

**Supplemental Online Material for
Modeling Faking in the Multidimensional Forced-Choice Format - The Faking
Mixture Model**

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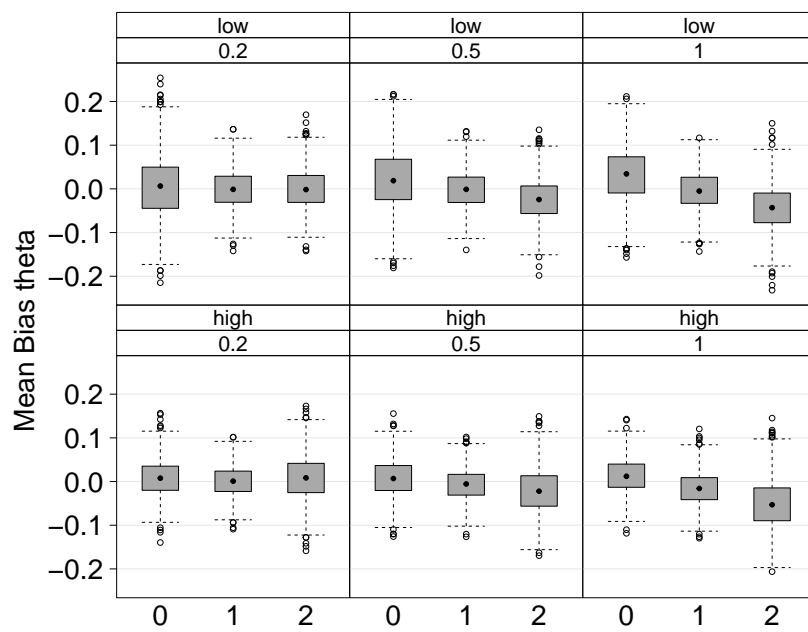
Modeling Faking in the Multidimensional Forced-Choice Format - The Faking Mixture Model

Boxplots for the Dependent Variables in the Simulation Study by Condition

Main Parameters

Figure S1

Mean bias for the faking trait θ in the simulation study by condition



Note. low = low fakability, high = high fakability; 0.2, 0.5, 1.0 = faking trait variance

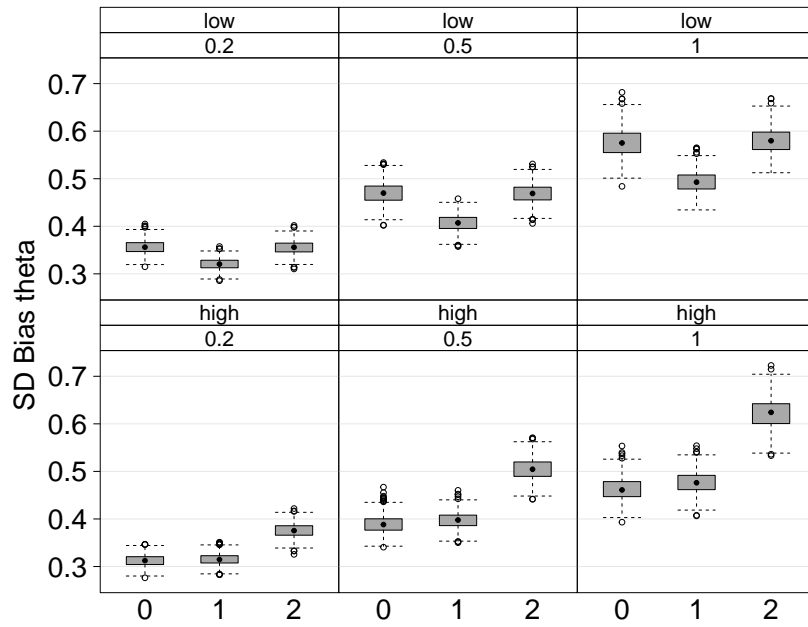
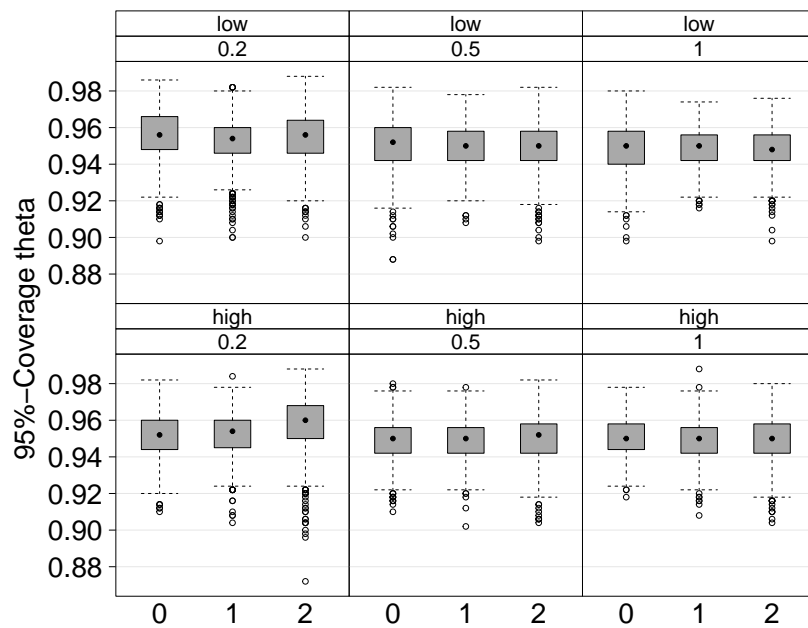
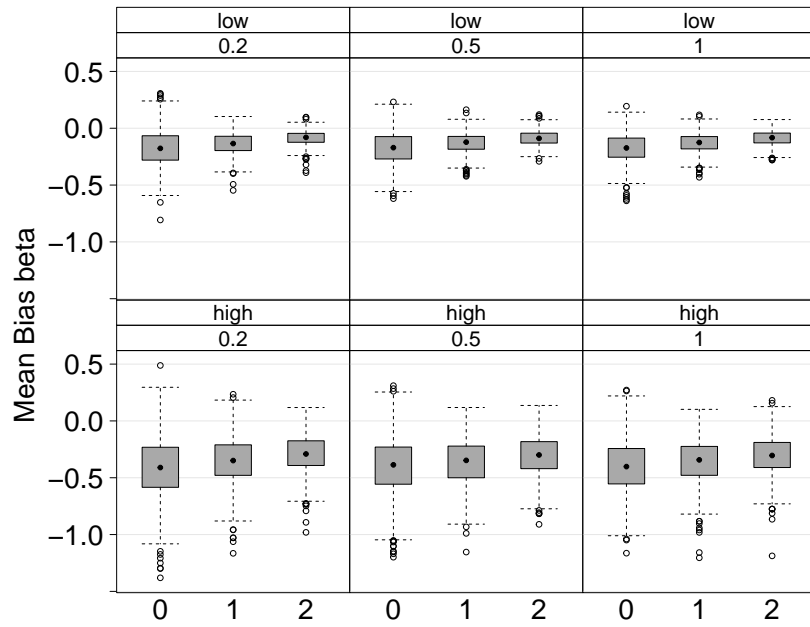
Figure S2*SD of bias for the faking trait θ in the simulation study by condition**Note.* low = low fakability, high = high fakability; 0.2, 0.5, 1.0 = faking trait variance**Figure S3***Coverage for the faking trait θ in the simulation study by condition**Note.* low = low fakability, high = high fakability; 0.2, 0.5, 1.0 = faking trait variance

Figure S4

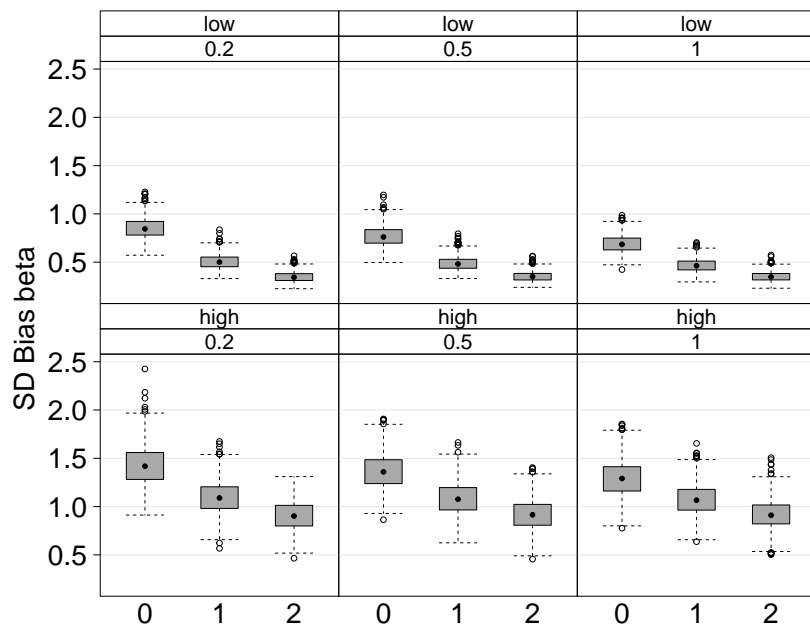
Mean bias for the rank-order parameters β_{kr} in the simulation study by condition



Note. low = low fakability, high = high fakability; 0.2, 0.5, 1.0 = faking trait variance

Figure S5

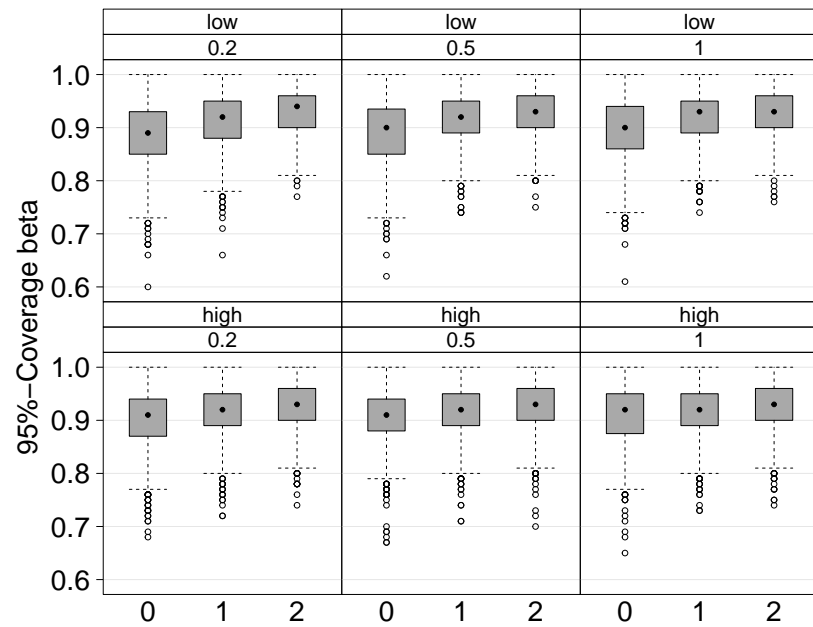
SD of bias for the rank-order parameters β_{kr} in the simulation study by condition



Note. low = low fakability, high = high fakability; 0.2, 0.5, 1.0 = faking trait variance

Figure S6

Coverage for the rank-order parameters β_{kr} in the simulation study by condition

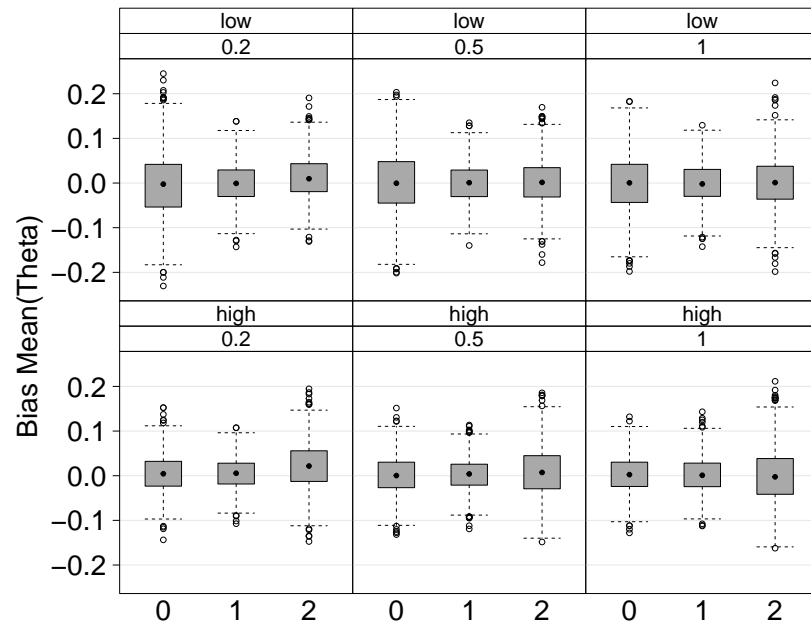


Note. low = low fakability, high = high fakability; 0.2, 0.5, 1.0 = faking trait variance

Hyperparameters

Figure S7

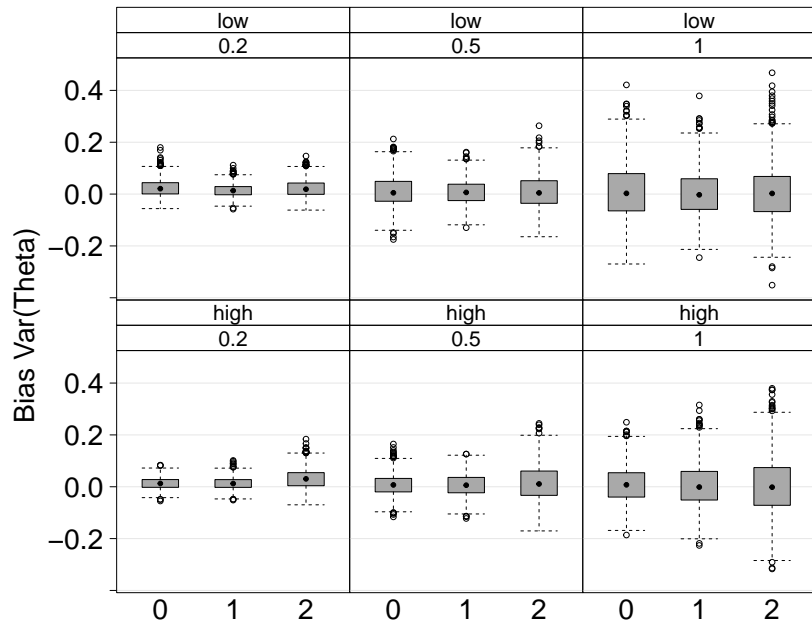
Bias for the faking trait mean $Mean(\theta)$ in the simulation study by condition



Note. low = low fakability, high = high fakability; 0.2, 0.5, 1.0 = faking trait variance

Figure S8

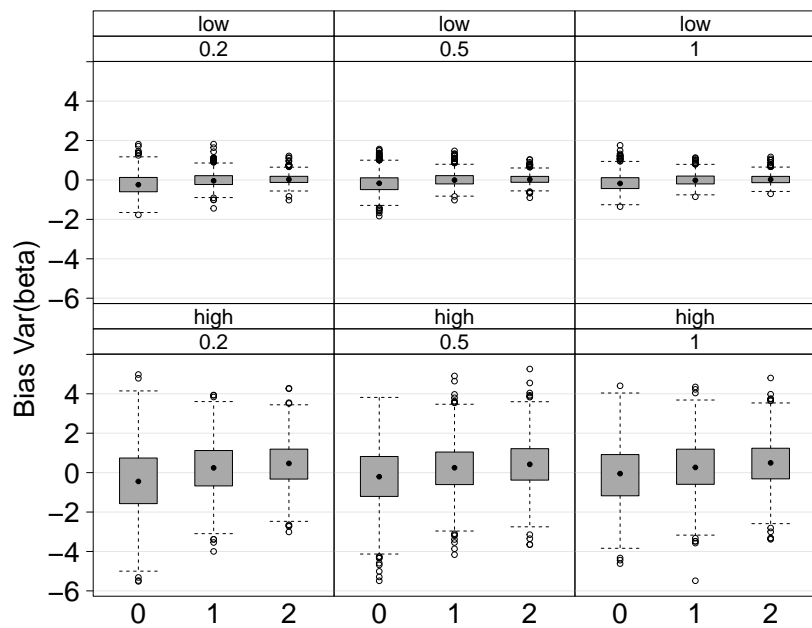
Bias for the faking trait variance $Var(\theta)$ in the simulation study by condition



Note. low = low fakability, high = high fakability; 0.2, 0.5, 1.0 = faking trait variance

Figure S9

Bias for the variance of the rank-order parameters $Var(\beta)$ in the simulation study by condition

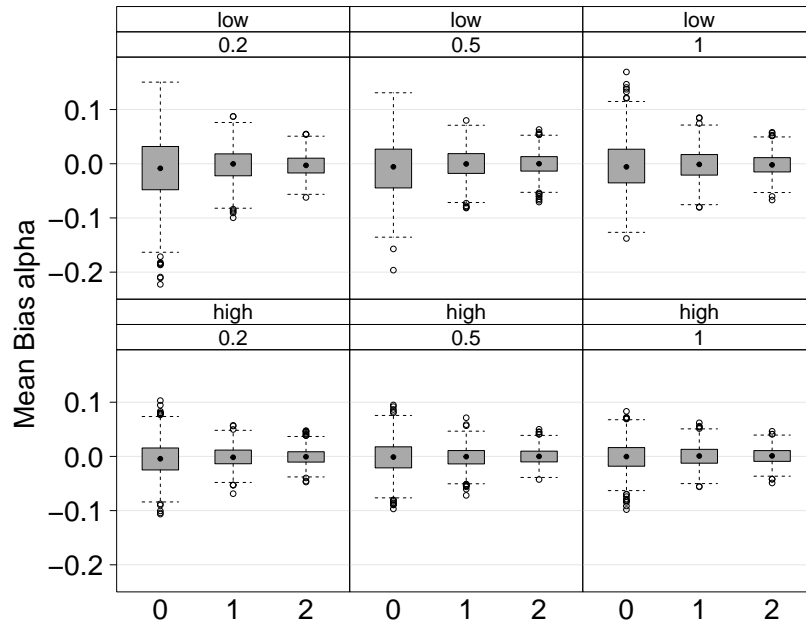


Note. low = low fakability, high = high fakability; 0.2, 0.5, 1.0 = faking trait variance

Derived Parameters

Figure S10

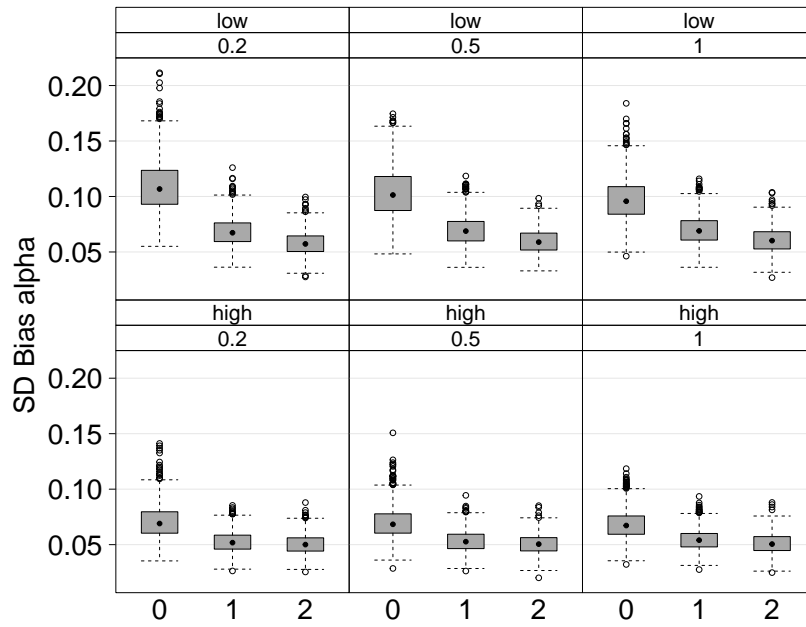
Mean bias for the block fakability parameters α_k in the simulation study by condition



Note. low = low fakability, high = high fakability; 0.2, 0.5, 1.0 = faking trait variance

Figure S11

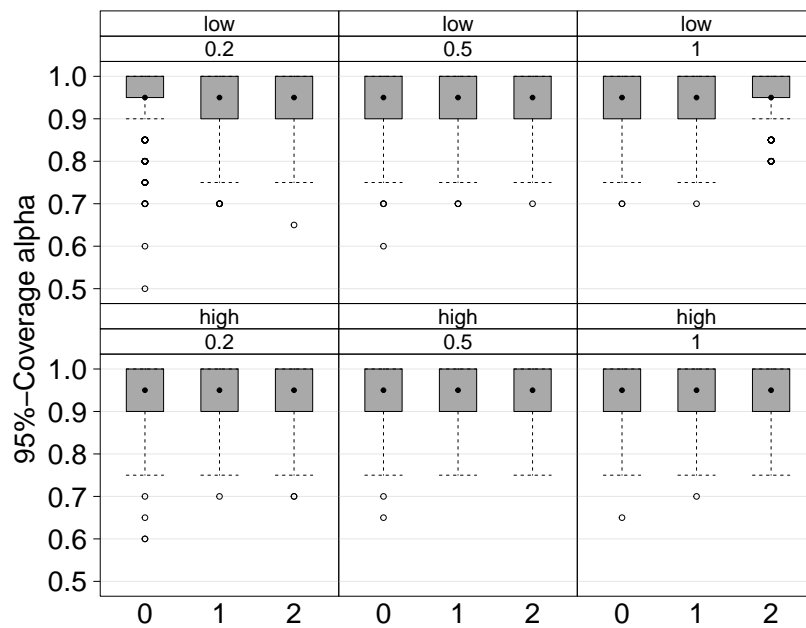
SD of bias for the block fakability parameters α_k in the simulation study by condition



Note. low = low fakability, high = high fakability; 0.2, 0.5, 1.0 = faking trait variance

Figure S12

Coverage for the block fakability parameters α_k in the simulation study by condition

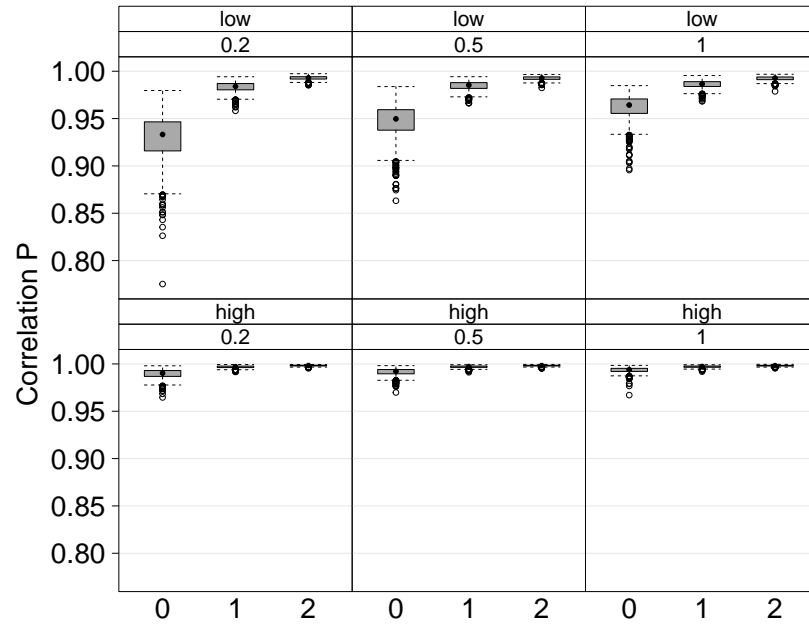


Note. low = low fakability, high = high fakability; 0.2, 0.5, 1.0 = faking trait variance

Figure S13

Correlations between true and estimated values for the rank-order probabilities

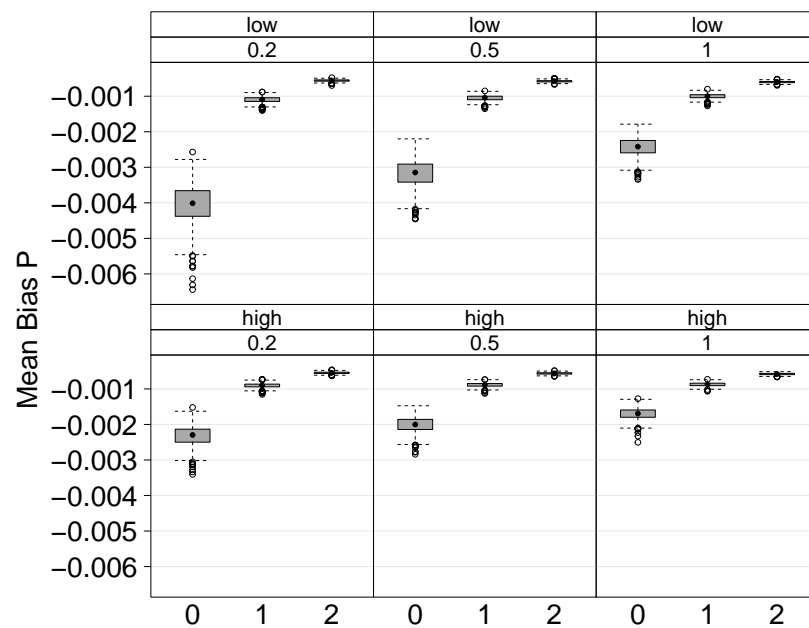
$P(X_k = r | F_{jk} = 1)$ in the simulation study by condition



Note. low = low fakability, high = high fakability; 0.2, 0.5, 1.0 = faking trait variance

Figure S14

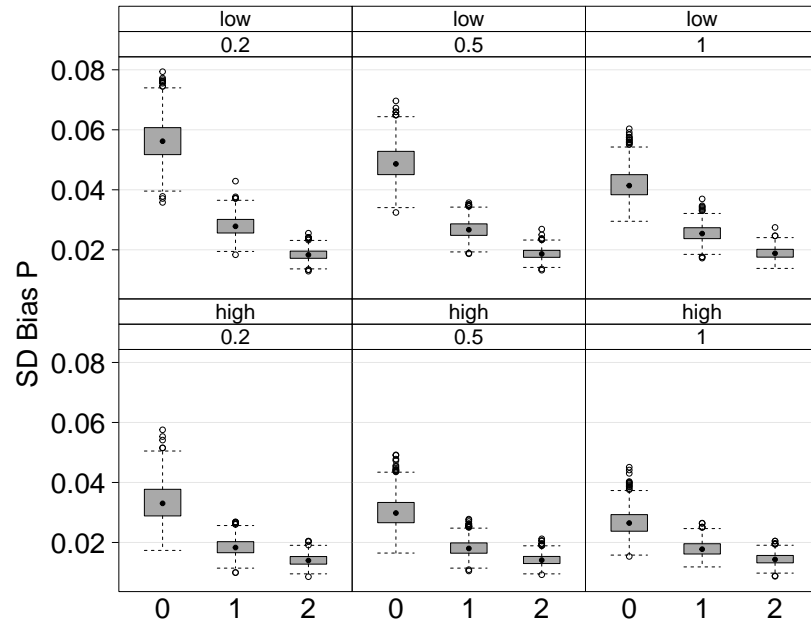
Mean bias for the rank-order probabilities $P(X_k = r | F_{jk} = 1)$ in the simulation study by condition



Note. low = low fakability, high = high fakability; 0.2, 0.5, 1.0 = faking trait variance

Figure S15

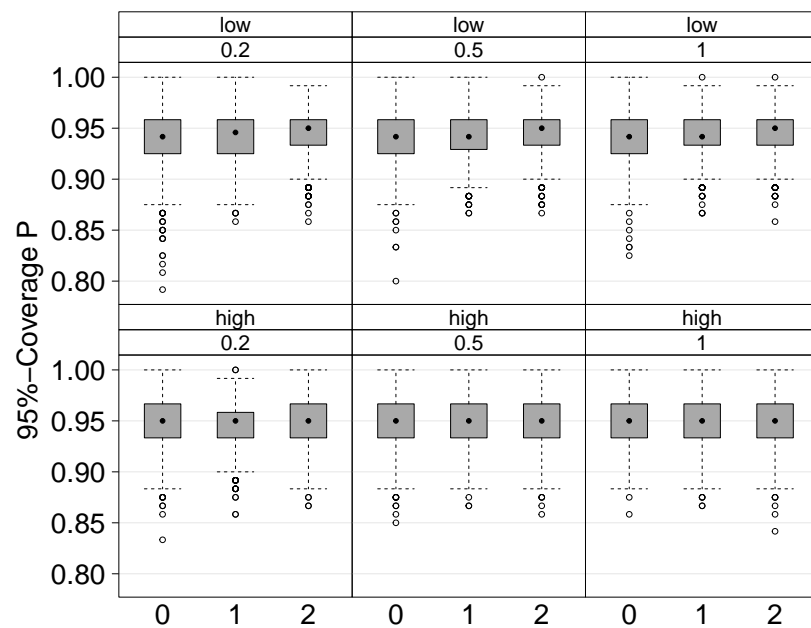
SD of bias for the rank-order probabilities $P(X_k = r|F_{jk} = 1)$ in the simulation study by condition



Note. low = low fakability, high = high fakability; 0.2, 0.5, 1.0 = faking trait variance

Figure S16

Coverage for the rank-order probabilities $P(X_k = r|F_{jk} = 1)$ in the simulation study by condition

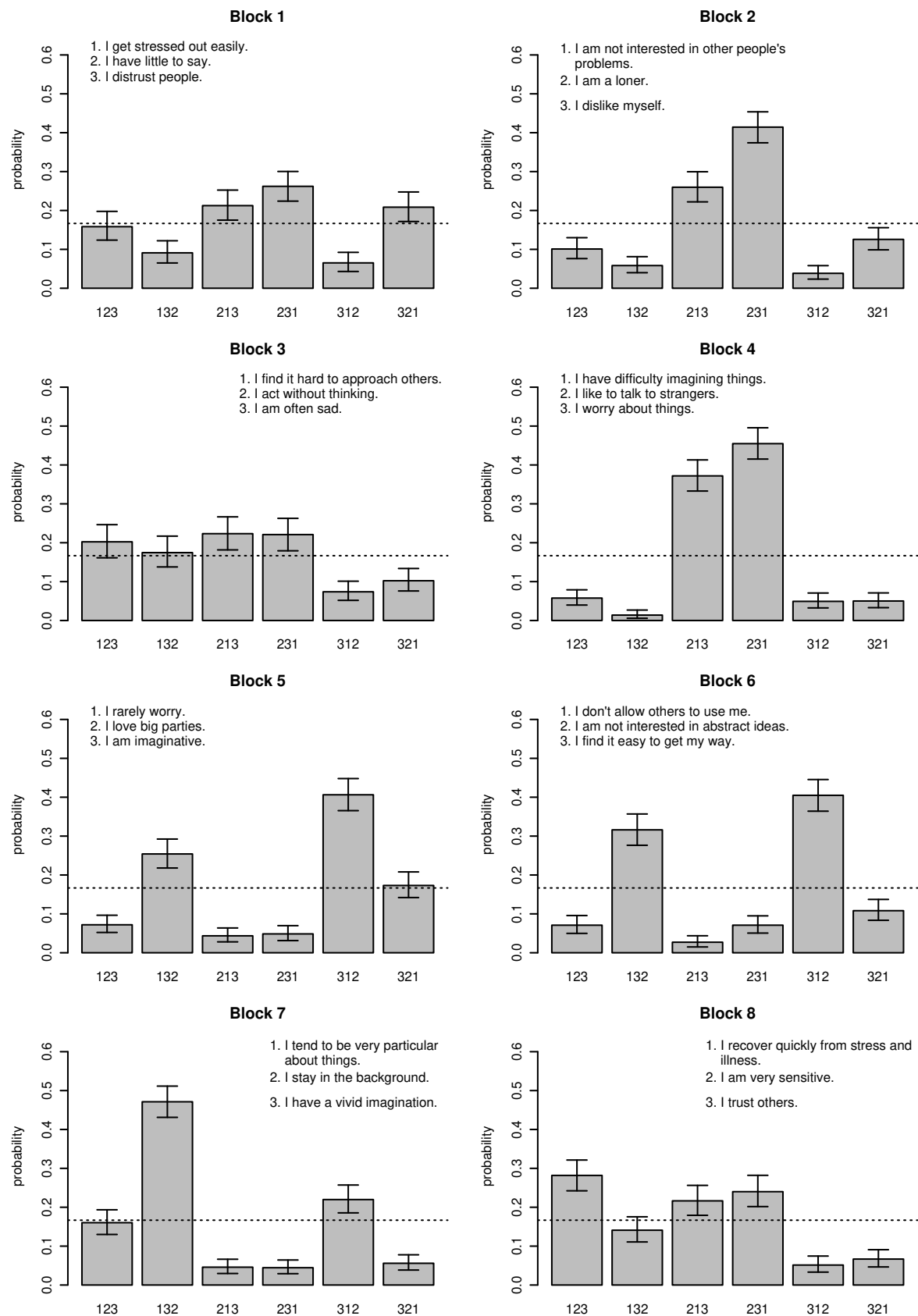


Note. low = low fakability, high = high fakability; 0.2, 0.5, 1.0 = faking trait variance

Figures for all Blocks in the Empirical Validation

Figure S17

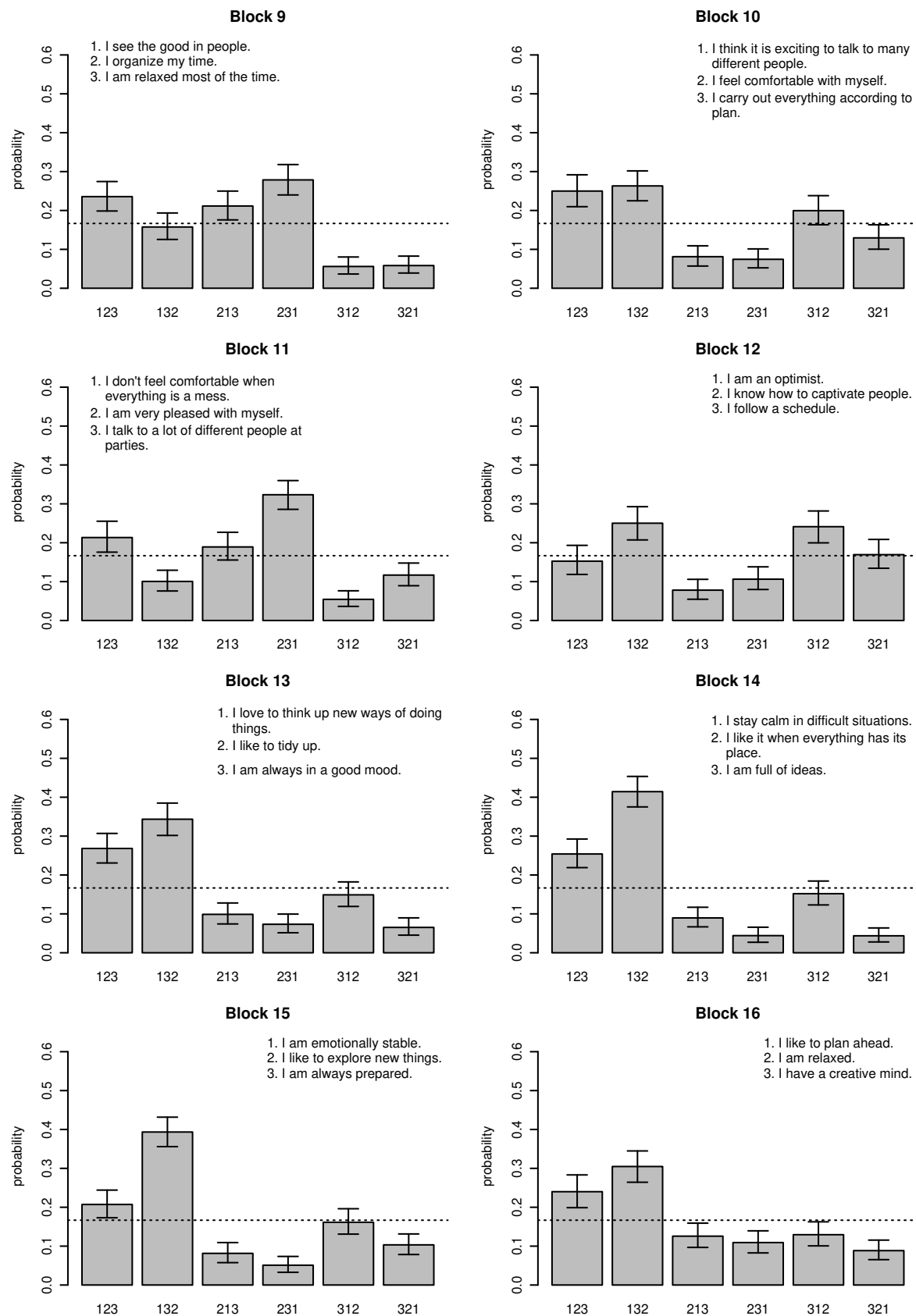
Probabilities for rank orders when faking in MFC-matched for Blocks 1-8



Note. The dotted line indicates where all rank orders are equally probable.

Figure S18

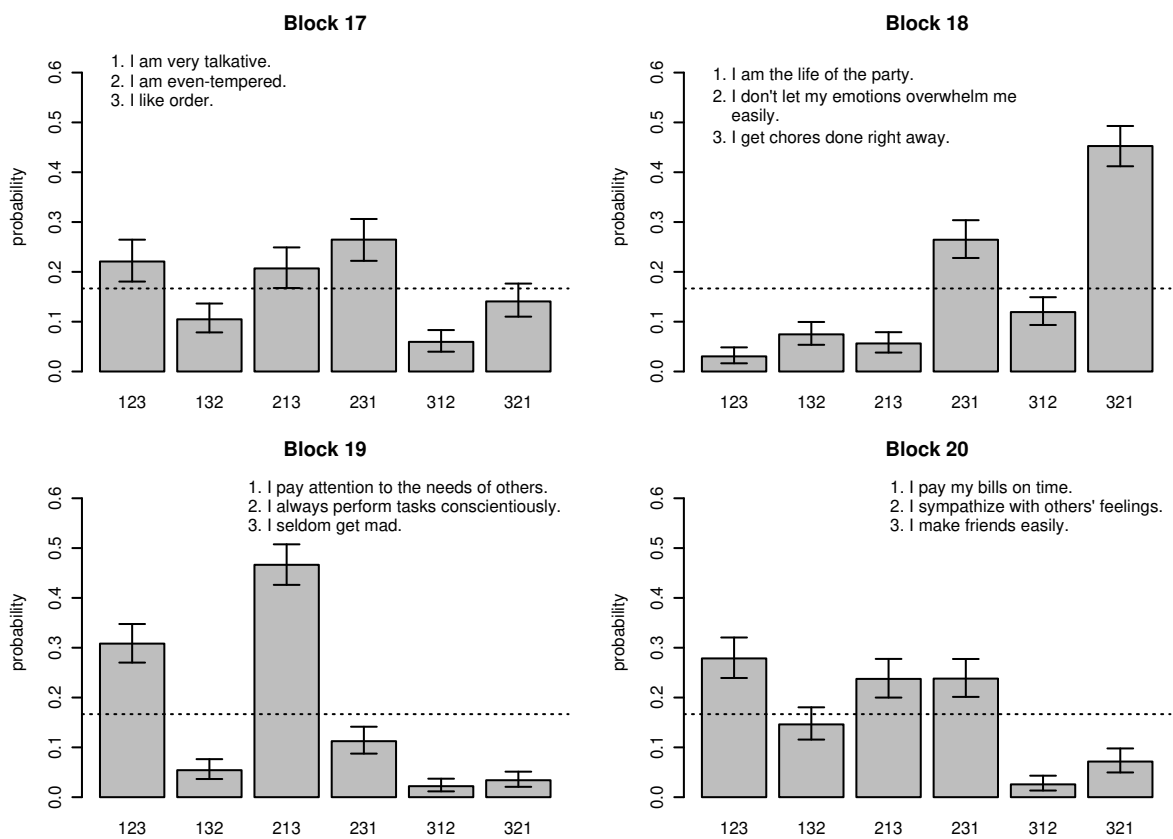
Probabilities for rank orders when faking in MFC-matched for Blocks 9-16



Note. The dotted line indicates where all rank orders are equally probable.

Figure S19

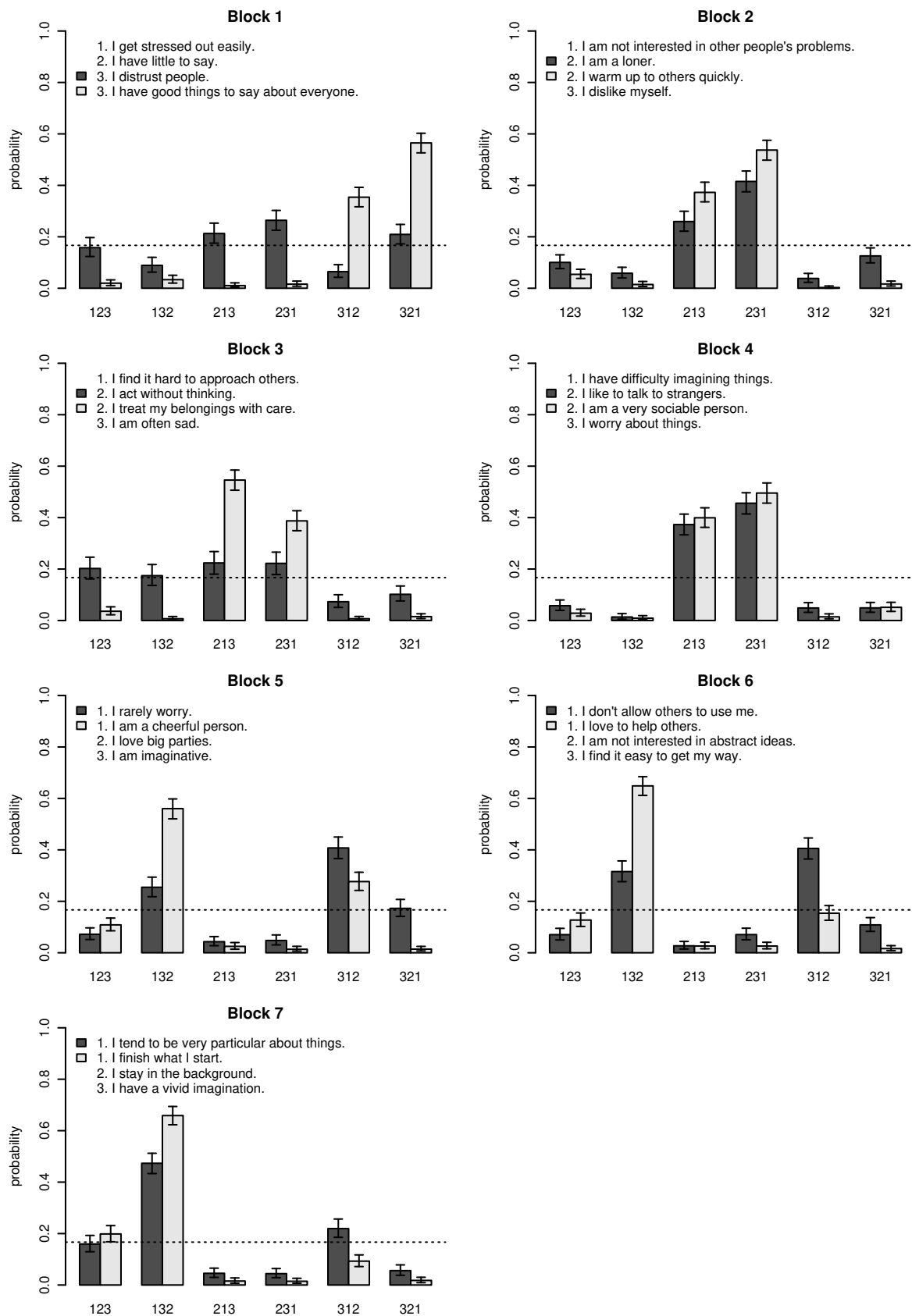
Probabilities for rank orders when faking in MFC-matched for Blocks 17-20



Note. The dotted line indicates where all rank orders are equally probable.

Figure S20

Probabilities for rank orders when faking in MFC-matched versus MFC-mixed



Note. The dotted line indicates where all rank orders are equally probable. Results for MFC-matched are depicted in dark-grey, for MFC-mixed in light-grey.