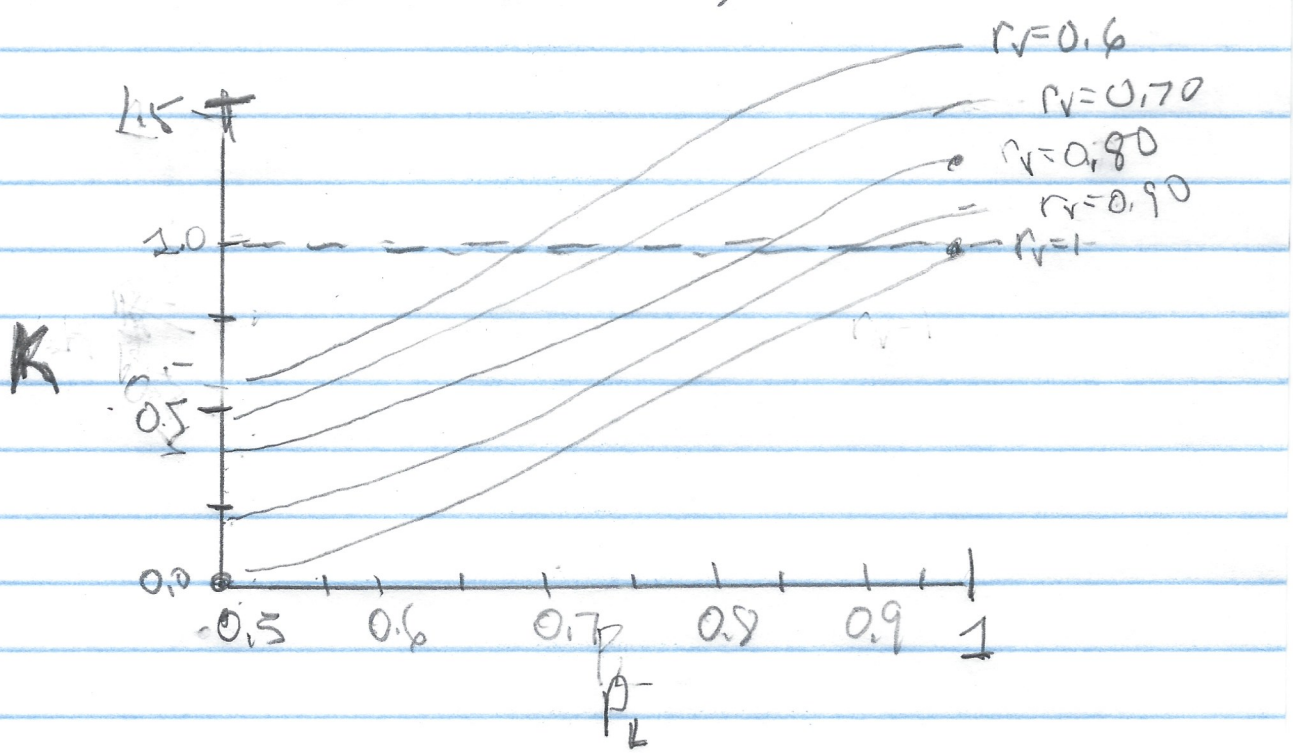
FIGURE: Relationship of Bias factor $K = R^+/R$ Linkage probability ($p_L$) and Vaccination reporting probability [$p(v^+) = 0.5$, $R = 0.25$]



① Simulation Results

$P(V) = 0.75$ $\quad r_D = 0.90$ $\quad r_V = 0.90$

| $\bar{\hat{R}}$ | $SD(\hat{R})$ | % simulations that $\hat{R}^* > \hat{R}$ | % simulations that $\hat{R}^* > \hat{R}$ |
|---|---|---|---|

$R = 1$

$P_L = 0.95$

$P_L = 0.90$

$P_L = 0.70$

$R = 0.25$

$P_L = 0.95$

$P_L = 0.9$

$P_L = 0.7$

Note: $\hat{R} = \dfrac{n_{VD}/N_V}{n_{\bar{V}D}/n_{\bar{V}}}$ $\qquad \hat{R}^* = \dfrac{n^*_{VD}/N^*_V}{n^*_{\bar{V}D}/N^*_{\bar{V}}}$

② Simulation results

$P(V) = 0.75$, $r_D = .7$ $\quad r_V = 0.9$

③ Errors in N

$N \sim$ Normal ($11 \times 10^6$, $SD = 1.1 \times 10^6$)

$P(V) = 0.75$ $\quad r_D = 0.9$ $\quad r_V = 0.90$