**Experiment 1 Block Effects**

We assessed whether mean JOL/recall responses in Experiment 1 differed as a function Block. Using a 4 (Pair Type: Forward vs Backward vs Symmetrical vs Unrelated) × 3 (Encoding Group: Item-Specific vs. Relational vs Read) × 2 (Block: Block 1 vs Block 2) × 2 (Measure: JOL vs Recall) mixed ANOVA yielded an effect of Pair Type on JOLs/recall,*F*(3, 255) = 766.76, *MSE* = 215.27, *η*p2 = .52. Overall, a significant main effect of block was detected, *F*(1, 85) = 10.82, *MSE* = 166.35, *ηp*2 = .01, in which collapsed across Pair Type, Measure, and Encoding Group, mean JOLs/recall rates were highest in block 1 (59.56) relative to block 2 (57.29).

These effects were qualified by two significant three-way interactions. First, an interaction occurred between Block, Encoding Group, and Measure, *F*(2, 85) = 12.70, *MSE* = 158.03, *ηp*2 = .01, in which collapsed across pair types, the magnitude of the illusion of competence differed across Encoding Groups as a function of Block. Starting with participants in the silent reading group, mean JOLs exceeded recall in both block 1 (63.40 vs 44.88) and block 2 (58.56 vs 46.48; *t*s ≥ 4.19, *d*s ≥ 0.99). Next, for participants in the item-specific group, mean ­JOLs were equivalent to recall for participants in block 1 (62.23 vs 61.17; *t*(28) < 1, *SEM* = 4.68, *p* = .81, *p*BIC = .84), however they significantly differed in block 2 (62.97 vs 54.07; *t*(28) = 2.34, *SEM* = 3.98, *d* = 0.65). Finally, for participants in the relational group, JOLs and recall were equivalent in the first block (63.15 vs 65.28; *t*(30) < 1, *SEM* = 3.81, *p* = .69, *p*BIC = .83), while JOLs exceeded recall in the second block (61.70 vs 55.63, *t*(30) = 2.82, *SEM* = 3.58, *d* = 0.60).

Next, an interaction was detected between Block, Pair Type, and Measure, *F*(3, 255) = 6.13, *MSE* = 120.71, *ηp*2 = .01, in which collapsed across encoding group, the illusion of competence differed as function of block for each pair type. Starting with forward pairs, mean JOLs and recall were equivalent in block 1 (70.69 vs 71.69; *t*(87) < 1, *SEM* = 3.11, *p* = .74, *p*BIC = .90), however, JOLs exceeded mean recall in block 2 (70.55 vs 76.21, *t*(87) = 2.61, *SEM* = 2.20, *d* = 0.35). Next, for backward pairs, JOLs exceed later recall for both block 1 (71.69 vs 55.46) and block 2 (68.24 vs 42.99). All comparisons for backward pairs were significant (*t*s ≥ 4.90, *d*s ≥ 0.75) and the illusion of competence replicated across both blocks. Third, for symmetrical pairs, JOLs in block 1 did not differ from recall (75.94 vs 75.40, *t*(87) < 1, *SEM* = 2.86, *p* = .84, *p*BIC = .90). However, in block 2, JOLs exceed later recall (75.70 vs 69.86, *t*(87) = 2.19, *SEM* = 2.70, *d* = 0.34) indicating a small illusion of competence. Finally, for unrelated pairs, JOLs exceeded later recall in both block 1 (33.37 vs 22.11) and block 2 (35.04 vs 19.67.) Both comparisons differed statistically (*t*s ≥ 3.99, *d*s ≥ 0.57); thus, the illusion of competence replicated across blocks for unrelated pairs.

No other three-way interactions with Block were detected, and the four-way interaction was non-significant, *F*(6, 255) = 1.76, *MSE* = 120.71, *pBIC* = .99. For completeness, mean JOLs and recall rates split by block are reported in Table 1.

**Experiment 2 Warning Effects**

Next, using a 4 (Pair Type: Forward vs Backward vs Symmetrical vs Unrelated) × 3 (Encoding Group: Item-Specific vs. Relational vs Read) × 2 (Warning: Warning vs No-Warning) × 2 (Measure: JOL vs Recall) we tested whether mean JOL/recall rates differed as a function of the warning manipulation in Experiment 2. Consistent with the full analyses, only data for block 2 was included in this analysis. Overall, the effect of warning was non-significant, *F*(1, 211) < 1, *MSE* = 1721.42, *pBIC* = .92, indicating that informing participants about the deceptive nature of a backward associates, symmetrical associates, and unrelated pairs did not influence their JOLs or recall rates.

**Experiment 2 Block Effects**

Finally, we assessed whether mean JOL/recall rates differed as a function of Block in Experiment 2 via a 4 (Pair Type: Forward vs Backward vs Symmetrical vs Unrelated) × 3 (Encoding Group: Item-Specific vs. Relational vs Read) × 2 (Block: Block 1 vs Block 2) × 2 (Measure: JOL vs Recall). This analysis yielded a significant effect of Block, *F*(1, 214) = 20.77, *MSE* = 250.17, *ηp*2 = .01, such that collapsed across Encoding Group, Pair Type, and Measure, mean JOLs/recall rates were higher in block 1 (49.83) relative to block 2 (47.43). These effects were then qualified by a significant three-way interaction between Encoding Group, Measure, and Block, *F*(6, 642) = 3.89, *MSE* = 69.76, *η*p2 = .001. As such, collapsed across pair types, the magnitude of the illusion of competence differed across Encoding Groups as a function of Block.

Starting with participants in the silent reading group, mean JOLs exceeded recall in both block 1 (54.28 vs 37.26) and block 2 (52.14 vs 36.08; *t*s ≥ 6.78, *d*s ≥ 0.86). Next, for participants in the item-specific group, mean ­JOLs exceed later recall in both block 1 (58.41 vs 43.73) and block 2 (55.12 vs 40.84; *t*s ≥ 5.27, *d*s ≥ 0.85). Finally, this pattern occurred again for participants in the relational group, as JOLs and recall differed both block 1 (60.68 vs 45.60) and block 2 (57.33 vs 43.84; *t*s ≥ 4.89, *d*s ≥ 0.71).

All other three-way interactions with Block were non-significant, and the four-way interaction was non-significant, *F*(6, 642) = .17, *MSE* = 54.18, *pBIC* = .99. Table 2 reports mean JOL and Recall rates for each pair type split by both block and warning group for each of the three encoding manipulations.

Table 1

*Mean JOLs and Recall in Experiment 1 Split by Block*

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Block | Measure | Encoding Task | Forward | | Backward | Symmetrical | Unrelated |
| One | JOL | Item-Specific | | 67.47 | 69.20 | 70.51 | 41.87 |
|  |  | Relational | | 72.57 | 72.23 | 76.04 | 31.74 |
|  |  | Read | | 71.96 | 73.30 | 81.44 | 26.33 |
|  | Recall | Item-Specific | | 76.68 | 67.36 | 84.28 | 16.26 |
|  |  | Relational | | 77.74 | 57.58 | 76.82 | 34.63 |
|  |  | Read | | 59.67 | 40.79 | 76.82 | 34.63 |
| Two | JOL | Item-Specific | | 69.87 | 69.91 | 72.34 | 39.42 |
|  |  | Relational | | 73.36 | 70.86 | 75.49 | 41.45 |
|  |  | Read | | 68.15 | 63.62 | 78.99 | 23.37 |
|  | Recall | Item-Specific | | 81.00 | 50.61 | 72.19 | 12.44 |
|  |  | Relational | | 76.70 | 43.34 | 72.01 | 30.42 |
|  |  | Read | | 70.71 | 34.77 | 65.05 | 15.26 |

Table 2

*Mean JOLs and Recall for the Warning and No Warning Groups in Experiment 2 Split by Block*

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| Warning | Block | Measure | Encoding Task | Forward | Backward | Symmetrical | Unrelated |
| No Warning | One | JOL | Item-Specific | 71.55 | 68.97 | 75.37 | 21.73 |
|  |  |  | Relational | 72.86 | 70.42 | 76.30 | 22.16 |
|  |  |  | Read | 64.55 | 60.94 | 69.11 | 20.41 |
|  |  |  |  |  |  |  |  |
|  |  | Recall | Item-Specific | 64.95 | 31.90 | 58.63 | 15.94 |
|  |  |  | Relational | 59.91 | 32.99 | 50.93 | 15.30 |
|  |  |  | Read | 58.42 | 33.31 | 53.83 | 11.47 |
|  |  |  |  |  |  |  |  |
|  | Two | JOL | Item-Specific | 65.31 | 61.03 | 69.71 | 21.60 |
|  |  |  | Relational | 69.17 | 64.90 | 73.91 | 16.38 |
|  |  |  | Read | 59.45 | 57.89 | 69.71 | 23.64 |
|  |  |  |  |  |  |  |  |
|  |  | Recall | Item-Specific | 62.72 | 28.88 | 55.48 | 16.72 |
|  |  |  | Relational | 60.24 | 32.42 | 50.92 | 16.10 |
|  |  |  | Read | 59.44 | 31.00 | 50.65 | 14.60 |
|  |  |  |  |  |  |  |  |
| Warning | One | JOL | Item-Specific | 72.25 | 68.33 | 74.24 | 17.84 |
|  |  |  | Relational | 75.61 | 70.02 | 67.01 | 23.36 |
|  |  |  | Read | 64.63 | 61.47 | 77.11 | 24.36 |
|  |  |  |  |  |  |  |  |
|  |  | Recall | Item-Specific | 69.21 | 36.98 | 58.10 | 14.32 |
|  |  |  | Relational | 75.16 | 45.81 | 68.17 | 21.94 |
|  |  |  | Read | 53.82 | 26.87 | 47.17 | 10.43 |
|  |  |  |  |  |  |  |  |
|  | Two | JOL | Item-Specific | 68.56 | 63.78 | 72.36 | 18.87 |
|  |  |  | Relational | 73.01 | 67.02 | 75.25 | 19.73 |
|  |  |  | Read | 61.33 | 58.11 | 63.98 | 29.69 |
|  |  |  |  |  |  |  |  |
|  |  | Recall | Item-Specific | 63.51 | 31.70 | 55.47 | 12.23 |
|  |  |  | Relational | 72.10 | 41.94 | 63.71 | 17.58 |
|  |  |  | Read | 49.68 | 25.46 | 55.47 | 12.65 |