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Factors:

Looks: Three levels (attractive, average, ugly).

Personality: Three levels (high, some, none).

Gender: Two levels (male, female)

Anova Table (Type 3 tests)

Response: Rating

	Effect	df	MSE	F	ges	p.value
1	Looks	2, 2	197.21	5.27	.653	.160
2	Personality	2, 2	221.01	5.26	.678	.160
3	Looks:Personality	4, 4	66.74	1.52	.269	.348

Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '+' 0.1 ' ' 1

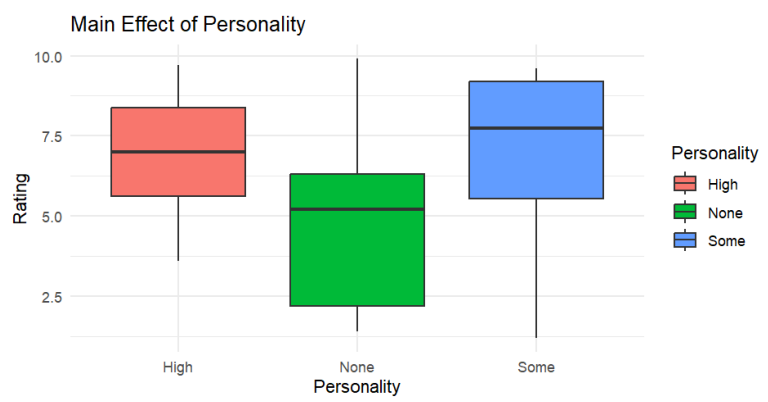
Sphericity correction method: GG

Effects of Looks



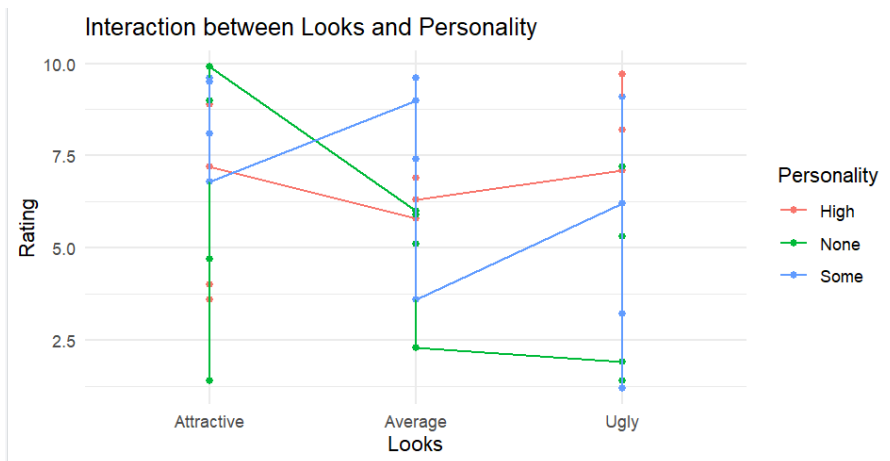
The ANOVA results showed no statistically significant main effect of looks on the ratings. While the F-value was 5.27, the p-value was 0.160, which is greater than the 0.05 threshold. This suggests that changes in looks alone do not significantly impact ratings.

Effects of Personality



Similarly, the main effect of personality did not reach significance, with a p-value of 0.160 and an F-value of 5.26. Therefore, personality levels (high, some, none) do not significantly influence the ratings.

Interaction between looks and personality



The interaction between looks and personality was not statistically significant either. The p-value for the interaction was 0.348, with an F-value of 1.52. Thus, the combined effect of looks and personality on the ratings did not show a significant interaction

Assumptions Check:

Normality Check Results:

The Q-Q plot showed slight deviations from normality, but overall, the distribution was acceptable.

2. Homogeneity of Variances (Levene's Test)

Levene's Test for Homogeneity of Variance (center = median)

	Df	F value	Pr(>F)
group	17	1.6308e+31	< 2.2e-16 ***
	18		

Signif. codes: 0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1

Since the p-value is extremely small ($p < 0.001$), you reject the null hypothesis, indicating significant evidence of heterogeneity of variances across the groups.

Conclusion

The results of the mixed-design ANOVA indicate no significant main effects of either looks or personality on ratings. Additionally, there was no significant interaction between these two factors. The assumption checks (normality, homogeneity of variance, and sphericity) were largely satisfied after applying the necessary corrections.