An Introduction to
Using Crime Data in Active Living Research:
Finding Useful Sources and Avoiding Common Problems

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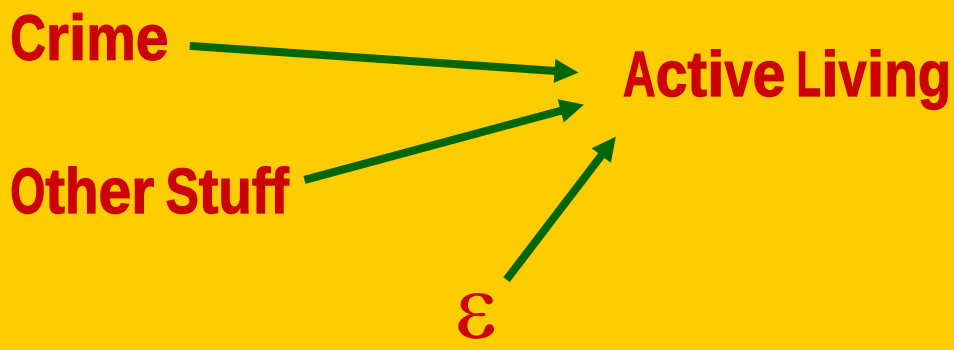
Overview

- **The Situation**
- **The Production of Crime Data**
- **Errors in Police Data**
- **Types of Police Data**
  - ***Reported Crime***
  - ***Calls for Service***
  - ***Arrests***
- **Obtaining Police Data**
- Survey Data
  - *Victimization Surveys*
  - *Fear Surveys*
  - *Environmental Surveys*
- Data from Other Sources
  - *Internal organization counts*
  - *Health agencies*
  - *Animal control*

The Basic Situation

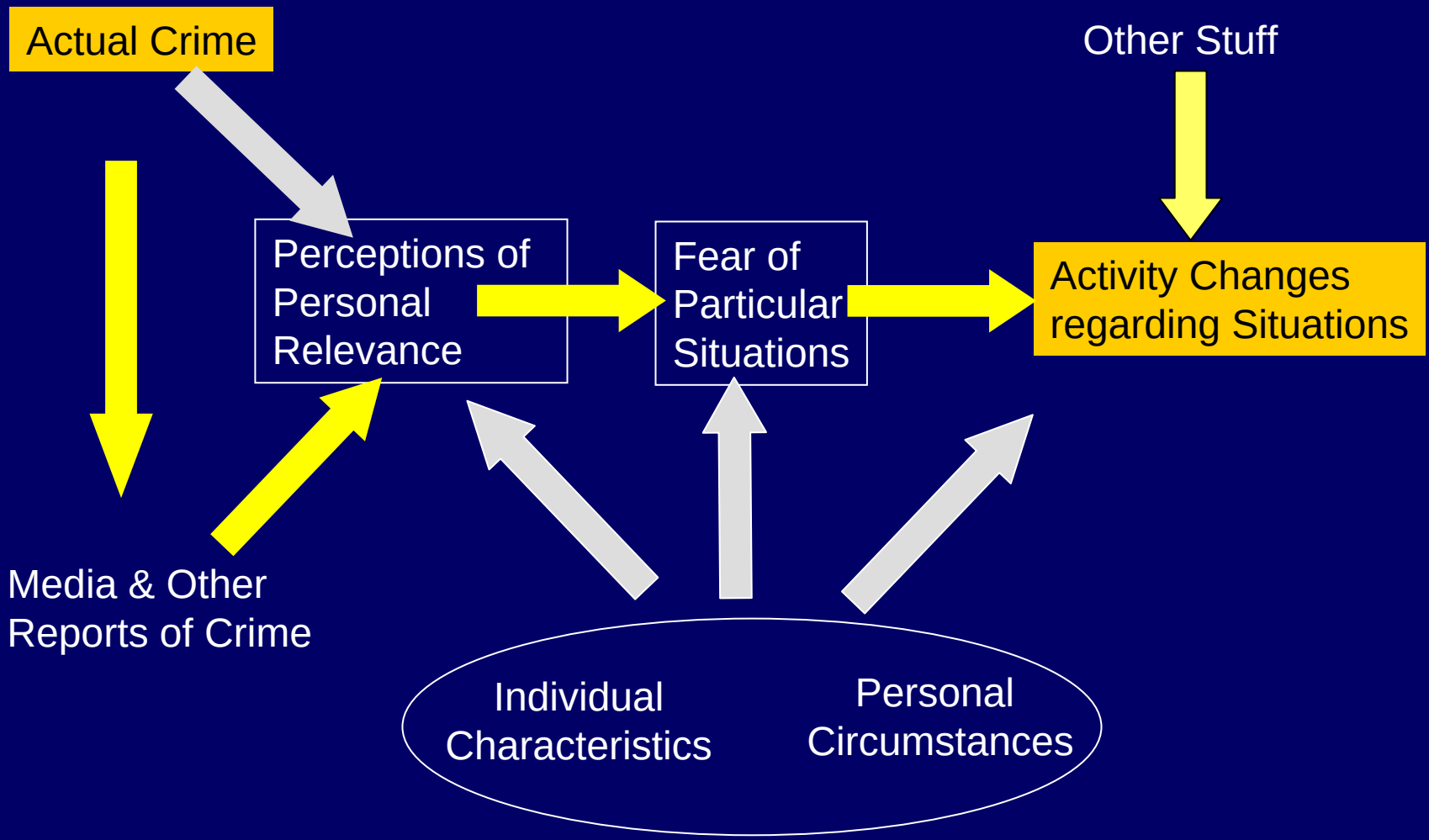
- Indicator of Active Living or Health as Dependent Variable
- Indicators of Crime an Independent Variable
- Temporal and Geographic Boundaries
- Specific Population

For elderly men living in Seattle (June 2, 2007-August 31, 2007)…



The Basic Situation

Crime, Perception, Fear and Behavior



The Basic Situation

What is Important?

Violent
- Homicide
- Sexual Assault
- Other Assault
- Robbery

Property
- Burglary
- Vehicle Theft
- Theft from Vehicle
- Other Thefts

Disorder
- Vandalism & graffiti
- Seemingly unruly youth
- Pan handling
- Other

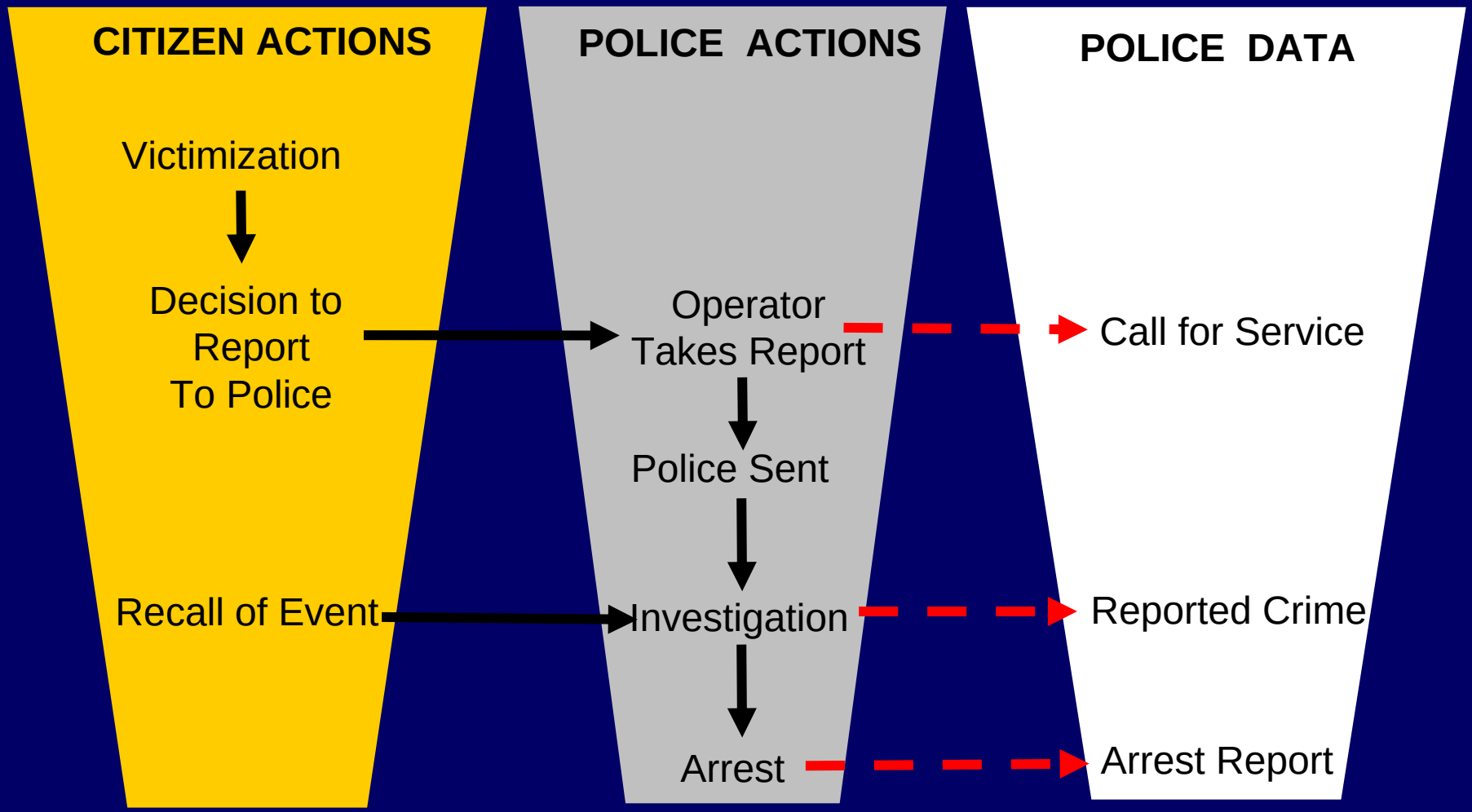
Consensual
- Drug dealing & use
- Prostitution
- Sales of stolen goods
- Other

Production of Police Data

- Reported Crime
- Calls for Service
- Arrests

Production of Police Data

How Many Crimes Turns into Few Data

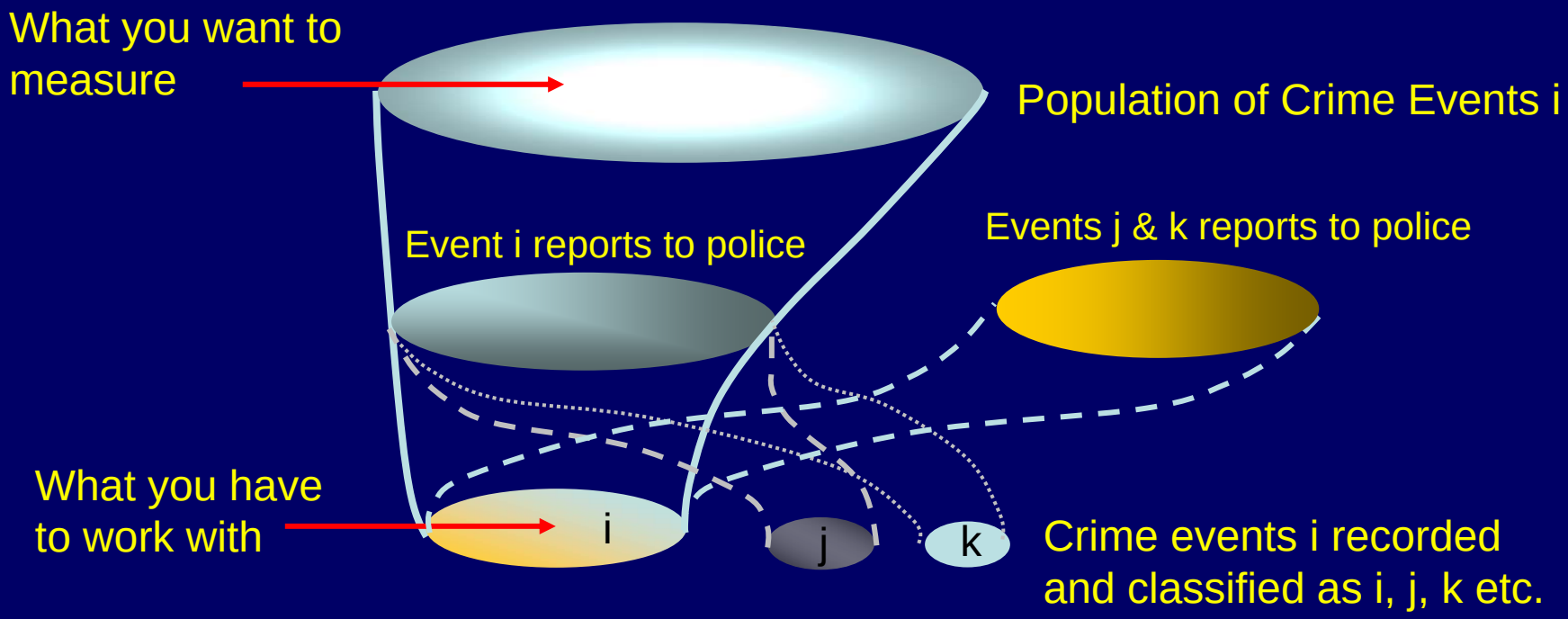


Errors in Police Crime Data

- **All** Crime Data Has Errors (not just police)
- **Few** Errors are Random
- Know the Error Creation Process
- Know the Possible Bias's of Data
- **Do Not** Expect Triangulation to Work
- Errors in Independent Variables are worse than those in Dependent Variables (mostly)

Errors in Police Crime Data

Crime Reporting and Error Creation



Everybody knows the dice are loaded.
Everybody roles with their fingers crossed.

Leonard Cohen "Everybody Knows"

Errors in Police Crime Data

Crime Recording Errors

INFORMATION SOUGHT	DATA DELIVERED
❑ What Behaviors	✓ Legal Categories
❑ Where Occurred	✓ Geocoding errors
❑ When Occurred	✓ Missing or incomplete
❑ How Occurred	✓ Hypothetical
❑ Who Involved	✓ Limited to victim, typically
❑ Other	✓ Variable

Errors in Police Crime Data

Reducing Error Problems

- **Know the source of data** – helps understand degree & direction of bias
- **Restrict research scope** – reduces error variation in situations, populations, time, etc.
- **Conduct sensitivity analysis** – determines how much errors mater
- **Honor minor gods of crime data** – it can't hurt*

*They like micro-brews!

Types of Police Data

TYPE	UNIT of ANALYSIS	DESCRIBES
Reported Crime	Events	Serious offenses
Calls for Service	Events	Mostly minor
Arrests	People	Mixture
Other	Events & People	Mix

Types of Police Data

Reported Crime

- Often Used for Serious Crime – murder, rape, robbery, assault, arson, burglary, vehicle theft, other thefts
- Classification following initial investigation
- Reporting and Recording
- Aggregated Data Lumps Unlike Events – e.g., street assaults and domestic violence

Types of Police Data

Uniform Crime Reports (UCR) Data

- Aggregated Reported Crime
  - FBI "*Crimes Known to the Police*"
- Focuses on Serious Crime: all violent offenses and property offenses like burglary and vehicle theft
  - Hierarchy Rule
  - Misses Cooperative Crimes, Minor Crimes and Disorders

Types of Police Data

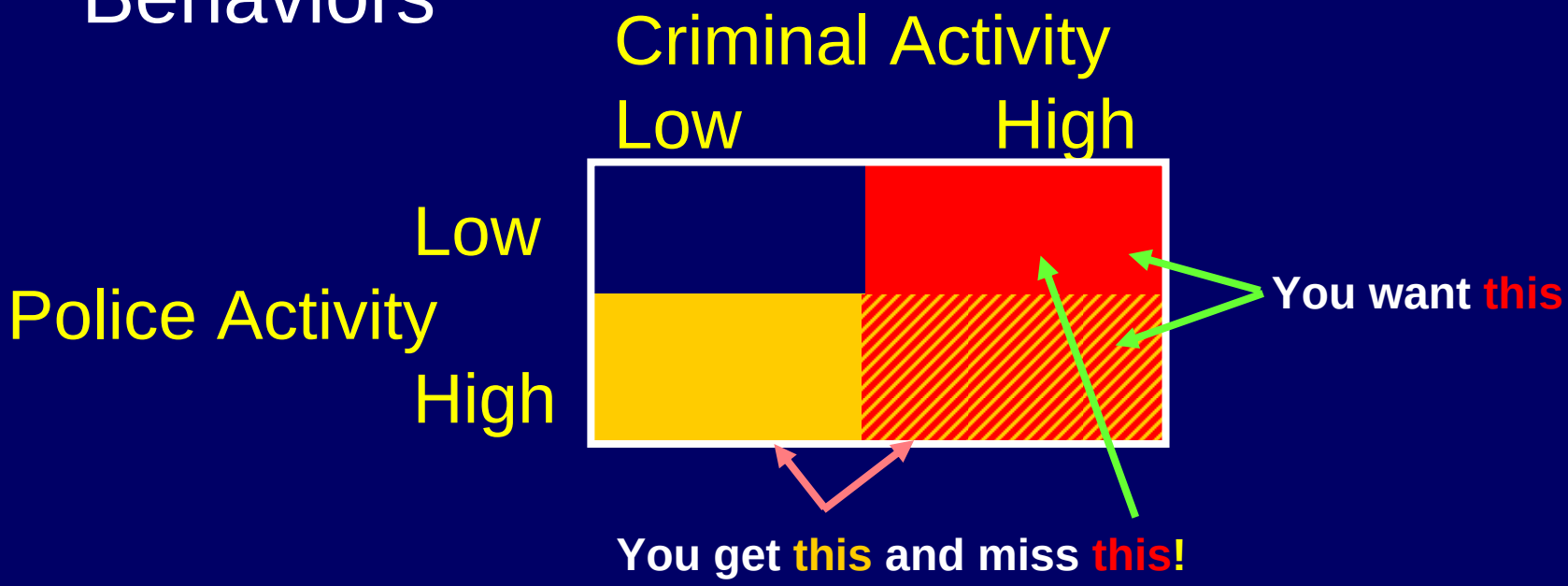
Calls for Service (CfS)

- Often Used for Minor Crimes and Disorder
- Classification Prior to Investigation
- High Volume
- Fine Grained Classification – need the code sheet!

Types of Police Data

Arrests

- Often Used for Consensual Crimes – e.g. drug dealing, prostitution, etc.
- Confounds Police Decisions and Offender Behaviors



Types of Police Data

Other Police Data

- Field Interrogations and Stop Data – describes police stopping and questioning of pedestrians and drivers
- Traffic Accidents – describes vehicle crashes, damages and injuries
- Traffic Enforcement – describe ticketing of motorists
- Special Unit Activities – describes all sorts of things, depending on the unit

Obtaining Data From The Police

Trust is the Issue for Police Agencies

- Your Research is [probably] Not about the Department's Practices or Individual Officers
  - ✓No One Wants to Look Bad, No One Wants to get Burned
- Be Clear about Intended Uses of the Data
  - ✓[Initially] Requesting Large Amounts of Data will Create Apprehension

Obtaining Data From the Police

Turn to a Criminologist !

- Criminology or Criminal Justice Department*
  - ✓Can get it: Existing Contacts
  - ✓May have it: Already Coded
  - ✓Understand it: Interpretations
- Geography Department
  - ✓Geographic Information Systems (GIS) -- Mapping

* Look for a police or crime prevention specialists.
Many criminologists do not deal with police or their data.

Obtaining Data From the Police

Networking for Data

- Use Public/Private Partners (Funders)
- Top Down versus Bottom Up Approaches
  - ✓Try talking to Neighborhood/Community Policing Officer
  - ✓People with Authority versus “Know-How”
- Be willing to give something for something
- The Center for Problem-Oriented Policing

  (www.popcenter.org)

End of Main Presentation

- Supplemental Material Follows on
  - Surveys
  - Other Data Sources

Survey Data

- Victimization Surveys
- Fear Surveys
- Environmental Surveys
- Offender Surveys (probably not applicable)

Survey Data

Victimization Surveys

- Probability Sample of Possible Victims
- Ask if
  - victim of type X,
  - in time window,
  - in geographic area, etc.
- Very Large Samples Needed
  - Personal interviews expensive but high response rates
  - Phone interviews useful, but problems with phone numbers
  - Mail cheap but dismal responses (<60% questionable)
- Repeat victimization
- Cross-sectional
- Limited Questions
- Only Victim's Information—subject to recall error

Survey Data

Fear Surveys

- Probability Sample of Sensitive Population
- Best if Mental Constructs Important
- Ask about
  - prior crime experiences
  - perceived risk
  - concerns about crime
  - actions to avoid crime
  - behavioral restrictions
- Moderate Size Samples Possible
- Cross sectional, but...
- Debate about How to Interpret Fear
- Actual behavior v Reported Behavior

Survey Data

Environmental Surveys

- Identify population of place types (e.g., parks)
- Visit and record information on
  - signs of crime,
  - disorder & upkeep,
  - usage & behaviors,
  - types of users,
  - physical layout & features
- Crime Measures Indirect
- Moderate Size Samples
- Cross sectional

Data from Other Sources

- Repair Records from Parks
- Private Security of Businesses
- Customer Counts & Sales Records of Stores
- Intentional Injury Reports from Hospitals
- Reports of Animal Problems
- many many many more ...

The Basic Situation

Crime, Perception, Fear and Behavior