

SPSS Independent-Samples Nonparametric Workflow

SPSS Independent-Samples Nonparametric Workflow
Test-specific data preparation and execution

```
>Warning # 4492 on line 13662 in column 42. Text: internet_bin  
>The (ADD) VALUE LABELS command included a symbol other than a value where a  
>value (either numeric or string) was expected. For compatibility with  
>previous systems, a parenthesized value would have been acceptable. All valu  
e  
>labels up to the next slash will be ignored.
```

SPSS nonparametric omnibus workflow

>Warning # 2004 on line 13666. Command name: SUBTITLE

>The subtitle given exceeds 60 characters in length. The first 60 characters
>will be used.

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Kruskal-Wallis distribution test and k-sample median test fo

NPar Tests

Notes		
Output Created		16-JUL-2026 16:49:57
Comments		
Input	Data	D:\DATA ANALYSIS\J Nonparametric Tests\Nonparametric Tests in SPSS\dataset.csv
	Active Dataset	NonparametricTestsinSPS SData
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	649
Missing Value Handling	Definition of Missing	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 /K-W=G3 BY guardian_n(1,3) /MEDIAN=G3 BY guardian_n(1,3) /STATISTICS=DESCRIPT IVE QUARTILES.
Resources	Processor Time	00:00:00.02
	Elapsed Time	00:00:00.02
	Number of Cases Allowed ^a	449389

a. Based on availability of workspace memory.

[NonparametricTestsinSPSSData]

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Descriptive Statistics

	N	Mean	Std. Deviation	Minimum	Maximum	Percentiles	
						25th	50th (Median)
G3	649	11.91	3.231	0	19	10.00	12.00
guardian_n	649	1.83	.519	1	3	2.00	2.00

Descriptive Statistics

	Percentiles
	75th
G3	14.00
guardian_n	2.00

Kruskal-Wallis Test

Ranks

	guardian_n	N	Mean Rank
G3	father	153	346.68
	mother	455	324.10
	other	41	254.12
	Total	649	

Test Statistics^{a,b}

	G3
Kruskal-Wallis H	8.018
df	2
Asymp. Sig.	.018

a. Kruskal Wallis Test

b. Grouping Variable: guardian_n

Median Test

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Frequencies

		guardian_n		
		father	mother	other
G3	> Median	68	199	9
	<= Median	85	256	32

Test Statistics^a

G3	
N	649
Median	12.00
Chi-Square	7.604 ^b
df	2
Asymp. Sig.	.022

a. Grouping Variable: guardian_n

b. 0 cells (0.0%) have expected frequencies less than 5. The minimum expected cell frequency is 17.4.

Explore

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Notes

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Comments		
Input	Data	D:\DATA ANALYSIS\J Nonparametric Tests\Nonparametric Tests in SPSS\dataset.csv
	Active Dataset	NonparametricTestsinSPS SData
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	649
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=G3 BY guardian_n /PLOT=BOXPLOT /STATISTICS=DESCRIPT...
Resources	Processor Time	00:00:00.52
	Elapsed Time	00:00:00.79

guardian_n

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Case Processing Summary

		Valid		Cases Missing		Total	
guardian_n		N	Percent	N	Percent	N	Percent
G3	father	153	100.0%	0	0.0%	153	100.0%
	mother	455	100.0%	0	0.0%	455	100.0%
	other	41	100.0%	0	0.0%	41	100.0%

Descriptives

guardian_n		Statistic		Std. Error
G3	father	Mean	12.20	.258
		95% Confidence Interval for Mean	Lower Bound	11.69
			Upper Bound	12.71
		5% Trimmed Mean	12.36	
		Median	12.00	
		Variance	10.189	
		Std. Deviation	3.192	
		Minimum	0	
		Maximum	19	
		Range	19	
		Interquartile Range	3	
		Skewness	-1.072	.196
		Kurtosis	3.549	.390
	mother	Mean	11.90	.154
		95% Confidence Interval for Mean	Lower Bound	11.59
			Upper Bound	12.20
		5% Trimmed Mean	12.06	
		Median	12.00	
		Variance	10.758	
		Std. Deviation	3.280	
		Minimum	0	
		Maximum	19	
		Range	19	
		Interquartile Range	4	

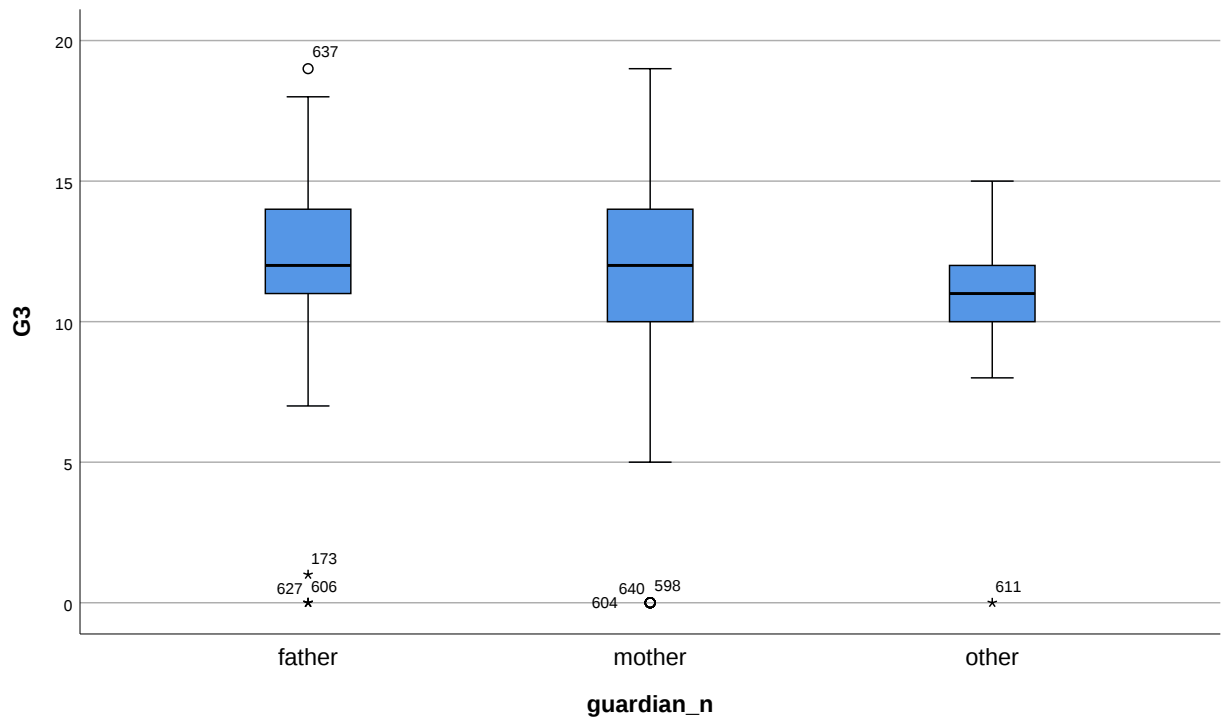
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Descriptives

guardian_n		Statistic	Std. Error
other	Skewness	-.877	.114
	Kurtosis	2.446	.228
	Mean	10.90	.410
	95% Confidence Interval for Mean	Lower Bound	10.07
		Upper Bound	11.73
	5% Trimmed Mean	11.05	
	Median	11.00	
	Variance	6.890	
	Std. Deviation	2.625	
	Minimum	0	
	Maximum	15	
	Range	15	
	Interquartile Range	2	
	Skewness	-1.510	.369
	Kurtosis	6.423	.724

G3

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Graph

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Notes

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Comments		
Input	Data	D:\DATA ANALYSIS\J Nonparametric Tests\Nonparametric Tests in SPSS\dataset.csv
	Active Dataset	NonparametricTestsinSPS SData
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	649
Syntax		GRAPH /BAR(GROUPED) =MEDIAN(G3) BY guardian_n.
Resources	Processor Time	00:00:00.53
	Elapsed Time	00:00:00.60

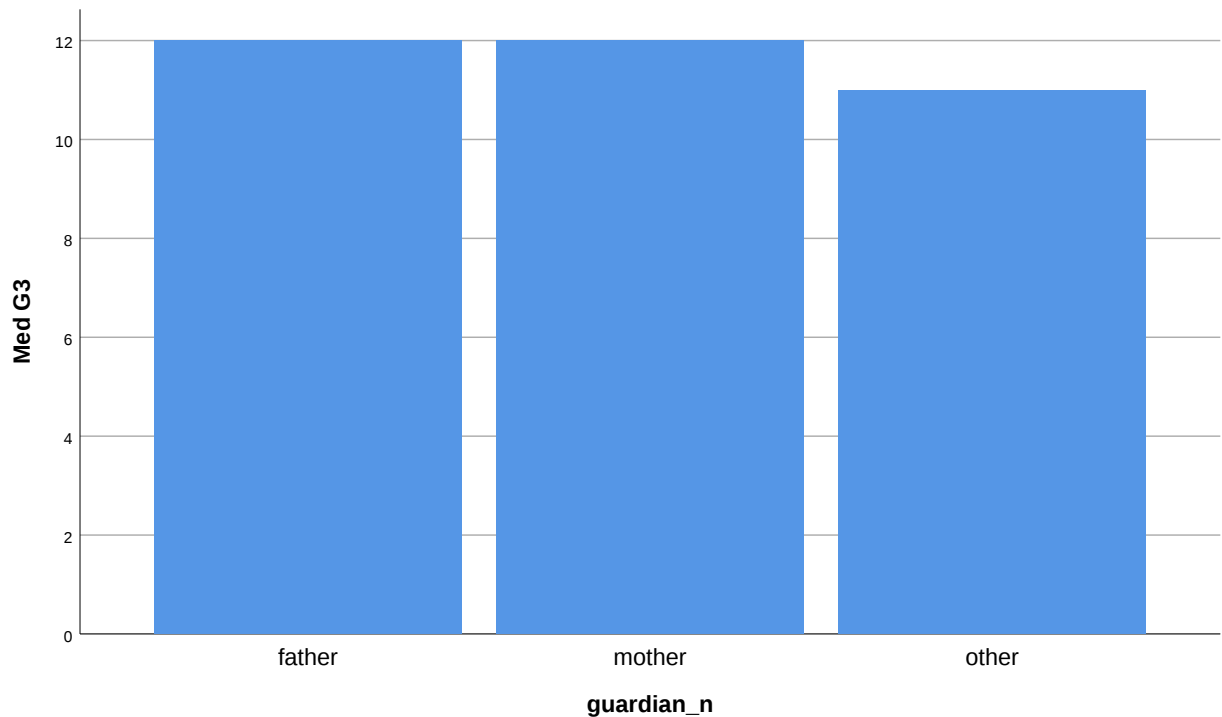
>Warning # 17848

>The requested bar chart type cannot be drawn with the provided data. Instead

,

>Graphics will attempt to draw a simple bar chart.

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SPSS INDEPENDENT-SAMPLES NONPARAMETRIC WORKFLOW

Formula: NPTESTS reports tie-corrected H and the pooled-median contingency chi-square.

Variables: G3, guardian

kruskal_p_value = 0.018153901261942596

kruskal_wallis_h = 8.017739591614378

median_chi_square = 7.604164149245588

median_p_value = 0.02232424269519299

pooled_median = 12.0

Cross-check status: pass

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