Oneway

Notes

Output Created		28-FEB-2022 22:13:53
Comments		
Input	Data	/Users/benjamin/Desktop/AP Research/21-22-PAS-AP-Research/Experiment 2/E2-Raw/E2.csv
	Active Dataset	DataSet2
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	125
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 Difference BY pH /ES=OVERALL /STATISTICS HOMOGENEITY /MISSING ANALYSIS /CRITERIA=CILEVEL (0.95) /POSTHOC=TUKEY ALPHA(0.05).
Resources	Processor Time	00:00:00.02
	Elapsed Time	00:00:00.00

Tests of Homogeneity of Variances

		Levene Statistic	df1	df2	Sig.
Difference	Based on Mean	30.824	4	120	<.001
	Based on Median	7.116	4	120	<.001
	Based on Median and with adjusted df	7.116	4	62.060	<.001
	Based on trimmed mean	27.999	4	120	<.001

ANOVA

Difference

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.108	4	.027	12.081	<.001
Within Groups	.268	120	.002		
Total	.375	124			

ANOVA Effect Sizes[a]

		Point Estimate	95% Confidence Interval Lower	Upper
Difference	Eta-squared	.287	.140	.388
	Epsilon-squared	.263	.112	.368
	Omega-squared Fixed-effect	.262	.111	.366
	Omega-squared Random-effect	.081	.030	.126

a. Eta-squared and Epsilon-squared are estimated based on the fixed-effect model.

Post Hoc Tests

Multiple Comparisons

Dependent Variable: Difference

Tukey HSD

(I) pH	(J) pH	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval Lower Bound	Upper Bound
1	4	-.0176360	.0133581	.679	-.054634	.019362
	7	-.0397800*	.0133581	.028	-.076778	-.002782
	10	-.0612360*	.0133581	<.001	-.098234	-.024238
	13	-.0819560*	.0133581	<.001	-.118954	-.044958
4	1	.0176360	.0133581	.679	-.019362	.054634
	7	-.0221440	.0133581	.464	-.059142	.014854
	10	-.0436000*	.0133581	.012	-.080598	-.006602
	13	-.0643200*	.0133581	<.001	-.101318	-.027322
7	1	.0397800*	.0133581	.028	.002782	.076778
	4	.0221440	.0133581	.464	-.014854	.059142
	10	-.0214560	.0133581	.496	-.058454	.015542
	13	-.0421760*	.0133581	.017	-.079174	-.005178
10	1	.0612360*	.0133581	<.001	.024238	.098234
	4	.0436000*	.0133581	.012	.006602	.080598

Multiple Comparisons

Dependent Variable: Difference

Tukey HSD

(I) pH	(J) pH	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
	7	.0214560	.0133581	.496	-.015542	.058454
	13	-.0207200	.0133581	.532	-.057718	.016278
13	1	.0819560*	.0133581	<.001	.044958	.118954
	4	.0643200*	.0133581	<.001	.027322	.101318
	7	.0421760*	.0133581	.017	.005178	.079174
	10	.0207200	.0133581	.532	-.016278	.057718

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

Homogeneous Subsets

Difference

Tukey HSD[a]

pH	N	Subset for alpha = 0.05			
		1	2	3	4
1	25	-.095412			
4	25	-.077776	-.077776		
7	25		-.055632	-.055632	
10	25			-.034176	-.034176
13	25				-.013456
Sig.		.679	.464	.496	.532

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 25.000.