Appendix A

Experiment 1 Comprehension Test Results

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| **Type 3 Tests of Fixed Effects** | | | | | | |
| Effect |  | Num DF | DF | F-value | p-value | Partial Eta Squared |
| Condition |  | 2 | 258 | 0.43 | .715 | .02 |
| Object |  | 1 | 258 | 0.20 | .653 | .00 |
| Spatial |  | 1 | 258 | 0.21 | .650 | .00 |
| Verbal |  | 1 | 258 | 9.26 | .003 | .03 |
| Object X Condition |  | 2 | 258 | 0.36 | .696 | .00 |
| Spatial X Condition |  | 2 | 258 | 2.74 | .066 | .02 |
| Verbal X Condition |  | 2 | 258 | 0.44 | .643 | .00 |
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| **Regression Coefficients** | | | | | | |
|  |  | Estimate | SE | t-value | p-value | Interpretation |
| Intercept |  | 8.18 | 0.30 | 27.72 | < .001 | Average test score was 8.18 correct out of 16, in the Text condition, for an individual with average levels of Spatial, Object, and Verbal preferences. |
| Condition | Conceptual | 0.32 | 0.42 | 0.77 | .444 | Average test score was .32 more correct in the Conceptual condition, relative to the Text Condition, for an individual with average levels of Spatial, Object, and Verbal preferences. This difference is not significant. |
| Condition | Image | 0.06 | 0.41 | 0.14 | .888 | Average test score was .32 more correct in the Image condition, relative to the Text Condition, for an individual with average levels of Spatial, Object, and Verbal preferences. This difference is not significant. |
| Condition | Text | 0.00 | - | - | - |  |
| Object |  | 0.16 | 0.31 | .53 | .599 | For each 1 SD increase Object preference, participants got .16 more items correct, in the Text Condition, assuming they had average levels for Spatial and Verbal Preferences. This slope is not significant. |
| Spatial |  | 0.40 | 0.32 | 1.24 | .216 | For each 1 SD increase Spatial preference, participants got .40 more items correct, in the Text Condition, assuming they had average levels for Object and Verbal Preferences. This slope is not significant. |
| Verbal |  | -0.40 | 0.32 | -1.27 | .206 | For each 1 SD increase Verbal preference, participants got .40 fewer items correct, in the Text Condition, assuming they had average levels for Object and Spatial Preferences. This slope is not significant. |
| Object X Condition | Conceptual | -0.29 | 0.43 | -0.68 | .498 | The slope for Object preference is .29 less in the Conceptual Condition than in the Text Condition (assuming average levels for Spatial and Verbal Preferences). This difference in slopes is not significant. |
| Object X Condition | Image | 0.04 | 0.44 | 0.09 | .930 | The slope for Image preference is .04 more in the Image Condition than in the Text Condition (assuming average levels for Spatial and Verbal Preferences). This difference in slope is not significant. |
| Object X Condition | Text | 0.00 | - | - | - |  |
| Spatial X Condition | Conceptual | -1.00 | 0.43 | -2.32 | .021 | The slope for Spatial preference is 1.00 less in the Conceptual Condition than in the Text Condition (assuming average levels for Object and Verbal Preferences). This difference in slopes is not significant. |
| Spatial X Condition | Image | -0.42 | 0.43 | -0.98 | .326 | The slope for Spatial preference is .42 less in the Image Condition than in the Text Condition (assuming average levels for Object and Verbal Preferences). This difference in slopes is not significant. |
| Spatial X Condition | Text | 0.00 | - | - | - |  |
| Verbal X Condition | Conceptual | -0.38 | 0.45 | -0.84 | .401 | The slope for Verbal preference is .38 less in the Conceptual Condition than in the Text Condition (assuming average levels for Spatial and Object Preferences). This difference in slopes is not significant. |
| Verbal X Condition | Image | -0.04 | 0.43 | -0.08 | .933 | The slope for Verbal preference is .38 less in the Image Condition than in the Text Condition (assuming average levels for Spatial and Object Preferences). This difference in slopes is not significant. |
| Verbal X Condition | Text | 0.00 | - | - | - |  |

Experiment 1 Metacognitive Judgments

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| **Type 3 Tests of Fixed Effects** | | | | | | |
| Effect |  | Num DF | DF | F-value | p-value | Partial Eta Squared |
| Condition |  | 2 | 257 | 1.08 | .342 | .01 |
| Object |  | 1 | 257 | 1.86 | .174 | .01 |
| Spatial |  | 1 | 257 | 7.55 | .006 | .03 |
| Verbal |  | 1 | 257 | 3.33 | .069 | .01 |
| Object X Condition |  | 2 | 257 | 2.54 | .081 | .02 |
| Spatial X Condition |  | 2 | 257 | 0.72 | .489 | .01 |
| Verbal X Condition |  | 2 | 257 | 0.42 | .655 | .00 |
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|  |  |  |  |  |  |  |
| **Regression Coefficients** | | | | | | |
|  |  | Estimate | SE | t-value | p-value | Interpretation |
| Intercept |  | 6.23 | 0.20 | 31.41 | < .001 | Average participant test prediction score was 6.23 correct out of 10, in the Text condition, for an individual with average levels of Spatial, Object, and Verbal preferences. |
| Condition | Conceptual | 0.40 | 0.28 | 1.42 | .158 | Average predicted test score was .40 more correct in the Conceptual condition, relative to the Text Condition, for an individual with average levels of Spatial, Object, and Verbal preferences. This difference is not significant. |
| Condition | Image | 0.11 | 0.27 | 0.39 | .698 | Average predicted test score was .11 more correct in the Image condition, relative to the Text Condition, for an individual with average levels of Spatial, Object, and Verbal preferences. This difference is not significant. |
| Condition | Text | 0.00 | - | - | - |  |
| Object |  | 0.53 | 0.21 | 2.54 | .012 | For each 1 SD increase Object preference, participants predicted .53 more items correct, in the Text Condition, assuming they had average levels for Spatial and Verbal Preferences. This slope is significant. |
| Spatial |  | 0.12 | 0.21 | 0.55 | .580 | For each 1 SD increase Spatial preference, participants predicted .12 more items correct, in the Text Condition, assuming they had average levels for Object and Verbal Preferences. This slope is not significant. |
| Verbal |  | 0.19 | 0.21 | 0.89 | .376 | For each 1 SD increase Verbal preference, participants predicted .19 more items correct, in the Text Condition, assuming they had average levels for Object and Spatial Preferences. This slope is not significant. |
| Object X Condition | Conceptual | -0.48 | 0.29 | -1.64 | .103 | The slope for Object preference is .48 less in the Conceptual Condition than in the Text Condition (assuming average levels for Spatial and Verbal Preferences). This difference in slopes is not significant. |
| Object X Condition | Image | -0.64 | 0.29 | -2.17 | .031 | The slope for Image preference is .64 more in the Image Condition than in the Text Condition (assuming average levels for Spatial and Verbal Preferences). This difference in slope is significant. |
| Object X Condition | Text | 0.00 | - | - | - |  |
| Spatial X Condition | Conceptual | 0.33 | 0.29 | 1.14 | .256 | The slope for Spatial preference is .33 more in the Conceptual Condition than in the Text Condition (assuming average levels for Object and Verbal Preferences). This difference in slopes is not significant. |
| Spatial X Condition | Image | 0.27 | 0.29 | 0.94 | .351 | The slope for Spatial preference is .27 more in the Image Condition than in the Text Condition (assuming average levels for Object and Verbal Preferences). This difference in slopes is not significant. |
| Spatial X Condition | Text | 0.00 | - | - | - |  |
| Verbal X Condition | Conceptual | -0.09 | 0.30 | -0.29 | .775 | The slope for Verbal preference is .09 less in the Conceptual Condition than in the Text Condition (assuming average levels for Spatial and Object Preferences). This difference in slopes is not significant. |
| Verbal X Condition | Image | 0.17 | 0.29 | 0.59 | .553 | The slope for Verbal preference is .17 less in the Image Condition than in the Text Condition (assuming average levels for Spatial and Object Preferences). This difference in slopes is not significant. |
| Verbal X Condition | Text | 0.00 | - | - | - |  |

Experiment 1 Study Time Results

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| **Type 3 Tests of Fixed Effects** | | | | | | |
| Effect |  | Num DF | DF | F-value | p-value | Partial Eta Squared |
| Condition |  | 2 | 257 | 2.43 | .090 | .02 |
| Object |  | 1 | 257 | 0.07 | .785 | .00 |
| Spatial |  | 1 | 257 | 6.37 | .012 | .02 |
| Verbal |  | 1 | 257 | 0.33 | .568 | .00 |
| Object X Condition |  | 2 | 257 | 0.55 | .580 | .00 |
| Spatial X Condition |  | 2 | 257 | 0.78 | .460 | .01 |
| Verbal X Condition |  | 2 | 257 | 0.09 | .910 | .00 |
|  |  |  |  |  |  |  |
|  |  |  |  |  |  |  |
| **Regression Coefficients** | | | | | | |
|  |  | Estimate | SE | t-value | p-value | Interpretation |
| Intercept |  | 31.97 | 3.10 | 10.30 | < .001 | Average study time requested was 31.97 minutes, in the Text condition, for an individual with average levels of Spatial, Object, and Verbal preferences. |
| Condition | Conceptual | -8.34 | 4.41 | -1.89 | .060 | Average study time requested was 8.34 minutes shorter in the Conceptual condition, relative to the Text Condition, for an individual with average levels of Spatial, Object, and Verbal preferences. This difference is not significant. |
| Condition | Image | 0.07 | 4.30 | 0.02 | .987 | Average study time requested was .07 minutes longer more correct in the Image condition, relative to the Text Condition, for an individual with average levels of Spatial, Object, and Verbal preferences. This difference is not significant. |
| Condition | Text | 0.00 | - | - | - |  |
| Object |  | 1.78 | 3.29 | .54 | .590 | For each 1 SD increase Object preference, participants requested 1.78 minutes more study time, in the Text Condition, assuming they had average levels for Spatial and Verbal Preferences. This slope is not significant. |
| Spatial |  | -6.24 | 3.36 | -1.86 | .064 | For each 1 SD increase Spatial preference, participants requested 6.24 minutes less study time, in the Text Condition, assuming they had average levels for Object and Verbal Preferences. This slope is not significant. |
| Verbal |  | 0.79 | 3.34 | 0.24 | .812 | For each 1 SD increase Verbal preference, participants requested .79 minutes more study time, in the Text Condition, assuming they had average levels for Object and Spatial Preferences. This slope is not significant. |
| Object X Condition | Conceptual | -2.07 | 4.56 | -0.45 | .650 | The slope for Object preference is 2.07 less in the Conceptual Condition than in the Text Condition (assuming average levels for Spatial and Verbal Preferences). This difference in slopes is not significant. |
| Object X Condition | Image | -4.78 | 4.60 | -1.04 | .300 | The slope for Image preference is 4.78 less in the Image Condition than in the Text Condition (assuming average levels for Spatial and Verbal Preferences). This difference in slope is not significant. |
| Object X Condition | Text | 0.00 | - | - | - |  |
| Spatial X Condition | Conceptual | 4.82 | 4.56 | 1.06 | .291 | The slope for Spatial preference is 4.82 more in the Conceptual Condition than in the Text Condition (assuming average levels for Object and Verbal Preferences). This difference in slopes is not significant. |
| Spatial X Condition | Image | 0.14 | 4.50 | 0.03 | .976 | The slope for Spatial preference is .14 more in the Image Condition than in the Text Condition (assuming average levels for Object and Verbal Preferences). This difference in slopes is not significant. |
| Spatial X Condition | Text | 0.00 | - | - | - |  |
| Verbal X Condition | Conceptual | 1.37 | 4.71 | 0.29 | .772 | The slope for Verbal preference is 1.37 more in the Conceptual Condition than in the Text Condition (assuming average levels for Spatial and Object Preferences). This difference in slopes is not significant. |
| Verbal X Condition | Image | -0.55 | 4.50 | -0.12 | .903 | The slope for Verbal preference is .55 less in the Image Condition than in the Text Condition (assuming average levels for Spatial and Object Preferences). This difference in slopes is not significant. |
| Verbal X Condition | Text | 0.00 | - | - | - |  |