

Appendix E; List of Influential Studies

This section reports all the influential studies and explains the reasons why some studies were detected as influential cases.

Model 1

Bergman-Nutley and Klingberg (2014): This study was an influential case in the omnibus meta-analysis. The study included a large sample ($N = 430$) and yielded a large effect ($g = 0.74$). Such a large effect was partly due to the baseline differences between groups and the consequent regression to the mean at post-test assessment.

Borella et al. (2014): This study was an influential case in the older-adult meta-analysis and omnibus meta-analysis. The study yielded a large mean effect ($g = 1.00$) and included only non-active controls. The large effect explains why the study was an influential case.

Dunning et al. (2013): This study was an influential case in the LD-children meta-analysis (active subsample too) and omnibus meta-analysis (active subsample too). The study yielded a large mean effect ($g = 1.48$). The large effect explains why the study was an influential case.

Foster et al. (2014): This study was an influential case in the omnibus meta-analysis (only active subsample). The study yielded a small mean effect ($g = 0.14$) but included many outcome measures ($k = 24$). Cheung and Chan's (2014) correction is a function of the number of k (the more k , the smaller sampling error variance). Therefore, despite being an influential case, the study was not an outlier.

Holmes et al. (2009): This study was an influential case in the LD-children meta-analysis (active subsample only). The study yielded a large mean effect ($g = 1.62$). The large effect explains why the study was an influential case.

Minear et al. (2012): This study was an influential case in the omnibus meta-analysis (only active subsample). The study yielded a small mean effect ($g = 0.21$) but included many outcome measures ($k = 24$) and was thus associated with a small sampling error variance. Therefore, despite being an influential case, the study was not an outlier.

Models 2 and 3

Anderson-Hanley et al. (2012): This study was an influential case in the omnibus meta-analysis of Model 3. The study yielded a small mean effect ($g = 0.08$) but included many outcome measures ($k = 13$) and was thus associated with a small sampling error variance. Therefore, despite being an influential case, the study was not an outlier.

Ang et al. (2015): This study was an influential case in the omnibus meta-analysis of Model 2. The study yielded a null mean effect ($g = 0.00$) but included many outcome measures ($k = 12$) and was thus associated with a small sampling error variance. Therefore, despite being an influential case, the study was not an outlier.

Borella et al. (2010): This study was an influential case in the older-adult meta-analysis, the omnibus meta-analysis in Model 2, and the omnibus meta-analysis in Model 3. The study yielded a large mean effect ($g = 0.66$) and included only non-active controls. The large effect explains why the study was an influential case.

Cantarella et al. (2016): This study was an influential case in the omnibus meta-analysis in Model 2 and the omnibus meta-analysis in Model 3. The study yielded a large mean effect ($g = 0.82$) and included only non-active controls. The large effect explains why the study was an influential case.

Chooi and Thompson (2012): This study was an influential case in the omnibus meta-analysis of Model 2. The study yielded a near-zero mean effect ($g = 0.08$) but included many outcome measures ($k = 20$) and was thus associated with a small sampling error variance. Therefore, despite being an influential case, the study was not an outlier.

Estrada et al. (2015): This study was an influential case in the omnibus meta-analysis of Model 2. The study yielded a near-zero mean effect ($g = -0.04$) but had many participants ($N = 363$) and was thus associated with a small sampling error variance. Therefore, despite being an influential case, the study was not an outlier.

Guye and von Bastian (2017): This study was an influential case in the omnibus meta-analysis of Model 2 and omnibus meta-analysis of Model 3. The study yielded a near-zero mean effect ($g = -0.02$) but had many participants ($N = 142$) and included many outcome measures ($k = 15$) and was thus associated with a small sampling error variance. Therefore, despite being an influential case, the study was not an outlier.

Hering et al. (2017): This study was an influential case in the omnibus meta-analysis of Model 2. The study yielded a near-zero mean effect ($g = -0.04$) but included many outcome measures ($k = 14$) and was thus associated with a small sampling error variance. Therefore, despite being an influential case, the study was not an outlier.

Jerrim et al. (2017): This study was an influential case in the omnibus meta-analysis of Model 3. The study yielded a null effect ($g = 0.00$) but included many outcome measures ($k = 14$) and was thus associated with a small sampling error variance. Therefore, despite being an influential case, the study was not an outlier.

Lee et al. (2012): This study was an influential case in the omnibus meta-analysis of Model 3. The study yielded a small effect ($g = 0.14$) but included many outcome measures ($k = 28$) and was thus associated with a small sampling error variance. Moreover, the controls were non-active. Therefore, despite being an influential case, the study was not an outlier.

Okagaki and Frensch (1994): This study was an influential case in the omnibus meta-analysis of Model 3. The study yielded a larger-than-average mean effect ($g = 0.53$). This was the reason why

the study was detected as an influential case. The larger-than-average mean effect was probably due to the fact that the controls were non-active.

Portowitz et al. (2009): This study was an influential case in music meta-analysis and the omnibus meta-analysis of Model 3. The study yielded a large mean effect ($g = 1.30$). The larger-than-average mean effect was probably due to the fact that the controls were non-active.

Rickard et al. (2012): This study was an influential case in music meta-analysis and the omnibus meta-analysis of Model 3. The study yielded a near-zero mean effect ($g = -0.02$) but included many outcome measures ($k = 20$) and was thus associated with a small sampling error variance. Therefore, despite being an influential case, the study was not an outlier.

Roden et al. (2014a): This study was an influential case in music meta-analysis (only active subsample). The study yielded a larger-than-average mean effect ($g = 0.56$). This was the reason why the study was detected as an influential case. This anomaly was probably due to the fact that the music-treated participants and the controls showed a large difference in IQ scores at baseline.

Roden et al. (2014b): This study was an influential case in music meta-analysis and the omnibus meta-analysis of Model 3. The study yielded a negative mean effect ($g = -0.26$) but had many participants ($N = 345$) and was thus associated with a small sampling error variance. Therefore, despite being an influential case, the study was not an outlier.

Romano (2011): This study was an influential case in the omnibus meta-analysis of Model 3. The study yielded a larger-than-average effect ($g = 0.37$) and included many participants ($N = 1788$) and was thus associated with a small sampling error variance. The larger-than-average mean effect was probably due to the fact that the controls were non-active.

St Clair and Thompson et al. (2010): This study was an influential case in the omnibus meta-analysis of Model 2. The study yielded a larger-than-average mean effect ($g = 0.46$). The larger-than-average mean effect was probably due to the fact that the controls were non-active.

Stephenson and Halpern (2013): This study was an influential case in the omnibus meta-analysis of Model 2. The study yielded a larger-than-average mean effect ($g = 0.30$) included many outcome measures ($k = 28$) and was thus associated with a small sampling error variance. The larger-than-average mean effect was probably due to the fact that the controls were non-active.

Trinchero and Sala (2016): This study was an influential case in the omnibus meta-analysis of Model 3. The study yielded a larger-than-average mean effect ($g = 0.22$) and included many participants ($N = 661$) and was thus associated with a small sampling error variance. The larger-than-average mean effect was probably due to the fact that the controls were non-active.