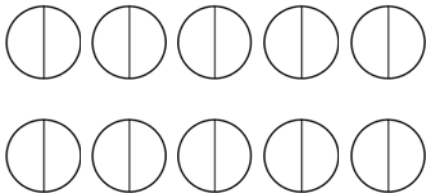
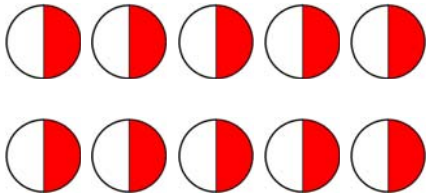
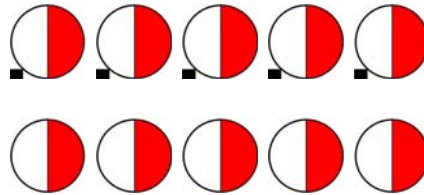


Observational Study: Cohort

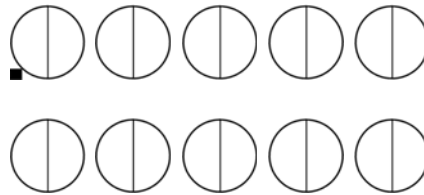
Starting



After 10 years



5 black



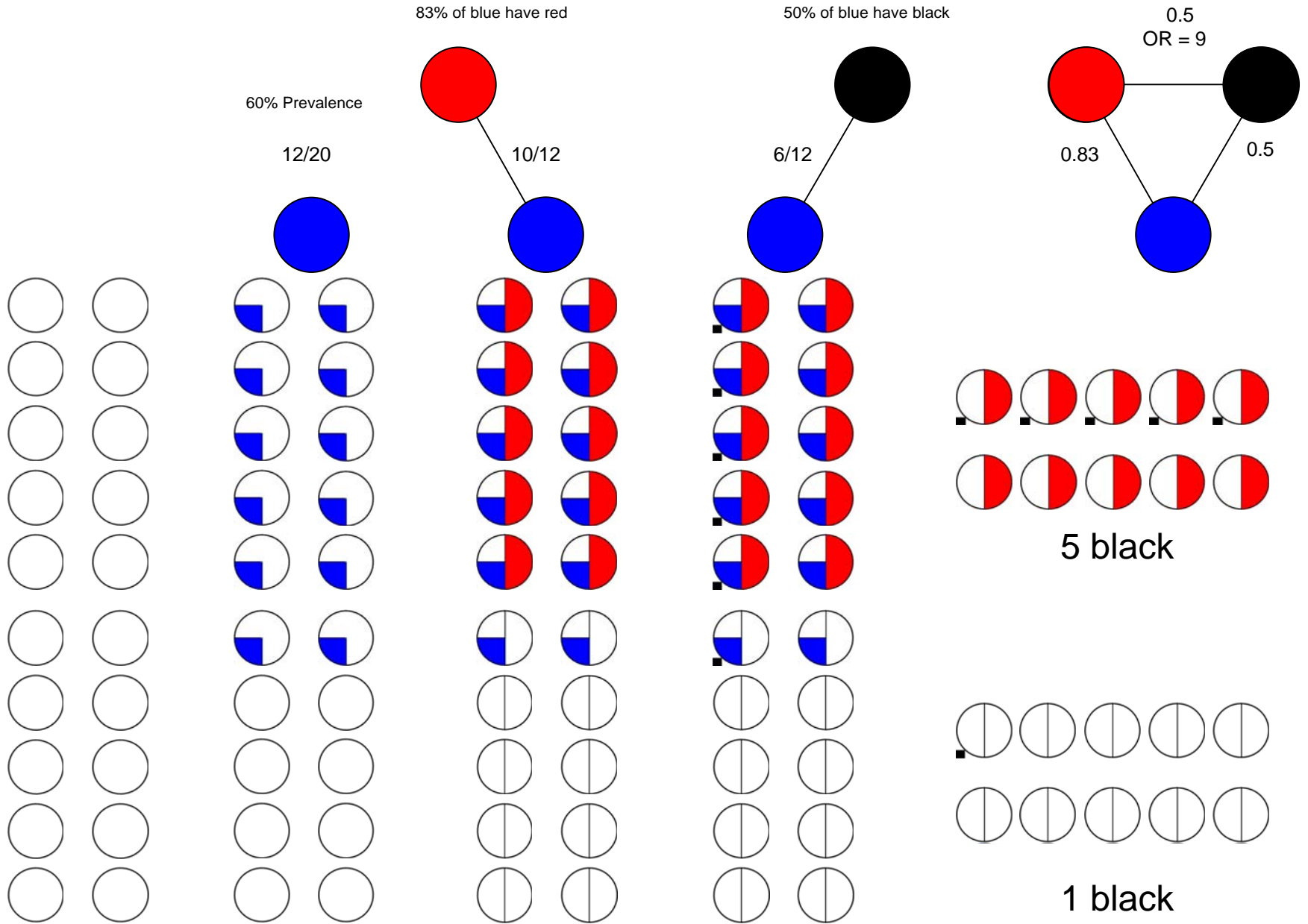
1 black

red	black		Total
	yes	no	
yes	5 50%	5 50%	10 100%
no	1 10%	9 90%	10 100%
Total	6 30%	14 70%	20 100%

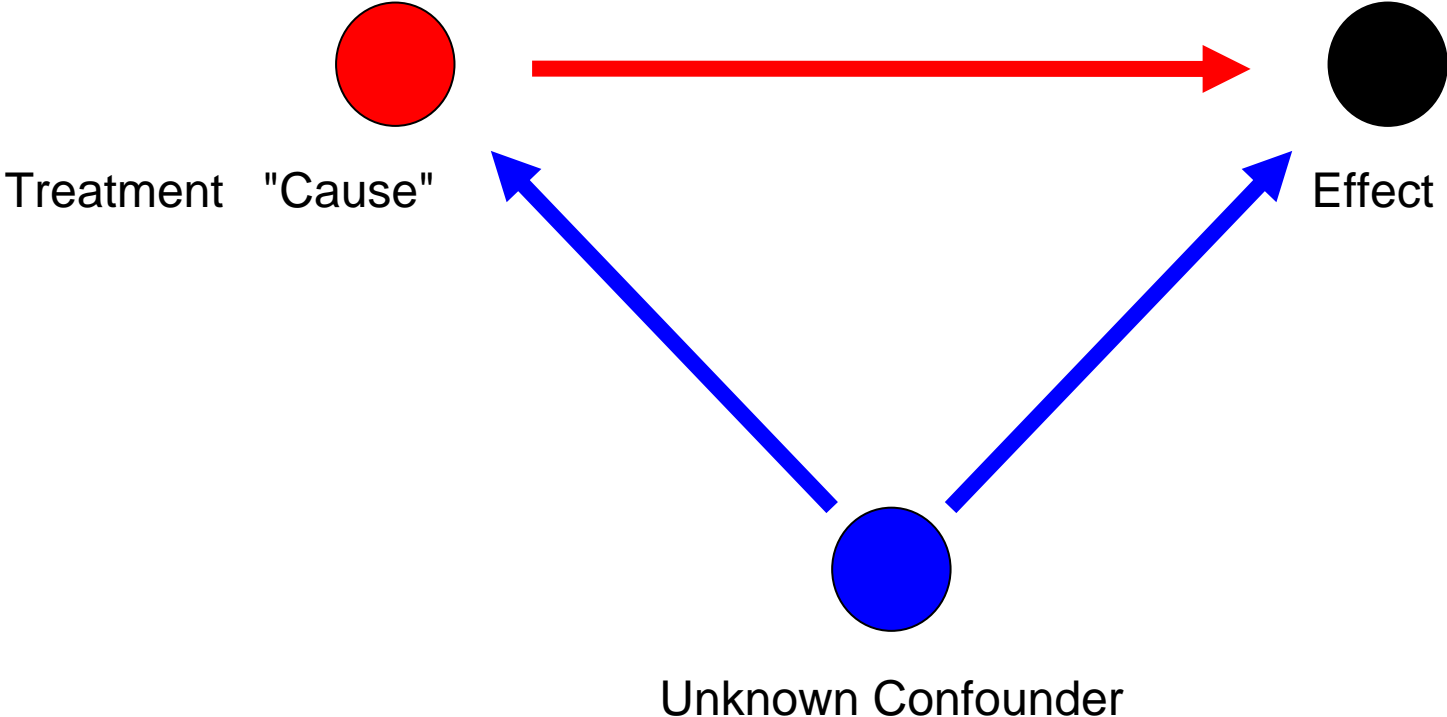
Pearson chi2(1) = 3.8095 Pr = 0.051
Odds ratio = 9.0000

Conclusion:
red is associated with black
red is "causing" black

Observational Study: Behind the Scene



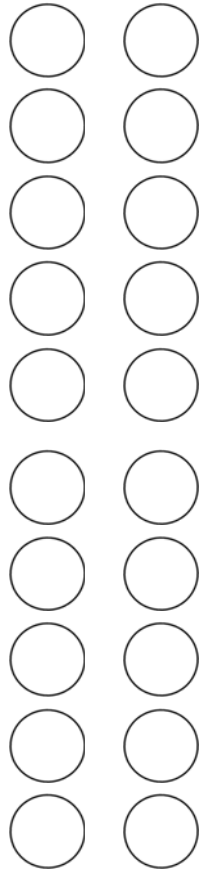
Observational



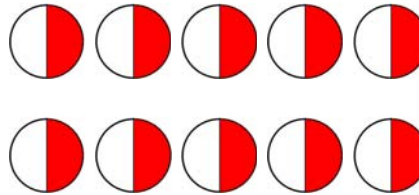
Experimental Study: Randomized trial

Randomized allocation

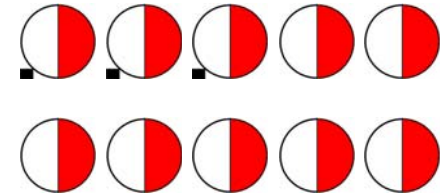
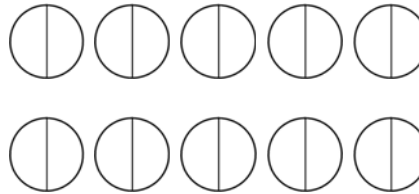
Visible result



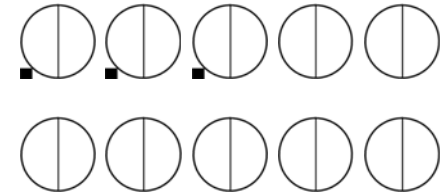
do red !



don't do red !



3 black



3 black

Experimental Study: Randomized trial

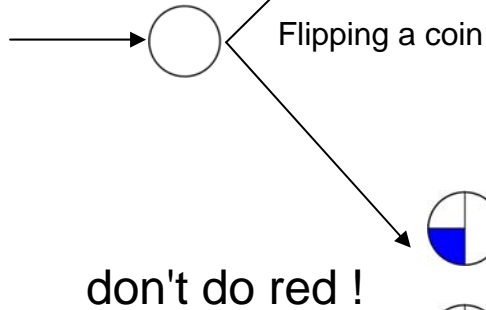
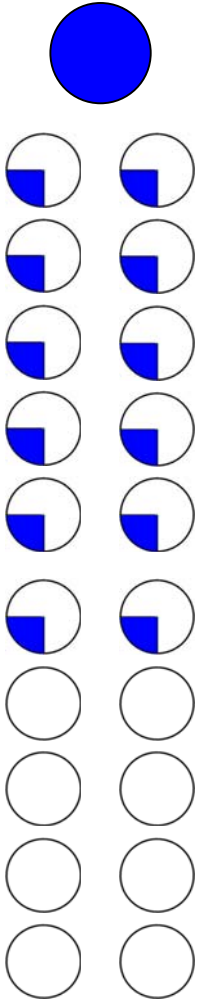
60% Prevalence

12/20

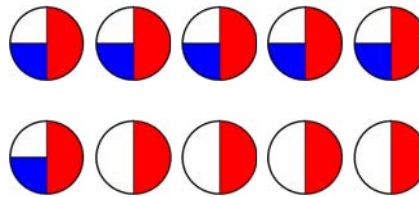
Randomized allocation

Behind the scene

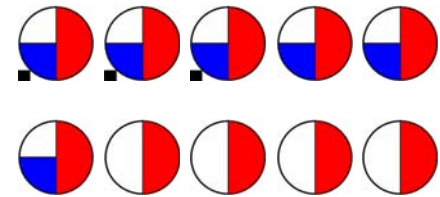
Visible result



Blue now distributed 6 and 6

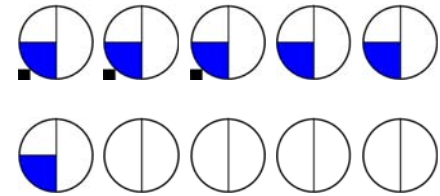
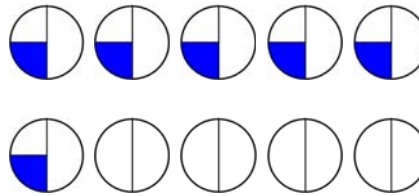


50% of blue become black



3 black

don't do red !



3 black

Experiment

