**Table 1.** *Pearson correlations between vocabulary knowledge scores in comprehension and production (N = 23) as measured by the Egyptian version of the Full Form Arabic CDI Words Only and the Arabic Language Test (Rifaie, 1994).*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | CDI comp | CDI prod. | Lang Test comp. | Lang Test prod. |
| CDI comp. | 1 |  |  |  |
| CDI prod. | .574\*\* | 1 |  |  |
| Lang Test comp. | .653\*\* | .783\*\* | 1 |  |
| Lang Test prod. | .511\* | .795\*\* | .894\*\* | 1 |

\*p<.05, \*\*p<.01

**Table 2.** *Descriptive statistics for girls and boys per age bin in the Egyptian group (n=436).*

|  |  |  |  |
| --- | --- | --- | --- |
| Age (In months) | Female | Male | Total |
| 8 | 0 | 3 | 3 |
| 9 | 16 | 15 | 31 |
| 10 | 16 | 7 | 23 |
| 11 | 10 | 11 | 21 |
| 12 | 13 | 6 | 19 |
| 13 | 14 | 9 | 23 |
| 14 | 7 | 8 | 15 |
| 15 | 12 | 8 | 20 |
| 16 | 7 | 7 | 14 |
| 17 | 11 | 5 | 16 |
| 18 | 5 | 5 | 10 |
| 19 | 7 | 6 | 13 |
| 20 | 9 | 9 | 18 |
| 21 | 5 | 8 | 13 |
| 22 | 6 | 9 | 15 |
| 23 | 2 | 5 | 7 |
| 24 | 8 | 9 | 17 |
| 25 | 16 | 13 | 29 |
| 26 | 13 | 9 | 22 |
| 27 | 11 | 10 | 21 |
| 28 | 9 | 5 | 14 |
| 29 | 16 | 15 | 31 |
| 30 | 20 | 21 | 41 |
| Total | 233 | 203 | 436 |

**Table 3.** *Fixed effects of quasi-binomial model on comprehension scores from the Egyptian data.*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Estimate | Std. Error | *t* value | Pr(>|t|) |
| (Intercept) | -3.35 | 0.22 | -14.906 | <0.001 |
| Age | 0.15 | 0.01 | 14.793 | <0.001 |
| SES | 0.34 | 0.45 | 0.755 | 0.451 |
| Gender | 0.18 | 0.45 | 0.396 | 0.693 |
| Age:SES | -0.01 | 0.02 | -0.578 | 0.563 |
| Age:Gender | 0.00 | 0.02 | -0.174 | 0.862 |
| SES:Gender | 0.07 | 0.90 | 0.076 | 0.94 |
| Age:SES:Gender | -0.02 | 0.04 | -0.418 | 0.676 |

**Table 4.** *Fixed effects of quasi-binomial model on production scores from the Egyptian data.*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Estimate | Std. Error | *t* value | Pr(>|t|) |
| (Intercept) | -4.95 | 0.30 | -16.283 | <0.001 |
| Age | 0.18 | 0.01 | 14.411 | <0.001 |
| SES | 0.28 | 0.61 | 0.453 | 0.651 |
| Gender | 0.49 | 0.61 | 0.809 | 0.419 |
| Age:SES | -0.01 | 0.03 | -0.346 | 0.729 |
| Age:Gender | -0.02 | 0.03 | -0.756 | 0.45 |
| SES:Gender | -1.08 | 1.22 | -0.89 | 0.374 |
| Age:SES:Gender | 0.04 | 0.05 | 0.698 | 0.486 |

**Table 5.** *Predicted proportions of words from the Short Form Arabic CDI Words Only comprehended at each 10th percentile (column) and each age group (row).*

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Age (months) | 10 | 20 | 30 | 40 | 50 | 60 | 70 | 80 | 90 |
| 8 | 0.04 | 0.05 | 0.06 | 0.08 | 0.09 | 0.09 | 0.11 | 0.14 | 0.16 |
| 9 | 0.04 | 0.06 | 0.07 | 0.09 | 0.10 | 0.11 | 0.13 | 0.17 | 0.20 |
| 10 | 0.05 | 0.07 | 0.08 | 0.10 | 0.12 | 0.13 | 0.16 | 0.20 | 0.25 |
| 11 | 0.06 | 0.08 | 0.09 | 0.12 | 0.14 | 0.15 | 0.18 | 0.23 | 0.30 |
| 12 | 0.07 | 0.09 | 0.11 | 0.14 | 0.16 | 0.18 | 0.21 | 0.27 | 0.36 |
| 13 | 0.08 | 0.10 | 0.13 | 0.16 | 0.18 | 0.21 | 0.25 | 0.31 | 0.42 |
| 14 | 0.09 | 0.12 | 0.15 | 0.18 | 0.21 | 0.24 | 0.29 | 0.36 | 0.48 |
| 15 | 0.10 | 0.14 | 0.17 | 0.21 | 0.24 | 0.28 | 0.33 | 0.40 | 0.55 |
| 16 | 0.11 | 0.16 | 0.19 | 0.24 | 0.27 | 0.31 | 0.37 | 0.45 | 0.61 |
| 17 | 0.13 | 0.18 | 0.22 | 0.27 | 0.31 | 0.36 | 0.42 | 0.51 | 0.67 |
| 18 | 0.15 | 0.20 | 0.25 | 0.31 | 0.35 | 0.40 | 0.47 | 0.56 | 0.72 |
| 19 | 0.17 | 0.23 | 0.29 | 0.34 | 0.39 | 0.44 | 0.52 | 0.61 | 0.77 |
| 20 | 0.19 | 0.26 | 0.32 | 0.38 | 0.43 | 0.49 | 0.56 | 0.65 | 0.82 |
| 21 | 0.21 | 0.29 | 0.36 | 0.42 | 0.47 | 0.54 | 0.61 | 0.70 | 0.85 |
| 22 | 0.24 | 0.32 | 0.40 | 0.47 | 0.52 | 0.58 | 0.66 | 0.74 | 0.88 |
| 23 | 0.26 | 0.36 | 0.44 | 0.51 | 0.56 | 0.63 | 0.70 | 0.78 | 0.91 |
| 24 | 0.29 | 0.40 | 0.49 | 0.55 | 0.60 | 0.67 | 0.74 | 0.81 | 0.93 |
| 25 | 0.32 | 0.44 | 0.53 | 0.59 | 0.64 | 0.71 | 0.77 | 0.84 | 0.94 |
| 26 | 0.36 | 0.48 | 0.57 | 0.63 | 0.68 | 0.75 | 0.81 | 0.86 | 0.95 |
| 27 | 0.39 | 0.52 | 0.61 | 0.67 | 0.72 | 0.78 | 0.83 | 0.89 | 0.96 |
| 28 | 0.43 | 0.55 | 0.65 | 0.70 | 0.75 | 0.81 | 0.86 | 0.91 | 0.97 |
| 29 | 0.46 | 0.59 | 0.69 | 0.74 | 0.78 | 0.84 | 0.88 | 0.92 | 0.98 |
| 30 | 0.50 | 0.63 | 0.73 | 0.77 | 0.81 | 0.86 | 0.90 | 0.94 | 0.98 |

**Table 6.** *Predicted proportions of words from the Short Form Arabic CDI Words Only produced at each 10th percentile (column) and each age group (row).*

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Age (months) | 10 | 20 | 30 | 40 | 50 | 60 | 70 | 80 | 90 |
| 8 | 0.01 | 0.01 | 0.01 | 0.02 | 0.02 | 0.02 | 0.03 | 0.04 | 0.05 |
| 9 | 0.01 | 0.01 | 0.01 | 0.02 | 0.02 | 0.02 | 0.03 | 0.04 | 0.06 |
| 10 | 0.01 | 0.01 | 0.02 | 0.02 | 0.03 | 0.03 | 0.04 | 0.06 | 0.08 |
| 11 | 0.01 | 0.02 | 0.02 | 0.03 | 0.03 | 0.04 | 0.05 | 0.07 | 0.10 |
| 12 | 0.01 | 0.02 | 0.03 | 0.03 | 0.04 | 0.05 | 0.06 | 0.08 | 0.12 |
| 13 | 0.01 | 0.02 | 0.03 | 0.04 | 0.05 | 0.06 | 0.08 | 0.10 | 0.14 |
| 14 | 0.02 | 0.03 | 0.04 | 0.05 | 0.06 | 0.07 | 0.09 | 0.12 | 0.18 |
| 15 | 0.02 | 0.03 | 0.05 | 0.06 | 0.07 | 0.08 | 0.11 | 0.15 | 0.21 |
| 16 | 0.03 | 0.04 | 0.06 | 0.07 | 0.09 | 0.10 | 0.14 | 0.18 | 0.25 |
| 17 | 0.03 | 0.05 | 0.07 | 0.09 | 0.11 | 0.13 | 0.17 | 0.22 | 0.30 |
| 18 | 0.04 | 0.06 | 0.09 | 0.11 | 0.13 | 0.15 | 0.20 | 0.26 | 0.35 |
| 19 | 0.04 | 0.07 | 0.11 | 0.13 | 0.16 | 0.18 | 0.23 | 0.30 | 0.40 |
| 20 | 0.05 | 0.09 | 0.13 | 0.15 | 0.19 | 0.22 | 0.27 | 0.35 | 0.46 |
| 21 | 0.06 | 0.10 | 0.15 | 0.18 | 0.22 | 0.26 | 0.32 | 0.41 | 0.52 |
| 22 | 0.08 | 0.13 | 0.18 | 0.21 | 0.26 | 0.30 | 0.37 | 0.46 | 0.57 |
| 23 | 0.09 | 0.15 | 0.21 | 0.24 | 0.30 | 0.35 | 0.42 | 0.52 | 0.63 |
| 24 | 0.11 | 0.18 | 0.25 | 0.28 | 0.35 | 0.40 | 0.47 | 0.57 | 0.68 |
| 25 | 0.13 | 0.21 | 0.29 | 0.32 | 0.40 | 0.45 | 0.52 | 0.63 | 0.73 |
| 26 | 0.15 | 0.24 | 0.33 | 0.36 | 0.45 | 0.51 | 0.57 | 0.68 | 0.77 |
| 27 | 0.18 | 0.28 | 0.38 | 0.41 | 0.50 | 0.56 | 0.63 | 0.72 | 0.81 |
| 28 | 0.21 | 0.32 | 0.43 | 0.46 | 0.56 | 0.62 | 0.67 | 0.77 | 0.84 |
| 29 | 0.24 | 0.37 | 0.48 | 0.51 | 0.61 | 0.67 | 0.72 | 0.80 | 0.87 |
| 30 | 0.28 | 0.42 | 0.53 | 0.56 | 0.66 | 0.71 | 0.76 | 0.84 | 0.89 |

**Table 7.** *Descriptive statistics for girls and boys per age bin and dialect in the Other Dialects group.*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Age bin | Female | Male | | Total |
| 8 – 12 months | 15 (2 Saudi, 1 Algerian, 1 Tunisian, 2 Syrian, 2 Lebanese, 1 Qatari, 2 Omani, 2 Yemeni, 1 Jordanian, 1 Palestinian) | | 14 (1 Lebanese, 1 Emirati, 1 Qatari, 2 Sudanese, 1 Libyan, 4 Omani, 1 Yemeni, 2 Bahraini, 1 Palestinian) | 29 |
| 13 – 20 months | 36 (3 Saudi, 5 Iraqi, 2 Algerian, 4 Tunisian, 2 Moroccan, 2 Lebanese, 5 Emirati, 2 Qatari, 1 Sudanese, 1 Libyan, 1 Omani, 2 Yemeni, 2 Bahraini, 3 Jordanian, 1 Palestinian) | | 28 (2 Saudi, 2 Iraqi, 4 Algerian, 2 Tunisian, 2 Moroccan, 2 Syrian, 3 Emirati, 3 Qatari, 2 Sudanese, 1 Omani, 1 Yemeni, 2 Bahraini, 1 Jordanian, 1 Palestinian) | 64 |
| 21 – 30 months | 30 (1Saudi, 4 Iraqi, 3 Algerian, 3 Tunisian, 2 Moroccan, 2 Syrian, 1 Lebanese, 6 Emirati, 2 Qatari, 3 Libyan, 1 Bahraini, 1 Jordanian, 1 Palestinian) | | 45 (7 Saudi, 4 Iraqi, 2 Tunisian, 2 Moroccan, 2 Syrian, 1 Lebanese, 8 Emirati, 1 Qatari, 3 Sudanese, 3 Libyan, 1 Omani, 3 Yemeni, 1 Bahraini, 2 Jordanian, 5 Palestinian) | 75 |

**Table 8.** *Fixed effects of quasi-binomial model on comprehension scores from Other Dialects data.*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Estimate | Std. Error | *t* value | Pr(>|t|) |
| (Intercept) | -3.22 | 0.54 | -5.946 | <0.001 |
| Age | 0.15 | 0.03 | 5.817 | <0.001 |
| SES | 0.33 | 1.08 | 0.305 | 0.761 |
| Gender | -0.67 | 1.08 | -0.616 | 0.539 |
| Age:SES | -0.01 | 0.05 | -0.194 | 0.846 |
| Age:Gender | 0.02 | 0.05 | 0.323 | 0.747 |
| SES:Gender | 1.31 | 2.17 | 0.604 | 0.547 |
| Age:SES:Gender | -0.03 | 0.11 | -0.285 | 0.776 |

**Table 9.** *Fixed effects of quasi-binomial model on production scores from Other Dialects data.*

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  | Estimate | Std. Error | *t* value | Pr(>|t|) |
| (Intercept) | -4.38 | 0.72 | -6.108 | <0.001 |
| Age | 0.15 | 0.03 | 4.854 | <0.001 |
| SES | -0.04 | 1.43 | -0.028 | 0.978 |
| Gender | -0.80 | 1.43 | -0.555 | 0.58 |
| Age:SES | 0.01 | 0.06 | 0.084 | 0.934 |
| Age:Gender | 0.01 | 0.06 | 0.208 | 0.836 |
| SES:Gender | 1.07 | 2.87 | 0.374 | 0.709 |
| Age:SES:Gender | -0.01 | 0.12 | -0.11 | 0.912 |