List of corrections ‘Multilevel Analysis. Techniques and Applications’.

Chapter 9

In Table 9.4 on page 170 the labels for school, pupil item are reversed; actually the highest variance is for the items and the lowest for the schools. This also affects the reliability calculations on pages 170-171. The school level reliability is now estimated much lower as 0.77, and quite different from the approximations by directly analyzing the covariances/correlations in Table 9.3. The estimates following the Raudenbush, Rowan and Kang procedure are better, because they reflect the school-level variation that is the result of differences between items and pupils.

Chapter 10

On page 186, the reference to the formula is 10.4 not 10.3. In line 7 ‘number of clusters’ should be ‘average cluster size’. In lines 6-8 the 3705/(1+18×0.25)=647 should read 3705/(1+194×0.25)=75, since n_{clus} is cluster size and not number of clusters. This changes all subsequent estimates of power. The correct text should read as below:

Using formula (10.4) to estimate the effective sample size from the intraclass correlation and the average cluster size, we obtain $n_{eff}=3705/(1+194×0.25)=75$. Using the standard formula for the sampling error of the effect size (cf. Table 8.1 in Chapter 8), using 75 subjects with equal sample sizes for the experimental and control groups, we obtain an expected standard error for $d$ of 0.23. Thus, the power estimate is (assuming a two-sided test: $p(Z>1.96-0.10/0.077)= p(Z>1.53)= 0.06$. We conclude that the power of our meta-analysis for detecting a small experimental effect is very poor. If we are interested in medium size effects, the power estimate is (assuming a two-sided test: $p(Z>1.96-0.30/0.23)= p(Z>0.66)= 0.25$, which is again not adequate.

Chapter 11

On page 200 lines 3 and 4, the first formula should give –206.62, and the second –210.46 -3.84= -214.3. The confidence interval was computed correctly.