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].

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

Data Visualization

```r
# 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.