Effects of Small Number of Dichotomous Indicators

Table 4: Percentage of Heywood cases in the CFA model under different experimental settings. Each cell result is based on R = 100 simulated replications.

Type of Indicators	Factor structure Communality haile	Correlation between factors	Sample Size											
			50			100			300			3000		
			Number of Indicators											
			6	10	16	6	10	16	6	10	16	6	10	16
BLR	Weak	Independence	21.0	6.0	3.0	51.0	24.0	2.0	50.0	26.0	3.0	5.0	0.0	0.0
		Moderate	21.0	3.0	6.0	41.0	23.0	7.0	44.0	15.0	4.0	1.0	0.0	0.0
		Strong	14.0	4.0	2.0	42.0	9.0	1.0	28.0	6.0	1.0	0.0	0.0	0.0
	Moderate	Independence	18.0	2.0	4.0	52.0	16.0	0.0	48.0	9.0	0.0	0.0	0.0	0.0
		Moderate	9.0	3.0	1.0	33.0	7.0	0.0	26.0	1.0	0.0	0.0	0.0	0.0
		Strong	8.0	0.0	4.0	31.0	4.0	0.0	8.0	0.0	0.0	0.0	0.0	0.0
	Strong	Independence	10.0	4.0	7.0	12.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0
	_	Moderate	6.0	3.0	4.0	9.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		Strong	5.0	2.0	2.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
BMR	Weak	Independence	47.0	13.0	3.0	53.0	18.0	3.0	34.0	5.0	0.0	0.0	0.0	0.0
		Moderate	45.0	20.0	2.0	37.0	13.0	1.0	12.0	0.0	0.0	0.0	0.0	0.0
		Strong	51.0	14.0	1.0	25.0	2.0	1.0	1.0	0.0	0.0	0.0	0.0	0.0
	Moderate	Independence	41.0	10.0	1.0	38.0	6.0	0.0	11.0	0.0	0.0	0.0	0.0	0.0
		Moderate	38.0	5.0	0.0	23.0	1.0	0.0	4.0	0.0	0.0	0.0	0.0	0.0
		Strong	17.0	1.0	0.0	13.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0
	Strong	Independence	6.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		Moderate	3.0	0.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		Strong	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Interval	Weak	Independence	66.0	48.0	14.0	54.0	14.0	2.0	20.0	0.0	0.0	0.0	0.0	0.0
		Moderate	51.0	34.0	12.0	46.0	7.0	1.0	9.0	0.0	0.0	0.0	0.0	0.0
		Strong	38.0	18.0	6.0	13.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Moderate	Independence	60.0	22.0	2.0	40.0	2.0	0.0	10.0	0.0	0.0	0.0	0.0	0.0
		Moderate	40.0	13.0	1.0	24.0	1.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0
		Strong	14.0	4.0	0.0	1.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	Strong	Independence	8.0	0.0	0.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		Moderate	7.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
		Strong	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0