

GLM Depression Anxiety Psychopathy BY Workplace
 /WSFACTOR=Measures 3 Polynomial
 /METHOD=SSTYPE(3)
 /POSTHOC=Workplace(TUKEY)
 /CRITERIA=ALPHA(.05)
 /WSDSIGN=Measures
 /DESIGN=Workplace.

General Linear Model

Notes

Output Created		15-APR-2020 20:18:...
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 /WSFACTOR=Measures 3 Polynomial /METHOD=SSTYPE(3) /POSTHOC=Workplace (TUKEY) /CRITERIA=ALPHA(.05) /WSDSIGN=Measures /DESIGN=Workplace.
Resources	Processor Time	00:00:00.02
	Elapsed Time	00:00:00.00

Within-Subjects Factors

Measure: MEASURE_1

Measures	Dependent Variable
1	Depression
2	Anxiety
3	Psychopathy

Between-Subjects Factors

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

Multivariate Tests^a

Effect		Value	F	Hypothesis df	Error df
Measures	Pillai's Trace	.972	627.890 ^b	2.000	36.000
	Wilks' Lambda	.028	627.890 ^b	2.000	36.000
	Hotelling's Trace	34.883	627.890 ^b	2.000	36.000
	Roy's Largest Root	34.883	627.890 ^b	2.000	36.000
Measures * Workplace	Pillai's Trace	1.234	29.784	4.000	74.000
	Wilks' Lambda	.101	38.717 ^b	4.000	72.000
	Hotelling's Trace	5.608	49.071	4.000	70.000
	Roy's Largest Root	4.935	91.305 ^c	2.000	37.000

Multivariate Tests^a

Effect		Sig.
Measures	Pillai's Trace	.000
	Wilks' Lambda	.000
	Hotelling's Trace	.000
	Roy's Largest Root	.000
Measures * Workplace	Pillai's Trace	.000
	Wilks' Lambda	.000
	Hotelling's Trace	.000
	Roy's Largest Root	.000

- Design: Intercept + Workplace
Within Subjects Design: Measures
- Exact statistic
- The statistic is an upper bound on F that yields a lower bound on the significance level.

Mauchly's Test of Sphericity^a

Measure: MEASURE_1

Within Subjects Effect	Mauchly's W	Approx. Chi-Square	df	Sig.	Epsilon ^b Greenhouse-Geisser
Measures	.999	.020	2	.990	.999

Mauchly's Test of Sphericity^a

Measure: MEASURE_1

Within Subjects Effect	Epsilon ^b	
	Huynh-Feldt	Lower-bound
Measures	1.000	.500

Tests the null hypothesis that the error covariance matrix of the orthonormalized transformed dependent variables is proportional to an identity matrix.

- Design: Intercept + Workplace
Within Subjects Design: Measures
- May be used to adjust the degrees of freedom for the averaged tests of significance. Corrected tests are displayed in the Tests of Within-Subjects Effects table.

Tests of Within-Subjects Effects

Measure: MEASURE_1

Source		Type III Sum of Squares	df	Mean Square	F
Measures	Sphericity Assumed	189988.026	2	94994.013	654.999
	Greenhouse-Geisser	189988.026	1.999	95047.715	654.999
	Huynh-Feldt	189988.026	2.000	94994.013	654.999
	Lower-bound	189988.026	1.000	189988.026	654.999
Measures * Workplace	Sphericity Assumed	30543.987	4	7635.997	52.651
	Greenhouse-Geisser	30543.987	3.998	7640.314	52.651
	Huynh-Feldt	30543.987	4.000	7635.997	52.651
	Lower-bound	30543.987	2.000	15271.994	52.651
Error(Measures)	Sphericity Assumed	10732.163	74	145.029	
	Greenhouse-Geisser	10732.163	73.958	145.111	
	Huynh-Feldt	10732.163	74.000	145.029	
	Lower-bound	10732.163	37.000	290.058	

Tests of Within-Subjects Effects

Measure: MEASURE_1

Source		Sig.
Measures	Sphericity Assumed	.000
	Greenhouse-Geisser	.000
	Huynh-Feldt	.000
	Lower-bound	.000
Measures * Workplace	Sphericity Assumed	.000
	Greenhouse-Geisser	.000
	Huynh-Feldt	.000
	Lower-bound	.000
Error(Measures)	Sphericity Assumed	
	Greenhouse-Geisser	
	Huynh-Feldt	
	Lower-bound	

Tests of Within-Subjects Contrasts

Measure: MEASURE_1

Source	Measures	Type III Sum of Squares	df	Mean Square	F
Measures	Linear	187550.480	1	187550.480	1279.335
	Quadratic	2437.547	1	2437.547	16.991
Measures * Workplace	Linear	25457.988	2	12728.994	86.828
	Quadratic	5085.999	2	2542.999	17.726
Error(Measures)	Linear	5424.199	37	146.600	
	Quadratic	5307.964	37	143.458	

Tests of Within-Subjects Contrasts

Measure: MEASURE_1

Source	Measures	Sig.
Measures	Linear	.000
	Quadratic	.000
Measures * Workplace	Linear	.000
	Quadratic	.000
Error(Measures)	Linear	
	Quadratic	

Tests of Between-Subjects Effects

Measure: MEASURE_1

Transformed Variable: Average

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Intercept	386900.784	1	386900.784	1324.392	.000
Workplace	47506.943	2	23753.472	81.310	.000
Error	10808.982	37	292.135		

Post Hoc Tests

Workplace

Multiple Comparisons

Measure: MEASURE_1

Tukey HSD

(I) Workplace	(J) Workplace	Mean Difference (I-J)	Std. Error	Sig.	95% ... Lower Bound
Black Mesa	Aperture Science	-46.4000 *	3.66708	.000	-55.3531
	Citadel	-18.4545 *	3.97595	.000	-28.1618
Aperture Science	Black Mesa	46.4000 *	3.66708	.000	37.4469
	Citadel	27.9455 *	3.91720	.000	18.3817
Citadel	Black Mesa	18.4545 *	3.97595	.000	8.7473
	Aperture Science	-27.9455 *	3.91720	.000	-37.5092

Multiple Comparisons

Measure: MEASURE_1

Tukey HSD

(I) Workplace	(J) Workplace	95% Confidence . Upper Bound
Black Mesa	Aperture Science	-37.4469
	Citadel	-8.7473
Aperture Science	Black Mesa	55.3531
	Citadel	37.5092
Citadel	Black Mesa	28.1618
	Aperture Science	-18.3817

Based on observed means.

The error term is Mean Square(Error) = 97.378.

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

Homogeneous Subsets

MEASURE_1

Tukey HSD^{a,b,c}

Workplace	N	Subset		
		1	2	3
Black Mesa	14	35.6667		
Citadel	11		54.1212	
Aperture Science	15			82.0667
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) = 97.378.

- 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.