List of corrections 'Multilevel Analysis. Techniques and Applications'.

Chapter 5

On page 77, formula (5.6) the subscript of the GPA variable should read *ti* instead of *tj*.

On page 83, last paragraph, the variance component for the slopes is incorrectly given as 0.038. It should be 0.04, and the standard deviation for the slopes on page 84 should be 0.06 instead of 0.19. The correct text should read as below:

The variance component of 0.004 for the slopes of the Time variable does not seem large. However, multilevel models assume a normal distribution for these slopes (or, equivalently, for the slope residuals u_1), for which the standard deviation is estimated in model (5) and (6) as $\sqrt{0.004} = 0.06$. Compared to the value of 0.10 for the average time slope in model (5), this is not very small. There is substantial variation among the time slopes, which is not modeled well by the available student variables.

Chapter 8

The last words on page 147 are "The small differences between these results and the results computed using..." The next page (p. 148) begins "The power of multilevel meta-analysis becomes apparent when we...". The last sentence on page 147 should be replaced by:

The differences between these results and the results computed using the classical approach to meta-analysis are small, indicating that the classical approach is quite accurate when the goal of the meta-analysis is to synthesize the results of a set of studies.

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 this result is quite different from the approximations obtained 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+18x0.25=647 should read 3705/(1+194x0.25=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.