

Mixed models in PanelCheck: Exercises

Make sure PanelCheck is running. It does NOT come in a Mac version. If you only have a MAC and do not have windows running on your MAC then you could work together with someone, who has it running.

Datasets

Use your own data OR use the version of the TVbo data set as it is shared in Campusnet. The 12 products in the TVbo data set consist of all combinations of 3 TVsets and 4 pictures.

Exercise – general approach and questions to be answered in most cases:

1. Look at the data set and describe it shortly, e.g. how many attributes, how many products, how many assessors and how many repetitions?
2. Check that all columns you need are there, and check the order of them. Import the data set in PanelCheck – look at the data information within Panelcheck again
3. Look at the ANOVA for all your attributes
4. Are there generally assessor effects in the data and for which attributes?
 1. Main effects (and if so, what does it really mean?)
 2. Interaction effects (and if so, what does it really mean?)
5. Are there generally repetition effects in the data and for which attributes?
 1. Main effects (and if so, what does it really mean?)
 2. Interaction effects (and if so, what does it really mean?)
6. Are there generally product effects in the model and for which attributes?
7. What are the conclusions about the products to be made from these potential effects?
 1. Which product is highest/lowest on attribute XX?
 2. Is it significantly so?
8. Do you find any examples (attributes) of products NOT being significantly different, but one of product-interactions being significant? And if so, what does that mean?
9. Compare your product effect results between the 2way and the 3way analysis – can you explain the (potentially lack of) differences?
10. For the TVbo data (or if you have a similar situation in your own data): How could you answer the following question: Are the product differences mainly due to the TVsets being different or is it an effect of the pictures, or maybe both? And if both do these effect act additively or do they interact?