```
 * Chart Builder.
GGRAPH
  /GRAPHDATASET NAME="graphdataset" VARIABLES=method median_mm MISSING=LISTWIS
E REPORTMISSING=NO
  /GRAPHSPEC SOURCE=INLINE.
BEGIN GPL
  SOURCE: s=userSource(id("graphdataset"))
  DATA: method=col(source(s), name("method"), unit.category())
  DATA: median_mm=col(source(s), name("median_mm"))
  DATA: id=col(source(s), name("$CASENUM"), unit.category())
  GUIDE: axis(dim(1), label("method"))
  GUIDE: axis(dim(2), label("median_mm"))
  GUIDE: text.title(label("Simple Boxplot of median_mm by method"))
  SCALE: linear(dim(2), include(0))
  ELEMENT: schema(position(bin.quantile.letter(method*median_mm)), label(id))
END GPL.
```

GGraph

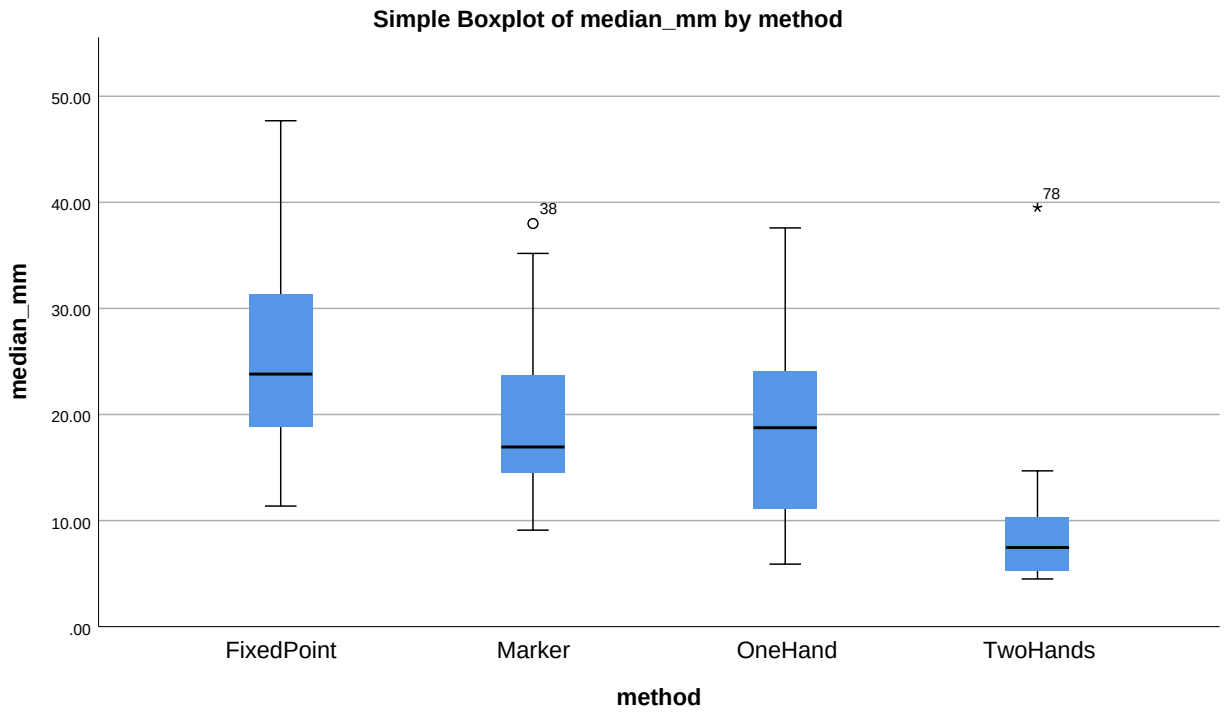
Notes

Output Created		29-MAR-2021 16:12:20
Comments		
Input	Data	C:\Data\SubmittedPapers\DennisPaper\Supplementary Material\Main\medians.sav
	Active Dataset	DataSet1
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	100

Notes

Syntax		GGRAPH /GRAPHDATASET NAME="graphdataset" VARIABLES=method median_mm MISSING=LISTWISE REPORTMISSING=NO /GRAPHSPEC SOURCE=INLINE. BEGIN GPL SOURCE: s=userSource (id("graphdataset")) DATA: method=col (source(s), name ("method"), unit. category()) DATA: median_mm=col (source(s), name ("median_mm")) DATA: id=col(source(s), name("$CASENUM"), unit. category()) GUIDE: axis(dim(1), label ("method")) GUIDE: axis(dim(2), label ("median_mm")) GUIDE: text.title(label ("Simple Boxplot of median_mm by method")) SCALE: linear(dim(2), include(0)) ELEMENT: schema (position(bin.quantile.letter (method*median_mm)), label(id)) END GPL.
Resources	Processor Time	00:00:02,72
	Elapsed Time	00:00:01,08

[DataSet1] C:\Data\SubmittedPapers\DennisPaper\SupplementaryMaterial\Main\medians.sav




```
 DATASET ACTIVATE DataSet1.

SAVE OUTFILE='C:\Data\SubmittedPapers\DennisPaper\SupplementaryMaterial\Main\medians.sav'
  /COMPRESSED.
EXAMINE VARIABLES=median_mm BY method
  /PLOT BOXPLOT STEMLEAF NPPLOT
  /COMPARE GROUPS
  /STATISTICS DESCRIPTIVES
  /CINTERVAL 95
  /MISSING LISTWISE
  /NOTOTAL.
```

Explore

Notes

Output Created		29-MAR-2021 16:14:33
Comments		
Input	Data	C:\Data\SubmittedPapers\DennisPaper\SupplementaryMaterial\Main\medians.sav
	Active Dataset	DataSet1
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	100
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=median_mm BY method /PLOT BOXPLOT STEMLEAF NPPLOT /COMPARE GROUPS /STATISTICS DESCRIPTIVES /CINTERVAL 95 /MISSING LISTWISE /NOTOTAL.
Resources	Processor Time	00:00:03,70
	Elapsed Time	00:00:01,46

Median_mm by method

Case Processing Summary

		Cases					
		Valid		Missing		Total	
	method	N	Percent	N	Percent	N	Percent
median_mm	1	25	100.0%	0	0.0%	25	100.0%
	2	24	96.0%	1	4.0%	25	100.0%
	3	25	100.0%	0	0.0%	25	100.0%
	4	24	96.0%	1	4.0%	25	100.0%

Descriptives

	method			Statistic	Std. Error
median_mm	1	Mean		26.5337	2.07386
		95% Confidence Interval for Mean	Lower Bound	22.2535	
			Upper Bound	30.8139	
		5% Trimmed Mean		26.1776	
		Median		23.8108	
		Variance		107.522	
		Std. Deviation		10.36930	
		Minimum		11.37	
		Maximum		47.69	
		Range		36.32	
		Interquartile Range		14.38	
		Skewness		.687	.464
		Kurtosis		-.600	.902
	2	Mean		18.9258	1.38868
		95% Confidence Interval for Mean	Lower Bound	16.0531	
			Upper Bound	21.7985	
		5% Trimmed Mean		18.5860	
		Median		16.6941	
		Variance		46.282	
		Std. Deviation		6.80310	
		Minimum		9.10	
		Maximum		35.19	
		Range		26.09	
		Interquartile Range		9.43	
		Skewness		.862	.472
		Kurtosis		.249	.918

Descriptives

	method			Statistic	Std. Error
	3	Mean		18.1235	1.71243
		95% Confidence Interval for Mean	Lower Bound	14.5893	
			Upper Bound	21.6578	
		5% Trimmed Mean		17.7715	
		Median		18.7530	
		Variance		73.310	
		Std. Deviation		8.56213	
		Minimum		5.90	
		Maximum		37.59	
		Range		31.69	
		Interquartile Range		13.83	
		Skewness		.361	.464
		Kurtosis		-.508	.902
	4	Mean		8.0931	.61774
		95% Confidence Interval for Mean	Lower Bound	6.8152	
			Upper Bound	9.3710	
		5% Trimmed Mean		7.9421	
		Median		7.2043	
		Variance		9.158	
		Std. Deviation		3.02628	
		Minimum		4.50	
		Maximum		14.69	
		Range		10.19	
		Interquartile Range		4.96	
		Skewness		.576	.472
		Kurtosis		-.762	.918

Tests of Normality

		Kolmogorov-Smirnov[a]			Shapiro-Wilk		
	method	Statistic	df	Sig.	Statistic	df	Sig.
median_mm	1	.148	25	.162	.921	25	.055
	2	.157	24	.132	.931	24	.102
	3	.148	25	.168	.948	25	.221
	4	.147	24	.191	.922	24	.066

a. Lilliefors Significance Correction

```
ONEWAY median_mm BY method
  /STATISTICS DESCRIPTIVES HOMOGENEITY WELCH
  /MISSING ANALYSIS
  /POSTHOC=GH ALPHA(0.05).
```

Oneway

Notes

Output Created		29-MAR-2021 16:16:17
Comments		
Input	Data	C:\Data\SubmittedPapers\DennisPaper\SupplementaryMaterial\Main\medians.sav
	Active Dataset	DataSet1
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	100
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 median_mm BY method /STATISTICS DESCRIPTIVES HOMOGENEITY WELCH /MISSING ANALYSIS /POSTHOC=GH ALPHA (0.05).
Resources	Processor Time	00:00:00,05
	Elapsed Time	00:00:00,06

Descriptives

median_mm

	N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean		Minimum
					Lower Bound	Upper Bound	
1	25	26.5337	10.36930	2.07386	22.2535	30.8139	11.37
2	24	18.9258	6.80310	1.38868	16.0531	21.7985	9.10
3	25	18.1235	8.56213	1.71243	14.5893	21.6578	5.90
4	24	8.0931	3.02628	.61774	6.8152	9.3710	4.50
Total	98	18.0090	10.05766	1.01598	15.9926	20.0254	4.50

Descriptives

median_mm

	Maximum
1	47.69
2	35.19
3	37.59
4	14.69
Total	47.69

Test of Homogeneity of Variances

		Levene Statistic	df1	df2	Sig.
median_mm	Based on Mean	9.650	3	94	.000
	Based on Median	6.815	3	94	.000
	Based on Median and with adjusted df	6.815	3	68.029	.000
	Based on trimmed mean	9.486	3	94	.000

ANOVA

median_mm

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	4197.077	3	1399.026	23.420	.000
Within Groups	5615.111	94	59.735		
Total	9812.189	97			

Robust Tests of Equality of Means

median_mm

	Statistic[a]	df1	df2	Sig.
Welch	40.965	3	46.765	.000

a. Asymptotically F distributed.

Post Hoc Tests

Multiple Comparisons

Dependent Variable: median_mm

Games-Howell

(I) method	(J) method	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
1	2	7.60789*	2.49586	.020	.9291	14.2867
	3	8.41017*	2.68948	.016	1.2433	15.5770
	4	18.44063*	2.16391	.000	12.5353	24.3460
2	1	-7.60789*	2.49586	.020	-14.2867	-.9291
	3	.80227	2.20473	.983	-5.0771	6.6817
	4	10.83273*	1.51988	.000	6.7132	14.9523
3	1	-8.41017*	2.68948	.016	-15.5770	-1.2433
	2	-.80227	2.20473	.983	-6.6817	5.0771
	4	10.03046*	1.82044	.000	5.0816	14.9793
4	1	-18.44063*	2.16391	.000	-24.3460	-12.5353
	2	-10.83273*	1.51988	.000	-14.9523	-6.7132
	3	-10.03046*	1.82044	.000	-14.9793	-5.0816

*. The mean difference is significant at the 0.05 level.

Notes

Output Created		29-MAR-2021 16:17:32
Comments		
Input	Data	C:\Data\SubmittedPapers\DennisPaper\Supplementary Material\Main\medians.sav
	Active Dataset	DataSet1
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	100

Notes

Syntax	GGRAPH /GRAPHDATASET NAME="graphdataset" VARIABLES=method MEANSE(median_mm, 2) [name=" MEAN_median_mm" LOW=" MEAN_median_mm_LOW " HIGH=" MEAN_median_mm_HIG H"] MISSING=LISTWISE REPORTMISSING=NO /GRAPHSPEC SOURCE=INLINE. BEGIN GPL SOURCE: s=userSource (id("graphdataset")) DATA: method=col (source(s), name ("method"), unit. category()) DATA: MEAN_median_mm=col (source(s), name ("MEAN_median_mm")) DATA: LOW=col(source (s), name ("MEAN_median_mm_LO W")) DATA: HIGH=col(source (s), name ("MEAN_median_mm_HI GH")) GUIDE: axis(dim(1), label ("method")) GUIDE: axis(dim(2), label ("Mean median_mm")) GUIDE: text.title(label ("Simple Bar Mean of median_mm by method")) GUIDE: text.footnote (label("Error Bars: 95% CI")) GUIDE: text.subfootnote (label("Error Bars: +/- 2 SE")) SCALE: linear(dim(2), include(0)) ELEMENT: interval (position (method*MEAN_median_ mm), shape.interior (shape.square)) ELEMENT: interval (position(region.spread. range(method* (LOW+HIGH))), shape. interior(shape.ibeam)) END GPL.

Notes

Resources	Processor Time	00:00:01,64
	Elapsed Time	00:00:00,66