

Appendix

Dataset 1:

Figure 1: Skin Tone Distribution

This bar plot illustrates the distribution of skin tones across the dataset, highlighting the predominance of "Fair" tones and showing potential imbalances in the data.

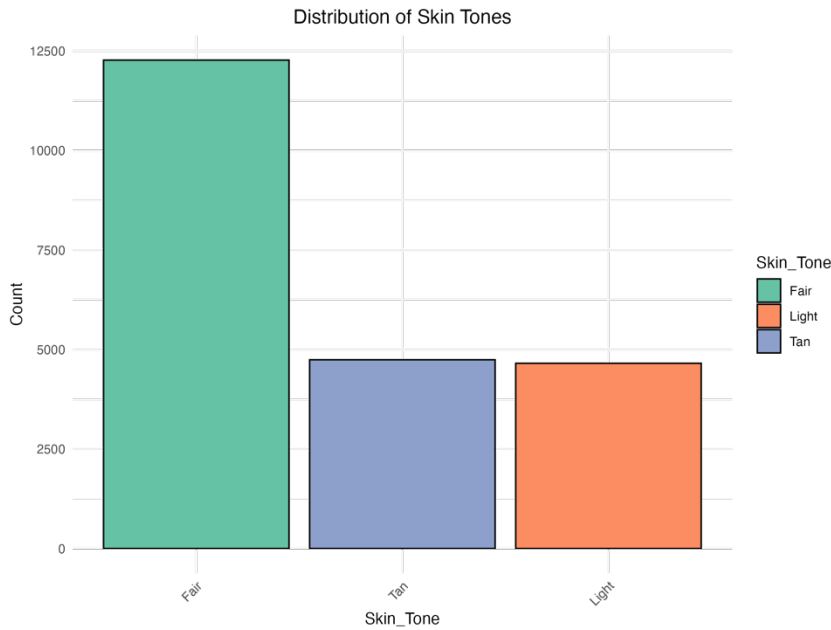


Figure 2: Clothes Season Distribution

This bar chart shows the distribution of clothing color palettes grouped by seasons. "Autumn" and "Winter" palettes dominate, which could reflect dataset bias.

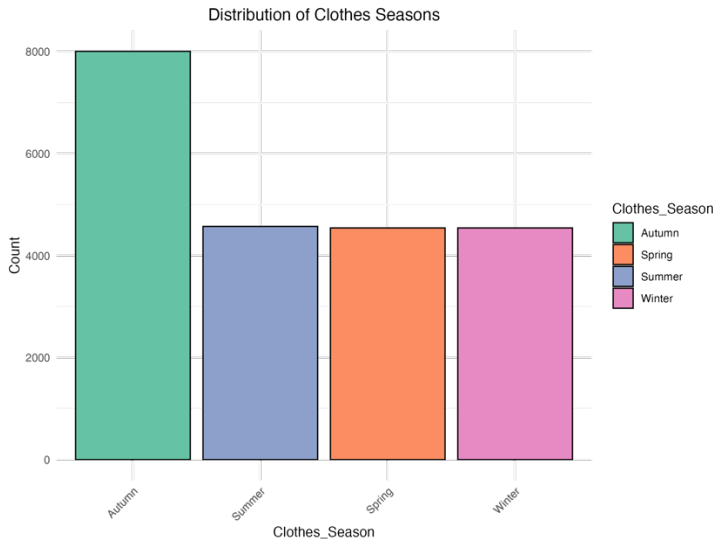


Figure 3: Pants Season Distribution

This bar chart visualizes the seasonal distribution of pants colors, showing a pattern similar to clothing colors with a significant emphasis on "Autumn" palettes.

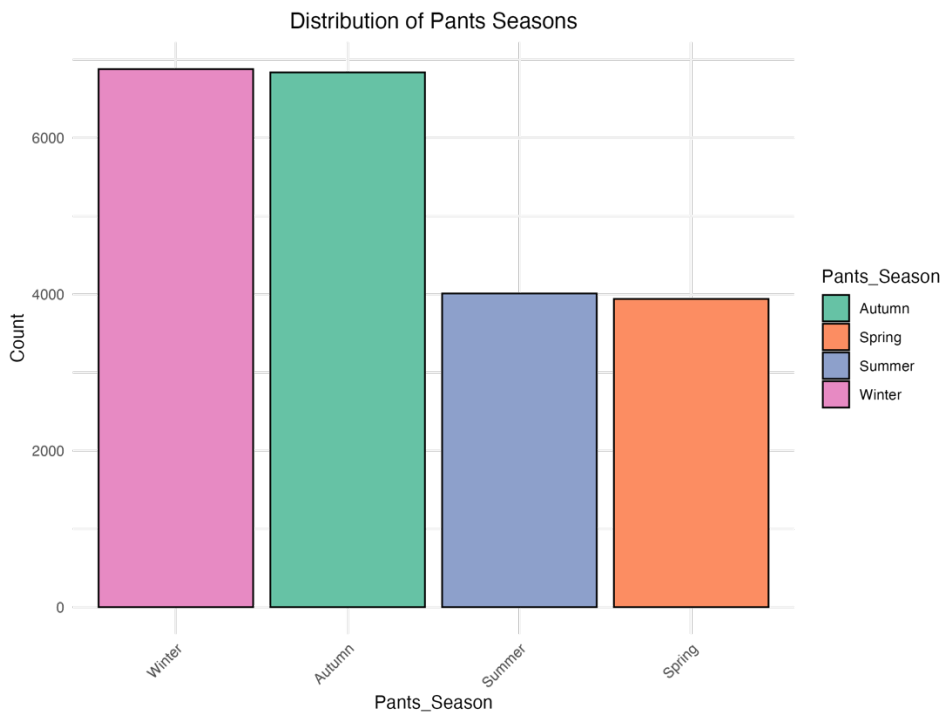


Figure 4: Color Harmony Scores by Skin Tone and Season

This heatmap highlights the harmony scores between skin tones and seasonal palettes based on color theory. Darker cells indicate stronger harmony relationships.



Figure 5: MCA - Clothes, Harmony, and Skin (Variables)

This MCA (Multiple Correspondence Analysis) visualization explores variable relationships, such as clustering of "Light" skin tones with "Spring" palettes.

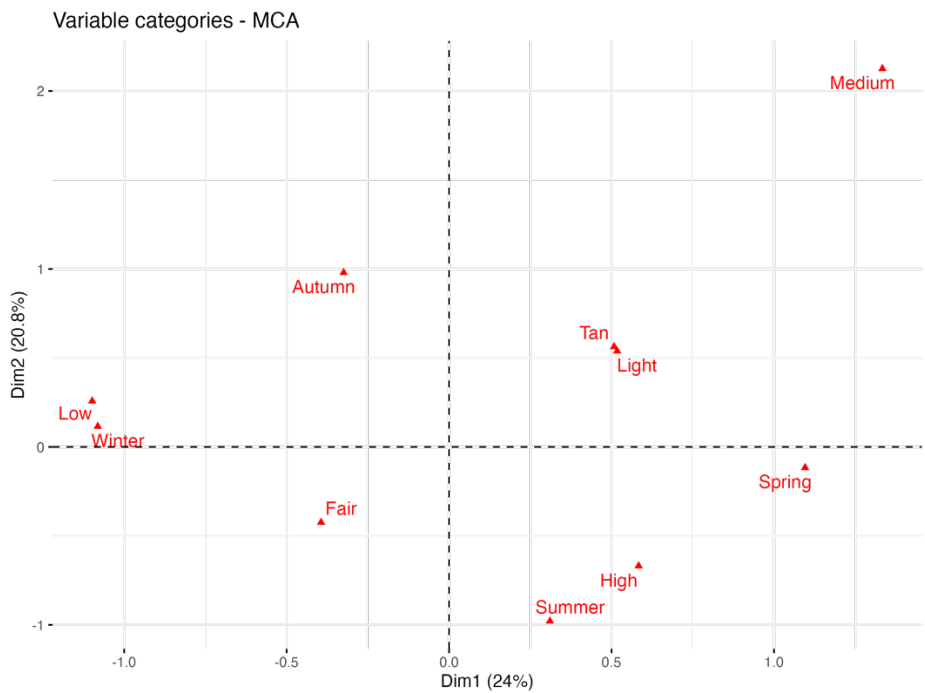


Figure 6: MCA - Clothes, Harmony, and Skin (Dimensions)

This scree plot shows the importance of MCA dimensions in explaining variance, with the first two dimensions capturing the majority of relationships.

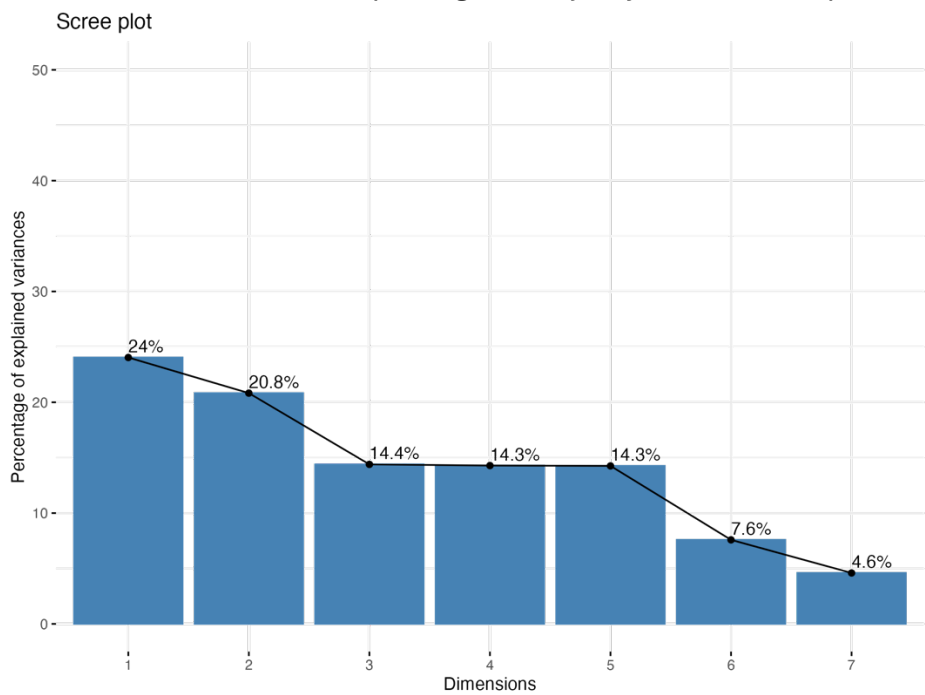


Figure 7: MCA - Clothes, Pants, Harmony, and Skin (Variables)

This visualization extends the MCA analysis by including pants seasons, showing clustering patterns such as "Autumn" palettes aligning with "Tan" skin tones.

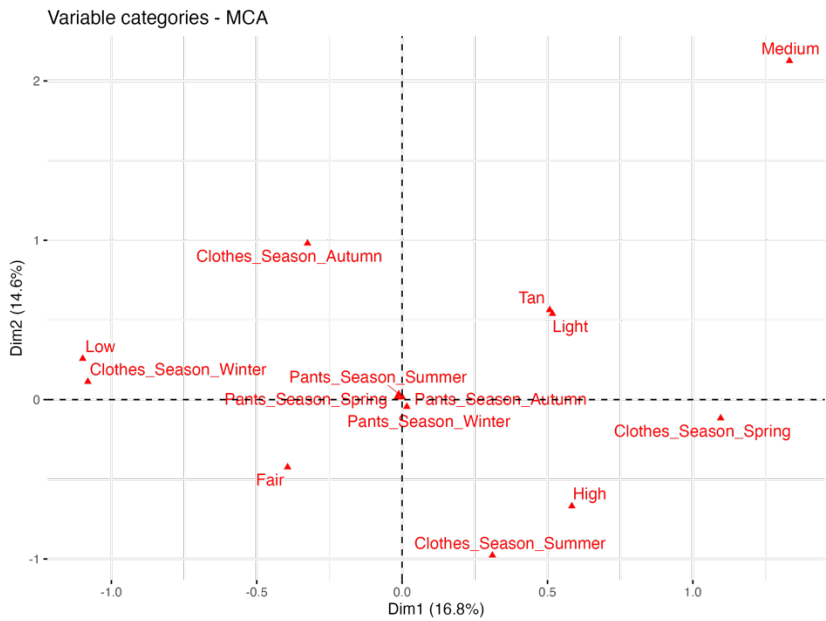


Figure 8: MCA - Clothes, Pants, Harmony, and Skin (Dimensions)

This scree plot depicts the significance of dimensions for the MCA analysis, with the first two dimensions being the most informative.

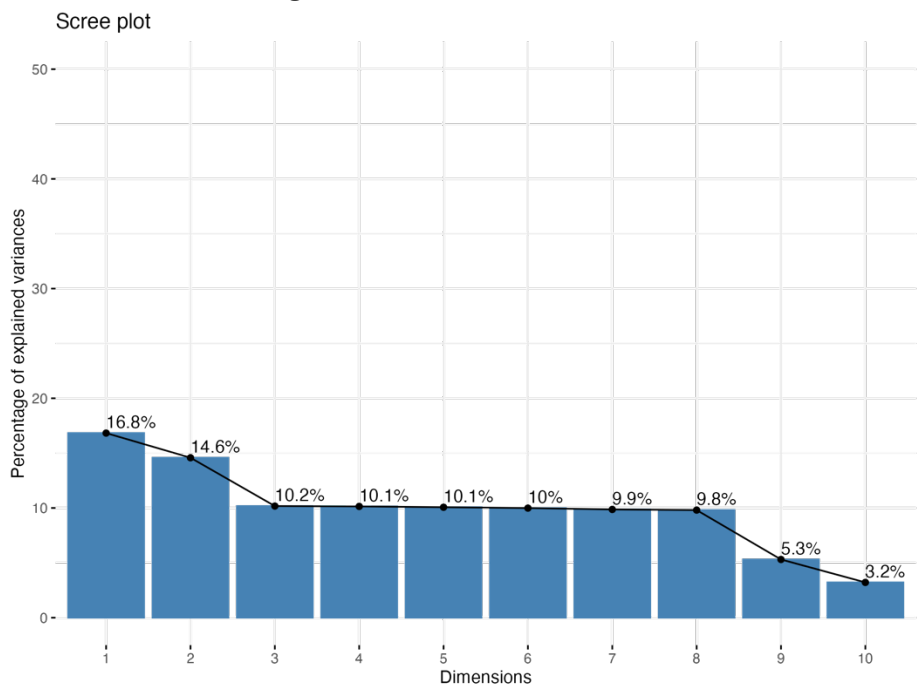


Figure 9: MCA - BMI, Gender, Clothes, Pants, Harmony, and Skin (Variables)

This MCA plot incorporates additional variables like BMI and gender, showing relationships such as "Underweight" BMI with "Low" harmony and "Winter" palettes.

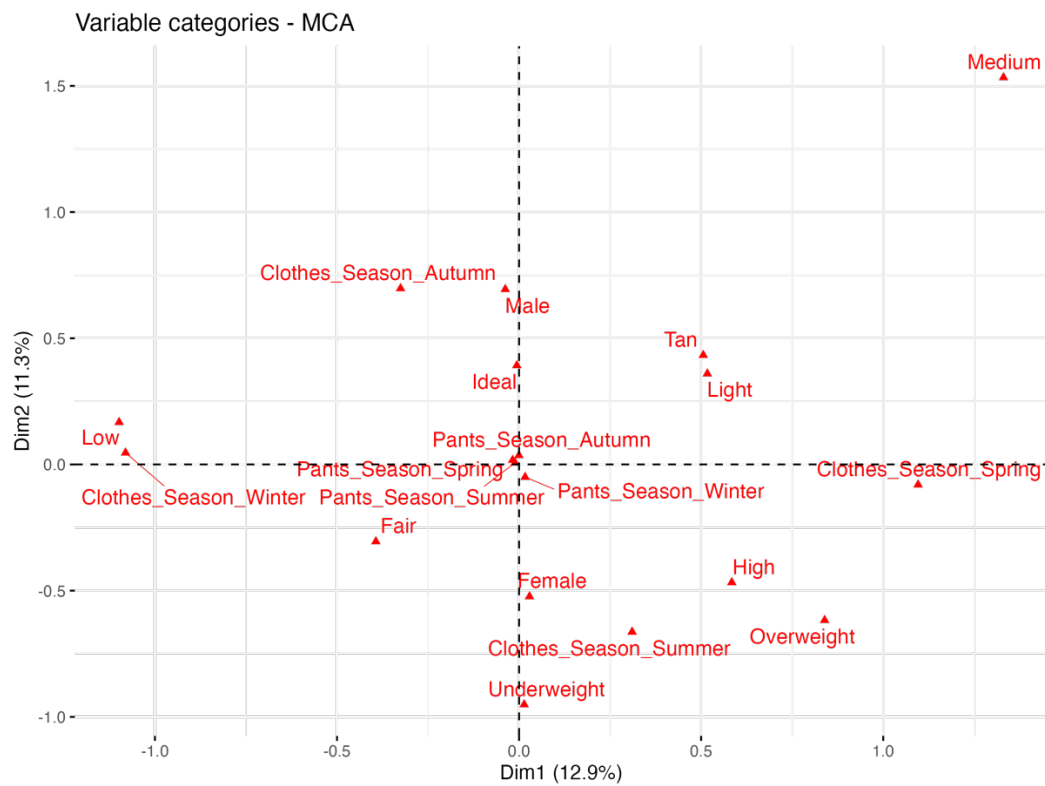
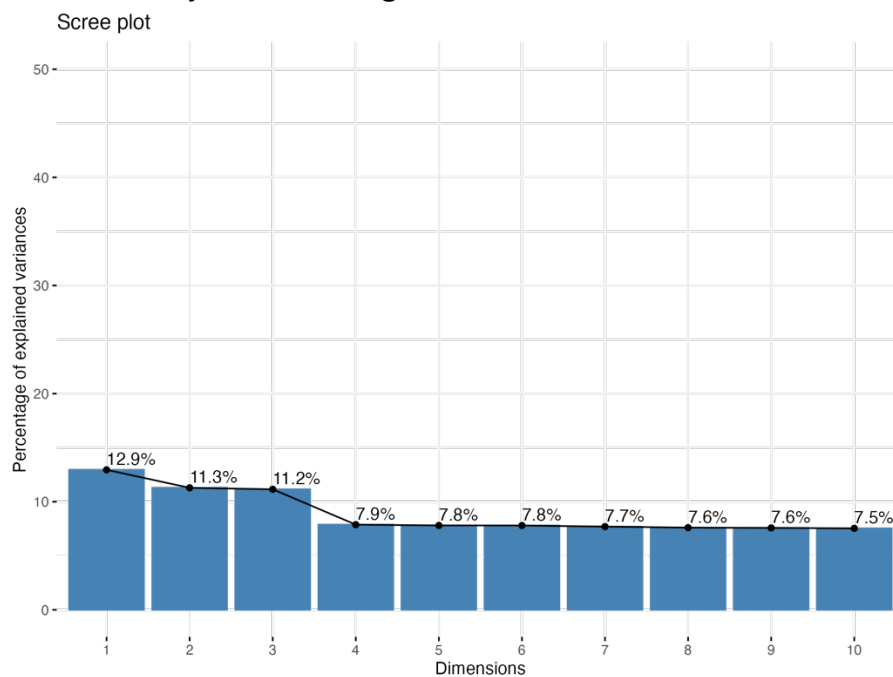


Figure 10: MCA - BMI, Gender, Clothes, Pants, Harmony, and Skin (Dimensions)

This scree plot illustrates the contribution of each dimension in explaining variance for the MCA analysis with BMI, gender, and other variables.



Dataset 2:

Figure 1: QQ Plot for Residual Analysis

This section contains QQ plots for residual analysis of the multivariate models, evaluating how residuals deviate from normality for Emotions Mean, Arousal, Dominance, and Valence models.

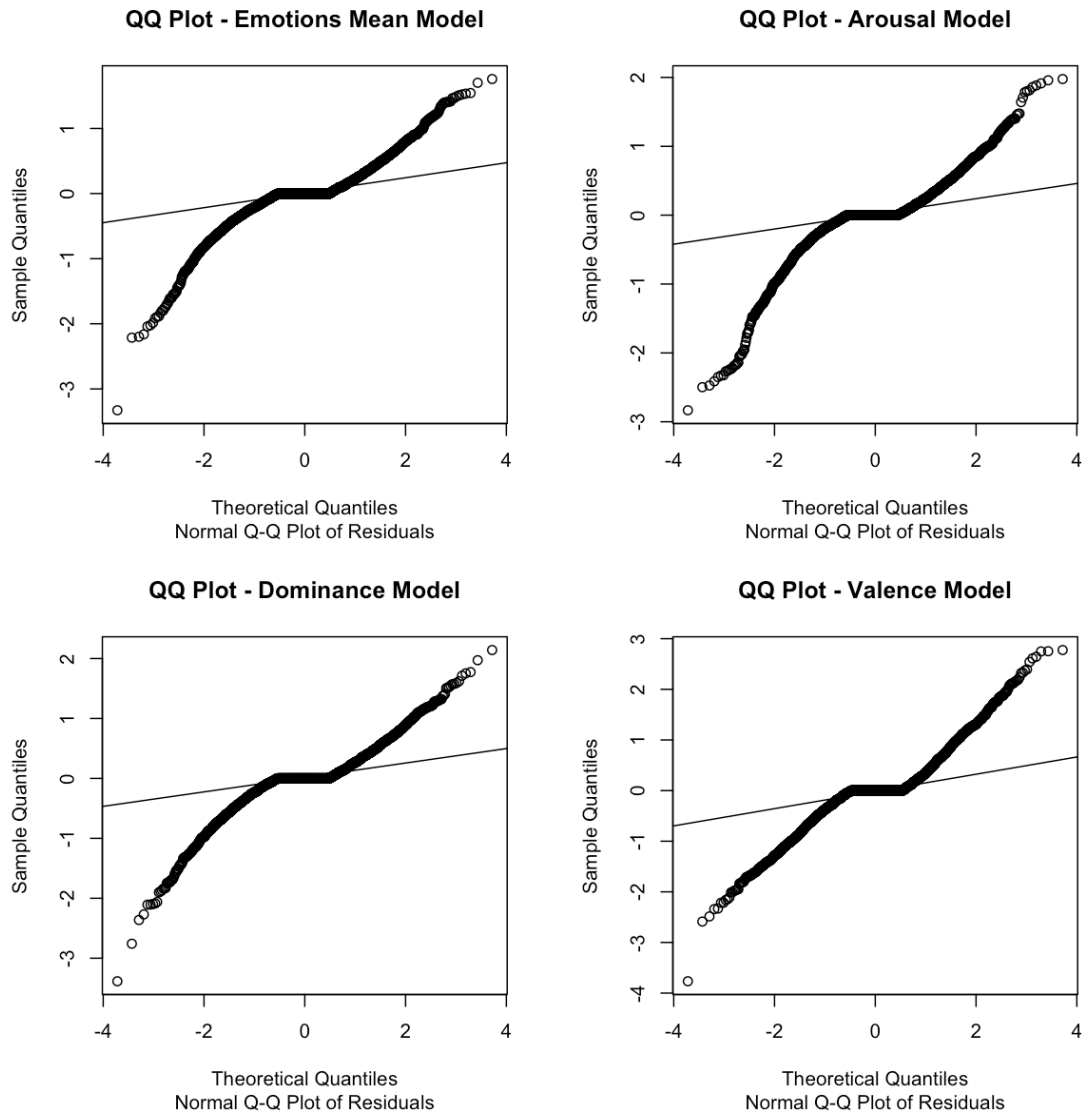


Figure 2: Actual vs Predicted Values

This section visualizes the comparison between actual and predicted values for the Emotions Mean, Arousal, Dominance, and Valence models, highlighting model accuracy and deviations.

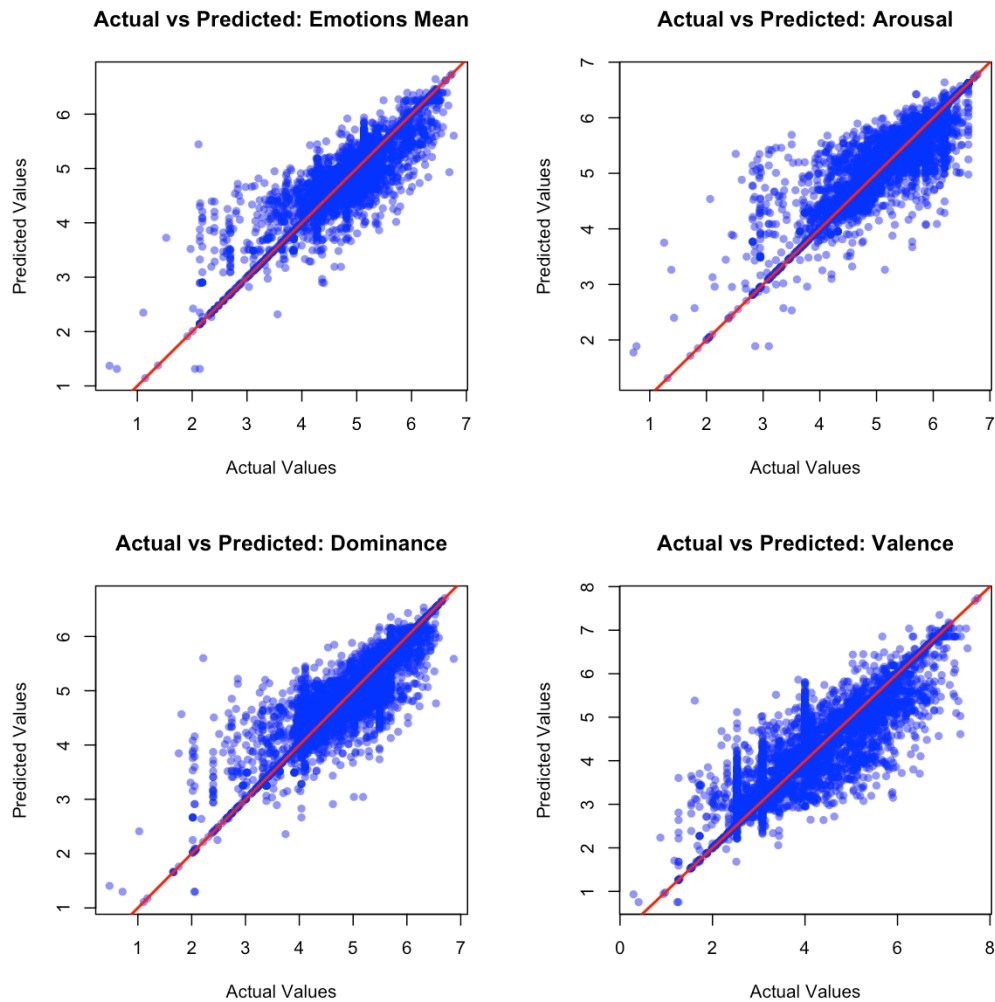


Figure 3: Correlation Heatmap of Emotional Dimensions

This heatmap visualizes the correlation between emotional dimensions (Valence, Arousal, Dominance, and Emotions Mean), showing strong relationships among the variables.

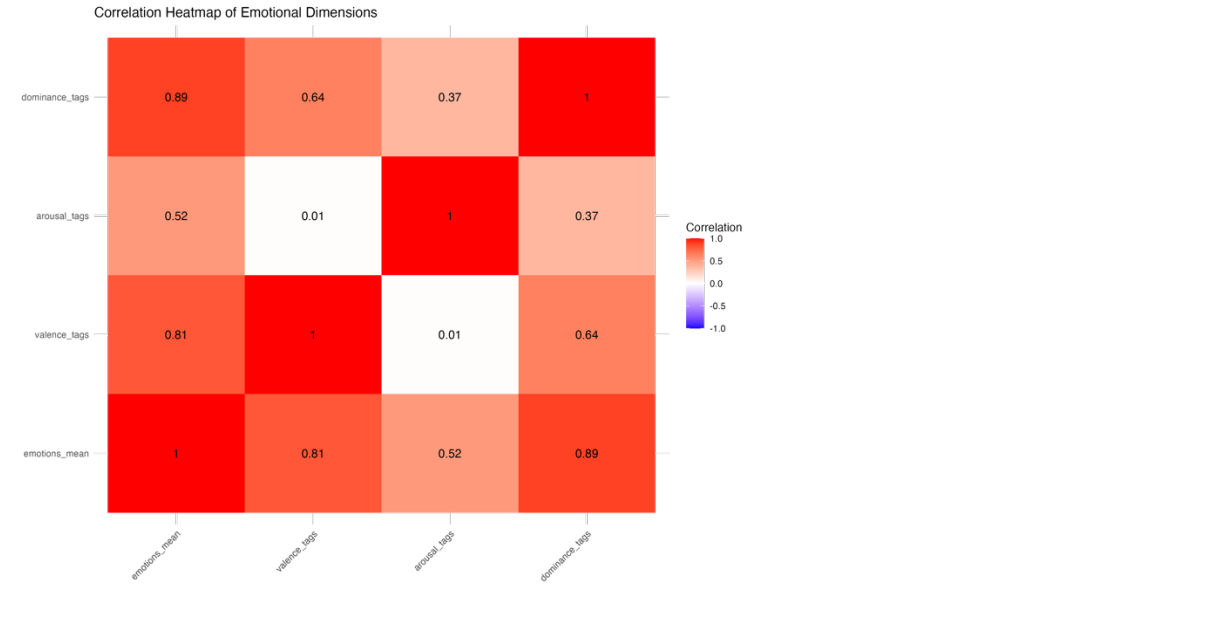


Figure 4: Valence vs Arousal

This graph displays the relationship between Valence (pleasantness) and Arousal (intensity) across different emotion tags. Larger bubble sizes indicate groups with more songs.

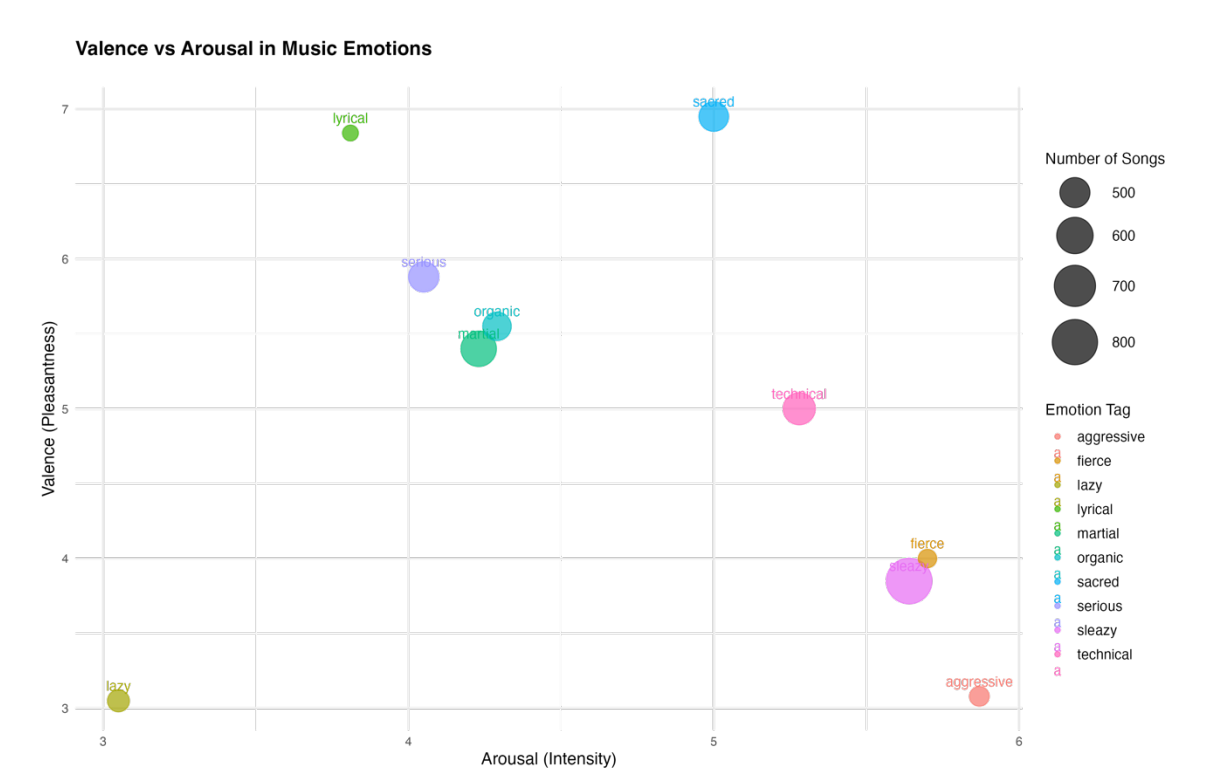


Figure 5: Arousal vs Dominance

This graph shows the relationship between Arousal (intensity) and Dominance (control) across emotion tags. The bubble sizes correspond to the number of songs in each group.

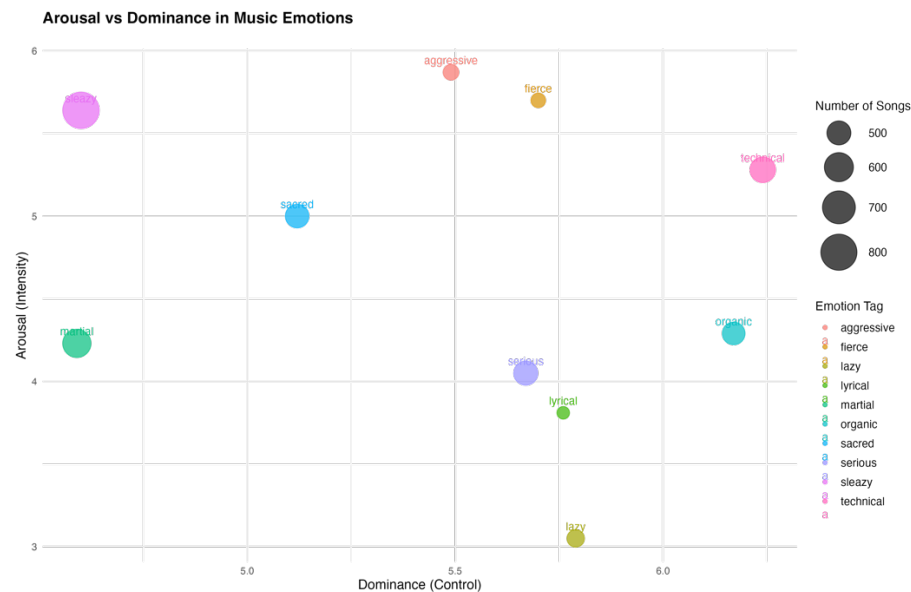


Figure 6: Valence vs Dominance

This plot demonstrates the relationship between Valence (pleasantness) and Dominance (control) across emotion tags, with bubble sizes reflecting the number of songs.

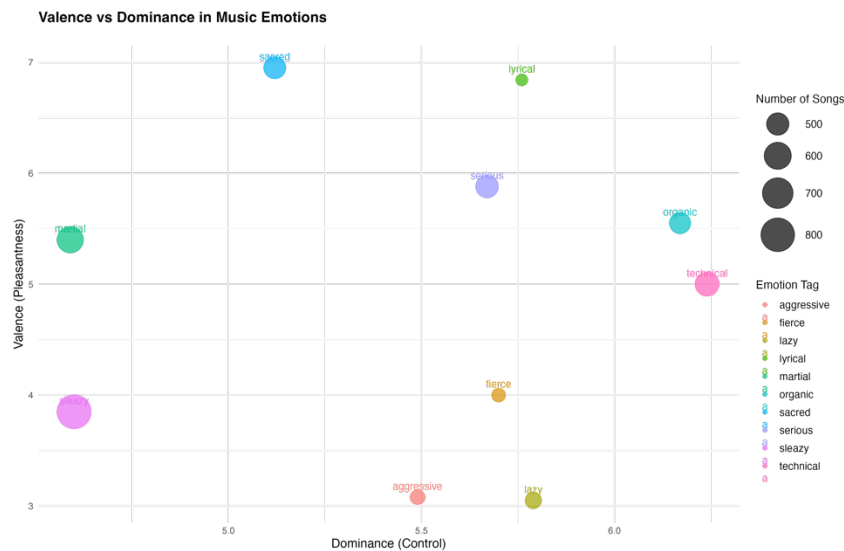


Figure 7: Emotional Dimensions of Music Groups

This combined visualization summarizes Valence, Arousal, and Dominance relationships across emotion groups, illustrating the overlap and variation among different tags.

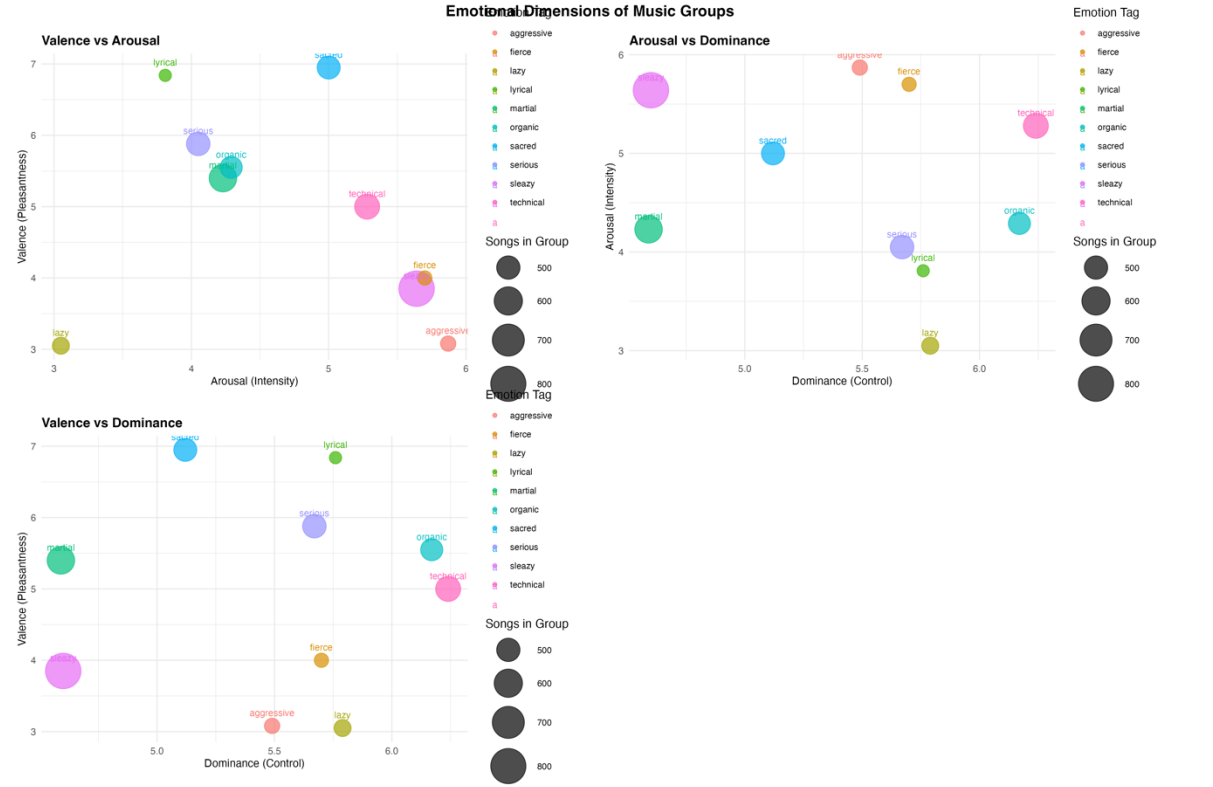


Figure 8: Artists with Both Sleazy and Fierce Songs

This scatter plot highlights artists who have songs tagged as both "Sleazy" and "Fierce," visualized by average emotional values like Arousal and Valence.

