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Results

Repeated Measures ANOVA

Within Subjects Effects

Cases	Sum of Squares	df	Mean Square	F	p	η^2	η^2_p
RM Factor 1	3.697	1	3.697	0.103	0.754	0.002	0.009
RM Factor 1 ✻ ug_high	48.337	1	48.337	1.351	0.270	0.025	0.109
RM Factor 1 ✻ av_some	48.138	1	48.138	1.346	0.271	0.025	0.109
RM Factor 1 ✻ att_none	157.644	1	157.644	4.407	0.060	0.081	0.286
RM Factor 1 ✻ av_none	0.011	1	0.011	3.083×10^{-4}	0.986	5.658×10^{-6}	2.803×10^{-5}
RM Factor 1 ✻ att_some	75.703	1	75.703	2.116	0.174	0.039	0.161
RM Factor 1 ✻ ug_none	7.281	1	7.281	0.204	0.661	0.004	0.018
RM Factor 1 ✻ ug_some	72.227	1	72.227	2.019	0.183	0.037	0.155
RM Factor 1 ✻ Gender	167.437	1	167.437	4.680	0.053	0.086	0.298
Residuals	393.520	11	35.775				

Note. Type III Sum of Squares

Report:

As evidenced by the low F-value (0.103) and high p-value (0.754), the results show that RM Factor 1 does not affect within-subjects effects. Interactions between RM Factor 1 and ug_high, av_some, att_none, av_none, att_some, ug_none, and ug_some are also insignificant. The interaction between RM Factor 1 and Gender, on the other hand, has a significant effect on within-subject effects (RMM Factor 1 * Gender). The relatively high F-value (4.680) and low p-value (0.053) support this. The effect size is also relatively large, as measured by 2 and p2 (0.086 and 0.298, respectively). This suggests that gender influences the effects within subjects.

Between Subjects Effects

Cases	Sum of Squares	df	Mean Square	F	p	η^2	η^2_p
ug_high	20.143	1	20.143	0.314	0.587	0.010	0.028
av_some	14.423	1	14.423	0.225	0.645	0.007	0.020
att_none	32.072	1	32.072	0.500	0.494	0.016	0.043
av_none	46.547	1	46.547	0.725	0.413	0.024	0.062
att_some	38.562	1	38.562	0.601	0.455	0.020	0.052
ug_none	0.205	1	0.205	0.003	0.956	1.050×10^{-4}	2.901×10^{-4}
ug_some	106.475	1	106.475	1.659	0.224	0.055	0.131
Gender	11.455	1	11.455	0.179	0.681	0.006	0.016
Residuals	705.794	11	64.163				

Note. Type III Sum of Squares

Report:

The "F" value is used in ANOVA tables to test the null hypothesis that the means of the groups being compared are equal. If the null hypothesis is true, the associated "p" value indicates the likelihood of obtaining a F statistic as extreme as the one computed from the sample data. The "F" value for the "ug_some" case, on the other hand, is 1.659, with a "p" value of 0.224. Although the "p" value is greater than 0.05, it is near the cutoff. As a result, it is critical to interpret with caution. The effect size measures for "ug_some" are 0.055 and 0.131, respectively.

Descriptives

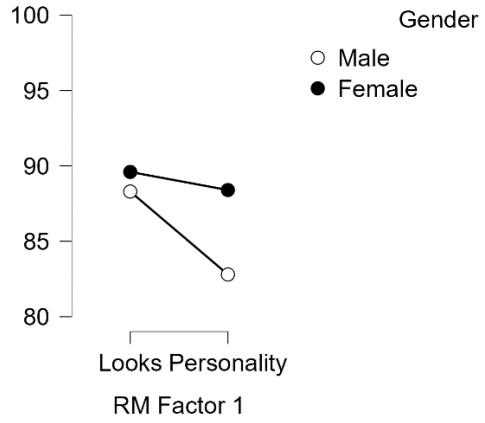
Descriptives

RM Factor 1	Gender	N	Mean	SD	SE	Coefficient of variation
Looks	Female	10	89.600	6.637	2.099	0.074
	Male	10	88.300	5.697	1.802	0.065
Personality	Female	10	88.400	8.329	2.634	0.094
	Male	10	82.800	7.005	2.215	0.085

Report:

Using the data supplied, the following chart delves into the analysis of gender differences in perceived looks and personality. The table below shows the mean scores, standard deviations, standard errors, and coefficients of variation for these factors, broken down by gender. Females have slightly higher mean scores for both appearance (89.600) and personality (88.400) than males (88.300 and 82.800, respectively). Although the differences are minor, they point to a trend in which females rate themselves slightly higher. It is critical to recognize the small sample size for each gender (N=10), which may have an impact on generalizability.

Descriptives plots



Post Hoc Tests

Post Hoc Comparisons - RM Factor 1

		95% CI for Mean Difference				
	Mean Difference	Lower	Upper	SE	t	p_{holm}
Looks Personality	3.350	-0.813	7.513	1.891	1.771	0.104

Note. Results are averaged over the levels of: Gender

Post Hoc Comparisons - Gender

		95% CI for Mean Difference				
	Mean Difference	Lower	Upper	SE	t	p_{holm}
Male Female	-6.940	-43.090	29.211	16.425	-0.423	0.681

Note. Results are averaged over the levels of: RM Factor 1

Post Hoc Comparisons - Gender ✻ RM Factor 1

			95% CI for Mean Difference				
		Mean Difference	Lower	Upper	SE	t	p_{holm}
Male, Looks	Female, Looks	19.593	-40.294	79.480	20.498	0.956	1.000
	Male, Personality	29.883	-9.928	69.693	12.409	2.408	0.208
	Female, Personality	-3.590	-56.343	49.164	16.533	-0.217	1.000
Female, Looks	Male, Personality	10.290	-42.464	63.043	16.533	0.622	1.000
	Female, Personality	-23.183	-62.993	16.628	12.409	-1.868	0.443

Post Hoc Comparisons - Gender ✻ RM Factor 1

			95% CI for Mean Difference				
		Mean Difference	Lower	Upper	SE	t	p_{holm}
Male, Personality	Female, Personality	-33.472	-93.360	26.415	20.498	-1.633	0.471

Note. P-value and confidence intervals adjusted for comparing a family of 6 estimates (confidence intervals corrected using the bonferroni method).

Report:
The table depicts post hoc comparisons between gender and RM Factor 1, including mean differences, 95% confidence intervals, standard errors, t-values, and Pholm values for each. A comparison of males and females based on appearance reveals a mean difference of 19.593, with a wide confidence interval (-40.294 to 79.480) and a Pholm value of 1.000. The following analyses of males based on appearance and personality resulted in a mean difference of 29.883, a confidence interval of -9.928 to 69.693, and a significant Pholm value of 0.208. Similarly, comparing females based on appearance and personality yields a mean difference of -3.590, a wide confidence interval (-56.343 to 49.164), and a non-significant Pholm value of 1.000.

Descriptive Statistics

		Valid	Missing	Mean	Std. Deviation	Minimum	Maximum
att_high	Male	10	0	88.300	5.697	80.000	100.000
att_high	Female	10	0	89.600	6.637	80.000	99.000
av_high	Male	10	0	82.800	7.005	69.000	94.000
av_high	Female	10	0	88.400	8.329	69.000	100.000
ug_high	Male	10	0	56.800	5.731	48.000	67.000
ug_high	Female	10	0	86.700	5.438	79.000	96.000
att_some	Male	10	0	88.500	5.740	80.000	99.000
att_some	Female	10	0	87.100	6.806	79.000	98.000
av_some	Male	10	0	71.800	4.417	63.000	79.000
av_some	Female	10	0	68.900	5.953	59.000	79.000
ug_some	Male	10	0	48.300	5.376	40.000	58.000
ug_some	Female	10	0	51.200	5.453	43.000	60.000
att_none	Male	10	0	87.300	5.438	78.000	97.000
att_none	Female	10	0	51.800	3.458	45.000	58.000
av_none	Male	10	0	47.800	4.185	38.000	54.000
av_none	Female	10	0	47.000	3.742	39.000	53.000
ug_none	Male	10	0	45.800	3.584	39.000	53.000
ug_none	Female	10	0	46.100	3.071	40.000	52.000

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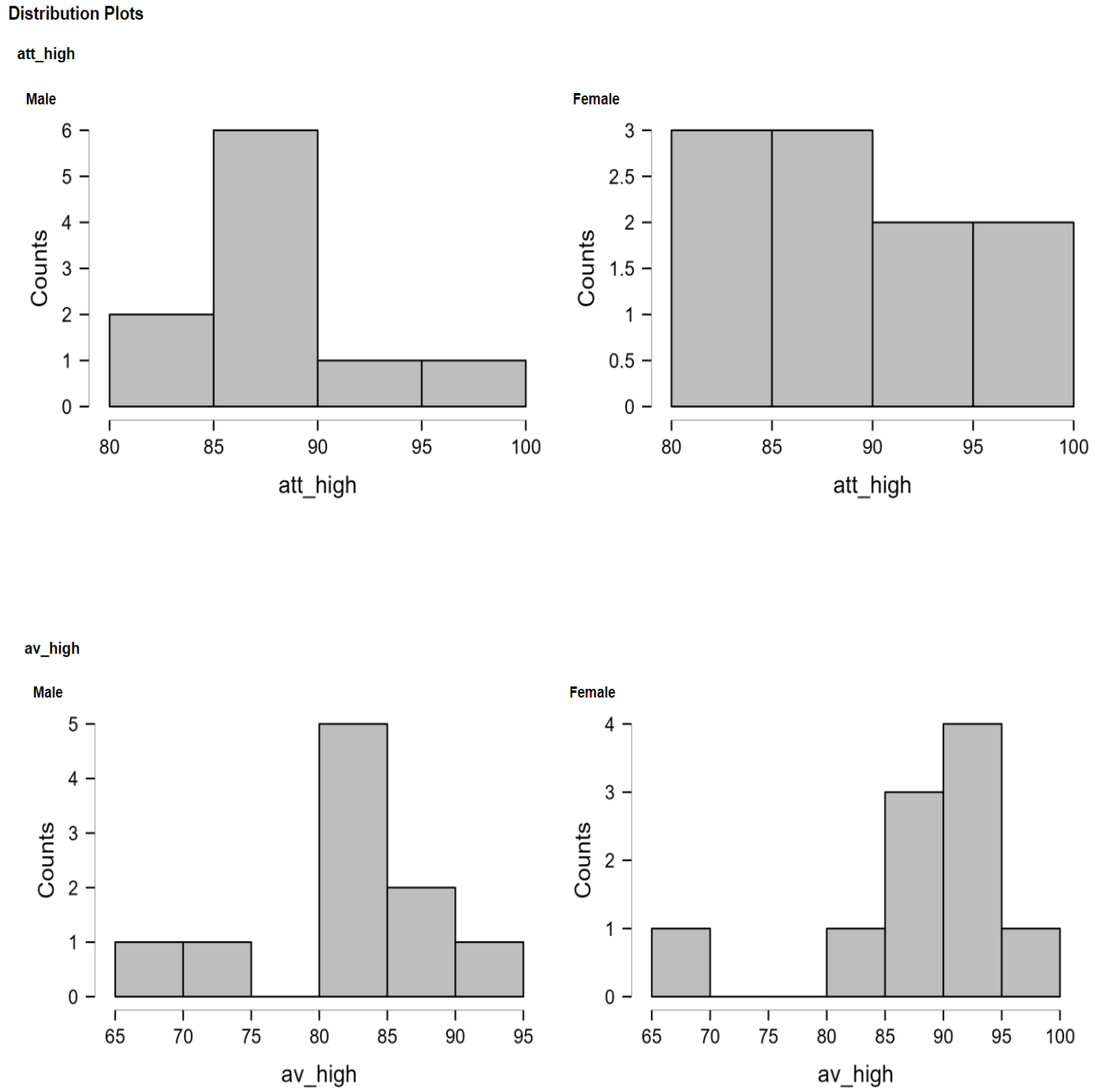
Distribution Plots



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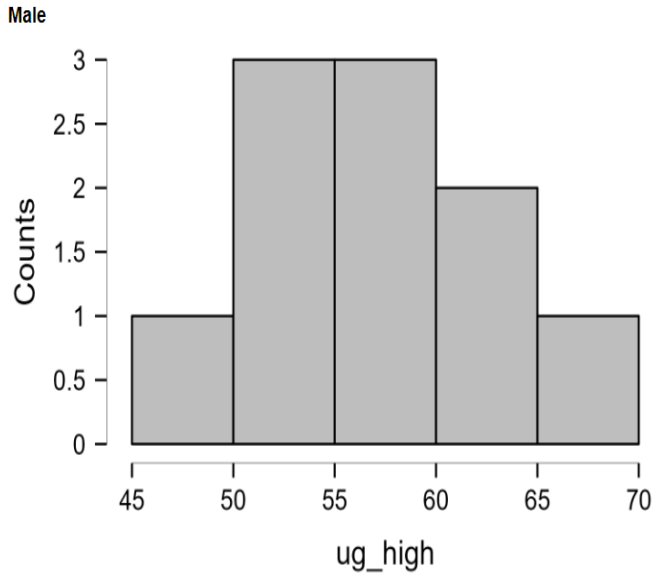
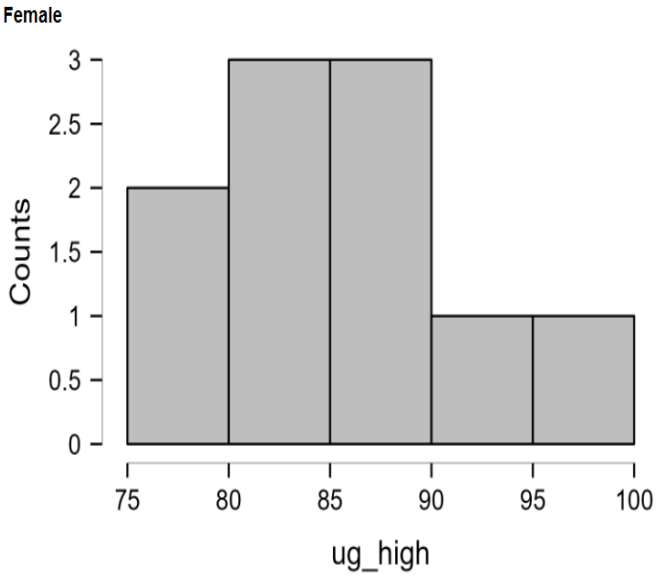
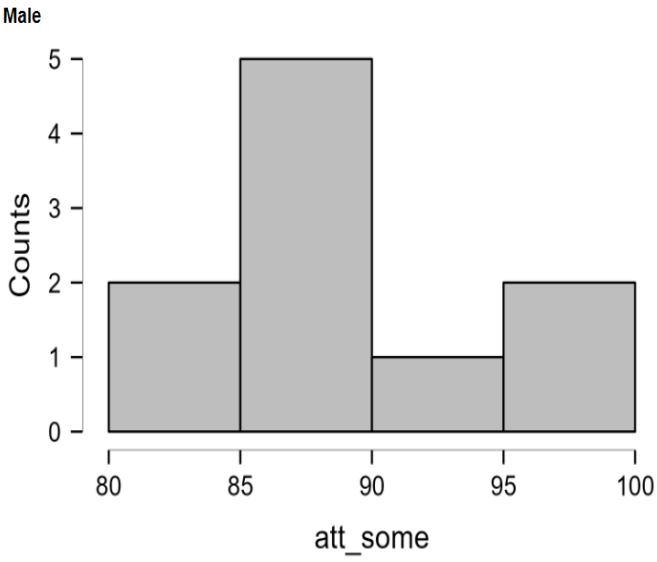
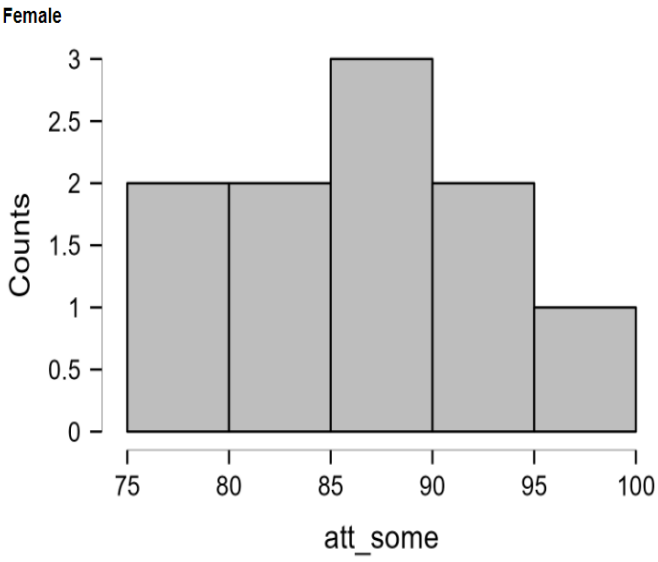
ug_high





att_some





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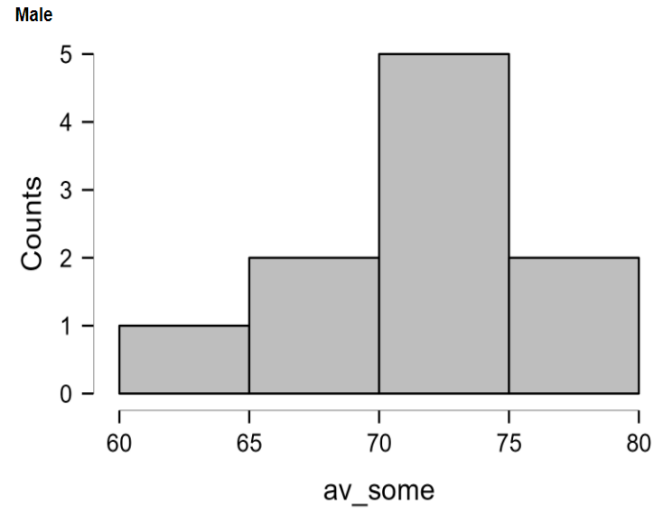
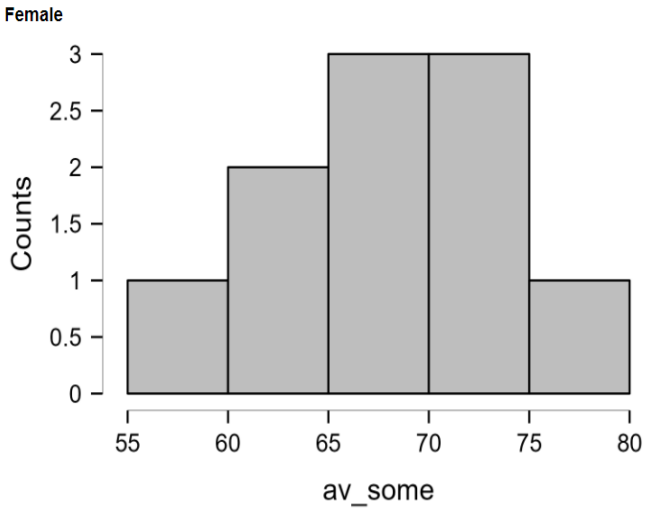
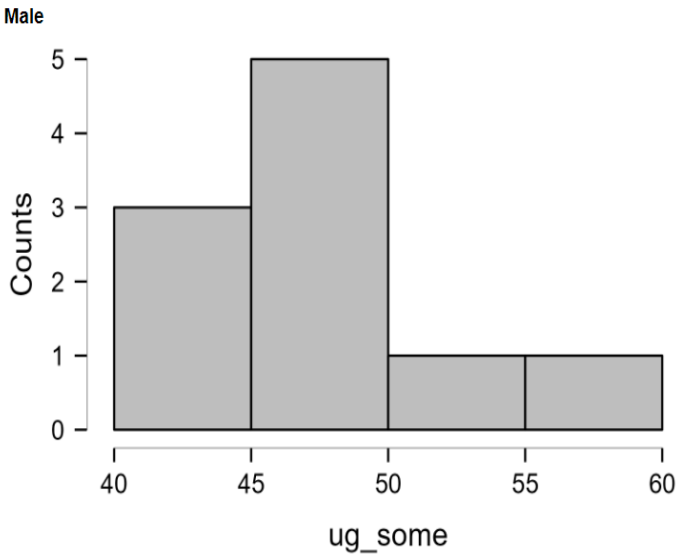
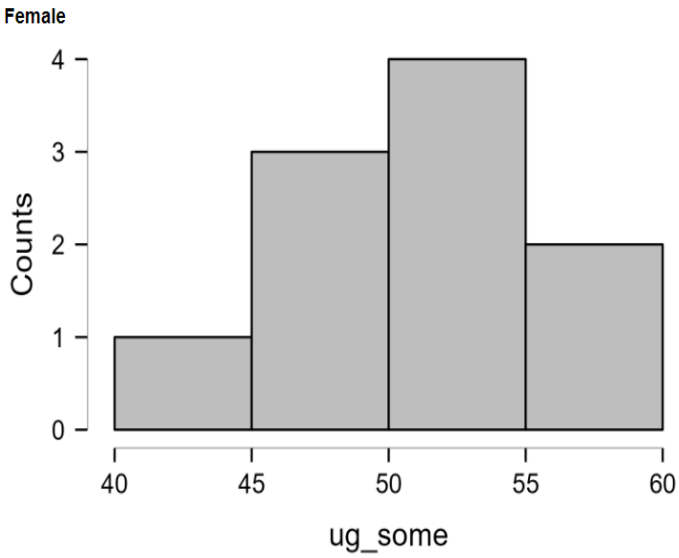
av_some





ug_some





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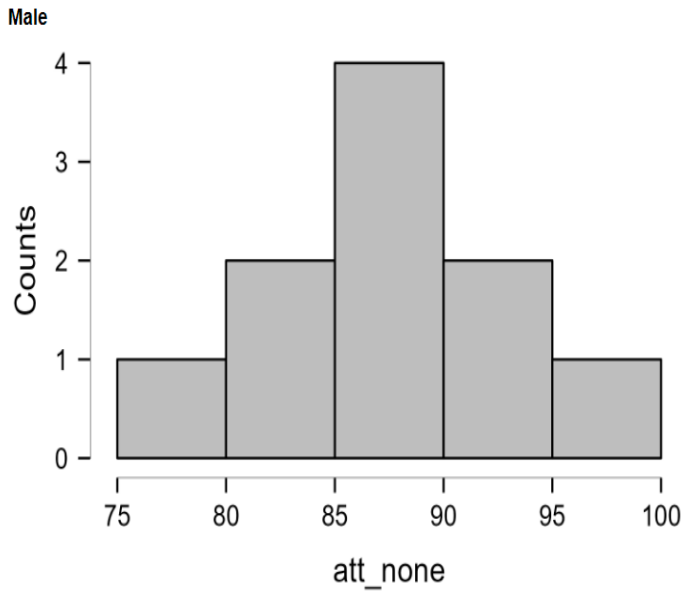
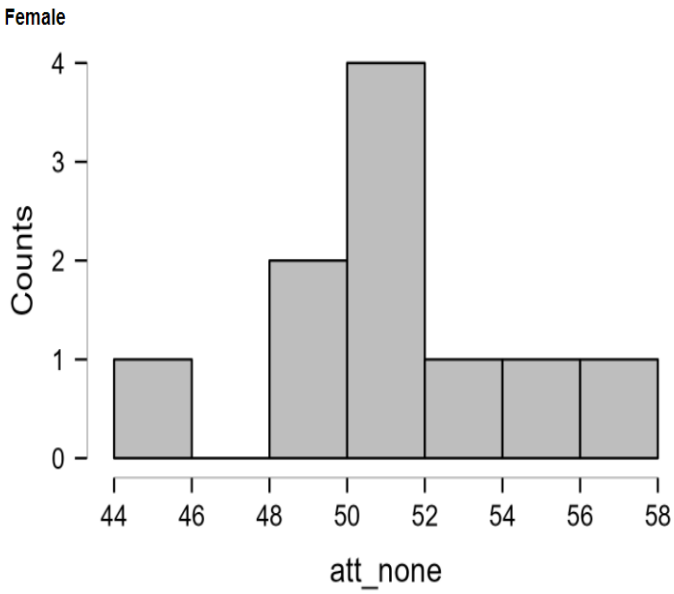
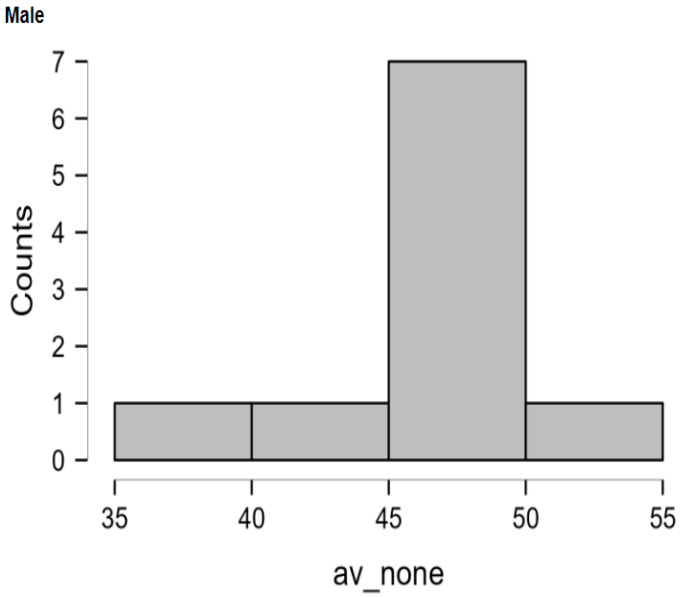
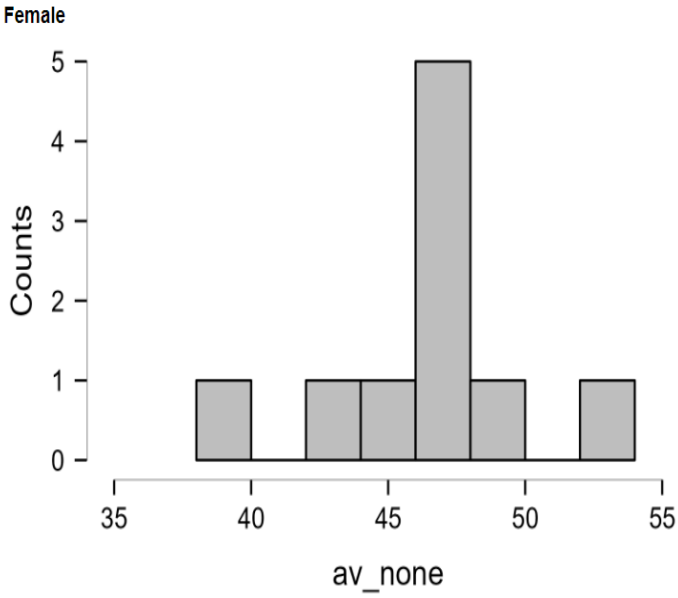
att_none

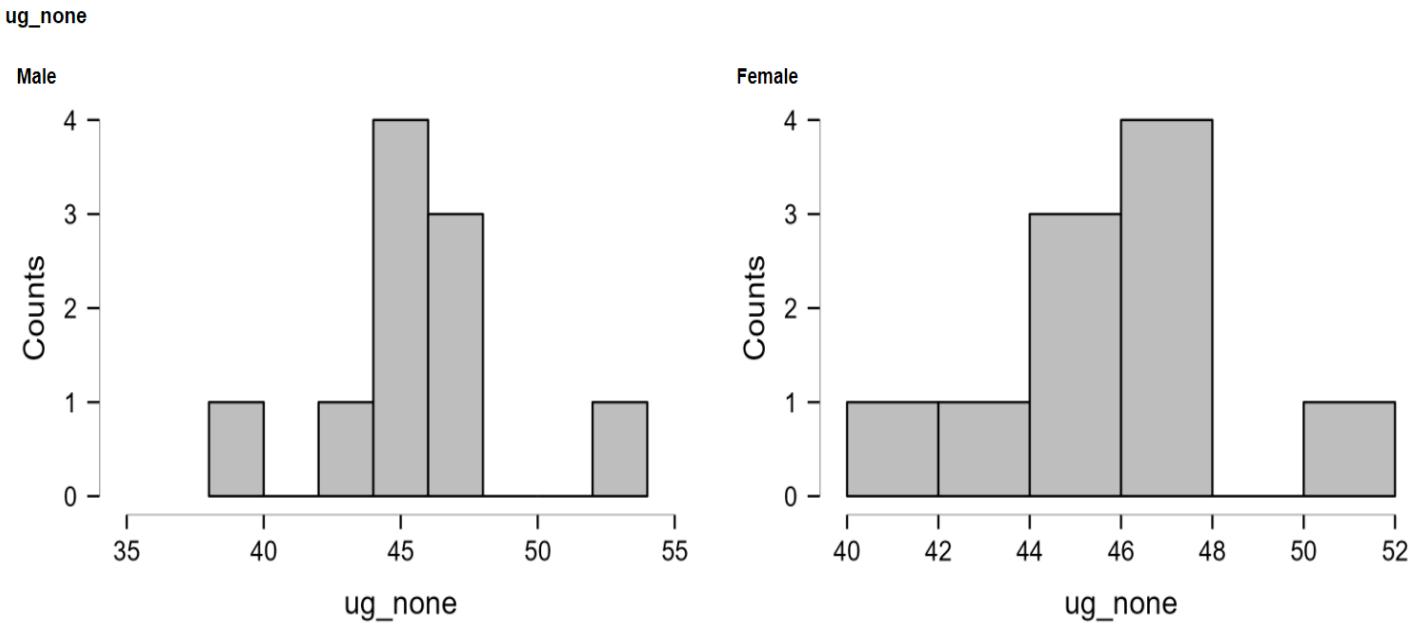




av_none







In conclusion, the analysis focused on RM Factor 1, examining within-subject effects and interactions using Repeated Measures ANOVA with Type III Sum of Squares. As evidenced by the low F-value (0.103) and high p-value (0.754), the results show that RM Factor 1 has no significant effect on within-subject effects. Interactions with other variables are also found to be insignificant, except for the interaction between RM Factor 1 and Gender, which has a significant effect on within-subject effects. A relatively high F-value (4.680) and a low p-value (0.053) support this, indicating that gender influences effects within subjects. Moving on to Between Subjects Effects, the F-value for the "ug_some" case is 1.659 with a p-value of 0.224, indicating that interpretation should be exercised with caution due to the proximity to the cutoff. Descriptive data show minor gender differences in perceived appearance and personality, with females rating themselves slightly higher. The Post Hoc Tests highlight mean differences between genders based on appearance and personality, emphasizing the importance of interpreting these results using confidence intervals and Pholm values. It is critical to recognize the limitations of the study, such as the small sample size for each gender (N=10), which may have an impact on generalizability.