

GLM Depression Anxiety Psychopathy BY Workplace

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/METHOD=SSTYPE(3)
/INTERCEPT=INCLUDE
/POSTHOC=Workplace(TUKEY)
/PLOT=PROFILE(Workplace)
/PRINT=DESCRIPTIVE ETASQ HOMOGENEITY
/CRITERIA=ALPHA(.05)
/DESIGN= Workplace.

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General Linear Model

Notes

Output Created		15-APR-2020 19:36:...
Comments		
Input	Data	/Users/nathanielstafford /OneDrive - University of Central Oklahoma/Teaching/PSY 3713 Spring 2020/Final Project/Final_Project.sav
	Active Dataset	DataSet1
	Filter	<none>
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	94
Missing Value Handling	Definition of Missing	User-defined missing values are treated as missing.
	Cases Used	Statistics are based on all cases with valid data for all variables in the model.
Syntax		GLM Depression Anxiety Psychopathy BY Workplace /METHOD=SSTYPE(3) /INTERCEPT=INCLUDE /POSTHOC=Workplace (TUKEY) /PLOT=PROFILE (Workplace) /PRINT=DESCRIPTIVE ETASQ HOMOGENEITY /CRITERIA=ALPHA(.05) /DESIGN= Workplace.
Resources	Processor Time	00:00:01.84
	Elapsed Time	00:00:02.00

Between-Subjects Factors

		Value Label	N
Workplace	1.00	Black Mesa	14
	2.00	Aperture Science	15
	3.00	Citadel	11

Descriptive Statistics

	Workplace	Mean	Std. Deviation	N
Depression	Black Mesa	60.2857	12.33150	14
	Aperture Science	143.4667	13.18477	15
	Citadel	105.0000	25.23093	11
	Total	103.7750	39.51727	40
Anxiety	Black Mesa	43.0000	15.29203	14
	Aperture Science	99.6000	9.01427	15
	Citadel	48.5455	25.56311	11
	Total	65.7500	31.37919	40
Psychopathy	Black Mesa	3.7143	.91387	14
	Aperture Science	3.1333	1.50555	15
	Citadel	8.8182	.98165	11
	Total	4.9000	2.71558	40

Box's Test of Equality of Covariance Matrices^a

Box's M	38.876
F	2.844
df1	12
df2	5522.531
Sig.	.001

Tests the null hypothesis that the observed covariance matrices of the dependent variables are equal across groups.

a. Design: Intercept + Workplace

Levene's Test of Equality of Error Variances^a

	F	df1	df2	Sig.
Depression	4.116	2	37	.024
Anxiety	34.145	2	37	.000
Psychopathy	2.466	2	37	.099

Tests the null hypothesis that the error variance of the dependent variable is equal across groups.

a. Design: Intercept + Workplace

Multivariate Tests^a

Effect		Value	F	Hypothesis df	Error df	Sig.
Intercept	Pillai's Trace	.984	713.741 ^b	3.000	35.000	.000
	Wilks' Lambda	.016	713.741 ^b	3.000	35.000	.000
	Hotelling's Trace	61.178	713.741 ^b	3.000	35.000	.000
	Roy's Largest Root	61.178	713.741 ^b	3.000	35.000	.000
Workplace	Pillai's Trace	1.655	57.636	6.000	72.000	.000
	Wilks' Lambda	.029	56.344 ^b	6.000	70.000	.000
	Hotelling's Trace	9.712	55.035	6.000	68.000	.000
	Roy's Largest Root	5.413	64.959 ^c	3.000	36.000	.000

Multivariate Tests^a

Effect		Partial Eta Squared
Intercept	Pillai's Trace	.984
	Wilks' Lambda	.984
	Hotelling's Trace	.984
	Roy's Largest Root	.984
Workplace	Pillai's Trace	.828
	Wilks' Lambda	.828
	Hotelling's Trace	.829
	Roy's Largest Root	.844

a. Design: Intercept + Workplace

b. Exact statistic

c. The statistic is an upper bound on F that yields a lower bound on the significance level.

Tests of Between-Subjects Effects

Source	Dependent Variable	Type III Sum of Squares	df	Mean Square	F
Corrected Model	Depression	50126.385 ^a	2	25063.192	86.051
	Anxiety	27689.173 ^b	2	13844.586	47.819
	Psychopathy	235.373 ^c	2	117.687	83.375
Intercept	Depression	416271.750	1	416271.750	1429.214
	Anxiety	159545.389	1	159545.389	551.064
	Psychopathy	1071.671	1	1071.671	759.223
Workplace	Depression	50126.385	2	25063.192	86.051
	Anxiety	27689.173	2	13844.586	47.819
	Psychopathy	235.373	2	117.687	83.375
Error	Depression	10776.590	37	291.259	
	Anxiety	10712.327	37	289.522	
	Psychopathy	52.227	37	1.412	
Total	Depression	491673.000	40		
	Anxiety	211324.000	40		
	Psychopathy	1248.000	40		
Corrected Total	Depression	60902.975	39		
	Anxiety	38401.500	39		
	Psychopathy	287.600	39		

Tests of Between-Subjects Effects

Source	Dependent Variable	Sig.	Partial Eta Squared
Corrected Model	Depression	.000	.823
	Anxiety	.000	.721
	Psychopathy	.000	.818
Intercept	Depression	.000	.975
	Anxiety	.000	.937
	Psychopathy	.000	.954
Workplace	Depression	.000	.823
	Anxiety	.000	.721
	Psychopathy	.000	.818
Error	Depression		
	Anxiety		
	Psychopathy		
Total	Depression		
	Anxiety		
	Psychopathy		
Corrected Total	Depression		
	Anxiety		
	Psychopathy		

a. R Squared = .823 (Adjusted R Squared = .813)

b. R Squared = .721 (Adjusted R Squared = .706)

c. R Squared = .818 (Adjusted R Squared = .809)

Post Hoc Tests

Workplace

Multiple Comparisons

Tukey HSD

Dependent Variable	(I) Workplace	(J) Workplace	Mean Difference (I-J)	Std. Error	Sig.
Depression	Black Mesa	Aperture Science	-83.1810 *	6.34204	.000
		Citadel	-44.7143 *	6.87622	.000
	Aperture Science	Black Mesa	83.1810 *	6.34204	.000
		Citadel	38.4667 *	6.77461	.000
	Citadel	Black Mesa	44.7143 *	6.87622	.000
		Aperture Science	-38.4667 *	6.77461	.000
Anxiety	Black Mesa	Aperture Science	-56.6000 *	6.32311	.000
		Citadel	-5.5455	6.85568	.700
	Aperture Science	Black Mesa	56.6000 *	6.32311	.000
		Citadel	51.0545 *	6.75438	.000
	Citadel	Black Mesa	5.5455	6.85568	.700
		Aperture Science	-51.0545 *	6.75438	.000
Psychopathy	Black Mesa	Aperture Science	.5810	.44150	.396
		Citadel	-5.1039 *	.47869	.000
	Aperture Science	Black Mesa	-.5810	.44150	.396
		Citadel	-5.6848 *	.47162	.000
	Citadel	Black Mesa	5.1039 *	.47869	.000
		Aperture Science	5.6848 *	.47162	.000

Multiple Comparisons

Tukey HSD

Dependent Variable	(I) Workplace	(J) Workplace	95% Confidence Interval	
			Lower Bound	Upper Bound
Depression	Black Mesa	Aperture Science	-98.6650	-67.6969
		Citadel	-61.5025	-27.9261
	Aperture Science	Black Mesa	67.6969	98.6650
		Citadel	21.9265	55.0068
	Citadel	Black Mesa	27.9261	61.5025
		Aperture Science	-55.0068	-21.9265
Anxiety	Black Mesa	Aperture Science	-72.0378	-41.1622
		Citadel	-22.2835	11.1926
	Aperture Science	Black Mesa	41.1622	72.0378
		Citadel	34.5638	67.5453
	Citadel	Black Mesa	-11.1926	22.2835
		Aperture Science	-67.5453	-34.5638
Psychopathy	Black Mesa	Aperture Science	-.4970	1.6589
		Citadel	-6.2726	-3.9352
	Aperture Science	Black Mesa	-1.6589	.4970
		Citadel	-6.8363	-4.5334
	Citadel	Black Mesa	3.9352	6.2726
		Aperture Science	4.5334	6.8363

Based on observed means.

The error term is Mean Square(Error) = 1.412.

*. The mean difference is significant at the .05 level.

Homogeneous Subsets

Depression

Tukey HSD^{a,b,c}

Workplace	N	Subset		
		1	2	3
Black Mesa	14	60.2857		
Citadel	11		105.0000	
Aperture Science	15			143.4667
Sig.		1.000	1.000	1.000

Means for groups in homogeneous subsets are displayed.

Based on observed means.

The error term is Mean Square(Error) = 291.259.

- a. Uses Harmonic Mean Sample Size = 13.100.
- b. The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.
- c. Alpha = .05.

Anxiety

Tukey HSD^{a,b,c}

Workplace	N	Subset	
		1	2
Black Mesa	14	43.0000	
Citadel	11	48.5455	
Aperture Science	15		99.6000
Sig.		.684	1.000

Means for groups in homogeneous subsets are displayed.

Based on observed means.

The error term is Mean Square(Error) = 289.522.

- a. Uses Harmonic Mean Sample Size = 13.100.
- b. The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.
- c. Alpha = .05.

Psychopathy

Tukey HSD^{a,b,c}

Workplace	N	Subset	
		1	2
Aperture Science	15	3.1333	
Black Mesa	14	3.7143	
Citadel	11		8.8182
Sig.		.431	1.000

Means for groups in homogeneous subsets are displayed.

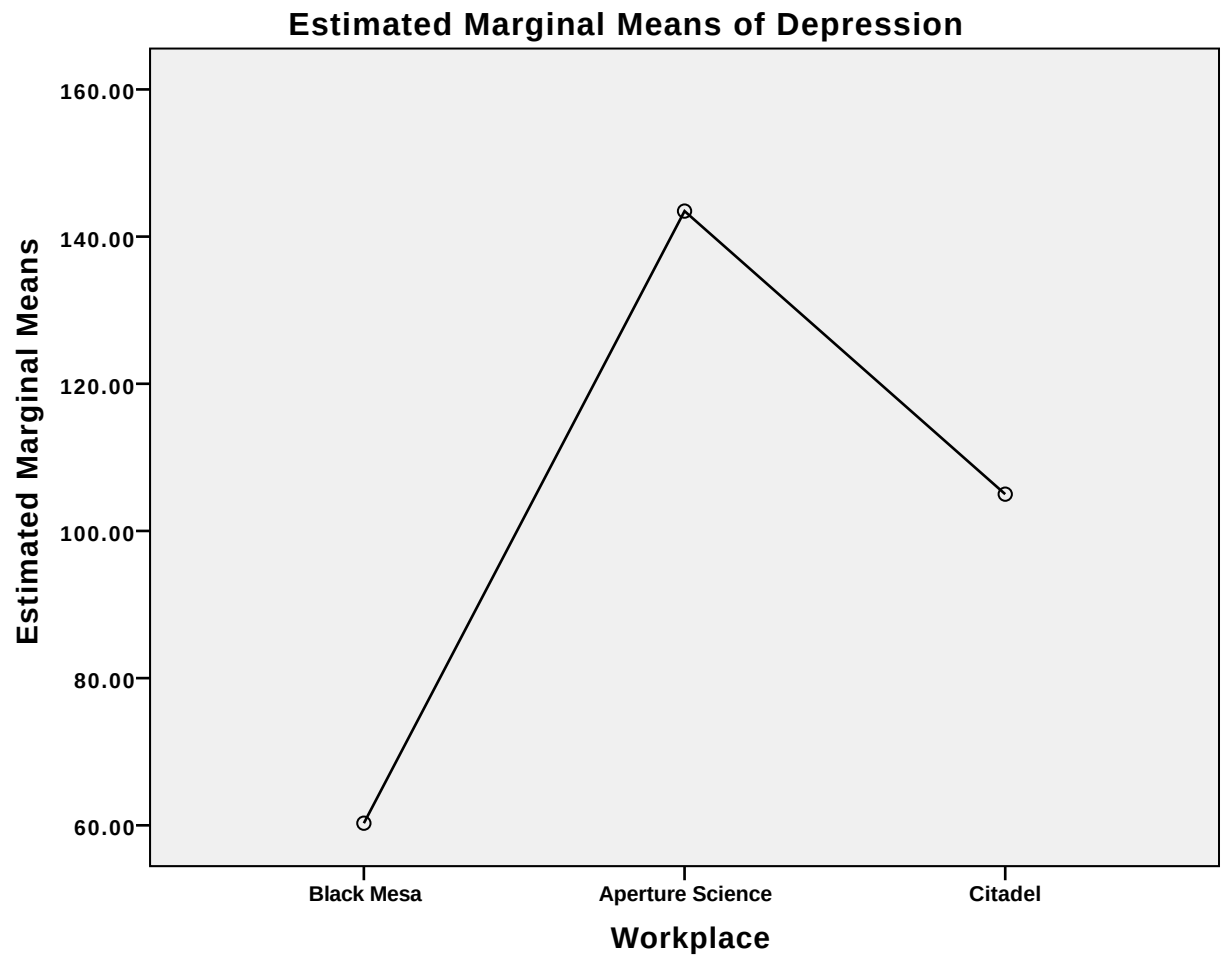
Based on observed means.

The error term is Mean Square(Error) = 1.412.

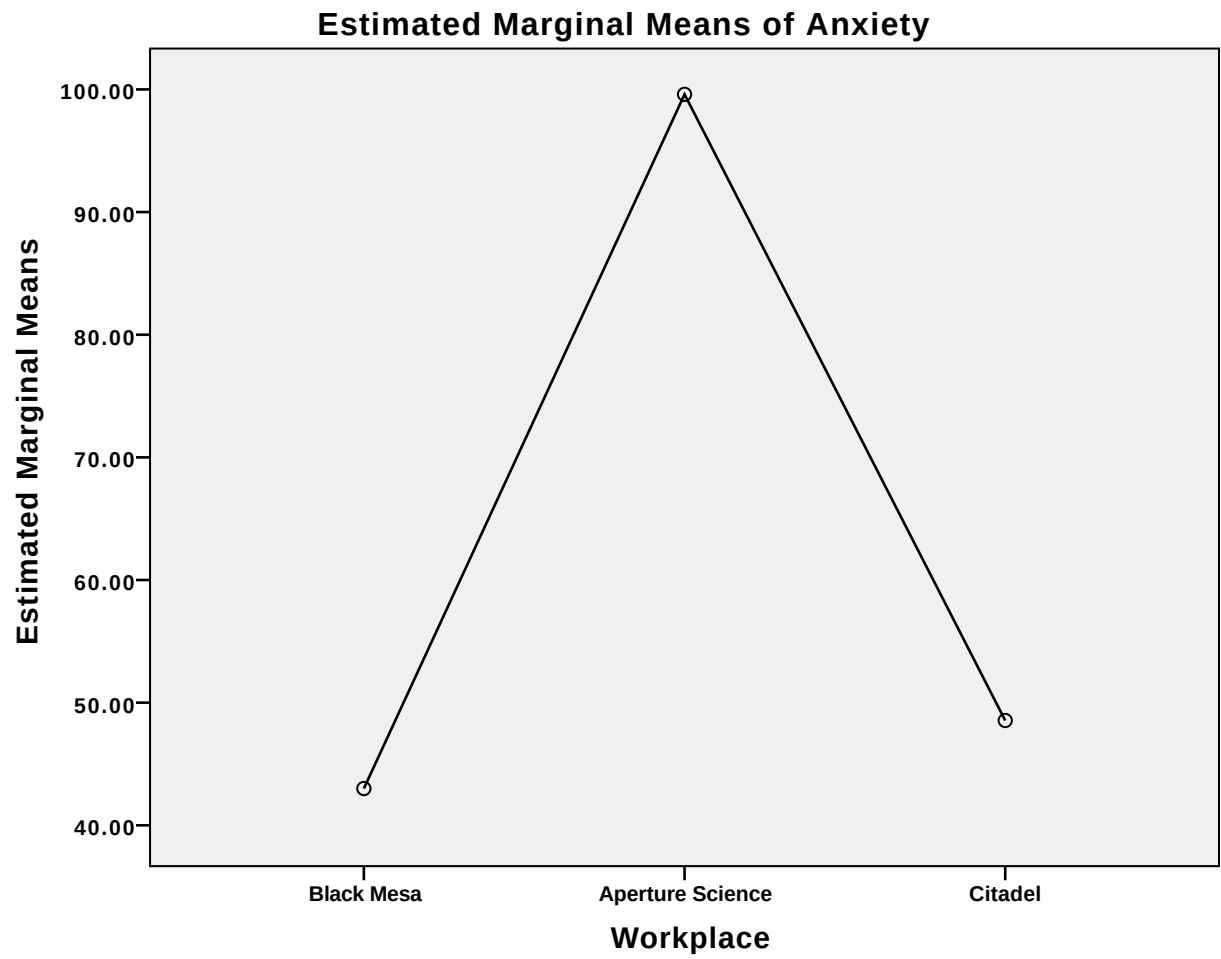
- a. Uses Harmonic Mean Sample Size = 13.100.
- b. The group sizes are unequal. The harmonic mean of the group sizes is used. Type I error levels are not guaranteed.
- c. Alpha = .05.

Profile Plots

Depression



Anxiety



Psychopathy

