

Kendall's W Coefficient of Concordance

Kendall's W Coefficient of Concordance
Test-specific data preparation and execution

```
>Warning # 4492 on line 12902 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.
```

Kendall coefficient of concordance W

Kendall coefficient of concordance W
Concordance of within-student G1, G2, and G3 rankings

NPar Tests

Notes

Output Created		16-JUL-2026 16:47:07
Comments		
Input	Data	D:\DATA ANALYSIS\J Nonparametric Tests\Kendalls W Test\dataset.csv
	Active Dataset	KendallsWTestData
	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 /KENDALL=G1 G2 G3 /STATISTICS=DESCRIPTIVES QUANTILES.
Resources	Processor Time	00:00:00.02
	Elapsed Time	00:00:00.02
	Number of Cases Allowed ^a	393216

a. Based on availability of workspace memory.

[KendallsWTestData]

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Descriptive Statistics

	N	Mean	Std. Deviation	Minimum	Maximum	Percentiles	
						25th	50th (Median)
G1	649	11.40	2.745	0	19	10.00	11.00
G2	649	11.57	2.914	0	19	10.00	11.00
G3	649	11.91	3.231	0	19	10.00	12.00

Descriptive Statistics

	Percentiles
	75th
G1	13.00
G2	13.00
G3	14.00

Kendall's W Test

Ranks

	Mean Rank
G1	1.76
G2	1.90
G3	2.34

Test Statistics

N	649
Kendall's W ^a	.129
Chi-Square	167.328
df	2
Asymp. Sig.	.000

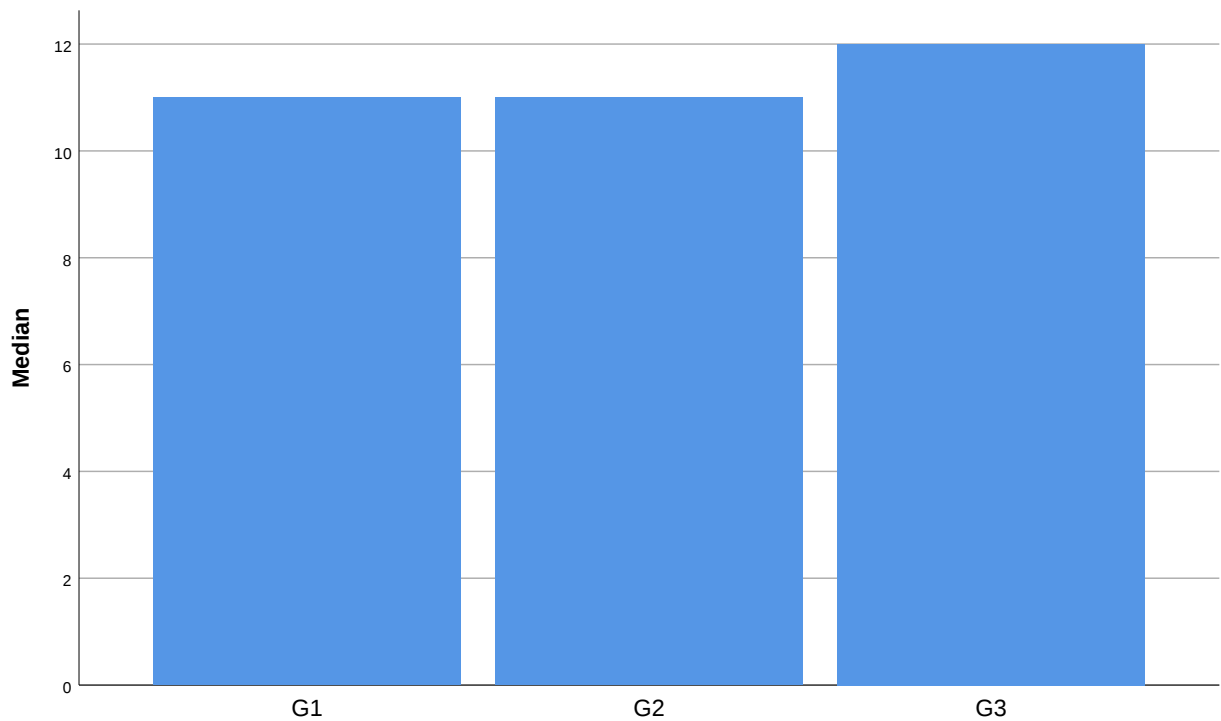
a. Kendall's Coefficient of Concordance

Graph

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	Active Dataset	KendallsWTestData
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	649
Syntax		GRAPH /BAR(SIMPLE) =MEDIAN(G1) MEDIAN (G2) MEDIAN(G3).
Resources	Processor Time	00:00:00.62
	Elapsed Time	00:00:01.01



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KENDALL'S W COEFFICIENT OF CONCORDANCE
Formula:  $W = Q_{\text{Friedman}}/[n(k-1)]$ 
Variables: G1, G2, G3
friedman_chi_square = 167.32827735644634
k_occasions = 3
kendalls_w = 0.12891238625304033
n_blocks = 649
p_value = 4.625154438692089e-37
Cross-check status: pass
=====
```