

## Oneway

### Notes

Output Created		28-FEB-2022 21:54:47
Comments		
Input	Data	/Users/benjamin/Desktop/AP Research/21-22-PAS-AP-Research/Experiment 2/E2-Raw/E2-EA.csv
	Active Dataset	DataSet1
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	25
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

[DataSet1]

### Tests of Homogeneity of Variances

		Levene Statistic	df1	df2	Sig.
Difference	Based on Mean	.411	4	20	.799
	Based on Median	.176	4	20	.948
	Based on Median and with adjusted df	.176	4	19.447	.948
	Based on trimmed mean	.424	4	20	.790

## ANOVA

Difference

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.092	4	.023	229968.394	<.001
Within Groups	.000	20	.000		
Total	.092	24			

## ANOVA Effect Sizes<sup>a</sup>

		Point Estimate	95% Confidence Interval	
			Lower	Upper
Difference	Eta-squared	1.000	1.000	1.000
	Epsilon-squared	1.000	1.000	1.000
	Omega-squared Fixed-effect	1.000	1.000	1.000
	Omega-squared Random-effect	1.000	1.000	1.000

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

## Post Hoc Tests

### Multiple Comparisons

Dependent Variable: Difference

Tukey HSD

		Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
(I) pH	(J) pH				Lower Bound	Upper Bound
1	4	-.0258200 *	.0001996	<.001	-.026417	-.025223
	7	-.0691400 *	.0001996	<.001	-.069737	-.068543
	10	-.1249000 *	.0001996	<.001	-.125497	-.124303
	13	-.1631400 *	.0001996	<.001	-.163737	-.162543
4	1	.0258200 *	.0001996	<.001	.025223	.026417
	7	-.0433200 *	.0001996	<.001	-.043917	-.042723
	10	-.0990800 *	.0001996	<.001	-.099677	-.098483
	13	-.1373200 *	.0001996	<.001	-.137917	-.136723
7	1	.0691400 *	.0001996	<.001	.068543	.069737
	4	.0433200 *	.0001996	<.001	.042723	.043917
	10	-.0557600 *	.0001996	<.001	-.056357	-.055163
	13	-.0940000 *	.0001996	<.001	-.094597	-.093403
10	1	.1249000 *	.0001996	<.001	.124303	.125497
	4	.0990800 *	.0001996	<.001	.098483	.099677

## 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	.0557600 *	.0001996	<.001	.055163	.056357
	13	-.0382400 *	.0001996	<.001	-.038837	-.037643
13	1	.1631400 *	.0001996	<.001	.162543	.163737
	4	.1373200 *	.0001996	<.001	.136723	.137917
	7	.0940000 *	.0001996	<.001	.093403	.094597
	10	.0382400 *	.0001996	<.001	.037643	.038837

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

## Homogeneous Subsets

### Difference

Tukey HSD<sup>a</sup>

pH	N	Subset for alpha = 0.05				
		1	2	3	4	5
1	5	-.200760				
4	5		-.174940			
7	5			-.131620		
10	5				-.075860	
13	5					-.037620
Sig.		1.000	1.000	1.000	1.000	1.000

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 5.000.