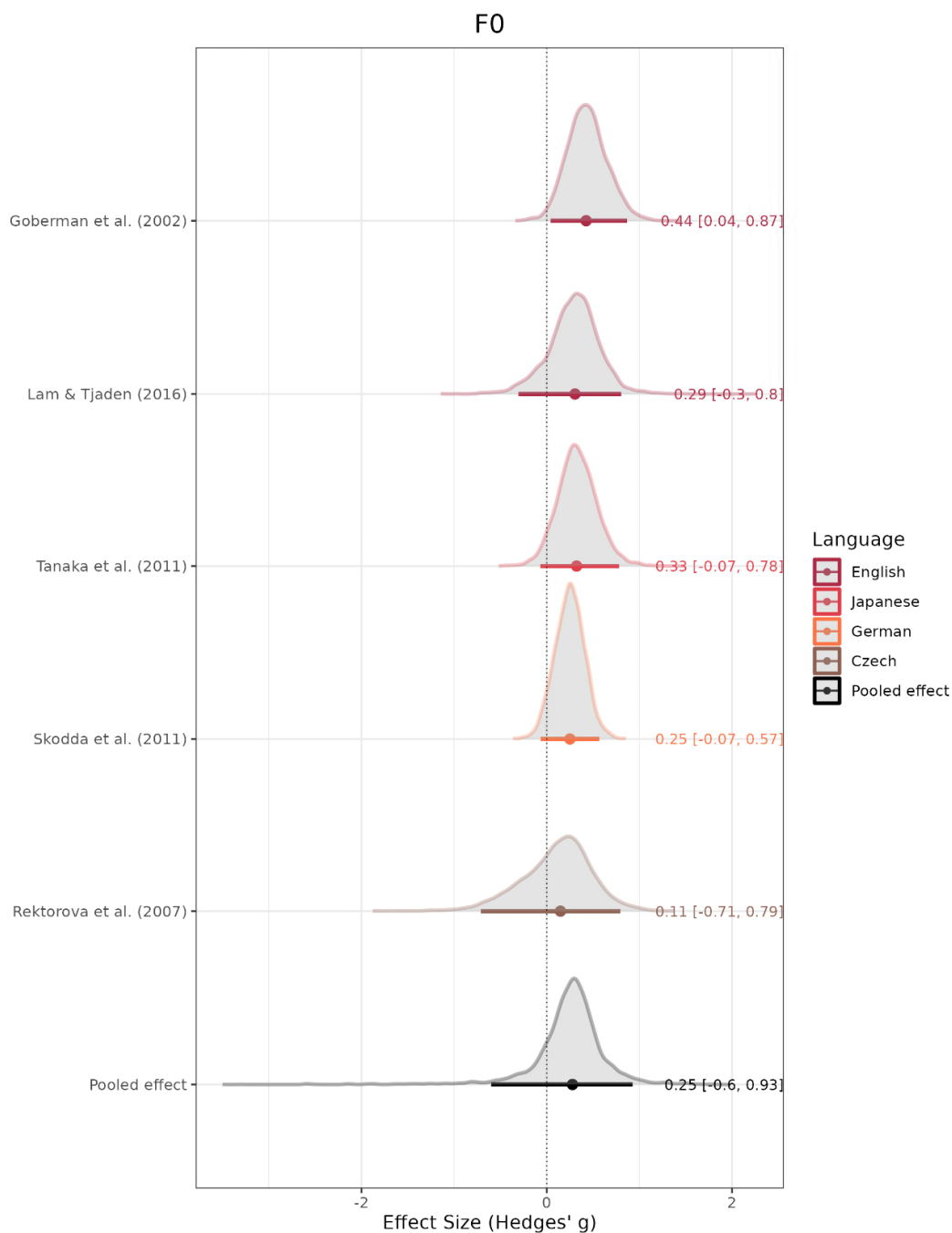


## Supplemental Material S2. Findings related to $F_0$ and intensity.

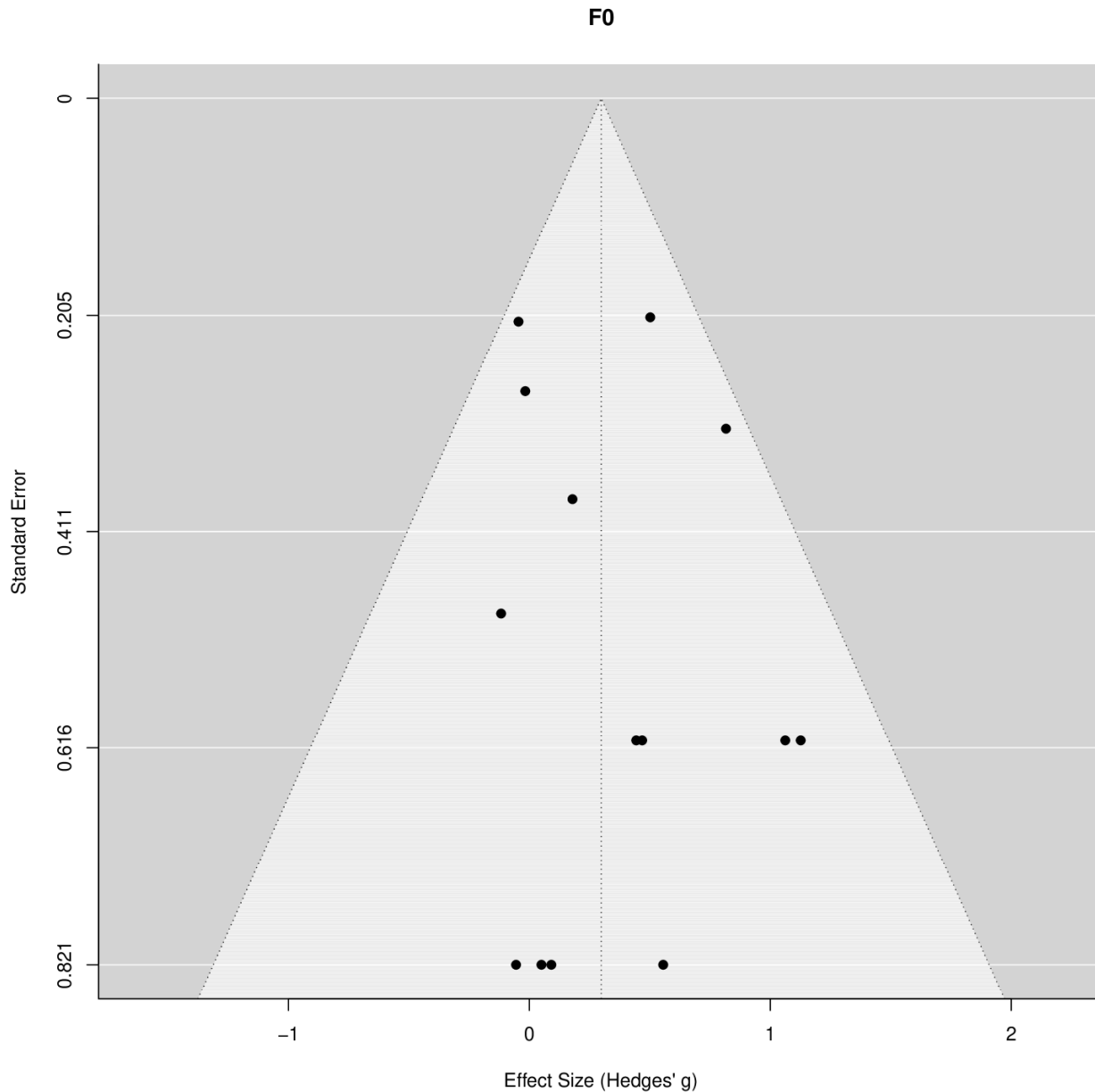
### $F_0$

The analyses on  $F_0$  included 14 effect sizes from five articles for a total of 122 PwPD and 87 controls. The Bayesian hierarchical model showed an overall estimated effect size of 0.25 with a 95% CrI of [-0.6, 0.93], as well as an overall estimated heterogeneity of 0.32 (95% CrI [0.01, 1.32]). Evidence ratio and credibility score for estimated effect size were 5.31 and 84%, respectively. The data did not exhibit any likely publication bias (Kendall's tau = 0.08,  $p = .69$ ).

**Figure 2.1.** Forest plot for mean  $F_0$  estimates according to article. Shaded areas represent posterior probability density for each estimate. Numbers on right provide estimated Hedges'  $g$  and 95% CrI. Results for pooled effect are displayed at bottom of plot, providing a comprehensive summary of the findings.



**Figure 2.2.** Funnel plot for mean  $F_0$ .



### Intensity

The analyses on intensity included 18 effect sizes from 13 articles for a total of 188 PwPD and 197 controls. The Bayesian hierarchical model showed an overall estimated effect size of -0.31 with a 95% CrI of [-0.84, 0.25], as well as an overall estimated heterogeneity of 0.48 (95% CI [0.15, 0.93]). Evidence ratio and credibility score for estimated effect size were 9.03 and 90%, respectively. The data did not exhibit any likely publication bias (Kendall's tau = -0.24,  $p = .18$ ).

**Figure 2.3.** Forest plot for mean intensity estimates according to article. Shaded areas represent posterior probability density for each estimate. Numbers on right provide estimated Hedges'  $g$  and 95% CrI. Results for pooled effect are displayed at bottom of plot, providing a comprehensive summary of the findings.

