

Configuration: Data Scenarios

Scenario Name	N	Distribution	Data Summary
1 N = 25 (Normal)	25	Normal	6 Datasets, Means 10-15, SD = 2.0
2 N = 50 (Normal)	50	Normal	6 Datasets, Means 10-15, SD = 2.0
3 N = 100 (Normal)	100	Normal	6 Datasets, Means 10-15, SD = 2.0
4 N = 50 (Skewed)	50	LogNormal	6 Datasets, Means 2.0-2.5 (Log), SD = 0.4
5 N = 50 (Likert)	50	Likert	6 Datasets, Scale 1-7, Means 3-5, SD = 1.5
6 N = 50 (Bimodal)	50	Bimodal	6 Datasets, Mix Means 10 & 15, SD = 2.7
7 N = 50 (Large Effect)	50	NormalLarge	6 Datasets, Means 10-20.0, SD = 2.0

Configuration: Method Parameters

References (B): Thresholds = 15000 | BCa = 30000 | Ranking = 5000

Parameter Set	Relaxed	Default	Strict
1. Bootstrap Thresholds			
Trials (n)	15	25	35
Smoothing (sm)	2	3	4
Streak (st)	2	3	4
Tolerance (tol)	0.010	0.010	0.010
Step Size (B)	100	100	100
B Range	[100-10000]	[100-10000]	[100-10000]
2. BCa Confidence Intervals			
Trials (n)	20	30	40
Smoothing (sm)	2	3	4
Streak (st)	2	3	4
Tolerance (tol)	0.030	0.030	0.030
Step Size (B)	200	200	200
B Range	[100-20000]	[100-20000]	[100-20000]
3. Ranking Stability			
Trials (n)	10	15	20
Smoothing (sm)	2	3	4
Streak (st)	2	3	4
Tolerance (tol)	0.005	0.005	0.005
Step Size (B)	25	25	25
B Range	[50-2000]	[50-2000]	[50-2000]