# Additional file 3

## Table S1

*dt, ds, c* and *C* for each dataset in the Palmer and Brewer (2012) corpus, estimated by the relevant models for each presentation format

|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  | *dt* | | | | *ds* | | | | *c* | | | | *C* | | | |
|  | Simultaneous | | Sequential | | Simultaneous | | Sequential | | Simultaneous | | Sequential | | Simultaneous | | Sequential | |
|  | MAX | INT | SEQ | INT | MAX | INT | SEQ | INT | MAX | INT | SEQ | INT | MAX | INT | SEQ | INT |
| Carlson et. al (2008, Exp 1) | 2.39 | 4.27 | 2.28 | 3.90 | -.27 | 0.55 | .43 | 1.89 | 1.73 | 1.86 | 2.08 | 2.54 | .53 | -0.28 | .95 | 0.59 |
| Carlson et. al (2008, Exp 2) | 1.50 | 1.80 | 1.54 | 1.99 | 1.28 | 1.88 | 1.32 | 2.70 | 1.40 | -0.22 | 1.77 | 0.95 | .65 | -1.12 | 1.00 | -0.04 |
| Clark & Davey (2005, Exp 1) | .49 | 0.80 | 1.48 | 1.50 | .90 | 1.46 | 1.13 | 1.18 | .79 | -1.30 | 1.05 | -1.18 | .55 | -1.70 | .31 | -1.93 |
| Clark & Davey (2005, Exp 2) | 1.08 | 1.40 | 1.64 | 1.70 | .80 | 1.33 | 1.18 | 1.74 | .93 | -1.10 | 1.29 | -0.74 | .39 | -1.80 | .46 | -1.59 |
| Greathouse & Kovera (2009) | .94 | 1.18 | 2.08 | 2.00 | .02 | 0.21 | -.05 | 0.02 | .75 | -1.87 | .93 | -1.75 | .28 | -2.45 | -.11 | -2.75 |
| Kneller et. al (2001) | 1.57 | 1.61 | 1.83 | 1.40 | - | - | - | - | .94 | -1.20 | 1.29 | 0.20 | .16 | -2.00 | .37 | -0.50 |
| Levi (2006) | 1.80 | 1.99 | 1.34 | 1.64 | - | - | - | - | 1.23 | -0.17 | 1.61 | 1.39 | .33 | -1.17 | .94 | 0.57 |
| Lindsay, Lea, & Fulford (1991) | 1.69 | 2.43 | 2.10 | 3.89 | .64 | 1.33 | .51 | 2.13 | 1.33 | -0.27 | 2.13 | 2.82 | .49 | -1.49 | 1.08 | 0.87 |
| Lindsay & Wells (1985) | 1.71 | 2.30 | 1.86 | 2.64 | 1.38 | 2.58 | .97 | 2.11 | 1.40 | 0.10 | 1.86 | 1.43 | .55 | -1.05 | .93 | 0.11 |
| MacLin & Phelan (2007) | 1.38 | 1.61 | 1.40 | 1.97 | - | - | - | - | 1.24 | -0.02 | 2.12 | 3.22 | .55 | -0.82 | 1.41 | 2.23 |
| MacLin et. al (2005, Exp 1) | 1.06 | 1.14 | 1.17 | 1.44 | - | - | - | - | .98 | -1.00 | 1.50 | 1.03 | .45 | -1.57 | .92 | 0.30 |
| MacLin et. al (2005, Exp 2) | 1.34 | 1.58 | 1.18 | 1.49 | - | - | - | - | 1.25 | 0.04 | 1.72 | 1.85 | .58 | -0.76 | 1.13 | 1.10 |
| Melara et. al (1989) | .34 | 0.34 | .56 | 0.70 | - | - | - | - | .47 | -3.09 | 1.62 | 1.56 | .30 | -3.26 | 1.34 | 1.21 |
| Memon & Gabbert (2003) | 1.32 | 1.46 | 1.19 | 1.70 | - | - | - | - | 1.14 | -0.37 | 2.13 | 3.34 | .48 | -1.10 | 1.54 | 2.49 |
| Parker & Ryan (1993) | 1.14 | 1.77 | .90 | 1.37 | .29 | 0.96 | -.21 | 0.25 | 1.25 | 0.20 | 1.16 | -0.01 | .68 | -0.69 | .71 | -0.69 |
| Pozzulo et. al (2008) | 1.37 | 1.56 | 1.56 | 1.90 | - | - | - | - | 1.19 | -0.19 | 1.70 | 1.62 | .51 | -0.97 | .91 | 0.67 |
| Pozzulo & Marciniak (2006) | 1.35 | 1.59 | 1.21 | 0.99 | - | - | - | - | 1.30 | 0.25 | 1.05 | -0.69 | .63 | -0.54 | .45 | -1.18 |
| Rose et. al (2005) | 1.78 | 1.94 | 1.28 | 1.39 | - | - | - | - | 1.19 | -0.32 | 1.36 | 0.43 | .30 | -1.29 | .72 | -0.27 |
| Sporer (1993) | 1.11 | 1.25 | 1.34 | 1.64 | - | - | - | - | .97 | -1.03 | 1.50 | 0.99 | .41 | -1.66 | .83 | 0.17 |
| Steblay et. al (2011) | .30 | 0.32 | .19 | 0.22 | - | - | - | - | 1.53 | 1.17 | 1.54 | 1.21 | 1.38 | 1.01 | 1.45 | 1.10 |
| Wells & Pozzulo (2006) | .74 | 0.85 | .19 | 0.16 | - | - | - | - | 1.26 | 0.18 | 1.22 | -0.05 | .89 | -0.25 | 1.12 | -0.13 |
| Wilcock et. al (2005) | 1.07 | 1.32 | 1.78 | 2.05 | - | - | - | - | 1.19 | -0.09 | 1.61 | 1.16 | .66 | -0.75 | .72 | 0.14 |

## Table S2

Fit statistics and *dt, ds* and *c* for each dataset in the post-2011 corpus, estimated by SDT-MAX and SDT-SEQ for simultaneous and sequential presentation respectively

|  |  |  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
|  |  | *χ*2(1) | | *p* | | *dt* | | *ds* | | *c* | |
| Study | Condition | sim | seq | sim | seq | sim | seq | sim | seq | sim | seq |
| Pica & Pozzulo (2017) | - | .18 | .90 | .68 | .34 | 2.37 | 2.22 | - | - | 1.31 | 1.80 |
| Flowe et al. (2016) | Upright | 2.60 | 1.14 | .11 | .29 | 1.64 | 1.38 | - | - | 1.33 | 1.45 |
|  | Inverted | .56 | 1.03 | .46 | .31 | .77 | .58 | - | - | 1.00 | 1.10 |
| Carlson et al. (2016) | Backloading | 10.29 | .35 | <.01 | .56 | 1.05 | 1.32 | - | - | 1.16 | 1.28 |
|  | No backloading | .26 | .92 | .61 | .17 | 1.07 | 1.17 | - | - | .83 | 1.09 |
| Pozzulo et al. (2016) | - | 3.23 | .94 | .07 | .33 | 1.95 | 1.28 | - | - | 1.28 | 1.47 |
| Sucic et al. (2015)a | - | 2.45 | 8.67 | .12 | <.01 | 1.24 | 1.43 | 1.09 | 1.16 | 1.02 | 1.39 |
| Carlson & Carlson (2014) | No weapon, no feature | .84 | .18 | .36 | .68 | .89 | .77 | -.67 | -.48 | .82 | .89 |
|  | No weapon, feature | .02 | .01 | .90 | .91 | .48 | .20 | -.15 | -.49 | .89 | .73 |
|  | Weapon, no feature | 1.11 | 3.19 | .29 | .07 | 1.21 | .52 | -.19 | -.11 | 1.03 | .83 |
|  | Weapon, feature | 1.76 | 10.09 | .18 | <.01 | .56 | .76 | -.11 | -.51 | .97 | .80 |
| Pozzulo et al. (2013) | - | .18 | 4.46 | .67 | .03 | 1.78 | 1.30 | - | - | 1.15 | 1.48 |
| Mickes et al. (2012) | Experiment 1a | .23 | .10 | .63 | .75 | 2.02 | 1.29 | - | - | 1.51 | 1.60 |

a Sucic et al. (2015) included an additional “don’t know” response option. We excluded “don’t know” responses when analysing the data, adjusting the total number of target present and target absent trials accordingly.

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