

Rubber Dog Balls Experiment Analysis

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Question 1: Specify the outcome and independent variables. What lurking variables might be present?

Outcome = PSI when ball rips; IV = Formulation. Could be a lurking variable if different operators are used to test the balls.

Question 3: Perform the Appropriate Exploratory Analysis

```
library(tidyverse)
library(readxl)

## Read in Rubber Dog Ball Data ##

dogs <- read_excel("Comparative Experiments/Dog Toys.xlsx")

## Examine Data Structure ##

dogs |>
  glimpse()
```

```
Rows: 120
Columns: 2
$ Formulation <chr> "Formula 1", "Formula 1", "Formula 1", "Formula 1", "Formu~
$ PSI <dbl> 276.11, 279.98, 304.28, 278.62, 291.15, 282.00, 274.11, 28~
```

```
#install.packages('broom')
```

$$\bar{x} = \frac{1}{n} \sum_{i=1}^n x_i$$