Results

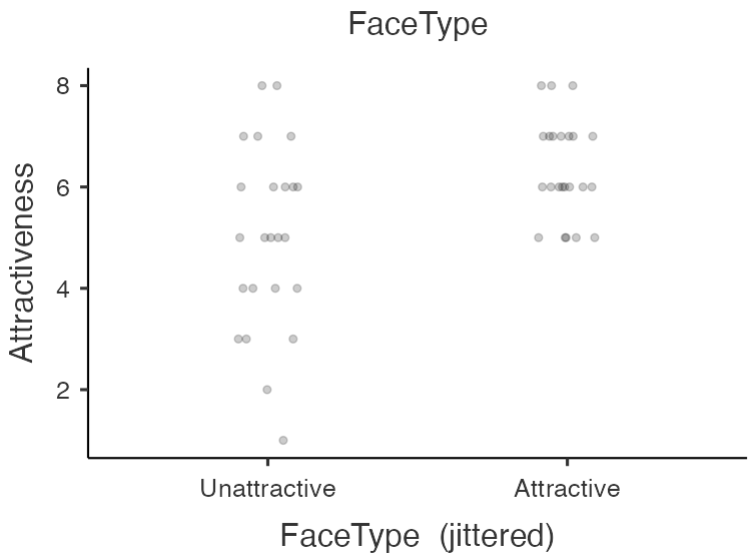
Relationships, Prediction, and Group Comparisons

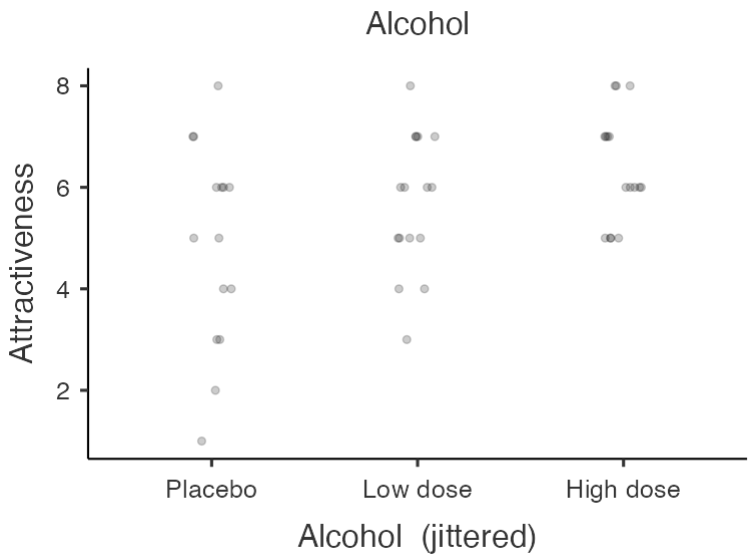
You have entered a numeric dependent variable and two categorical (nominal/ordinal) independent variables. Hence, a two way ANOVA seems to be a good option for you! In order to run this analysis in jamovi, go to: ANOVA > ANOVA

- Drop your numeric dependent variable in the box below Dependent Variable and your two independent (grouping) variables in the box below Fixed Factors

Click on the link to learn more about this method!

Scatter Plots of Bivariate Relationships - Dependent/Independent Variables





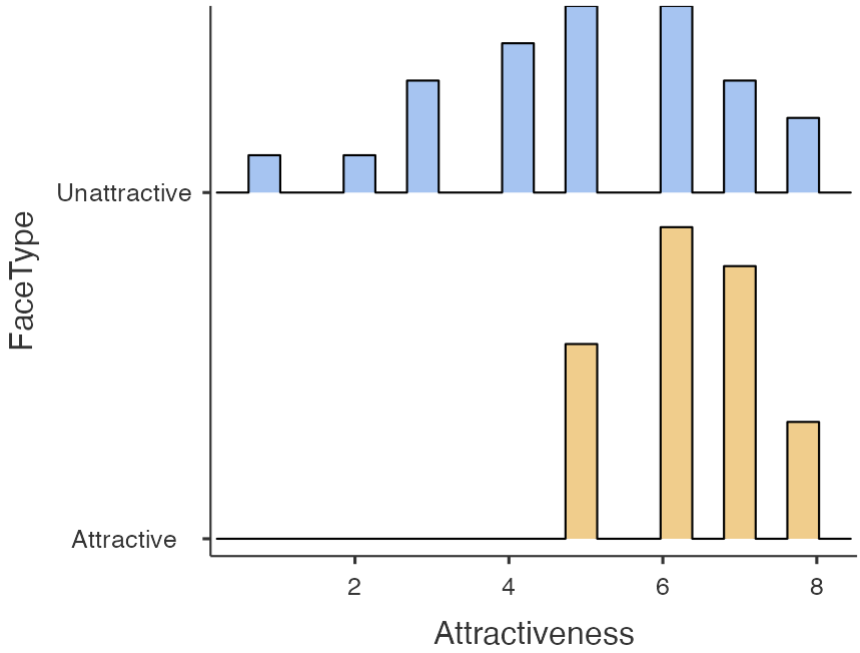
Descriptives

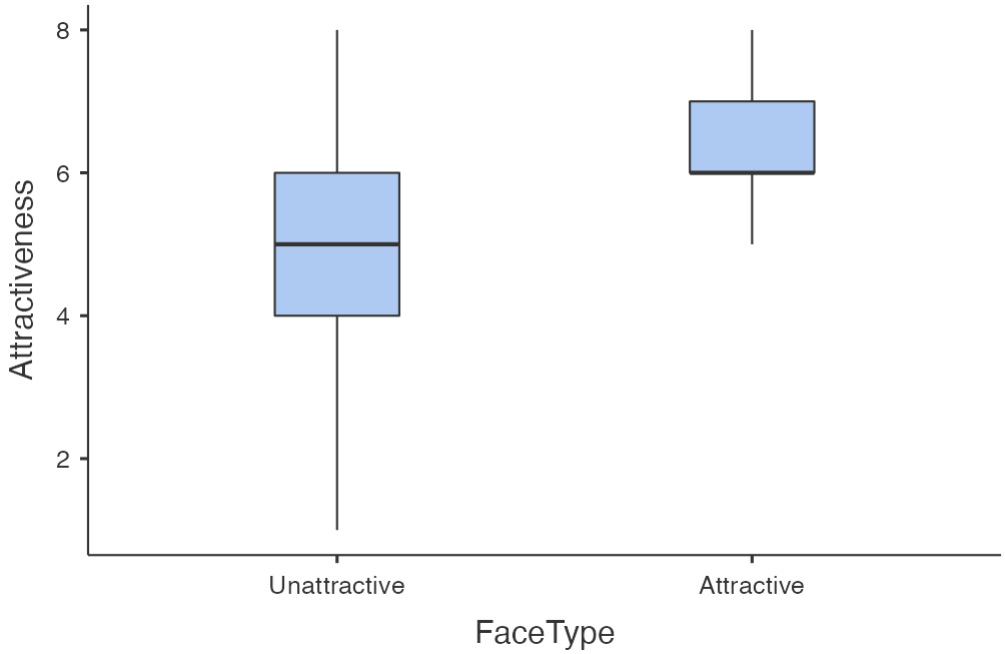
Descriptives

	FaceType	Attractiveness
N	Unattractive	24
	Attractive	23
Missing	Unattractive	0
	Attractive	1
Mean	Unattractive	5.00
	Attractive	6.35
Median	Unattractive	5.00
	Attractive	6.00
Standard deviation	Unattractive	1.82
	Attractive	0.982
Minimum	Unattractive	1.00
	Attractive	5.00
Maximum	Unattractive	8.00
	Attractive	8.00
Skewness	Unattractive	-0.284
	Attractive	0.152
Std. error skewness	Unattractive	0.472
	Attractive	0.481
Kurtosis	Unattractive	-0.312
	Attractive	-0.873
Std. error kurtosis	Unattractive	0.918
	Attractive	0.935
Shapiro-Wilk W	Unattractive	0.966
	Attractive	0.885
Shapiro-Wilk p	Unattractive	0.567
	Attractive	0.012

Plots

Attractiveness





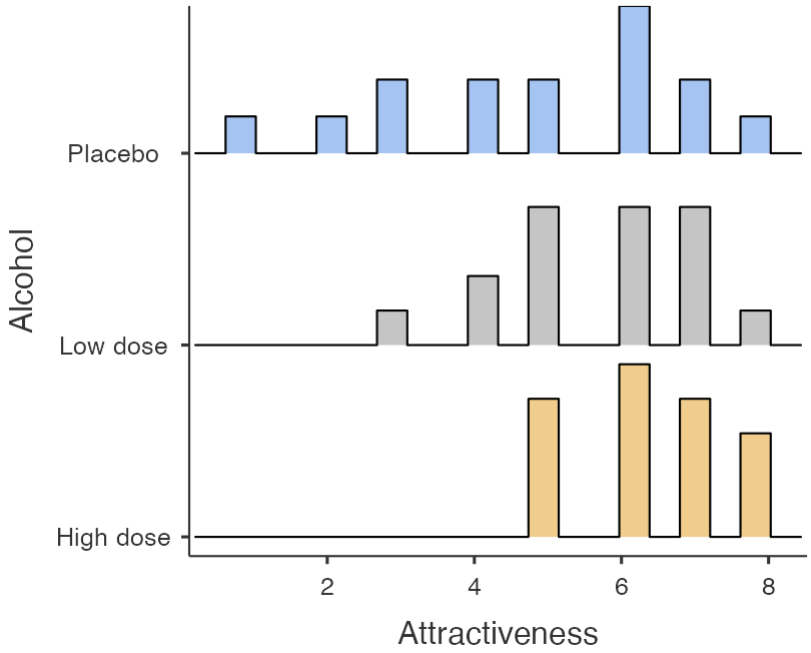
Descriptives

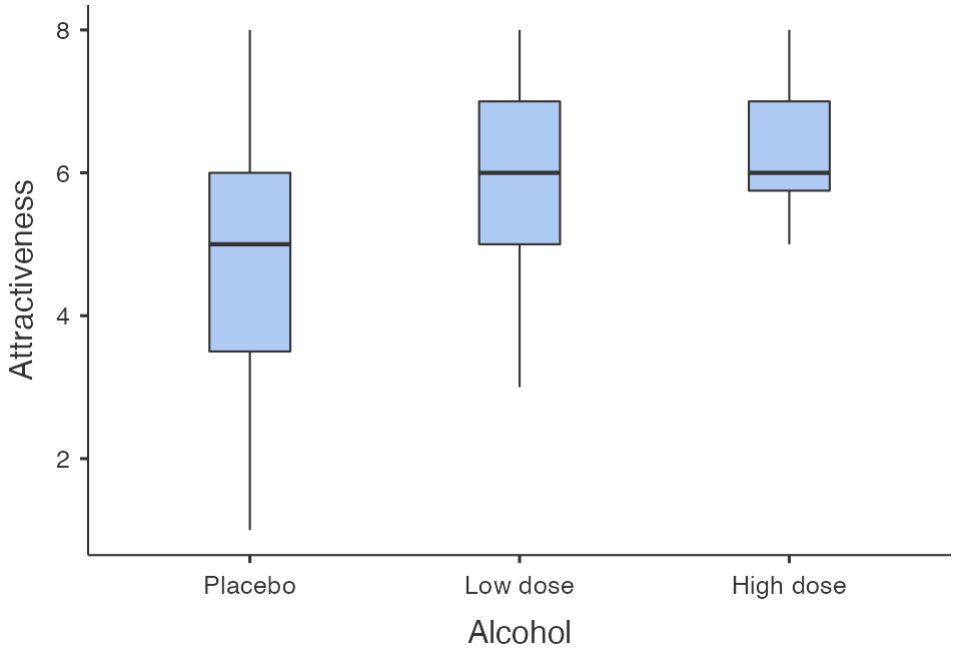
Descriptives

	Alcohol	Attractiveness
N	Placebo	15
	Low dose	16
	High dose	16
Missing	Placebo	1
	Low dose	0
	High dose	0
Mean	Placebo	4.87
	Low dose	5.69
	High dose	6.38
Median	Placebo	5.00
	Low dose	6.00
	High dose	6.00
Standard deviation	Placebo	2.00
	Low dose	1.35
	High dose	1.09
Minimum	Placebo	1.00
	Low dose	3.00
	High dose	5.00
Maximum	Placebo	8.00
	Low dose	8.00
	High dose	8.00
Skewness	Placebo	-0.412
	Low dose	-0.271
	High dose	0.189
Std. error skewness	Placebo	0.580
	Low dose	0.564
	High dose	0.564
Kurtosis	Placebo	-0.573
	Low dose	-0.440
	High dose	-1.15
Std. error kurtosis	Placebo	1.12
	Low dose	1.09
	High dose	1.09
Shapiro-Wilk W	Placebo	0.959
	Low dose	0.951
	High dose	0.880
Shapiro-Wilk p	Placebo	0.669
	Low dose	0.506
	High dose	0.039

Plots

Attractiveness





ANOVA

ANOVA - Attractiveness

	Sum of Squares	df	Mean Square	F	p	ω²
Alcohol	15.4	2	7.69	5.50	0.008	0.106
FaceType	21.4	1	21.40	15.30	<.001	0.168
Alcohol ✻ FaceType	23.3	2	11.64	8.32	<.001	0.172
Residuals	57.3	41	1.40			

[3]

Assumption Checks

Homogeneity of Variances Test (Levene's)

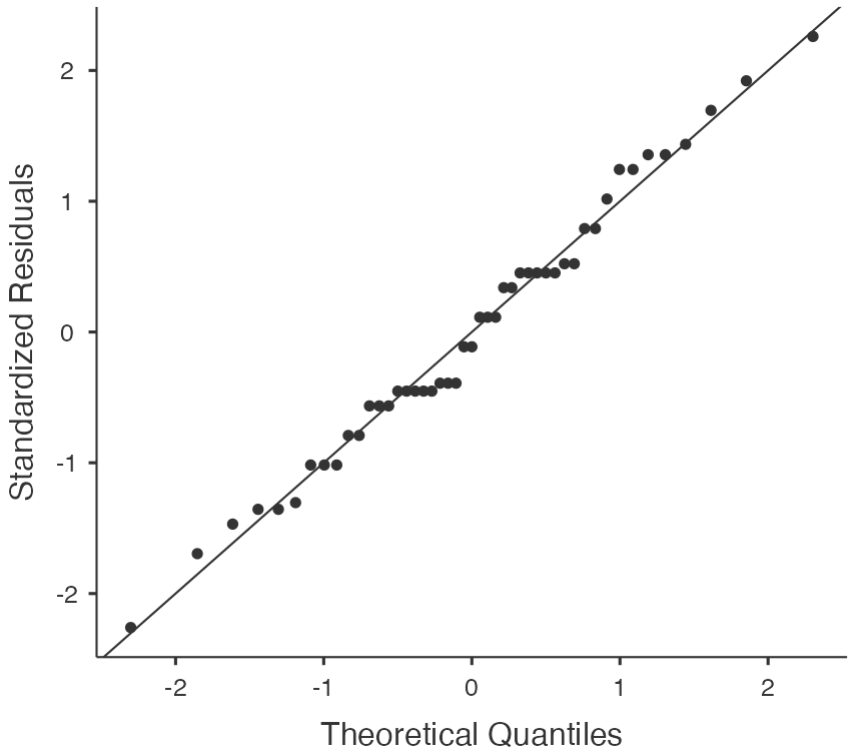
F	df1	df2	p
0.615	5	41	0.689

[3]

Normality Test (Shapiro-Wilk)

Statistic	p
0.986	0.838

Q-Q Plot



Post Hoc Tests

Post Hoc Comparisons - Alcohol

Comparison								
Alcohol		Alcohol	Mean Difference	SE	df	t	p_{tukey}	Cohen's d
Placebo	-	Low dose	-0.723	0.426	41.0	-1.70	0.218	-0.612
	-	High dose	-1.411	0.426	41.0	-3.32	0.005	-1.193
Low dose	-	High dose	-0.688	0.418	41.0	-1.64	0.239	-0.581

Note. Comparisons are based on estimated marginal means

Post Hoc Comparisons - FaceType

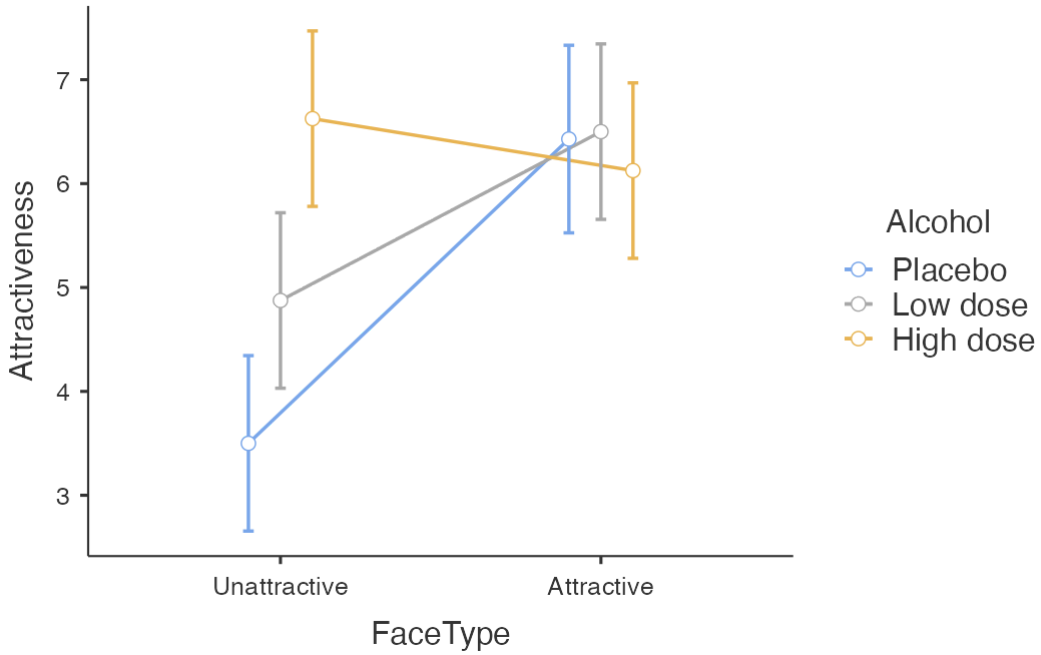
Comparison								
FaceType		FaceType	Mean Difference	SE	df	t	p_{tukey}	Cohen's d
Unattractive	-	Attractive	-1.35	0.345	41.0	-3.91	<.001	-1.14

Note. Comparisons are based on estimated marginal means

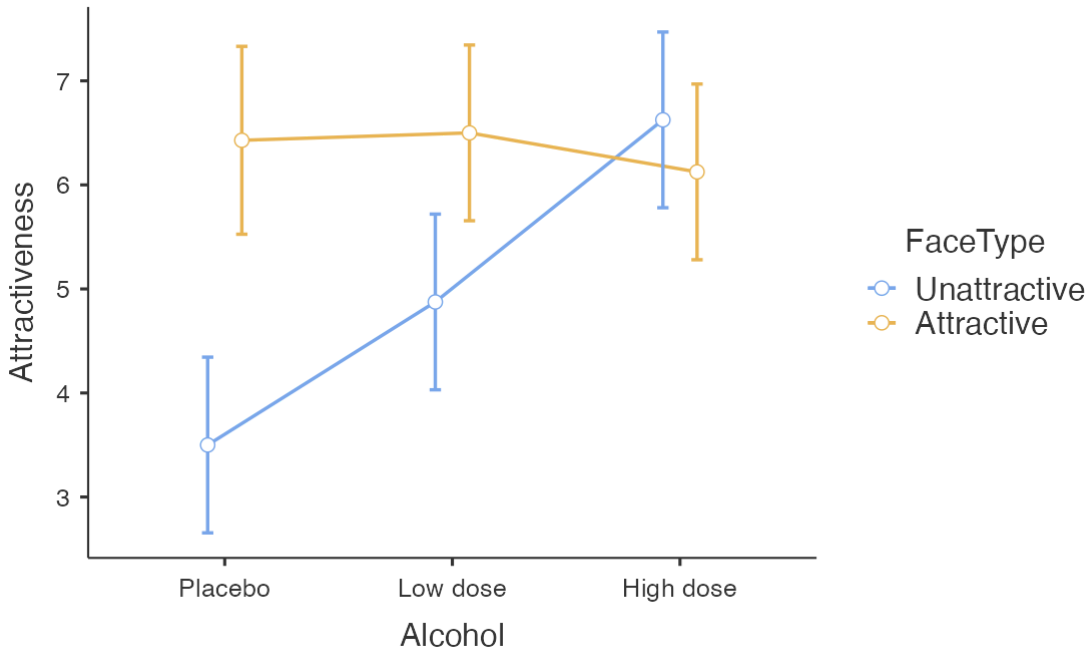
[4]

Estimated Marginal Means

FaceType ✻ Alcohol



Alcohol ✻ FaceType



[4]

References

[1] The jamovi project (2022). *jamovi*. (Version 2.3) [Computer Software]. Retrieved from https://www.jamovi.org.

[2] R Core Team (2021). *R: A Language and environment for statistical computing*. (Version 4.1) [Computer software]. Retrieved from https://cran.r-project.org. (R packages retrieved from MRAN snapshot 2022-01-01).

[3] Fox, J., & Weisberg, S. (2020). *car: Companion to Applied Regression*. [R package]. Retrieved from https://cran.r-project.org/package=car.

[4] Lenth, R. (2020). *emmeans: Estimated Marginal Means, aka Least-Squares Means*. [R package]. Retrieved from https://cran.r-project.org/package=emmeans.