

This time:
 foundations
 next time:
 combinatorics

$$p(DP) = \frac{36}{326} = 11.1\%$$
 (STAT 131)
 9 Apr 20
 (lecture) ①

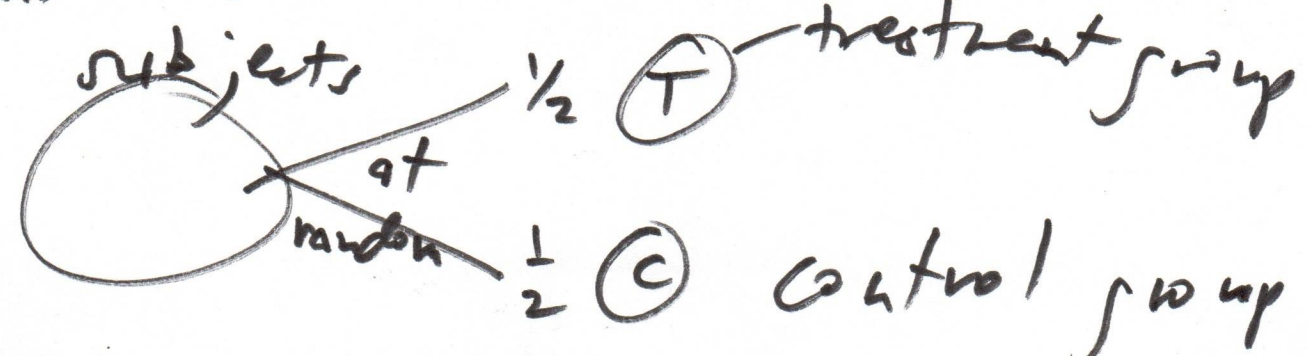
$$P(DP|DW) = \frac{19}{160} = 11.9\%$$
 defendant white

DP & race
 dependent
 but not
 strongly
 so

$$P(DP|DB) = \frac{17}{166} = 10.2\%$$
 def. block
 (strange)

outcome (Y): $\begin{cases} 1 & \text{if DP} \\ 0 & \text{not} \end{cases}$
 "treatment" (X): $\begin{cases} 1 & \text{if } B \text{ (T)} \\ 0 & \text{not (C)} \end{cases}$

randomized controlled trial (RCT)



observational study: subjects choose which of $\textcircled{1}$, $\textcircled{2}$ groups receive, instead of investigator choosing ⁽²⁾

yes, this is an obs. study

def.

third variable

$\textcircled{1}$

is a PCF if it's plausible that

(potential)

$\textcircled{1}$

$\textcircled{1}$, $\textcircled{2}$ are

confounding factor

associated (dependent)

(PCF)

$\textcircled{1}$ $\textcircled{2}$

$\textcircled{1}$, $\textcircled{2}$ are

associated

(dependent)

$\textcircled{1}$: (race of victim)

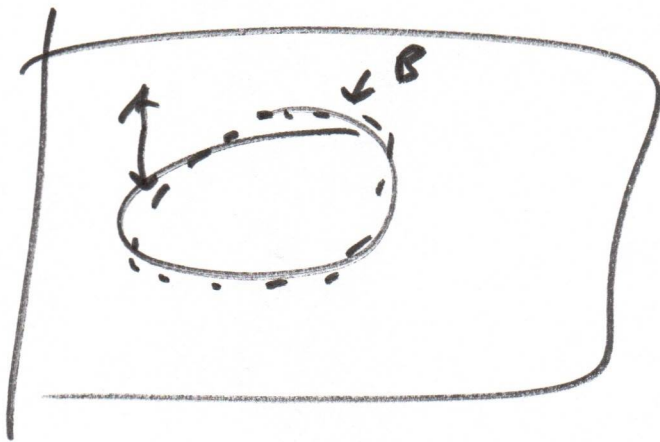
1 if VB (victim)
0 not VB

to defeat a PCF at analysis (3)

here, hold it constant.

⊢ Axiom 3 is equivalent
intuitively to the following

idea:



Intuitive
Axiom 3'

if $A = B$ then $P_K(A) = P_K(B)$

(continuity of $P_K(\cdot)$)
