

Simulation results

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ResNMTF

The effect of increasing the number of biclusters on performance
4 views, $\phi = 200$, 10 repetitions.

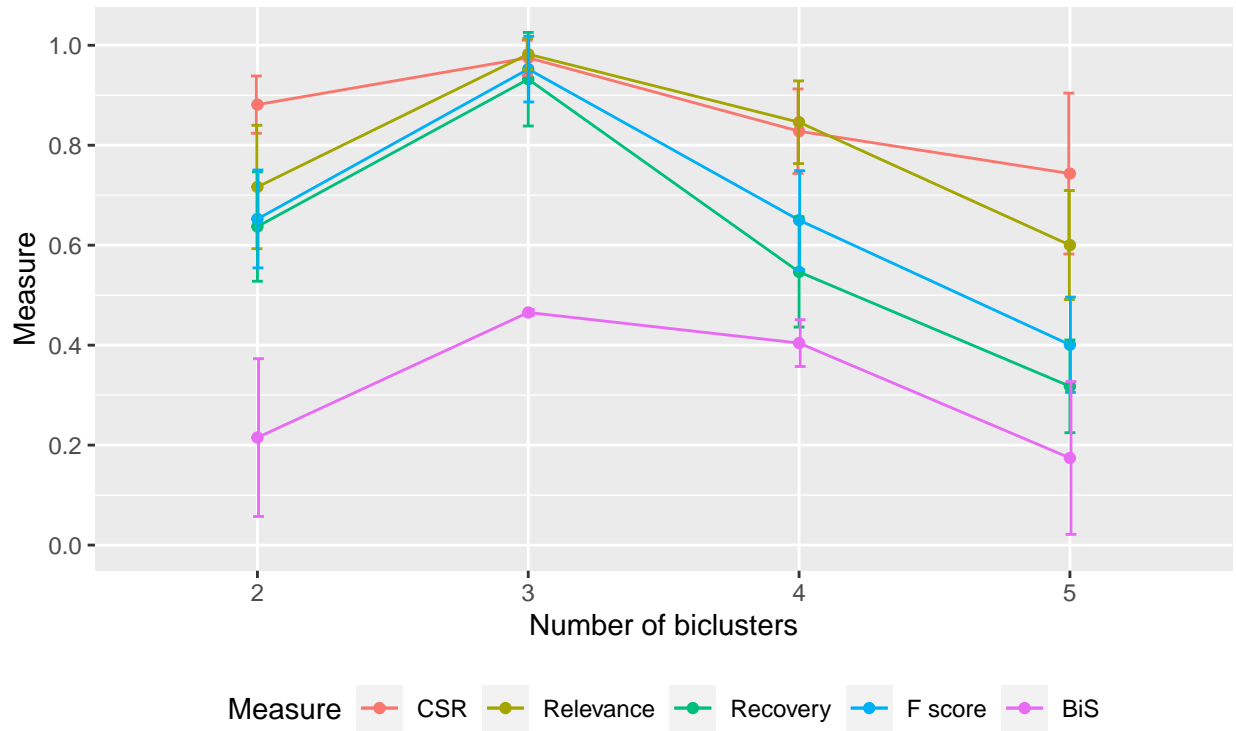


Figure 1: Simulation results for ResNMTF only

	Number of biclusters			
	2	3	4	5
F score	0.6525 (0.0979)	0.9523 (0.0657)	0.6501 (0.0990)	0.4008 (0.0953)
Relevance	0.7165 (0.1234)	0.9822 (0.0309)	0.8460 (0.0827)	0.6002 (0.1092)
Recovery	0.6373 (0.1095)	0.9321 (0.0936)	0.5465 (0.1103)	0.3176 (0.0927)
CSR	0.8812 (0.0573)	0.9750 (0.0351)	0.8280 (0.0846)	0.7434 (0.1610)
BiS	0.2151 (0.1579)	0.4654 (0.0058)	0.4042 (0.0468)	0.1743 (0.1529)

^a 4 views, $\phi = 200$, 10 repetitions.

Comparisons

Relevance

The effect of increasing the number of biclusters on performance

4 views, $\phi = 200$, 10 repetitions.

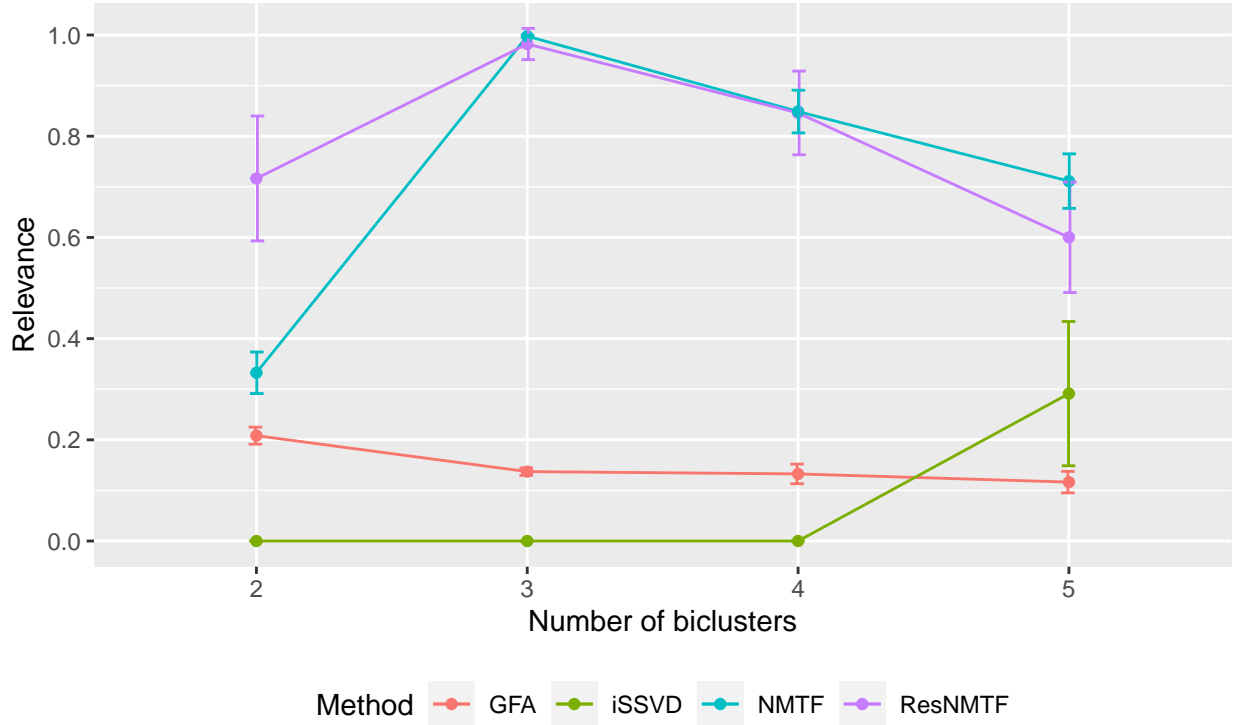


Figure 2: Simulation results for ResNMTF only

	Number of biclusters			
	2	3	4	5
ResNMTF	0.7165 (0.1234)	0.9822 (0.0309)	0.8460 (0.0827)	0.6002 (0.1092)
GFA	0.2082 (0.0168)	0.1372 (0.0073)	0.1326 (0.0194)	0.1164 (0.0212)
iSSVD	0.0000 (0.0000)	0.0000 (0.0000)	0.0000 (0.0000)	0.2913 (0.1426)
NMTF	0.3325 (0.0411)	0.9977 (0.0019)	0.8488 (0.0421)	0.7113 (0.0539)

^a 4 views, $\phi = 200$, 10 repetitions.

Recovery

F score

BiS

CSR

All measures

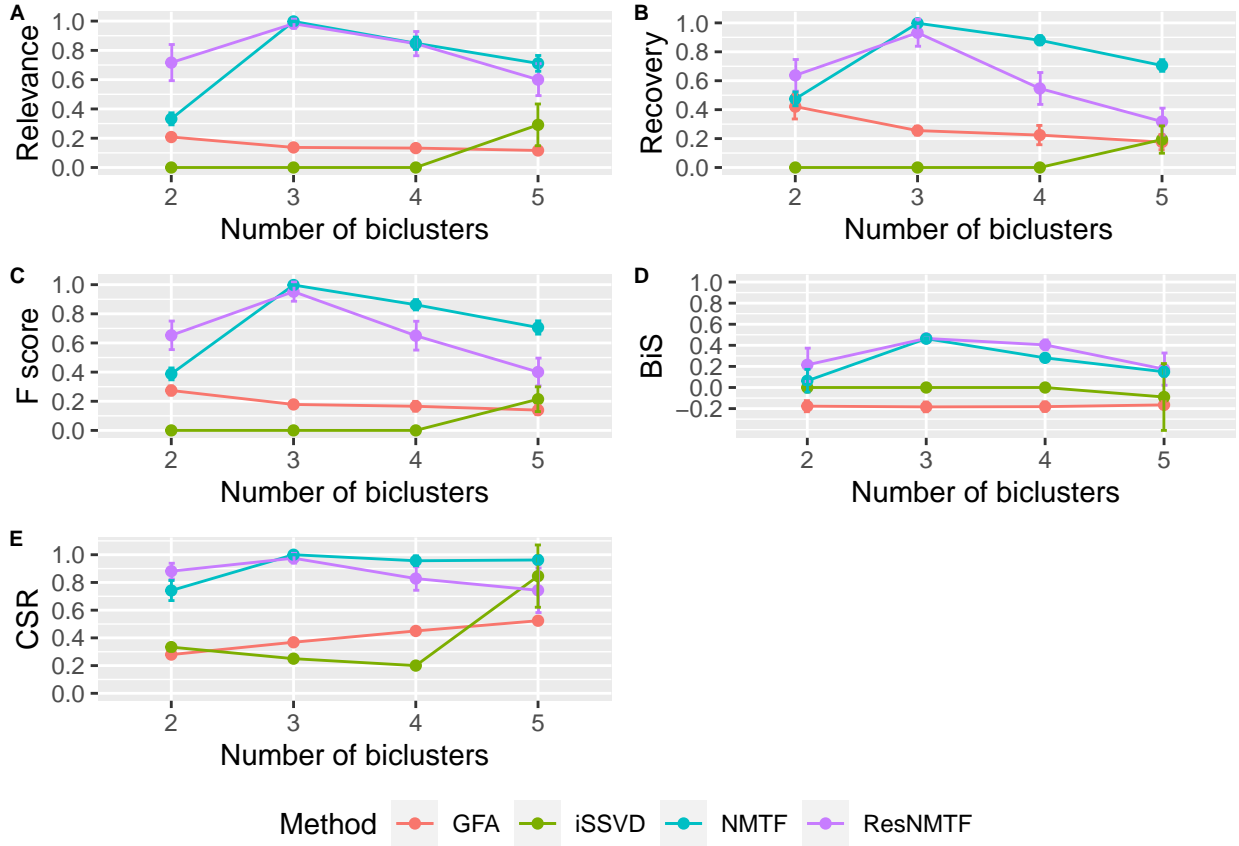


Figure 3: Simulation results for ResNMTF only

	Number of biclusters			
	2	3	4	5
Relevance				
ResNMTF	0.7165 (0.1234)	0.9822 (0.0309)	0.8460 (0.0827)	0.6002 (0.1092)
GFA	0.2082 (0.0168)	0.1372 (0.0073)	0.1326 (0.0194)	0.1164 (0.0212)
iSSVD	0.0000 (0.0000)	0.0000 (0.0000)	0.0000 (0.0000)	0.2913 (0.1426)
NMTF	0.3325 (0.0411)	0.9977 (0.0019)	0.8488 (0.0421)	0.7113 (0.0539)
Recovery				
ResNMTF	0.6373 (0.1095)	0.9321 (0.0936)	0.5465 (0.1103)	0.3176 (0.0927)
GFA	0.4211 (0.0855)	0.2553 (0.0302)	0.2242 (0.0667)	0.1758 (0.0525)
iSSVD	0.0000 (0.0000)	0.0000 (0.0000)	0.0000 (0.0000)	0.1933 (0.0944)
NMTF	0.4746 (0.0477)	0.9977 (0.0019)	0.8800 (0.0310)	0.7054 (0.0403)
F score				
ResNMTF	0.6525 (0.0979)	0.9523 (0.0657)	0.6501 (0.0990)	0.4008 (0.0953)
GFA	0.2740 (0.0310)	0.1782 (0.0135)	0.1657 (0.0336)	0.1395 (0.0315)
iSSVD	0.0000 (0.0000)	0.0000 (0.0000)	0.0000 (0.0000)	0.2142 (0.0849)
NMTF	0.3878 (0.0407)	0.9977 (0.0019)	0.8622 (0.0354)	0.7063 (0.0455)
BiS				
ResNMTF	0.2151 (0.1579)	0.4654 (0.0058)	0.4042 (0.0468)	0.1743 (0.1529)
GFA	-0.1770 (0.0527)	-0.1839 (0.0461)	-0.1816 (0.0451)	-0.1649 (0.0310)
iSSVD	0.0000 (0.0000)	0.0000 (0.0000)	0.0000 (0.0000)	-0.0900 (0.3169)
NMTF	0.0641 (0.1079)	0.4629 (0.0072)	0.2811 (0.0236)	0.1491 (0.0426)
CSR				
ResNMTF	0.8812 (0.0573)	0.9750 (0.0351)	0.8280 (0.0846)	0.7434 (0.1610)
GFA	0.2794 (0.0019)	0.3684 (0.0000)	0.4500 (0.0000)	0.5238 (0.0000)
iSSVD	0.3333 (0.0000)	0.2500 (0.0000)	0.2000 (0.0000)	0.8457 (0.2249)
NMTF	0.7416 (0.0724)	1.0000 (0.0000)	0.9566 (0.0353)	0.9622 (0.0294)

^a 4 views, $\phi = 200$, 10 repetitions.

Correlation

	BiS	CSR
F score	0.8539149	0.8835355
Relevance	0.8950093	0.9036734
Recovery	0.7721782	0.8351088