1 Simulation

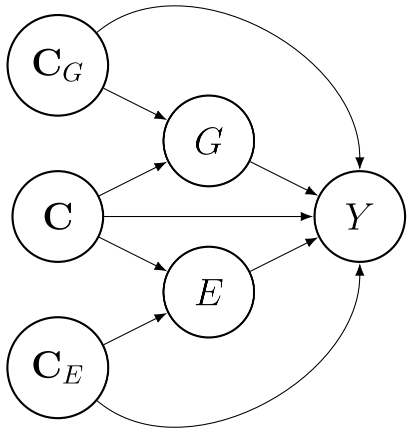

Figure 1: Directed Acyclic Graphs for causal interactions under two treatments G and E.

Let G and E denote the two binary treatments and Y be the binary outcome. Let $\mathbf{C}_G$, $\mathbf{C}_E$ be the set of covariates that confound G and E individually, and let $\mathbf{C}$ be the set of common confounders to both treatments.

1.1 Data generation

In this study, we will assume the outcome Y is binary and there are two treatments G and E. Let $\mathbf{C}_G = \{X_1, X_2\}$,$\mathbf{C}_E = \{X_3, X_4\}$ and $\mathbf{C} = \{X_5, X_6\}$ be the confounders of G, E and common confounder. Suppose $\mathbf{X} = \{X_1, \ldots, X_6\}$ is generated to follow a multivariate normal distribution such that $\mathbf{X} \sim \mathcal{N}_6(\mathbf{0}, \mathbf{I}_6)$. To generate the treatment assignment probabilities, we firstly generate probabilities for each treatment individually:

$$\pi_{G=1} = P(G = 1 \mid \mathbf{X}_G) = \frac{\exp\{f(\mathbf{X}_G)\}}{1 + \exp\{f(\mathbf{X}_G)\}}$$
$$\pi_{E=1} = P(E_i = 1 \mid \mathbf{X}_E) = \frac{\exp\{f(\mathbf{X}_E)\}}{1 + \exp\{f(\mathbf{X}_E)\}}$$

where $f(\mathbf{X}_G)$ and $f(\mathbf{X}_E)$ are the function of $\mathbf{X}_G$ and $\mathbf{X}_E$ such that $\mathbf{X}_G = \{X_1, X_2, X_5, X_6\}$ and $\mathbf{X}_E = \{X_3, X_4, X_5, X_6\}$. We now suppose $f(\mathbf{X}_G) = 0.8X_1 + 0.5X_2 - 0.3X_5 + 0.4X_6$ and $f(\mathbf{X}_E) = -0.5X_3 + 0.2X_4 + 0.3X_5 + 0.6X_6$. Note that here it is unnecessary to add the intercept as the expectation for each covariate is 0, making the marginal probabilities $\pi_{G=1}$ and $\pi_{E=1}$ are approximately 0.5. With the above setups, the probability of assignment for

Table 1: Summary of the simulated data

G	E	Y = 0	Y = 1	Rate
0	0	762	13	0.0167742
0	1	699	22	0.0305132
1	0	717	32	0.0427236
1	1	679	76	0.1006623

each combination of treatments can be computed as

$$\begin{aligned}
\theta_{00} &= p_{G=0,E=0} = (1-\pi_{G=1})(1-\pi_{E=1}) \\
\theta_{10} &= p_{G=1,E=0} = \pi_{G=1}(1-\pi_{E=1}) \\
\theta_{01} &= p_{G=0,E=1} = (1-\pi_{G=1})\pi_{E=1} \\
\theta_{11} &= p_{G=1,E=1} = \pi_{G=1}\pi_{E=1}
\end{aligned}$$

For each observation, the probability of receiving each pair of treatment follows a multinomial distribution such that $T_i \mid \mathbf{X} \sim \text{Multinomial}(1, \theta_{00}, \theta_{10}, \theta_{01}, \theta_{11})$. In addition, the outcome is generated as

$$\begin{aligned}
\Pr(Y=1 \mid \mathbf{X}, G, E) = &\operatorname{logit}^{-1}(-4.5 + 0.3X_1 - 0.5X_2 + 0.7X_3 + 0.9X_4 - 0.2X_5 + 0.3X_6 \\
&+ 0.3G + 0.4E + 0.8GE)
\end{aligned}$$

The true value of RERI in terms of odds ratio can be computed as $\exp 0.3 + 0.4 + 0.8 - \exp 0.3 - \exp 0.4 + 1 = 2.64$

```r
# Generate the data
set.seed(2025)
sim_dat <- simulate_data(3000)
mean(sim_dat$G == 1)
```

```
## [1] 0.5013333
```

```r
mean(sim_dat$E == 1)
```

```
## [1] 0.492
```

Table 1 shows the summary of the simulated data. We can see that the rate of $Y = 1$ remains around 0.05.

In addition, from the simulated data, we can also estimate the RERI in terms of risk ratio. However, it is not the true value of $RERI_{OR}$ but approaches to the true value when the sample size increases. The estimate result is around 2.01.

```r
set.seed(2025)
sim_dat_large <- simulate_data_intercept(1e6, -4.5)
# truth on the risk scale
p00 <- with(sim_dat_large, mean(Y[G==0 & E==0]))
p10 <- with(sim_dat_large, mean(Y[G==1 & E==0]))
p01 <- with(sim_dat_large, mean(Y[G==0 & E==1]))
p11 <- with(sim_dat_large, mean(Y[G==1 & E==1]))

true_RERI_RR <- (p11 - p10 - p01 + p00) / p00
true_RERI_RR
```

```
## [1] 2.736884
```

```r
# truth on the odds scale
logit <- function(p) log(p/(1-p))
OR11 <- exp(logit(p11) - logit(p00))
OR10 <- exp(logit(p10) - logit(p00))
OR01 <- exp(logit(p01) - logit(p00))
true_RERI_OR <- OR11 - OR10 - OR01 + 1
true_RERI_OR
```

```
## [1] 3.264325
```

```r
set.seed(2025)
sim_dat <- simulate_data_intercept(3000, -4.5)
fit_outcome <- glm(
  Y ~ G * E + X1 + X2 + X3 + X4 + X5 + X6,
  data   = sim_dat,
  family = binomial(link = "logit")
)

summary(fit_outcome)
```

```
##
## Call:
## glm(formula = Y ~ G * E + X1 + X2 + X3 + X4 + X5 + X6, family = binomial(link = "logi
##     data = sim_dat)
##
## Coefficients:
##             Estimate Std. Error z value Pr(>|z|)
## (Intercept) -4.37674    0.26675 -16.408  < 2e-16 ***
## G            0.36663    0.31318   1.171  0.24174
```

```
## E             0.37989    0.31789   1.195  0.23206
## X1            0.25746    0.08933   2.882  0.00395 **
## X2           -0.63476    0.09245  -6.866 6.59e-12 ***
## X3            0.65930    0.09114   7.234 4.68e-13 ***
## X4            0.90141    0.09669   9.323  < 2e-16 ***
## X5           -0.23902    0.09031  -2.647  0.00813 **
## X6            0.79016    0.09425   8.384  < 2e-16 ***
## G:E           0.68436    0.38326   1.786  0.07416 .
## ---
## Signif. codes:  0 '***' 0.001 '**' 0.01 '*' 0.05 '.' 0.1 ' ' 1
##
## (Dispersion parameter for binomial family taken to be 1)
##
##     Null deviance: 1361.8  on 2999  degrees of freedom
## Residual deviance: 1006.2  on 2990  degrees of freedom
## AIC: 1026.2
##
## Number of Fisher Scoring iterations: 7
```

```r
compute_RERI_OR(1.05413, 0.96932, 0.15710)
```

```
## [1] 4.345544
```

2 Testing different models (fitting one time)

2.1 Using control only

2.1.1 $\beta_0 = -6$

Model	β_0	β_1	β_2	β_3	Abs. Bias
Default LOM	-5.956(0.707)	4.755(4.431)	0.613(1.475)	7.401(5.654)	4.772
CLOM(X1X2)	-6.216(0.721)	6.241(5.666)	0.645(1.505)	9.240(7.277)	6.600
CLOM(X3X4)	-6.675(0.742)	5.403(4.962)	0.971(1.815)	8.000(6.390)	5.360
CLOM(X5X6)	-6.088(0.721)	2.765(2.920)	0.074(0.994)	1.734(1.908)	0.906
CLOM(all)	-7.101(0.785)	3.140(3.340)	0.043(0.984)	2.269(2.376)	0.371
MSLOM(X1X2)	-6.164(0.710)	5.737(5.233)	0.533(1.411)	12.206(9.301)	9.577
MSLOM(X3X4)	-6.093(0.708)	4.952(4.609)	0.360(1.244)	9.535(7.149)	6.906
MSLOM(X5X6)	-6.081(0.713)	5.615(5.241)	0.601(1.476)	2.502(3.391)	0.127
MSLOM(all)	-6.442(0.709)	6.747(6.079)	0.432(1.326)	5.643(5.270)	3.014
DR	-8.129(0.510)	7.052(4.021)	0.583(0.970)	6.068(3.462)	3.428

Marginal: $RERI_{OR}^{true} = 2.629$, $RERI_{RR}^{true} = 2.553$; Conditional: $RERI_{OR}^{true} = 2.64$

2.1.2 $\beta_0 = -4.5$

Model	β_0	β_1	β_2	β_3	Abs. Bias
Default LOM	-3.631(0.227)	0.850(0.528)	0.582(0.467)	3.067(0.879)	0.822
CLOM(X1X2)	-3.825(0.235)	0.996(0.588)	0.598(0.475)	3.475(1.024)	0.835
CLOM(X3X4)	-4.196(0.248)	0.987(0.579)	1.024(0.615)	3.864(1.180)	1.224
CLOM(X5X6)	-3.550(0.229)	0.400(0.405)	0.248(0.377)	1.630(0.537)	1.010
CLOM(all)	-4.377(0.267)	0.443(0.452)	0.462(0.465)	2.278(0.773)	0.362
MSLOM(X1X2)	-3.755(0.243)	1.145(0.654)	0.737(0.551)	3.439(1.094)	1.194
MSLOM(X3X4)	-3.753(0.231)	0.950(0.568)	0.878(0.569)	3.813(1.110)	1.568
MSLOM(X5X6)	-3.390(0.241)	0.426(0.433)	0.214(0.378)	1.685(0.560)	0.560
MSLOM(all)	-3.703(0.249)	0.853(0.597)	0.709(0.580)	1.973(0.848)	0.272
DR	-4.583(0.140)	0.974(0.313)	0.989(0.320)	2.257(0.463)	0.383

Marginal: $RERI_{OR}^{true} = 2.245$, $RERI_{RR}^{true} = 1.998$; Conditional: $RERI_{OR}^{true} = 2.64$

2.1.3 $\beta_0 = -3.7$

Model	β_0	β_1	β_2	β_3	Abs. Bias
Default LOM	-2.911(0.162)	0.865(0.384)	0.729(0.363)	2.348(0.591)	0.305
CLOM(X1X2)	-3.079(0.169)	1.069(0.442)	0.756(0.371)	2.787(0.707)	0.147
CLOM(X3X4)	-3.539(0.184)	1.060(0.444)	1.381(0.527)	3.505(0.926)	0.865
CLOM(X5X6)	-2.812(0.166)	0.408(0.297)	0.316(0.286)	1.160(0.376)	1.480
CLOM(all)	-3.731(0.202)	0.572(0.372)	0.698(0.403)	2.095(0.649)	0.545
MSLOM(X1X2)	-2.964(0.175)	1.087(0.462)	0.888(0.431)	2.527(0.720)	0.484
MSLOM(X3X4)	-3.051(0.166)	1.033(0.427)	1.182(0.471)	3.308(0.818)	1.265
MSLOM(X5X6)	-2.606(0.171)	0.365(0.296)	0.280(0.283)	1.158(0.380)	0.885
MSLOM(all)	-2.821(0.184)	0.679(0.394)	0.770(0.430)	1.270(0.569)	0.773
DR	-3.775(0.100)	0.876(0.215)	1.200(0.250)	1.624(0.326)	1.016

Marginal: $RERI_{OR}^{true} = 2.043$, $RERI_{RR}^{true} = 1.634$; Conditional: $RERI_{OR}^{true} = 2.64$

2.1.4 $\beta_0 = -3$

Model	β_0	β_1	β_2	β_3	Abs. Bias
Default LOM	-2.190(0.119)	0.345(0.217)	0.242(0.205)	2.836(0.454)	0.995
CLOM(X1X2)	-2.262(0.124)	0.331(0.224)	0.245(0.207)	2.968(0.492)	0.328
CLOM(X3X4)	-2.675(0.136)	0.453(0.248)	0.586(0.279)	4.085(0.720)	1.445
CLOM(X5X6)	-2.066(0.123)	0.025(0.171)	-0.020(0.168)	1.797(0.300)	0.843
CLOM(all)	-2.683(0.148)	-0.018(0.186)	0.160(0.220)	2.509(0.474)	0.131
MSLOM(X1X2)	-2.158(0.133)	0.286(0.228)	0.272(0.231)	2.742(0.485)	0.901
MSLOM(X3X4)	-2.305(0.122)	0.481(0.244)	0.477(0.252)	3.745(0.617)	1.904
MSLOM(X5X6)	-1.897(0.130)	-0.057(0.162)	-0.092(0.160)	1.795(0.297)	0.046
MSLOM(all)	-1.961(0.152)	-0.033(0.191)	0.084(0.220)	1.949(0.408)	0.108
DR	-2.659(0.071)	-0.011(0.091)	0.229(0.110)	2.723(0.229)	0.083

Marginal: $RERI_{OR}^{true} = 1.841$, $RERI_{RR}^{true} = 1.269$; Conditional: $RERI_{OR}^{true} = 2.64$

2.1.5 $\beta_0 = -2$

Model	β_0	β_1	β_2	β_3	Abs. Bias
Default LOM	-1.565(0.095)	0.535(0.196)	0.320(0.173)	2.693(0.409)	1.026
CLOM(X1X2)	-1.604(0.098)	0.527(0.204)	0.325(0.176)	2.807(0.437)	0.167
CLOM(X3X4)	-1.940(0.107)	0.705(0.234)	0.674(0.238)	4.110(0.673)	1.470
CLOM(X5X6)	-1.407(0.099)	0.171(0.157)	0.041(0.144)	1.718(0.279)	0.922
CLOM(all)	-1.856(0.119)	0.194(0.185)	0.252(0.195)	2.516(0.457)	0.124
MSLOM(X1X2)	-1.524(0.103)	0.522(0.212)	0.266(0.178)	2.400(0.413)	0.733
MSLOM(X3X4)	-1.679(0.098)	0.687(0.221)	0.609(0.219)	3.731(0.574)	2.064
MSLOM(X5X6)	-1.378(0.102)	0.248(0.169)	0.097(0.154)	1.548(0.288)	0.119
MSLOM(all)	-1.355(0.120)	0.191(0.191)	0.165(0.188)	1.649(0.366)	0.018
DR	-1.759(0.058)	0.206(0.092)	0.239(0.094)	2.097(0.175)	0.543

Marginal: $RERI_{OR}^{true} = 1.667$, $RERI_{RR}^{true} = 0.826$; Conditional: $RERI_{OR}^{true} = 2.64$

2.1.6 $\beta_0 = -1$

Model	β_0	β_1	β_2	β_3	Abs. Bias
Default LOM	-0.838(0.078)	0.579(0.171)	0.296(0.143)	2.739(0.411)	1.137
CLOM(X1X2)	-0.875(0.082)	0.593(0.183)	0.306(0.147)	2.970(0.456)	0.330
CLOM(X3X4)	-1.089(0.088)	0.789(0.212)	0.619(0.197)	4.332(0.693)	1.692
CLOM(X5X6)	-0.607(0.083)	0.253(0.143)	-0.021(0.115)	1.740(0.280)	0.900
CLOM(all)	-0.874(0.100)	0.342(0.184)	0.150(0.157)	2.767(0.494)	0.127
MSLOM(X1X2)	-0.800(0.083)	0.586(0.186)	0.186(0.138)	2.467(0.421)	0.865
MSLOM(X3X4)	-0.973(0.081)	0.783(0.198)	0.671(0.192)	4.140(0.625)	2.538
MSLOM(X5X6)	-0.619(0.084)	0.268(0.145)	-0.010(0.117)	1.541(0.290)	0.061
MSLOM(all)	-0.662(0.092)	0.288(0.168)	0.093(0.143)	1.664(0.405)	0.062
DR	-0.763(0.052)	0.237(0.085)	0.072(0.075)	2.301(0.168)	0.339

Marginal: $RERI_{OR}^{true} = 1.602$, $RERI_{RR}^{true} = 0.484$; Conditional: $RERI_{OR}^{true} = 2.64$

2.2 Using both control and case

2.2.1 $\beta_0 = -6$

Model	β_0	β_1	β_2	β_3	Abs. Bias
Default LOM	-5.956(0.707)	4.755(4.431)	0.613(1.475)	7.401(5.654)	4.772
CLOM(X1X2)	-6.216(0.721)	6.241(5.666)	0.645(1.505)	9.240(7.277)	6.600
CLOM(X3X4)	-6.675(0.742)	5.403(4.962)	0.971(1.815)	8.000(6.390)	5.360
CLOM(X5X6)	-6.088(0.721)	2.765(2.920)	0.074(0.994)	1.734(1.908)	0.906
CLOM(all)	-7.101(0.785)	3.140(3.340)	0.043(0.984)	2.269(2.376)	0.371
MSLOM(X1X2)	-6.158(0.709)	5.700(5.197)	0.515(1.393)	11.992(9.123)	9.363
MSLOM(X3X4)	-6.070(0.708)	4.782(4.477)	0.330(1.216)	9.111(6.820)	6.482
MSLOM(X5X6)	-6.088(0.713)	5.642(5.266)	0.619(1.493)	2.406(3.379)	0.223
MSLOM(all)	-6.440(0.710)	6.706(6.053)	0.437(1.331)	5.179(5.001)	2.550
DR	-8.153(0.507)	7.355(4.139)	0.621(0.985)	6.172(3.561)	3.532

Marginal: $RERI_{OR}^{true} = 2.629$, $RERI_{RR}^{true} = 2.553$; Conditional: $RERI_{OR}^{true} = 2.64$

2.2.2 $\beta_0 = -4.5$

Model	β_0	β_1	β_2	β_3	Abs. Bias
Default LOM	-3.631(0.227)	0.850(0.528)	0.582(0.467)	3.067(0.879)	0.822
CLOM(X1X2)	-3.825(0.235)	0.996(0.588)	0.598(0.475)	3.475(1.024)	0.835
CLOM(X3X4)	-4.196(0.248)	0.987(0.579)	1.024(0.615)	3.864(1.180)	1.224
CLOM(X5X6)	-3.550(0.229)	0.400(0.405)	0.248(0.377)	1.630(0.537)	1.010
CLOM(all)	-4.377(0.267)	0.443(0.452)	0.462(0.465)	2.278(0.773)	0.362
MSLOM(X1X2)	-3.744(0.245)	1.114(0.647)	0.719(0.550)	3.323(1.062)	1.078
MSLOM(X3X4)	-3.709(0.232)	0.855(0.542)	0.795(0.544)	3.392(0.997)	1.147
MSLOM(X5X6)	-3.376(0.243)	0.413(0.432)	0.208(0.379)	1.628(0.550)	0.617
MSLOM(all)	-3.657(0.252)	0.769(0.573)	0.658(0.571)	1.648(0.782)	0.597
DR	-4.612(0.136)	1.019(0.311)	1.054(0.321)	2.293(0.485)	0.347

Marginal: $RERI_{OR}^{true} = 2.245$, $RERI_{RR}^{true} = 1.998$; Conditional: $RERI_{OR}^{true} = 2.64$

2.2.3 $\beta_0 = -3.7$

Model	β_0	β_1	β_2	β_3	Abs. Bias
Default LOM	-2.911(0.162)	0.865(0.384)	0.729(0.363)	2.348(0.591)	0.305
CLOM(X1X2)	-3.079(0.169)	1.069(0.442)	0.756(0.371)	2.787(0.707)	0.147
CLOM(X3X4)	-3.539(0.184)	1.060(0.444)	1.381(0.527)	3.505(0.926)	0.865
CLOM(X5X6)	-2.812(0.166)	0.408(0.297)	0.316(0.286)	1.160(0.376)	1.480
CLOM(all)	-3.731(0.202)	0.572(0.372)	0.698(0.403)	2.095(0.649)	0.545
MSLOM(X1X2)	-2.947(0.177)	1.043(0.453)	0.852(0.425)	2.421(0.689)	0.378
MSLOM(X3X4)	-2.983(0.165)	0.870(0.392)	1.024(0.434)	2.714(0.691)	0.671
MSLOM(X5X6)	-2.585(0.173)	0.348(0.294)	0.269(0.282)	1.108(0.374)	0.935
MSLOM(all)	-2.729(0.188)	0.536(0.366)	0.649(0.408)	0.929(0.503)	1.114
DR	-3.801(0.096)	0.895(0.208)	1.250(0.245)	1.633(0.344)	1.007

Marginal: $RERI_{OR}^{true} = 2.043$, $RERI_{RR}^{true} = 1.634$; Conditional: $RERI_{OR}^{true} = 2.64$

2.2.4 $\beta_0 = -3$

Model	β_0	β_1	β_2	β_3	Abs. Bias
Default LOM	-2.190(0.119)	0.345(0.217)	0.242(0.205)	2.836(0.454)	0.995
CLOM(X1X2)	-2.262(0.124)	0.331(0.224)	0.245(0.207)	2.968(0.492)	0.328
CLOM(X3X4)	-2.675(0.136)	0.453(0.248)	0.586(0.279)	4.085(0.720)	1.445
CLOM(X5X6)	-2.066(0.123)	0.025(0.171)	-0.020(0.168)	1.797(0.300)	0.843
CLOM(all)	-2.683(0.148)	-0.018(0.186)	0.160(0.220)	2.509(0.474)	0.131
MSLOM(X1X2)	-2.140(0.134)	0.272(0.225)	0.239(0.227)	2.662(0.466)	0.821
MSLOM(X3X4)	-2.228(0.122)	0.323(0.218)	0.371(0.232)	3.125(0.510)	1.284
MSLOM(X5X6)	-1.868(0.132)	-0.072(0.162)	-0.104(0.159)	1.742(0.288)	0.099
MSLOM(all)	-1.843(0.163)	-0.130(0.179)	-0.017(0.208)	1.608(0.340)	0.233
DR	-2.682(0.069)	-0.027(0.086)	0.239(0.107)	2.761(0.245)	0.121

Marginal: $RERI_{OR}^{true} = 1.841$, $RERI_{RR}^{true} = 1.269$; Conditional: $RERI_{OR}^{true} = 2.64$

2.2.5 $\beta_0 = -2$

Model	β_0	β_1	β_2	β_3	Abs. Bias
Default LOM	-1.606(0.097)	0.505(0.197)	0.713(0.220)	1.951(0.371)	0.284
CLOM(X1X2)	-1.679(0.100)	0.577(0.214)	0.795(0.233)	2.098(0.410)	0.542
CLOM(X3X4)	-2.006(0.111)	0.624(0.230)	1.305(0.328)	3.740(0.687)	1.100
CLOM(X5X6)	-1.450(0.100)	0.149(0.157)	0.254(0.170)	1.253(0.255)	1.387
CLOM(all)	-2.020(0.123)	0.243(0.198)	0.755(0.274)	2.542(0.519)	0.098
MSLOM(X1X2)	-1.632(0.103)	0.514(0.214)	0.685(0.232)	2.309(0.431)	0.642
MSLOM(X3X4)	-1.702(0.099)	0.548(0.209)	1.031(0.269)	2.330(0.449)	0.663
MSLOM(X5X6)	-1.316(0.110)	0.233(0.177)	0.277(0.179)	0.955(0.254)	0.712
MSLOM(all)	-1.425(0.122)	0.263(0.203)	0.497(0.237)	1.281(0.353)	0.386
DR	-2.071(0.060)	0.337(0.102)	0.776(0.133)	3.001(0.285)	0.361

Marginal: $RERI_{OR}^{true} = 1.667$, $RERI_{RR}^{true} = 0.826$; Conditional: $RERI_{OR}^{true} = 2.64$

2.2.6 $\beta_0 = -1$

Model	β_0	β_1	β_2	β_3	Abs. Bias
Default LOM	-0.815(0.078)	0.543(0.169)	0.654(0.177)	1.853(0.355)	0.251
CLOM(X1X2)	-0.911(0.082)	0.709(0.199)	0.777(0.194)	2.163(0.426)	0.477
CLOM(X3X4)	-1.070(0.088)	0.713(0.206)	0.991(0.236)	3.869(0.664)	1.229
CLOM(X5X6)	-0.622(0.082)	0.251(0.145)	0.301(0.148)	0.969(0.246)	1.671
CLOM(all)	-0.998(0.100)	0.504(0.207)	0.669(0.221)	2.352(0.508)	0.288
MSLOM(X1X2)	-0.844(0.089)	0.563(0.193)	0.722(0.208)	2.114(0.427)	0.512
MSLOM(X3X4)	-0.919(0.081)	0.630(0.184)	0.839(0.203)	2.472(0.444)	0.870
MSLOM(X5X6)	-0.487(0.091)	0.152(0.140)	0.171(0.139)	0.919(0.228)	0.683
MSLOM(all)	-0.620(0.121)	0.220(0.186)	0.379(0.208)	1.637(0.416)	0.035
DR	-1.025(0.047)	0.497(0.096)	0.771(0.113)	3.060(0.284)	0.420

Marginal: $RERI_{OR}^{true} = 1.602$, $RERI_{RR}^{true} = 0.484$; Conditional: $RERI_{OR}^{true} = 2.64$