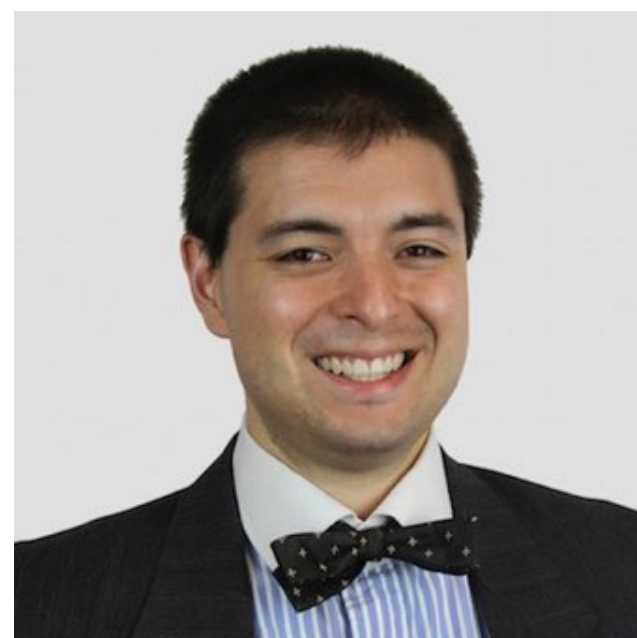# Context, Structure, Mechanisms In Experiment Design (SOC 412)

Week 7 Lecture 11

Sherrerd Hall 306

J. Nathan Matias

@natematias

civilservant.io

jmatias@princeton.edu

Department of
Psychology
PRINCETON
UNIVERSITY

CITP

mit media lab

Team Updates

Weekly (Friday 5pm)

Try not to spend more than 15 minutes writing it, during a regular team meeting

Format: described in "Logistics" in the syllabus

Team Presentations

Total slots: 8:

Present with a team-mate.

Presenters per talk: 2

First presentation: next Tuesday

Sign up link: http://bit.ly/2URtb9L

Format: described in "Logistics" in the syllabus

Presentation Outline

Title Page

Motivating question

Context - what was the setting & issue?

Theory - what did they expect and why?

Intervention - what did they test?

Design - how did they construct the study?

Findings

Full Cycle Social Psychology

Silos: Lab Experiments and Field Experiments - these methods have complementary strengths & weaknesses

There could be an A/B testing risk similar to the risks from just doing lab experiments…

Changing Climates of Conflict:
A Social Network Experiment in 56 Schools

Elizabeth Levy Paluck, Hana Shepherd,
Peter M. Aronow

Paluck, E. L., Shepherd, H., & Aronow, P. M. (2016). **Changing climates of conflict: A social network experiment in 56 schools.** *Proceedings of the National Academy of Sciences*, *113*(3), 566-571.

Week 7: Context, Structure, Mechanisms In Experiment Design

Motivating Questions

- How do individual changes in behavior spread through networks to affect community-wide behavior?

- Which community members are effective at influencing beliefs about typical and desirable behavior (social norms) and through that, behavior?

Paluck, E. L., Shepherd, H., & Aronow, P. M. (2016). **Changing climates of conflict: A social network experiment in 56 schools.** *Proceedings of the National Academy of Sciences*, *113*(3), 566-571.

Week 7: Context, Structure, Mechanisms In Experiment Design

Context

- 2011: New Jersey passes an anti-bullying law that requires bullying tracking & bullying reduction interventions

- Few studies had systematically-tested the effects of conflict reduction initiatives

- Paluck, Shepherd, Aronow have an opportunity

Gilpin, Donald. (2016) **Princeton University Study Proposes Peer Intervention to Combat Bullying.** Princeton Magazine.
Paluck, E. L., Shepherd, H., & Aronow, P. M. (2016). **Changing climates of conflict: A social network experiment in 56 schools.** *Proceedings of the National Academy of Sciences, 113*(3), 566-571.

Context

- Middle and secondary schools in New Jersey (grades 5-8)

- "In contrast to claims that conflict is driven by a minority group of student 'bullies'(36), evidence suggests a majority of students contribute to conflicts at their school (37), and these conflicts persist overtime because of cyclical patterns of offense and retaliation (38)"

Paluck, E. L., Shepherd, H., & Aronow, P. M. (2016). **Changing climates of conflict: A social network experiment in 56 schools.** *Proceedings of the National Academy of Sciences, 113*(3), 566-571.

Theory

- Influencing behavior by influencing **social norms** (beliefs about what is typical/desirable)

- **Referents**: groups or individuals that are important sources of normative information

Paluck, E. L., Shepherd, H., & Aronow, P. M. (2016). **Changing climates of conflict: A social network experiment in 56 schools.** *Proceedings of the National Academy of Sciences*, *113*(3), 566-571.

Intervention

- Schools & seed groups: within 728 seed groups of up to 64 students, 50% were invited into an anti-conflict intervention

- Within seed groups, an RA helped students identify conflict behaviors, and develop "grassroots campaigns" "in which students took the lead and customized the intervention to address the problems"

Paluck, E. L., Shepherd, H., & Aronow, P. M. (2016). **Changing climates of conflict: A social network experiment in 56 schools.** *Proceedings of the National Academy of Sciences, 113*(3), 566-571.

Design

- Random assignment to schools

- Measured the network of "social referents"

- Randomly assigned students to seed groups with different numbers of social referents

- Opt-out consent of school students

- Opt-in consent of seed group students

- Recorded & vetted reports of conflict

Paluck, E. L., Shepherd, H., & Aronow, P. M. (2016). **Changing climates of conflict: A social network experiment in 56 schools.** *Proceedings of the National Academy of Sciences, 113*(3), 566-571.

Findings

- Between-school effects:

  - 25% reduction in disciplinary reports related to bullying

  - More social referents in the seed group caused more of a reduction in bullying

- Students exposed to social referents changed perceptions about conflict norms but not disciplinary reports per student

Paluck, E. L., Shepherd, H., & Aronow, P. M. (2016). **Changing climates of conflict: A social network experiment in 56 schools.** *Proceedings of the National Academy of Sciences*, *113*(3), 566-571.

Wider Issue: Consent & Accountability

- State Legislature (passed the law)

- 3 University IRBs

- School boards & school administrators

- Opt out consent with parents of all students

- Opt in consent for seed group participants

Paluck, E. L., Shepherd, H., & Aronow, P. M. (2016). **Changing climates of conflict: A social network experiment in 56 schools.** *Proceedings of the National Academy of Sciences, 113*(3), 566-571.

Social Media Question Assignment

Receive Code and data

- analyze the results of yours (or someone else's experiment)

- make a chart of the effect, with example code

- fill in the debriefing note you wrote for the previous class and re-submit