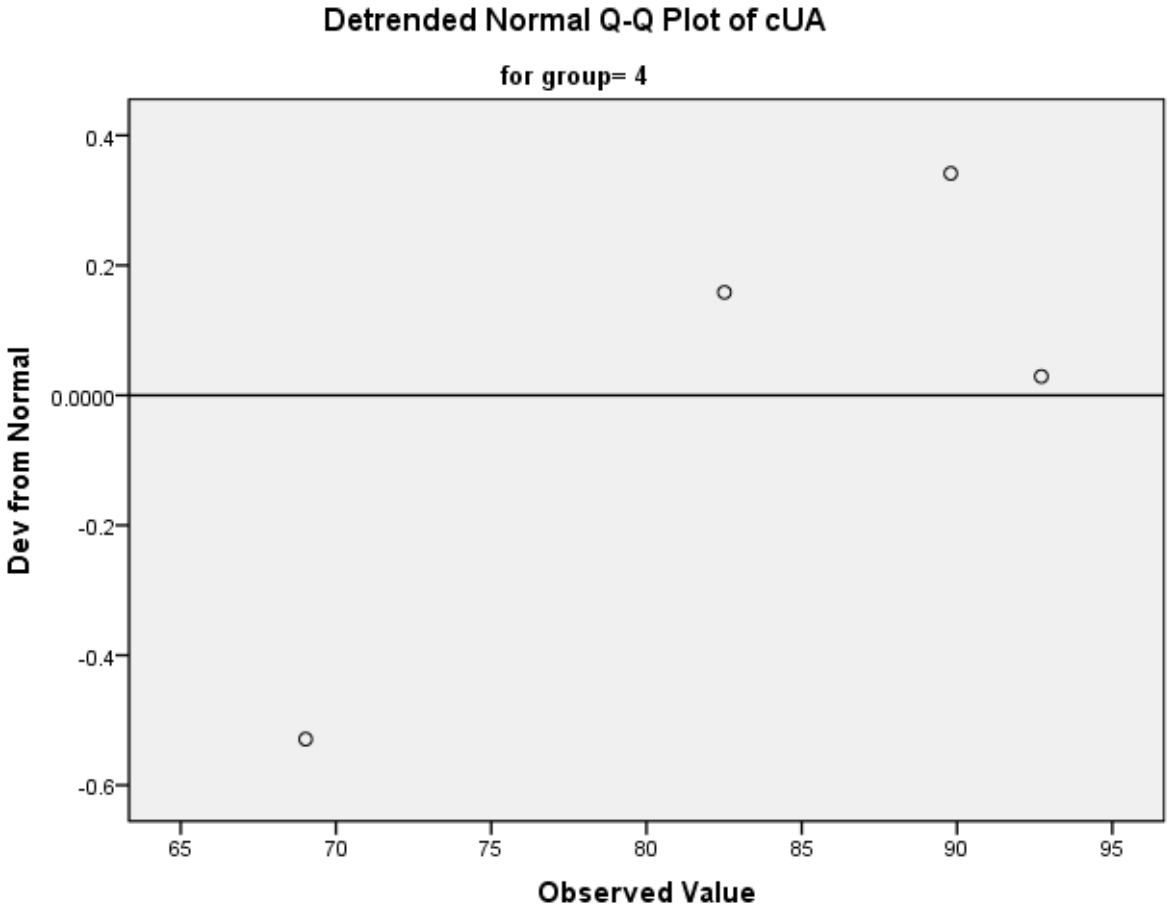


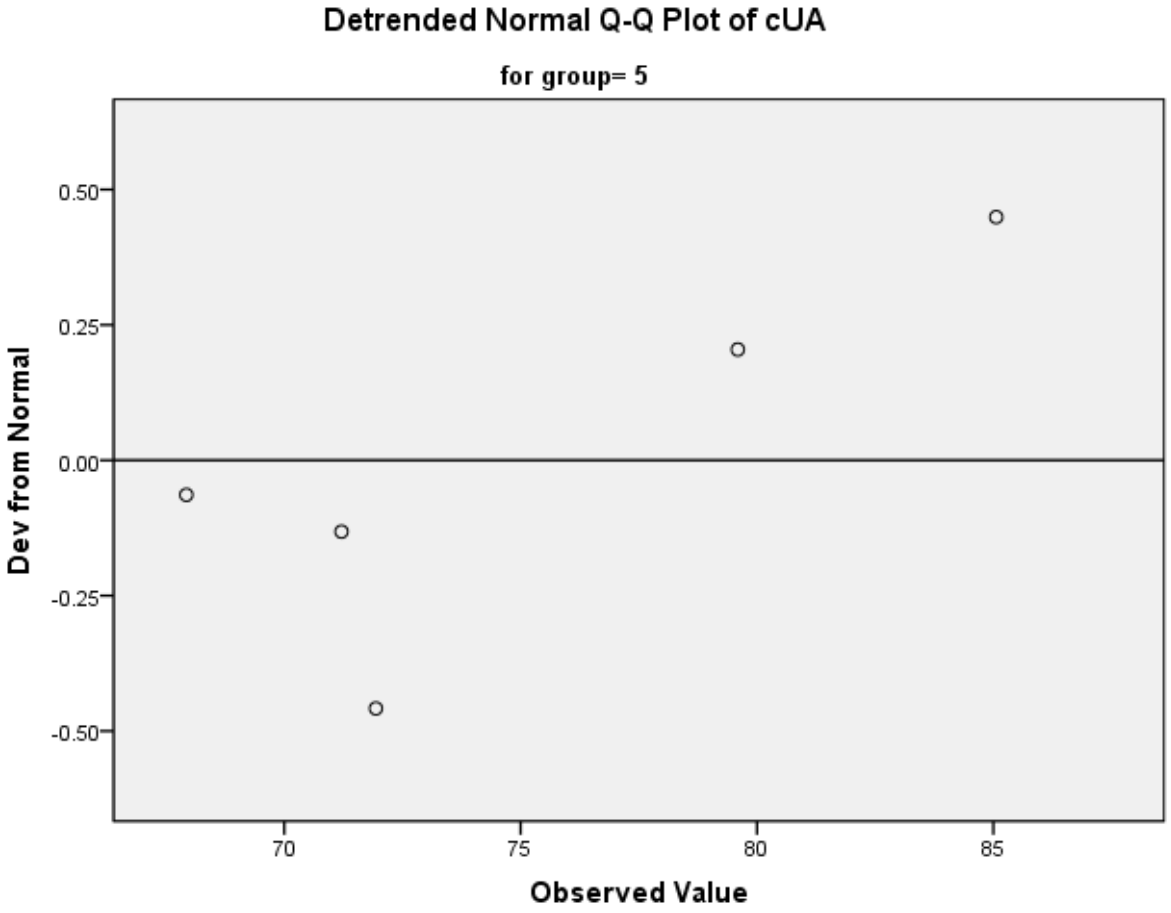
Detrended Normal Q-Q Plots

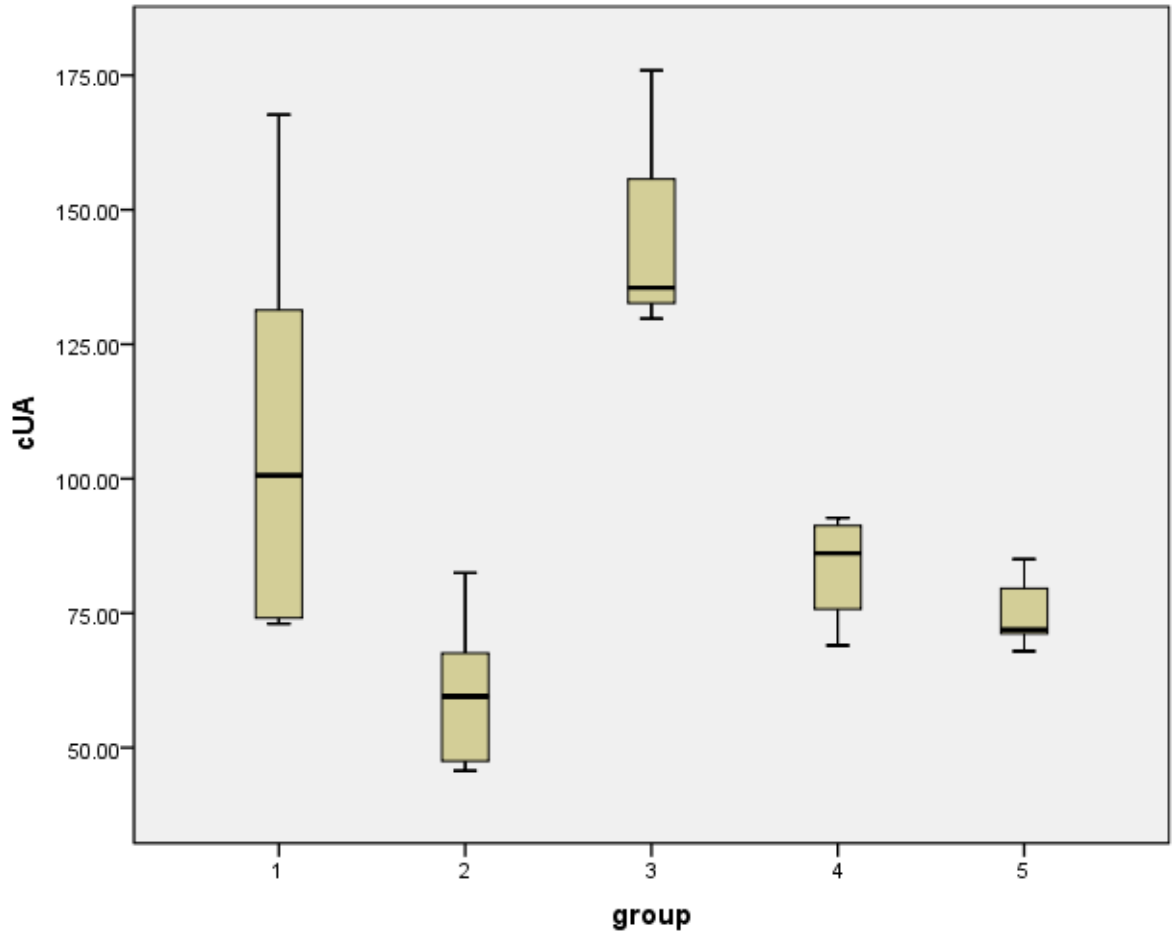

Detrended Normal Q-Q Plot of cUA
for group= 1
Dev from Normal
0.50
0.25
0.00
-0.25
-0.50
75
100
125
150
175
Observed Value


Detrended Normal Q-Q Plot of cUA
for group= 2
Dev from Normal
0.50
0.25
0.00
-0.25
-0.50
40
50
60
70
80
90
Observed Value


Detrended Normal Q-Q Plot of cUA
for group= 3
Dev from Normal
0.50
0.25
0.00
-0.25
-0.50
120
130
140
150
160
170
180
Observed Value


Detrended Normal Q-Q Plot of cUA
for group= 4
Dev from Normal
0.4
0.2
0.0000
-0.2
-0.4
-0.6
65
70
75
80
85
90
95
Observed Value


Detrended Normal Q-Q Plot of cUA
for group= 5
Dev from Normal
0.50
0.25
0.00
-0.25
-0.50
70
75
80
85
Observed Value




```
ONEWAY cUA BY group
  /STATISTICS HOMOGENEITY
  /MISSING ANALYSIS.
```

Oneway

Notes

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Comments		
Input	Data	C:\Users\Hao_Yu\Desktop\abcfspss.sav
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	Filter	<none>

	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	22
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 cUA BY group /STATISTICS HOMOGENEITY /MISSING ANALYSIS.
Resources	Processor Time	00:00:00.00
	Elapsed Time	00:00:00.01

[数据集1] C:\Users\Hao_Yu\Desktop\abcfspss.sav

Test of Homogeneity of Variances

cUA

Levene Statistic	df1	df2	Sig.
4.964	4	17	.008

ANOVA

cUA

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	17228.904	4	4307.226	7.920	.001
Within Groups	9245.880	17	543.875		
Total	26474.785	21			

```
*Nonparametric Tests: Independent Samples.
NPTESTS
  /INDEPENDENT TEST (cUA) GROUP (group) KRUSKAL_WALLIS(COMPARE=STEPWISE)
  /MISSING SCOPE=ANALYSIS USERMISSING=EXCLUDE
  /CRITERIA ALPHA=0.05  CILEVEL=95.
```

Nonparametric Tests

Notes

Output Created		01-NOV-2017 19:58:08
Comments		
Input	Data	C:\Users\Hao_Yu\Desktop\abcfspss.sav
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	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	22
Syntax		NPTESTS /INDEPENDENT TEST (cUA) GROUP (group) KRUSKAL_WALLIS(COMPARE=STEPWISE) /MISSING SCOPE=ANALYSIS USERMISSING=EXCLUDE /CRITERIA ALPHA=0.05 CILEVEL=95.
Resources	Processor Time	00:00:00.03
	Elapsed Time	00:00:00.04

[数据集1] C:\Users\Hao_Yu\Desktop\abcfspss.sav

Hypothesis Test Summary

	Null Hypothesis	Test	Sig.	Decision
1	The distribution of cUA is the same across categories of group.	Independent-Samples Kruskal-Wallis Test	.009	Reject the null hypothesis.

Asymptotic significances are displayed. The significance level is .05.

```
*Nonparametric Tests: Independent Samples.
NPTESTS
  /INDEPENDENT TEST (cUA) GROUP (group) KRUSKAL_WALLIS(COMPARE=STEPWISE)
  /MISSING SCOPE=ANALYSIS USERMISSING=EXCLUDE
  /CRITERIA ALPHA=0.05  CILEVEL=95.
```

Notes

Output Created		01-NOV-2017 20:02:13
Comments		
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	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	22
Syntax		NPTESTS /INDEPENDENT TEST (cUA) GROUP (group) KRUSKAL_WALLIS(COMPARE=STEPWISE) /MISSING SCOPE=ANALYSIS USERMISSING=EXCLUDE /CRITERIA ALPHA=0.05 CILEVEL=95.
Resources	Processor Time	00:00:00.06
	Elapsed Time	00:00:00.04

Homogeneous Subsets based on cUA

		Subset		
		1	2	3
Sample[1]	2.000	4.500		
	5.000	9.000	9.000	
	4.000		12.375	12.375
	1.000		15.200	15.200
	3.000			20.000
Test Statistic		3.153	3.883	4.754
Sig. (2-sided test)		.076	.143	.093
Adjusted Sig. (2-sided test)		.179	.228	.150

Homogeneous subsets are based on asymptotic significances. The significance level is .05.

[1]Each cell shows the sample average rank of cUA.