Mixed ANOVA with Two Treatments

The **MIXED ANOVA WITH TWO TREATMENTS** performs three-way mixed-design ANOVA with two between-subjects factors and one within-subjects factor. All groups are assumed to be of the same size. The design is also known as *double blind mixed design*.

How To

✓ Run: **STATISTICS->ANOVA -> MIXED ANOVA WITH TWO TREATMENTS…**

✓ Select two between-subjects variables (**FACTOR A, FACTOR B**) containing the treatment group codes.

✓ Select variables with **REPEATED MEASURES**.

✓ **Casewise** deletion method is used for missing values removal.

Results

A report includes analysis of variance summary table and descriptive statistics for the treatments.

ANALYSIS OF VARIANCE TABLE

SOURCE OF VARIATION - the source of variation (term in the model).
SS (SUM OF SQUARES) - the sum of squares for the term.
DF (DEGREES OF FREEDOM) - the number of observations for the corresponding model term.
MS (MEAN SQUARE) - an estimate of the variation accounted for the term.
$MS = SS/DF$
F - the F-test statistic.
P-LEVEL - the significance level of the F-test. If p-level is less than the significance level α - the null hypothesis is rejected, and we can conclude that not all of the group means are equal.

References

[WIN] Winer, B. J. Statistical Principles in Experimental Design. New York: McGraw-Hill, 1971.

[STE] Stevens, James. Applied Multivariate Statistics for the Social Sciences. Mahwah, N.J.: Lawrence Erlbaum Associates, 1996.

[SHA] Shaughnessy J.J., Research Methods in Psychology. New York: McGraw-Hill, 2006.