

Friedman Test

Friedman Test
Test-specific data preparation and execution

```
>Warning # 4492 on line 12750 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.
```

Friedman repeated-measures rank test

Friedman repeated-measures rank test
Within-student comparison of G1, G2, and G3

NPar Tests

Notes

Output Created		16-JUL-2026 16:46:35
Comments		
Input	Data	D:\DATA ANALYSIS\J Nonparametric Tests\Friedman Test\dataset.csv
	Active Dataset	FriedmanTestData
	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 /FRIEDMAN=G1 G2 G3 /STATISTICS=DESCRIPTIVES QUARTILES.
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.

[FriedmanTestData]

Friedman repeated-measures rank test
Within-student comparison of G1, G2, and G3

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

Friedman Test

Ranks

	Mean Rank
G1	1.76
G2	1.90
G3	2.34

Test Statistics^a

N	649
Chi-Square	167.328
df	2
Asymp. Sig.	.000

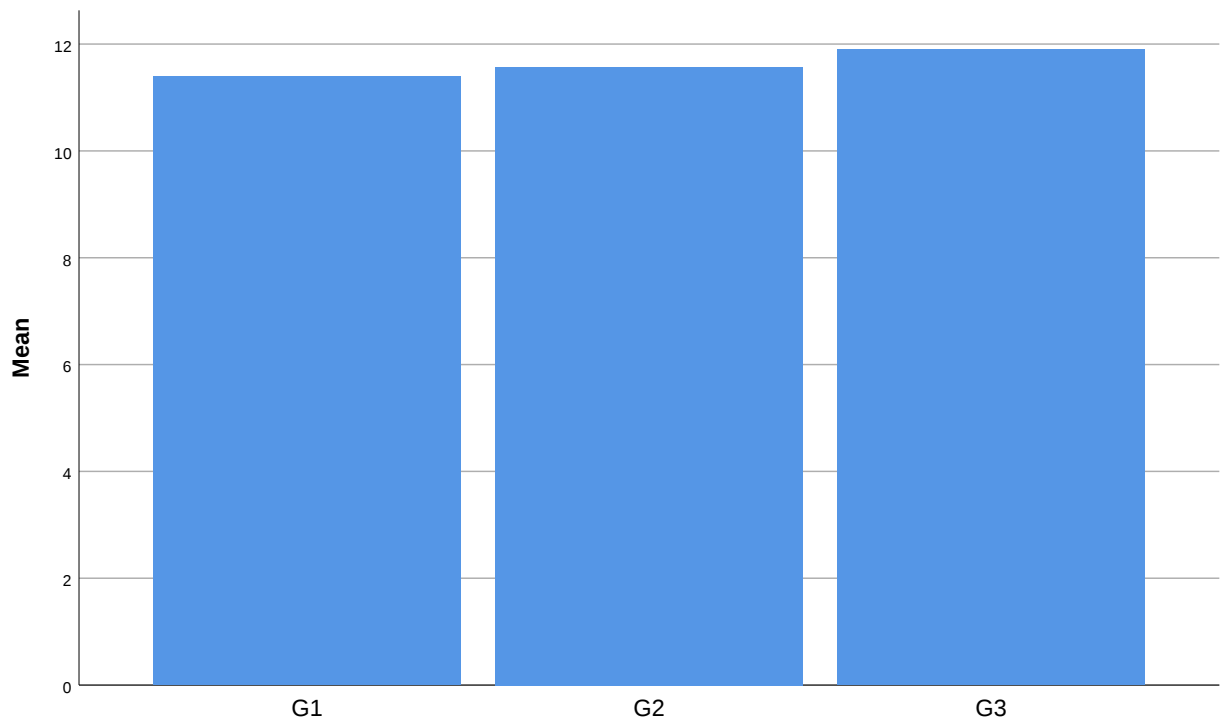
a. Friedman Test

Graph

Friedman repeated-measures rank test
Within-student comparison of G1, G2, and G3

Notes

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Comments		
Input	Data	D:\DATA ANALYSIS\J Nonparametric Tests\Friedman Test\dataset.csv
	Active Dataset	FriedmanTestData
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	649
Syntax		GRAPH /BAR(SIMPLE) =MEAN(G1) MEAN(G2) MEAN(G3).
Resources	Processor Time	00:00:00.66
	Elapsed Time	00:00:00.76



Friedman repeated-measures rank test
Within-student comparison of G1, G2, and G3

```
=====
FRIEDMAN TEST
Formula:  $Q = 12/[n k(k+1)] \sum_j R_j^2 - 3n(k+1)$ , with tie correction.
Variables: G1, G2, G3
degrees_of_freedom = 2
kendalls_w = 0.12891238625304033
p_value = 4.625154438692089e-37
statistic = 167.32827735644634
Cross-check status: pass
=====
```