My title*

My subtitle if needed

First author Another author

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First sentence. Second sentence. Third sentence. Fourth sentence.

1 Introduction

You can and should cross-reference sections and sub-sections.

The remainder of this paper is structured as follows. Section 2….

2 Data

The raw data was achieved from a paper "https://www.aeaweb.org/articles?id=10.1257/pandp.20201118". All improper variables were removed during the data-cleaning process for accurate results. The statistics of all police officers have been separated into each race/gender group to analyze factors of the award nomination.

Groups	all_birth_year	all_training	all_complain	all_arrest	all_observation
Everyone	1981.508	18.37726	0.4478134	23.44781	1715
White	1982.400	18.17738	0.4440476	24.80357	840
Black	1979.535	18.81206	0.5425532	21.15957	282
Male	1981.737	18.37619	0.4667641	24.30095	1369
Female	1980.601	18.38150	0.3728324	20.07225	346

Table

According to the TABLE 1 [Table 1— Baseline Characteristics] …

*Code and data are available at: LINK.

```
Warning: Use of `all_officer$total_month` is discouraged.
i Use `total_month` instead.
```

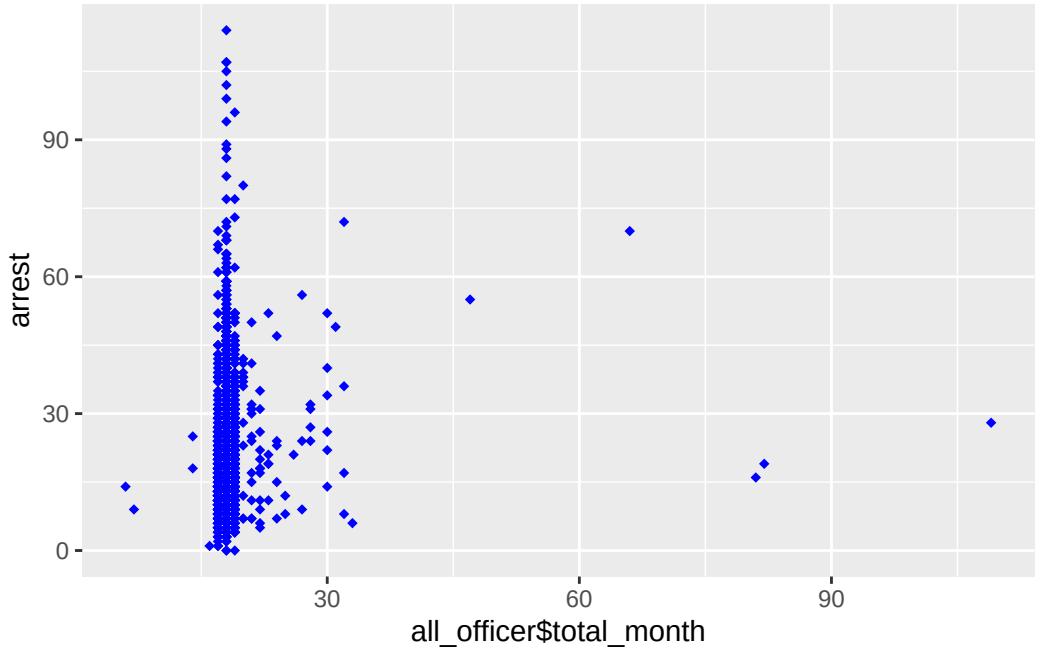

Figure 1: Bills of penguins

Talk way more about it.

3 Model

3.1 Model set-up

Original Model

$$y_{it} = \beta_0 + \beta_1 Black_i + \beta_2 Female_i + \beta_3 Hispanic_i \quad (1)$$
$$+ \beta_4 Asian_i + \beta_5 NatAm_i + X_{it} + u_{it} \quad (2)$$

```
Call:
lm(formula = awd_perf ~ Black + Female + Hisp + Asian + Natam,
    data = all_officer_year)
```

```
Coefficients:
(Intercept)        Black       Female         Hisp        Asian        Natam
     37.583      -10.368      -12.826       -5.157      -16.785        9.624
```

Model 1

$$y = \beta_0 + \beta_1 Black_i + \beta_2 Female_i + \beta_3 Hispanic_i \quad (3)$$
$$+ \beta_4 Asian_i + \epsilon \quad (4)$$

```
Call:
lm(formula = awd_perf ~ Black + Female + Hisp + Asian, data = all_officer_year)

Coefficients:
(Intercept)        Black       Female         Hisp        Asian
     37.626      -10.416      -12.813       -5.204      -16.831
```

3.1.1 Model justification

We expect a positive relationship between the size of the wings and time spent aloft. In particular…

We can use maths by including latex between dollar signs, for instance θ.

4 Results

Our results are summarized in **?@tbl-modelresults**.

5 Discussion

5.1 First discussion point

If my paper were 10 pages, then should be be at least 2.5 pages. The discussion is a chance to show off what you know and what you learnt from all this.

5.2 Second discussion point

5.3 Third discussion point

5.4 Weaknesses and next steps

Weaknesses and next steps should also be included.

Appendix

A Additional data details

B Model details

B.1 Posterior predictive check

Examining how the model fits, and is affected by, the data

Figure 2: **?(caption)**

B.2 Diagnostics

?@fig-stanareyouokay-1 is a trace plot. It shows… This suggests…

?@fig-stanareyouokay-2 is a Rhat plot. It shows… This suggests…

Checking the convergence of the MCMC algorithm

Figure 3: **?(caption)**

C References