The SAS System

Obs	before	after	difference
1	186	188	2
2	171	177	6
3	177	176	-1
4	168	169	1
5	191	196	5
6	172	172	0
7	177	165	-12
8	191	190	-1
9	170	166	-4
10	171	180	9
11	188	181	-7
12	187	172	-15

The SAS System

The UNIVARIATE Procedure
Variable: difference

Moments			
N	12	Sum Weights	12
Mean	-1.4166667	Sum Observations	-17
Std Deviation	7.12815587	Variance	50.8106061
Skewness	-0.6094769	Kurtosis	-0.110357
Uncorrected SS	583	Corrected SS	558.916667
Coeff Variation	-503.16394	Std Error Mean	2.05772135

Basic Statistical Measures			
Location		Variability	
Mean	-1.41667	Std Deviation	7.12816
Median	-0.50000	Variance	50.81061
Mode	-1.00000	Range	24.00000
		Interquartile Range	9.00000

Tests for Location: Mu0=0				
Test	Statistic		p Value	
Student's t	t	-0.68846	Pr > |t|	0.5054
Sign	M	-0.5	Pr >= |M|	1.0000
Signed Rank	S	-5	Pr >= |S|	0.7012

Quantiles (Definition 5)						
				Order Statistics		
Level	Quantile	95% Confidence Limits Distribution Free		LCL Rank	UCL Rank	Coverage
100% Max	9.0					
99%	9.0	.	.	.	.	.
95%	9.0	5	9	10	12	44.01
90%	6.0	5	9	10	12	60.67
75% Q3	3.5	-1	9	6	12	95.41
50% Median	-0.5	-7	5	3	10	96.14
25% Q1	-5.5	-15	0	1	7	95.41
10%	-12.0	-15	-7	1	3	60.67
5%	-15.0	-15	-7	1	3	44.01
1%	-15.0	.	.	.	.	.
0% Min	-15.0					

Extreme Observations			
Lowest		Highest	
Value	Obs	Value	Obs
-15	12	1	4
-12	7	2	1
-7	11	5	5

Extreme Observations			
Lowest		Highest	
Value	Obs	Value	Obs
-4	9	6	2
-1	8	9	10

test for location

Obs	VarName	Test	Testlab	Stat	pType	pValue	Mu0
1	difference	Signed Rank	S	-5	Pr >= |S|	0.7012	0

Quantiles and 95% CIs for quantiles

Obs	Quantile	Estimate	LCLRank	UCLRank
1	50% Median	-0.5	3	10

Quantiles and 95% CIs for quantiles

Obs	treatment	condition	Count
1	0	0	4
2	0	1	112
3	1	0	2
4	1	1	114

í2x2 table analysis of CVD and salt intake dataí

The FREQ Procedure

Frequency Expected Percent Row Pct Col Pct	Table of treatment by condition		
	condition		
treatment	infected	non-infected	Total
std treatment	4 3 1.72 3.45 66.67	112 113 48.28 96.55 49.56	116 50.00
new treatment	2 3 0.86 1.72 33.33	114 113 49.14 98.28 50.44	116 50.00
Total	6 2.59	226 97.41	232 100.00

Statistics for Table of treatment by condition

Statistic	DF	Value	Prob
Chi-Square	1	0.6844	0.4081
Likelihood Ratio Chi-Square	1	0.6973	0.4037
Continuity Adj. Chi-Square	1	0.1711	0.6791
Mantel-Haenszel Chi-Square	1	0.6814	0.4091
Phi Coefficient		0.0543	
Contingency Coefficient		0.0542	
Cramer's V		0.0543	

WARNING: 50% of the cells have expected counts less than 5. (Asymptotic) Chi-Square may not be a valid test.

Pearson Chi-Square Test	
Chi-Square	0.6844
DF	1
Asymptotic Pr > ChiSq	0.4081
Exact Pr >= ChiSq	0.6834

Fisher's Exact Test	
Cell (1,1) Frequency (F)	4
Left-sided Pr <= F	0.8937
Right-sided Pr >= F	0.3417
Table Probability (P)	0.2354
Two-sided Pr <= P	0.6834

Odds Ratio and Relative Risks			
Statistic	Value	95% Confidence Limits	
Odds Ratio	2.0357	0.3655	11.3378
Relative Risk (Column 1)	2.0000	0.3736	10.7070

Odds Ratio and Relative Risks			
Statistic	**Value**	**95% Confidence Limits**	
Relative Risk (Column 2)	0.9825	0.9421	1.0246

Odds Ratio	
Odds Ratio	2.0357
Asymptotic Conf Limits	
95% Lower Conf Limit	0.3655
95% Upper Conf Limit	11.3378
Exact Conf Limits	
95% Lower Conf Limit	0.2844
95% Upper Conf Limit	22.8594

Sample Size = 232

Output of Fisher Exact Test

Label1	cValue1
Left-sided Pr <= F	0.8937
Right-sided Pr >= F	0.3417
Table Probability (P)	0.2354
Two-sided Pr <= P	0.6834

Output of Fisher Exact Test

The FREQ Procedure

Frequency Percent Row Pct Col Pct	Table of treatment by condition		
	condition		
treatment	0	1	Total
0	4 1.72 3.45 66.67	112 48.28 96.55 49.56	116 50.00
1	2 0.86 1.72 33.33	114 49.14 98.28 50.44	116 50.00
Total	6 2.59	226 97.41	232 100.00

Statistics for Table of treatment by condition

Statistic	DF	Value	Prob
Chi-Square	1	0.6844	0.4081
Likelihood Ratio Chi-Square	1	0.6973	0.4037
Continuity Adj. Chi-Square	1	0.1711	0.6791
Mantel-Haenszel Chi-Square	1	0.6814	0.4091
Phi Coefficient		0.0543	
Contingency Coefficient		0.0542	
Cramer's V		0.0543	
WARNING: 50% of the cells have expected counts less than 5. Chi-Square may not be a valid test.			

Fisher's Exact Test	
Cell (1,1) Frequency (F)	4
Left-sided Pr <= F	0.8937
Right-sided Pr >= F	0.3417
Table Probability (P)	0.2354
Two-sided Pr <= P	0.6834

Sample Size = 232

Output of Fisher Exact Test

Obs	executives	method	conf
1	1	Utility	1.3
2	1	Worry	4.8
3	1	Comparis	9.2
4	2	Utility	2.5
5	2	Worry	6.9
6	2	Comparis	14.4
7	3	Utility	7.2
8	3	Worry	9.1
9	3	Comparis	16.5
10	4	Utility	6.8
11	4	Worry	13.2
12	4	Comparis	17.6
13	5	Utility	12.6
14	5	Worry	13.6
15	5	Comparis	15.5

Output of Fisher Exact Test

The GLM Procedure

Class Level Information		
Class	**Levels**	**Values**
executives	5	1 2 3 4 5
method	3	Comparis Utility Worry

Number of Observations Read	15
Number of Observations Used	15

Output of Fisher Exact Test

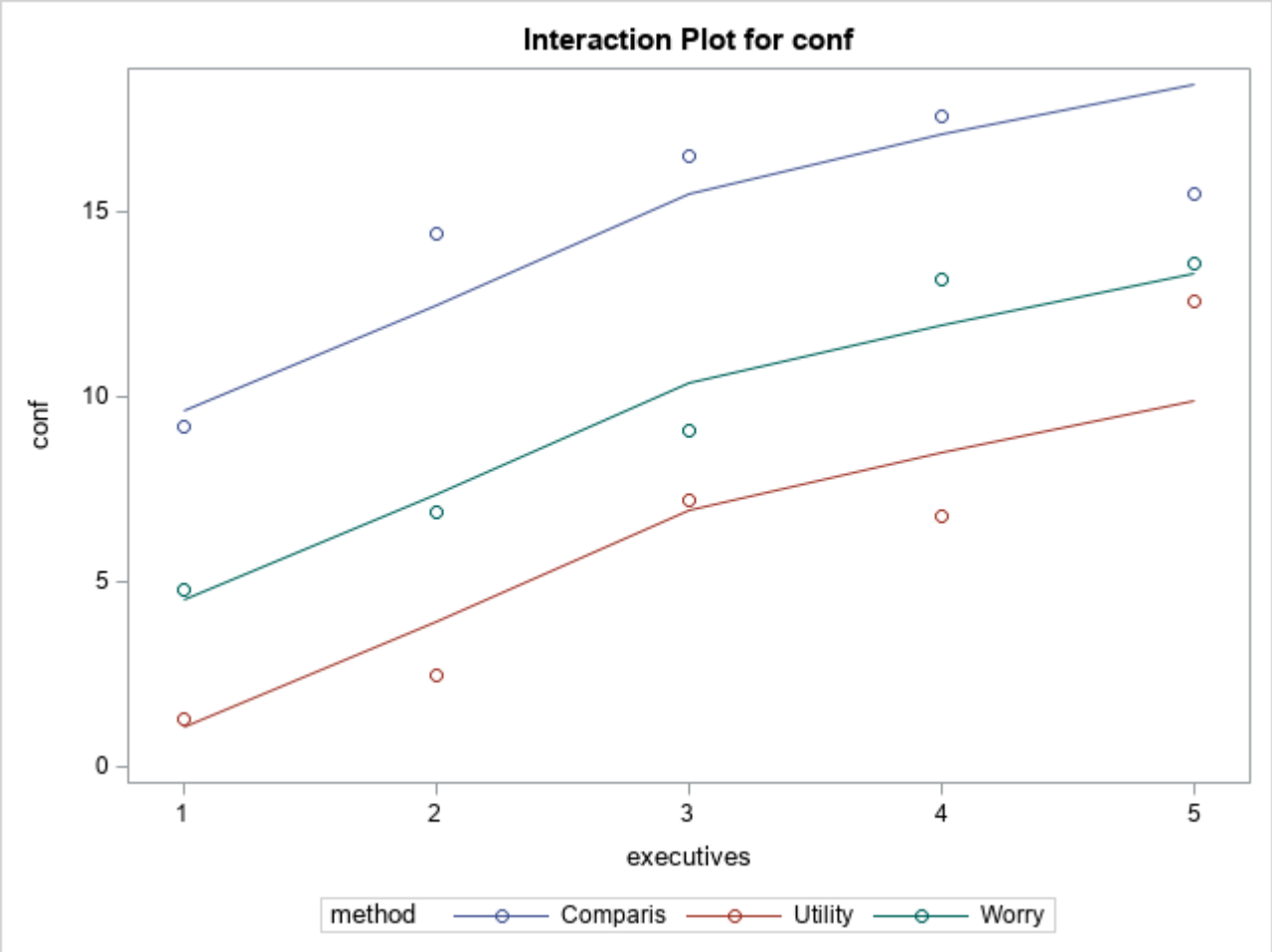
The GLM Procedure

Dependent Variable: conf

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	6	337.7800000	56.2966667	15.10	0.0006
Error	8	29.8240000	3.7280000		
Corrected Total	14	367.6040000			

R-Square	Coeff Var	Root MSE	conf Mean
0.918869	19.15479	1.930803	10.08000

Source	DF	Type I SS	Mean Square	F Value	Pr > F
method	2	185.5360000	92.7680000	24.88	0.0004
executives	4	152.2440000	38.0610000	10.21	0.0031



2-Way ANOVA For Test Detergent and Temperature Effects

The GLM Procedure

Class Level Information		
Class	**Levels**	**Values**
executives	5	1 2 3 4 5
method	3	Comparis Utility Worry

Number of Observations Read	15
Number of Observations Used	15

2-Way ANOVA For Test Detergent and Temperature Effects

The GLM Procedure

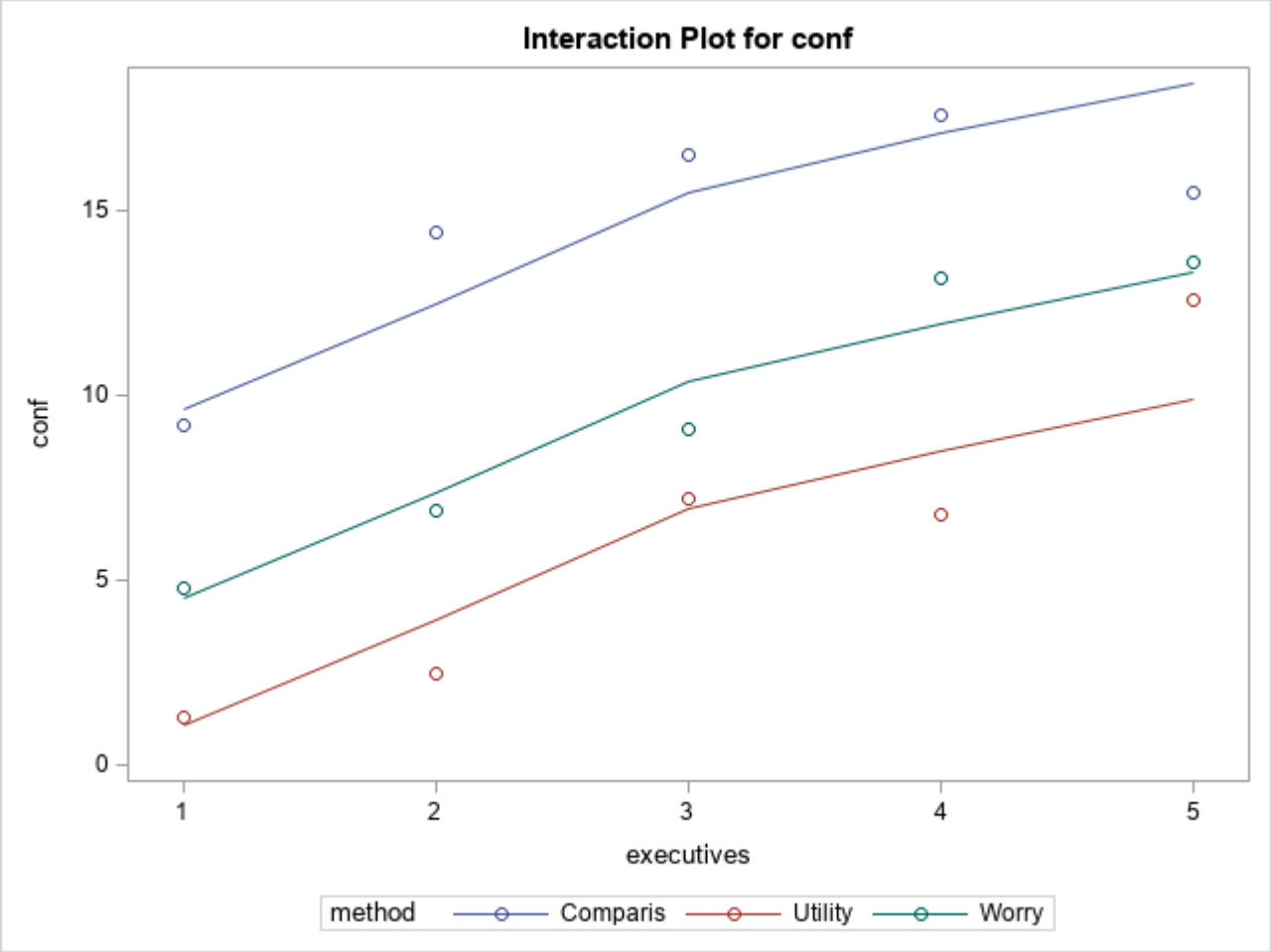
Dependent Variable: conf

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	6	337.7800000	56.2966667	15.10	0.0006
Error	8	29.8240000	3.7280000		
Corrected Total	14	367.6040000			

R-Square	Coeff Var	Root MSE	conf Mean
0.918869	19.15479	1.930803	10.08000

Source	DF	Type I SS	Mean Square	F Value	Pr > F
executives	4	152.2440000	38.0610000	10.21	0.0031
method	2	185.5360000	92.7680000	24.88	0.0004

Contrast	DF	Contrast SS	Mean Square	F Value	Pr > F
Equality of confidence ratings among 1st and 3rd methods	1	65.5360000	65.5360000	17.58	0.0030
Equality of confidence ratings among 1st and 2nd methods	1	183.1840000	183.1840000	49.14	0.0001
Equality of confidence ratings among 2nd and 3rd methods	1	29.5840000	29.5840000	7.94	0.0226
Equality of confidence ratings among 1st and 2nd executives	1	12.0416667	12.0416667	3.23	0.1100
Equality of confidence ratings among 1st and 3rd executives	1	51.0416667	51.0416667	13.69	0.0060
Equality of confidence ratings among 1st and 4th executives	1	82.8816667	82.8816667	22.23	0.0015
Equality of confidence ratings among 1st and 5th executives	1	116.1600000	116.1600000	31.16	0.0005
Equality of confidence ratings among 2nd and 3rd executives	1	13.5000000	13.5000000	3.62	0.0935
Equality of confidence ratings among 2nd and 4th executives	1	31.7400000	31.7400000	8.51	0.0194
Equality of confidence ratings among 2nd and 5th executives	1	53.4016667	53.4016667	14.32	0.0054
Equality of confidence ratings among 3rd and 4th executives	1	3.8400000	3.8400000	1.03	0.3399
Equality of confidence ratings among 3rd and 5th executives	1	13.2016667	13.2016667	3.54	0.0966
Equality of confidence ratings among 4th and 5th executives	1	2.8016667	2.8016667	0.75	0.4112


Interaction Plot for conf
conf
15
10
5
0
1
2
3
4
5
executives
method
Comparis
Utility
Worry

2-Way ANOVA For Test Detergent and Temperature Effects

Obs	gender	result	Count
1	1	1	125
2	1	2	59
3	1	3	21
4	2	1	101
5	2	2	79
6	2	3	16

Breast Cancer and Age of First Birth Study

The FREQ Procedure

Frequency Expected	Table of gender by result			
	result			
gender	Yes	No	Uncertain	Total
Women	125 115.54	59 70.549	21 18.915	205
Men	101 110.46	79 67.451	16 18.085	196
Total	226	138	37	401

Statistics for Table of gender by result

Statistic	DF	Value	Prob
Chi-Square	2	5.9239	0.0517
Likelihood Ratio Chi-Square	2	5.9380	0.0514
Mantel-Haenszel Chi-Square	1	1.2498	0.2636
Phi Coefficient		0.1215	
Contingency Coefficient		0.1207	
Cramer's V		0.1215	

Sample Size = 401

Chisqure Test of 2x2 Contingency Table

Statistic	DF	Value	Prob
Chi-Square	2	5.9239	0.0517

Means and medians from three groups

mean1	mean2	mean3	mean4	med1	med2	med3	med4
8.95714	8.55714	9.67143	7.97143	9	8.4	9.6	8

Scores of each group

Class	N	SumOfScores	StdDevOfSum	MeanScore
group1	7	116.50	18.81	16.64
group2	7	85.50	18.81	12.21
group3	7	173.50	18.81	24.79
group4	7	30.50	18.81	4.36

Means and medians from three groups

mean1	mean2	med1	med2
9.67143	7.97143	9.6	8

Scores of each group

Class	N	SumOfScores	StdDevOfSum	MeanScore
group3	7	77.00	7.82	11.00
group4	7	28.00	7.82	4.00

Kruskal-Wallis Test for means betweeen variety C and D

Obs	VISUAL	CLASS
1	10.1	1
2	10.0	1
3	9.6	1
4	9.3	1
5	9.8	1
6	9.5	1
7	9.4	1
8	7.8	2
9	8.2	2
10	8.1	2
11	7.9	2
12	7.7	2
13	8.0	2
14	8.1	2

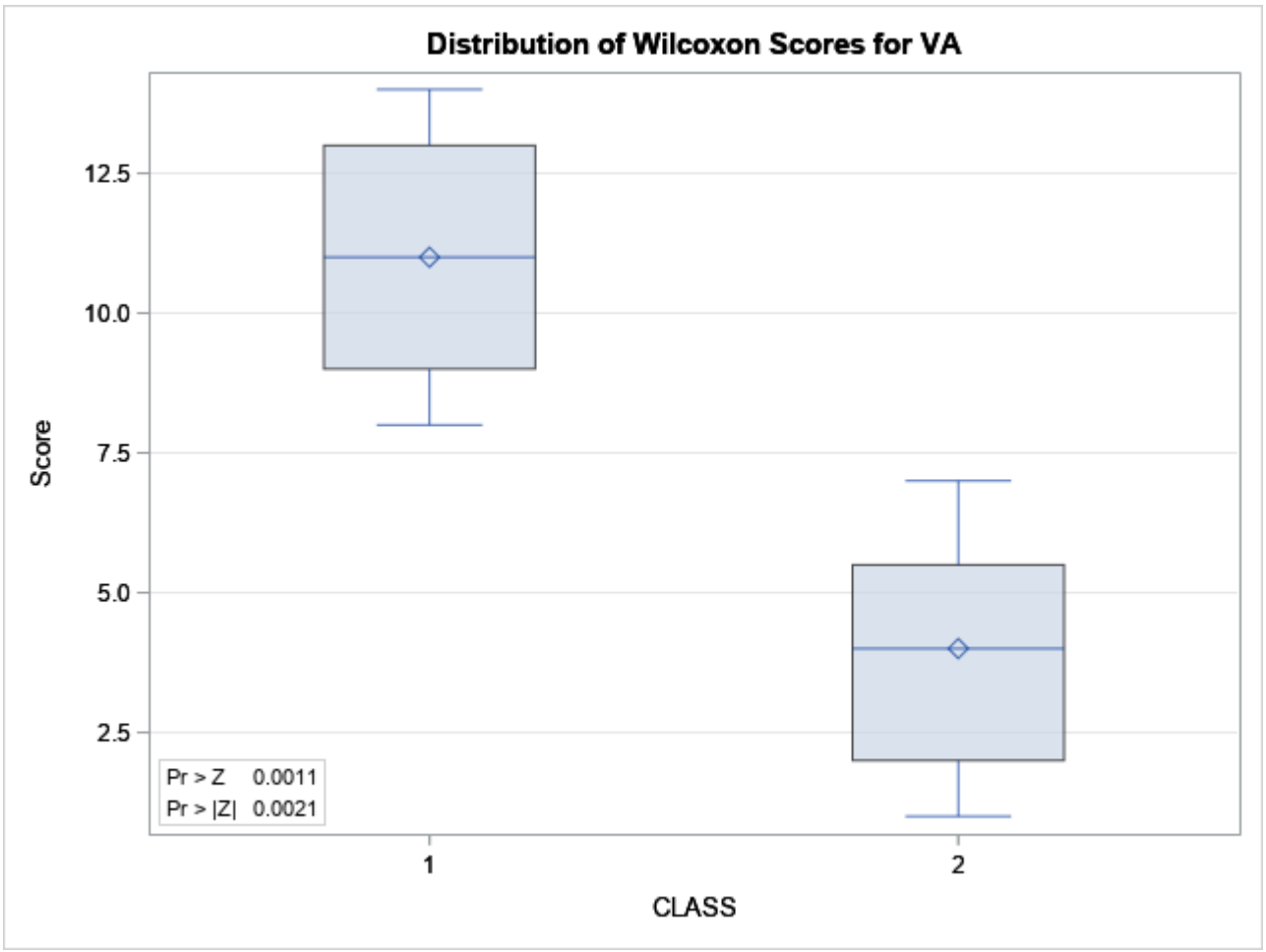
Kruskal-Wallis Test for means betweeen variety C and D

The NPAR1WAY Procedure

Wilcoxon Scores (Rank Sums) for Variable VA Classified by Variable CLASS					
CLASS	N	Sum of Scores	Expected Under H0	Std Dev Under H0	Mean Score
1	7	77.0	52.50	7.817633	11.0
2	7	28.0	52.50	7.817633	4.0
Average scores were used for ties.					

Wilcoxon Two-Sample Test					
				t Approximation	
Statistic	Z	Pr > Z	Pr > |Z|	Pr > Z	Pr > |Z|
77.0000	3.0700	0.0011	0.0021	0.0045	0.0089
Z includes a continuity correction of 0.5.					

Kruskal-Wallis Test		
Chi-Square	DF	Pr > ChiSq
9.8216	1	0.0017



Kruskal-Wallis Test for means betweeen variety C and D

The NPAR1WAY Procedure

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CLASS	N	Sum of Scores	Expected Under H0	Std Dev Under H0	Mean Score
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77.0000	3.0700	0.0011	0.0021	0.0045	0.0089
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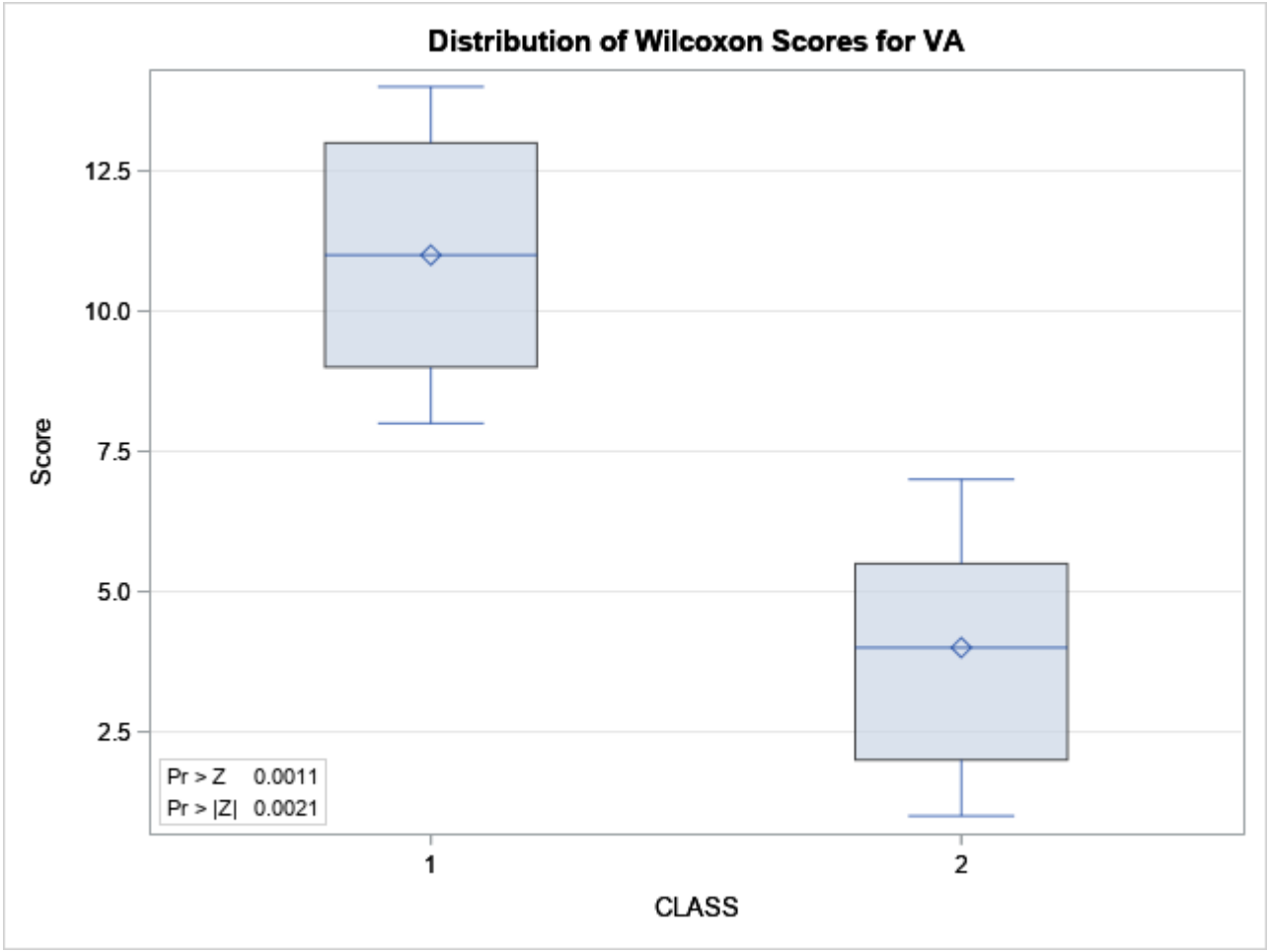


Wilcoxon Rank Sum Test---Test Statistic and P-value Output
Using Outout Deliveray System (ODS)

Obs	VISUAL	CLASS	VA
1	10.1	1	13
2	10.0	1	12
3	9.6	1	10
4	9.3	1	7
5	9.8	1	11
6	9.5	1	9
7	9.4	1	8
8	7.8	2	2
9	8.2	2	6
10	8.1	2	5
11	7.9	2	3
12	7.7	2	1
13	8.0	2	4
14	8.1	2	5

Wilcoxon Rank Sum Test---Score Output
Using Outout Deliveray System (ODS)

Obs	VISUAL	CLASS	VA
1	10.1	1	13
2	10.0	1	12
3	9.6	1	10
4	9.3	1	7
5	9.8	1	11
6	9.5	1	9
7	9.4	1	8
8	7.8	2	2
9	8.2	2	6
10	8.1	2	5
11	7.9	2	3
12	7.7	2	1
13	8.0	2	4
14	8.1	2	5

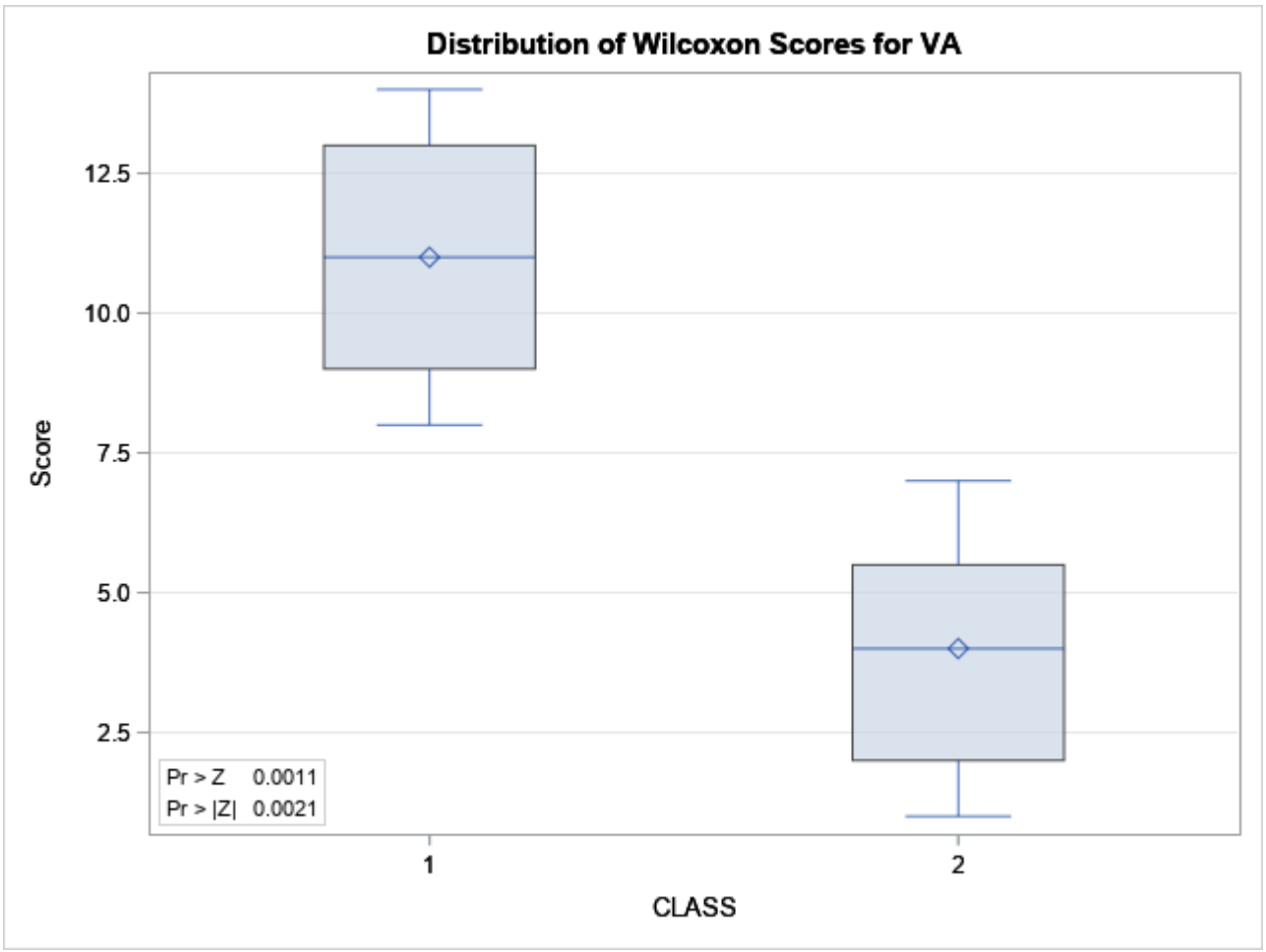
Wilcoxon Rank Sum Test---Score Output Using Outout Deliveray System (ODS)

The NPAR1WAY Procedure

Wilcoxon Scores (Rank Sums) for Variable VA Classified by Variable CLASS					
CLASS	N	Sum of Scores	Expected Under H0	Std Dev Under H0	Mean Score
1	7	77.0	52.50	7.817633	11.0
2	7	28.0	52.50	7.817633	4.0
Average scores were used for ties.					

Wilcoxon Two-Sample Test					
				t Approximation	
Statistic	Z	Pr > Z	Pr > |Z|	Pr > Z	Pr > |Z|
77.0000	3.0700	0.0011	0.0021	0.0045	0.0089
Z includes a continuity correction of 0.5.					

Kruskal-Wallis Test		
Chi-Square	DF	Pr > ChiSq
9.8216	1	0.0017



Wilcoxon Rank Sum Test---Test Statistic and P-value Output Using Outout Deliveray System (ODS)

Obs	Variable	Statistic	Z	Prob1	Prob2	tProb1	tProb2
1	VA	77.0000	3.0700	0.0011	0.0021	0.0045	0.0089

Wilcoxon Rank Sum Test---Score Output
Using Outout Deliveray System (ODS)

Obs	Variable	Class	N	SumOfScores	ExpectedSum	StdDevOfSum	MeanScore
1	VA	1	7	77.0	52.50	7.817633	11.0
2	VA	2	7	28.0	52.50	7.817633	4.0

Wilcoxon Rank Sum Test---Score Output
Using Outout Deliveray System (ODS)

Obs	before	after	difference
1	186	188	2
2	171	177	6
3	177	176	-1
4	168	169	1
5	191	196	5
6	172	172	0
7	177	165	-12
8	191	190	-1
9	170	166	-4
10	171	180	9
11	188	181	-7
12	187	172	-15

Wilcoxon Rank Sum Test---Score Output Using Outout Deliveray System (ODS)

The UNIVARIATE Procedure
Variable: difference

Moments			
N	12	Sum Weights	12
Mean	-1.4166667	Sum Observations	-17
Std Deviation	7.12815587	Variance	50.8106061
Skewness	-0.6094769	Kurtosis	-0.110357
Uncorrected SS	583	Corrected SS	558.916667
Coeff Variation	-503.16394	Std Error Mean	2.05772135

Basic Statistical Measures			
Location		Variability	
Mean	-1.41667	Std Deviation	7.12816
Median	-0.50000	Variance	50.81061
Mode	-1.00000	Range	24.00000
		Interquartile Range	9.00000

Tests for Location: Mu0=0				
Test	Statistic		p Value	
Student's t	t	-0.68846	Pr > |t|	0.5054
Sign	M	-0.5	Pr >= |M|	1.0000
Signed Rank	S	-5	Pr >= |S|	0.7012

Quantiles (Definition 5)						
		95% Confidence Limits Distribution Free		Order Statistics		
Level	Quantile			LCL Rank	UCL Rank	Coverage
100% Max	9.0					
99%	9.0	.	.	.	.	.
95%	9.0	5	9	10	12	44.01
90%	6.0	5	9	10	12	60.67
75% Q3	3.5	-1	9	6	12	95.41
50% Median	-0.5	-7	5	3	10	96.14
25% Q1	-5.5	-15	0	1	7	95.41
10%	-12.0	-15	-7	1	3	60.67
5%	-15.0	-15	-7	1	3	44.01
1%	-15.0	.	.	.	.	.
0% Min	-15.0					

Extreme Observations			
Lowest		Highest	
Value	Obs	Value	Obs
-15	12	1	4
-12	7	2	1

Extreme Observations			
Lowest		Highest	
Value	Obs	Value	Obs
-7	11	5	5
-4	9	6	2
-1	8	9	10

test for location

Obs	VarName	Test	Testlab	Stat	pType	pValue	Mu0
1	difference	Signed Rank	S	-5	Pr >= |S|	0.7012	0

Quantiles and 95% CIs for quantiles

Obs	Quantile	Estimate	LCLRank	UCLRank
1	50% Median	-0.5	3	10

Quantiles and 95% CIs for quantiles

Obs	treatment	condition	Count
1	0	0	4
2	0	1	112
3	1	0	2
4	1	1	114

í2x2 table analysis of CVD and salt intake dataí

The FREQ Procedure

Frequency Expected Percent Row Pct Col Pct	Table of treatment by condition		
	condition		
treatment	infected	non-infected	Total
std treatment	4 3 1.72 3.45 66.67	112 113 48.28 96.55 49.56	116 50.00
new treatment	2 3 0.86 1.72 33.33	114 113 49.14 98.28 50.44	116 50.00
Total	6 2.59	226 97.41	232 100.00

Statistics for Table of treatment by condition

Statistic	DF	Value	Prob
Chi-Square	1	0.6844	0.4081
Likelihood Ratio Chi-Square	1	0.6973	0.4037
Continuity Adj. Chi-Square	1	0.1711	0.6791
Mantel-Haenszel Chi-Square	1	0.6814	0.4091
Phi Coefficient		0.0543	
Contingency Coefficient		0.0542	
Cramer's V		0.0543	

WARNING: 50% of the cells have expected counts less than 5. (Asymptotic) Chi-Square may not be a valid test.

Pearson Chi-Square Test	
Chi-Square	0.6844
DF	1
Asymptotic Pr > ChiSq	0.4081
Exact Pr >= ChiSq	0.6834

Fisher's Exact Test	
Cell (1,1) Frequency (F)	4
Left-sided Pr <= F	0.8937
Right-sided Pr >= F	0.3417
Table Probability (P)	0.2354
Two-sided Pr <= P	0.6834

Odds Ratio and Relative Risks			
Statistic	Value	95% Confidence Limits	
Odds Ratio	2.0357	0.3655	11.3378
Relative Risk (Column 1)	2.0000	0.3736	10.7070

Odds Ratio and Relative Risks			
Statistic	**Value**	**95% Confidence Limits**	
Relative Risk (Column 2)	0.9825	0.9421	1.0246

Odds Ratio	
Odds Ratio	2.0357
Asymptotic Conf Limits	
95% Lower Conf Limit	0.3655
95% Upper Conf Limit	11.3378
Exact Conf Limits	
95% Lower Conf Limit	0.2844
95% Upper Conf Limit	22.8594

Sample Size = 232

Output of Fisher Exact Test

Label1	cValue1
Left-sided Pr <= F	0.8937
Right-sided Pr >= F	0.3417
Table Probability (P)	0.2354
Two-sided Pr <= P	0.6834

Output of Fisher Exact Test

The FREQ Procedure

Frequency Percent Row Pct Col Pct	Table of treatment by condition		
	condition		
treatment	0	1	Total
0	4 1.72 3.45 66.67	112 48.28 96.55 49.56	116 50.00
1	2 0.86 1.72 33.33	114 49.14 98.28 50.44	116 50.00
Total	6 2.59	226 97.41	232 100.00

Statistics for Table of treatment by condition

Statistic	DF	Value	Prob
Chi-Square	1	0.6844	0.4081
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Continuity Adj. Chi-Square	1	0.1711	0.6791
Mantel-Haenszel Chi-Square	1	0.6814	0.4091
Phi Coefficient		0.0543	
Contingency Coefficient		0.0542	
Cramer's V		0.0543	
WARNING: 50% of the cells have expected counts less than 5. Chi-Square may not be a valid test.			

Fisher's Exact Test	
Cell (1,1) Frequency (F)	4
Left-sided Pr <= F	0.8937
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Two-sided Pr <= P	0.6834

Sample Size = 232

Output of Fisher Exact Test

Obs	executives	method	conf
1	1	Utility	1.3
2	1	Worry	4.8
3	1	Comparis	9.2
4	2	Utility	2.5
5	2	Worry	6.9
6	2	Comparis	14.4
7	3	Utility	7.2
8	3	Worry	9.1
9	3	Comparis	16.5
10	4	Utility	6.8
11	4	Worry	13.2
12	4	Comparis	17.6
13	5	Utility	12.6
14	5	Worry	13.6
15	5	Comparis	15.5

Output of Fisher Exact Test

The GLM Procedure

Class Level Information		
Class	**Levels**	**Values**
executives	5	1 2 3 4 5
method	3	Comparis Utility Worry

Number of Observations Read	15
Number of Observations Used	15

Output of Fisher Exact Test

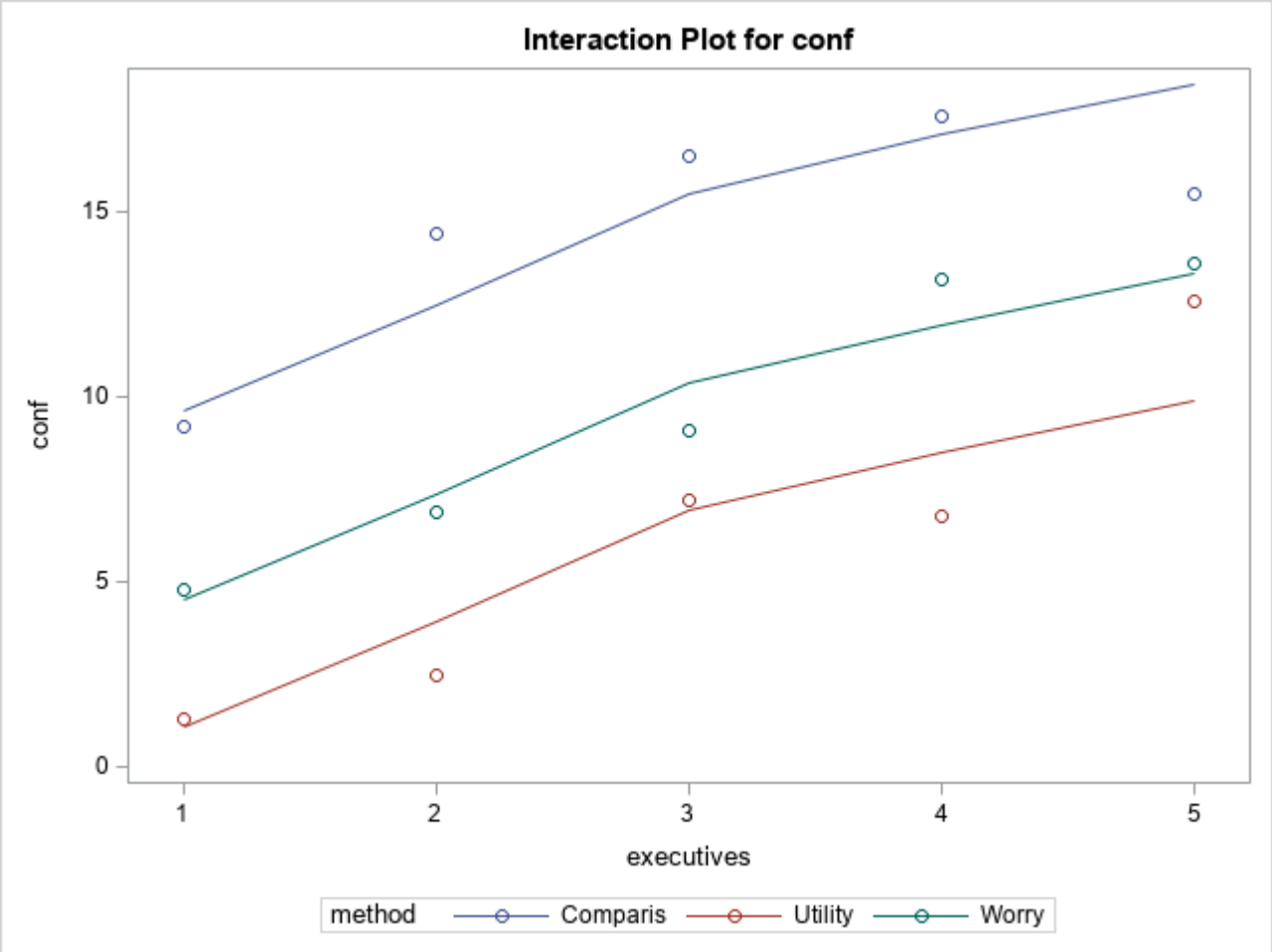
The GLM Procedure

Dependent Variable: conf

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
Model	6	337.7800000	56.2966667	15.10	0.0006
Error	8	29.8240000	3.7280000		
Corrected Total	14	367.6040000			

R-Square	Coeff Var	Root MSE	conf Mean
0.918869	19.15479	1.930803	10.08000

Source	DF	Type I SS	Mean Square	F Value	Pr > F
method	2	185.5360000	92.7680000	24.88	0.0004
executives	4	152.2440000	38.0610000	10.21	0.0031



2-Way ANOVA For Test Detergent and Temperature Effects

The GLM Procedure

Class Level Information		
Class	**Levels**	**Values**
executives	5	1 2 3 4 5
method	3	Comparis Utility Worry

Number of Observations Read	15
Number of Observations Used	15

2-Way ANOVA For Test Detergent and Temperature Effects

The GLM Procedure

Dependent Variable: conf

Source	DF	Sum of Squares	Mean Square	F Value	Pr > F
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Error	8	29.8240000	3.7280000		
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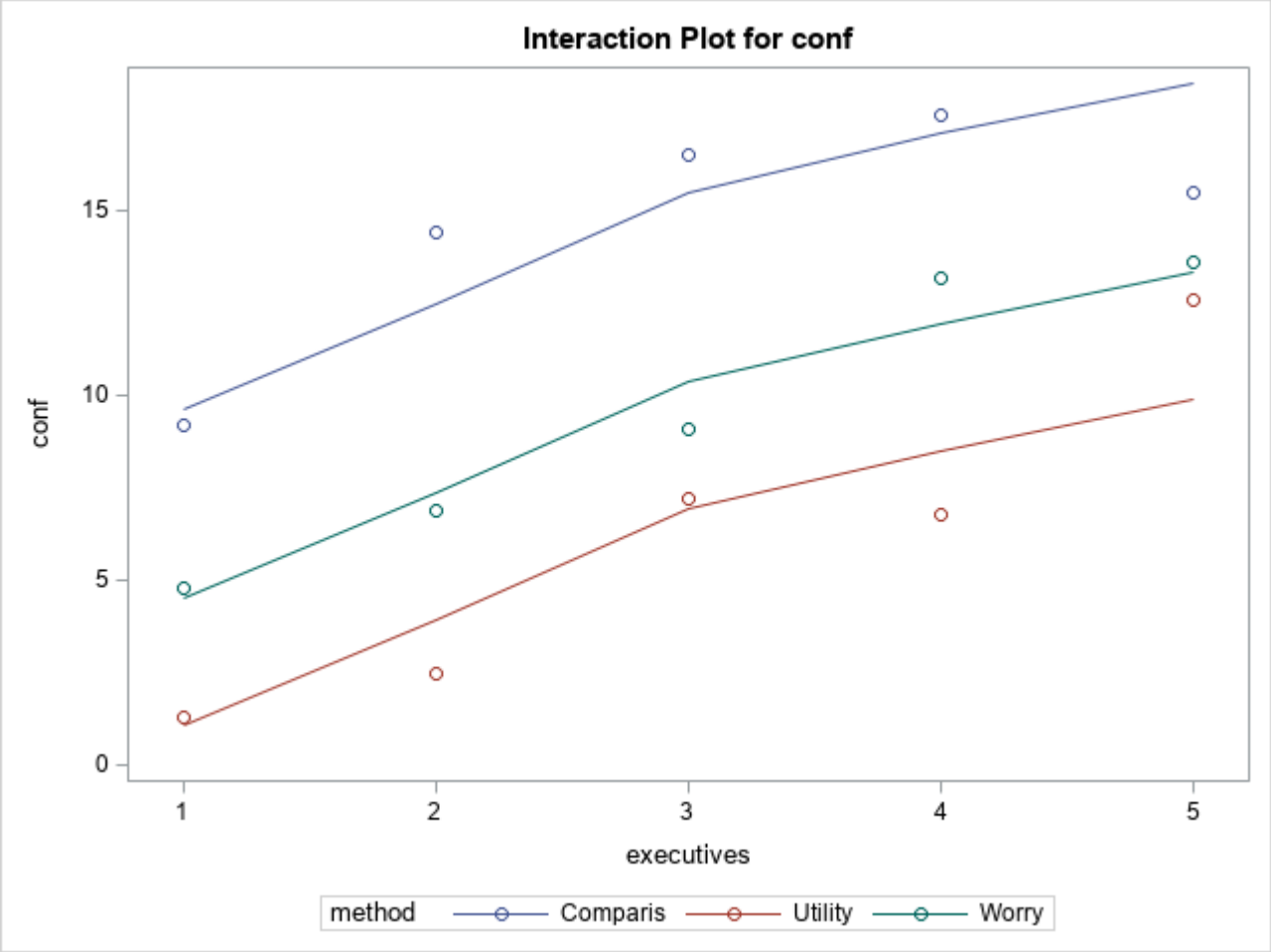
R-Square	Coeff Var	Root MSE	conf Mean
0.918869	19.15479	1.930803	10.08000

Source	DF	Type I SS	Mean Square	F Value	Pr > F
executives	4	152.2440000	38.0610000	10.21	0.0031
method	2	185.5360000	92.7680000	24.88	0.0004

Contrast	DF	Contrast SS	Mean Square	F Value	Pr > F
Equality of confidence ratings among 1st and 3rd methods	1	65.5360000	65.5360000	17.58	0.0030
Equality of confidence ratings among 1st and 2nd methods	1	183.1840000	183.1840000	49.14	0.0001
Equality of confidence ratings among 2nd and 3rd methods	1	29.5840000	29.5840000	7.94	0.0226
Equality of confidence ratings among 1st and 2nd executives	1	12.0416667	12.0416667	3.23	0.1100
Equality of confidence ratings among 1st and 3rd executives	1	51.0416667	51.0416667	13.69	0.0060
Equality of confidence ratings among 1st and 4th executives	1	82.8816667	82.8816667	22.23	0.0015
Equality of confidence ratings among 1st and 5th executives	1	116.1600000	116.1600000	31.16	0.0005
Equality of confidence ratings among 2nd and 3rd executives	1	13.5000000	13.5000000	3.62	0.0935
Equality of confidence ratings among 2nd and 4th executives	1	31.7400000	31.7400000	8.51	0.0194
Equality of confidence ratings among 2nd and 5th executives	1	53.4016667	53.4016667	14.32	0.0054
Equality of confidence ratings among 3rd and 4th executives	1	3.8400000	3.8400000	1.03	0.3399
Equality of confidence ratings among 3rd and 5th executives	1	13.2016667	13.2016667	3.54	0.0966
Equality of confidence ratings among 4th and 5th executives	1	2.8016667	2.8016667	0.75	0.4112


Interaction Plot for conf
conf
15
10
5
0
1
2
3
4
5
executives
method
Comparis
Utility
Worry

2-Way ANOVA For Test Detergent and Temperature Effects

Obs	gender	result	Count
1	1	1	125
2	1	2	59
3	1	3	21
4	2	1	101
5	2	2	79
6	2	3	16

Breast Cancer and Age of First Birth Study

The FREQ Procedure

Frequency Expected	Table of gender by result			
	result			
gender	Yes	No	Uncertain	Total
Women	125 115.54	59 70.549	21 18.915	205
Men	101 110.46	79 67.451	16 18.085	196
Total	226	138	37	401

Statistics for Table of gender by result

Statistic	DF	Value	Prob
Chi-Square	2	5.9239	0.0517
Likelihood Ratio Chi-Square	2	5.9380	0.0514
Mantel-Haenszel Chi-Square	1	1.2498	0.2636
Phi Coefficient		0.1215	
Contingency Coefficient		0.1207	
Cramer's V		0.1215	

Sample Size = 401

Chisqure Test of 2x2 Contingency Table

Statistic	DF	Value	Prob
Chi-Square	2	5.9239	0.0517

Means and medians from three groups

mean1	mean2	mean3	mean4	med1	med2	med3	med4
8.95714	8.55714	9.67143	7.97143	9	8.4	9.6	8

Scores of each group

Class	N	SumOfScores	StdDevOfSum	MeanScore
group1	7	116.50	18.81	16.64
group2	7	85.50	18.81	12.21
group3	7	173.50	18.81	24.79
group4	7	30.50	18.81	4.36

Means and medians from three groups

mean1	mean2	med1	med2
9.67143	7.97143	9.6	8

Scores of each group

Class	N	SumOfScores	StdDevOfSum	MeanScore
group3	7	77.00	7.82	11.00
group4	7	28.00	7.82	4.00

Kruskal-Wallis Test for means betweeen variety C and D

Obs	VISUAL	CLASS
1	10.1	1
2	10.0	1
3	9.6	1
4	9.3	1
5	9.8	1
6	9.5	1
7	9.4	1
8	7.8	2
9	8.2	2
10	8.1	2
11	7.9	2
12	7.7	2
13	8.0	2
14	8.1	2

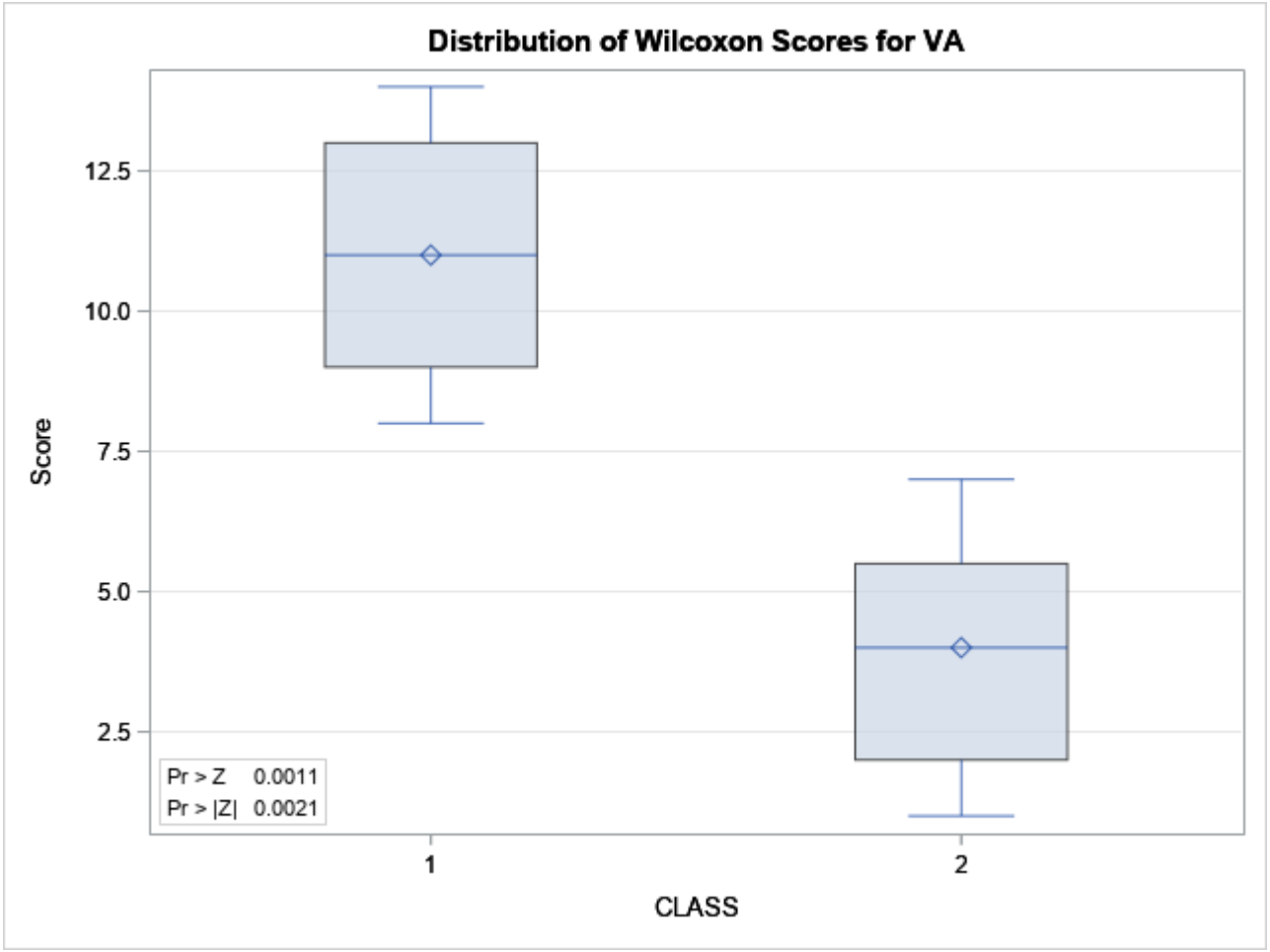
Kruskal-Wallis Test for means betweeen variety C and D

The NPAR1WAY Procedure

Wilcoxon Scores (Rank Sums) for Variable VA Classified by Variable CLASS					
CLASS	N	Sum of Scores	Expected Under H0	Std Dev Under H0	Mean Score
1	7	77.0	52.50	7.817633	11.0
2	7	28.0	52.50	7.817633	4.0
Average scores were used for ties.					

Wilcoxon Two-Sample Test					
				t Approximation	
Statistic	Z	Pr > Z	Pr > |Z|	Pr > Z	Pr > |Z|
77.0000	3.0700	0.0011	0.0021	0.0045	0.0089
Z includes a continuity correction of 0.5.					

Kruskal-Wallis Test		
Chi-Square	DF	Pr > ChiSq
9.8216	1	0.0017



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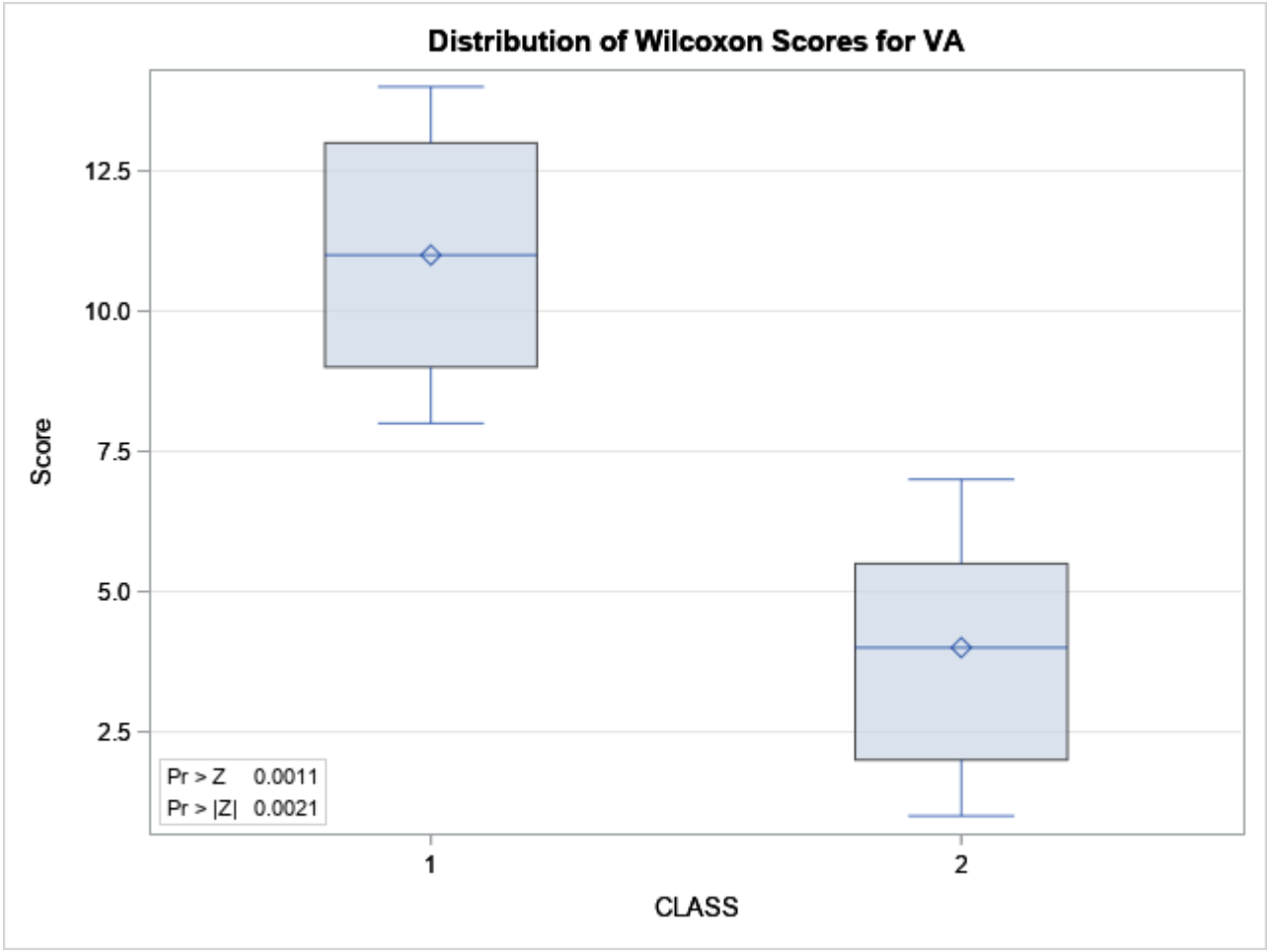

Wilcoxon Rank Sum Test---Test Statistic and P-value Output
Using Outout Deliveray System (ODS)

Obs	VISUAL	CLASS	VA
1	10.1	1	13
2	10.0	1	12
3	9.6	1	10
4	9.3	1	7
5	9.8	1	11
6	9.5	1	9
7	9.4	1	8
8	7.8	2	2
9	8.2	2	6
10	8.1	2	5
11	7.9	2	3
12	7.7	2	1
13	8.0	2	4
14	8.1	2	5

Wilcoxon Rank Sum Test---Score Output
Using Outout Deliveray System (ODS)

Obs	VISUAL	CLASS	VA
1	10.1	1	13
2	10.0	1	12
3	9.6	1	10
4	9.3	1	7
5	9.8	1	11
6	9.5	1	9
7	9.4	1	8
8	7.8	2	2
9	8.2	2	6
10	8.1	2	5
11	7.9	2	3
12	7.7	2	1
13	8.0	2	4
14	8.1	2	5

Wilcoxon Rank Sum Test---Score Output Using Outout Deliveray System (ODS)

The NPAR1WAY Procedure

Wilcoxon Scores (Rank Sums) for Variable VA Classified by Variable CLASS					
CLASS	N	Sum of Scores	Expected Under H0	Std Dev Under H0	Mean Score
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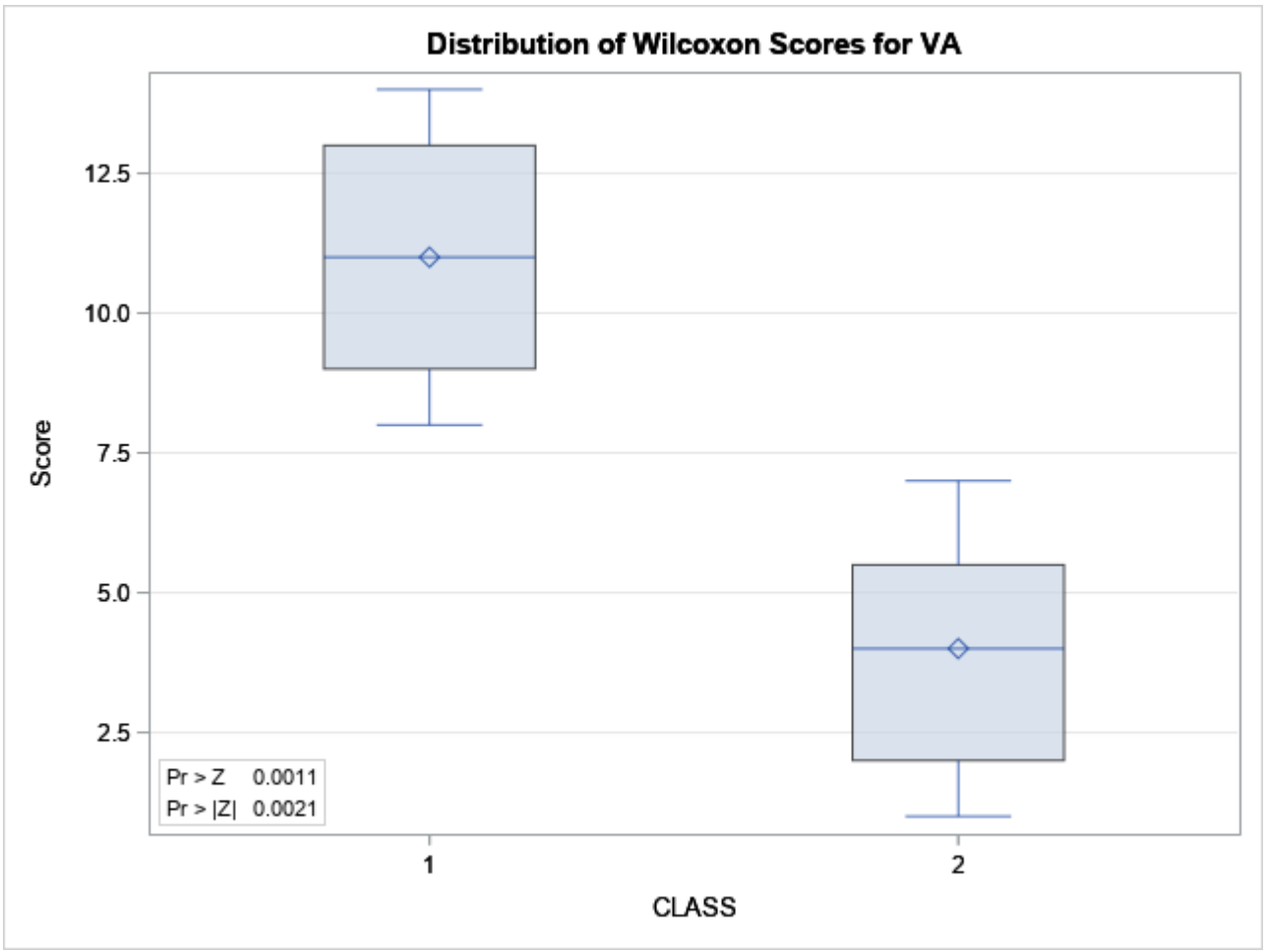

Wilcoxon Rank Sum Test---Test Statistic and P-value Output Using Outout Deliveray System (ODS)

Obs	Variable	Statistic	Z	Prob1	Prob2	tProb1	tProb2
1	VA	77.0000	3.0700	0.0011	0.0021	0.0045	0.0089

Wilcoxon Rank Sum Test---Score Output
Using Outout Deliveray System (ODS)

Obs	Variable	Class	N	SumOfScores	ExpectedSum	StdDevOfSum	MeanScore
1	VA	1	7	77.0	52.50	7.817633	11.0
2	VA	2	7	28.0	52.50	7.817633	4.0