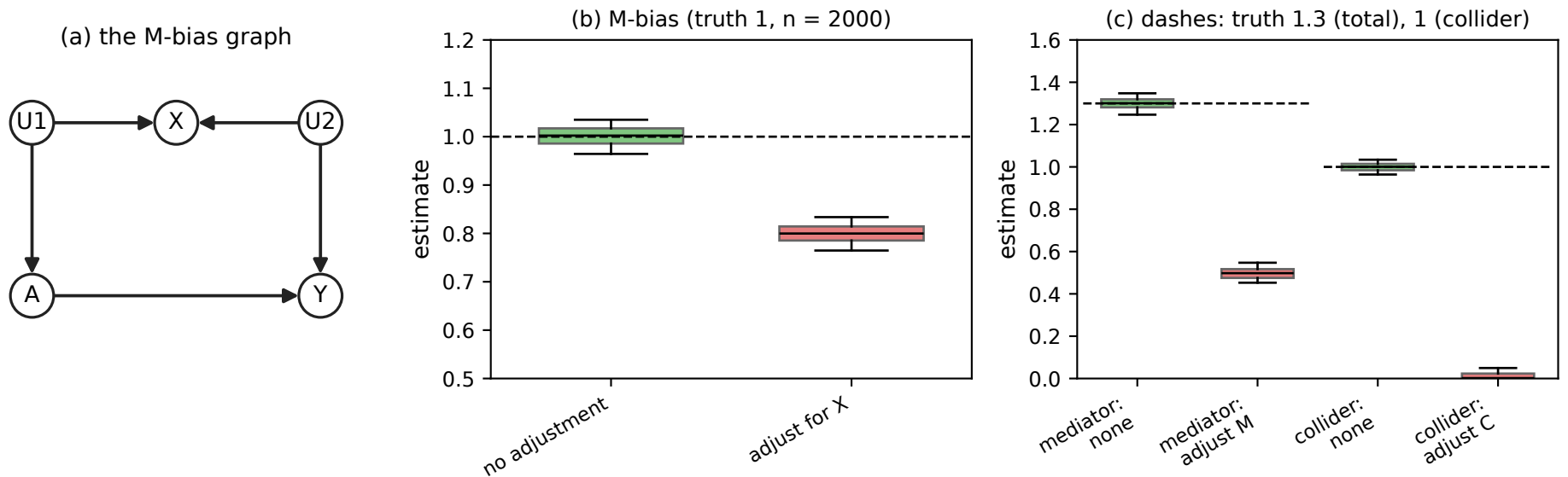

(a) the M-bias graph
U1
X
U2
A
Y
(b) M-bias (truth 1, n = 2000)
estimate
1.2
1.1
1.0
0.9
0.8
0.7
0.6
0.5
no adjustment
adjust for X
(c) dashes: truth 1.3 (total), 1 (collider)
estimate
1.6
1.4
1.2
1.0
0.8
0.6
0.4
0.2
0.0
mediator: none
mediator: adjust M
collider: none
collider: adjust C