Oneway

Notes

Output Created		28-FEB-2022 20:54:07
Comments		
Input	Data	/Users/benjamin/Desktop/AP Research/21-22-PAS-AP-Research/Experiment 1/E1-Raw/E1-SA.csv
	Active Dataset	DataSet3
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	50
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 Temperature /ES=OVERALL /STATISTICS HOMOGENEITY /MISSING ANALYSIS /CRITERIA=CILEVEL (0.95) /POSTHOC=TUKEY ALPHA(0.05).
Resources	Processor Time	00:00:00.06
	Elapsed Time	00:00:00.00

[DataSet3]

Tests of Homogeneity of Variances

		Levene Statistic	df1	df2	Sig.
Difference	Based on Mean	.809	9	40	.611
	Based on Median	.654	9	40	.744
	Based on Median and with adjusted df	.654	9	32.587	.743
	Based on trimmed mean	.823	9	40	.598

ANOVA

Difference

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	.002	9	.000	1940.735	<.001
Within Groups	.000	40	.000		
Total	.002	49			

ANOVA Effect Sizes[a]

		Point Estimate	95% Confidence Interval Lower	Upper
Difference	Eta-squared	.998	.995	.998
	Epsilon-squared	.997	.994	.998
	Omega-squared Fixed-effect	.997	.994	.998
	Omega-squared Random-effect	.975	.950	.979

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) Temperature	(J) Temperature	Mean Difference (I-J)	Std. Error	Sig.	95% … Lower Bound
5	10	-.0015200*	.0002159	<.001	-.002243
	15	-.0027200*	.0002159	<.001	-.003443
	20	-.0058800*	.0002159	<.001	-.006603
	25	-.0070200*	.0002159	<.001	-.007743
	30	-.0099400*	.0002159	<.001	-.010663
	35	-.0120000*	.0002159	<.001	-.012723
	40	-.0158600*	.0002159	<.001	-.016583
	45	-.0170000*	.0002159	<.001	-.017723
	50	-.0188000*	.0002159	<.001	-.019523
10	5	.0015200*	.0002159	<.001	.000797
	15	-.0012000*	.0002159	<.001	-.001923
	20	-.0043600*	.0002159	<.001	-.005083
	25	-.0055000*	.0002159	<.001	-.006223
	30	-.0084200*	.0002159	<.001	-.009143
	35	-.0104800*	.0002159	<.001	-.011203

Multiple Comparisons

Dependent Variable: Difference

Tukey HSD

(I) Temperature	(J) Temperature	95% … Upper Bound
5	10	-.000797
	15	-.001997
	20	-.005157
	25	-.006297
	30	-.009217
	35	-.011277
	40	-.015137
	45	-.016277
	50	-.018077
10	5	.002243
	15	-.000477
	20	-.003637
	25	-.004777
	30	-.007697
	35	-.009757

Multiple Comparisons

Dependent Variable: Difference

Tukey HSD

(I) Temperature	(J) Temperature	Mean Difference (I-J)	Std. Error	Sig.	95% … Lower Bound
	40	-.0143400*	.0002159	<.001	-.015063
	45	-.0154800*	.0002159	<.001	-.016203
	50	-.0172800*	.0002159	<.001	-.018003
15	5	.0027200*	.0002159	<.001	.001997
	10	.0012000*	.0002159	<.001	.000477
	20	-.0031600*	.0002159	<.001	-.003883
	25	-.0043000*	.0002159	<.001	-.005023
	30	-.0072200*	.0002159	<.001	-.007943
	35	-.0092800*	.0002159	<.001	-.010003
	40	-.0131400*	.0002159	<.001	-.013863
	45	-.0142800*	.0002159	<.001	-.015003
	50	-.0160800*	.0002159	<.001	-.016803
20	5	.0058800*	.0002159	<.001	.005157
	10	.0043600*	.0002159	<.001	.003637
	15	.0031600*	.0002159	<.001	.002437
	25	-.0011400*	.0002159	<.001	-.001863
	30	-.0040600*	.0002159	<.001	-.004783
	35	-.0061200*	.0002159	<.001	-.006843
	40	-.0099800*	.0002159	<.001	-.010703
	45	-.0111200*	.0002159	<.001	-.011843
	50	-.0129200*	.0002159	<.001	-.013643
25	5	.0070200*	.0002159	<.001	.006297
	10	.0055000*	.0002159	<.001	.004777
	15	.0043000*	.0002159	<.001	.003577
	20	.0011400*	.0002159	<.001	.000417
	30	-.0029200*	.0002159	<.001	-.003643
	35	-.0049800*	.0002159	<.001	-.005703
	40	-.0088400*	.0002159	<.001	-.009563
	45	-.0099800*	.0002159	<.001	-.010703
	50	-.0117800*	.0002159	<.001	-.012503
30	5	.0099400*	.0002159	<.001	.009217
	10	.0084200*	.0002159	<.001	.007697
	15	.0072200*	.0002159	<.001	.006497
	20	.0040600*	.0002159	<.001	.003337

Multiple Comparisons

Dependent Variable: Difference

Tukey HSD

(I) Temperature	(J) Temperature	95% … Upper Bound
	40	-.013617
	45	-.014757
	50	-.016557
15	5	.003443
	10	.001923
	20	-.002437
	25	-.003577
	30	-.006497
	35	-.008557
	40	-.012417
	45	-.013557
	50	-.015357
20	5	.006603
	10	.005083
	15	.003883
	25	-.000417
	30	-.003337
	35	-.005397
	40	-.009257
	45	-.010397
	50	-.012197
25	5	.007743
	10	.006223
	15	.005023
	20	.001863
	30	-.002197
	35	-.004257
	40	-.008117
	45	-.009257
	50	-.011057
30	5	.010663
	10	.009143
	15	.007943
	20	.004783

Multiple Comparisons

Dependent Variable: Difference

Tukey HSD

(I) Temperature	(J) Temperature	Mean Difference (I-J)	Std. Error	Sig.	95% … Lower Bound
	25	.0029200*	.0002159	<.001	.002197
	35	-.0020600*	.0002159	<.001	-.002783
	40	-.0059200*	.0002159	<.001	-.006643
	45	-.0070600*	.0002159	<.001	-.007783
	50	-.0088600*	.0002159	<.001	-.009583
35	5	.0120000*	.0002159	<.001	.011277
	10	.0104800*	.0002159	<.001	.009757
	15	.0092800*	.0002159	<.001	.008557
	20	.0061200*	.0002159	<.001	.005397
	25	.0049800*	.0002159	<.001	.004257
	30	.0020600*	.0002159	<.001	.001337
	40	-.0038600*	.0002159	<.001	-.004583
	45	-.0050000*	.0002159	<.001	-.005723
	50	-.0068000*	.0002159	<.001	-.007523
40	5	.0158600*	.0002159	<.001	.015137
	10	.0143400*	.0002159	<.001	.013617
	15	.0131400*	.0002159	<.001	.012417
	20	.0099800*	.0002159	<.001	.009257
	25	.0088400*	.0002159	<.001	.008117
	30	.0059200*	.0002159	<.001	.005197
	35	.0038600*	.0002159	<.001	.003137
	45	-.0011400*	.0002159	<.001	-.001863
	50	-.0029400*	.0002159	<.001	-.003663
45	5	.0170000*	.0002159	<.001	.016277
	10	.0154800*	.0002159	<.001	.014757
	15	.0142800*	.0002159	<.001	.013557
	20	.0111200*	.0002159	<.001	.010397
	25	.0099800*	.0002159	<.001	.009257
	30	.0070600*	.0002159	<.001	.006337
	35	.0050000*	.0002159	<.001	.004277
	40	.0011400*	.0002159	<.001	.000417
	50	-.0018000*	.0002159	<.001	-.002523
50	5	.0188000*	.0002159	<.001	.018077
	10	.0172800*	.0002159	<.001	.016557

Multiple Comparisons

Dependent Variable: Difference

Tukey HSD

(I) Temperature	(J) Temperature	95% … Upper Bound
	25	.003643
	35	-.001337
	40	-.005197
	45	-.006337
	50	-.008137
35	5	.012723
	10	.011203
	15	.010003
	20	.006843
	25	.005703
	30	.002783
	40	-.003137
	45	-.004277
	50	-.006077
40	5	.016583
	10	.015063
	15	.013863
	20	.010703
	25	.009563
	30	.006643
	35	.004583
	45	-.000417
	50	-.002217
45	5	.017723
	10	.016203
	15	.015003
	20	.011843
	25	.010703
	30	.007783
	35	.005723
	40	.001863
	50	-.001077
50	5	.019523
	10	.018003

Multiple Comparisons

Dependent Variable: Difference

Tukey HSD

(I) Temperature	(J) Temperature	Mean Difference (I-J)	Std. Error	Sig.	95% … Lower Bound
	15	.0160800*	.0002159	<.001	.015357
	20	.0129200*	.0002159	<.001	.012197
	25	.0117800*	.0002159	<.001	.011057
	30	.0088600*	.0002159	<.001	.008137
	35	.0068000*	.0002159	<.001	.006077
	40	.0029400*	.0002159	<.001	.002217
	45	.0018000*	.0002159	<.001	.001077

Multiple Comparisons

Dependent Variable: Difference

Tukey HSD

(I) Temperature	(J) Temperature	95% … Upper Bound
	15	.016803
	20	.013643
	25	.012503
	30	.009583
	35	.007523
	40	.003663
	45	.002523

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

Homogeneous Subsets

Difference

Tukey HSD[a]

Temperature	N	Subset for alpha = 0.05					
		1	2	3	4	5	6
5	5	-.021960					
10	5		-.020440				
15	5			-.019240			
20	5				-.016080		
25	5					-.014940	
30	5						-.012020
35	5						
40	5						
45	5						
50	5						
Sig.		1.000	1.000	1.000	1.000	1.000	1.000

Difference

Tukey HSD[a]

Temperature	Subset for alpha = 0.05			
	7	8	9	10
5				
10				
15				
20				
25				
30				
35	-.009960			
40		-.006100		
45			-.004960	
50				-.003160
Sig.	1.000	1.000	1.000	1.000

Means for groups in homogeneous subsets are displayed.

a. Uses Harmonic Mean Sample Size = 5.000.