

Simple output for data set: CrossAgeEffect8.sav

Research Question 1

Univariate Analysis of Variance

Between-Subjects Factors

		Value Label	N
age group	1	young	90
	2	old	90
face recognition test type (same vs different)	1	same age faces test	90
	2	different age faces test	90

Descriptive Statistics

Dependent Variable: percentage accuracy

age group	face recognition test type (same vs different)	Mean	Std. Deviation	N
young	same age faces test	79.11	7.121	45
	different age faces test	60.59	10.831	45
	Total	69.85	13.029	90
old	same age faces test	54.07	11.783	45
	different age faces test	43.11	12.048	45
	Total	48.59	13.068	90
Total	same age faces test	66.59	15.880	90
	different age faces test	51.85	14.388	90
	Total	59.22	16.821	180

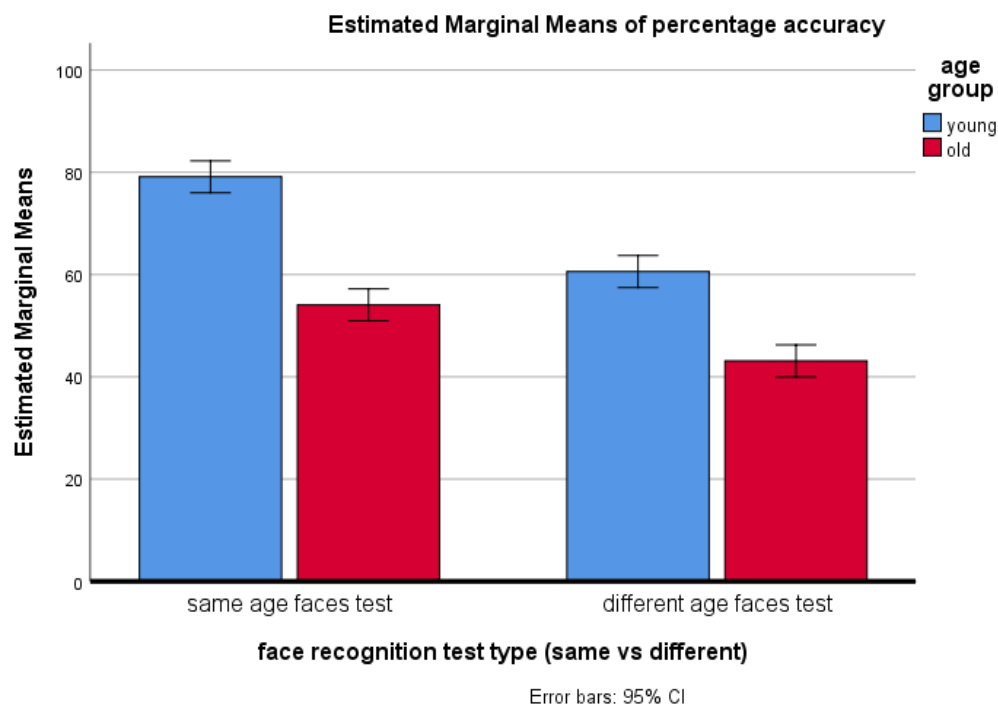
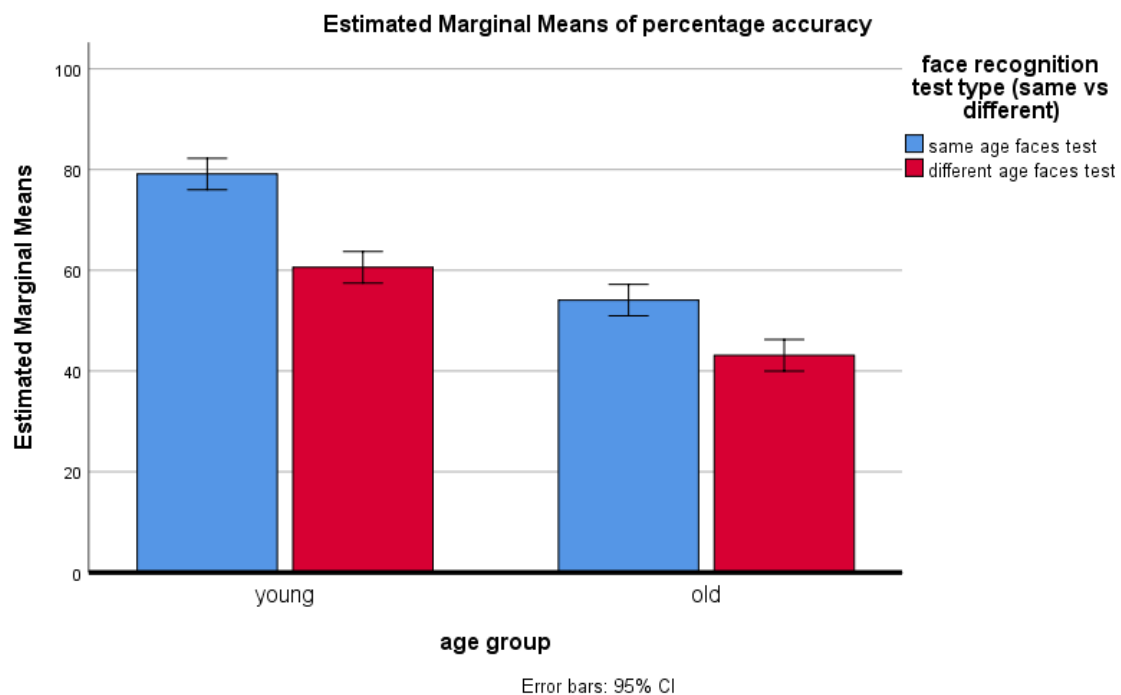
Tests of Between-Subjects Effects

Dependent Variable: percentage accuracy

Source	Type III Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	30758.272 ^a	3	10252.757	90.731	.000
Intercept	631308.889	1	631308.889	5586.693	.000
age_group	20338.025	1	20338.025	179.979	.000
face_rec_test	9778.025	1	9778.025	86.529	.000
age_group * face_rec_test	642.222	1	642.222	5.683	.018
Error	19888.395	176	113.002		
Total	681955.556	180			
Corrected Total	50646.667	179			

a. R Squared = .607 (Adjusted R Squared = .601)

Profile Plots



Note: One of the above two graphs is better. Also, neither graph can be used as is. It needs editing. If you do the analysis yourself in SPSS, edit the graph in SPSS. If you are just using output, see the file on how to draw your graphs in Excel at the bottom of the output files.

T-Test

face recognition test type (same vs different) = same age faces test

Group Statistics^a

	age group	N	Mean	Std. Deviation	Std. Error Mean
percentage accuracy	young	45	79.11	7.121	1.062
	old	45	54.07	11.783	1.756

a. face recognition test type (same vs different) = same age faces test

Independent Samples Test^a

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
percentage accuracy	Equal variances assumed	13.334	.000	12.199	88	.000	25.037	2.052	20.958	29.116
	Equal variances not assumed			12.199	72.358	.000	25.037	2.052	20.946	29.128

a. face recognition test type (same vs different) = same age faces test

face recognition test type (same vs different) = different age faces test

Group Statistics^a

	age group	N	Mean	Std. Deviation	Std. Error Mean
percentage accuracy	young	45	60.59	10.831	1.615
	old	45	43.11	12.048	1.796

a. face recognition test type (same vs different) = different age faces test

Independent Samples Test^a

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
percentage accuracy	Equal variances assumed	.004	.951	7.238	88	.000	17.481	2.415	12.682	22.281
	Equal variances not assumed			7.238	87.021	.000	17.481	2.415	12.681	22.282

a. face recognition test type (same vs different) = different age faces test

T-Test

age group = young

Group Statistics^a

face recognition test type (same vs different)		N	Mean	Std. Deviation	Std. Error Mean
percentage accuracy	same age faces test	45	79.11	7.121	1.062
	different age faces test	45	60.59	10.831	1.615

a. age group = young

Independent Samples Test^a

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
percentage accuracy	Equal variances assumed	11.040	.001	9.584	88	.000	18.519	1.932	14.678	22.359
	Equal variances not assumed			9.584	76.048	.000	18.519	1.932	14.670	22.367

a. age group = young

age group = old

Group Statistics^a

face recognition test type (same vs different)		N	Mean	Std. Deviation	Std. Error Mean
percentage accuracy	same age faces test	45	54.07	11.783	1.756
	different age faces test	45	43.11	12.048	1.796

a. age group = old

Independent Samples Test^a

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
percentage accuracy	Equal variances assumed	.150	.700	4.364	88	.000	10.963	2.512	5.971	15.955
	Equal variances not assumed			4.364	87.956	.000	10.963	2.512	5.971	15.955

a. age group = old

Research Questions 2 and 3

T-Test

Group Statistics

face recognition test type (same vs different)		N	Mean	Std. Deviation	Std. Error Mean
judgment of familiarity	same age faces test	90	6.83	1.856	.196
	different age faces test	90	4.44	1.849	.195

Independent Samples Test

		Levene's Test for Equality of Variances					t-test for Equality of Means			95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference		Lower	Upper
judgment of familiarity	Equal variances assumed	.390	.533	8.651	178	.000	2.389	.276		1.844	2.934
	Equal variances not assumed			8.651	177.998	.000	2.389	.276		1.844	2.934

Correlations

Correlations

		judgment of familiarity	percentage accuracy
judgment of familiarity	Pearson Correlation	1	.268**
	Sig. (2-tailed)		.000
	N	180	180
percentage accuracy	Pearson Correlation	.268**	1
	Sig. (2-tailed)	.000	
	N	180	180

** . Correlation is significant at the 0.01 level (2-tailed).

Correlations

Correlations

		judgment of familiarity	judgment of identification
judgment of familiarity	Pearson Correlation	1	.168*
	Sig. (2-tailed)		.024
	N	180	180
judgment of identification	Pearson Correlation	.168*	1
	Sig. (2-tailed)	.024	
	N	180	180

*. Correlation is significant at the 0.05 level (2-tailed).

Crosstabs

Case Processing Summary

	Valid		Cases Missing		Total	
	N	Percent	N	Percent	N	Percent
judgment of identification * face recognition test type (same vs different)	180	100.0%	0	0.0%	180	100.0%

judgment of identification * face recognition test type (same vs different) Crosstabulation

			face recognition test type (same vs different)		
			same age faces test	different age faces test	Total
judgment of identification	no, I don't identify	Count	29	54	83
		% within face recognition test type (same vs different)	32.2%	60.0%	46.1%
	yes, I do identify	Count	61	36	97
		% within face recognition test type (same vs different)	67.8%	40.0%	53.9%
Total		Count	90	90	180
		% within face recognition test type (same vs different)	100.0%	100.0%	100.0%

Chi-Square Tests

	Value	df	Asymptotic Significance (2-sided)	Exact Sig. (2- sided)	Exact Sig. (1- sided)
Pearson Chi-Square	13.973 ^a	1	.000		
Continuity Correction ^b	12.878	1	.000		
Likelihood Ratio	14.165	1	.000		
Fisher's Exact Test				.000	.000
Linear-by-Linear Association	13.896	1	.000		
N of Valid Cases	180				

a. 0 cells (0.0%) have expected count less than 5. The minimum expected count is 41.50.

b. Computed only for a 2x2 table

Symmetric Measures

		Value	Approximate Significance
Nominal by Nominal	Phi	-.279	.000
	Cramer's V	.279	.000
N of Valid Cases		180	

T-Test

Group Statistics

	judgment of identification	N	Mean	Std. Deviation	Std. Error Mean
percentage accuracy	no, I don't identify	83	60.44	15.967	1.753
	yes, I do identify	97	58.18	17.533	1.780

Independent Samples Test

		Levene's Test for Equality of Variances		t-test for Equality of Means					95% Confidence Interval of the Difference	
		F	Sig.	t	df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	Lower	Upper
percentage accuracy	Equal variances assumed	2.618	.107	.899	178	.370	2.263	2.516	-2.703	7.229
	Equal variances not assumed			.906	177.291	.366	2.263	2.498	-2.667	7.193