**Robust Evidence for the Simple View of Second Language Reading:**

**Secondary Meta-Analysis of Jeon and Yamashita (2022)**

**Supplementary Material 4: Publication Bias**

Since there are no available methods to evaluate publication bias within the MASEM framework, we conducted exploratory analyses provided by Peng et al. (2021), In’nami et al. (2022), and Lee et al. (2022). Publication bias occurs when the probability of a study getting published is affected by its characteristics. In meta-analysis, assessing and correcting for publication bias are conducted using small-study effect methods. They assume that large-scale studies are likely to get published, regardless of whether the results are significant or not, because of their large commitment of resources and time, while only small-scale studies with high effect sizes will be published (Borenstein et al., 2021). Therefore, we investigated the effects of large-scale studies on the outcomes obtained in this study.

First, correlation analyses were conducted to examine whether the correlational datapoints, sample sizes, and impact factor scores of journals were correlated with each other. If larger-scale studies with more datapoints and larger sample sizes are valued more highly, they will be significantly correlated with the impact factor of the journal in which they are published. Although In’nami et al. (2022) and Lee et al. (2022) compared the number of datapoints between publication types (e.g., published articles vs. dissertations), the studies included in the 2022 study were only ones published in refereed journals or by a reputable academic publisher. Therefore, we used the 2022 impact factor of journals as an available proxy for study quality. After removing seven studies due to missing information on the impact factor (e.g., studies obtained from *Reading in a Foreign Language* and book chapters), 81 studies were submitted to the correlation analyses. The results showed that the 2022 impact factor did not correlate with the datapoints (*r* = −.09, 95% CI [−.31, .13], *p* = .415) or the sample size (*r* = .08, 95% CI [−.12, .28], *p* = .435).

Second, Egger’s test for funnel plot asymmetry was conducted to confirm whether the 28 correlations pooled in the first stage were not beyond their normal range. The results accepted the null hypothesis that the shape of the funnel plot was asymmetrical (*z* = −0.92, *p* = .356), and all pooled correlations were located within 95% CI limits in the funnel plot (Figure 1).

**Figure 1**

*A Funnel Plot for the 28 Pooled Correlations*



Third, although Peng et al. (2021), In’nami et al. (2022), and Lee et al. (2022) had performed subgroup analyses by including publication type as a moderator variable in a focal model, we could not conduct the same analysis due to insufficient samples. However, comparisons of the pooled correlations did not show significantly larger effect sizes in studies published in relatively low impact journals (*n* = 40, *M* = 2.27, *SD* = 0.92) than in those published in high impact journals (*n* = 39, *M* = 4.79, *SD* = 0.47). High and low impact was determined by a median split of the 2022 impact factor scores (see Table 1).

**Table 1**

*Pooled Correlations Between Studies Published in High- and Low-Impact Journals*

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Variables | *1.* | *2.* | *3.* | *4.* | *5.* | *6.* | *7.* | *8.* |
| 1. L2 reading comprehension | − | .51 | .57 | .63 | .37 | .56 | .56 | .59 |
| 2. L2 decoding accuracy | .59 | − | .69 | .18 | .35 | .34 | .46 | .58 |
| 3. L2 decoding fluency | .54 | .48 | − | .53 | .53 | .41 | .50 | .38 |
| 4. L2 vocabulary knowledge | .49 | .42 | .54 | − | .24 | .49 | .59 | .12 |
| 5. L2 grammar knowledge | .36 | .12 | .43 | .18 | − | .59 | .56 | .65 |
| 6. L2 listening comprehension | .50 | .14 | .33 | .41 | .52 | − | .28 | .29 |
| 7. L2 phonological awareness | .41 | .51 | .54 | .59 | .50 | .00 | − | .28 |
| 8. L2 morphological knowledge | .48 | .56 | .47 | .22 | .54 | .17 | .31 | − |

*Note*. The diagonal values above and below indicate the pooled correlations published in high- and low-impact journals, respectively.

In conclusion, these three exploratory approaches to testing potential publication bias suggest that there was no unignorable influence caused by the collected data on the present results.