

Simulation Tables

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Table 1: Model results for simulated data with $n = 1,000$, $J = 4$, $p = 2$, $K = 3$, $r = 2$. 1,000 iterations were run with a burn in of 100. Missingness mechanism was MAR and $P(\text{miss}) = 0$. Model results for the multivariate skew normal (MSN) and multivariate normal (MN) mixtures are presented.

Component	Param.	Class 1		
		True	MSN Est. (95% CrI)	MN Est. (95% CrI)
MVSN Regression	β_{11}	11	11.07 (10.74, 11.39)	9.42 (8.91, 9.77)
	β_{21}	12	12.02 (11.87, 12.17)	11.98 (11.77, 12.18)
	β_{31}	13	13.06 (12.75, 13.36)	11.39 (10.7, 11.78)
	β_{41}	14	14.06 (13.91, 14.22)	14.02 (13.78, 14.22)
	β_{12}	2	2.11 (1.82, 2.35)	0.42 (0.03, 0.83)
	β_{22}	2	2.03 (1.88, 2.17)	2.02 (1.86, 2.22)
	β_{32}	2	2.13 (1.8, 2.43)	0.49 (0.14, 0.86)
	β_{42}	2	2.08 (1.93, 2.23)	2.08 (1.92, 2.28)
	α_1	-0.99	-0.81 (-2.12, 0.05)	0 (0, 0)
	α_2	-0.5	-0.22 (-1.3, 0.75)	0 (0, 0)
	α_3	-0.5	-0.96 (-2.14, 0.01)	0 (0, 0)
	α_4	-0.99	-1.18 (-2.44, -0.06)	0 (0, 0)
Multinom.	δ_{11}	-0.08	-0.07 (-0.27, 0.12)	-0.54 (-0.77, -0.32)
	δ_{12}	0.51	0.25 (-0.04, 0.53)	-0.26 (-0.6, 0.05)
	δ_{21}	-0.97	-0.71 (-0.95, -0.48)	-0.07 (-0.28, 0.14)
	δ_{22}	0.84	0.39 (0.09, 0.71)	0.24 (-0.04, 0.5)
Clustering	π_l	0.38	0.38 (0.38, 0.38)	0.38 (0.13, 0.41)