Section 3: Week 8: Present Findings - Transcript

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# Present Findings – Transcript

## Title Slide

Good afternoon, I am Nate Bachmeier. Today I will be reviewing the project proposal for NCU-Cares (NCU-C) next initiative, reducing police violence in America. This presentation embodies eight long weekends of looking at this problem from a unique perspective.

## Agenda

The agenda for this discussion will cover the planning, evaluating, and delivery of an effective strategy to address this issue. Then we will conclude with reflections into learnings, future topics, and conclusions. Each of these sections will further drill into a collection of relevant subtopics. Without further ado, let us jump into the details.

# Planning

## Problem Statement

In May, the death of George Floyd raised to the national debate stage questions around civil rights and police violence. This event triggered a series of global protests that are pointently asking why a disproportionate people of color fall victim. These discussions propose various solutions, such as defunding the police to increase investments into mental health and civil services. Meanwhile, others argue that these actions are the result of a few bad apples, and not evident of a systematic bias.

It is challenging to understand these perspectives, because the problem has become highly partisan, and neither side willing to objectively look at the data. Anytime that preventable death occurs, emotions run high and both parties approach the issue with skeptism, pain and frustration.

NCU-C, our polticially neutral non-profit foundation believes that the truth is rarely at any extreme and generally lies in the middle. If we remove the politics and assess the situation, only then can an efficient strategy be formed, striking at the heart of the problem.

## Hypothesis

The central idea of the Black Lives Matter (BLM) movement is that police violence disproportionally victimizes people of color (Pierce, 2019). Assuming this statement is true, to what extent is this true? Data collectors are quick to cite that “black people represent 24% of all police killings, despite being only 13% of the population (KilledByPolice, 2020).” However, can these two data points be uniformly compared? Alternatively, does a demographically adjusted accounting provide greater insight into racial injustice hotspots? Processes that can uncover such disparity could lead to laser-focused policies versus broad debate on the national stage. These actions would not represent the final stage, but do offer a path for measurable short term improvements.

Another central theme is that shifting funding from police departments to civil services will change the risk calculus. Assuming this statement is true, to what extent? What portion of the population is going through a medical crisis during their time of demise? Until examining the data, it can be challenging to separate the norm from media machines selling advertising. Perhaps a more accurate perspective is that scenario-specific categories exist, and additional training programs can target those situations, reducing the mortality rates.

## Data Collection and Requirements

There are numerous strategies for approaching this problem with varying levels of sophistication and planning. One standard solution is to perform statistical application analysis on the Washington Post’s police shootings data set (Nix, Campbell, Byers, & Alpert, 2017). This data source contains demographic, location, and contextual information on all publically known fatalities of police violence between 2015 to the present (Washington Post, 2020). While there are several limitations to this aggregate feed, it does provides a best-intentioned sampling of the broader population.

For an experiment to be successful, it needs to have sufficient *power* to measure the *effect* in question. Several knobs feed into the power of an experiment, such relaxing the confidence interval, using parametric statistics, converting to a one-tail model, increasing the samples, or adjusting the sensitivity (Donovan, 2016). Choosing an appropriate value is scenario-specific and can be somewhat of an art form.

## Methodology

There are multiple strategies for determining which variable has more effect on a situational outcome. News articles typically approach the problem by looking at the raw descriptive statistics, such as the ratio of victims that were experiencing a mental crisis. A challenge with this solution is that the telemetry only communicates what happened, not why. Consider the extreme example that one hundred percent of all police violence within a given community is against a specific race. While this scenario immediately raises questions around racial profiling, it should also invite a discussion around the diversity of the inflicted population.

DeCarlo (2018) states that quasi-experiments are particularly useful in social welfare policy research (see chapter 12.2). Under a quasi-experiment, the researcher team does not use random assignment and instead looks at different populations. This method could be highly effective for examining the impact of both *race* and *sanity* variables. For example, how does *race* impact police violence when comparing diverse metropolitan areas (e.g., Chicago and Detroit) to homogenous cities (e.g., Brandsen or Sioux Falls)? Likewise, for every dollar that Nevada spends on public health, Alaska invests six (United Health Foundation, 2017). From examining these groups that are both similar and complete opposites, it should lead to a quantitative sense of the underlying effect of these variables.

# Evaluating

## Data Analysis

The research team began with a collection of descriptive statistics, comparing various pivots to ensure sufficient coverage exists for the chosen tests. During this step, it became necessary to reduce the exploration to only focus on Black, Hispanic, and White people, because other groups lacked the required representation.

Our first test plots the distribution by race for all victims between 2015 to 2019. These results are compared with diversity statistics according to the US Census over that same period. From this view a skew becomes evident and this aligns with position of many peaceful protesters. Next, the data set was partitioned along various lines, such as demographics, location, and weapon status. Nix et al. use a similar approach in their article for Nature, which has been cited over 200 times. The contexts of their analysis was reproducable, and our team confirmed their insights, such as Black-people are twice as likely as White-people to die unarmed (5 vs 10%).

## Outcome Inference

According to the data analysis results a skew exists, which is disproportionately impacting Black people more than White people. However, the research team asks if this is the entire story? Instead of treating America as a single homogeneous group, the victim results were mapped to individual states. One observation from this perspective is that death rates for people of color generally aligns with the diversity ratios of that state. For example, in Texas 39% of fatalities are Hispancic compared to representing 34% of the residents. Generally speaking, the ratios are maintained across all states, suggesting that these are even-handed not racial profiling. These values become skewed on a national level, due to the inclusion of areas that lack minorities among the residents, such as Montana and Utah.

Going back to the reseach questions; **R1 does** *race* or *sanity* explain the data set? No, using DeCarlo’s proposal; the statistical effect of these feature values is fairly small across the population assessments. Within the full paper are details on these groupings by age, race, sanity, weapon type, and location. **R2 are** these even-handed or racially profiled? Once the results are demographically adjusting to population of an individual state, then the rates are consistent. The national skew originates from the inclusion of rural areas that are void of either victims or minorities. **R3 should** an effective strategy focus on a different aspect of the problem? Absolutely; there is another piece to this puzzle that needs to be front-and-center.

## Research Limitations

There are several challenges and limitations with studying police brutality. First, national officials do not require official reporting of statistics. Without a federally managed database researchers must rely on open-source datasets. Information for this study comes from the Washington Post, and they rely on third-party media coverage. This game of telephone could be missing data points or erroneously reporting features. Since data is relatively sparse, some pivots and comparisons lack large sample sizes. Given the low statistical effect between different partitions of that grouping, its possible that underlying trends are missing from the analysis.

Other potential issues could have arised from incorrectly chosen statistical tests, or inconsistent control processes during the exploration phase. While the researchers follow due diligence and best effort, this study has finite time and resources.

# Strategy Delivery

## Implementation Plan

## Monitoring Progress

# Reflecting

## Learnings and Future Considerations

## Conclusion

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