



SPSS Tip 14.1

Simple effects analysis using SPSS Statistics

The syntax for a simple effects analysis of the beer-goggles data is in the file **GogglesSimpleEffects.sps**. The commands are:

```
GLM Attractiveness by FaceType Alcohol  
/EMMEANS = TABLES(FaceType*Alcohol) COMPARE(FaceType).
```

The first line specifies the model using the *GLM* command, followed by the outcome variable (**Attractiveness**), the *BY* command and then a list of predictor/independent variables (**FaceType** and **Alcohol**). The line beginning */EMMEANS* specifies the simple effects. *COMPARE(FaceType)* specifies to look at the effect of type of face at each level of alcohol. Run the syntax (make sure you have **Goggles.sav** loaded) and you'll get the same output as in the chapter, but with an extra table containing the simple effects (Output 14.6). There was a significant difference in ratings of unattractive and attractive faces in the placebo group, $p < 0.001$, and in the low-dose group, $p = 0.008$, but not in the high-dose group, $p = 0.398$. These results confirm our speculation based on Figure 14.13 (see main text).

Univariate Tests

Dependent Variable: Median attractiveness rating

Alcohol consumption		Sum of Squares	df	Mean Square	F	Sig.
Placebo	Contrast	33.063	1	33.063	24.150	.000
	Error	57.500	42	1.369		
Low dose	Contrast	10.563	1	10.563	7.715	.008
	Error	57.500	42	1.369		
High dose	Contrast	1.000	1	1.000	.730	.398
	Error	57.500	42	1.369		

Each F tests the simple effects of Attractiveness of facial stimuli within each level combination of the other effects shown. These tests are based on the linearly independent pairwise comparisons among the estimated marginal means.

Output 14.6

