# SCED Special Issue - Analysis with $rho_M = 0.7$ , $rho_Y = 0.7$ , prop\_indir\_dir = 2

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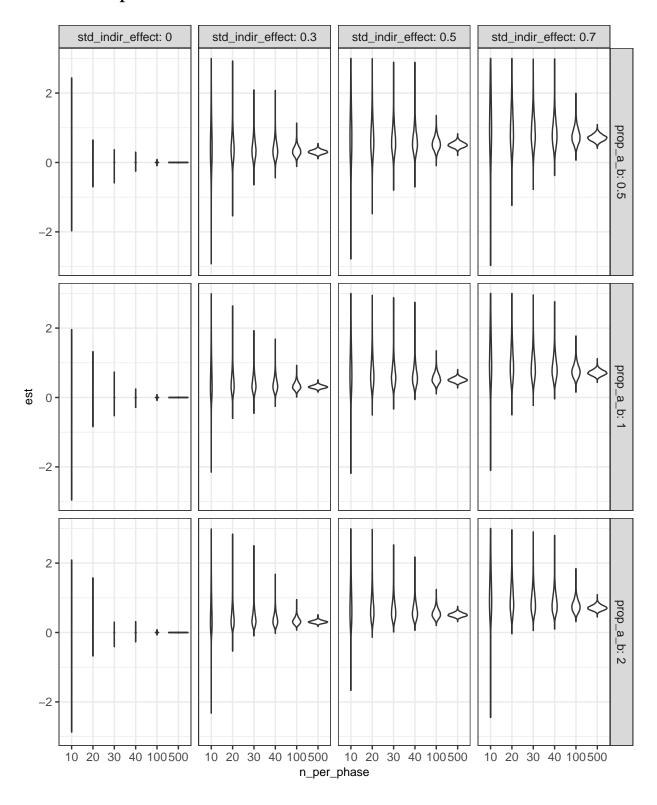
#### 1 Conditions

- measurements per phase: 10, 20, 30, 40, 100, 500 • standardized indirect effect  $(ab/\sigma_Y)$ : 0, 0.3, 0.5, 0.7 • proportion of indirect and direct effect: (ab/c'): 0.2, 0.5, 0.8 • proportian of a and b (a/b): 2 • autocorrelation of Y  $(\rho_Y)$ : 0.7
- autocorrelation of  $M(\rho_M)$ : 0.7

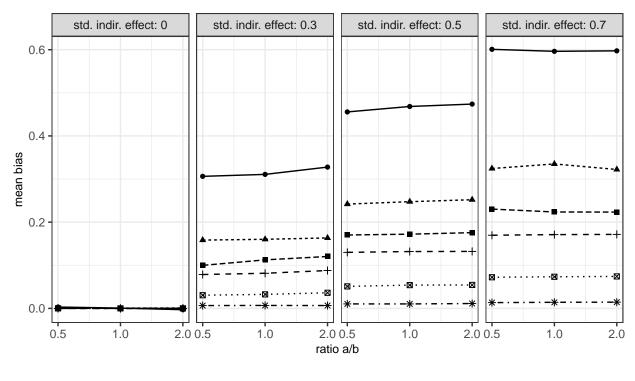
# 2 Dependent variable

- Standardized Indirect Effect:  $ab/\sigma_Y$ 

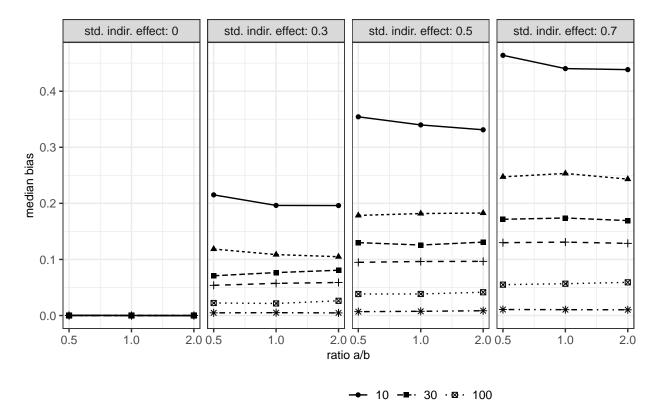
# 3 Violin plot



## 4 Bias: Mean deviation from true value



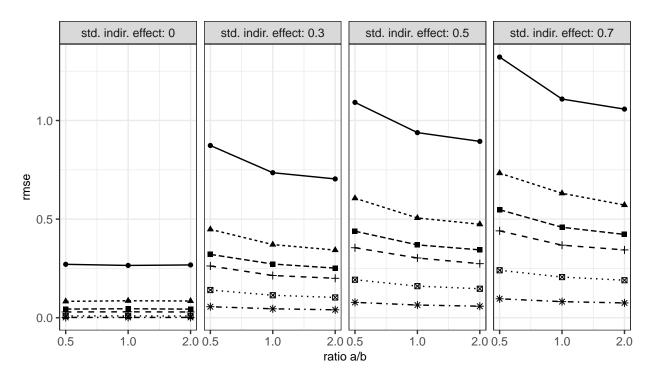
## 5 Bias: Median deviation from true value



20 <del>---</del> 40 ·\*· 500

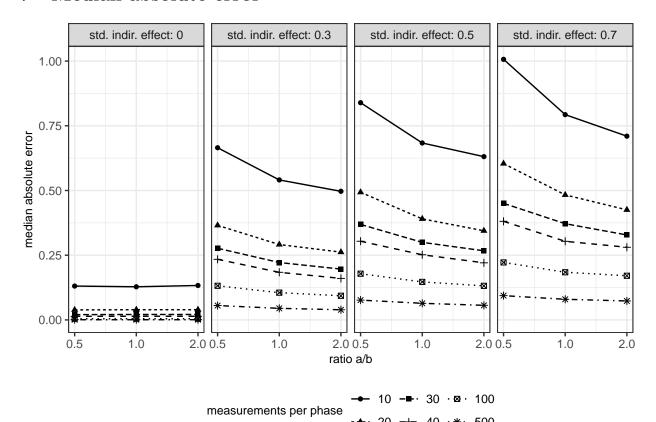
measurements per phase

# 6 Root mean squared error

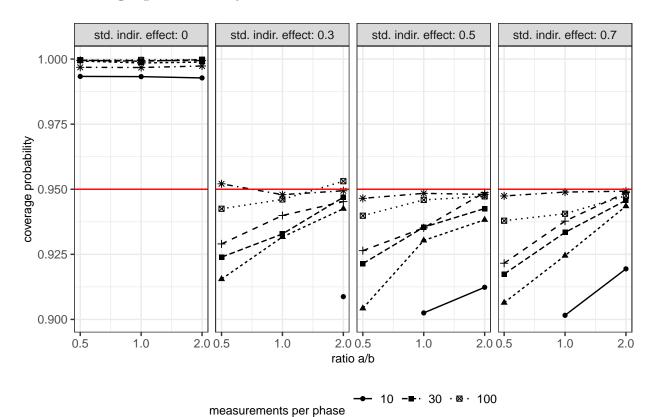


— 10 -■ · 30 · ≅ · 100 measurements per phase - ★ · 20 → 40 · ★ · 500

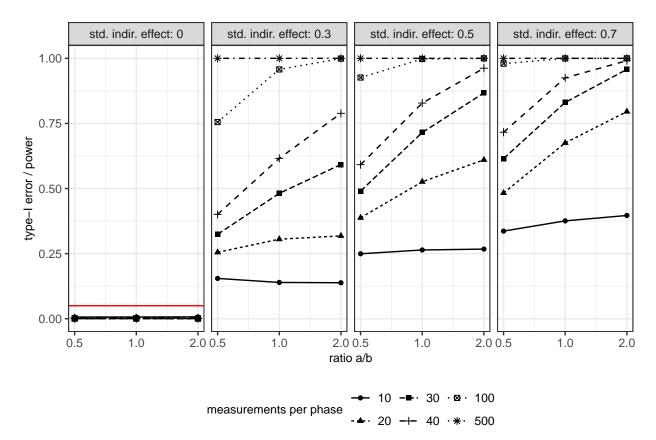
## 7 Median absolute error



# 8 Coverage probability

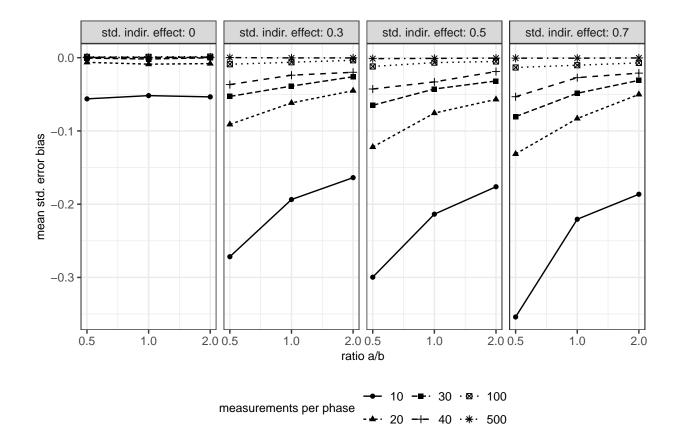


#### 9 Power



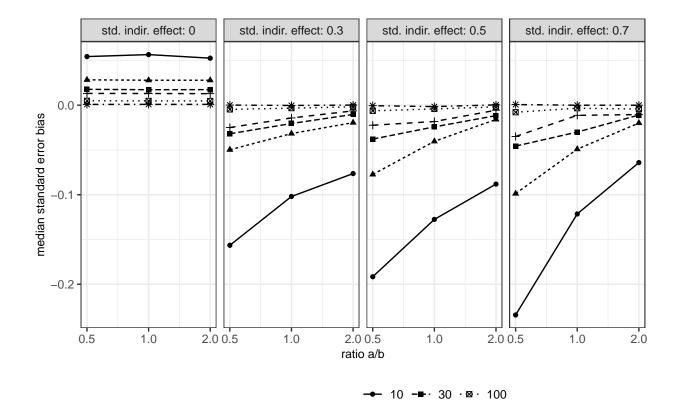
# 10 Standard error bias: Deviation of mean estimated standard error from empirical standard error (standard deviation of point estimates)

Note: Positive value indicates that the estimated standard error is graeter than the true standard error (which is estimated through the standard deviation of the point estimates).



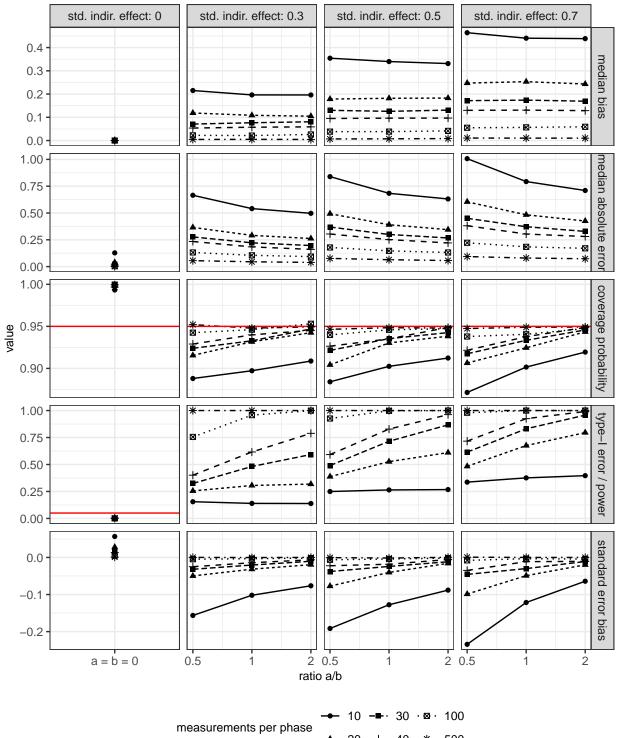
# 11 Standard error bias: Deviation of median estimated standard error from empirical standard error (MAD of point estimates)

Note: Positive value indicates that the estimated standard error is graeter than the true standard error (which is estimated through the MAD of the point estimates).



measurements per phase

#### 12 Median based results



#### 13 Mean based results

