

Dunn's Post-Hoc Test

Dunn's Post-Hoc Test
Test-specific data preparation and execution

```
>Warning # 4492 on line 12597 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.
```

Dunn post-hoc rank comparisons

>Warning # 2004 on line 12601. Command name: SUBTITLE

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

Dunn post-hoc rank comparisons
Absences by guardian; tie-corrected Dunn z contrasts and Hol

NPar Tests

Notes

Output Created		16-JUL-2026 16:46:08
Comments		
Input	Data	D:\DATA ANALYSIS\J Nonparametric Tests\Dunns Test\dataset. csv
	Active Dataset	DunnsTestData
	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=absences BY guardian_n(1,3) /STATISTICS=DESCRIPT IVES QUARTILES.
Resources	Processor Time	00:00:00.03
	Elapsed Time	00:00:00.05
	Number of Cases Allowed ^a	449389

a. Based on availability of workspace memory.

[DunnsTestData]

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Descriptive Statistics

	N	Mean	Std. Deviation	Minimum	Maximum	Percentiles	
						25th	50th (Median)
absences	649	3.66	4.641	0	32	.00	2.00
guardian_n	649	1.83	.519	1	3	2.00	2.00

Descriptive Statistics

	Percentiles
	75th
absences	6.00
guardian_n	2.00

Kruskal-Wallis Test

Ranks

	guardian_n	N	Mean Rank
absences	father	153	291.79
	mother	455	328.62
	other	41	408.79
	Total	649	

Test Statistics^{a,b}

	absences
Kruskal-Wallis H	14.024
df	2
Asymp. Sig.	.001

a. Kruskal Wallis Test

b. Grouping Variable: guardian_n

RANK

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Comments		
Input	Data	D:\DATA ANALYSIS\J Nonparametric Tests\Dunns Test\dataset. csv
	Active Dataset	DunnsTestData
	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	All non-missing data are used.
Syntax		RANK VARIABLES=absences (A) /RANK INTO dunn_rank /TIES=MEAN.
Resources	Processor Time	00:00:00.03
	Elapsed Time	00:00:00.05
Variables Created or Modified	dunn_rank	Rank of absences

Created Variables^a

Source Variable	Function	New Variable	Label
absences ^b	Rank	dunn_rank	Rank of absences

a. Mean rank of tied values is used for ties.

b. Ranks are in ascending order.

Means

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Comments		
Input	Data	D:\DATA ANALYSIS\J Nonparametric Tests\Dunns Test\dataset. csv
	Active Dataset	DunnsTestData
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	649
Missing Value Handling	Definition of Missing	For each dependent variable in a table, user-defined missing values for the dependent and all grouping variables are treated as missing.
	Cases Used	Cases used for each table have no missing values in any independent variable, and not all dependent variables have missing values.
Syntax		MEANS TABLES=dunn_rank BY guardian_n /CELLS=COUNT MEAN SUM STDDEV.
Resources	Processor Time	00:00:00.03
	Elapsed Time	00:00:00.19

Case Processing Summary

	Included		Excluded		Total	
	N	Percent	N	Percent	N	Percent
Rank of absences * guardian_n	649	100.0%	0	0.0%	649	100.0%

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Report

Rank of absences

guardian_n	N	Mean	Sum	Std. Deviation
father	153	291.78758	44643.500	175.786884
mother	455	328.61758	149521.000	179.436164
other	41	408.79268	16760.500	199.807375
Total	649	325.00000	210925.000	181.616796

Graph

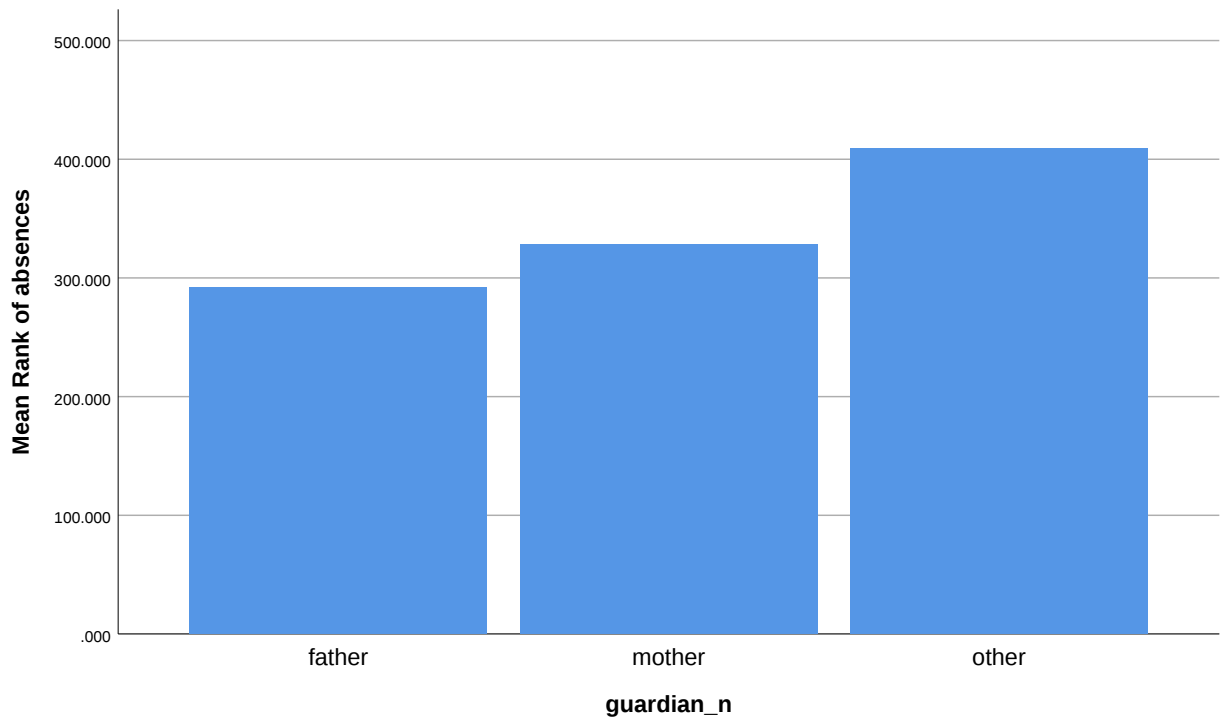
Notes

Output Created		16-JUL-2026 16:46:09
Comments		
Input	Data	D:\DATA ANALYSIS\J Nonparametric Tests\Dunns Test\dataset. csv
	Active Dataset	DunnsTestData
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	649
Syntax		GRAPH /BAR(GROUPED) =MEAN(dunn_rank) BY guardian_n.
Resources	Processor Time	00:00:00.44
	Elapsed Time	00:00:00.82

>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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=====
DUNN'S POST-HOC TEST
Formula: z_ij = (Rbar_i-Rbar_j) / sqrt[(N(N+1)/12-C_tie)(1/n_i+1/n_j)]
Variables: absences, guardian
minimum_holm_p = 0.0007466380881038898
minimum_raw_p = 0.0002488793627012966
variance_base = 32984.660493827156
Cross-check status: pass
=====
```