

Why don't we know more about officer-involved shootings?

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Acknowledgements



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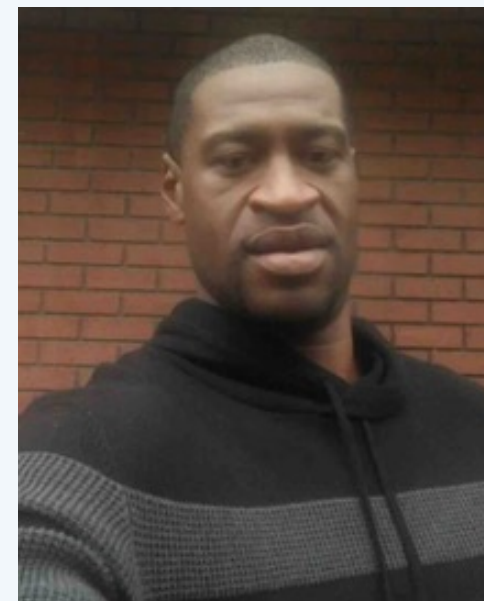
Jim Burch



Maria Valdovinos Olson

Recent history in the use of force

In recent years, fatal instances of use of force have frequently led to significant public attention on the involved police department, individuals, and policing more broadly



Use of force research

- A significant amount of research has been done based on a handful of crowd-sourced datasets



Other use of force research

- The CDC's National Violent Death Reporting System
 - Eg Conner et al, 2019
- The National Vital Statistics System
 - Eg Edwards, Lee & Esposito, 2019

What's missing?

- What kinds of situations prompt OIS?
- How do they progress from start to finish?
- What characteristics of officers or shift details are associated with OIS?
- How often are there investigations? Who conducts them? What are the outcomes?

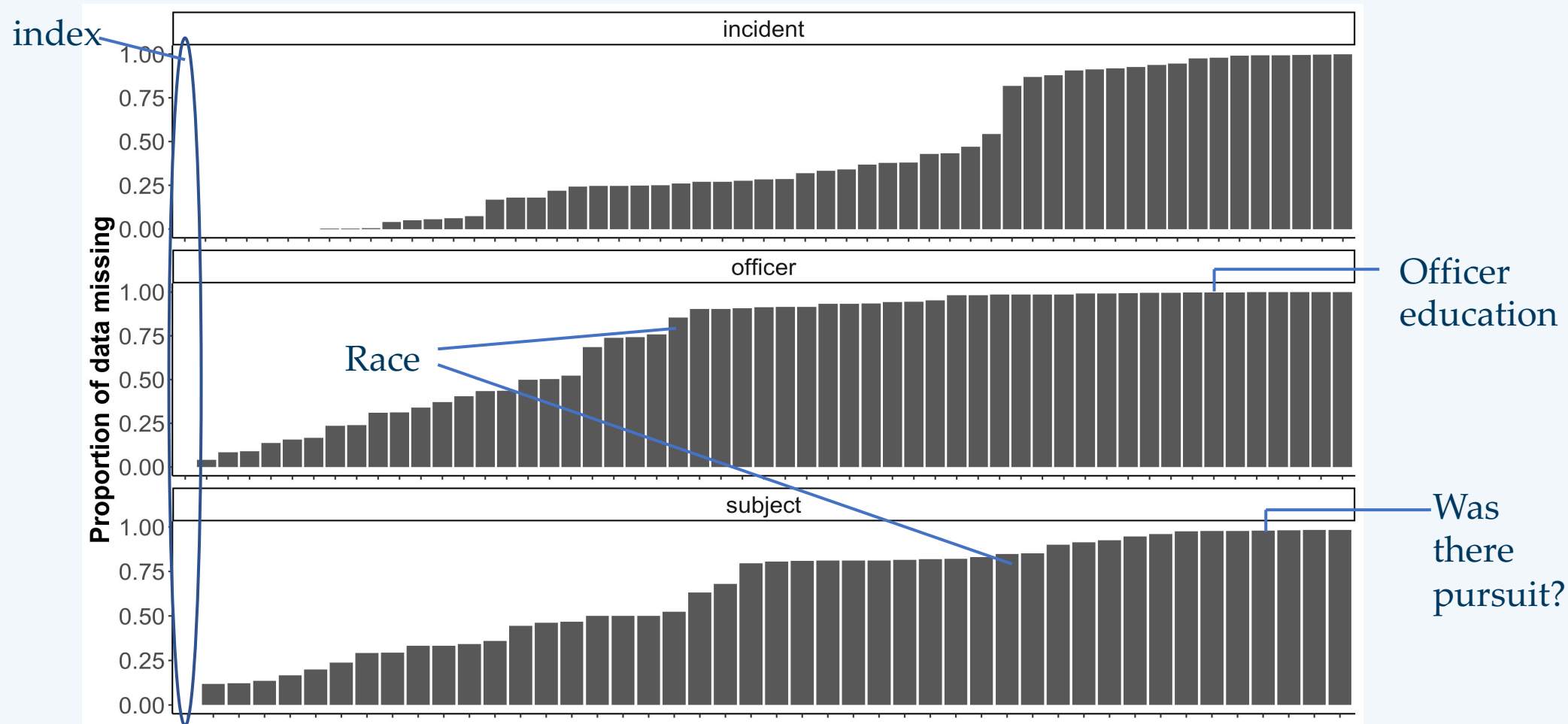
NPF + Major Cities Chiefs Association

- Partnered to develop online data collection tool focused on OIS
- NPF gets a high-quality, granular dataset
- Participating agencies get monthly analysis and feedback

OIS data

- Data collection went live in late 2015, with extensive follow-up through 2018
- Received data from 56 agencies
- 1600 incidents
 - 58 questions, including date, time, precipitating facts, location details
- 2574 officers
 - 56 questions, including demographics, work history, injuries sustained
- 1750 subjects
 - 47 questions, including demographics, resistance, presence of weapons, mental health or substance abuse issues

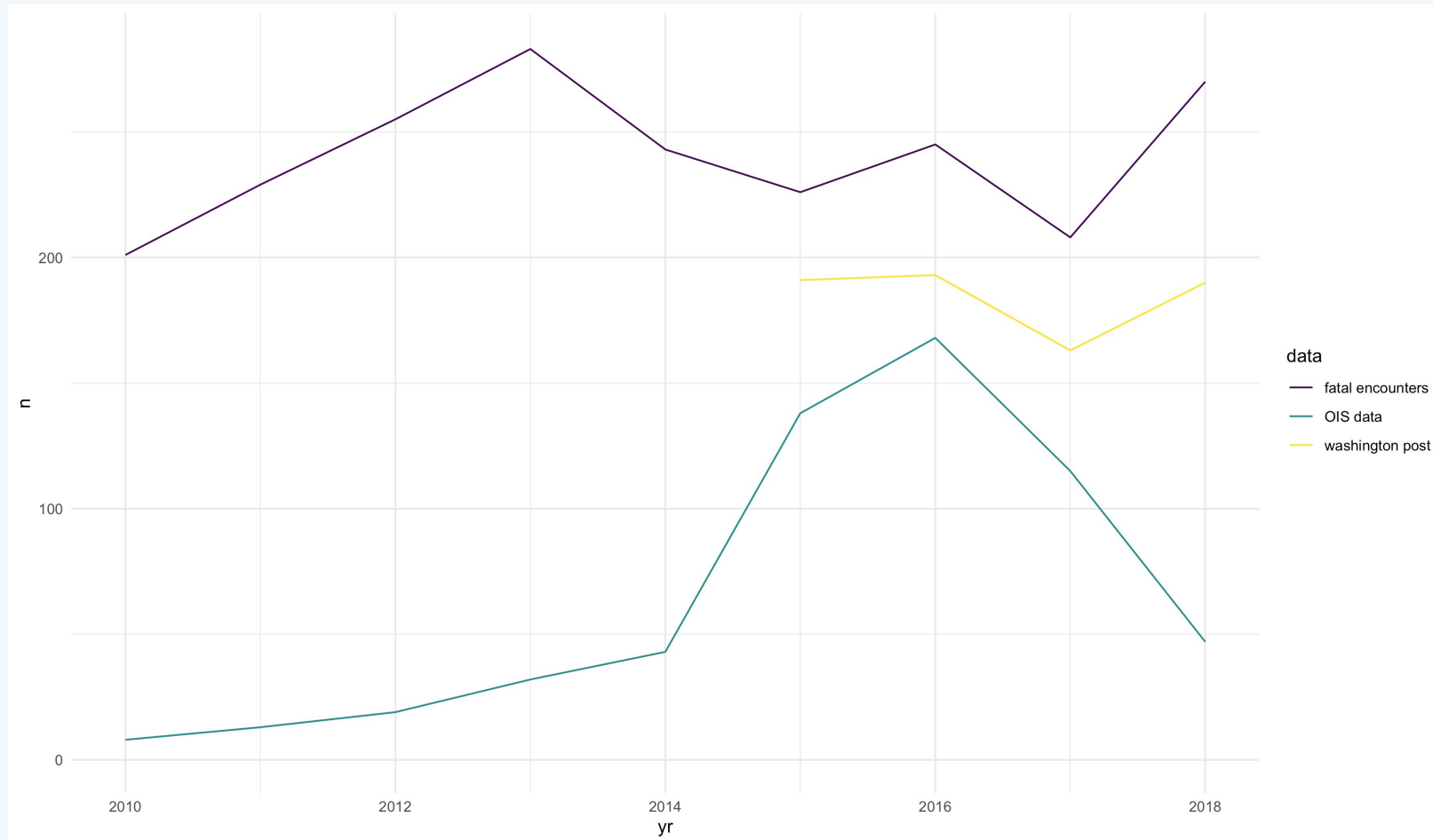
Rough rates of missingness



Take-away 1

- Possible uses of the dataset are constrained due to item missingness

Missingness of cases



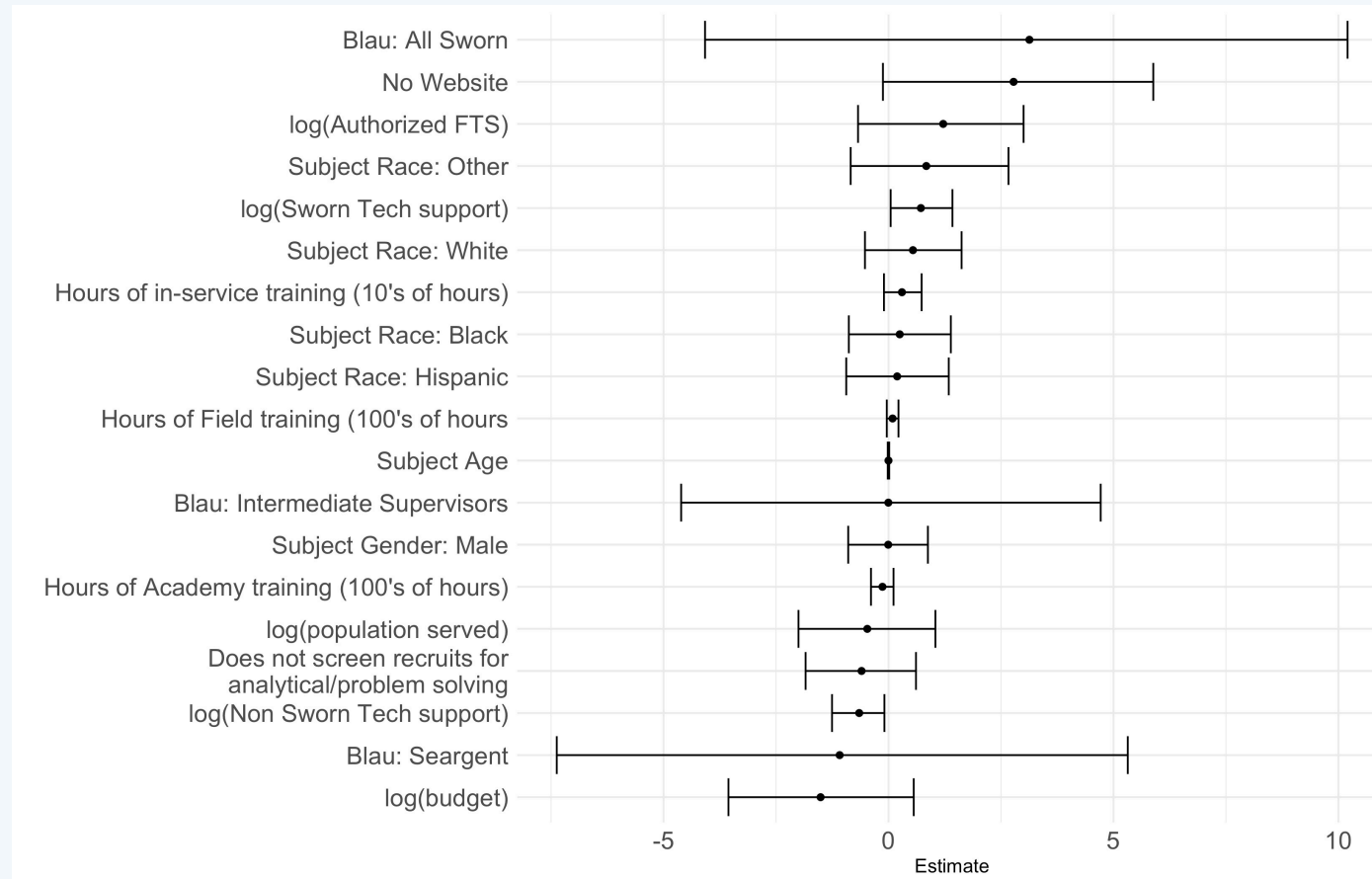
Is there anything systematic about the missing cases?

- After merging WaPo, FE, and our OIS data:
 - 2315 total unique cases from 2010-2018
 - Our OIS data is missing 1750 of these
 - 269 unique cases in 2016 alone
 - Our OIS data is missing 111 of these
- What features of the incident or the agency are associated with a case being missing from our data?
- Use agency-level data from the 2016 LEMAS to find associations

Analysis approach

- Use agency-level data from the 2016 LEMAS
- Include subject-level data, as available from data merging procedure
- Covariates
 - Demographics of subject (age/gender/race)
 - Demographics of department (Blau indices at various supervisory levels)
 - Department size
 - Total budget
 - Training requirements
 - Indicators of technical sophistication (e.g. technical support staff, agency has a website)
 - Year
- Missing data handled with multiple imputation
- Primary model is a Bayesian multilevel logistic regression with weakly informative priors

What's associated with case missingness?



Take aways

- Biggest barriers to data recording/collection are more likely to be structural
- Broader data collection issues:



Future NPF research advice?

- Constrain data collection to a smaller handful of variables
- Code the case reports ourselves
- Find external data to link to at the outset (e.g. NVDRS)

Advice for practitioners/policy-makers interested in the topic

- Allocate resources to data collection for a wider range of policing activities
- Even if this dataset were perfect:
 - we are still conditioning on police-citizen interactions that rise to a use of force situation (a small fraction of all interactions)
 - The long tail of 18k law enforcement agencies

Thanks!