# Activity 2 Presentation: Exploring Bivariate Data Relationships

Your Name

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## Introduction

This presentation explores the relationship between two variables from a real-world dataset. Our objective is to determine if there exists a causal, no, or spurious relationship between these variables. This analysis is inspired by the Harvard Business Review article ("Beware Spurious Correlations" 2015) about the Spurious Correlation website (Vigen).

## Data Preparation

The dataset used in this analysis was sourced from [describe data source here]. The variables of interest are [Variable 1] and [Variable 2], chosen because [briefly explain why].

```
# Your R code to load (and preview) the dataset
```

## Data Visualization

```
# Create a scatterplot of your variables + any other plots you find necessary
```

## Discussion

The plot(s) generated reveals [describe the overall pattern]. This pattern suggests that the relationship between Variable 1 and Variable 2 is [causal/no/spurious].

### Relationship Analysis

- **Form of Relationship**: The relationship appears to be [linear/non-linear/etc.], indicating [explain].
- **Causality**: Given the nature of the data, it is [likely/unlikely] that this relationship is causal because [reason].
- **Alternative Explanations**: It is also possible that [other variables/confounding factors] could explain this relationship.

### Conclusion

In conclusion, the analysis of [Variable 1] and [Variable 2] provides [summarise findings]. While definitive conclusions about causality cannot be drawn without further information, the data suggests [final thoughts].

## References (optional)

- <To display the references, you need to make sure that `references.bib` is in the same directory as this R Markdown file. The `bibliography: references.bib` line in the header tells R Markdown where to find your bibliography file.>
- <To add references, simply add entries of the same format in `references.bib`.>

- <To remove the references, you simply need to delete the line `bibliography: references.bib` in the header, and remove ("Beware Spurious Correlations" 2015) and (Vigen) in the introduction section.>

"Beware Spurious Correlations." 2015. Harvard Business Review. https://hbr.org/2015/06/beware-spurious-correlations.

Vigen, Tyler. "Spurious Correlations." Spurious Correlations project. https://www.tylervigen.com/spurious-correlations.