## **Associations Between Exposures and Education Outcomes**

| Outcome  | Specific Outcome | Exposure   | Age Group | Lead Author, Date      | <i>r</i> with 95% CI | l <sup>2</sup> | κ  | N      |     |   |
|--|------------------|--|-----------|------------------------|----------------------|----------------|----|--------|-----|---|
| Learning   | General          | Screen use: General  | All       | Adelantado-Renau, 2019 | -0.22 [-0.31, -0.13] | 96%            | 18 | 13,100 |     |   |
|  | General          | TV programs and movies: General                              | All       | Adelantado-Renau, 2019 | -0.12 [-0.16, -0.07] | 96%            | 18 | 62,135 | 0   |   |
|  | General          | Video games: General   | All       | Adelantado-Renau, 2019 | -0.09 [-0.12, -0.06] | 2%             | 10 | 4,276  | IOI |   |
|  | General          | Screen-based intervention:<br>Education (via touch screen)   | Children  | Xie, 2018              | 0.29 [ 0.24, 0.34]   | 72%            | 79 | 5,810  |     |   |
|  | General          | e-Books: Narration   | Children  | Takacs, 2014           | 0.19 [ 0.14, 0.23]   | 20%            | 50 | 2,288  |     | 0 |
|  | General          | Screen-based intervention:<br>Augmented reality (in schools) | All       | Tekedere, 2016         | 0.33 [ 0.25, 0.42]   | 68%            | 15 | 1,474  |     |   |
| Literacy   | General          | Screen use: General  | Children  | Madigan, 2020          | -0.14 [-0.20, -0.09] | 90%            | 38 | 18,318 |     |   |
|  | General          | Screen use: General (coviewing)                              | Children  | Madigan, 2020          | 0.15 [ 0.02, 0.28]   | 96%            | 12 | 6,083  | -   |   |
|  | General          | TV programs and movies: Educational                          | Children  | Madigan, 2020          | 0.13 [ 0.03, 0.23]   | 82%            | 13 | 1,955  | +   |   |
| Numeracy   | General          | Screen-based intervention: Mathematic                        | All       | Li, 2010               | 0.30 [ 0.24, 0.35]   | 96%            | 85 | 36,793 |     |   |
|  | General          | Video games: Numeracy  | All       | Byun, 2018             | 0.32 [ 0.21, 0.43]   | 88%            | 25 | 2,008  |     |   |
| -0.4 -0.2 0.0 0.2 0.4<br><b>r</b> with <b>95%</b> and <b>99.9%</b> CIs |                  |  |           |                        |                      |                |    |        |     |   |