

## Centering in SPSS

The HLM package makes centering (either group- or grand-mean centering) very convenient. Grand-mean centering in SPSS is relatively simple, although a separate descriptive analysis is needed (using the exact same sample size as used in the MIXED model!). Group-mean centering in SPSS was more inconvenient in older version of SPSS. SPSS 13 and higher has added a data wizard that may make computation of group-centered variables somewhat easier. It is always a good idea to check your data at several steps along the way, as I have shown here. I provide some example of SPSS syntax to illustrate centering computations with the NHSUP variable from HW1. Comment lines designated by \* are ignored by SPSS.

```
get file='c:\jason\spsswin\sqms\hsbmerged.sav'.

* replace [filepath] with location of your data file, for example
  get file='c:\mlrclass\hsbmerged.sav'.

compute tses=(ses*10) + 50.

* AGGREGATE creates group means for tses variable.

AGGREGATE
  /BREAK schoolid
  /meantses=MEAN(tses).

*compute the group mean centered ses using meantses.
compute gpcses=tses - meantses.

descriptives vars=all.
```