

# **CHAPTER 1 - SCIENCE, SOCIETY, AND**

# **WHAT DO YOU BELIEVE ARE THE CASUES OF POLICE BRUTALITY?**

# REASONING ABOUT THE SOCIAL WORLD

- Criminology and criminal justice is a type of *social science* research.
- What types of problems are studied in criminology and criminal justice research?

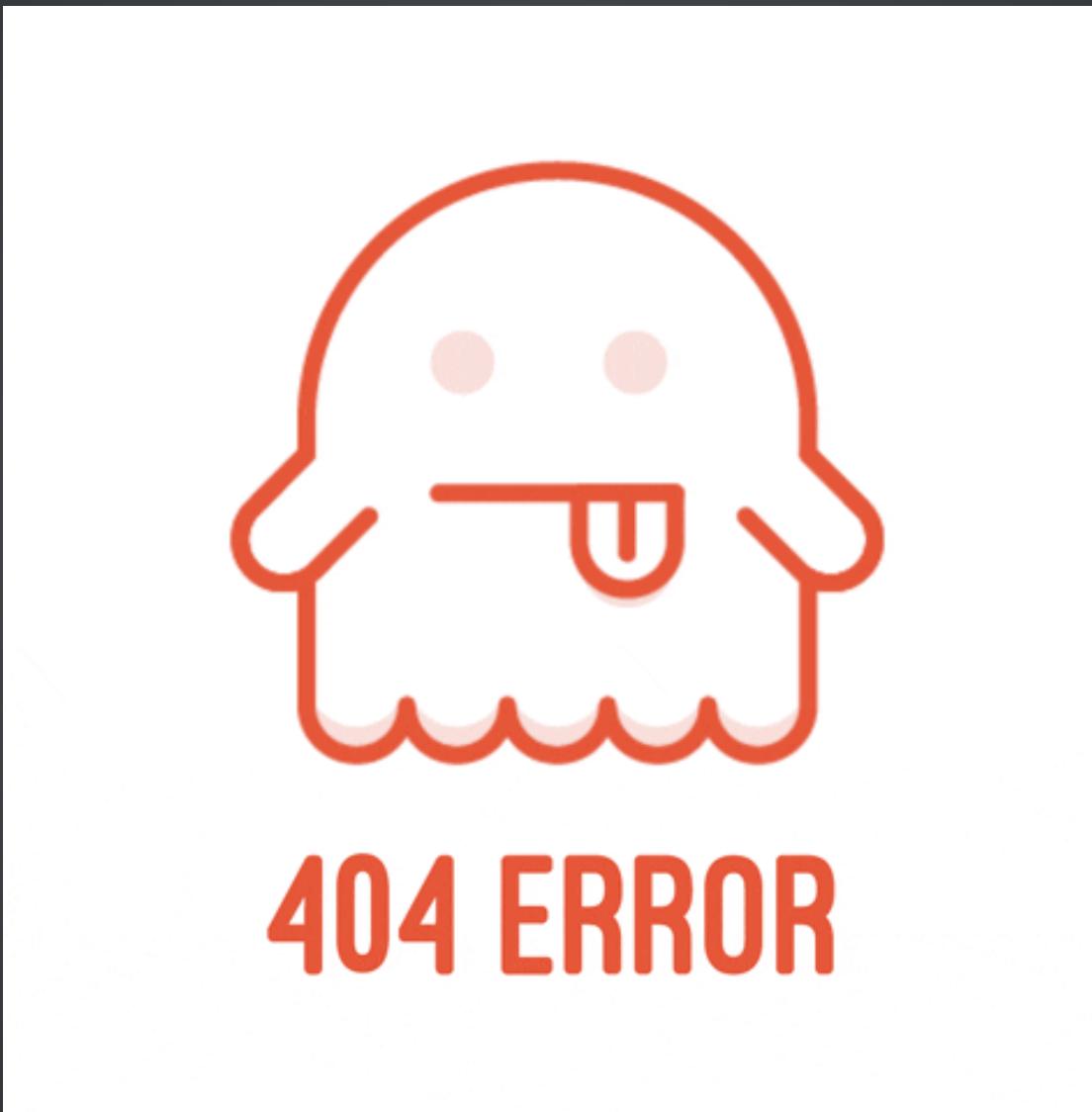
# WHAT IS REASONING?

- Can you name some examples?



(image: purePNG.com)

# BUT WHAT HAPPENS WHEN THIS PROCESS BREAKS DOWN?



(image: giphy.com)

**WHICH BRINGS US TO OUR DISCUSSION TOPIC TODAY!!!**

# **Everyday Errors in Reasoning**

- *spooky vibes*

# EVERYDAY ERRORS IN REASONING

## OVERGENERALIZATIONS

- Concluding that what we have observed or what we know to be true for *ONE* observation, to be true for *ALL* observations.
- Examples:
  - “*Everyone* from that ethnicity is a certain way.”
  - “*All* politicians are corrupt.”
  - “This Chipotle is *always* closed!”
- Why do you think we make these errors?

# EVERYDAY ERRORS IN REASONING

## SELECTIVE OR INACCURATE OBSERVATIONS

# EVERYDAY ERRORS IN REASONING

## ILLOGICAL REASONING

- This occurs when a person prematurely jumps to conclusions or argues on the bases of an invalid or unsupported assumptions.
- Example:
  - Ice cream sales are the highest when homicide rates are the highest. Therefore, ice cream sales causes high homicide rates.
  - Instead, homicide rates are highest during seasons of warmer temperatures, like ice cream sales.

# EVERYDAY ERRORS IN REASONING

## RESISTANCE TO CHANGE



(image: The Boston Globe)

# EVERYDAY ERRORS IN REASONING

## RESISTANCE TO CHANGE

What are some reasons we are resistant to change?

- Ego-based commitments
- Excessive devotion to tradition
- Uncritical agreement with authority

CAN WE AVOID THESE EVERYDAY **ERRORS** IN REASONING?



(image: giphy.com)

**WE USE THE SCIENTIFIC APPROACH!**

# THE SCIENTIFIC APPROACH



(image: Public Domain)

# THE SCIENTIFIC APPROACH

## SCIENCE VS PSEUDOSCIENCE

“The reliability of bloodstain-pattern analysis has never been definitively proven or quantified, but largely due to the testimony of criminalist Herbert MacDonell, it was steadily admitted in court after court around the country in the 1970s and '80s.” (*Propublica*, 2023)

Click [here](#).

# THE SCIENTIFIC APPROACH

## WHY WE DO CRIMINOLOGY RESEARCH?

### Policy motivations

- Do we need to find another way to address a problem?
- Are we using our funds efficiently?
- For example, lets consider the police brutality problem...
  - What policies could be implemented to reduce or prevent incidents like the murder of George Floyd?
  - [Click here.](#)

# THE SCIENTIFIC APPROACH

## WHY WE DO CRIMINOLOGY RESEARCH?

### Academic motivations

- Learn more about complex social phenomena to better understand crime and society's response to it.
- Understand mechanisms: why does this phenomena occur the way it does?



(image: Public Domain)

# THE SCIENTIFIC APPROACH

## WHY WE DO CRIMINOLOGY RESEARCH?

### Personal motivations

- Solving problems of personal interest.

# RECAP

## WHAT DID WE LEARN LAST LECTURE?

- What is Reasoning?
- The Types of Everyday Errors in Reasoning
- The Scientific Approach to Reasoning

# THE SCIENTIFIC APPROACH

## SOCIAL CRIMINOLOGICAL RESEARCH IN ACTION

### Descriptive research

- Not interested in explaining some phenomenon, just in *describing* its prevalence or its qualities.
- Measurement and sampling are central concerns when doing descriptive research.
- For example,
  - National Crime Victimization Survey (NCVS)

# THE SCIENTIFIC APPROACH

## SOCIAL CRIMINOLOGICAL RESEARCH IN ACTION

### Exploratory research

- Seeks a better understanding of some phenomena, without expectations going in.
- Seeks out questions like, *what's going on here?*
- For example, how do police officers feel about protests against police brutality?

# THE SCIENTIFIC APPROACH

## SOCIAL CRIMINOLOGICAL RESEARCH IN ACTION

### Explanatory research

- Seeks to explain the relationship between two or more variables
- For example, subject race and police brutality.

# THE SCIENTIFIC APPROACH

## SOCIAL CRIMINOLOGICAL RESEARCH IN ACTION

### Evaluation research

- Do social programs/interventions work as intended?
  - For example, does D.A.R.E. reduce adolescent drug use?

The screenshot shows a digital journal article from the *Am J Public Health*. The article is titled "Project D.A.R.E. Outcome Effectiveness Revisited" by Steven L. West, PhD and Keri K. O'Neal, PhD. It includes a brief abstract, objectives, methods, results, and conclusions. The journal's logo and name are visible on the left margin.

Am J Public Health. 2004 June; 94(6): 1027–1029.  
doi: [10.2105/ajph.94.6.1027](https://doi.org/10.2105/ajph.94.6.1027)

Project D.A.R.E. Outcome Effectiveness Revisited  
Steven L. West, PhD and Keri K. O'Neal, PhD  
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**Abstract** Go to: ►

**Objectives.** We provide an updated meta-analysis on the effectiveness of Project D.A.R.E. in preventing alcohol, tobacco, and illicit drug use among school-aged youths.

**Methods.** We used meta-analytic techniques to create an overall effect size for D.A.R.E. outcome evaluations reported in scientific journals.

**Results.** The overall weighted effect size for the included D.A.R.E. studies was extremely small (correlation coefficient = 0.011; Cohen d = 0.023; 95% confidence interval = -0.04, 0.08) and nonsignificant ( $z = 0.73$ , NS).

**Conclusions.** Our study supports previous findings indicating that D.A.R.E. is ineffective.

# STRENGTHS AND LIMITATIONS OF SOCIAL RESEARCH

- Research will *always* have flaws and limitations.
- Findings are *always* subject to differing interpretations.
- The important points are:
  - What does the evidence suggest at this moment in time?
  - Does our conclusion contain any **errors in reasoning?**

# TYPES OF RESEARCH METHODS

## QUANTITATIVE METHODS



(image: San Marcos Academy)

# TYPES OF RESEARCH METHODS

## QUANTITATIVE METHODS

- Utilize surveys and experiments.
  - For example, A survey is given to participants in an experiment that has two conditions (A or B)
    - Group A has a new feature on an phone application.
    - Group B has the existing feature

# TYPES OF RESEARCH METHODS

## QUANTITATIVE METHODS

The psychopath and low-resting heart rate



(image: Wikipedia)

# TYPES OF RESEARCH METHODS

## QUALITATIVE METHODS



(image: Rev)

# TYPES OF RESEARCH METHODS

## QUALITATIVE METHODS

- Utilize participant observation, interviewing, ride alongs, and focus groups.
  - For example,
    - A researcher would ask what the new user of phone application thought and felt about it.
    - Paying attention to not only the responses but the body language and other expressions.

# TYPES OF RESEARCH METHODS

## QUALITATIVE METHODS

### American Policing and the Danger Imperative

*Sierra-Arévalo, Michael.* "American Policing and the Danger Imperative." *Law and Society Review*. Accepted for Publication on November 20, 2020.

43 Pages • Posted: 10 Nov 2016 • Last revised: 23 Nov 2020

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Date Written: November 20, 2020

#### Abstract

In spite of long-term declines in the violent victimization of U.S. police officers, the danger of police work continues to structure police socialization, culture, and behavior. Existing research, though attentive to police behavior and deviance that negatively affects the public, analytically ignores how the danger of policing engenders officer behavior that harms police themselves. Drawing on ethnographic observations and interviews in three U.S. police departments, this article describes how police are informally and formally socialized into the danger imperative—a cultural frame that emphasizes violence and the need for officer safety—and its effect on officer behavior. As a result of perception mediated through the danger imperative, officers engage in policy-compliant and policy-deviant behaviors to protect themselves from violence. Unfortunately, policy-deviant behaviors such as unauthorized high-speed driving and not wearing a seatbelt, though justified in the name of safety, lead to catastrophic car accidents that injure and kill both police and members of the public. This article concludes with discussion of how seemingly mundane policy deviant behaviors are a reflection of assumptions within police culture that undergird police practices that damage public wellbeing and perpetuate boarder inequalities in U.S. policing.

**Keywords:** police, social control, deviance, danger, ethnography

[Supporting Citations](#)

# TYPES OF RESEARCH METHODS

## MIXED METHODS



# SOCIAL RESEARCH GOALS

## MEASUREMENT VALIDITY

- This exists when a measure *actually* measures what we think it does.



(image: Quizizz)

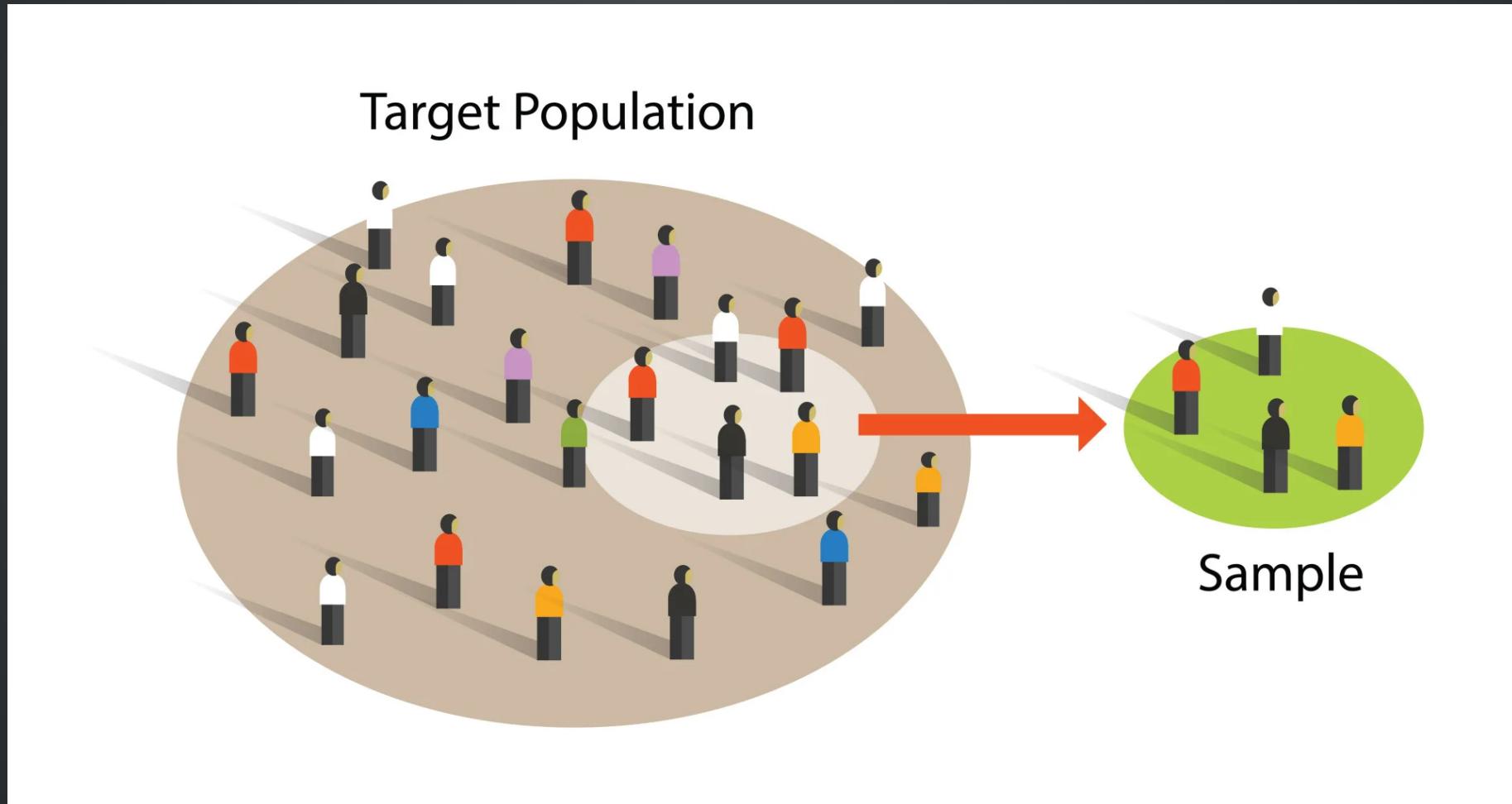
# SOCIAL RESEARCH GOALS

## GENERALIZABILITY

- Sample generalizability
  - When a conclusion based on our **sample** of the larger population holds true for that larger population.
- Cross-population generalizability
  - When a conclusion about one population holds true for another population.

# SOCIAL RESEARCH GOALS

## GENERALIZABILITY



(image: Simply Psychology)

# SOCIAL RESEARCH GOALS

## CAUSAL VALIDITY

- This exist when the conclusion that X causes Y is correct.

# SOCIAL RESEARCH GOALS

## AUTHENTICITY

- This exists when our understanding of a social process or social setting is one that reflects fairly the various perspectives of participants in that setting.

# HAVE A GOOD DAY!



*Have a good day!*

