SHOTS FIRED: EXAMINING CUES IN POLICE USE OF FORCE ENCOUNTERS

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There are more than 730,000 sworn officers of state and local law-enforcement agencies in the United States

The authorization to use police force is the core element that defines and distinguishes police work from other professions (Bittner, 1970)
Problem Statement

Police are involved in situations with different stimuli and variables

- Therefore, there is no single strategy that is relevant to all events

Studies of police use of force have varied in several important ways:

- Different definitions of what police actions constitute “force”
- Varying theoretical approaches
- Variety of methodologies and data sources
The purpose of this quantitative study was to document cues in decision-making that lend predictability to police use of lethal versus a less than lethal use of force. In order to increase awareness, enhance police safety, and improve training and supervision.
When prepared through knowledge of the potential harms presented by a call for service, officers were less likely to sustain injury than officers who entered into encounters ill-equipped to mitigate risk (Ellis, Choi, & Blaus, 1993).

Although police shootings are rare, they are controversial even under the best circumstances. They can have potentially devastating consequences, not only for the victim and the officer, but also for the police department, the community, and their relationship (Geller & Scott, 1992).
RESEARCH QUESTIONS

1. What differences, if any, exist in officer and subject characteristics during incidents involving lethal versus less than lethal use of force?

2. What differences, if any, exist in situational characteristics during incidents involving lethal versus less than lethal use of force?

3. What differences, if any, exist in environmental characteristics during incidents involving lethal versus less than lethal use of force?

4. What characteristics are predictive of the level of lethality when force is utilized?
Prior studies focused primarily on the Officer / Suspect’s physical characteristics such as race, age and gender when identifying variables associated with police use of force.

Examining other cues associated with police use of force decision making will better prepare the officer by increased awareness and improved training and supervision.
DATA COLLECTION

Obtained permission to use data

Received data from FOIA request

Constructed a database
  • Number of lethal & less than lethal force incidents
  • Number of officers & subjects involved in each incident
  • Subject’s actions during the incident
  • Type of force used in each incident
Sworn officers of a Midwestern Police Department

Involved in situations where they used force, either:
- Lethal (firearm) 2010 - 2015
- Nonlethal (Taser) 2015

Lethal use of force $n=\phantom{0}$
- 402 incidents
- 552 sworn officers who fired shots
- 457 suspects

Nonlethal use of force $n=\phantom{0}$
- 381 incidents
- 375 suspects
Obtained preexisting data sets from the Independent Police Review Authority (n.d.)

These data sets are available through the Freedom of Information Act

The IPRA documents all incidents involving:

- Use of force
- Police shootings
- Discharge of oleoresin capsicum (OC) spray
- Taser
DATA ANALYSIS

- Statistical Package for the Social Sciences (SPSS) Predictive Analytics Software

**Research Questions 1-3**

$\chi^2$ test of independence
- Determines whether there is a statistically significant relationship between variables

**Research Question 4**

Independent t-test/binary logistic regression analysis
- Continuous data
What differences, if any, exist in officer and subject characteristics during incidents involving lethal versus less than lethal use of force?

Statistically Significant relationship between suspect gender and type of force
- $p = 0.001 < 0.05. \chi^2 (1, n = 832) = 23.00, p = 0.001$, Cramer’s $V = .166$

Statistically Significant relationship between suspect race and type of force
- $p = 0.044 < 0.05. \chi^2 (3, n = 828) = 8.09, p = 0.044$, Cramer’s $V = .099$

Statistically Significant relationship between suspect age and type of force
- $p = 0.001 < 0.05. \chi^2 (6, n = 800) = 51.58, p = 0.001$, Cramer’s $V = .254$

Statistically Significant relationship between officer race and type of force
- $p = 0.003 < 0.05. \chi^2 (3, n = 932) = 13.78, p = 0.003$, Cramer’s $V = .122$
What differences, if any, exist in situational characteristics during incidents involving lethal versus less than lethal use of force?

Statistically Significant relationship between suspect’s actions and type of force

- $p = 0.001 < 0.05. \chi^2 (2, n = 484) = 256.23, p = 0.001$, Cramer’s $V = .728$
FINDINGS: RESEARCH QUESTION 3

What differences, if any, exist in environmental characteristics during incidents involving lethal versus less than lethal use of force?

Statistically Significant relationship between area/geographic location and type of force
- $p = 0.001 < 0.05. \chi^2 (2, n = 1018) = 47.07, p = 0.001, \text{Cramer's V} = .215$

Statistically Significant relationship between indoor/outdoor location of incident and type of force
- $p = 0.001 < 0.05. \chi^2 (1, n = 505) = 15.33, p = 0.001, \text{Cramer's V} = .174$
FINDINGS: RESEARCH QUESTION 4

What characteristics are predictive of the level of lethality when force is utilized?

Suspect age \((b = 1.047, p = .007)\)
- Each additional year of age = 5% increase in use of nonlethal force

Location \((b = 5.926, p = .002)\)
- Indoor encounters = 6x more likely to use nonlethal force

Suspect actions \((p < .001)\)
- Having a weapon results in greater use of lethal force than acting combative or pulling away
What characteristics are predictive of level of the lethality when force is utilized?

When controlling for other variables
- Neither suspect nor officer race was a significant predictor of use of force utilized during police use of force encounters
CONCLUSION

The results can aid law enforcement agencies in...

- Identifying the need/benefit of equipping officers with nonlethal tools
- Implementing effective training to handle diverse situations
**IMPLICATIONS**

- Need for multicultural training for officers
- Develop citywide or targeted programs for community education regarding expectations when interacting with police
- Develop a curriculum to teach the same
- Identify characteristics of problem officers to improve discipline and accountability
LIMITATIONS

- There is NO nationally reported database for police use of force incidents
- Relied upon officers’ self-report data; excluded third-party input
- Possibility of human error during transcription
- FOIA limited timeframe to 4 years prior
- Lack of data on officer socio-economic status and education levels
- Participants were sampled from only one department
RECOMMENDATIONS

- Explore effect of officers’ level of education on their use of lethal/nonlethal force
- Explore impact of the introduction of body cameras and the accessibility of Tasers on complaints of excessive force
- Compare results of current study to police departments across the country
REFERENCES


