# **Response to Reviewers**

#### Abstract

A. Added a hook/introductory sentence:

Inserted: "Even as the city sleeps, the London Fire Brigade is wide awake, answering calls to save pets and wild animals in night-time emergencies."

B. Addressed concerns with causal language:

Before: "We analyzed data using statistical software to understand the impact of time of day on the frequency of animal rescues based on animal type."

After: "We analyzed data using statistical software to understand potential associations between time of day and the frequency of animal rescues based on animal type."

## I. Introduction

A. Discussed the structure of the paper:

Inserted: "The animal rescue calls from the LFB-collected data can be divided into two main categories, pets and wild animals. Overall, there were more calls made for pets compared to wild animals. Taking these unequal counts into consideration, we conducted a two-proportion z-test and found a discernible difference in the proportion of night-time rescues between pets and wild animals. This information can benefit the LFB, allowing them to better allocate their resources during the night shift."

B. Clarified that overall there were more pet calls than wild animal calls.

## II. Data and Methods

A. Removed passive voice:

Before: "The data were collected from January 2009 were updated monthly to the London Data Store (Brigade 2016) until May 2021"

After: "The LFB collected data beginning January 2009 and updated monthly to the London Data Store (Brigade 2016) until May 2021"

B. Referenced z-test:

Inserted: "We conducted the z-test in R version 4.4.0" to clarify the software used for statistical analyses.

#### III. Results

- A. Right-aligned numeric values in the table
- B. Changed y-axis of the confidence interval plot to percent
- C. Added the word overall

Before: "We should note that a much larger number of pet incidents occurred, compared to wild animals, when investigating sample sizes"

After: "We should note that a much larger number of pet incidents occurred, compared to wild animals overall, when investigating sample sizes"

D. Clarified a two-proportion x-test 95% confidence interval

Before: "Figure 2 indicates greater variability within the wild animal group which may be a product of the lower comparative sample size."

After: "Figure 2 portrays 95% confidence intervals from the two-proportion z-test. There appears to be a wider interval for the wild animal group which may be a product of the lower comparative sample size."

E. Changed x2 to a correctly formatted chi-square statistic.

#### IV. Discussion

A. Added more about the practical significance about there being a higher proportion of pet calls:

Inserted: "Another contributing factor could be that many people remain inside at night to unwind and sleep. This means that unless a wild animal ventures directly to their homes, most people are unlikely to encounter one in need of rescue. However, should a pet need assistance, their owner would be more likely to notice because they are home. Conversely, during the day-time hours when pet owners are at work, it is less probable they will be in a position to call in about their pet."

B. Clarify cause and effect

Inserted: "Given the observational nature of the analysis, we may only draw associative conclusions about animals in London and are unable to claim a causal relationship between time of incidents and animal type."

# C. Clarify generalizability

Inserted: "Overall, the data only include rescues that were documented by the LFB, however, other agencies may have been responsible for additional rescues."