

```

NEW FILE.
DATASET NAME DataSet1 WINDOW=FRONT.
PRESERVE.
SET DECIMAL DOT.

GET DATA /TYPE=TXT
  /FILE="E:\Data Science and Coding\Python\Projects\Final Year Project Analysis\posner_analysis\rt_mean_over_conditions.csv"
  /ENCODING='UTF8'
  /DELIMITERS=", "
  /QUALIFIER='"'
  /ARRANGEMENT=DELIMITED
  /FIRSTCASE=2
  /DATATYPEMIN PERCENTAGE=95.0
  /VARIABLES=
    cueInvalid_lofi AUTO
    cueInvalid_silence AUTO
    cueInvalid_white AUTO
    cueValid_lofi AUTO
    cueValid_silence AUTO
    cueValid_white AUTO
  /MAP.
RESTORE.
CACHE.
EXECUTE.

```

Data written to the working file.

6 variables and 11 cases written.

```

Variable: cueInvalid_lofi      Type: Number  Format : F19.17
Variable: cueInvalid_silence   Type: Number  Format : F19.17
Variable: cueInvalid_white     Type: Number  Format : F19.17
Variable: cueValid_lofi        Type: Number  Format : F19.17
Variable: cueValid_silence     Type: Number  Format : F19.17
Variable: cueValid_white       Type: Number  Format : F19.17

```

```

DATASET NAME DataSet2 WINDOW=FRONT.

```

```

GLM cueValid_silence cueValid_white cueValid_lofi cueInvalid_silence cueInvalid_white
  cueInvalid_lofi
  /WSFACTOR=cueValidity 2 Polynomial SoundCondition 3 Polynomial
  /METHOD=SSTYPE(3)

```

```

/PLOT=PROFILE(SoundCondition*cueValidity) TYPE=LINE ERRORBAR=NO MEANREFERENC
E=NO YAXIS=AUTO
/EMMEANS=TABLES(cueValidity)
/EMMEANS=TABLES(SoundCondition)
/EMMEANS=TABLES(cueValidity*SoundCondition)
/PRINT=DESCRIPTIVE
/CRITERIA=ALPHA(.05)
/WSDESIGN=cueValidity SoundCondition cueValidity*SoundCondition.

GLM cueValid_silence cueValid_white cueValid_lofi cueInvalid_silence cueInvalid_
d_white
    cueInvalid_lofi
/WSFACTOR=cueValidity 2 Polynomial SoundCondition 3 Polynomial
/METHOD=SSTYPE(3)
/PLOT=PROFILE(SoundCondition*cueValidity) TYPE=LINE ERRORBAR=NO MEANREFERENC
E=NO YAXIS=AUTO
/EMMEANS=TABLES(cueValidity)
/EMMEANS=TABLES(SoundCondition)
/EMMEANS=TABLES(cueValidity*SoundCondition)
/PRINT=DESCRIPTIVE
/CRITERIA=ALPHA(.05)
/WSDESIGN=cueValidity SoundCondition cueValidity*SoundCondition.

```

General Linear Model

Within-Subjects Factors

Measure: MEASURE_1

cueValidity	SoundCondition	Dependent Variable
1	1	cueValid_silence
	2	cueValid_white
	3	cueValid_lofi
2	1	cueInvalid_silence
	2	cueInvalid_white
	3	cueInvalid_lofi

Descriptive Statistics

	Mean	Std. Deviation	N
cueValid_silence	.327428	.0520956	11
cueValid_white	.329301	.0568300	11
cueValid_lofi	.336997	.0489242	11
cueInvalid_silence	.363841	.0485907	11
cueInvalid_white	.372493	.0549354	11
cueInvalid_lofi	.371873	.0561340	11

Multivariate Tests^a

Effect		Value	F	Hypothesis df	Error df
cueValidity	Pillai's Trace	.698	23.160 ^b	1.000	10.000
	Wilks' Lambda	.302	23.160 ^b	1.000	10.000
	Hotelling's Trace	2.316	23.160 ^b	1.000	10.000
	Roy's Largest Root	2.316	23.160 ^b	1.000	10.000
SoundCondition	Pillai's Trace	.197	1.101 ^b	2.000	9.000
	Wilks' Lambda	.803	1.101 ^b	2.000	9.000
	Hotelling's Trace	.245	1.101 ^b	2.000	9.000
	Roy's Largest Root	.245	1.101 ^b	2.000	9.000
cueValidity * SoundCondition	Pillai's Trace	.095	.473 ^b	2.000	9.000
	Wilks' Lambda	.905	.473 ^b	2.000	9.000
	Hotelling's Trace	.105	.473 ^b	2.000	9.000
	Roy's Largest Root	.105	.473 ^b	2.000	9.000

Multivariate Tests^a

Effect		Sig.
cueValidity	Pillai's Trace	.001
	Wilks' Lambda	.001
	Hotelling's Trace	.001
	Roy's Largest Root	.001
SoundCondition	Pillai's Trace	.374
	Wilks' Lambda	.374
	Hotelling's Trace	.374
	Roy's Largest Root	.374
cueValidity * SoundCondition	Pillai's Trace	.638
	Wilks' Lambda	.638
	Hotelling's Trace	.638
	Roy's Largest Root	.638

a. Design: Intercept

Within Subjects Design: cueValidity + SoundCondition + cueValidity * SoundCondition

b. Exact statistic

Mauchly's Test of Sphericity^a

Measure: MEASURE_1

Within Subjects Effect	Mauchly's W	Approx. Chi-Square	df	Sig.	Epsilon ^b Greenhouse-Geisser
cueValidity	1.000	.000	0	.	1.000
SoundCondition	.583	4.858	2	.088	.706
cueValidity * SoundCondition	.684	3.414	2	.181	.760

Mauchly's Test of Sphericity^a

Measure: MEASURE_1

Within Subjects Effect	Epsilon ^b	
	Huynh-Feldt	Lower-bound
cueValidity	1.000	1.000
SoundCondition	.787	.500
cueValidity * SoundCondition	.868	.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

Within Subjects Design: cueValidity + SoundCondition + cueValidity * SoundCondition

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: MEASURE_1

Source		Type III Sum of Squares	df	Mean Square	F
cueValidity	Sphericity Assumed	.024	1	.024	23.160
	Greenhouse-Geisser	.024	1.000	.024	23.160
	Huynh-Feldt	.024	1.000	.024	23.160
	Lower-bound	.024	1.000	.024	23.160
Error(cueValidity)	Sphericity Assumed	.010	10	.001	
	Greenhouse-Geisser	.010	10.000	.001	
	Huynh-Feldt	.010	10.000	.001	
	Lower-bound	.010	10.000	.001	
SoundCondition	Sphericity Assumed	.001	2	.000	1.764
	Greenhouse-Geisser	.001	1.411	.001	1.764
	Huynh-Feldt	.001	1.575	.001	1.764
	Lower-bound	.001	1.000	.001	1.764
Error(SoundCondition)	Sphericity Assumed	.005	20	.000	
	Greenhouse-Geisser	.005	14.113	.000	
	Huynh-Feldt	.005	15.746	.000	
	Lower-bound	.005	10.000	.000	
cueValidity * SoundCondition	Sphericity Assumed	.000	2	.000	.807
	Greenhouse-Geisser	.000	1.520	.000	.807
	Huynh-Feldt	.000	1.736	.000	.807
	Lower-bound	.000	1.000	.000	.807
Error (cueValidity*SoundCondition)	Sphericity Assumed	.003	20	.000	
	Greenhouse-Geisser	.003	15.201	.000	
	Huynh-Feldt	.003	17.360	.000	
	Lower-bound	.003	10.000	.000	

Tests of Within-Subjects Effects

Measure: MEASURE_1

Source		Sig.
cueValidity	Sphericity Assumed	.001
	Greenhouse-Geisser	.001
	Huynh-Feldt	.001
	Lower-bound	.001
Error(cueValidity)	Sphericity Assumed	
	Greenhouse-Geisser	
	Huynh-Feldt	
	Lower-bound	
SoundCondition	Sphericity Assumed	.197
	Greenhouse-Geisser	.209
	Huynh-Feldt	.206
	Lower-bound	.214
Error(SoundCondition)	Sphericity Assumed	
	Greenhouse-Geisser	
	Huynh-Feldt	
	Lower-bound	
cueValidity * SoundCondition	Sphericity Assumed	.460
	Greenhouse-Geisser	.433
	Huynh-Feldt	.446
	Lower-bound	.390
Error (cueValidity*SoundCondition)	Sphericity Assumed	
	Greenhouse-Geisser	
	Huynh-Feldt	
	Lower-bound	

Tests of Within-Subjects Contrasts

Measure: MEASURE_1

Source	cueValidity	SoundCondition	Type III Sum of Squares	df	Mean Square
cueValidity	Linear		.024	1	.024
Error(cueValidity)	Linear		.010	10	.001
SoundCondition		Linear	.001	1	.001
		Quadratic	1.091E-5	1	1.091E-5
Error(SoundCondition)		Linear	.004	10	.000
		Quadratic	.001	10	8.889E-5
cueValidity * SoundCondition	Linear	Linear	6.493E-6	1	6.493E-6
		Quadratic	.000	1	.000
Error (cueValidity*SoundCondition)	Linear	Linear	.001	10	6.794E-5
		Quadratic	.002	10	.000

Tests of Within-Subjects Contrasts

Measure: MEASURE_1

Source	cueValidity	SoundCondition	F	Sig.
cueValidity	Linear		23.160	.001
Error(cueValidity)	Linear			
SoundCondition		Linear	2.129	.175
		Quadratic	.123	.733
Error(SoundCondition)		Linear		
		Quadratic		
cueValidity * SoundCondition	Linear	Linear	.096	.764
		Quadratic	1.051	.330
Error (cueValidity*SoundCondition)	Linear	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	8.100	1	8.100	537.347	.000
Error	.151	10	.015		

Estimated Marginal Means

1. cueValidity

Measure: MEASURE_1

cueValidity	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
1	.331	.016	.297	.366
2	.369	.016	.334	.404

2. SoundCondition

Measure: MEASURE_1

SoundCondition	Mean	Std. Error	95% Confidence Interval	
			Lower Bound	Upper Bound
1	.346	.015	.313	.378
2	.351	.016	.315	.387
3	.354	.015	.320	.389

3. cueValidity * SoundCondition

Measure: MEASURE_1

cueValidity	SoundCondition	Mean	Std. Error	95% Confidence Interval	
				Lower Bound	Upper Bound
1	1	.327	.016	.292	.362
	2	.329	.017	.291	.367
	3	.337	.015	.304	.370
2	1	.364	.015	.331	.396
	2	.372	.017	.336	.409
	3	.372	.017	.334	.410

Profile Plots

