

Supplementary Table 1.

*Web ORLA® Computer-Generated Practice*

| Participant  | Practice per Week (Minutes) |     |     |     |     |     | Total hours of practice | Mean hours per week |
|--------------|-----------------------------|-----|-----|-----|-----|-----|-------------------------|---------------------|
|              | 1                           | 2   | 3   | 4   | 5   | 6   |                         |                     |
| Web ORLA P1  | 421                         | 426 | 587 | 603 | 632 | 394 | 51.05                   | 8.51                |
| Web ORLA P2  | 729                         | 628 | 577 | 276 | 567 | 350 | 52.12                   | 8.69                |
| Web ORLA P3  | 779                         | 312 | 860 | 568 | 582 | *   | 51.68*                  | 10.34               |
| Web ORLA P4  | 492                         | 443 | 187 | 130 | 115 | *   | 22.78*                  | 4.56                |
| Web ORLA P5  | 369                         | 521 | 474 | 393 | 530 | 330 | 43.62                   | 7.27                |
| Web ORLA P6  | 966                         | 572 | 512 | 584 | 491 | 594 | 61.98                   | 10.33               |
| Web ORLA P7  | 346                         | 377 | 342 | 437 | 418 | 352 | 37.87                   | 6.31                |
| Web ORLA P8  | 588                         | 557 | 511 | 517 | 503 | 429 | 51.75                   | 8.63                |
| Web ORLA P9  | 568                         | 583 | 591 | 548 | 550 | 548 | 56.47                   | 9.41                |
| Web ORLA P10 | 616                         | 640 | 605 | 535 | 655 | 636 | 61.45                   | 10.24               |
| Web ORLA P11 | 626                         | 555 | 560 | 578 | 583 | 579 | 58.02                   | 9.67                |
| Web ORLA P12 | 519                         | 532 | 560 | 537 | 512 | 498 | 52.63                   | 8.77                |
| Web ORLA P13 | 458                         | 548 | 565 | 561 | 549 | 504 | 53.08                   | 8.85                |
| Web ORLA P14 | 560                         | 527 | 579 | 529 | 665 | 431 | 54.85                   | 9.14                |
| Web ORLA P15 | 727                         | 493 | 483 | 367 | 443 | 483 | 49.93                   | 8.32                |

|              |     |     |     |     |     |     |       |       |
|--------------|-----|-----|-----|-----|-----|-----|-------|-------|
| Web ORLA P16 | 606 | 643 | 570 | 570 | 632 | 531 | 59.20 | 9.87  |
| Web ORLA P17 | 732 | 622 | 759 | 837 | 731 | 731 | 73.53 | 12.26 |
| Web ORLA P18 | 560 | 564 | 561 | 562 | 489 | 568 | 55.07 | 9.18  |
| Web ORLA P19 | 587 | 560 | 523 | 585 | 555 | 506 | 55.27 | 9.21  |
| Mean         |     |     |     |     |     |     | 52.76 | 8.92  |

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*Note.* \* = Practice was done off-line due to a computer glitch. Total practice time and mean practice per week are calculated from only five weeks of practice.

Supplementary Table 2.

*Web ORLA Group: WAB-R Language Quotient (LQ) Performance with Reading and Writing Sub-Scores*

| Participant  | Pre-treatment LQ | Post-treatment LQ | Follow-up LQ | Pre-treatment Reading | Post-treatment Reading | Follow-up Reading | Pre-treatment Writing | Post-treatment Writing | Follow-up Writing |
|--------------|------------------|-------------------|--------------|-----------------------|------------------------|-------------------|-----------------------|------------------------|-------------------|
| Web ORLA P1  | 26.0             | 27.3              | 34.2         | 23.0                  | 32.0                   | 37.0              | 16.0                  | 12.5                   | 21.0              |
| Web ORLA P2  | 72.6             | 79.7              | 83.5         | 80.0                  | 80.0                   | 86.0              | 69.0                  | 96.0                   | 96.0              |
| Web ORLA P3  | 48.8             | 55.6              | 52.3         | 40.0                  | 45.0                   | 46.0              | 34.0                  | 44.5                   | 33.0              |
| Web ORLA P4  | 38.5             | 29.1              | NA           | 47.0                  | 18.0                   | NA                | 21.0                  | 28.0                   | NA                |
| Web ORLA P5  | 38.0             | 39.6              | 41.8         | 31.0                  | 43.0                   | 32.0              | 29.5                  | 30.0                   | 29.0              |
| Web ORLA P6  | 72.9             | 80.1              | 78.1         | 84.0                  | 94.0                   | 92.0              | 75.0                  | 77.0                   | 74.0              |
| Web ORLA P7  | 76.9             | 77.8              | 81.7         | 80.0                  | 78.0                   | 92.0              | 75.0                  | 78.5                   | 84.0              |
| Web ORLA P8  | 75.8             | 80.3              | 83.1         | 73.0                  | 92.0                   | 86.0              | 70.5                  | 66.0                   | 81.0              |
| Web ORLA P9  | 62.0             | 60.3              | 62.3         | 62.0                  | 63.0                   | 62.0              | 44.5                  | 42.0                   | 51.0              |
| Web ORLA P10 | 65.4             | 71.3              | NA           | 63.0                  | 80.0                   | NA                | 58.5                  | 60.0                   | NA                |
| Web ORLA P11 | 71.7             | 75.5              | 74.9         | 82.0                  | 88.0                   | 94.0              | 54.5                  | 62.0                   | 59.0              |
| Web ORLA P12 | 83.5             | 87.8              | 90.0         | 88.0                  | 82.0                   | 98.0              | 71.5                  | 87.0                   | 81.5              |
| Web ORLA P13 | 66.3             | 67.0              | 65.8         | 71.0                  | 66.0                   | 60.0              | 16.5                  | 19.0                   | 21.0              |
| Web ORLA P14 | 69.7             | 75.4              | 74.8         | 66.0                  | 78.0                   | 71.0              | 54.0                  | 65.5                   | 58.0              |

|              |      |      |      |      |      |      |      |      |      |
|--------------|------|------|------|------|------|------|------|------|------|
| Web ORLA P15 | 36.4 | 40.5 | NA   | 30.0 | 30.0 | NA   | 20.0 | 21.5 | NA   |
| Web ORLA P16 | 53.5 | 59.2 | 55.6 | 48.0 | 57.0 | 42.0 | 49.0 | 51.0 | 53.0 |
| Web ORLA P17 | 79.8 | 76.1 | 79.5 | 88.0 | 80.0 | 80.0 | 90.0 | 83.0 | 83.0 |
| Web ORLA P18 | 47.9 | 55.7 | 55.1 | 60.0 | 71.0 | 71.0 | 46.0 | 58.0 | 61.0 |
| Web ORLA P19 | 32.4 | 36.0 | 37.6 | 36.0 | 45.0 | 48.0 | 33.0 | 33.5 | 38.5 |

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*Note.* Pre-treatment = week -2; Post-treatment = week 7; Follow-up = week 13; LQ= Language Quotient; NA = follow-up assessment data not available

Supplementary Table 3.

*Bejeweled Group: WAB-R Language Quotient (LQ) Performance with Reading and Writing Sub-Scores*

| Participant | Pre-treatment LQ | Post-treatment LQ | Follow-up LQ | Pre-treatment Reading | Post-treatment Reading | Follow-up Reading | Pre-treatment Writing | Post-treatment Writing | Follow-up Writing |
|-------------|------------------|-------------------|--------------|-----------------------|------------------------|-------------------|-----------------------|------------------------|-------------------|
| Control P1  | 58.3             | 64.6              | 62.7         | 72.0                  | 68.0                   | 64.0              | 60.6                  | 56.0                   | 55.5              |
| Control P2  | 75.2             | 76.5              | 75.2         | 69.0                  | 74.0                   | 77.0              | 93.0                  | 86.0                   | 75.5              |
| Control P3  | 24.6             | 25.6              | NA           | 17                    | 11                     | NA                | 12.5                  | 11.5                   | NA                |
| Control P4  | 36.1             | 37.0              | 37.7         | 48.0                  | 36.0                   | 35.0              | 27.5                  | 28.5                   | 28.5              |
| Control P5  | 58.6             | 60.8              | 60.3         | 43.0                  | 62.0                   | 55.0              | 36.5                  | 36.5                   | 34.0              |
| Control P6  | 62.3             | 69.5              | NA           | 64.0                  | 73.0                   | NA                | 37.0                  | 44.5                   | NA                |
| Control P7  | 59.2             | 60.6              | 60.3         | 60.0                  | 61.0                   | 52.0              | 50.0                  | 50.0                   | 49.5              |
| Control P8  | 67.4             | 73.6              | 69.7         | 67.0                  | 84.0                   | 72.0              | 39.5                  | 41.0                   | 42.0              |
| Control P9  | 78.7             | 84.8              | 84.5         | 83.0                  | 85.0                   | 82.0              | 80.0                  | 96.0                   | 94.0              |
| Control P10 | 80.6             | 79.5              | 84.5         | 72.0                  | 77.0                   | 82.0              | 80.5                  | 72.5                   | 77.5              |
| Control P11 | 69.8             | 70.7              | 69.5         | 75.0                  | 77.0                   | 73.0              | 77.5                  | 72.0                   | 76.0              |
| Control P12 | 87.1             | 84.9              | 87.5         | 98.0                  | 88.0                   | 84.0              | 83.0                  | 84.5                   | 88.0              |
| Control P13 | 64.2             | 59.6              | 63.4         | 67.0                  | 51.0                   | 56.0              | 46.0                  | 47.0                   | 44.0              |

*Note.* Pre-treatment = week -2; Post-treatment = week 7; Follow-up = week 13; LQ= Language Quotient; NA = follow-up assessment data not available