

NEW MEXICO
LEGISLATIVE
FINANCE
COMMITTEE

Data collection and data design

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New Mexico Sentencing Commission Education Series

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Overview

- The value and progress of using research in public policy
 - Through the years
 - Thoughts on “big data”
- The importance of why
 - Asking the important (and right) questions
 - Designing systems to answer the important questions
- Data collection (and analysis)
 - Important considerations
 - Barriers
 - Working with partners towards being “solutions focused”



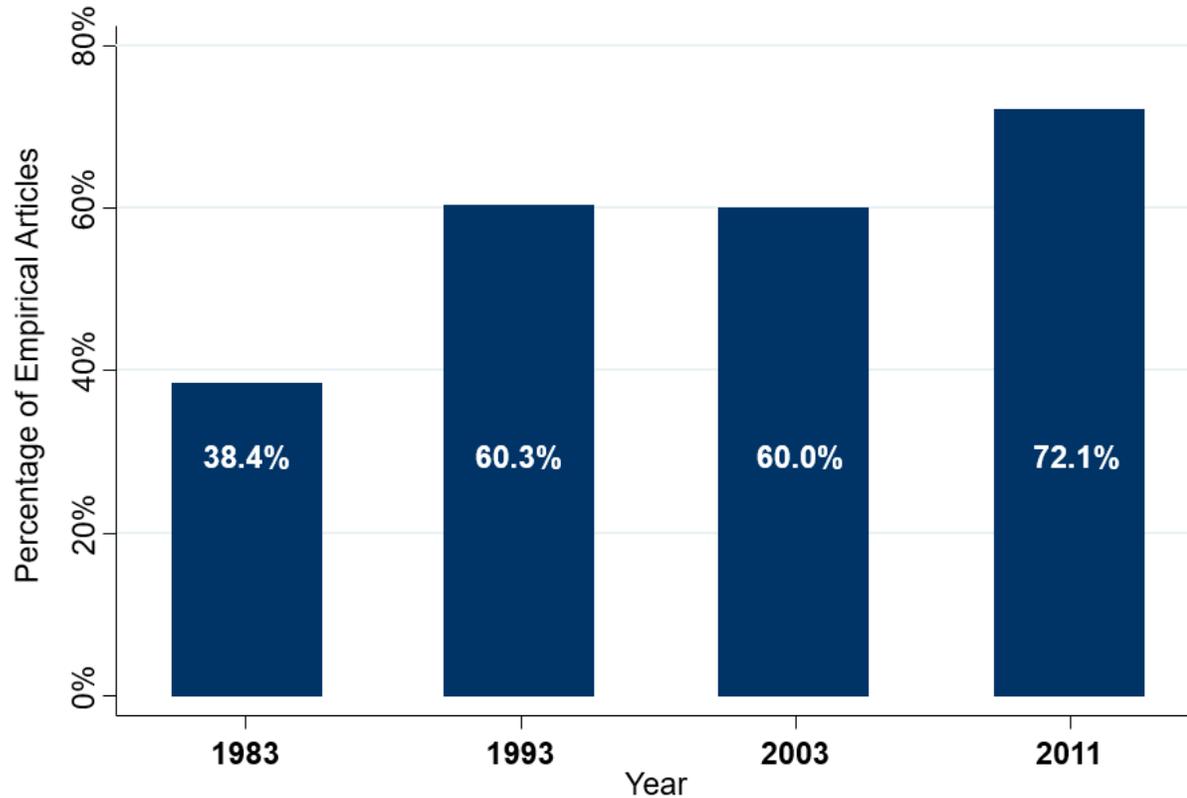
The challenge

“Every calculation based on experience elsewhere fails in New Mexico.”

–Territorial Governor of NM Lew Wallace, 1881

Growing use of data and empirical evidence

Empirical (Data-Based) Articles in Leading Economics Journals, 1983-2011

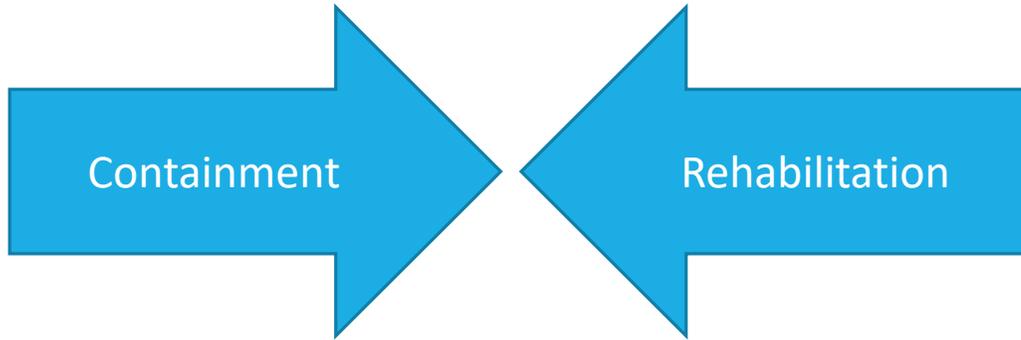


Source: Hamermesh (JEL 2013)-adapted from Opportunity Insights "Big Data Course"

Social science entering a “golden age” (Buyalskaya et al, 2021).

- Growing availability of data
 - Better IT systems in government
 - Better data collection
 - Corporate world leading the way (e.g. Google)
 - Some examples of improved data sharing and transparency
- Diverse interdisciplinary teams working together to answer research questions
- New and improving methods for examining research questions

Progress in using data in criminal justice



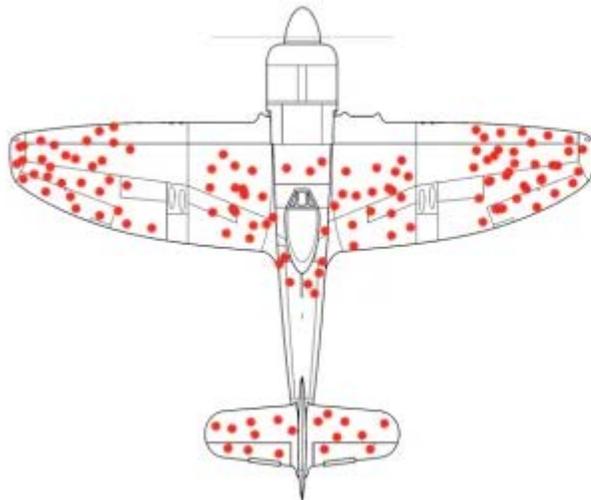
- Historically, competing goals in criminal justice have led to a significant research gap (Cullen, 2013; Johnson et al. 2018).



- More recently commonly shared goals have fueled progress in knowing “what works”
- What is your definition of success in your community?

Asking the right questions...

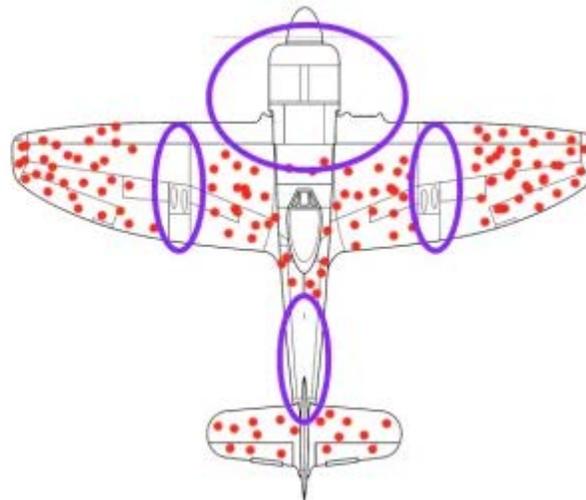
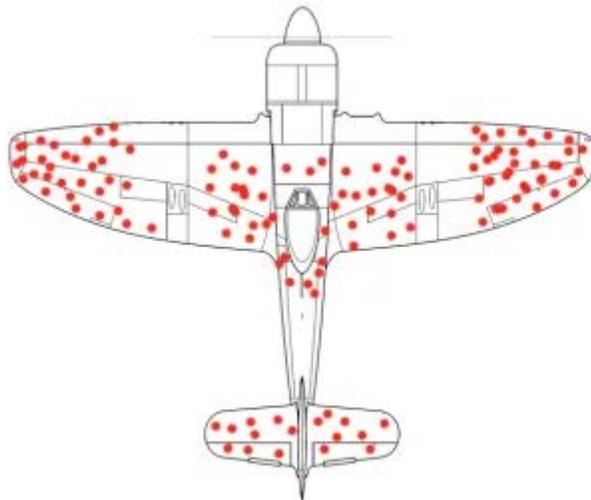
- WWII-Allied air missions were not going as planned with heavy losses to B-17's
- Question: Where were returning bombers taking the most damage?
- Used repair data and found areas with most damage
- Initial suggestions were to add additional armor to outer/inner wing area



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- Was that the right question...NO!
 - Where were the holes in the bombers that were not returning?
- The planes that didn't return were taking damage in the cockpit, engines and fuel tanks
- Armored the "missing holes" and **mission survival rates increased by a factor of 10**



How do you define success?

- What are your goals to meet that definition?
- Before data collection begins, define what is of value in your CJ system.
- What needle are you trying to move and how do you move it?

Iterative Goal Setting Process



Source: Adapted from O'Malley, 2019

Getting ahead of the data...

Iterative Goal Setting Process

- Defining value and set an ambitious public goal
- Creating a strategic plan to achieve the goal
- Use the scoreboard to measure progress



- Monitoring of informative data
- Creation and comparison to benchmarks
- Consistent meeting of an oversight entity/management

- Strategic plan?
- Inventory and deploy ev-based programs and practices
- Empirical research to inform about impact and fidelity of programs

Case study: NMSC and Drug Treatment

- Goal: NMCD has a goal of reducing recidivism through treating root causes (drug addiction)
- In 2012, NMCD was not collecting data on how the main program to meet this goal
 - Therapeutic communities (TC)
- TC should reduce recidivism rates by 7%.
- LFC examined the program finding implementation issues:
 - TC was being run as a 6 month program (should be 12 month)
 - TC was not available at all prisons, transfers contributed to a 18% completion rate.
 - Lack of aftercare services

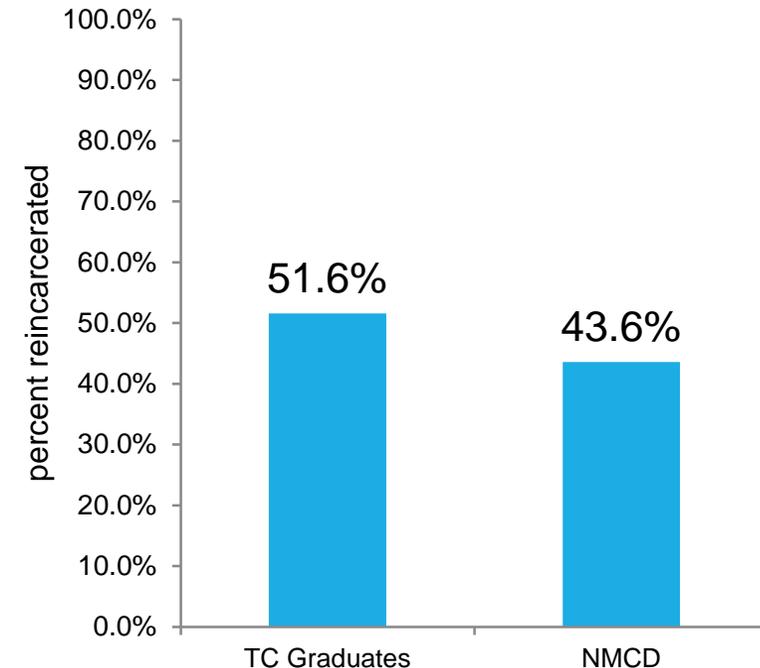
What about performance?



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Percent of Prisoners Reincarcerated within 36 months (2011)



Source: NMCD



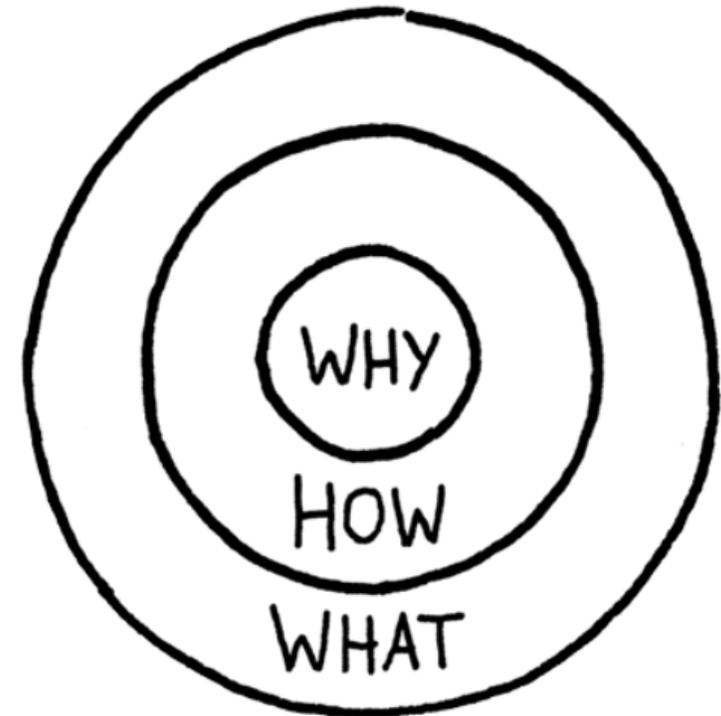
How do you define success?

- There is likely not a one size fits all approach as each community in NM is unique.
- Over the last 10 years (2010-2019); NM communities have seen differing trends in crime.
- Additionally, based on their current situation, each CJCC may need to set different goals:
 - Reducing the jail population or reducing disproportionate representation
 - Diverting non-violent offenders to effective programming
 - Crime prevention
 - Reducing use of force incidents
 - Reducing violent crime
 - Reducing property crime (motor vehicle theft)
 - Risk assessment
 - Cost savings/ROI



Now we are getting somewhere...

- Data Collection (gathering of observations or measurements)
 - Integrated data systems
 - Important considerations in collection
 - Data census, definitions, quality, sharing and security, storage and analysis
 - Barriers
 - Working with partners towards being “solutions focused” and defining value



Why do I need a vehicle?



- My family loves camping
- Have enough room for the family
- Have the ability to pull a trailer
- Have cruise control for long trips



I want a Ford Mustang GT500



I need a vehicle that will

- Have room to load camping gear
- Have enough room for the family
- Have the ability to pull a trailer
- Have cruise control for long trips



Putting everything in one bucket...

Integrated Data Systems (IDS)

- Will putting everything in one bucket will address your goals?
 - Integrated data systems can be costly and resource intensive (e.g. governance)
 - There are often data solutions that don't require a significant IT investment (e.g. unique ID)
 - The state has a poor record with IDS
- Lessons learned and best practices
 - Assistance and resources: Actionable Intelligence for Social Policy (AISP)
 - Planning: Establishing user needs and getting feedback early to ensure use of data dashboards
 - Implementing in stages: Use of pilots to identify potential issues when scaling up

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- Florida was also receiving attention for passing a law that would bring radical transparency and a new era of criminal justice data in 2018

NEWS

A new law was supposed to make Florida's criminal justice data radically transparent. It failed.

Andrew Pantazi The Florida Times-Union

Published 2:57 p.m. ET Jul. 2, 2020 | Updated 3:28 p.m. ET Jul. 2, 2020



Important considerations

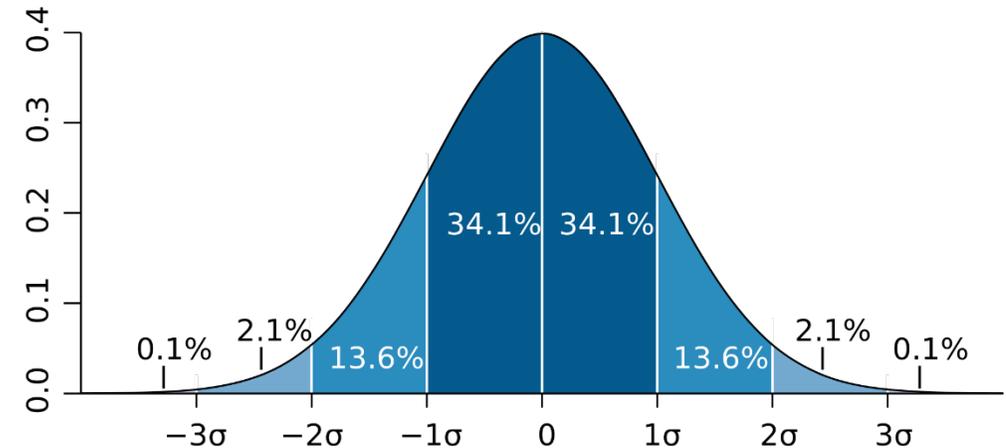
- Data census
 - Do the data you need exist and if not can you obtain or create? If so, keep running through considerations.
- Data definitions
 - Does the organization who holds these data have a data dictionary defining variables and tables?
- Data history and quality (integrity)
 - Are the data that exist valid and reliable? Has that changed over time.

Important considerations (part 2)

- Data sharing and security
 - Are the data you need available for sharing and what protections need to be put in place for use (HIPPA, FERPA, other Fed or State Law)?
- Data management (transfer, storage, cost)
 - Do you have the resources you need to properly store and analyze these data (hardware, software, and personnel)?
- Data analysis and interpretation
 - Do you have an analysis plan for these data that your organization is capable of carrying out? Do you have working hypotheses that you can apply to results?

Important considerations (last one)

- Data sanity-Using the entire population or a random sample of your data, run some checks.
 - Plot descriptive statistics
 - What does your distribution look like? As expected?
 - Do you have outliers (5% outside the normal distribution)?
 - Look at frequencies
 - Do you have missing data?
 - Do you have duplicate records?
 - Are there differences in how data is entered that require cleanup (e.g. two similar items need to be recoded as one)
 - Do you have data in categories as expected?
 - Have plans for how to address issues you might run into.
 - Using an equity lens.



Case study: Being solutions focused

The recidivism debate

- Recidivism is one of the most fundamental concepts in criminal justice
 - “Refers to a person’s relapse into criminal behavior, often after the person receives sanctions or undergoes intervention for a previous crime” -US Sentencing Commission
- How do you or your organization define recidivism?
 - Time frame?
 - What event to use?
 - Rearrest, Reconviction, Reincarceration?

Keep your meetings from going off the rails

- Prep guardrails for your discussion
 - What are the elements that will need to be discussed to define a metric?
 - Defining shared value
 - Working towards achieving X (goal; benchmark; performance measure)

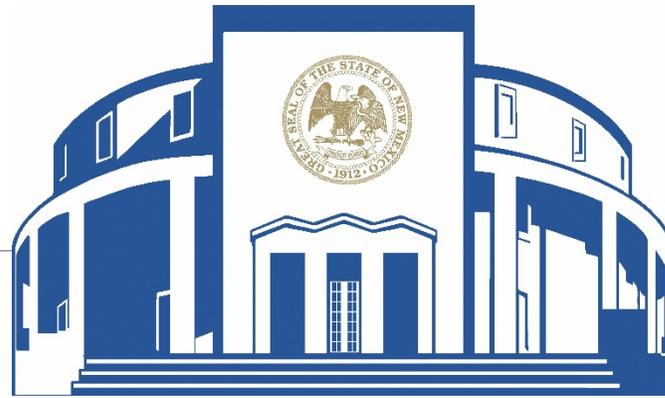


Making the stats meaningful (May, 2004)

- Understandability
- Interpretability
- Comparability

Summary

- We covered a lot today
 - The value and progress of using research in public policy
 - The importance of why
 - Data collection (and analysis)
- In conclusion
 - Dig into provided resources to go further into each of these areas.
 - Important to establish shared value and goals.
 - Don't let the perfect be the enemy of the good.



NEW MEXICO LEGISLATIVE FINANCE COMMITTEE

For More Information on LFC

- <http://www.nmlegis.gov/lcs/lfc/lfcdefault.aspx>
 - Session Publications – Budgets
 - Performance Report Cards
 - Program Evaluations

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