

$$\begin{matrix} A \\ Y_A = 21 \\ T_A = 1 \end{matrix}$$

$$\begin{matrix} B \\ Y_B = 11 \\ T_B = 0 \end{matrix}$$



$$\begin{matrix} C \\ Y_C = 9 \\ T_C = 0 \end{matrix}$$

$$\begin{matrix} D \\ Y_D = 5 \\ T_D = 1 \end{matrix}$$

I don't know about the individual causal effects. BUT I can help you TEST your ideas / HYPOTHESES about them.

① Idea/ $H_0$ :  $Y_i(1) = Y_i(0)$

②  $H_0$  implies  $Y_i = Y_i(0)$

③  $H_0$  and Randomization imply 6 equally likely  $\pm(T, Y)$  values.

$i$	$T$	$Y$	$Y(T=1)$	$Y(T=0)$	Effect ( $\tau$ )
A	1	21	21	21	$21 - ? = \tau_A$
B	0	11	?	11	$? - 11 = \tau_B$
C	0	9	?	9	$? - 9 = \tau_C$
D	1	5	5	5	$5 - ? = \tau_D$

In this experiment, "No effects" means

$i$	$\tilde{T}_1$	$\tilde{T}_2$	$\tilde{T}_3$	$\tilde{T}_4$	$\tilde{T}_5$	$\tilde{T}_6$
A	1	1	1	0	0	0
B	0	1	0	1	1	0
C	0	0	1	1	0	1
D	1	0	0	0	1	1

D 3 9 7 -3 -7 -9

$\pm(T, Y)$   
no effects