

How to Design a Panel Study for Investigating Bivariate Dynamics Using Continuous-Time Modeling: Supplemental Materials

Nuria Real-Brioso, Eduardo Estrada

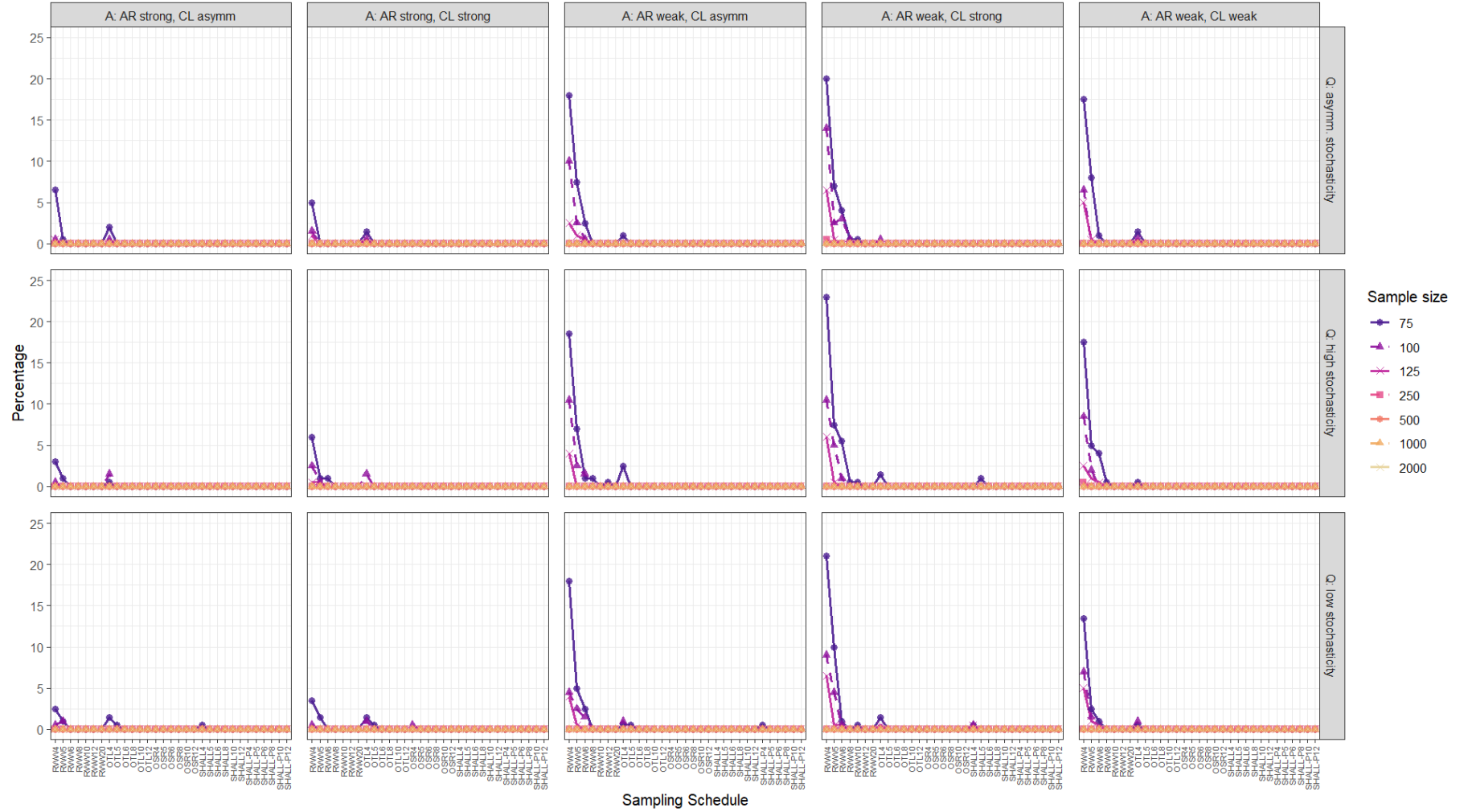
Correspondence should be sent to: Eduardo Estrada, eduardo.estrada.rs@gmail.com, Dpt. of Social Psychology and Methodology. Universidad Autónoma de Madrid. Ivan Pavlov 6. 28049, Madrid (Spain)

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- **Figures K-R:** Correct confidence interval (statistical power) ϕ for parameters c_{12} and c_{21} for the rest of the conditions with 6 (**K, L**), 8 (**M, N**), 10 (**O, P**) and 12 (**Q, R**) (RRMM: repeated measurements) across all matrices Q .

Note: We refer to Tables 1 and 2 in the manuscript for the population generating parameter values corresponding to each condition. Online materials: <https://osf.io/vudta>

Figure A - Improper solutions for all sampling schedules across all time points conditions



Note. See Table 3 in Manuscript for Sampling Schedule descriptions. For $N \geq 250$, no differences are found between different populations dynamics.

Figure C – Correct sign estimates for parameter c_{12} for the rest of the conditions with 6 repeated measurements across all matrices Q .

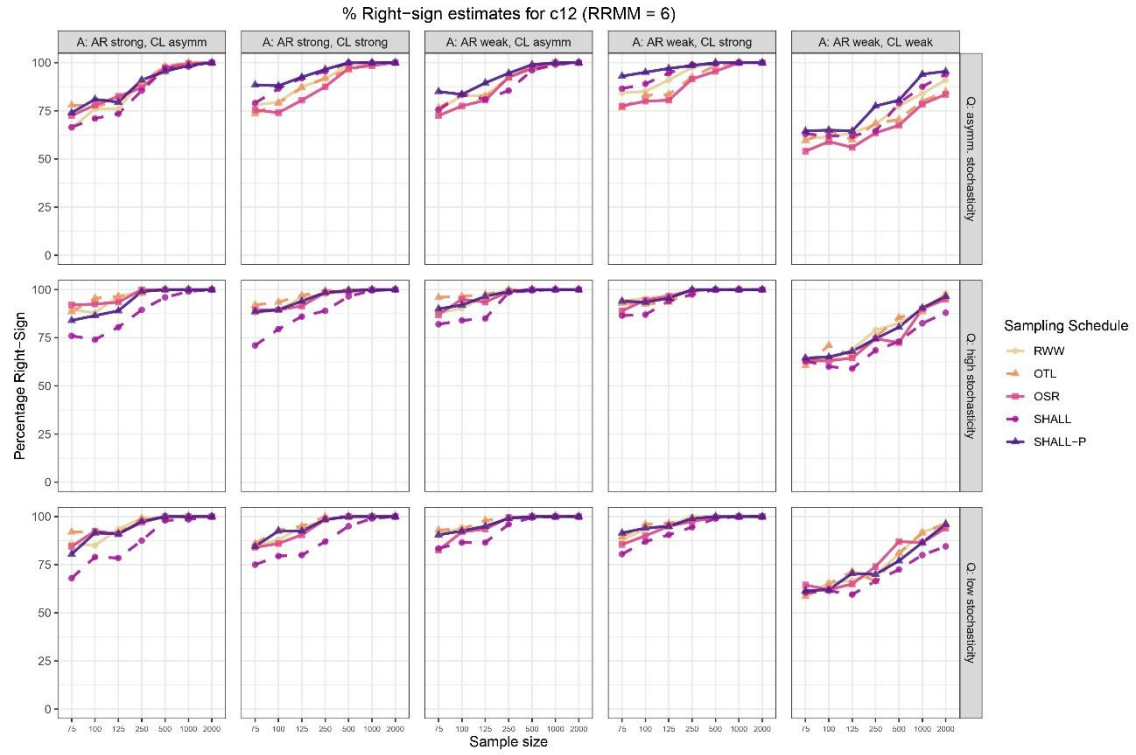


Figure D – Correct sign estimates for parameter c_{21} for the rest of the conditions with 6 repeated measurements across all matrices Q .

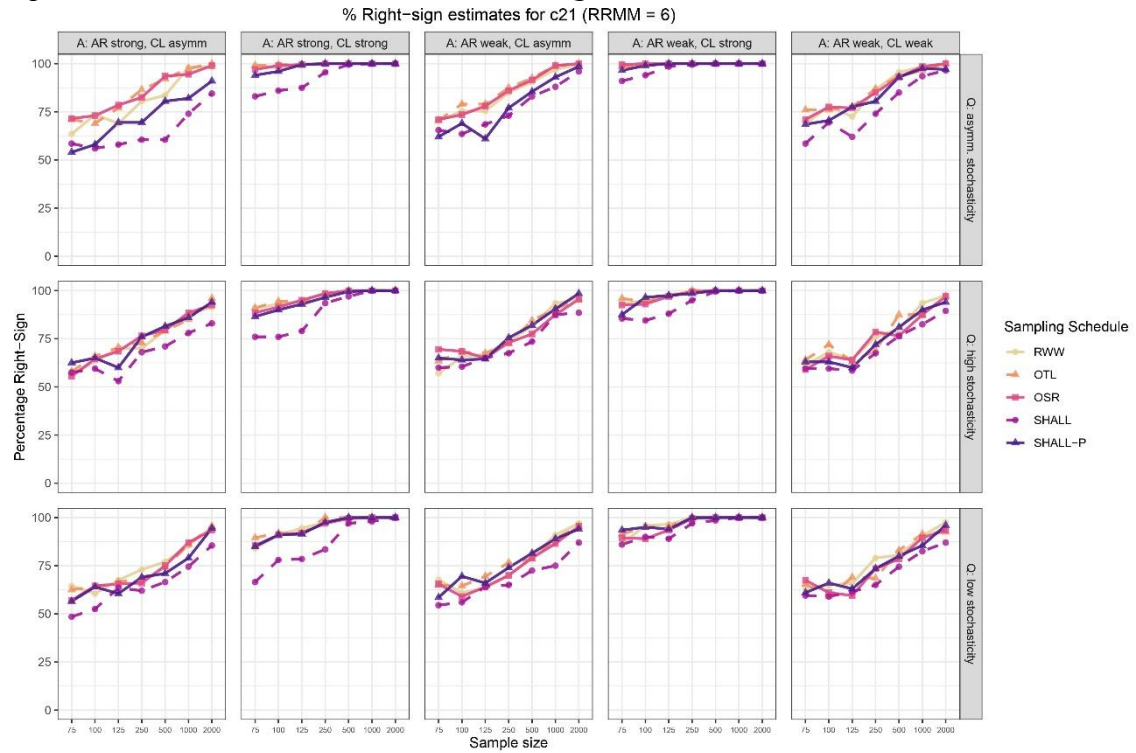


Figure E – Correct sign estimates for parameter c_{12} for the rest of the conditions with 8 repeated measurements across all matrices Q .

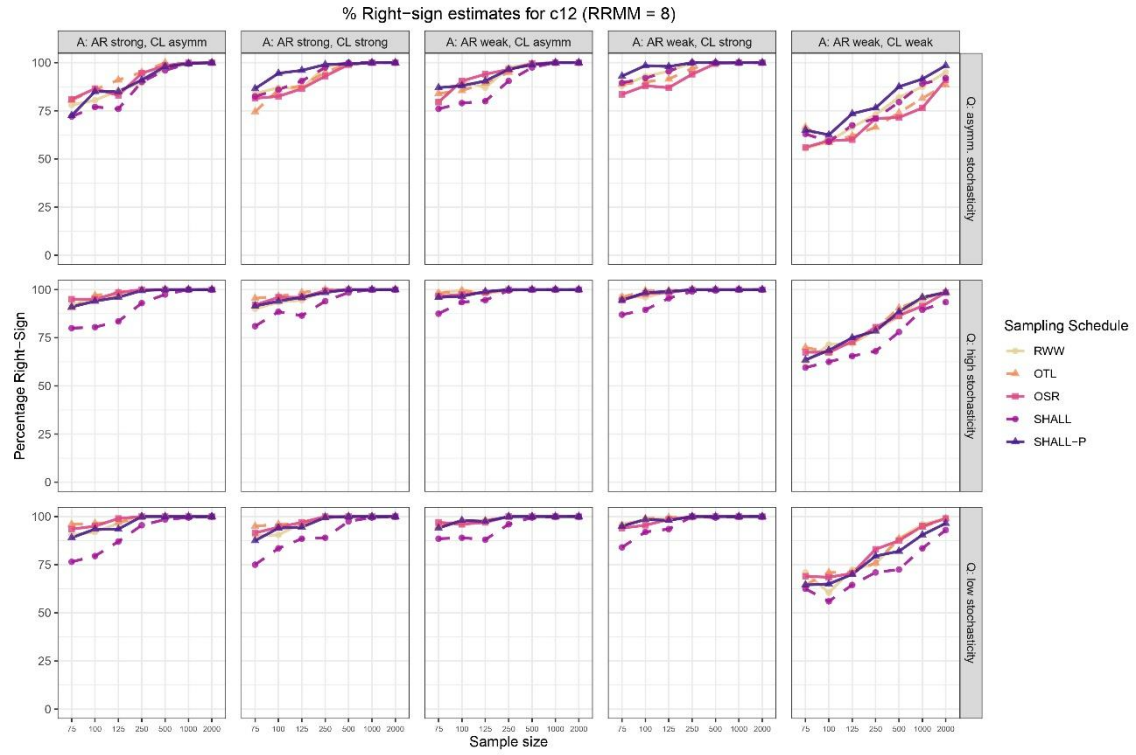


Figure F Correct sign estimates for parameter c_{21} for the rest of the conditions with 8 repeated measurements across all matrices Q

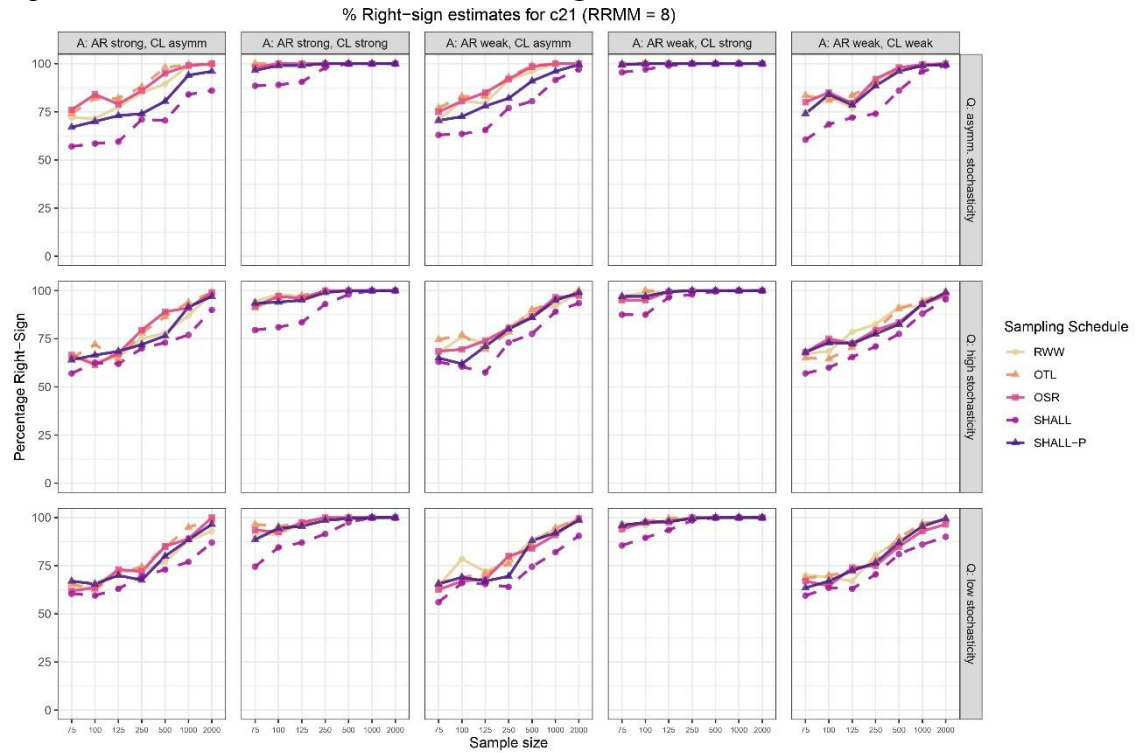


Figure G – Correct sign estimates for parameter c_{12} for the rest of the conditions with 10 repeated measurements across all matrices Q .

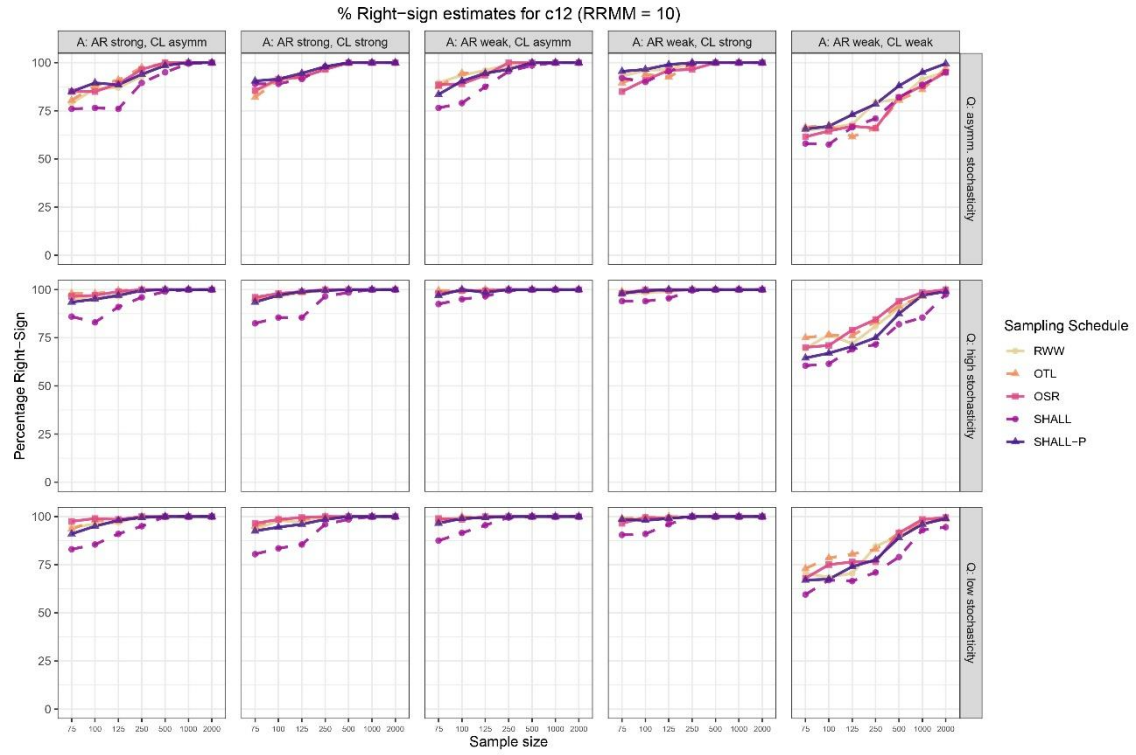


Figure H – Correct sign estimates for parameter c_{21} for the rest of the conditions with 10 repeated measurements across all matrices Q .

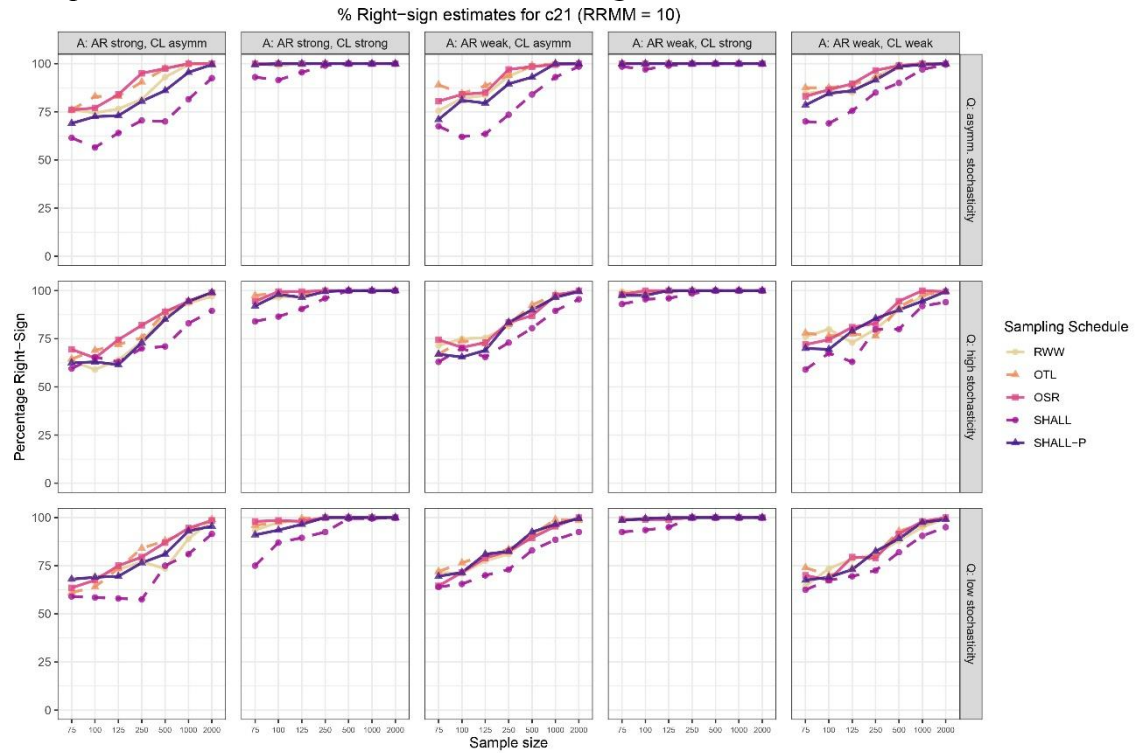


Figure I – Correct sign estimates for parameter c_{12} for the rest of the conditions with 12 repeated measurements across all matrices Q .

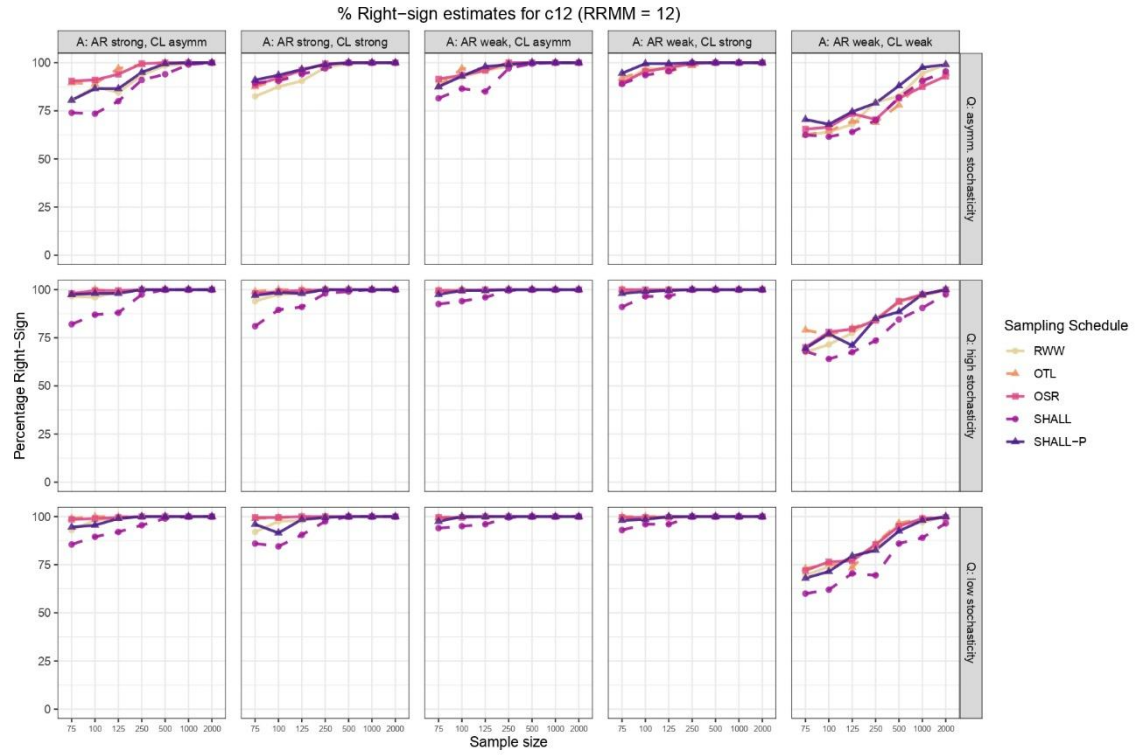


Figure J Correct sign estimates for parameter c_{21} for the rest of the conditions with 12 repeated measurements across all matrices Q

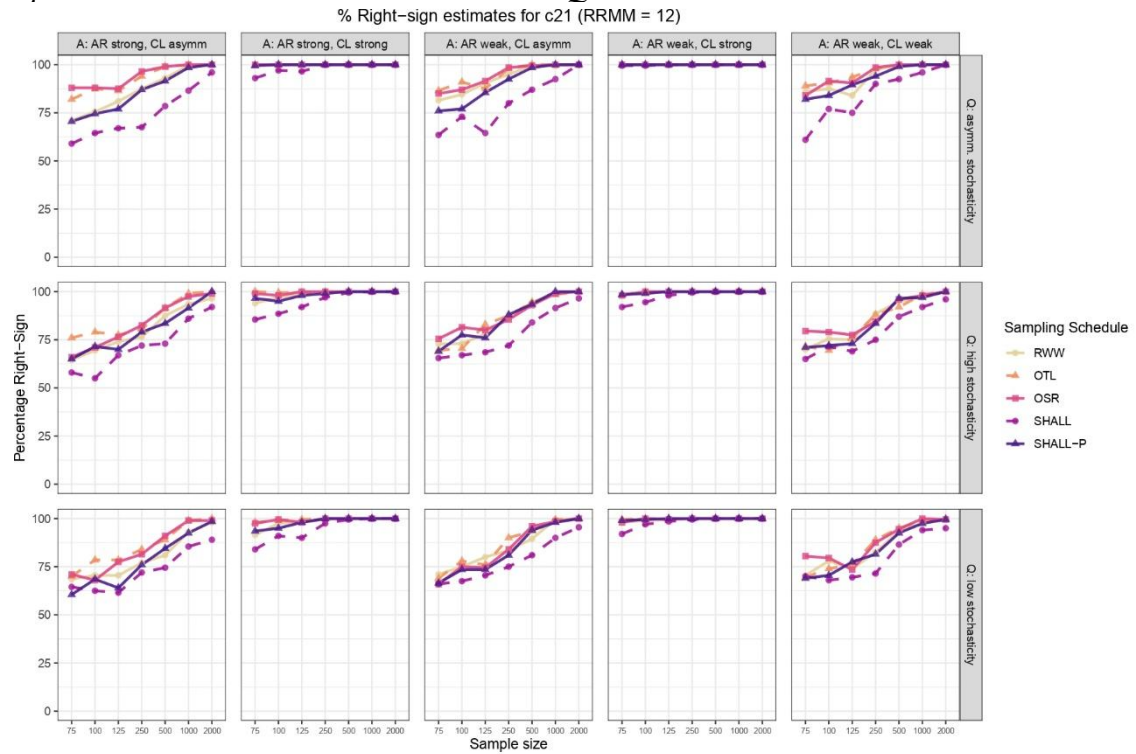


Figure K – Correct confidence interval for parameter c_{12} for the rest of the conditions with 6 repeated measurements across all matrices Q .

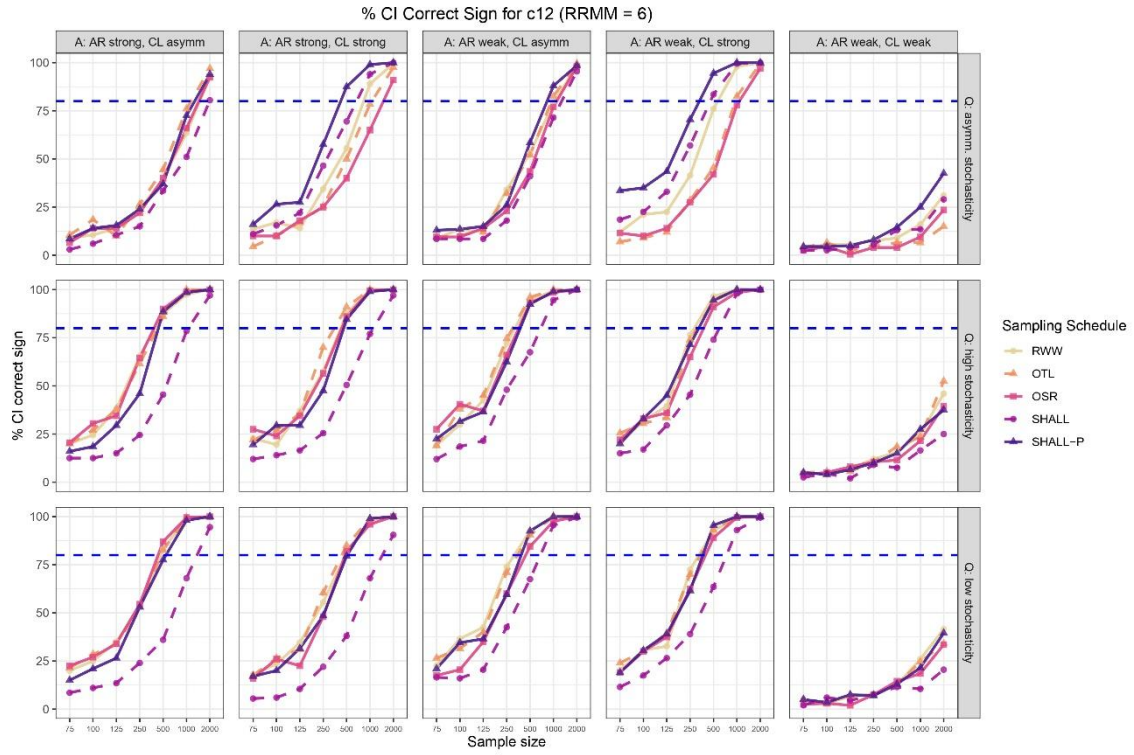


Figure L – Correct confidence interval for parameter c_{22} for the rest of the conditions with 6 repeated measurements across all matrices Q .

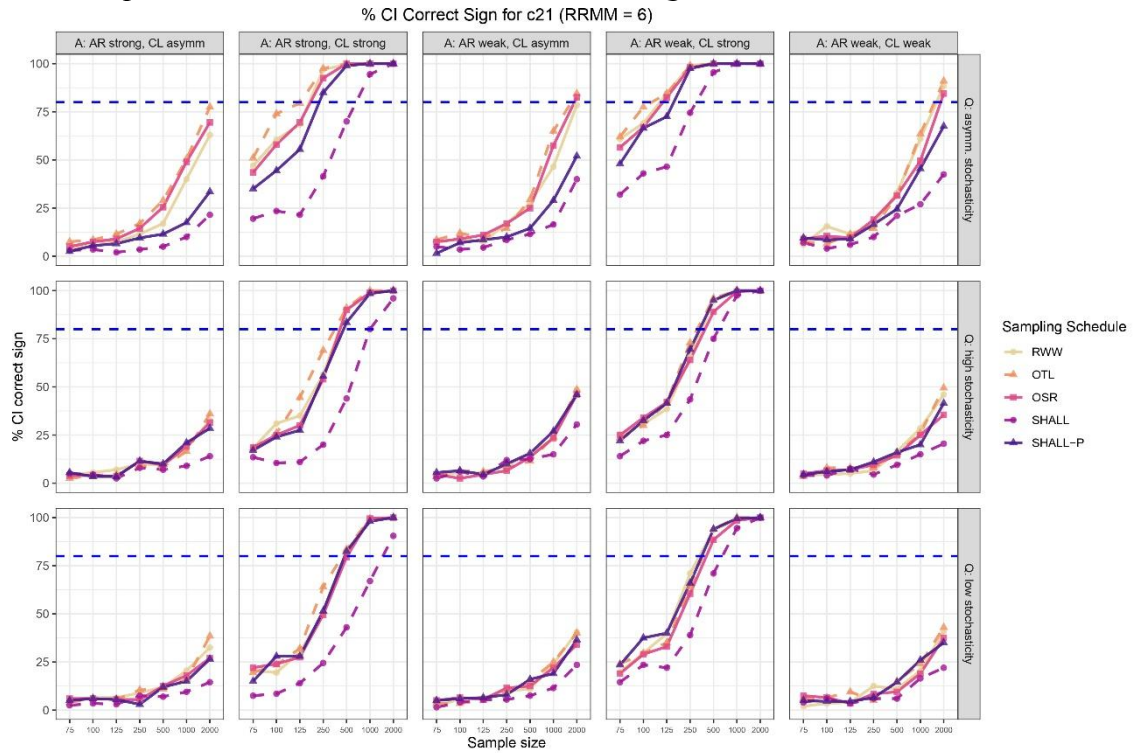


Figure M – Correct confidence interval for parameter c_{12} for the rest of the conditions with 8 repeated measurements across all matrices Q .

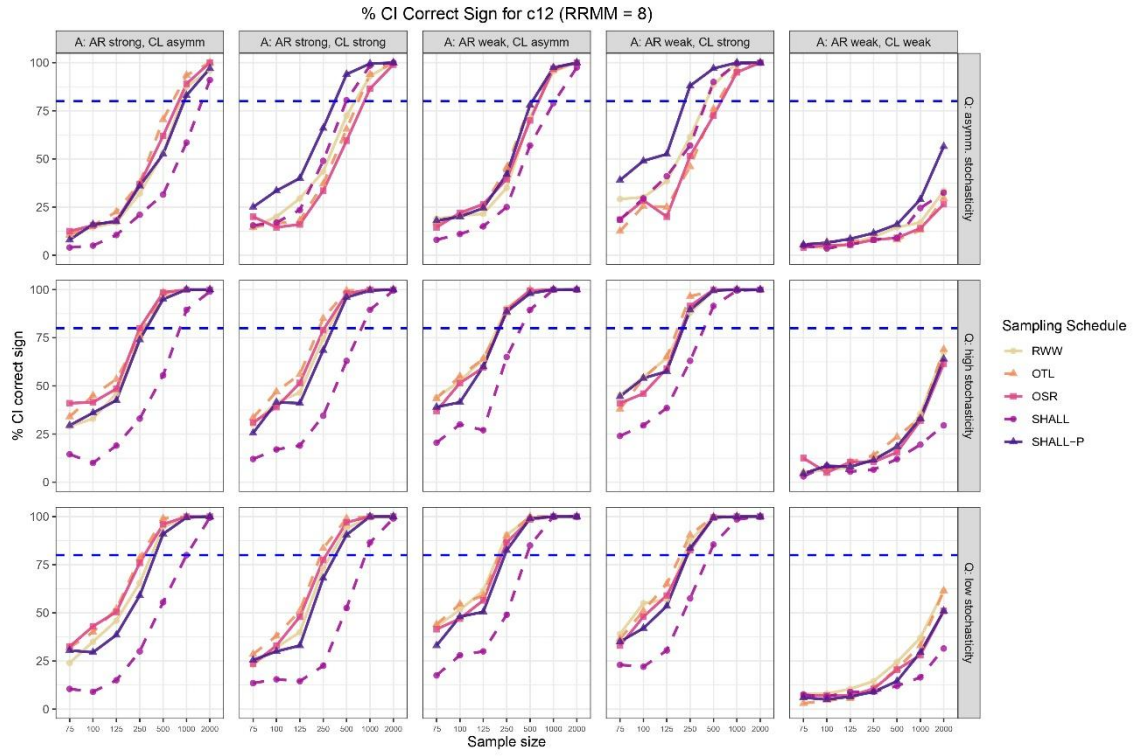


Figure N – Correct confidence interval for parameter c_{21} for the rest of the conditions with 8 repeated measurements across all matrices Q .

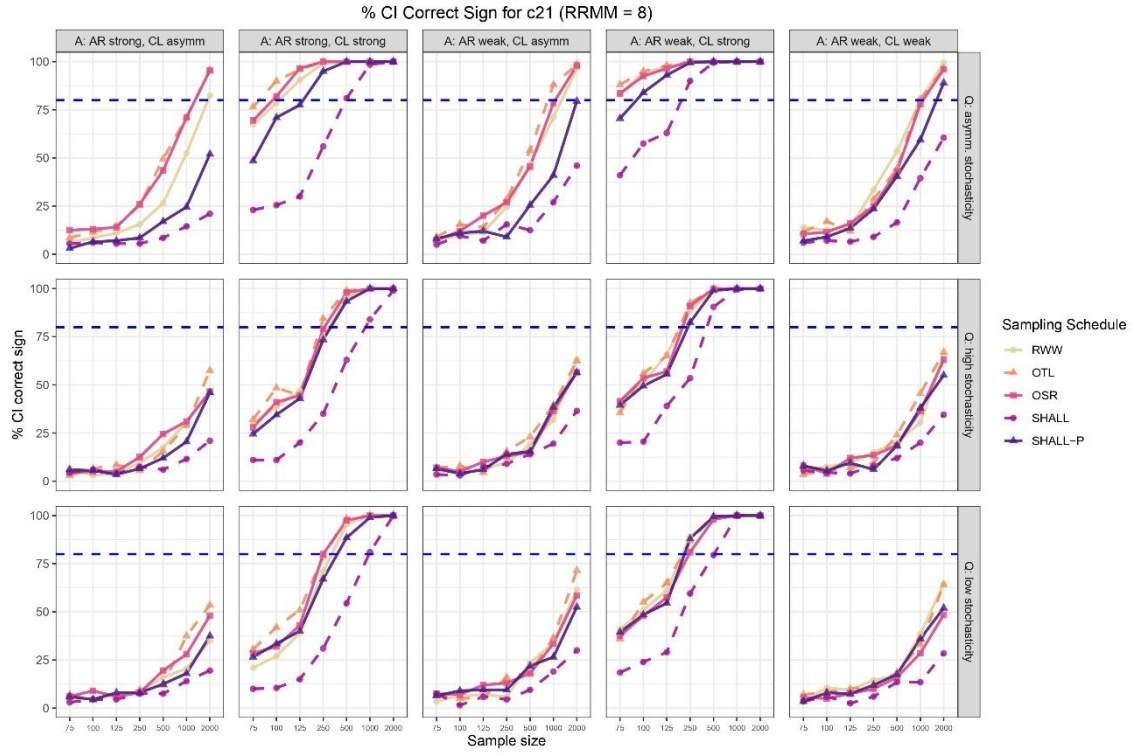


Figure O – Correct confidence interval for parameter c_{12} for the rest of the conditions with 10 repeated measurements across all matrices Q .

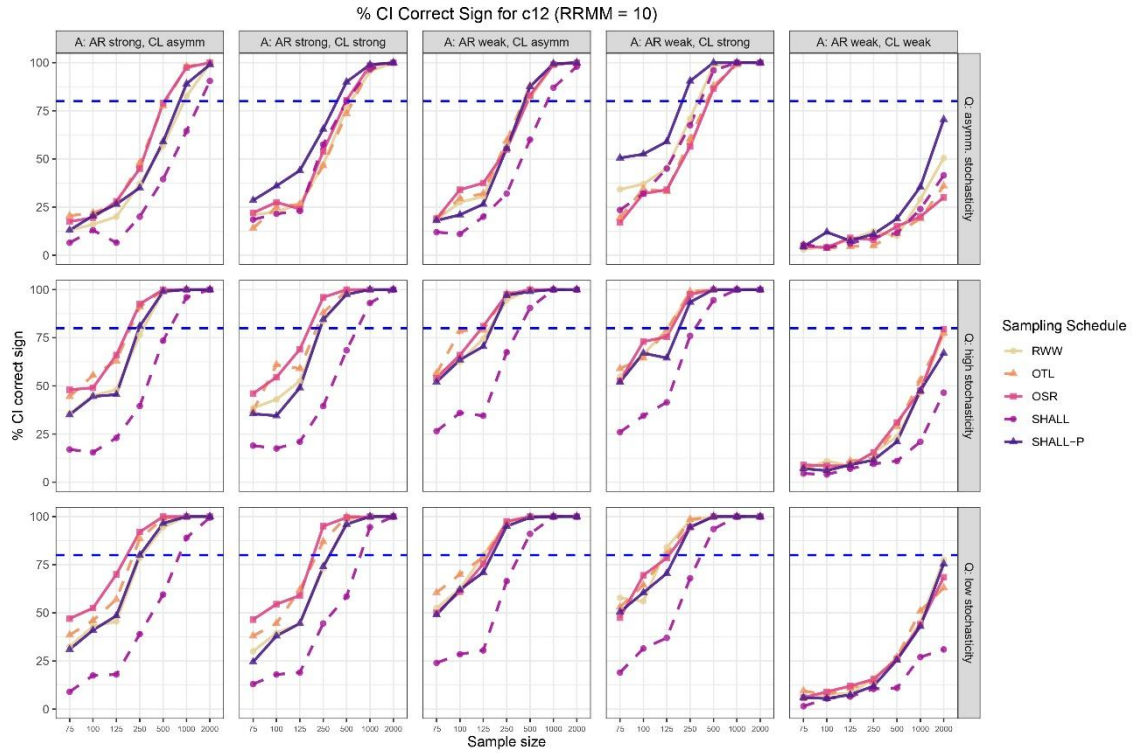


Figure P – Correct confidence interval for parameter c_{22} for the rest of the conditions with 10 repeated measurements across all matrices Q .

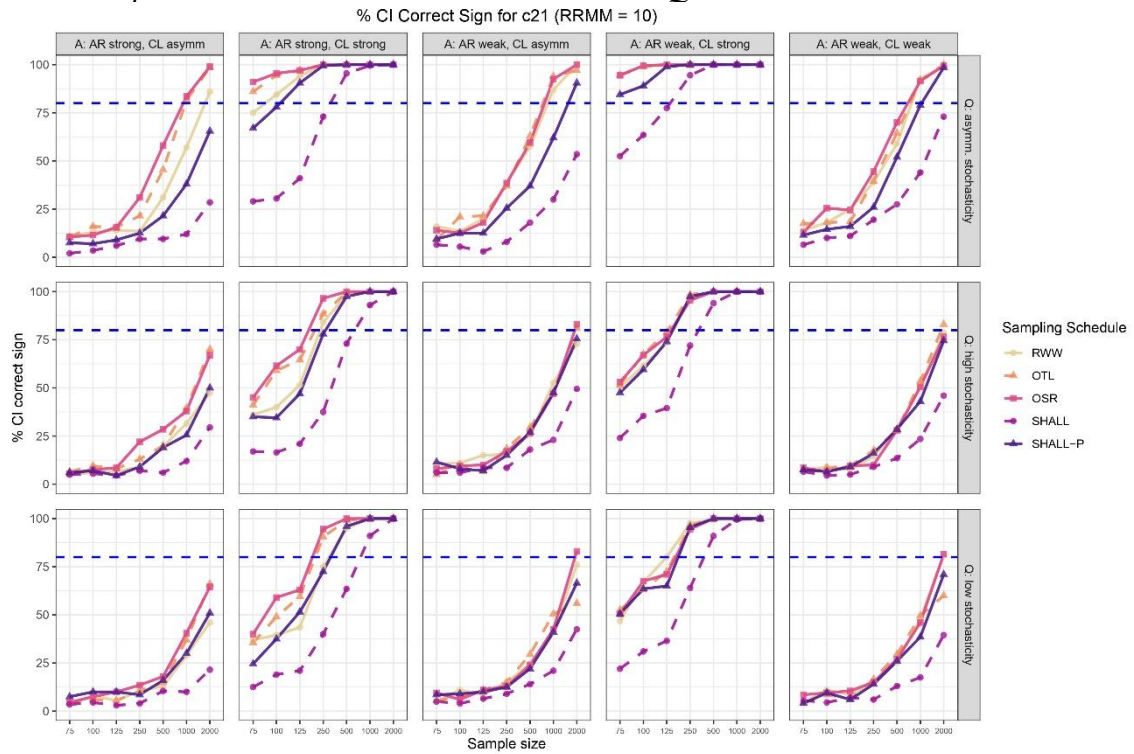


Figure Q – Correct confidence interval for parameter c_{12} for the rest of the conditions with 12 repeated measurements across all matrices Q .

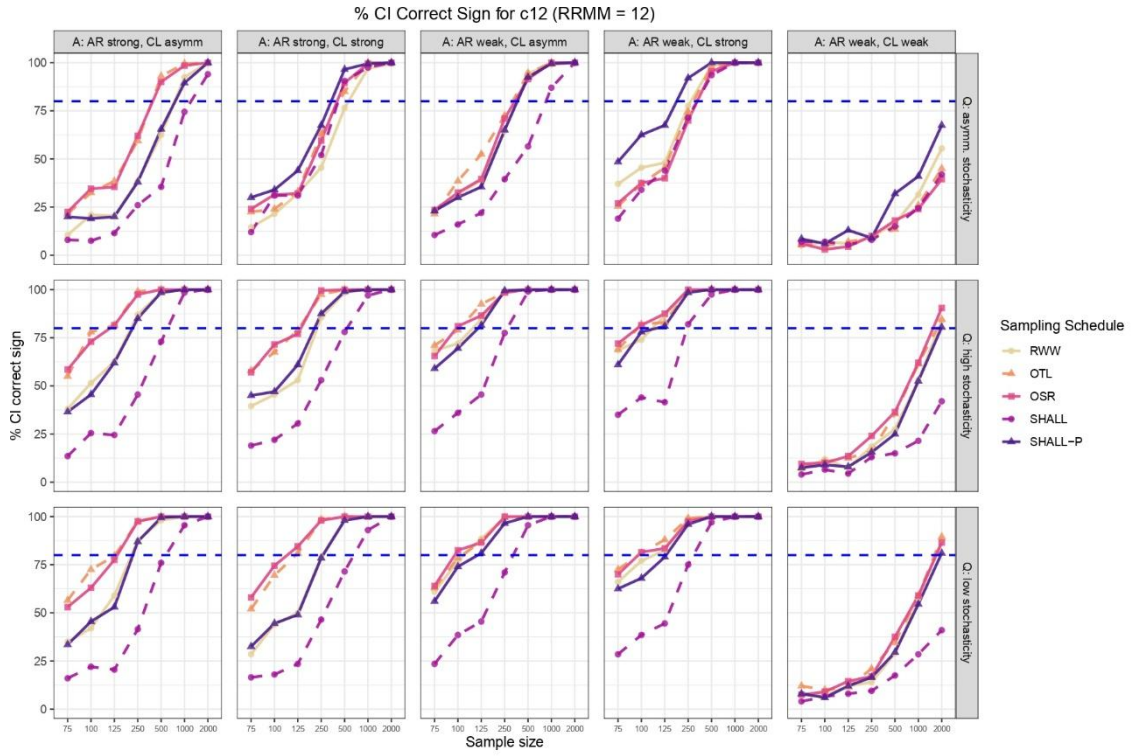


Figure R – Correct confidence interval for parameter c_{21} for the rest of the conditions with 12 repeated measurements across all matrices Q .

