```
ONEWAY T1 T2 T3 T4 BY University
  /STATISTICS DESCRIPTIVES
  /PLOT MEANS
  /MISSING ANALYSIS
  /POSTHOC=LSD ALPHA(0.05).
```

Oneway

Notes

Output Created		08-MAR-2025 00:45:16
Comments		
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	Active Dataset	DataSet1
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	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	691
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 T1 T2 T3 T4 BY University /STATISTICS DESCRIPTIVES /PLOT MEANS /MISSING ANALYSIS /POSTHOC=LSD ALPHA(0.05).
Resources	Processor Time	00:00:00.28
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Descriptives

		N	Mean	Std. Deviation	Std. Error	95% Confidence Interval for Mean
						Lower Bound
T1	King Abdul-Aziz University	282	2.6230	.90503	.05389	2.5170
	King Saud University	273	2.5960	.71477	.04326	2.5108
	King Fahd University	136	2.6706	.86334	.07403	2.5242
	Total	691	2.6217	.82555	.03141	2.5600
T2	King Abdul-Aziz University	282	3.0057	.87839	.05231	2.9027
	King Saud University	273	2.9282	.84006	.05084	2.8281
	King Fahd University	136	2.4941	.75403	.06466	2.3662
	Total	691	2.8744	.86043	.03273	2.8101
T3	King Abdul-Aziz University	282	3.0073	.83388	.04966	2.9096
	King Saud University	273	2.8494	.71875	.04350	2.7637
	King Fahd University	136	2.7764	.72994	.06259	2.6526
	Total	691	2.8995	.77447	.02946	2.8416
T4	King Abdul-Aziz University	282	3.0585	.84879	.05054	2.9590
	King Saud University	273	3.0062	.74838	.04529	2.9171
	King Fahd University	136	2.5691	.89918	.07710	2.4166
	Total	691	2.9415	.84081	.03199	2.8787

Descriptives

		95% Confidence Interval for Mean	Minimum	Maximum
		Upper Bound		
T1	King Abdul-Aziz University	2.7291	1.00	4.50
	King Saud University	2.6811	1.00	4.20
	King Fahd University	2.8170	1.30	4.10
	Total	2.6834	1.00	4.50
T2	King Abdul-Aziz University	3.1086	1.00	5.00
	King Saud University	3.0283	1.10	4.50
	King Fahd University	2.6220	1.10	3.80
	Total	2.9387	1.00	5.00
T3	King Abdul-Aziz University	3.1050	1.24	4.65
	King Saud University	2.9350	1.00	4.76
	King Fahd University	2.9002	1.76	4.82

	Total	2.9573	1.00	4.82
T4	King Abdul-Aziz University	3.1580	1.00	5.00
	King Saud University	3.0954	1.00	5.00
	King Fahd University	2.7216	1.30	4.70
	Total	3.0043	1.00	5.00

ANOVA

		Sum of Squares	df	Mean Square	F	Sig.
T1	Between Groups	.506	2	.253	.371	.690
	Within Groups	469.748	688	.683		
	Total	470.254	690			
T2	Between Groups	25.318	2	12.659	17.938	.000
	Within Groups	485.519	688	.706		
	Total	510.837	690			
T3	Between Groups	6.024	2	3.012	5.081	.006
	Within Groups	407.839	688	.593		
	Total	413.863	690			
T4	Between Groups	23.864	2	11.932	17.695	.000
	Within Groups	463.934	688	.674		
	Total	487.798	690			

Post Hoc Tests

Multiple Comparisons

LSD

Dependent Variable	(I) University	(J) University	Mean Difference (I-J)
T1	King Abdul-Aziz University	King Saud University	.02708
		King Fahd University	-.04754-
	King Saud University	King Abdul-Aziz University	-.02708-
		King Fahd University	-.07462-
	King Fahd University	King Abdul-Aziz University	.04754
		King Saud University	.07462
T2	King Abdul-Aziz University	King Saud University	.07747
		King Fahd University	.51156*

	King Saud University	King Abdul-Aziz University	-.07747-
		King Fahd University	.43409*
	King Fahd University	King Abdul-Aziz University	-.51156-*
		King Saud University	-.43409-*
	King Abdul-Aziz University	King Saud University	.15791*
		King Fahd University	.23092*
T3	King Saud University	King Abdul-Aziz University	-.15791-*
		King Fahd University	.07300
	King Fahd University	King Abdul-Aziz University	-.23092-*
		King Saud University	-.07300-
	King Abdul-Aziz University	King Saud University	.05228
		King Fahd University	.48939*
T4	King Saud University	King Abdul-Aziz University	-.05228-
		King Fahd University	.43711*
	King Fahd University	King Abdul-Aziz University	-.48939-*
		King Saud University	-.43711-*

Multiple Comparisons

LSD

Dependent Variable	(I) University	(J) University	Std. Error	Sig.
	King Abdul-Aziz University	King Saud University	.07016	.700
		King Fahd University	.08626	.582
	King Saud University	King Abdul-Aziz University	.07016	.700
T1		King Fahd University	.08673	.390
	King Fahd University	King Abdul-Aziz University	.08626	.582
		King Saud University	.08673	.390
	King Abdul-Aziz University	King Saud University	.07133	.278
		King Fahd University	.08770*	.000
	King Saud University	King Abdul-Aziz University	.07133	.278
T2		King Fahd University	.08817*	.000
	King Fahd University	King Abdul-Aziz University	.08770*	.000
		King Saud University	.08817*	.000
	King Abdul-Aziz University	King Saud University	.06537*	.016
		King Fahd University	.08038*	.004
	King Saud University	King Abdul-Aziz University	.06537*	.016
T3		King Fahd University	.08081	.367
	King Fahd University	King Abdul-Aziz University	.08038*	.004
		King Saud University	.08081	.367
	King Abdul-Aziz University	King Saud University	.06972	.454
T4		King Fahd University	.08573*	.000
	King Saud University	King Abdul-Aziz University	.06972	.454

	King Fahd University	King Fahd University	.08619*	.000
		King Abdul-Aziz University	.08573*	.000
		King Saud University	.08619*	.000

Multiple Comparisons

LSD

Dependent Variable	(I) University	(J) University	95% Confidence Interval
			Lower Bound
T1	King Abdul-Aziz University	King Saud University	-.1107-
		King Fahd University	-.2169-
	King Saud University	King Abdul-Aziz University	-.1648-
		King Fahd University	-.2449-
	King Fahd University	King Abdul-Aziz University	-.1218-
		King Saud University	-.0957-
T2	King Abdul-Aziz University	King Saud University	-.0626-
		King Fahd University	.3394*
	King Saud University	King Abdul-Aziz University	-.2175-
		King Fahd University	.2610*
	King Fahd University	King Abdul-Aziz University	-.6837-*
		King Saud University	-.6072-*
T3	King Abdul-Aziz University	King Saud University	.0296*
		King Fahd University	.0731*
	King Saud University	King Abdul-Aziz University	-.2863-*
		King Fahd University	-.0857-
	King Fahd University	King Abdul-Aziz University	-.3887-*
		King Saud University	-.2317-
T4	King Abdul-Aziz University	King Saud University	-.0846-
		King Fahd University	.3211*
	King Saud University	King Abdul-Aziz University	-.1892-
		King Fahd University	.2679*
	King Fahd University	King Abdul-Aziz University	-.6577-*
		King Saud University	-.6063-*

Multiple Comparisons

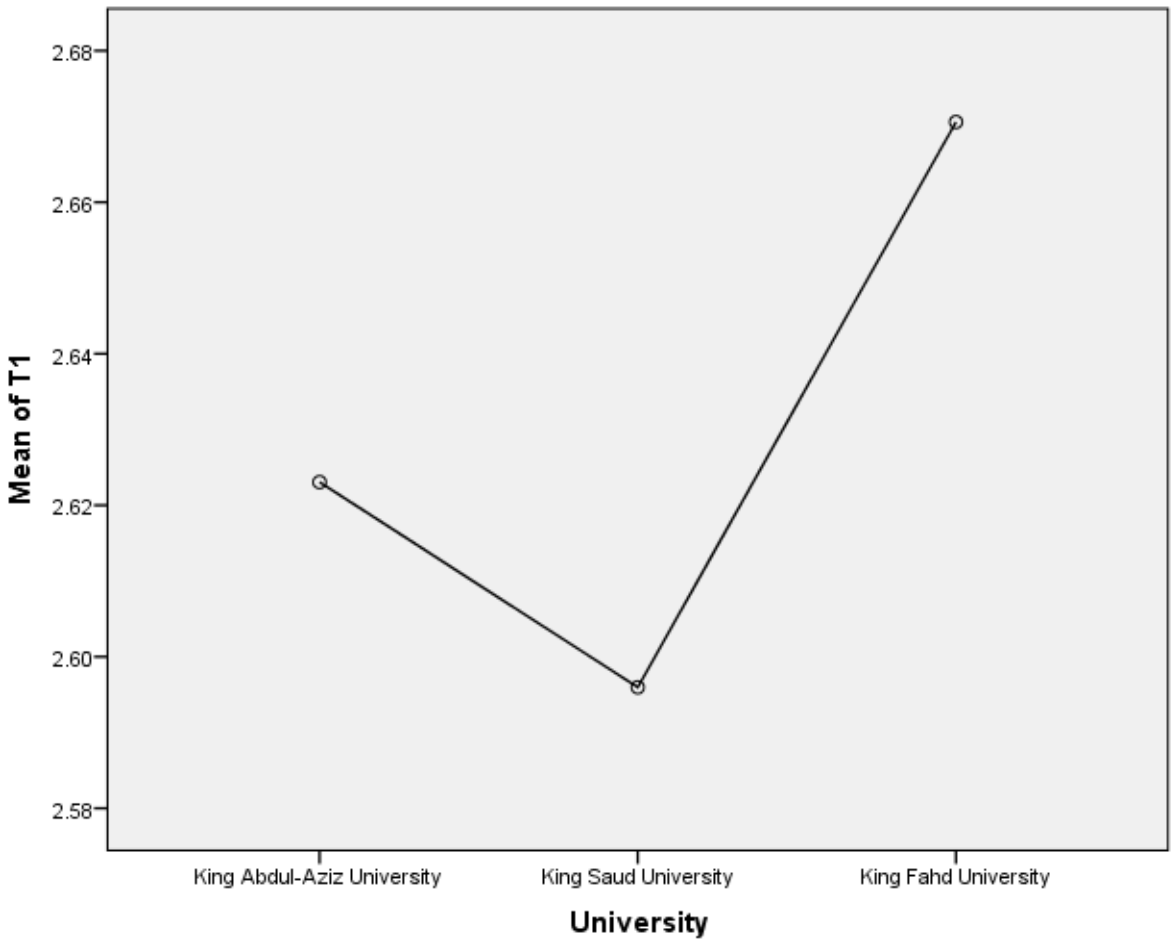
LSD

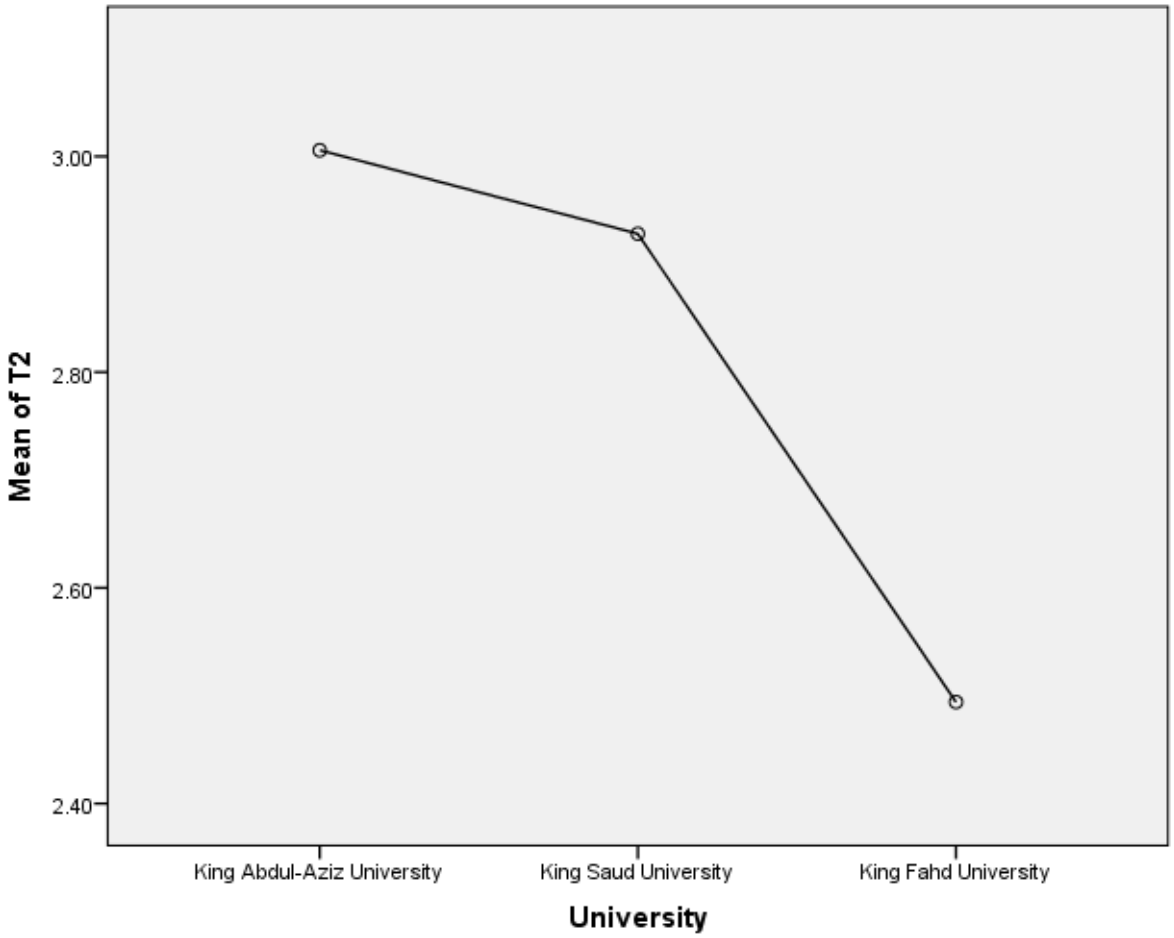
Dependent Variable	(I) University	(J) University	95% Confidence Interval
			Upper Bound
T1	King Abdul-Aziz University	King Saud University	.1648
		King Fahd University	.1218

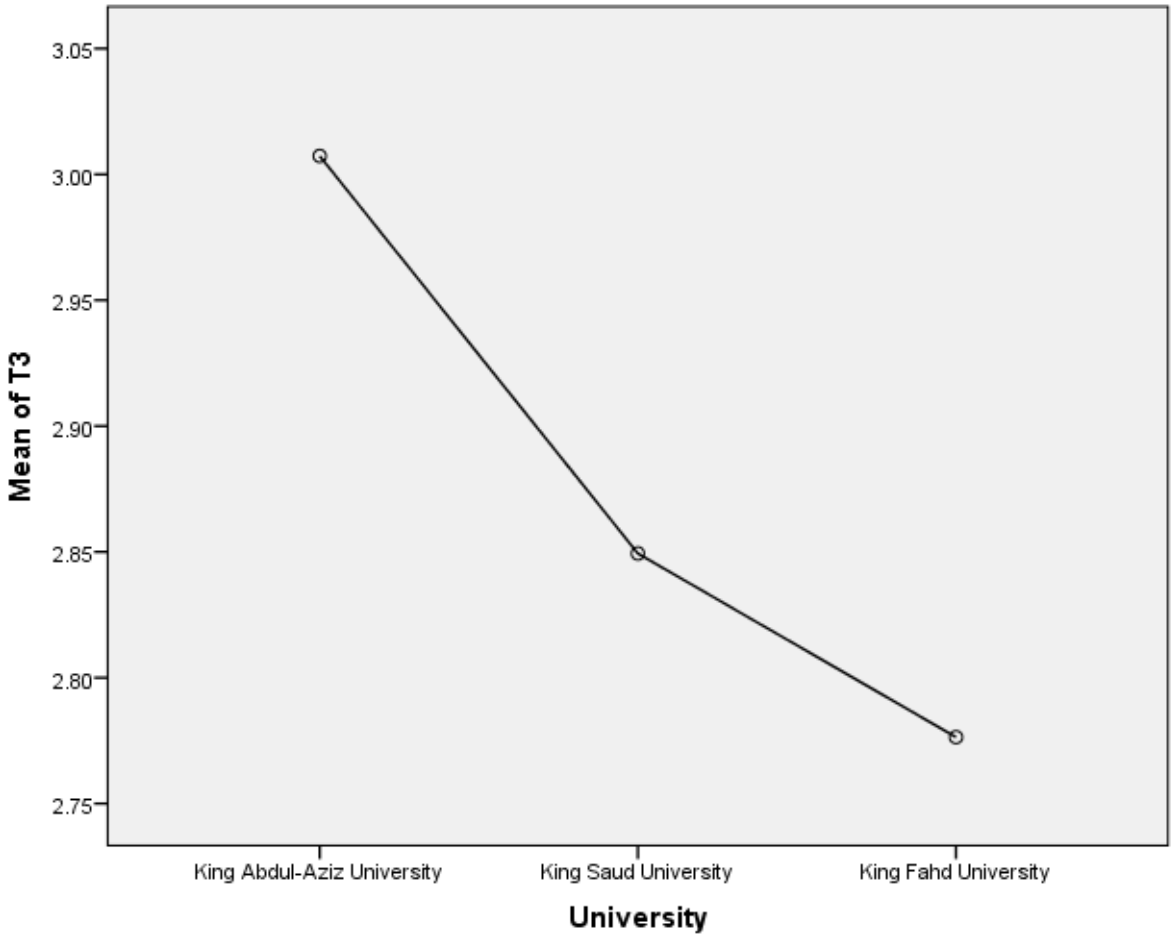
	King Saud University	King Abdul-Aziz University	.1107
		King Fahd University	.0957
	King Fahd University	King Abdul-Aziz University	.2169
		King Saud University	.2449
	King Abdul-Aziz University	King Saud University	.2175
		King Fahd University	.6837*
T2	King Saud University	King Abdul-Aziz University	.0626
		King Fahd University	.6072*
	King Fahd University	King Abdul-Aziz University	-.3394-*
		King Saud University	-.2610-*
	King Abdul-Aziz University	King Saud University	.2863*
		King Fahd University	.3887*
T3	King Saud University	King Abdul-Aziz University	-.0296-*
		King Fahd University	.2317
	King Fahd University	King Abdul-Aziz University	-.0731-*
		King Saud University	.0857
	King Abdul-Aziz University	King Saud University	.1892
		King Fahd University	.6577*
T4	King Saud University	King Abdul-Aziz University	.0846
		King Fahd University	.6063*
	King Fahd University	King Abdul-Aziz University	-.3211-*
		King Saud University	-.2679-*

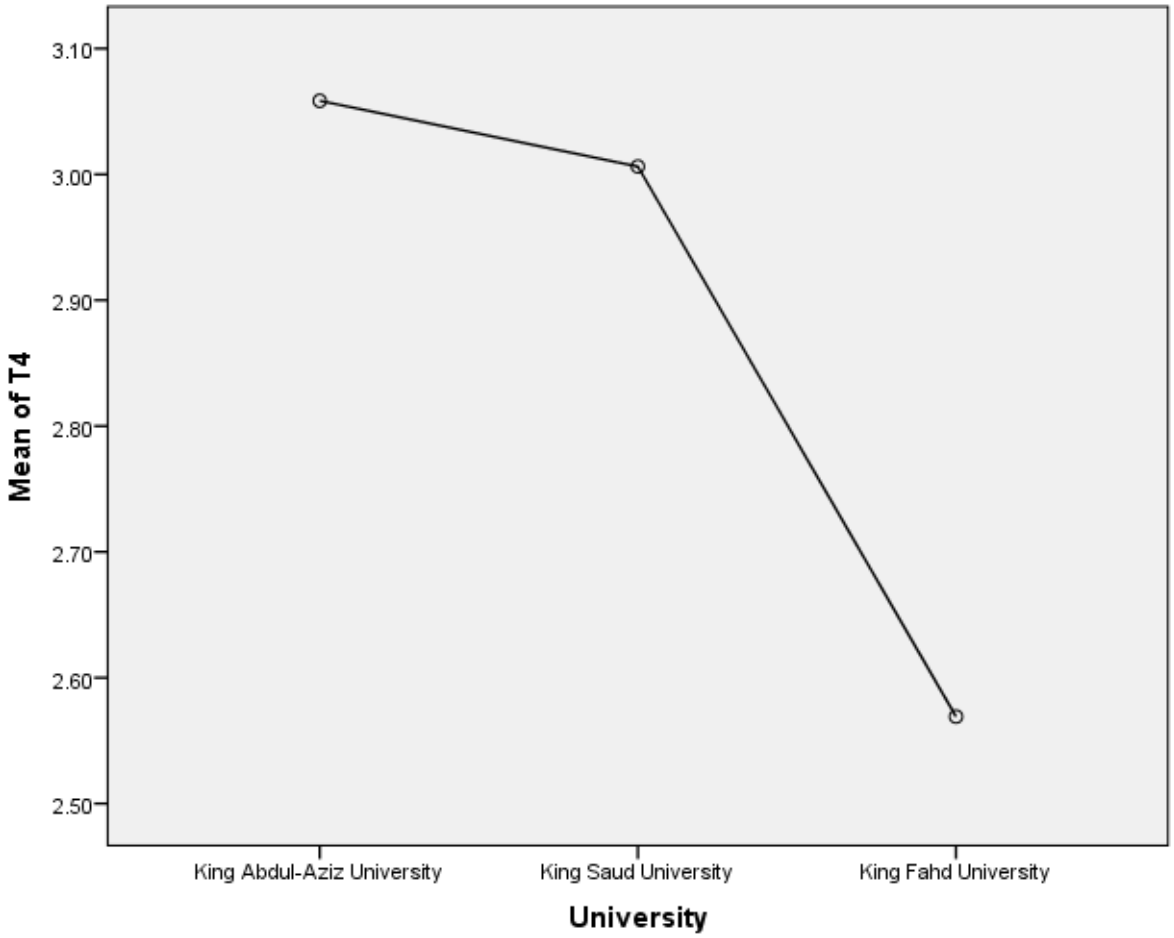
*. The mean difference is significant at the 0.05 level.

Means Plots


2.68
2.66
2.64
2.62
2.60
2.58
Mean of T1
King Abdul-Aziz University
King Saud University
King Fahd University
University


3.00
2.80
2.60
2.40
Mean of T2
King Abdul-Aziz University
King Saud University
King Fahd University
University


3.05
3.00
2.95
2.90
2.85
2.80
2.75
Mean of T3
King Abdul-Aziz University
King Saud University
King Fahd University
University



Oneway

Notes

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	Split File	<none>
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Resources	Processor Time	00:00:00.25
	Elapsed Time	00:00:00.24