```
GLM rep0rate rep1rate rep5rate BY condition
  /WSFACTOR=Repetition 3 Simple(1)
  /MEASURE=Liking
  /METHOD=SSTYPE(3)
  /PLOT=PROFILE(Repetition*condition)
  /EMMEANS=TABLES(condition)
  /EMMEANS=TABLES(Repetition)
  /EMMEANS=TABLES(condition*Repetition)
  /PRINT=DESCRIPTIVE ETASQ OPOWER HOMOGENEITY
  /CRITERIA=ALPHA(.05)
  /WSDESIGN=Repetition
  /DESIGN=condition.
```

General Linear Model

Notes

Output Created		**08-NOV-2015 21:20...**
Comments		
Input	**Data**	**/Users/mikatmich/Desktop/thesis/Untitled1.sav**
	Active Dataset	**DataSet3**
	Filter	**condition < 3 (FILTER)**
	Weight	**<none>**
	Split File	**<none>**
	N of Rows in Working Data File	**40**
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.**

Notes

Syntax		GLM rep0rate rep1rate rep5rate BY condition /WSFACTOR=Repetition 3 Simple(1) /MEASURE=Liking /METHOD=SSTYPE(3) /PLOT=PROFILE (Repetition*condition) /EMMEANS=TABLES (condition) /EMMEANS=TABLES (Repetition) /EMMEANS=TABLES (condition*Repetition) /PRINT=DESCRIPTIVE ETASQ OPOWER HOMOGENEITY /CRITERIA=ALPHA(.05) /WSDESIGN=Repetition /DESIGN=condition.
Resources	Processor Time	00:00:00.33
	Elapsed Time	00:00:01.00

Within-Subjects Factors

Measure: Liking

Repetition	Dependent Variable
1	rep0rate
2	rep1rate
3	rep5rate

Between-Subjects Factors

		N
condition	1.00	20
	2.00	20

Descriptive Statistics

	condition	Mean	Std. Deviation	N
rep0rate	1.00	52.0759	21.40369	20
	2.00	54.8554	19.01973	20
	Total	53.4656	20.03507	40
rep1rate	1.00	50.4369	18.95000	20
	2.00	56.7915	18.38291	20
	Total	53.6142	18.70654	40
rep5rate	1.00	53.1174	15.28254	20
	2.00	56.7464	19.32908	20
	Total	54.9319	17.29674	40

Box's Test of Equality of Covariance Matrices[a]

Box's M	8.019
F	1.221
df1	6
df2	10462.189
Sig.	.292

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

a. Design: Intercept + condition
Within Subjects Design: Repetition

Multivariate Tests[a]

Effect		Value	F	Hypothesis df	Error df	Sig.	Partial Eta Squared	Noncent. Parameter	Observed Power[c]
Repetition	Pillai's Trace	.011	.204[b]	2.000	37.000	.816	.011	.408	.079
	Wilks' Lambda	.989	.204[b]	2.000	37.000	.816	.011	.408	.079
	Hotelling's Trace	.011	.204[b]	2.000	37.000	.816	.011	.408	.079
	Roy's Largest Root	.011	.204[b]	2.000	37.000	.816	.011	.408	.079
Repetition * condition	Pillai's Trace	.018	.342[b]	2.000	37.000	.713	.018	.684	.101
	Wilks' Lambda	.982	.342[b]	2.000	37.000	.713	.018	.684	.101
	Hotelling's Trace	.018	.342[b]	2.000	37.000	.713	.018	.684	.101
	Roy's Largest Root	.018	.342[b]	2.000	37.000	.713	.018	.684	.101

a. Design: Intercept + condition
Within Subjects Design: Repetition

b. Exact statistic

c. Computed using alpha =

Mauchly's Test of Sphericity[a]

Measure: Liking

Within Subjects Effect	Mauchly's W	Approx. Chi-Square	df	Sig.	Epsilon[b]		
					Greenhouse-Geisser	Huynh-Feldt	Lower-bound
Repetition	.967	1.241	2	.538	.968	1.000	.500

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

a. Design: Intercept + condition
Within Subjects Design: Repetition

b. 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: Liking

Source		Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared	Noncent. Parameter	Observed Power[a]
Repetition	Sphericity Assumed	52.111	2	26.055	.222	.801	.006	.444	.084
	Greenhouse-Geisser	52.111	1.936	26.914	.222	.794	.006	.430	.083
	Huynh-Feldt	52.111	2.000	26.055	.222	.801	.006	.444	.084
	Lower-bound	52.111	1.000	52.111	.222	.640	.006	.222	.074
Repetition * condition	Sphericity Assumed	69.773	2	34.886	.297	.744	.008	.594	.096
	Greenhouse-Geisser	69.773	1.936	36.037	.297	.737	.008	.575	.095
	Huynh-Feldt	69.773	2.000	34.886	.297	.744	.008	.594	.096
	Lower-bound	69.773	1.000	69.773	.297	.589	.008	.297	.083
Error(Repetition)	Sphericity Assumed	8922.337	76	117.399					
	Greenhouse-Geisser	8922.337	73.574	121.270					
	Huynh-Feldt	8922.337	76.000	117.399					
	Lower-bound	8922.337	38.000	234.798					

a. Computed using alpha =

Tests of Within-Subjects Contrasts

Measure: Liking

Source	Repetition	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared	Noncent. Parameter	Observed Power[a]
Repetition	Level 2 vs. Level 1	.883	1	.883	.004	.950	.000	.004	.050
	Level 3 vs. Level 1	85.996	1	85.996	.311	.580	.008	.311	.084
Repetition * condition	Level 2 vs. Level 1	127.813	1	127.813	.577	.452	.015	.577	.115
	Level 3 vs. Level 1	7.217	1	7.217	.026	.873	.001	.026	.053
Error(Repetition)	Level 2 vs. Level 1	8417.911	38	221.524					
	Level 3 vs. Level 1	10507.877	38	276.523					

a. Computed using alpha =

Levene's Test of Equality of Error Variances[a]

	F	df1	df2	Sig.
rep0rate	.396	1	38	.533
rep1rate	.005	1	38	.946
rep5rate	.044	1	38	.835

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

a. Design: Intercept + condition
Within Subjects Design: Repetition

Tests of Between-Subjects Effects

Measure: Liking

Transformed Variable: Average

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared	Noncent. Parameter	Observed Power[a]
Intercept	116656.921	1	116656.921	423.060	.000	.918	423.060	1.000
condition	180.996	1	180.996	.656	.423	.017	.656	.124
Error	10478.342	38	275.746					

a. Computed using alpha =

Estimated Marginal Means

1. condition

Measure: Liking

condition	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
1.00	51.877	3.713	44.360	59.394
2.00	56.131	3.713	48.614	63.648

2. Repetition

Measure: Liking

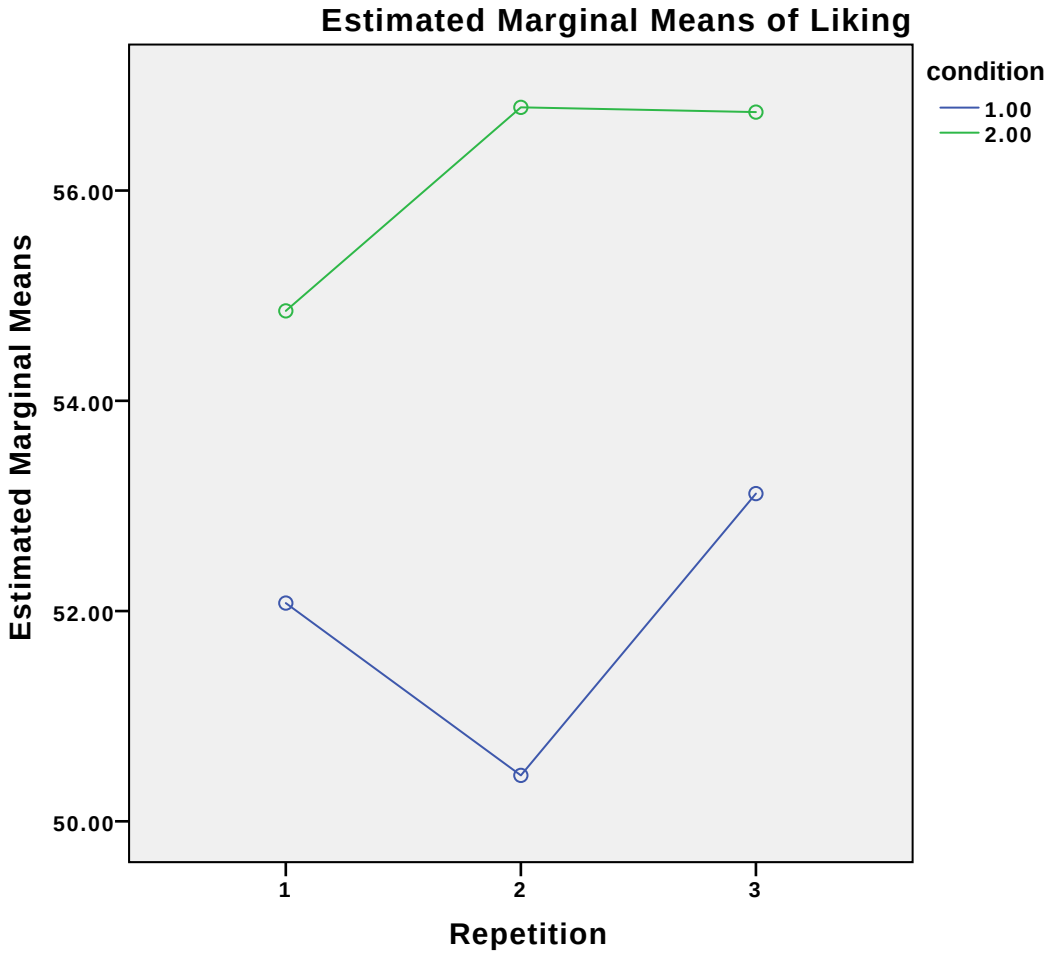
Repetition	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
1	53.466	3.201	46.985	59.946
2	53.614	2.952	47.639	59.590
3	54.932	2.755	49.355	60.509

3. condition * Repetition

Measure: Liking

condition	Repetition	Mean	Std. Error	95% Confidence Interval	
				Lower Bound	Upper Bound
1.00	1	52.076	4.527	42.911	61.241
	2	50.437	4.174	41.986	58.888
	3	53.117	3.896	45.230	61.005
2.00	1	54.855	4.527	45.690	64.020
	2	56.791	4.174	48.341	65.242
	3	56.746	3.896	48.859	64.634

Profile Plots




```
GLM rep0ease rep1ease rep5ease BY condition
  /WSFACTOR=Repetition 3 Simple(1)
  /MEASURE=Ease
  /METHOD=SSTYPE(3)
  /PLOT=PROFILE(Repetition*condition)
  /EMMEANS=TABLES(condition)
  /EMMEANS=TABLES(Repetition)
  /EMMEANS=TABLES(condition*Repetition)
  /PRINT=DESCRIPTIVE ETASQ OPOWER HOMOGENEITY
  /CRITERIA=ALPHA(.05)
  /WSDESIGN=Repetition
  /DESIGN=condition.
```

General Linear Model

Notes

Output Created		08-NOV-2015 21:22...
Comments		
Input	Data	/Users/mikatmich/Desktop/thesis/Untitled1.sav
	Active Dataset	DataSet3
	Filter	condition < 3 (FILTER)
	Weight	<none>
	Split File	<none>
	N of Rows in Working Data File	40
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 rep0ease rep1ease rep5ease BY condition /WSFACTOR=Repetition 3 Simple(1) /MEASURE=Ease /METHOD=SSTYPE(3) /PLOT=PROFILE (Repetition*condition) /EMMEANS=TABLES (condition) /EMMEANS=TABLES (Repetition) /EMMEANS=TABLES (condition*Repetition) /PRINT=DESCRIPTIVE ETASQ OPOWER HOMOGENEITY /CRITERIA=ALPHA(.05) /WSDESIGN=Repetition /DESIGN=condition.
Resources	Processor Time	00:00:00.30
	Elapsed Time	00:00:00.00

Within-Subjects Factors

Measure: Ease

Repetition	Dependent Variable
1	rep0ease
2	rep1ease
3	rep5ease

Between-Subjects Factors

		N
condition	1.00	20
	2.00	20

Descriptive Statistics

	condition	Mean	Std. Deviation	N
rep0ease	1.00	56.9228	26.55156	20
	2.00	47.3506	18.83958	20
	Total	52.1367	23.23495	40
rep1ease	1.00	56.3514	23.41235	20
	2.00	50.2192	17.61138	20
	Total	53.2853	20.68302	40
rep5ease	1.00	60.9861	22.84786	20
	2.00	52.4373	18.96639	20
	Total	56.7117	21.17330	40

Box's Test of Equality of Covariance Matrices[a]

Box's M	13.134
F	2.001
df1	6
df2	10462.189
Sig.	.062

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

a. Design: Intercept + condition
Within Subjects Design: Repetition

Multivariate Tests[a]

Effect		Value	F	Hypothesis df	Error df	Sig.	Partial Eta Squared	Noncent. Parameter	Observed Power[c]
Repetition	Pillai's Trace	.114	2.382[b]	2.000	37.000	.106	.114	4.763	.451
	Wilks' Lambda	.886	2.382[b]	2.000	37.000	.106	.114	4.763	.451
	Hotelling's Trace	.129	2.382[b]	2.000	37.000	.106	.114	4.763	.451
	Roy's Largest Root	.129	2.382[b]	2.000	37.000	.106	.114	4.763	.451
Repetition * condition	Pillai's Trace	.016	.309[b]	2.000	37.000	.736	.016	.618	.095
	Wilks' Lambda	.984	.309[b]	2.000	37.000	.736	.016	.618	.095
	Hotelling's Trace	.017	.309[b]	2.000	37.000	.736	.016	.618	.095
	Roy's Largest Root	.017	.309[b]	2.000	37.000	.736	.016	.618	.095

a. Design: Intercept + condition
Within Subjects Design: Repetition

b. Exact statistic

c. Computed using alpha =

Mauchly's Test of Sphericity[a]

Measure: Ease

Within Subjects Effect	Mauchly's W	Approx. Chi-Square	df	Sig.	Epsilon[b]		
					Greenhouse-Geisser	Huynh-Feldt	Lower-bound
Repetition	.991	.316	2	.854	.992	1.000	.500

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

a. Design: Intercept + condition
Within Subjects Design: Repetition

b. 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: Ease

Source		Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared	Noncent. Parameter	Observed Power[a]
Repetition	Sphericity Assumed	453.202	2	226.601	2.353	.102	.058	4.706	.462
	Greenhouse-Geisser	453.202	1.983	228.530	2.353	.102	.058	4.666	.460
	Huynh-Feldt	453.202	2.000	226.601	2.353	.102	.058	4.706	.462
	Lower-bound	453.202	1.000	453.202	2.353	.133	.058	2.353	.321
Repetition * condition	Sphericity Assumed	62.403	2	31.202	.324	.724	.008	.648	.100
	Greenhouse-Geisser	62.403	1.983	31.467	.324	.722	.008	.642	.100
	Huynh-Feldt	62.403	2.000	31.202	.324	.724	.008	.648	.100
	Lower-bound	62.403	1.000	62.403	.324	.573	.008	.324	.086
Error(Repetition)	Sphericity Assumed	7319.639	76	96.311					
	Greenhouse-Geisser	7319.639	75.358	97.131					
	Huynh-Feldt	7319.639	76.000	96.311					
	Lower-bound	7319.639	38.000	192.622					

a. Computed using alpha =

Tests of Within-Subjects Contrasts

Measure: Ease

Source	Repetition	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared	Noncent. Parameter	Observed Power[a]
Repetition	Level 2 vs. Level 1	52.771	1	52.771	.278	.601	.007	.278	.081
	Level 3 vs. Level 1	837.225	1	837.225	4.685	.037	.110	4.685	.560
Repetition * condition	Level 2 vs. Level 1	118.336	1	118.336	.623	.435	.016	.623	.120
	Level 3 vs. Level 1	10.473	1	10.473	.059	.810	.002	.059	.056
Error(Repetition)	Level 2 vs. Level 1	7220.534	38	190.014					
	Level 3 vs. Level 1	6790.605	38	178.700					

a. Computed using alpha =

Levene's Test of Equality of Error Variances[a]

	F	df1	df2	Sig.
rep0ease	1.758	1	38	.193
rep1ease	2.560	1	38	.118
rep5ease	1.308	1	38	.260

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

a. Design: Intercept + condition
Within Subjects Design: Repetition

Tests of Between-Subjects Effects

Measure: Ease

Transformed Variable: Average

Source	Type III Sum of Squares	df	Mean Square	F	Sig.	Partial Eta Squared	Noncent. Parameter	Observed Power[a]
Intercept	116832.607	1	116832.607	290.301	.000	.884	290.301	1.000
condition	653.575	1	653.575	1.624	.210	.041	1.624	.237
Error	15293.214	38	402.453					

a. Computed using alpha =

Estimated Marginal Means

1. condition

Measure: Ease

condition	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
1.00	58.087	4.486	49.006	67.168
2.00	50.002	4.486	40.921	59.083

2. Repetition

Measure: Ease

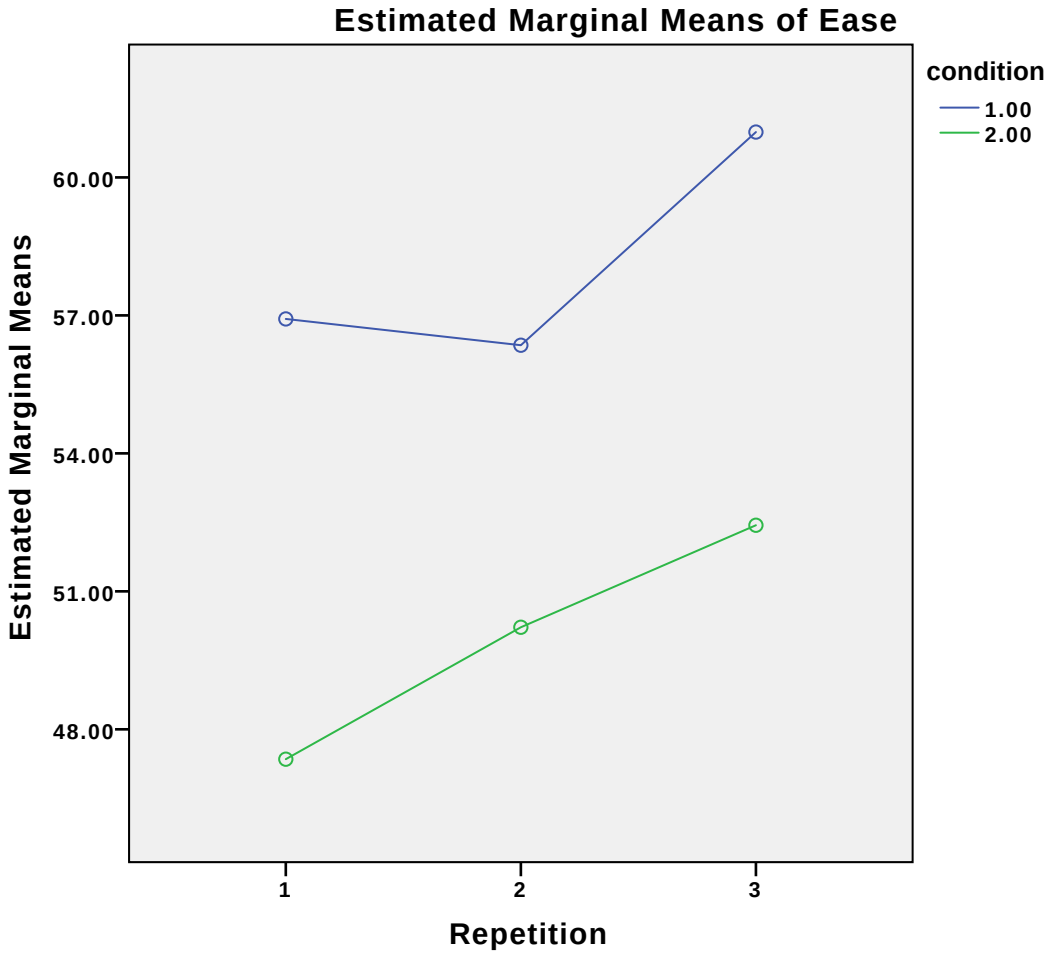
Repetition	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
1	52.137	3.640	44.768	59.505
2	53.285	3.275	46.654	59.916
3	56.712	3.320	49.991	63.433

3. condition * Repetition

Measure: Ease

condition	Repetition	Mean	Std. Error	95% Confidence Interval	
				Lower Bound	Upper Bound
1.00	1	56.923	5.148	46.502	67.344
	2	56.351	4.632	46.974	65.729
	3	60.986	4.695	51.481	70.491
2.00	1	47.351	5.148	36.930	57.771
	2	50.219	4.632	40.842	59.597
	3	52.437	4.695	42.933	61.942

Profile Plots


Estimated Marginal Means of Ease
condition
1.00
2.00
Estimated Marginal Means
60.00
57.00
54.00
51.00
48.00
1
2
3
Repetition