Results

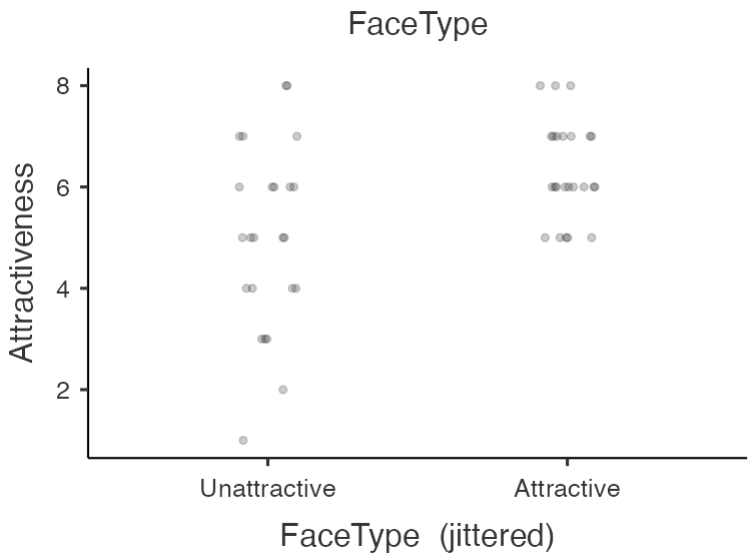
Relationships, Prediction, and Group Comparisons

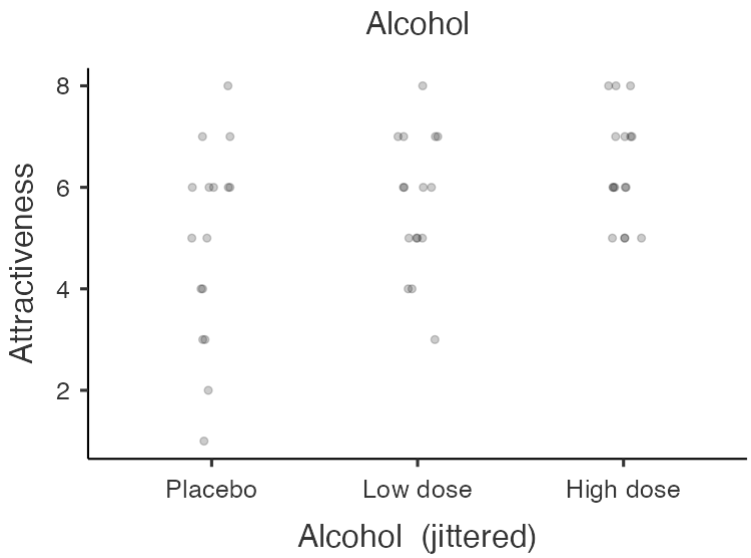
You have entered a numeric dependent variable and two categorical (nominal/ordinal) independent variables. Hence, a two way ANOVA seems to be a good option for you! In order to run this analysis in jamovi, go to: ANOVA > ANOVA

- 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





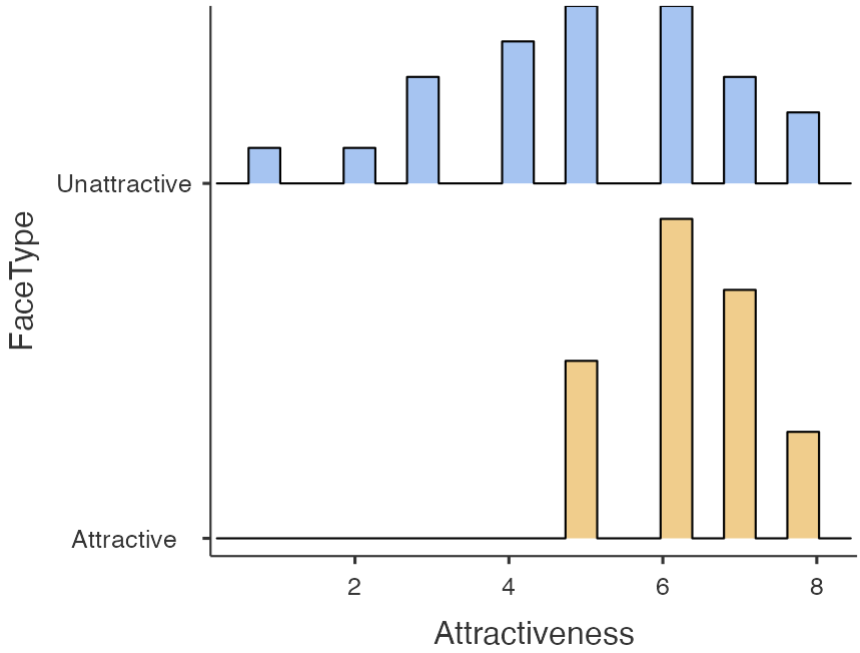
Descriptives

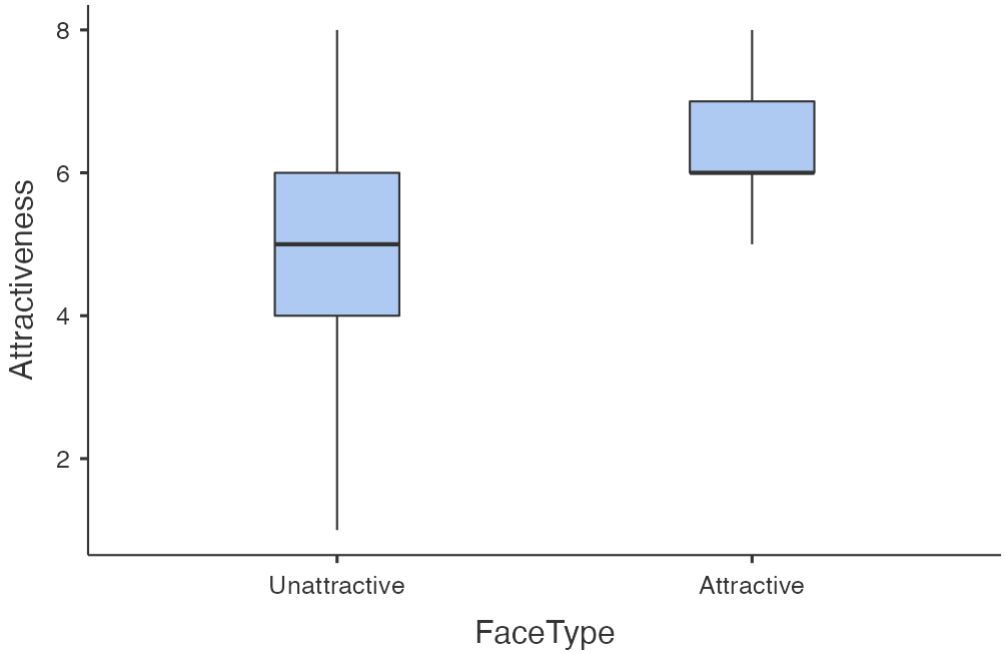
Descriptives

	FaceType	Attractiveness
N	Unattractive	24
	Attractive	24
Missing	Unattractive	0
	Attractive	0
Mean	Unattractive	5.00
	Attractive	6.33
Median	Unattractive	5.00
	Attractive	6.00
Standard deviation	Unattractive	1.82
	Attractive	0.963
Minimum	Unattractive	1.00
	Attractive	5.00
Maximum	Unattractive	8.00
	Attractive	8.00
Skewness	Unattractive	-0.284
	Attractive	0.201
Std. error skewness	Unattractive	0.472
	Attractive	0.472
Kurtosis	Unattractive	-0.312
	Attractive	-0.781
Std. error kurtosis	Unattractive	0.918
	Attractive	0.918
Shapiro-Wilk W	Unattractive	0.966
	Attractive	0.884
Shapiro-Wilk p	Unattractive	0.567
	Attractive	0.010

Plots

Attractiveness





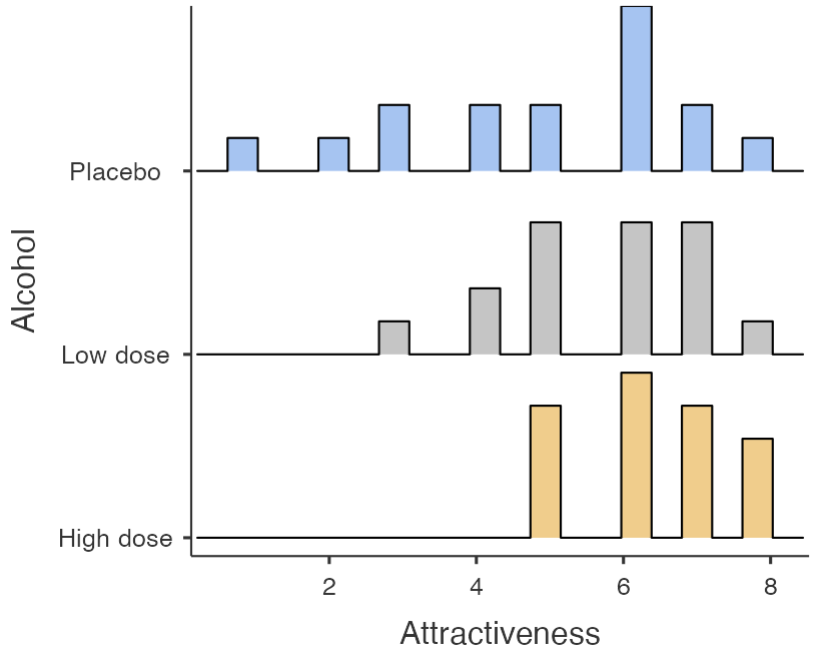
Descriptives

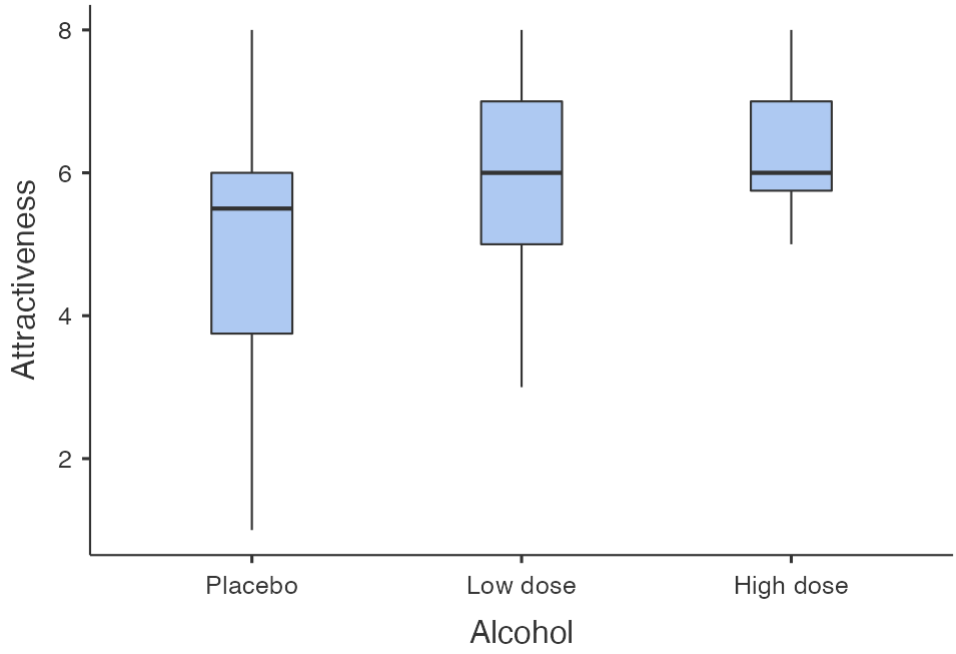
Descriptives

	Alcohol	Attractiveness
N	Placebo	16
	Low dose	16
	High dose	16
Missing	Placebo	0
	Low dose	0
	High dose	0
Mean	Placebo	4.94
	Low dose	5.69
	High dose	6.38
Median	Placebo	5.50
	Low dose	6.00
	High dose	6.00
Standard deviation	Placebo	1.95
	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	-0.518
	Low dose	-0.271
	High dose	0.189
Std. error skewness	Placebo	0.564
	Low dose	0.564
	High dose	0.564
Kurtosis	Placebo	-0.424
	Low dose	-0.440
	High dose	-1.15
Std. error kurtosis	Placebo	1.09
	Low dose	1.09
	High dose	1.09
Shapiro-Wilk W	Placebo	0.947
	Low dose	0.951
	High dose	0.880
Shapiro-Wilk p	Placebo	0.447
	Low dose	0.506
	High dose	0.039

Plots

Attractiveness





ANOVA

ANOVA - Attractiveness

	Sum of Squares	df	Mean Square	F	p	ω²
FaceType	21.3	1	21.33	15.58	<.001	0.166
Alcohol	16.5	2	8.27	6.04	0.005	0.115
FaceType ✻ Alcohol	23.3	2	11.65	8.51	<.001	0.171
Residuals	57.5	42	1.37			

[3]

Assumption Checks

Homogeneity of Variances Tests

	Statistic	df	df2	p
Levene's	0.702	5	42	0.625
Bartlett's	3.14	5		0.678

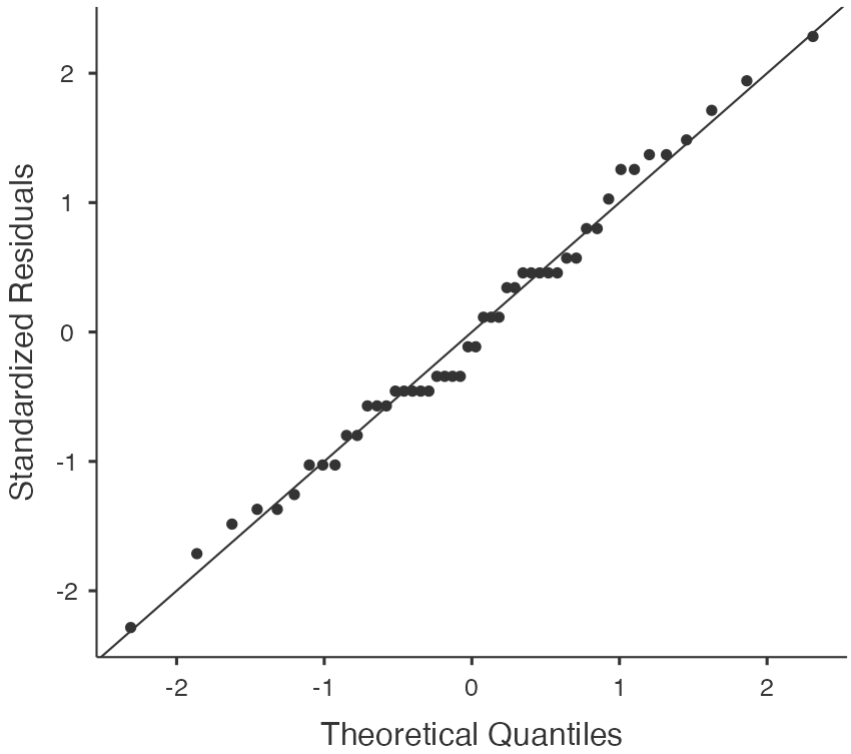
Note. Additional results provided by *moretests*

Normality tests

	statistic	p
Shapiro-Wilk	0.987	0.878
Kolmogorov-Smirnov	0.112	0.585
Anderson-Darling	0.288	0.605

Note. Additional results provided by *moretests*

Q-Q Plot



Post Hoc Tests

Post Hoc Comparisons - FaceType

Comparison								
FaceType		FaceType	Mean Difference	SE	df	t	p_{tukey}	Cohen's d
Unattractive	-	Attractive	-1.33	0.338	42.0	-3.95	<.001	-1.14

Note. Comparisons are based on estimated marginal means

Post Hoc Comparisons - Alcohol

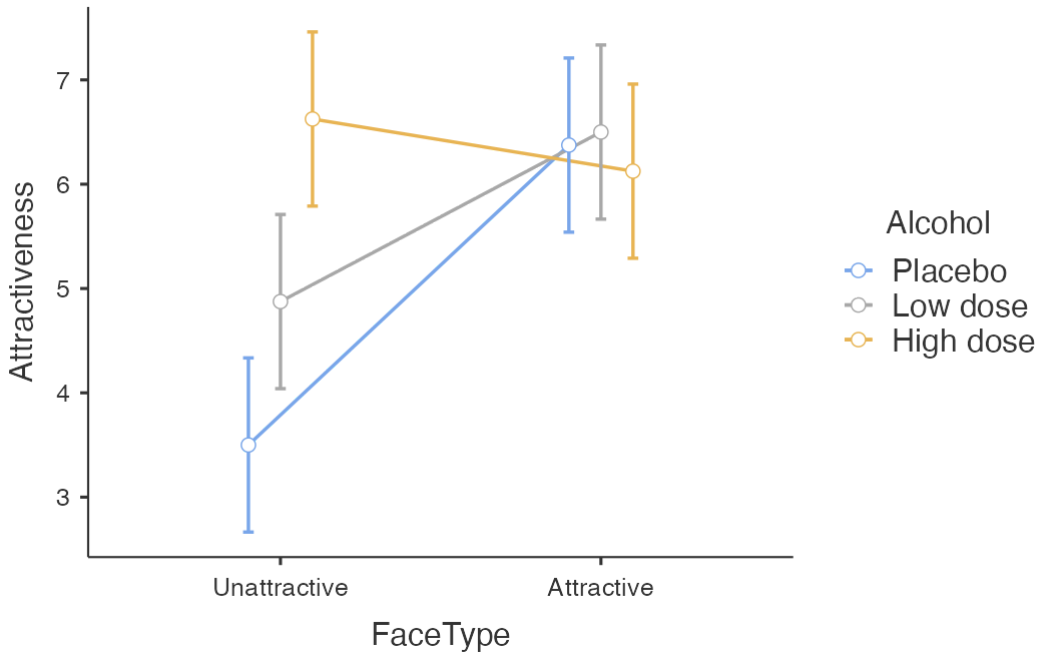
Comparison								
Alcohol		Alcohol	Mean Difference	SE	df	t	p_{tukey}	Cohen's d
Placebo	-	Low dose	-0.750	0.414	42.0	-1.81	0.178	-0.641
	-	High dose	-1.437	0.414	42.0	-3.47	0.003	-1.229
Low dose	-	High dose	-0.688	0.414	42.0	-1.66	0.232	-0.588

Note. Comparisons are based on estimated marginal means

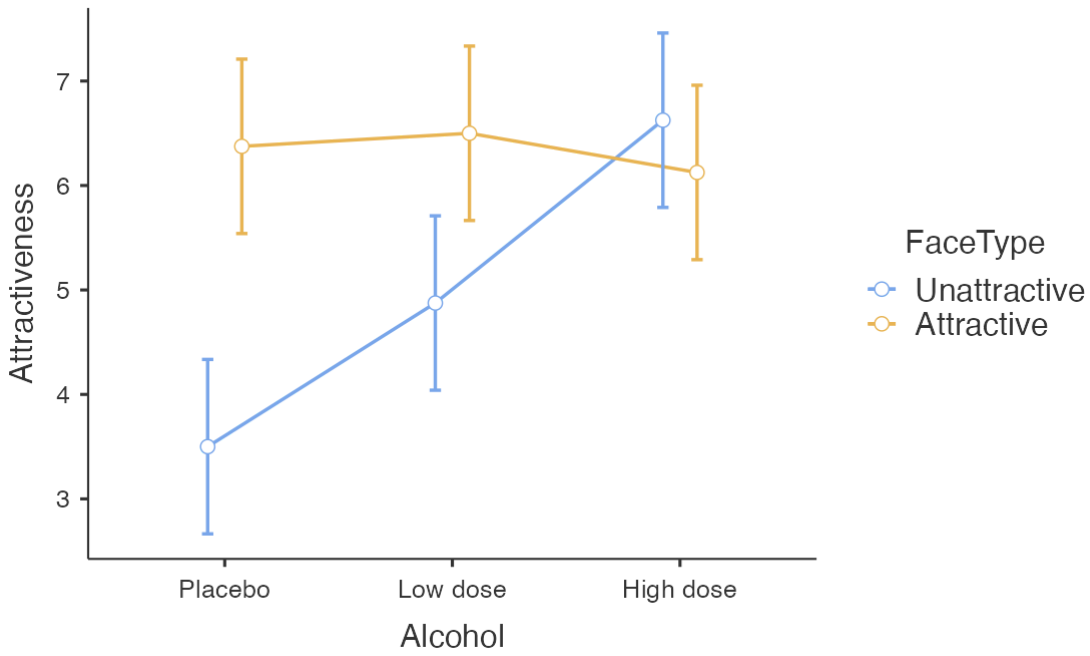
[4]

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.