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| Table S1. *Relative difference and empirical standard deviation* [*in bracket*] *of the conditional classification consistency estimate for conditions with 500 iterations per θ value and binary items (top) or polytomous items (bottom)* | | | | | | | | | |
|  | Theta values | | | | | | | | |
| *i* | -2.0 | -1.5 | -1.0 | -0.5 | 0 | 0.5 | 1.0 | 1.5 | 2.0 |
| 5 | .000[.011] | .001[.016] | .001[.022] | .001[.019] | .002[.002] | .005[.018] | .002[.023] | .001[.017] | .000[.011] |
| 6 | .000[.014] | .000[.020] | .003[.020] | .002[.008] | .002[.014] | .000[.022] | .000[.017] | .000[.010] | .000[.004] |
| 7 | .001[.018] | .002[.023] | .002[.017] | .002[.003] | .001[.021] | .001[.021] | .000[.011] | .000[.005] | .000[.002] |
| 8 | -.001[.021] | .003[.021] | .001[.011] | .002[.012] | .003[.023] | .000[.016] | .000[.007] | .000[.002] | .000[.001] |
| 9 | .002[.021] | .000[.020] | .001[.004] | -.001[.018] | .000[.020] | .000[.011] | .000[.004] | .000[.001] | .000[.000] |
| 10 | -.001[.023] | .004[.017] | .001[.003] | .000[.021] | .001[.017] | .000[.008] | .000[.002] | .000[.001] | .000[.000] |
| 11 | .002[.023] | .002[.013] | .001[.010] | .001[.022] | .000[.015] | .000[.005] | .000[.001] | .000[.000] | .000[.000] |
| 12 | .003[.021] | .001[.008] | .000[.014] | .000[.021] | .000[.012] | .000[.004] | .000[.001] | .000[.000] | .000[.000] |
| 13 | .000[.020] | .001[.004] | .002[.018] | .001[.021] | .000[.009] | .000[.002] | .000[.000] | .000[.000] | .000[.000] |
| 14 | .002[.019] | .001[.002] | .001[.021] | .000[.019] | .000[.007] | .000[.002] | .000[.000] | .000[.000] | .000[.000] |
| 15 | .002[.015] | .001[.006] | -.001[.022] | .000[.016] | .000[.006] | .000[.001] | .000[.000] | .000[.000] | .000[.000] |
| 5 | .000[.003] | .000[.007] | .001[.014] | .000[.020] | .002[.021] | .002[.005] | .003[.015] | .000[.023] | .000[.017] |
| 6 | -.001[.009] | -.001[.017] | .002[.022] | .002[.015] | .002[.008] | .003[.021] | .000[.019] | .000[.011] | .000[.005] |
| 7 | .001[.017] | .000[.022] | .002[.013] | .001[.011] | .002[.022] | .001[.016] | .000[.008] | .000[.003] | .000[.001] |
| 8 | .002[.022] | .002[.017] | .001[.009] | .001[.024] | .001[.016] | .000[.007] | .000[.002] | .000[.001] | .000[.000] |
| 9 | .001[.021] | .002[.001] | .003[.022] | .002[.018] | .000[.008] | .000[.003] | .000[.000] | .000[.000] | .000[.000] |
| 10 | .001[.013] | .002[.014] | .000[.020] | .000[.010] | .000[.003] | .000[.001] | .000[.000] | .000[.000] | .000[.000] |
| 11 | .002[.002] | .001[.021] | .001[.016] | .000[.006] | .000[.001] | .000[.000] | .000[.000] | .000[.000] | .000[.000] |
| 12 | .002[.013] | .002[.022] | .000[.009] | .000[.003] | .000[.000] | .000[.000] | .000[.000] | .000[.000] | .000[.000] |
| 13 | .001[.021] | -.001[.018] | .000[.006] | .000[.001] | .000[.000] | .000[.000] | .000[.000] | .000[.000] | .000[.000] |
| 14 | -.001[.023] | .000[.012] | .000[.003] | .000[.001] | .000[.000] | .000[.000] | .000[.000] | .000[.000] | .000[.000] |
| 15 | .002[.020] | .000[.008] | .000[.002] | .000[.000] | .000[.000] | .000[.000] | .000[.000] | .000[.000] | .000[.000] |

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| Table S2. *Item parameters from the first example with and without DIF* | | | | | |
|  | Group | a | b1 | b2 | b3 |
| CESD1 | males | 1.493 | -0.044 | 1.863 | 3.553 |
|  | females | - | - | - | - |
| CESD2 | males | 0.681 | 0.724 | 3.340 | 6.447 |
|  | females | - | - | - | - |
| CESD3 | males | 1.787 | 0.380 | 1.818 | 3.061 |
|  | females | - | - | - | - |
| CESD4 | males | 0.894 | -0.464 | 1.249 | 3.488 |
|  | females | - | - | - | - |
| CESD5 | males | 1.330 | -1.381 | 0.575 | 2.289 |
|  | females | - | - | - | - |
| CESD6 | males | 3.286 | 0.343 | 1.308 | 2.239 |
|  | females | - | - | - | - |
| CESD7 | males | 0.332 | -2.920 | 2.278 | 6.676 |
|  | females | - | - | - | - |
| CESD8 | males | 1.003 | -0.788 | 1.108 | 3.048 |
|  | females | - | - | - | - |
| CESD9 | males | 1.794 | 1.167 | 2.270 | 3.474 |
|  | females | - | - | - | - |
| CESD10 | males | 1.536 | 1.440 | 3.096 | 3.988 |
|  | females | 1.753 | 0.262 | 1.729 | 2.716 |
| CESD11 | males | 0.767 | -0.417 | 1.484 | 3.568 |
|  | females | - | - | - | - |
| CESD12 | males | 1.993 | -0.161 | 1.044 | 2.590 |
|  | females | - | - | - | - |
| CESD13 | males | 0.953 | -0.115 | 2.201 | 4.300 |
|  | females | - | - | - | - |
| CESD14 | males | 1.616 | 0.042 | 1.426 | 2.483 |
|  | females | - | - | - | - |
| CESD15 | males | 0.630 | 1.698 | 4.517 | 7.584 |
|  | females | - | - | - | - |
| CESD16 | males | 2.018 | -0.087 | 1.001 | 2.213 |
|  | females | - | - | - | - |
| CESD17 | males | 1.085 | 2.733 | 3.723 | NA |
|  | females | 1.735 | 1.015 | 2.106 | NA |
| CESD18 | males | 2.435 | 0.393 | 1.588 | 2.897 |
|  | females | 3.118 | -0.008 | 1.124 | 2.084 |
| CESD19 | males | 1.105 | 0.908 | 2.819 | 4.207 |
|  | females | - | - | - | - |
| CESD20 | males | 1.321 | -0.154 | 1.480 | 3.122 |
|  | females | - | - | - | - |
| Note: Entries with a “-“ are for anchor items. | | | | | |

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| Table S3. *Relative difference and empirical standard deviation (in brackets) of the marginal consistency classification estimate by the simulation-based approach for the reference group in screening scenario 2.* | | | | | | |
|  | Iterations per θ value | | | | | |
|  | Two-category items | | | Five-category items | | |
| *i* | 50 | 125 | 250 | 50 | 125 | 250 |
| 5 | .007 [.008] | .002 [.005] | .001 [.004] | .007 [.007] | .003 [.005] | .001 [.003] |
| 6 | .005 [.008] | .002 [.005] | .001 [.004] | .006 [.007] | .002 [.005] | .001 [.004] |
| 7 | .005 [.008] | .002 [.005] | .001 [.003] | .005 [.008] | .002 [.005] | .001 [.003] |
| 8 | .006 [.007] | .002 [.005] | .001 [.003] | .004 [.006] | .002 [.004] | .001 [.003] |
| 9 | .005 [.007] | .002 [.004] | .001 [.003] | .004 [.006] | .002 [.004] | .001 [.002] |
| 10 | .005 [.006] | .002 [.004] | .001 [.003] | .002 [.005] | .001 [.003] | .000 [.002] |
| 11 | .004 [.006] | .002 [.004] | .001 [.003] | .002 [.005] | .001 [.003] | .001 [.002] |
| 12 | .005 [.006] | .001 [.004] | .001 [.003] | .002 [.005] | .000 [.003] | .000 [.002] |
| 13 | .004 [.006] | .002 [.004] | .001 [.002] | .001 [.004] | .000 [.003] | .000 [.002] |
| 14 | .004 [.006] | .001 [.003] | .001 [.002] | .000 [.004] | .000 [.002] | .000 [.002] |
| 15 | .003 [.005] | .001 [.003] | .001 [.002] | .000 [.003] | .000 [.002] | .000 [.001] |
| **Note**: *i* is for number of items. The cutpoint for conditions with binary items was ≥ 3 and the cutpoint for conditions with polytomous items was ≥ 12. Relative difference is the estimate of the simulation-based procedure minus the estimate of the procedure by Lee (2010), divided by the estimate of the procedure by Lee (2010). | | | | | | |

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| Table S4. *Relative difference and empirical standard deviation (in brackets) of the marginal consistency classification estimate by the simulation-based approach for the focal group in screening scenario 2.* | | | | | | |
|  | Iterations per θ value | | | | | |
|  | Two-category items | | | Five-category items | | |
| *i* | 50 | 125 | 250 | 50 | 125 | 250 |
| 5 | .007 [.007] | .002 [.005] | .001 [.003] | .007 [.009] | .003 [.005] | .001 [.004] |
| 6 | .004 [.007] | .002 [.004] | .001 [.003] | .005 [.006] | .002 [.004] | .001 [.003] |
| 7 | .003 [.006] | .001 [.004] | .001 [.003] | .002 [.006] | .001 [.004] | .001 [.003] |
| 8 | .002 [.005] | .001 [.004] | .000 [.002] | .001 [.005] | .000 [.003] | .000 [.002] |
| 9 | .002 [.005] | .001 [.004] | .000 [.002] | .000 [.004] | .000 [.002] | .000 [.002] |
| 10 | .001 [.005] | .000 [.003] | .000 [.002] | .000 [.002] | .000 [.001] | .000 [.001] |
| 11 | .001 [.005] | .000 [.003] | .000 [.002] | .000 [.001] | .000 [.001] | .000 [.000] |
| 12 | .001 [.004] | .000 [.003] | .000 [.002] | .000 [.000] | .000 [.000] | .000 [.000] |
| 13 | .000 [.004] | .000 [.002] | .000 [.002] | .000 [.000] | .000 [.000] | .000 [.000] |
| 14 | .000 [.003] | .000 [.002] | .000 [.002] | .000 [.000] | .000 [.000] | .000 [.000] |
| 15 | .000 [.003] | .000 [.002] | .000 [.001] | .000 [.000] | .000 [.000] | .000 [.000] |
| **Note**: Group 1 and group 2 would have the same estimate of classification consistency. *i* is for number of items. The cutpoint for conditions with binary items was ≥ 3 and the cutpoint for conditions with polytomous items was ≥ 12. Relative difference is the estimate of the simulation-based procedure minus the estimate of the procedure by Lee (2010), divided by the estimate of the procedure by Lee (2010). | | | | | | |

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| Table S5. *Relative difference and empirical standard deviation (in brackets) of the conditional classification consistency estimate for conditions with 250 iterations per θ value and binary items (top) or polytomous items (bottom) for the reference group in screening scenario 2.* | | | | | | | | | |
|  | Theta values | | | | | | | | |
| *i* | -2.0 | -1.5 | -1.0 | -0.5 | 0 | 0.5 | 1.0 | 1.5 | 2.0 |
| 5 | .000[.015] | .001[.024] | .001[.031] | .005[.025] | .004[.003] | .004[.025] | .001[.032] | .002[.025] | .000[.015] |
| 6 | .001[.020] | .001[.029] | .001[.029] | .003[.012] | .002[.020] | .000[.031] | .004[.025] | .000[.013] | .000[.006] |
| 7 | .002[.025] | .000[.031] | .003[.026] | .004[.004] | .004[.028] | -.001[.029] | .000[.015] | .001[.006] | .000[.003] |
| 8 | .003[.029] | .003[.030] | .004[.016] | .004[.017] | .000[.030] | -.002[.021] | .000[.009] | .000[.003] | .000[.001] |
| 9 | .000[.030] | .007[.030] | .003[.006] | .002[.025] | .001[.030] | -.001[.016] | .000[.005] | .000[.001] | .000[.000] |
| 10 | .003[.030] | .003[.024] | .004[.005] | .004[.031] | .002[.026] | .000[.010] | .000[.003] | .000[.001] | .000[.000] |
| 11 | .001[.031] | .004[.018] | .004[.014] | .000[.031] | .001[.022] | .000[.007] | .000[.002] | .000[.001] | .000[.000] |
| 12 | .001[.031] | .004[.013] | .005[.021] | .004[.030] | .001[.017] | .000[.005] | .000[.001] | .000[.000] | .000[.000] |
| 13 | .003[.027] | .003[.006] | .000[.026] | -.001[.029] | .000[.013] | .000[.003] | .000[.001] | .000[.000] | .000[.000] |
| 14 | .003[.025] | .004[.003] | .002[.029] | .002[.025] | .000[.010] | .000[.002] | .000[.000] | .000[.000] | .000[.000] |
| 15 | .000[.022] | .003[.008] | .005[.031] | .002[.023] | .001[.008] | .000[.002] | .000[.000] | .000[.000] | .000[.000] |
| 5 | .000[.004] | .000[.010] | .001[.019] | .001[.029] | .007[.030] | .003[.007] | .004[.020] | .003[.031] | .000[.025] |
| 6 | -.001[.012] | -.001[.023] | .001[.029] | .003[.020] | .001[.011] | .001[.031] | .001[.027] | -.001[.015] | .000[.006] |
| 7 | .001[.023] | .001[.030] | .002[.018] | .002[.016] | .004[.032] | .001[.022] | .001[.010] | .000[.004] | .000[.001] |
| 8 | .002[.030] | .001[.023] | .004[.013] | .005[.031] | .000[.022] | .001[.009] | .000[.003] | .000[.001] | .000[.000] |
| 9 | .004[.029] | .005[.003] | .003[.029] | -.001[.024] | .000[.011] | .000[.003] | .000[.001] | .000[.000] | .000[.000] |
| 10 | .004[.017] | .003[.022] | .001[.029] | .000[.014] | .000[.005] | .000[.001] | .000[.000] | .000[.000] | .000[.000] |
| 11 | .004[.002] | .002[.031] | -.002[.023] | .000[.008] | .000[.002] | .000[.000] | .000[.000] | .000[.000] | .000[.000] |
| 12 | .004[.018] | .003[.030] | .001[.013] | .000[.004] | .000[.001] | .000[.000] | .000[.000] | .000[.000] | .000[.000] |
| 13 | -.001[.028] | .000[.023] | .000[.008] | .000[.002] | .000[.000] | .000[.000] | .000[.000] | .000[.000] | .000[.000] |
| 14 | -.001[.030] | .000[.017] | .000[.004] | .000[.001] | .000[.000] | .000[.000] | .000[.000] | .000[.000] | .000[.000] |
| 15 | .001[.031] | .000[.012] | .000[.002] | .000[.000] | .000[.000] | .000[.000] | .000[.000] | .000[.000] | .000[.000] |

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| Table S6. *Relative difference and empirical standard deviation (in brackets) of the conditional classification consistency estimate for conditions with 250 iterations per θ value and binary items (top) or polytomous items (bottom) for the focal group in screening scenario 2.* | | | | | | | | | |
|  | Theta values | | | | | | | | |
| *i* | -0.6 | -0.2 | 0.2 | 0.6 | 1 | 1.4 | 1.8 | 2.2 | 2.6 |
| 5 | .006[.027] | .003[.012] | .004[.013] | .004[.028] | .001[.033] | .000[.025] | .000[.018] | .000[.012] | .000[.008] |
| 6 | .003[.018] | .004[.008] | .002[.028] | -.001[.031] | .001[.023] | -.001[.015] | .001[.008] | .000[.005] | .000[.002] |
| 7 | .003[.004] | .003[.021] | .001[.031] | .001[.025] | .001[.015] | .000[.008] | .000[.004] | .000[.002] | .000[.001] |
| 8 | .004[.010] | .001[.030] | .001[.030] | .000[.018] | .000[.009] | .000[.004] | .000[.001] | .000[.001] | .000[.000] |
| 9 | .002[.020] | .000[.031] | .000[.024] | .000[.013] | .000[.006] | .000[.002] | .000[.001] | .000[.000] | .000[.000] |
| 10 | .002[.027] | .001[.030] | .000[.020] | .000[.009] | .000[.003] | .000[.001] | .000[.000] | .000[.000] | .000[.000] |
| 11 | .002[.030] | .000[.029] | .000[.014] | .000[.006] | .000[.002] | .000[.001] | .000[.000] | .000[.000] | .000[.000] |
| 12 | .005[.031] | -.001[.025] | .000[.011] | .000[.004] | .000[.001] | .000[.000] | .000[.000] | .000[.000] | .000[.000] |
| 13 | .002[.032] | .000[.019] | .000[.008] | .000[.002] | .000[.001] | .000[.000] | .000[.000] | .000[.000] | .000[.000] |
| 14 | -.001[.028] | .001[.016] | .000[.006] | .000[.001] | .000[.000] | .000[.000] | .000[.000] | .000[.000] | .000[.000] |
| 15 | .000[.026] | -.001[.013] | .000[.004] | .000[.001] | .000[.000] | .000[.000] | .000[.000] | .000[.000] | .000[.000] |
| 5 | .003[.027] | .001[.031] | .003[.022] | .004[.003] | .003[.021] | .001[.032] | .001[.027] | -.001[.020] | .000[.013] |
| 6 | .003[.025] | .004[.003] | .003[.023] | .003[.032] | .001[.026] | .001[.016] | .000[.009] | .000[.004] | .000[.003] |
| 7 | .005[.010] | .006[.029] | .002[.030] | .002[.020] | .000[.010] | .000[.005] | .000[.002] | .000[.001] | .000[.000] |
| 8 | .004[.032] | .004[.028] | .001[.017] | .000[.008] | .000[.003] | .000[.001] | .000[.000] | .000[.000] | .000[.000] |
| 9 | .002[.028] | .002[.015] | .001[.007] | .000[.003] | .000[.001] | .000[.001] | .000[.000] | .000[.000] | .000[.000] |
| 10 | .000[.019] | .000[.008] | .000[.003] | .000[.001] | .000[.000] | .000[.000] | .000[.000] | .000[.000] | .000[.000] |
| 11 | -.001[.010] | .000[.003] | .000[.001] | .000[.000] | .000[.000] | .000[.000] | .000[.000] | .000[.000] | .000[.000] |
| 12 | .000[.005] | .000[.001] | .000[.000] | .000[.000] | .000[.000] | .000[.000] | .000[.000] | .000[.000] | .000[.000] |
| 13 | .000[.002] | .000[.001] | .000[.000] | .000[.000] | .000[.000] | .000[.000] | .000[.000] | .000[.000] | .000[.000] |
| 14 | .000[.001] | .000[.000] | .000[.000] | .000[.000] | .000[.000] | .000[.000] | .000[.000] | .000[.000] | .000[.000] |
| 15 | .000[.001] | .000[.000] | .000[.000] | .000[.000] | .000[.000] | .000[.000] | .000[.000] | .000[.000] | .000[.000] |

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| Table S7. *Relative difference and empirical standard deviation (in brackets) of the marginal consistency classification estimate by the simulation-based approach for the reference group in screening scenario 3.* | | | | | | |
|  | Iterations per θ value | | | | | |
|  | Two-category items | | | Five-category items | | |
| *i* | 50 | 125 | 250 | 50 | 125 | 250 |
| 5 | .006 [.008] | .002 [.005] | .001 [.004] | .005 [.008] | .003 [.005] | .001 [.004] |
| 6 | .006 [.008] | .002 [.005] | .001 [.004] | .006 [.008] | .002 [.005] | .001 [.003] |
| 7 | .004 [.008] | .002 [.005] | .001 [.004] | .005 [.007] | .002 [.004] | .001 [.003] |
| 8 | .005 [.008] | .002 [.005] | .001 [.003] | .005 [.007] | .002 [.004] | .001 [.003] |
| 9 | .005 [.007] | .001 [.005] | .001 [.003] | .003 [.005] | .001 [.004] | .000 [.003] |
| 10 | .005 [.007] | .001 [.004] | .001 [.003] | .003 [.005] | .001 [.003] | .000 [.002] |
| 11 | .005 [.006] | .002 [.004] | .001 [.003] | .001 [.005] | .001 [.003] | .000 [.002] |
| 12 | .004 [.006] | .001 [.004] | .001 [.003] | .001 [.005] | .001 [.003] | .000 [.002] |
| 13 | .004 [.006] | .001 [.004] | .001 [.002] | .001 [.004] | .000 [.003] | .000 [.002] |
| 14 | .004 [.005] | .001 [.004] | .001 [.002] | .000 [.004] | .000 [.002] | .000 [.002] |
| 15 | .003 [.005] | .001 [.003] | .001 [.002] | .000 [.003] | .000 [.002] | .000 [.001] |
| **Note**: *i* is for number of items. The cutpoint for conditions with binary items was ≥ 3 and the cutpoint for conditions with polytomous items was ≥ 12. Relative difference is the estimate of the simulation-based procedure minus the estimate of the procedure by Lee (2010), divided by the estimate of the procedure by Lee (2010). | | | | | | |

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| Table S8. *Relative difference and empirical standard deviation (in brackets) of the marginal consistency classification estimate by the simulation-based approach for the focal group in screening scenario 3.* | | | | | | |
|  | Iterations per θ value | | | | | |
|  | Two-category items | | | Five-category items | | |
| *i* | 50 | 125 | 250 | 50 | 125 | 250 |
| 5 | .008 [.009] | .004 [.005] | .002 [.004] | .007 [.008] | .003 [.005] | .001 [.004] |
| 6 | .008 [.009] | .004 [.005] | .001 [.004] | .007 [.009] | .003 [.005] | .002 [.004] |
| 7 | .007 [.008] | .002 [.005] | .001 [.004] | .005 [.008] | .002 [.005] | .001 [.004] |
| 8 | .006 [.007] | .003 [.005] | .001 [.004] | .005 [.007] | .002 [.004] | .001 [.003] |
| 9 | .005 [.007] | .002 [.004] | .001 [.003] | .004 [.006] | .001 [.004] | .001 [.003] |
| 10 | .005 [.007] | .003 [.004] | .001 [.003] | .003 [.005] | .001 [.004] | .001 [.002] |
| 11 | .004 [.006] | .002 [.004] | .001 [.003] | .002 [.005] | .001 [.003] | .001 [.002] |
| 12 | .004 [.006] | .002 [.004] | .001 [.003] | .001 [.005] | .000 [.003] | .000 [.002] |
| 13 | .004 [.006] | .002 [.004] | .001 [.003] | .001 [.005] | .000 [.003] | .000 [.002] |
| 14 | .004 [.006] | .001 [.003] | .001 [.002] | .000 [.004] | .000 [.003] | .000 [.002] |
| 15 | .003 [.005] | .001 [.003] | .001 [.002] | .000 [.003] | .000 [.002] | .000 [.002] |
| **Note**: Group 1 and group 2 would have the same estimate of classification consistency. *i* is for number of items. The cutpoint for conditions with binary items was ≥ 3 and the cutpoint for conditions with polytomous items was ≥ 12. Relative difference is the estimate of the simulation-based procedure minus the estimate of the procedure by Lee (2010), divided by the estimate of the procedure by Lee (2010). | | | | | | |

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| Table S9. *Relative difference and empirical standard deviation (in brackets) of the conditional classification consistency estimate for conditions with 250 iterations per θ value and binary items (top) or polytomous items (bottom) for the reference group in screening scenario 3.* | | | | | | | | | |
|  | Theta values | | | | | | | | |
| *i* | -2.0 | -1.5 | -1.0 | -0.5 | 0 | 0.5 | 1.0 | 1.5 | 2.0 |
| 5 | .001[.014] | .000[.024] | .001[.031] | .001[.026] | .004[.003] | .005[.027] | .001[.032] | .002[.025] | .000[.015] |
| 6 | .001[.020] | .000[.029] | .003[.030] | .003[.012] | .004[.019] | -.002[.033] | .000[.023] | .000[.013] | .000[.006] |
| 7 | .001[.025] | .002[.032] | .001[.024] | .004[.004] | .000[.029] | .004[.027] | .001[.015] | .000[.007] | .000[.002] |
| 8 | -.001[.027] | -.002[.033] | .005[.017] | .004[.016] | .003[.031] | .004[.021] | -.001[.009] | .000[.003] | .000[.001] |
| 9 | .005[.030] | .001[.029] | .004[.007] | .001[.025] | .002[.029] | .000[.015] | .000[.006] | .000[.001] | .000[.001] |
| 10 | .004[.032] | .004[.023] | .004[.005] | .003[.029] | .003[.025] | .000[.011] | .000[.003] | .000[.001] | .000[.000] |
| 11 | .000[.033] | .004[.019] | .002[.013] | .003[.031] | -.001[.020] | .000[.007] | .000[.002] | .000[.000] | .000[.000] |
| 12 | .002[.029] | .003[.012] | .002[.020] | .000[.031] | -.001[.017] | .000[.005] | .000[.001] | .000[.000] | .000[.000] |
| 13 | .001[.029] | .004[.006] | .003[.026] | .005[.029] | .000[.013] | .000[.003] | .000[.001] | .000[.000] | .000[.000] |
| 14 | .004[.024] | .004[.003] | .003[.029] | .001[.026] | -.001[.010] | .000[.002] | .000[.000] | .000[.000] | .000[.000] |
| 15 | .005[.021] | .005[.009] | .004[.032] | .001[.023] | .000[.007] | .000[.001] | .000[.000] | .000[.000] | .000[.000] |
| 5 | .000[.004] | .000[.010] | .001[.018] | -.002[.029] | .002[.031] | .004[.007] | .001[.020] | .000[.034] | -.001[.024] |
| 6 | .000[.011] | .000[.022] | .003[.031] | .002[.019] | .003[.011] | .006[.031] | .002[.025] | .000[.015] | .000[.007] |
| 7 | .000[.022] | .005[.031] | .004[.018] | .003[.016] | .000[.030] | .001[.022] | .000[.010] | .000[.004] | .000[.001] |
| 8 | .000[.033] | .004[.022] | .005[.012] | .000[.033] | .000[.023] | .000[.010] | .000[.003] | .000[.001] | .000[.000] |
| 9 | .001[.031] | .004[.003] | .003[.028] | .000[.026] | .000[.011] | .000[.003] | .000[.001] | .000[.000] | .000[.000] |
| 10 | .001[.016] | .002[.020] | -.002[.028] | .000[.015] | .000[.005] | .000[.001] | .000[.000] | .000[.000] | .000[.000] |
| 11 | .004[.003] | .000[.030] | .000[.022] | .000[.008] | .000[.002] | .000[.000] | .000[.000] | .000[.000] | .000[.000] |
| 12 | .002[.019] | .001[.031] | .001[.014] | .000[.004] | .000[.001] | .000[.000] | .000[.000] | .000[.000] | .000[.000] |
| 13 | .005[.027] | -.001[.024] | .000[.009] | .000[.002] | .000[.000] | .000[.000] | .000[.000] | .000[.000] | .000[.000] |
| 14 | -.003[.031] | .000[.018] | .000[.004] | .000[.001] | .000[.000] | .000[.000] | .000[.000] | .000[.000] | .000[.000] |
| 15 | .001[.030] | .000[.012] | .000[.002] | .000[.000] | .000[.000] | .000[.000] | .000[.000] | .000[.000] | .000[.000] |

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| Table S10. *Relative difference and empirical standard deviation (in brackets) of the conditional classification consistency estimate for conditions with 250 iterations per θ value and binary items (top) or polytomous items (bottom) for the focal group in screening scenario 3.* | | | | | | | | | |
|  | Theta values | | | | | | | | |
| *i* | -2.0 | -1.5 | -1.0 | -0.5 | 0 | 0.5 | 1.0 | 1.5 | 2.0 |
| 5 | -.001[.021] | .001[.028] | .003[.033] | .002[.025] | .004[.009] | .004[.013] | .002[.028] | -.002[.032] | .001[.026] |
| 6 | -.001[.027] | .001[.030] | .004[.029] | .004[.013] | .006[.012] | .000[.029] | .001[.033] | .000[.023] | .000[.015] |
| 7 | .001[.028] | .002[.031] | .003[.021] | .005[.005] | .002[.027] | .000[.031] | .002[.024] | .000[.013] | .000[.007] |
| 8 | .001[.032] | .005[.028] | .003[.011] | .004[.016] | .002[.030] | -.001[.027] | .000[.015] | .000[.008] | .000[.003] |
| 9 | .001[.032] | .004[.026] | .003[.003] | .004[.026] | .001[.032] | .001[.020] | .000[.010] | .000[.004] | .000[.001] |
| 10 | .000[.031] | .003[.019] | .003[.009] | .004[.029] | .002[.026] | .001[.015] | .000[.007] | .000[.002] | .000[.001] |
| 11 | .000[.031] | .003[.014] | .005[.018] | .000[.032] | .002[.024] | .000[.010] | .000[.003] | .000[.001] | .000[.000] |
| 12 | .002[.028] | .004[.007] | .004[.023] | -.002[.032] | .000[.019] | -.001[.007] | .000[.002] | .000[.001] | .000[.000] |
| 13 | .001[.026] | .004[.003] | .005[.029] | .000[.030] | .001[.014] | .000[.005] | .000[.001] | .000[.000] | .000[.000] |
| 14 | .003[.021] | .004[.008] | .003[.030] | .000[.024] | .001[.011] | .000[.003] | .000[.001] | .000[.000] | .000[.000] |
| 15 | .004[.016] | .005[.014] | .003[.034] | .000[.023] | .000[.009] | .000[.002] | .000[.000] | .000[.000] | .000[.000] |
| 5 | .001[.009] | .000[.016] | .000[.025] | .000[.031] | -.001[.029] | .003[.018] | .004[.005] | .004[.023] | .000[.032] |
| 6 | .001[.017] | -.001[.026] | .002[.034] | .005[.024] | .004[.003] | .000[.022] | .003[.032] | .001[.026] | .000[.018] |
| 7 | .001[.026] | .002[.030] | .006[.021] | .004[.007] | .000[.028] | .000[.031] | .000[.021] | .001[.011] | .000[.005] |
| 8 | -.001[.029] | .004[.023] | .004[.005] | .003[.029] | .000[.029] | .000[.018] | .000[.009] | .000[.003] | .000[.001] |
| 9 | .003[.029] | .004[.004] | .003[.025] | .001[.030] | .000[.019] | .000[.008] | .000[.003] | .000[.001] | .000[.000] |
| 10 | .004[.017] | .005[.019] | -.003[.031] | .001[.021] | .000[.009] | .000[.003] | .000[.001] | .000[.000] | .000[.000] |
| 11 | .004[.003] | .003[.029] | .002[.025] | -.001[.012] | .000[.004] | .000[.001] | .000[.000] | .000[.000] | .000[.000] |
| 12 | .004[.018] | .002[.032] | .001[.017] | .000[.007] | .000[.002] | .000[.000] | .000[.000] | .000[.000] | .000[.000] |
| 13 | .004[.029] | .001[.027] | .000[.012] | .000[.003] | .000[.001] | .000[.000] | .000[.000] | .000[.000] | .000[.000] |
| 14 | .000[.031] | .000[.021] | .000[.006] | .000[.001] | .000[.000] | .000[.000] | .000[.000] | .000[.000] | .000[.000] |
| 15 | .002[.030] | .001[.013] | .000[.003] | .000[.001] | .000[.000] | .000[.000] | .000[.000] | .000[.000] | .000[.000] |