Exploring Women's Safety: Risks, Realities, and the Role of Society

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INTRODUCTION

》Focus: Women's safety in public spaces
》Goals: Understand perceptions, experiences, and effectiveness of safety measures.

》Data: Responses from diverse individuals across regions.
》Key Areas: Safety experiences, societal norms, effectiveness of measures.

》Significance: Inform future safety interventions.

OBJECTIVES

》To analyze the influence of societal norms and cultural attitudes on women's safety.

》To assess public perception of women's safety in different regions.

》To identify key areas requiring improvement to enhance women's safety.

DATA OVERVIEW

》Total entries: 173 responses

》Columns: 27, including demographic details (age, gender, region), opinions on harassment, safety ratings, and suggested interventions.

☆ Key Columns:

》Demographics: Age range, G
ender, Region

》Perception-related: Safety ratings, opinions on harassment and violence

》Effectiveness-related: Ratings on safety measures and suggested interventions

STATISTICAL ANALYSIS

Measure of Central Tendency & Dispersion

Linear Regression

Measures of Central tendency & Dispersion

Column: What is your age range?
Mean: 27.705202312138727, Median: 23.0, Mode: 18
Range: 45, Variance: 142.18584487162252, Standard Deviation: 11.924170615670615, IQR: 15.0

Column: On a scale of 1 to 5, how safe do you think public spaces are for women in your area?
Mean: 3.023121387283237, Median: 3.0, Mode: 3
Range: 4, Variance: 1.290159967737599, Standard Deviation: 1.1358520888467825, IQR: 2.0

Column: How much do you think concerns about safety restrict how freely women can move around in your area? Please rate it from 1 to 5, with 1 being not at all and 5 being very much.
Mean: 3.5260115606936417, Median: 3.0, Mode: 3
Range: 9, Variance: 2.4484473719585966, Standard Deviation: 1.5647515368129845, IQR: 1.0

Column: On a scale of 1 to 5, how would you rate the effectiveness of your country's efforts in ensuring women's safety compared to other countries?
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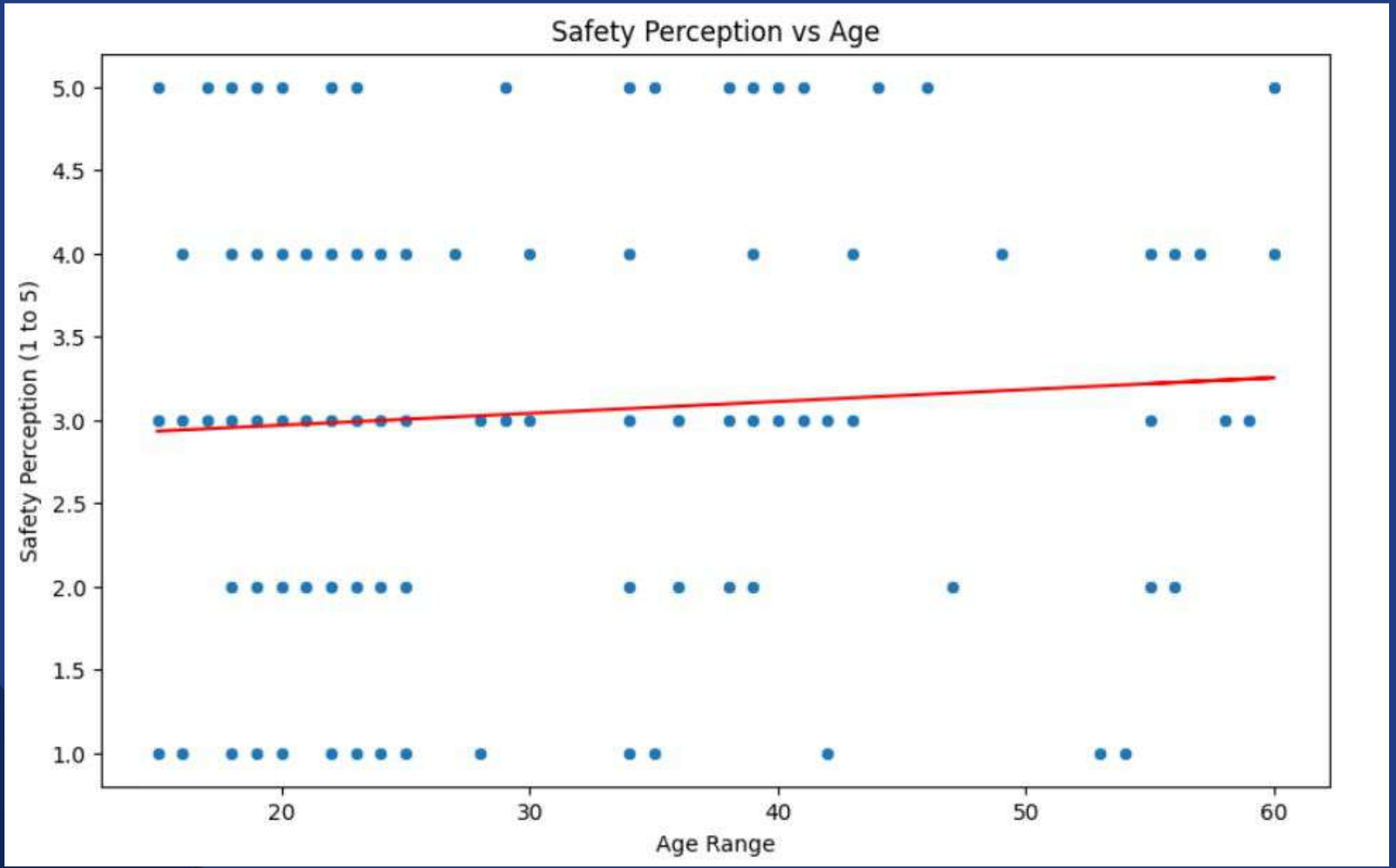
Linear Regression

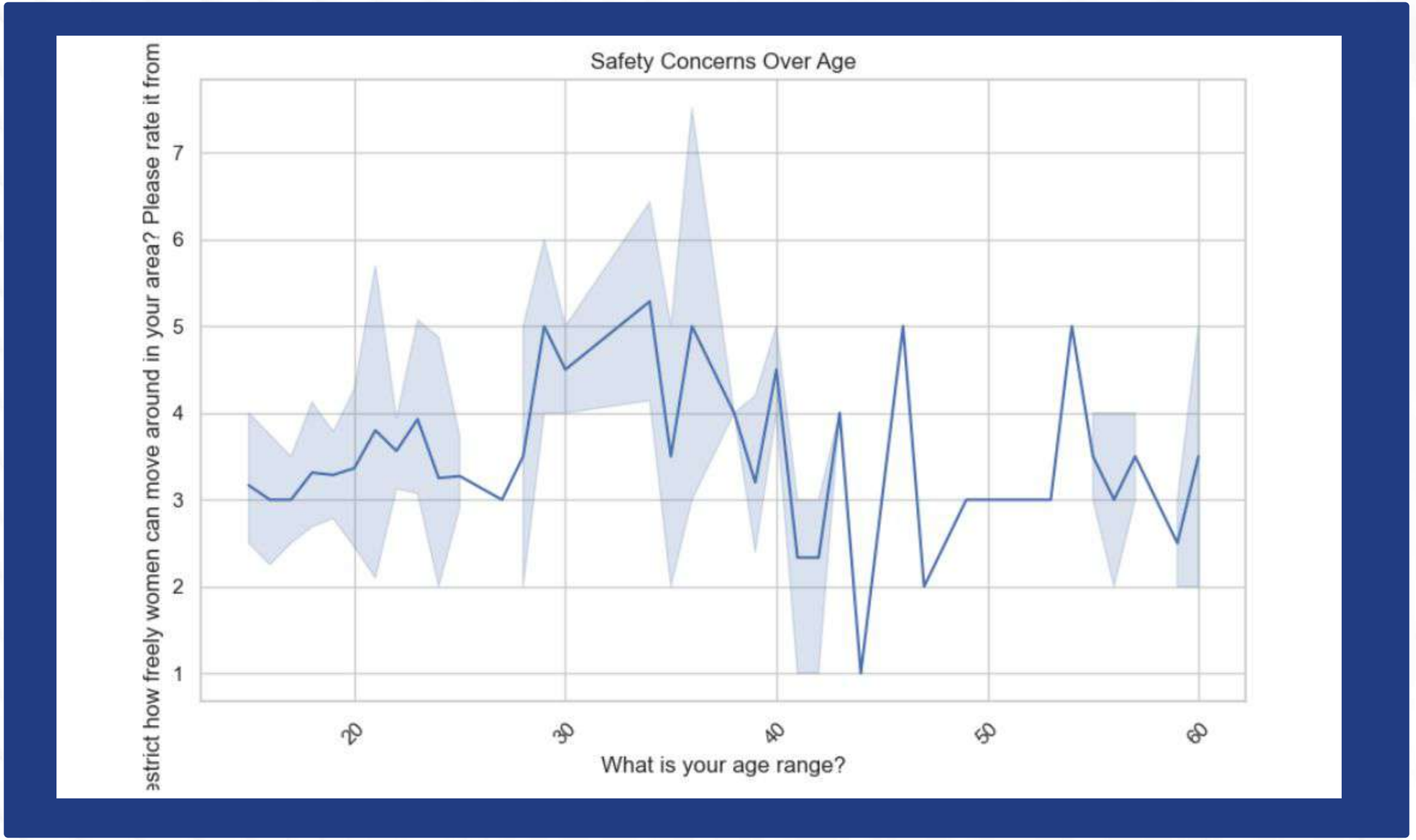


DATA VISUALISATION

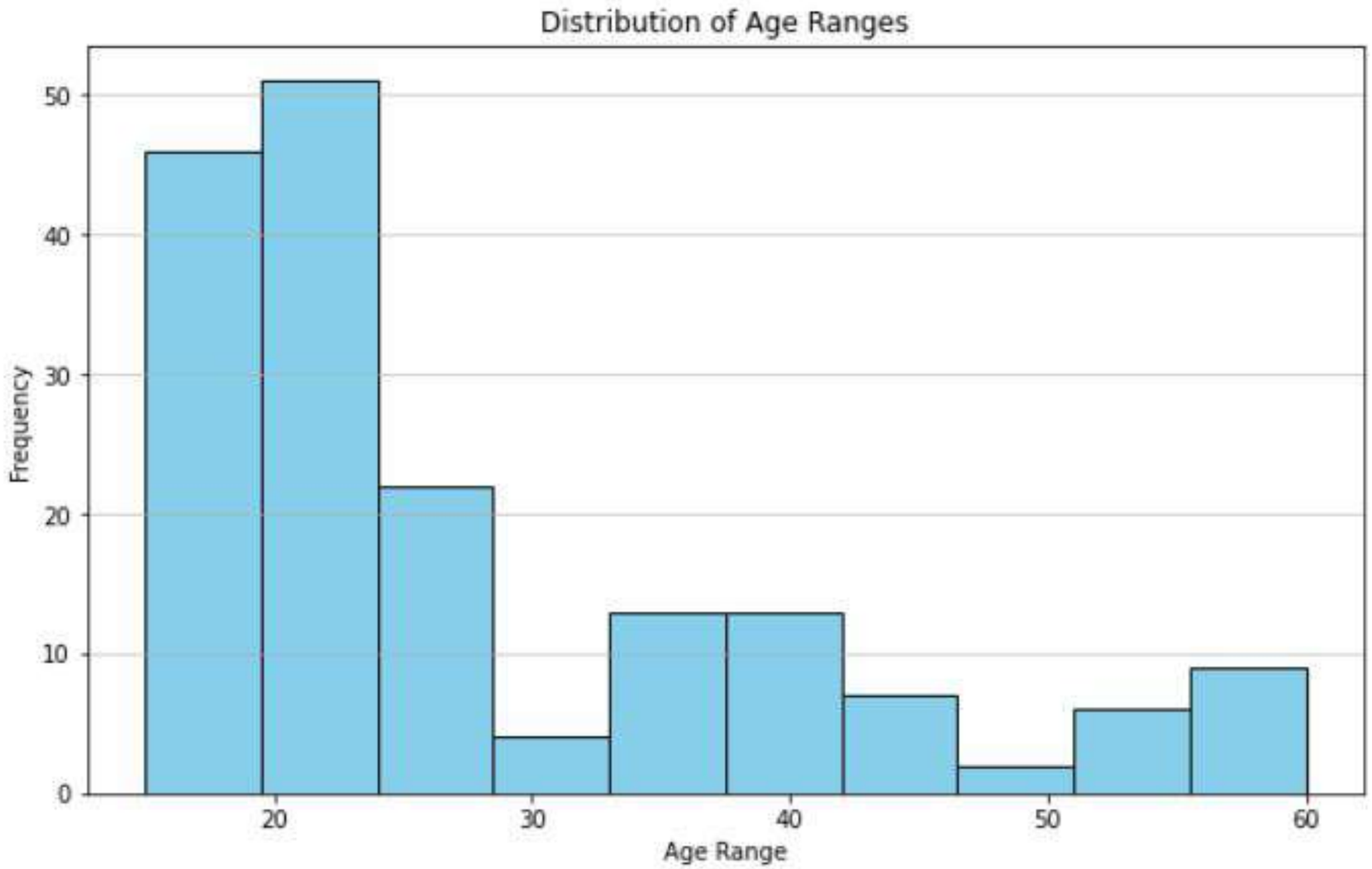
Bar graps
line llot
Scatter plot
Pie Chart

Linear Regression

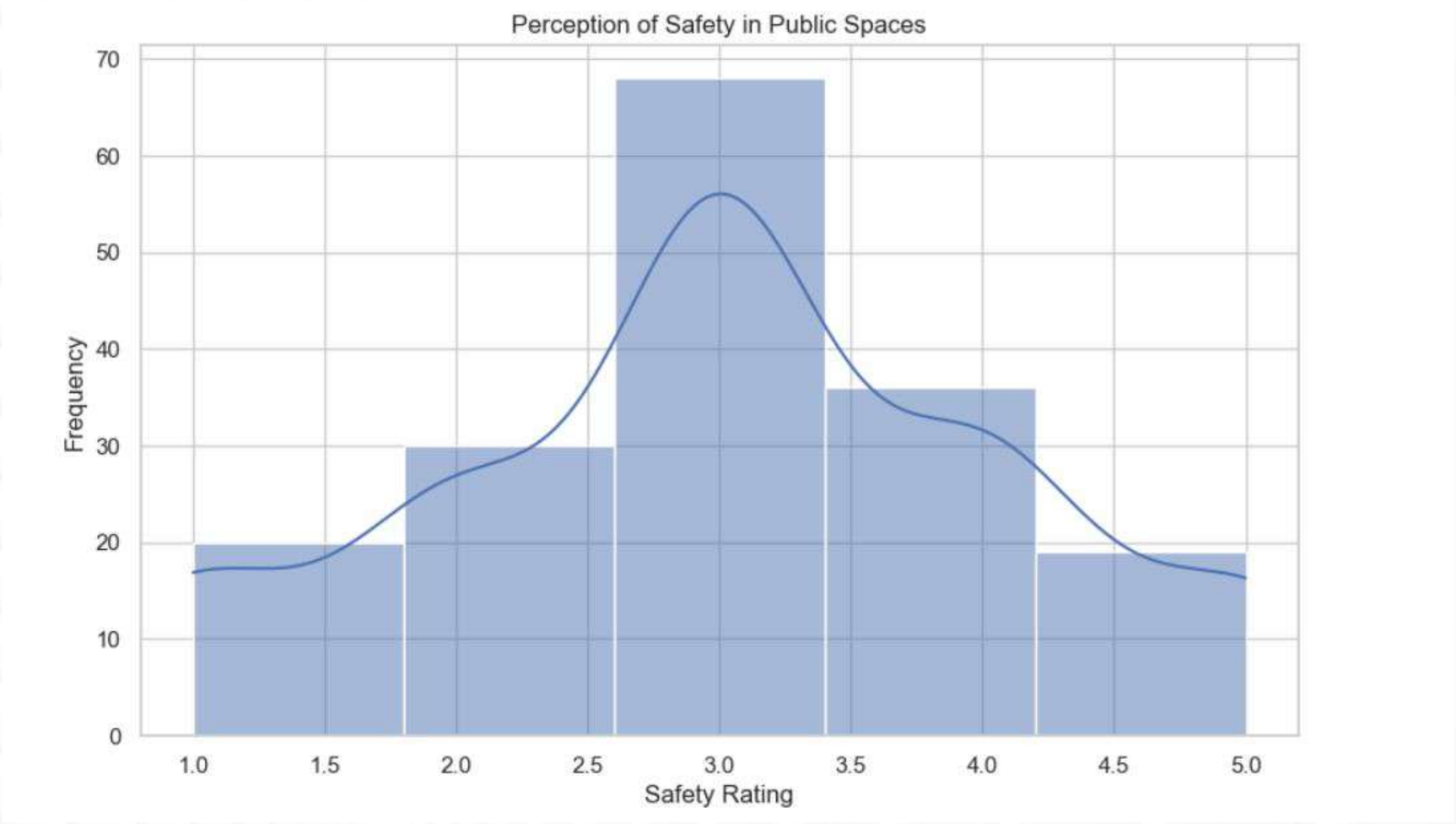
SAFETY CONCERNS OVER AGE



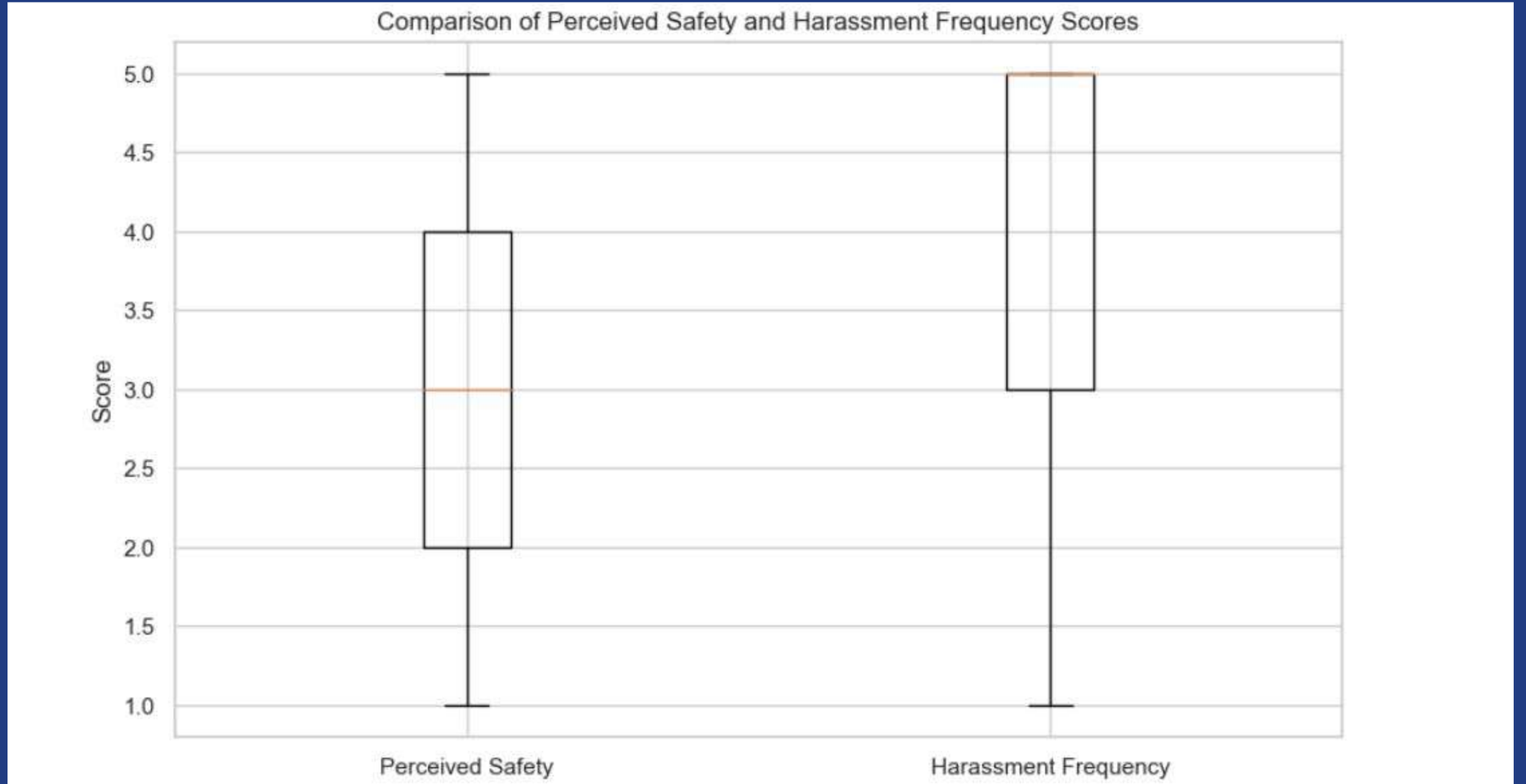
AGE RANGE DISTRIBUTION



PERCEPTION OF SAFETY IN PUBLIC PLACES



PERCEIVED SAFETY VS HARASSMENT FREQUENCY SCORES



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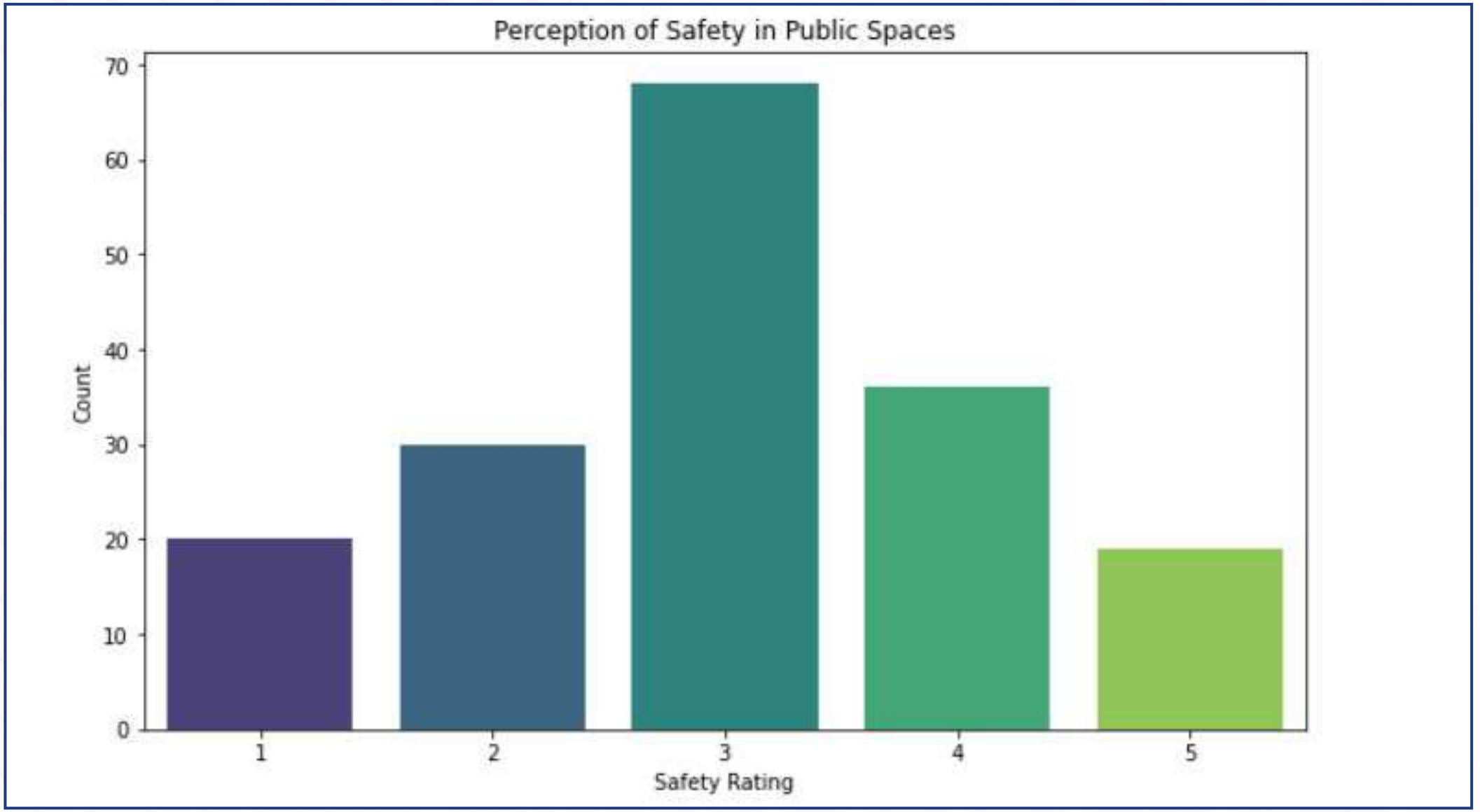
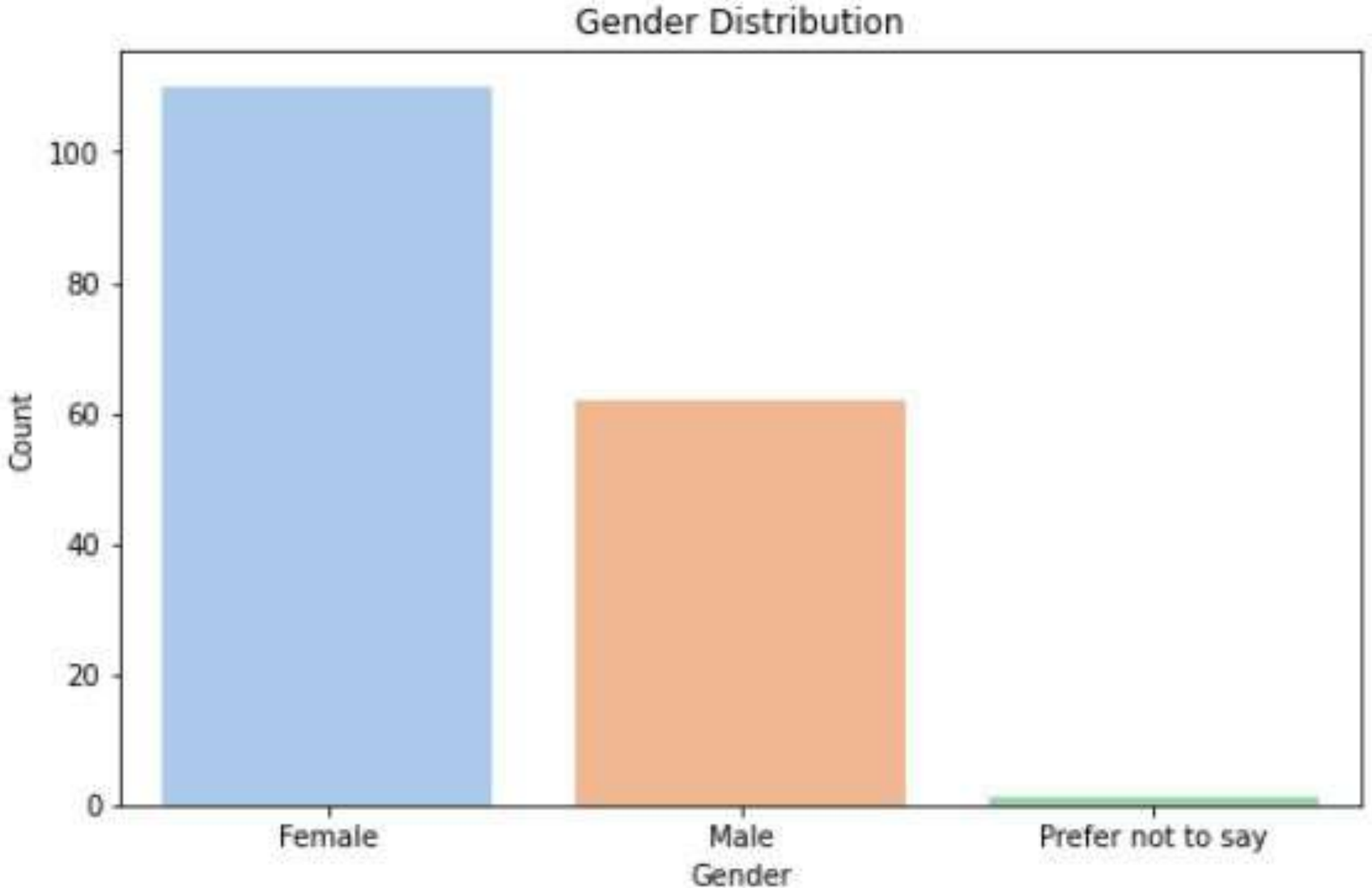
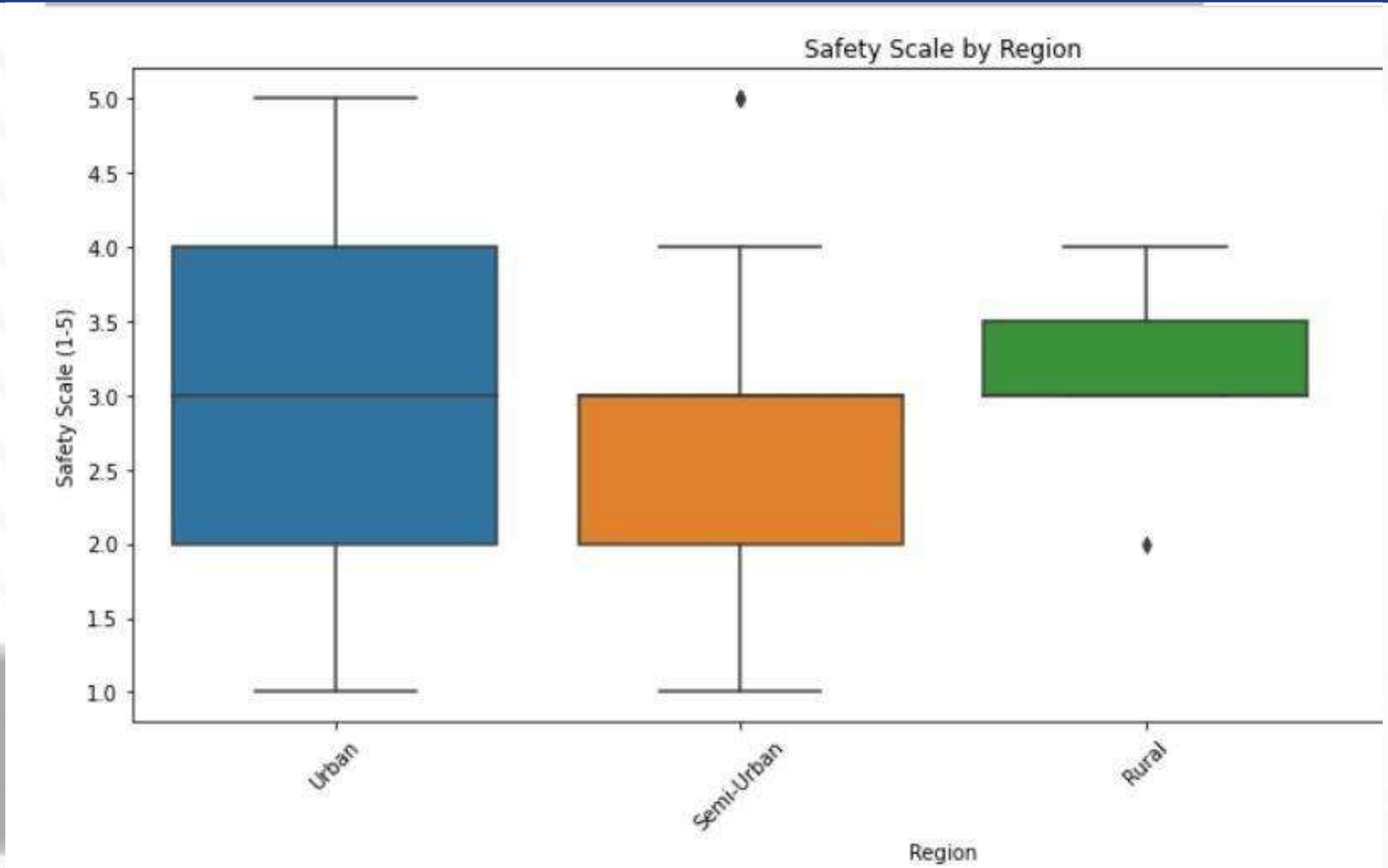


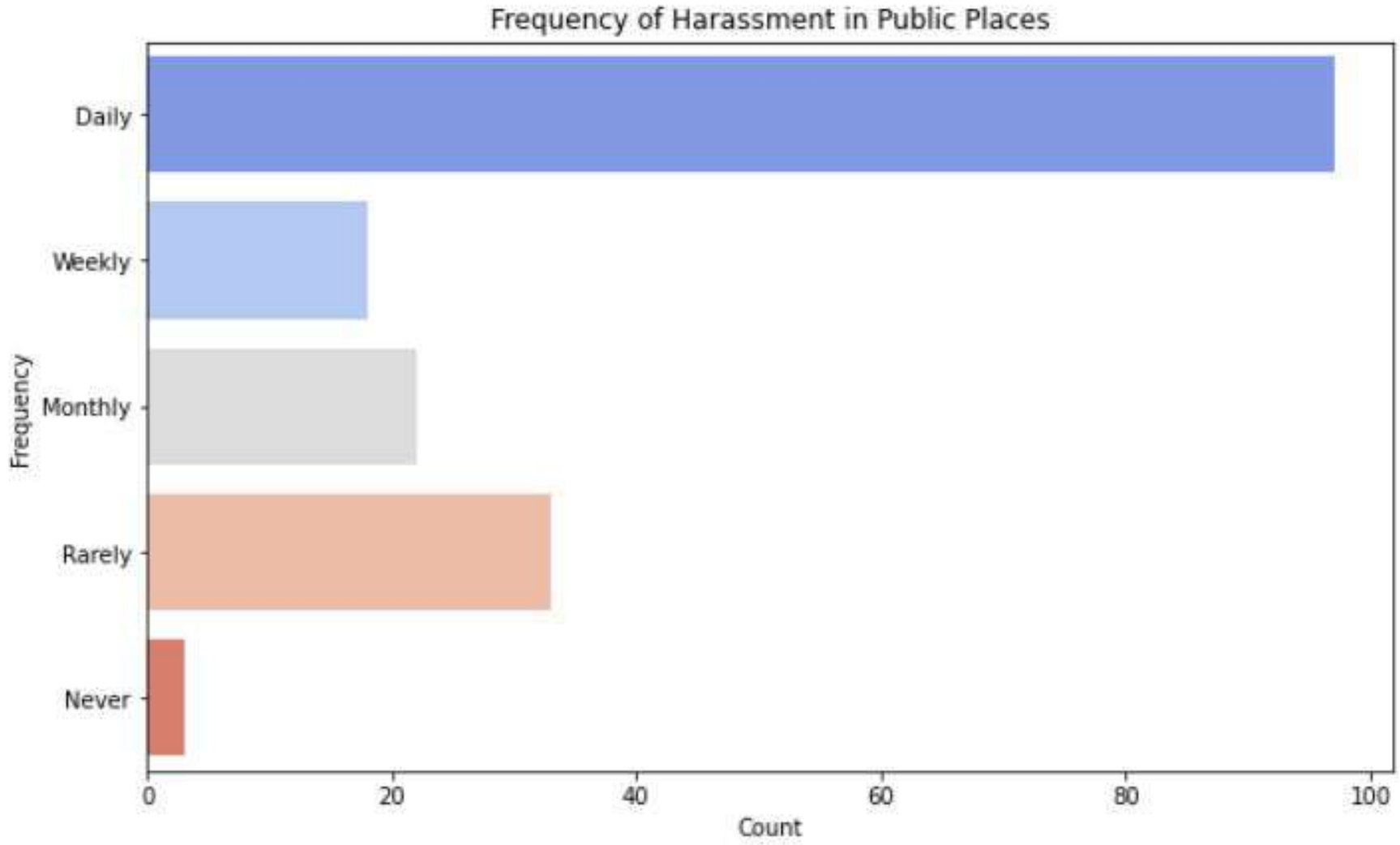
GENDER DISTRIBUTION



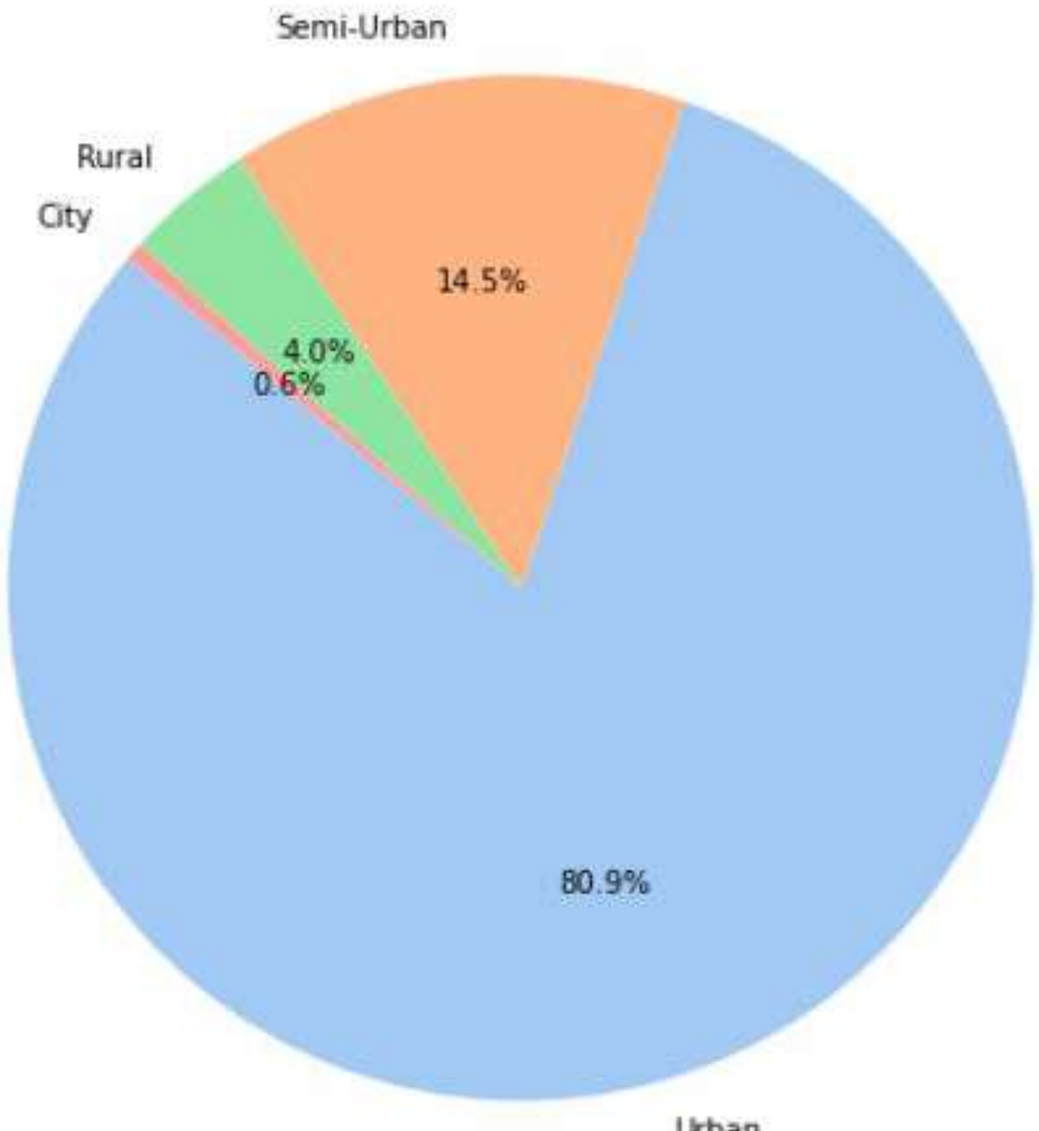
SAFETY SCALE BY REGION



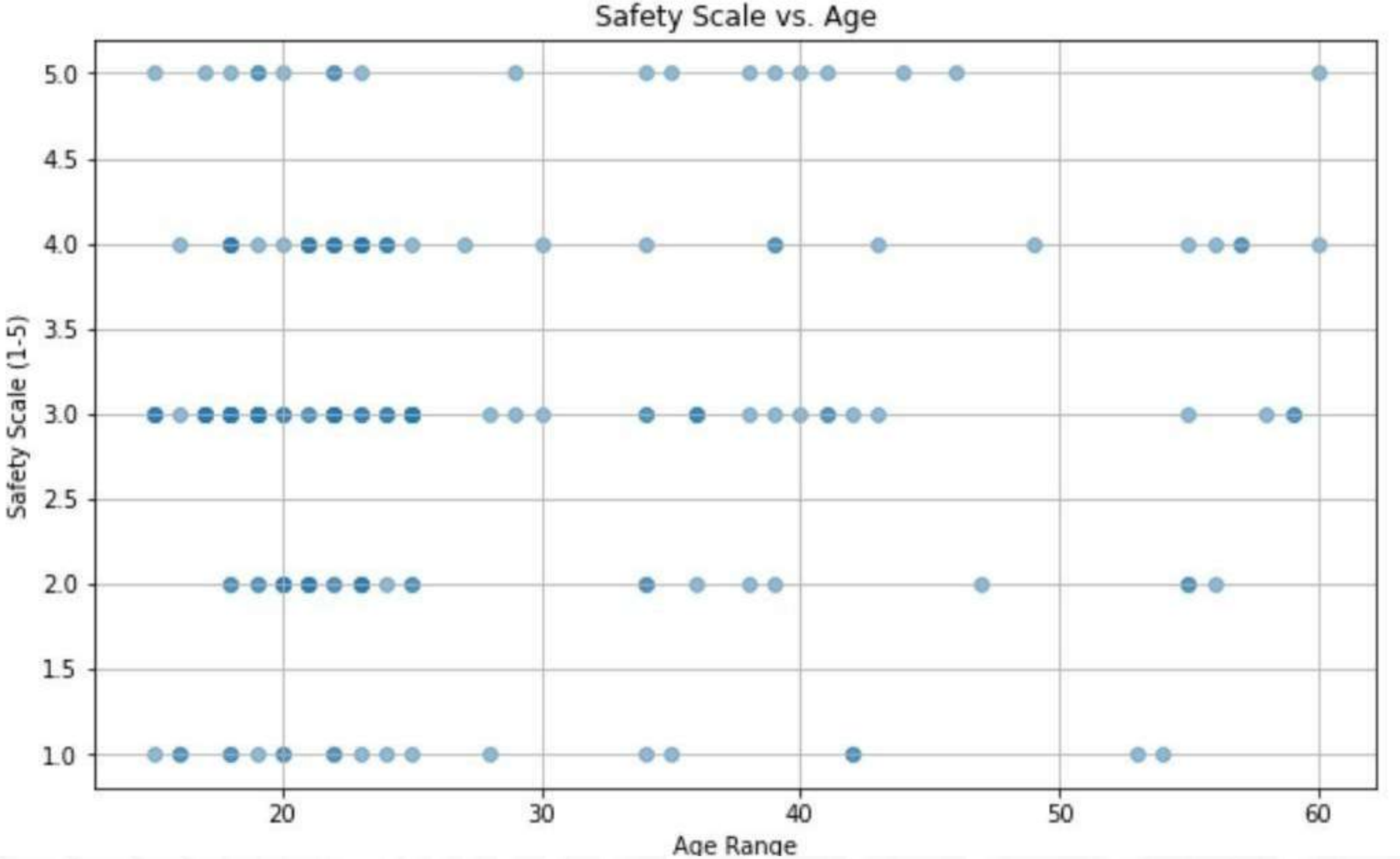
FREQUENCY OF HARASSMENT IN PUBLIC PLACES



REGIONAL DISTRIBUTION



AGE VS SAFETY SCALE



STATISTICAL TESTS

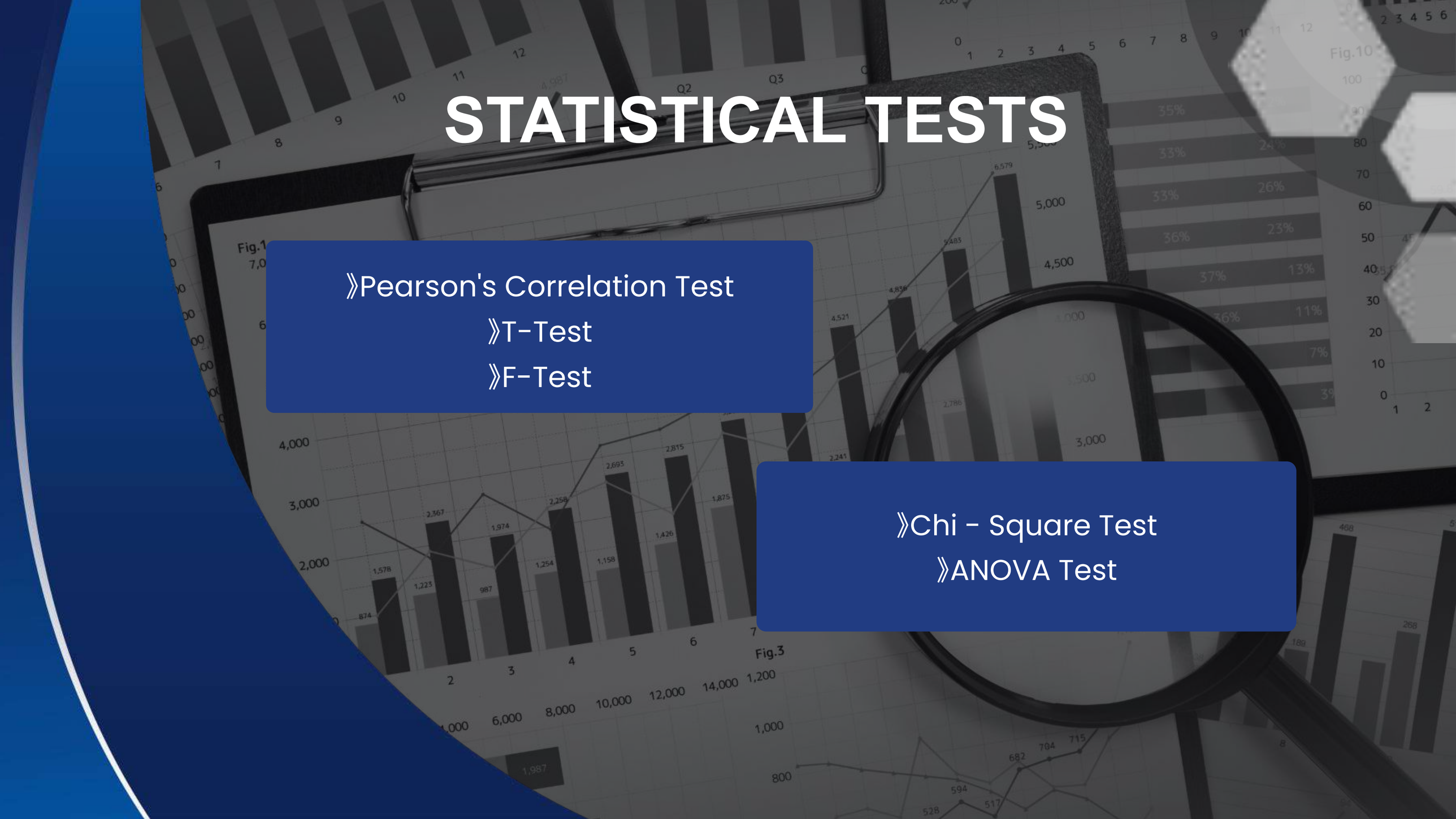
》Pearson's Correlation Test

》T-Test

》F-Test

》Chi - Square Test

》ANOVA Test



PEARSON'S CORRELATION TEST

Objective:

- To determine if there is a significant correlation between harassment frequency and mental health impact.

Hypothesis:

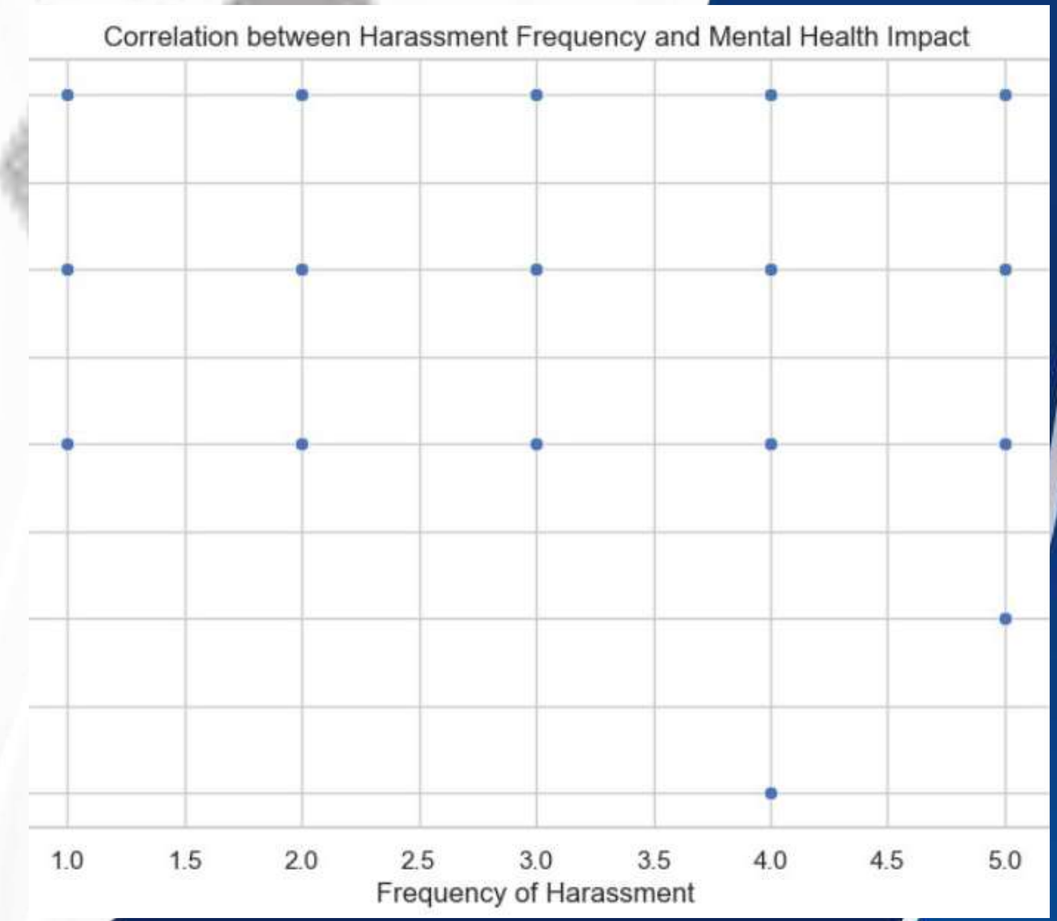
- Null Hypothesis (H_0): There is no significant association between harassment frequency and mental health impact.
- Alternative Hypothesis (H_1): A significant association exists between harassment frequency and mental health impact.

Results:

- Correlation: 0.0821 (very weak positive relationship).
- P-value: 0.2828 (greater than 0.05).

Conclusion:

- We fail to reject H_0. No significant association between harassment frequency and mental health



CHI - SQUARE TEST

》**Objective:**

¤ This analysis investigates the potential association between a woman's gender and her belief in societal norms and gender stereotypes contributing to unsafe environments.

》**Hypothesis:**

¤ Null Hypothesis (H0): There is no significant association between gender and belief in societal norms contributing to unsafe environments.

¤ Alternative Hypothesis (Ha): There exists a significant association between gender and this belief.

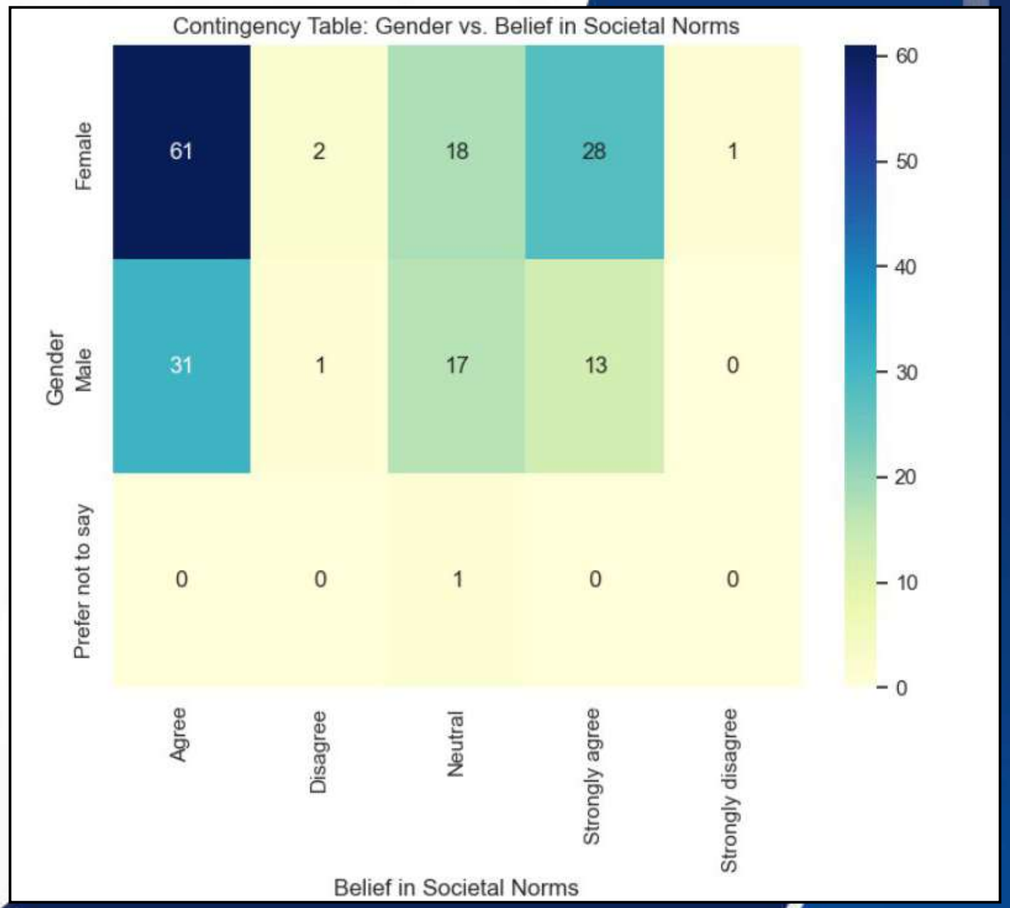
》**Results:**

¤ Chi-Square Statistic: The chi-square statistic calculated is [7.2919].

¤ P-Value: The obtained p-value is [0.5054].

》Significance Level (α): We will consider a significance level of 0.05 for this analysis.

》**Conclusion:**



F - TEST

》Objective:

¤ To analyze whether there is a significant difference in the perceived safety of public spaces for women between Urban and Semi-Urban regions.

》Hypothesis:

¤ Null Hypothesis (H_0): There is no significant difference in the perceived safety of public spaces for women between Urban and Semi-Urban regions.

¤ Alternative Hypothesis (H_1): There is a significant difference in the perceived safety of public spaces for women between Urban and Semi-Urban regions.

》Methodology:

¤ Conducted an independent two-sample t-test comparing safety scores between respondents from Urban and Semi-Urban regions.

¤ Results: T-statistic and p-value from the t-test will determine if the difference is statistically significant.

》Visualization:

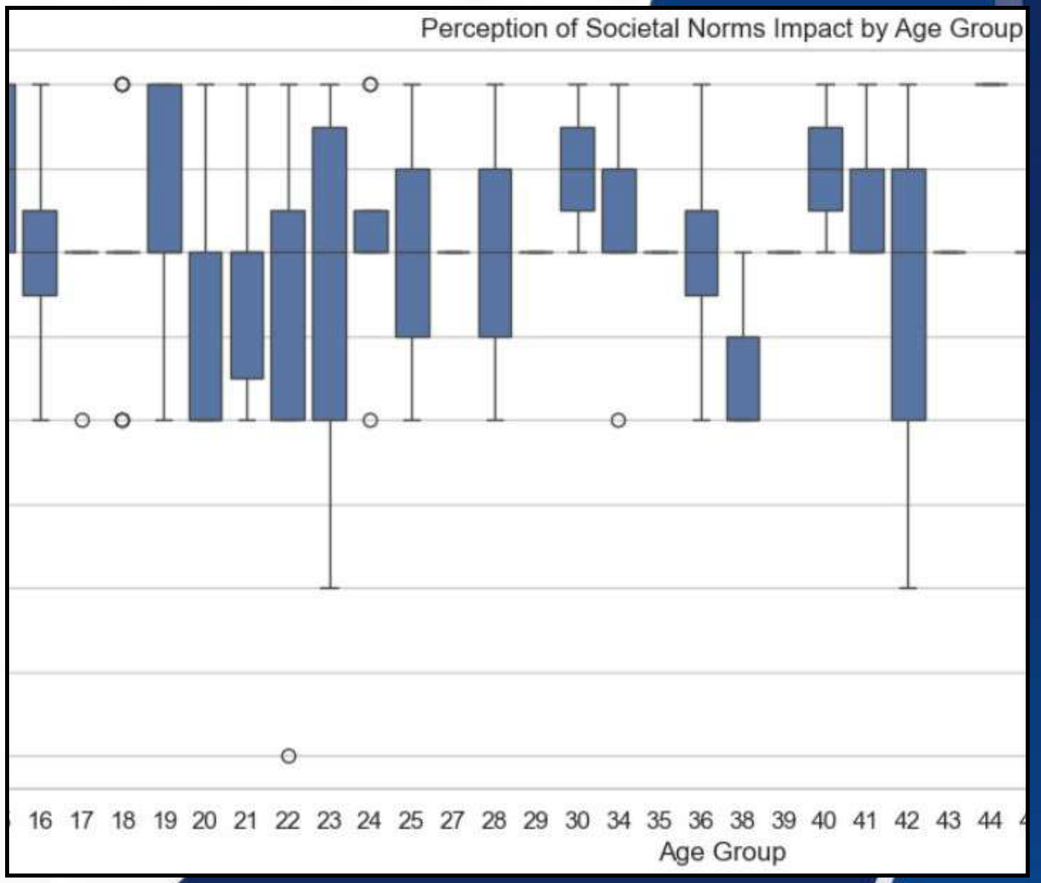
¤ A box plot visually compares the safety score distributions for the two regions.

* F-Statistic: The calculated F-statistic is 56.8023.

* P-Value: The obtained p-value is 4.3090.

Significance Level (α): We will consider a significance level of 0.05 for this analysis.

Conclusion:



T - TEST

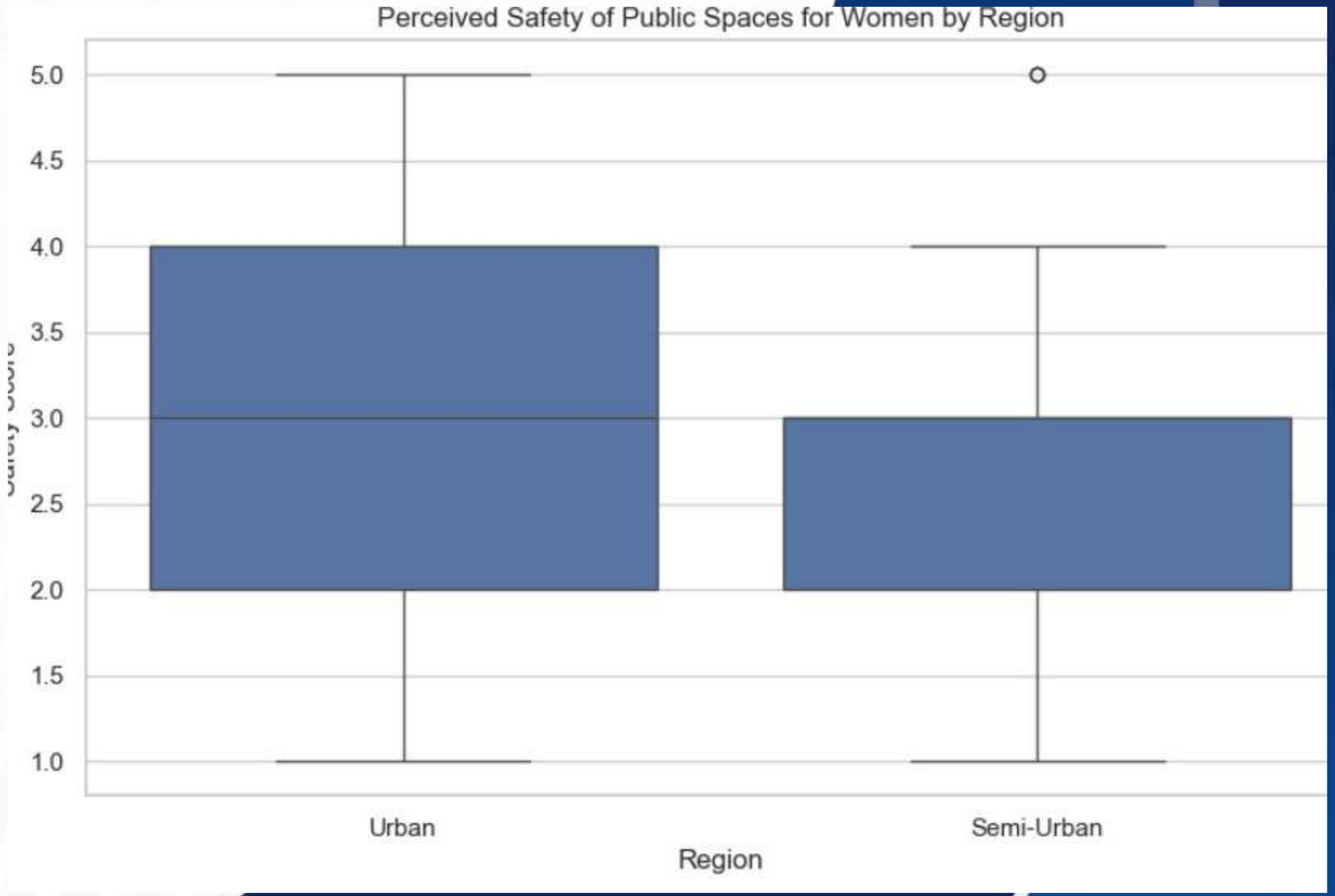
》**Objective**:
This analysis aims to determine if there's a significant difference in how safe women perceive public spaces to be between urban and semi-urban regions.

》**Hypothesis**:
¤ Null Hypothesis (H0): There is no significant difference in perceived safety of public spaces for women between urban and semi-urban regions.
¤ Alternative Hypothesis (Ha): A significant difference exists in perceived safety between these regions.

》**Results**:
¤ T-Statistic: The t-statistic calculated is [0.90199].
¤ P-Value: The p-value obtained is [0.36839].

》**Significance Level (α)**: We will consider a significance level of 0.05 for this analysis.

》**Conclusion**:
¤ Based on the p-value of [0.36839] which is less than our chosen significance level of 0.05, we reject the null hypothesis (H0).



CONCLUSION

》**Demographics**: Highlight the diverse age, region, and gender of respondents for context.

》**Harassment Frequency**: Summarize how often respondents believe women face harassment, and personal experiences shared.

》**Perceived Safety**: Show safety ratings and any demographic or regional differences.

》**Societal Impact**: Discuss the influence of societal norms and gender stereotypes on safety perceptions.

》**Solutions**: Highlight suggested solutions, including stricter laws and views on government efforts.

》**Global Comparison**: Compare respondents' perceptions of women's safety locally vs. globally.