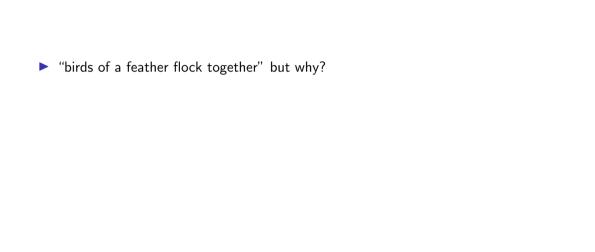
## Class 16: Experimental studies of contagion

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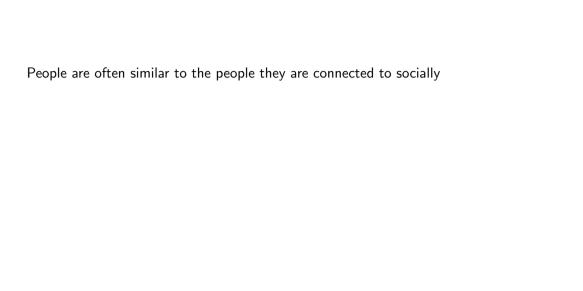
1/3 Background





<b>•</b>	"birds of a feather flock together" but why?
•	Experiments are powerful ways to isolate and estimate causal effects

- "birds of a feather flock together" but why?
- Experiments are powerful ways to isolate and estimate causal effects
- Experiments are powerful but not perfect: internal validity, external validity, and ethics



selection (like people become friends)

- selection (like people become friends)
- shared environment

- People are often similar to the people they are connected to socially
- selection (like people become friends)
- shared environment
- contagion

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For some traits, selection dominates (e.g., gender).

- selection (like people become friends)
- shared environment
- contagion

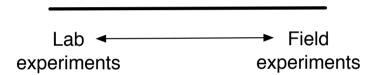
For some traits, selection dominates (e.g., gender). For other traits, all might be at work.

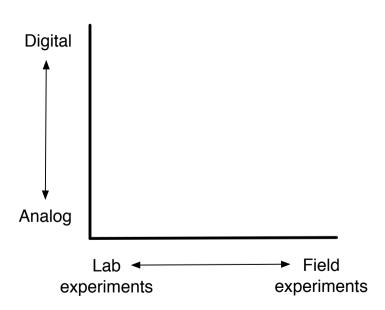
- "birds of a feather flock together" but why?
- Experiments are powerful ways to isolate and estimate causal effects
- ► Experiments are powerful but not perfect: internal validity, external validity, and ethics

"It's like you don't harass women, you don't steal, and you've got to have a control group. This is one of the things that you can lose your job for at Harrah's not running

a control group." Gary Loveman, CEO Harrah's

It is hard to make causal claims without an experiment, as both papers describe. Pa of the contribution of each paper is to bring experimental evidence. Here we saw tw field experiments.	



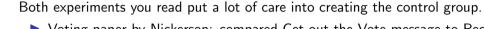


recruiting participants

- recruiting participants
- randomization treatment

- recruiting participants
- randomization treatment
- delivering treatment and control

- recruiting participants
- randomization treatment
- delivering treatment and control
- measuring outcomes



▶ Voting paper by Nickerson: compared Get-out-the-Vote message to Recycling

message

Both experiments you read put a lot of care into creating the control group.

- ▶ Voting paper by Nickerson: compared Get-out-the-Vote message to Recycling message
- ► Emotional contagion paper by Kramer et al.: a control group for positivity reduced condition and a control group for negatively reduced condition because of different base rates (e.g., 22.4% of posted had negative words, 46.8% had positive words)

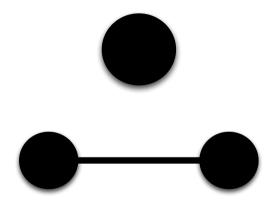
Perturb and observe experiments vs randomized controlled experiments

A note on terminology:

These experiments move from the individual to the dyad.



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You saw internal validity and external validity were categories to organize concerns. Explicit in Nickerson study on voting; implicit in Kramer et al. study of emotions

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Given that common background let's dive in