DDS Analytics – Frito Lay

Case Study 2 Presentation
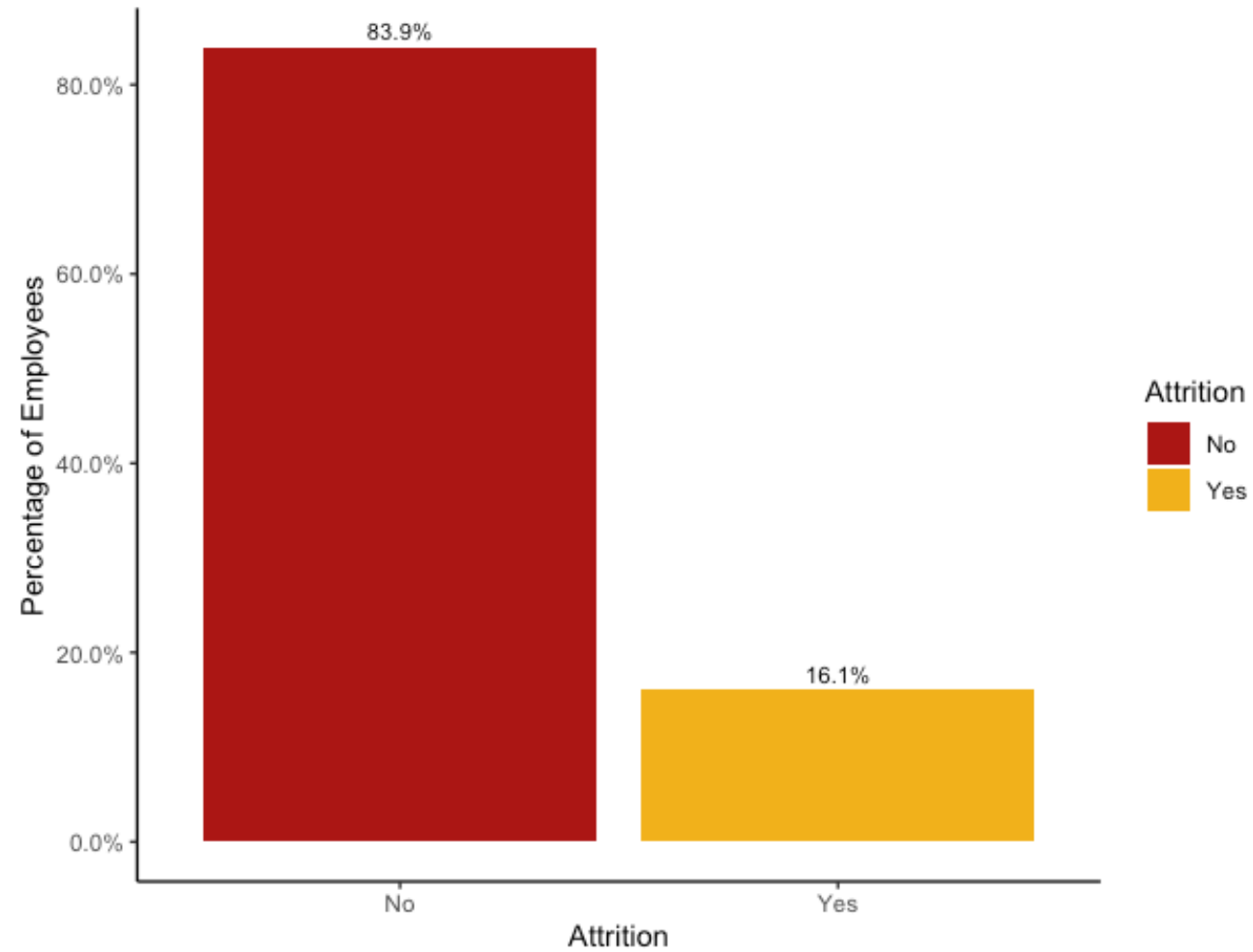
Hollie Gardner
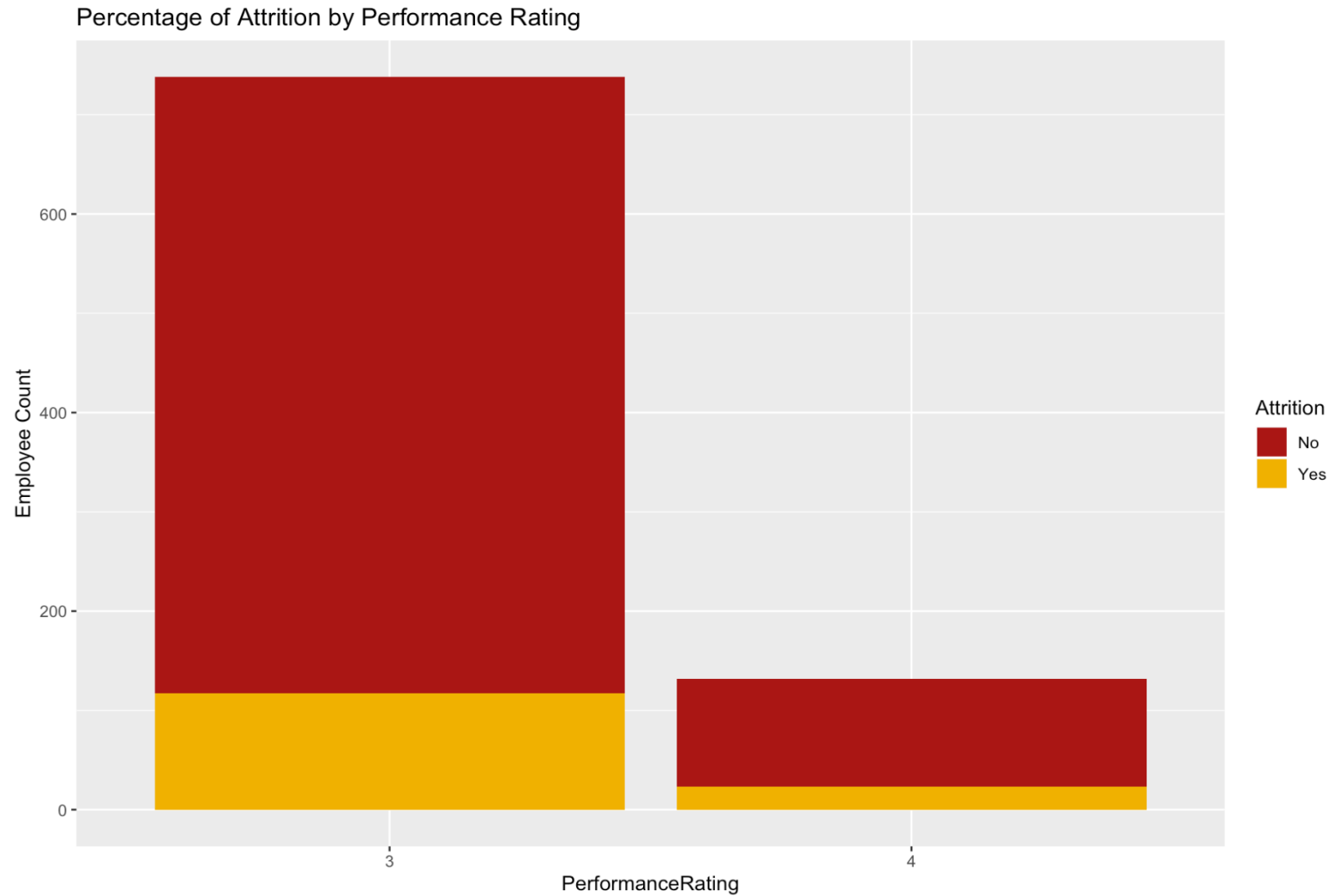
Demographics
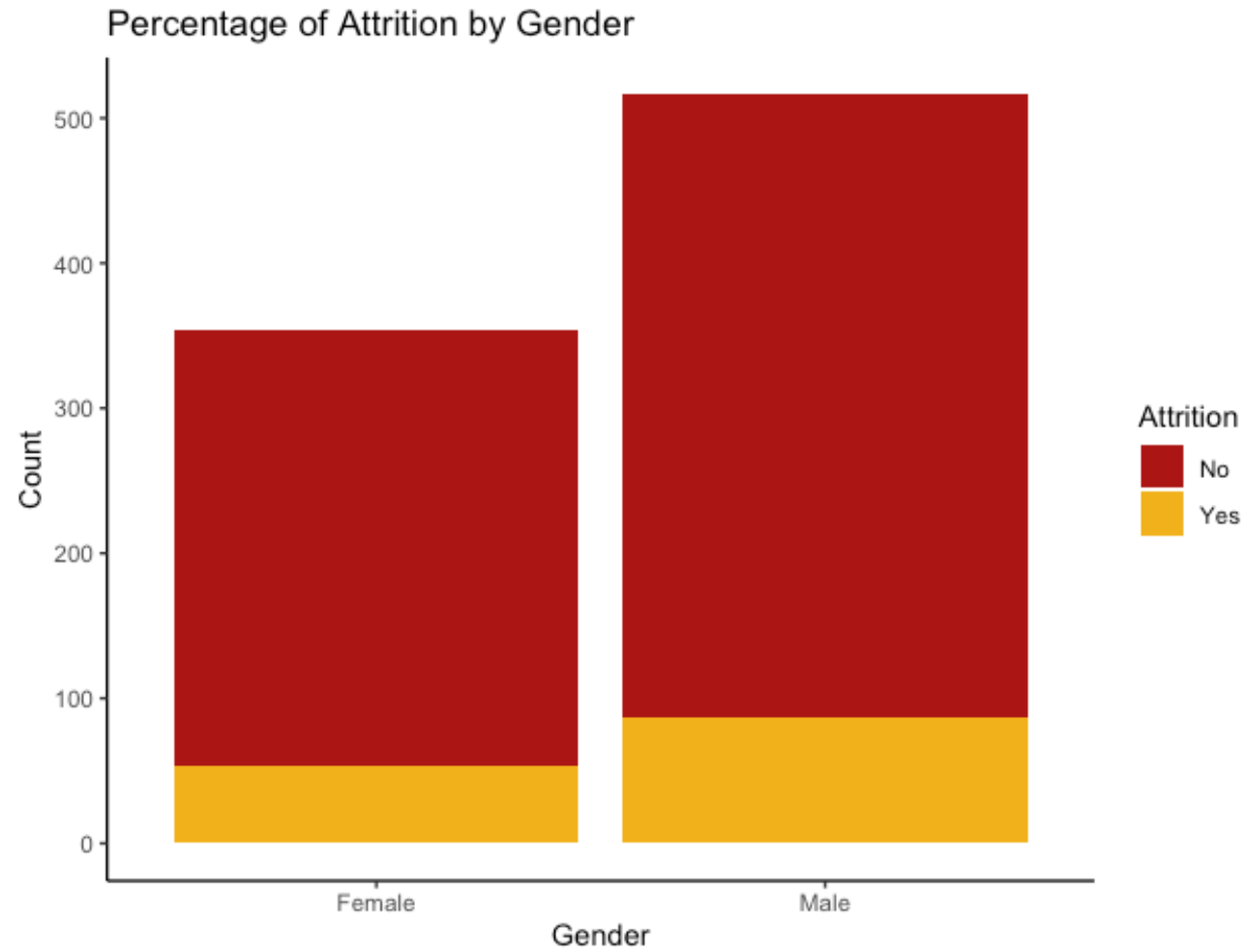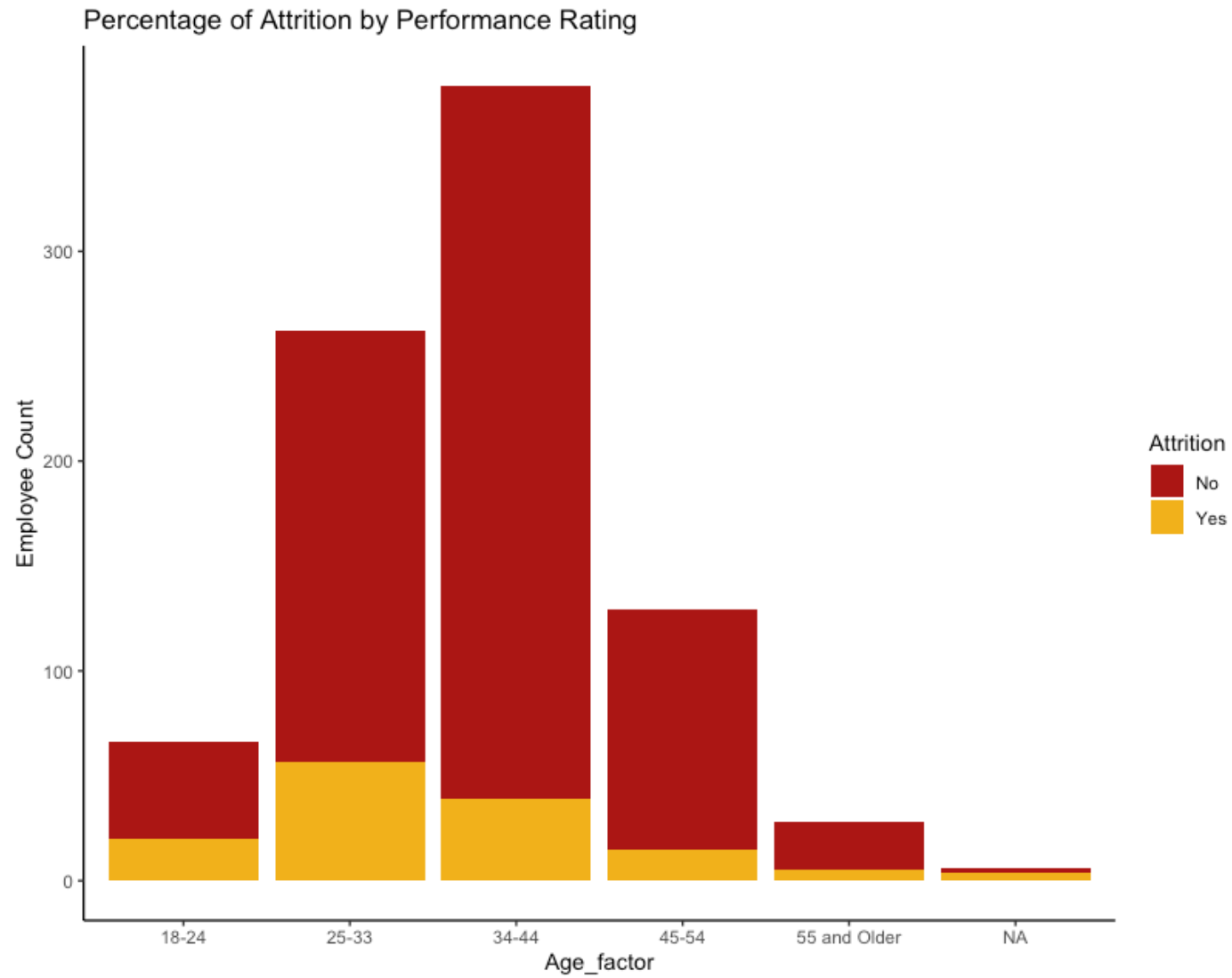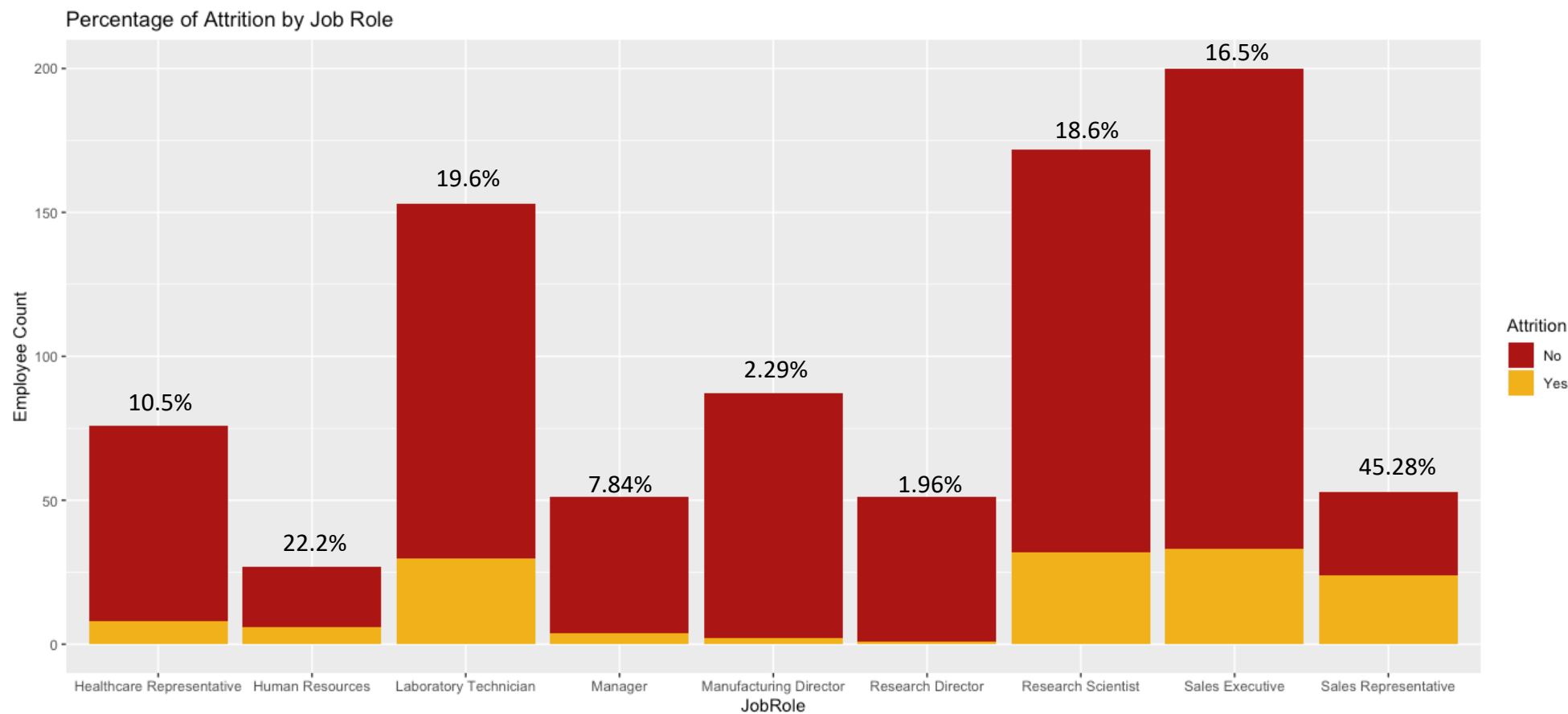
870 employees

Performance

Percentage of Attrition by Performance Rating

Gender
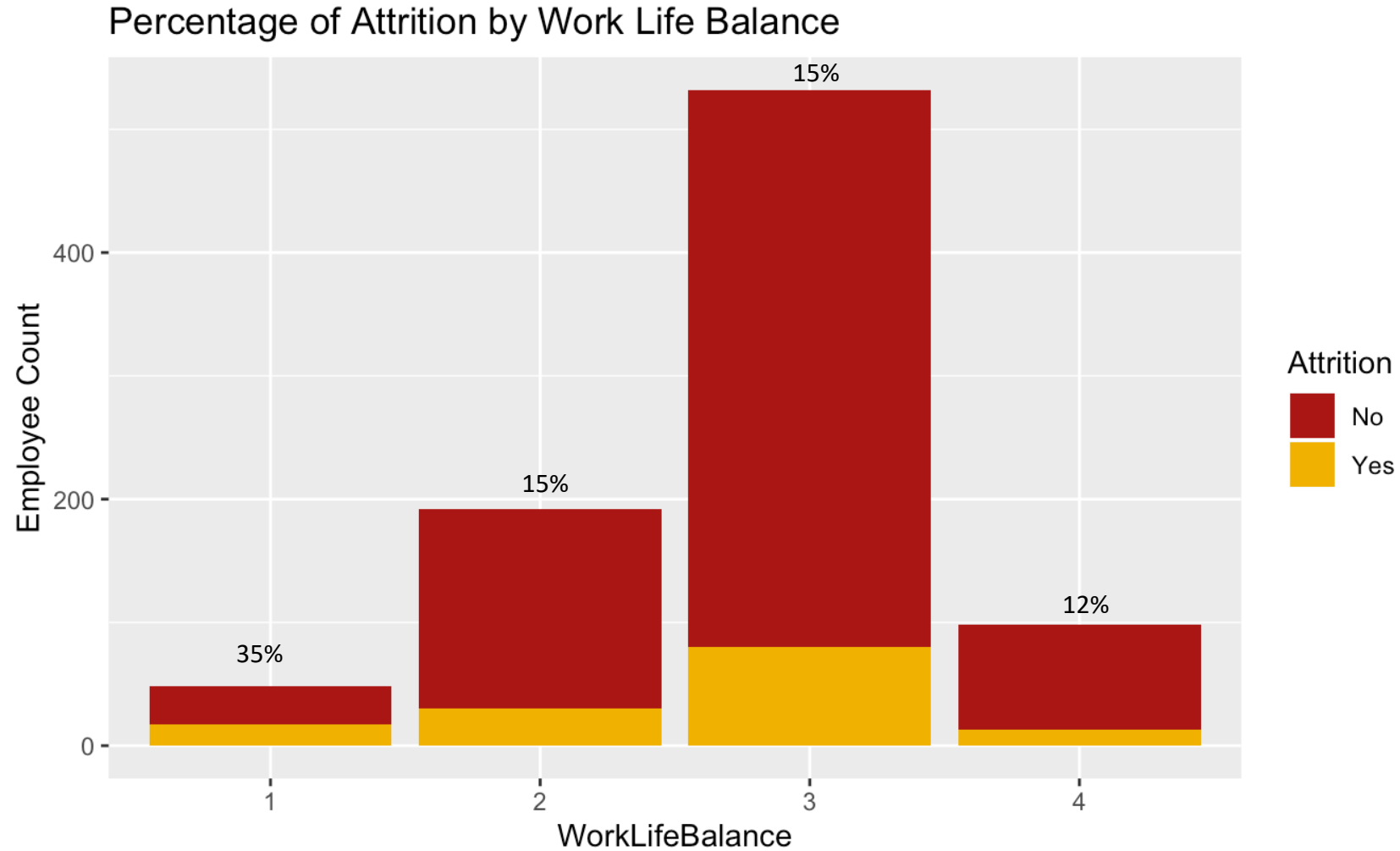
Age

Percentage of Attrition by Performance Rating

Job Role

Work-Life Balance

Work Life Balance

Distance From Home

Boxplot of Distribution of Distance from Home Grouped by Attrition

Over Time

Percentage of Attrition by OverTime
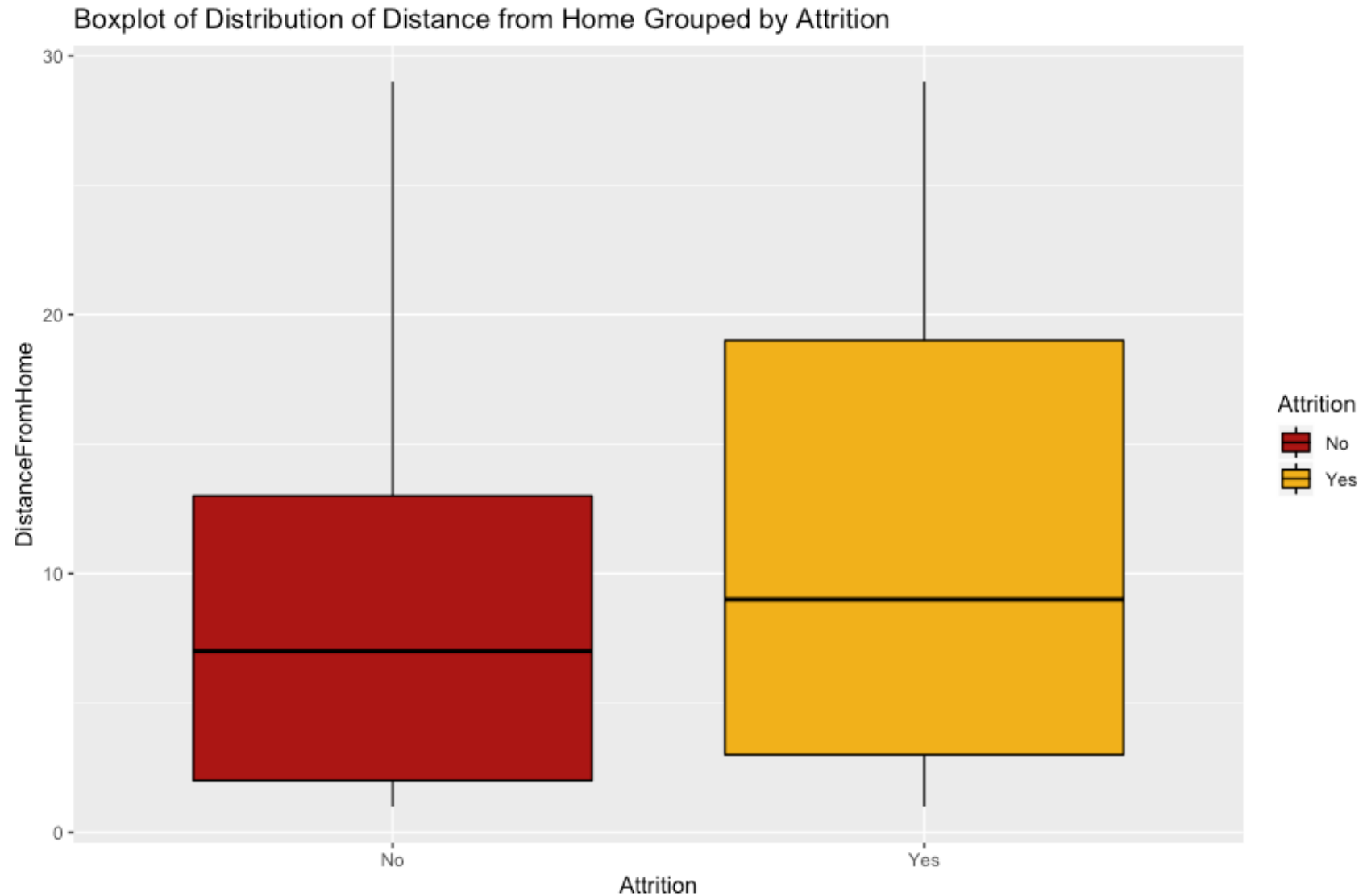
Management
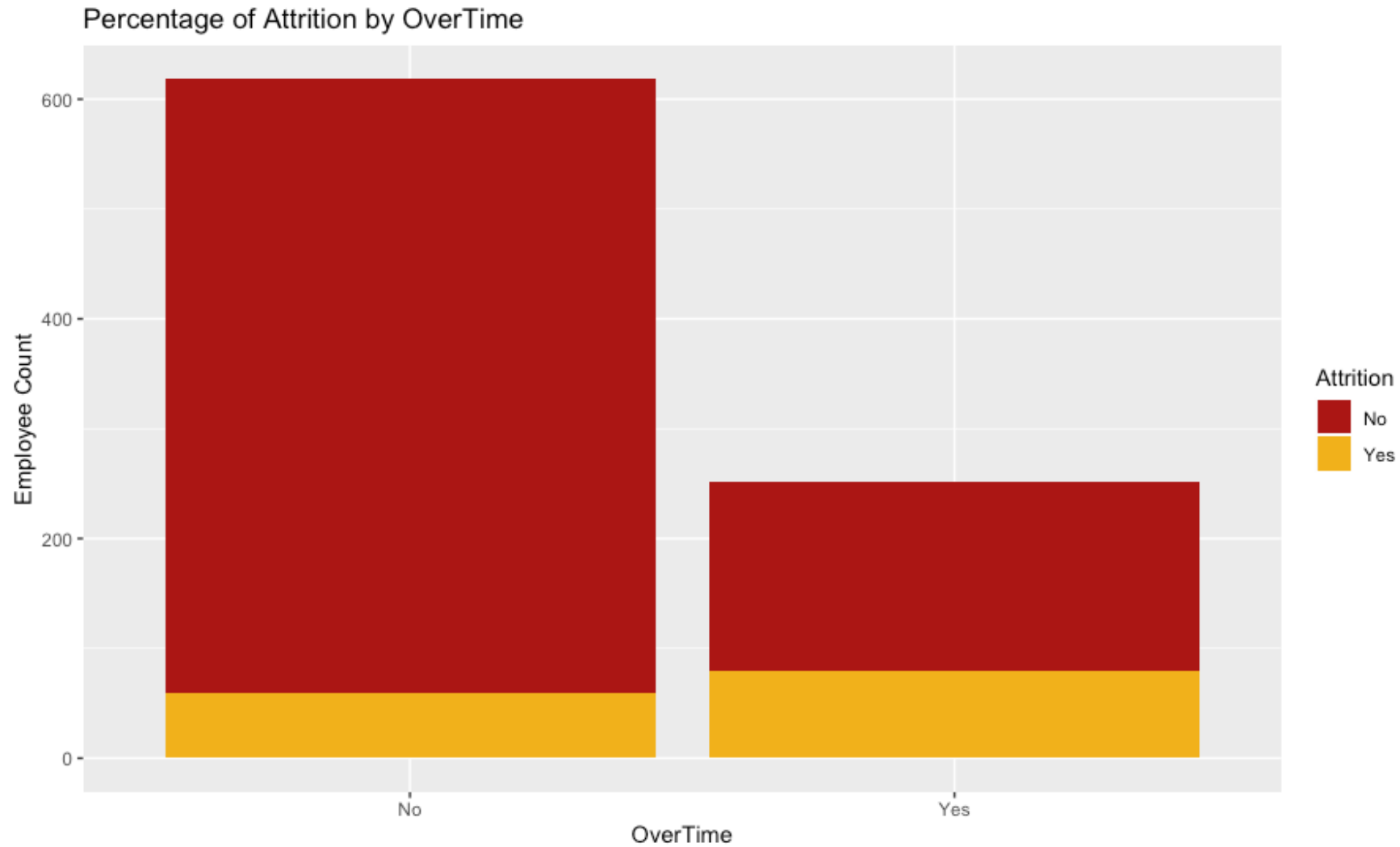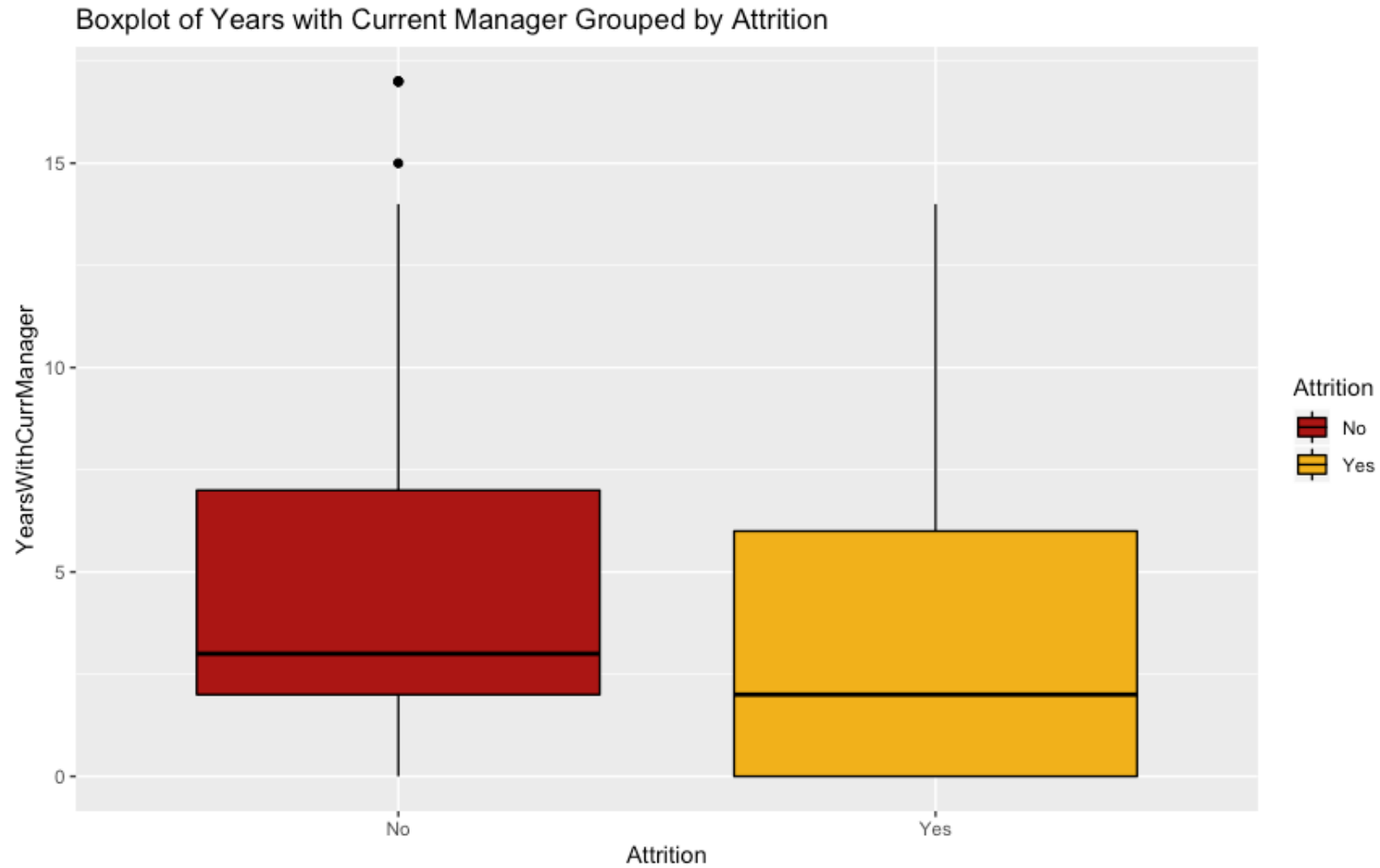
Years with Manager

Boxplot of Years with Current Manager Grouped by Attrition

Relationship Satisfaction

Manager Relationship Satisfaction
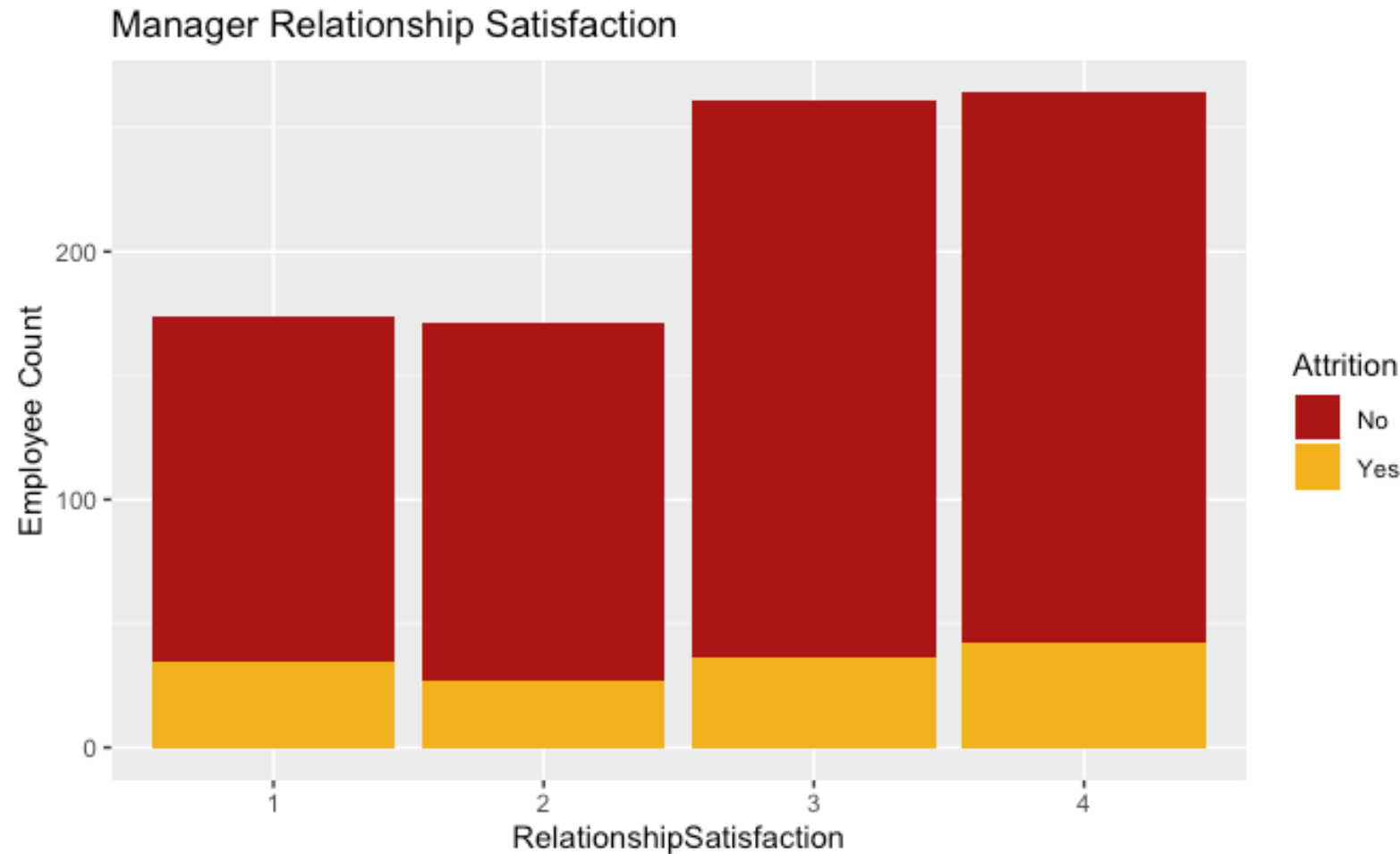
Compensation

Monthly Income

Monthly Rate

Distribution of Monthly Rate by Attrition
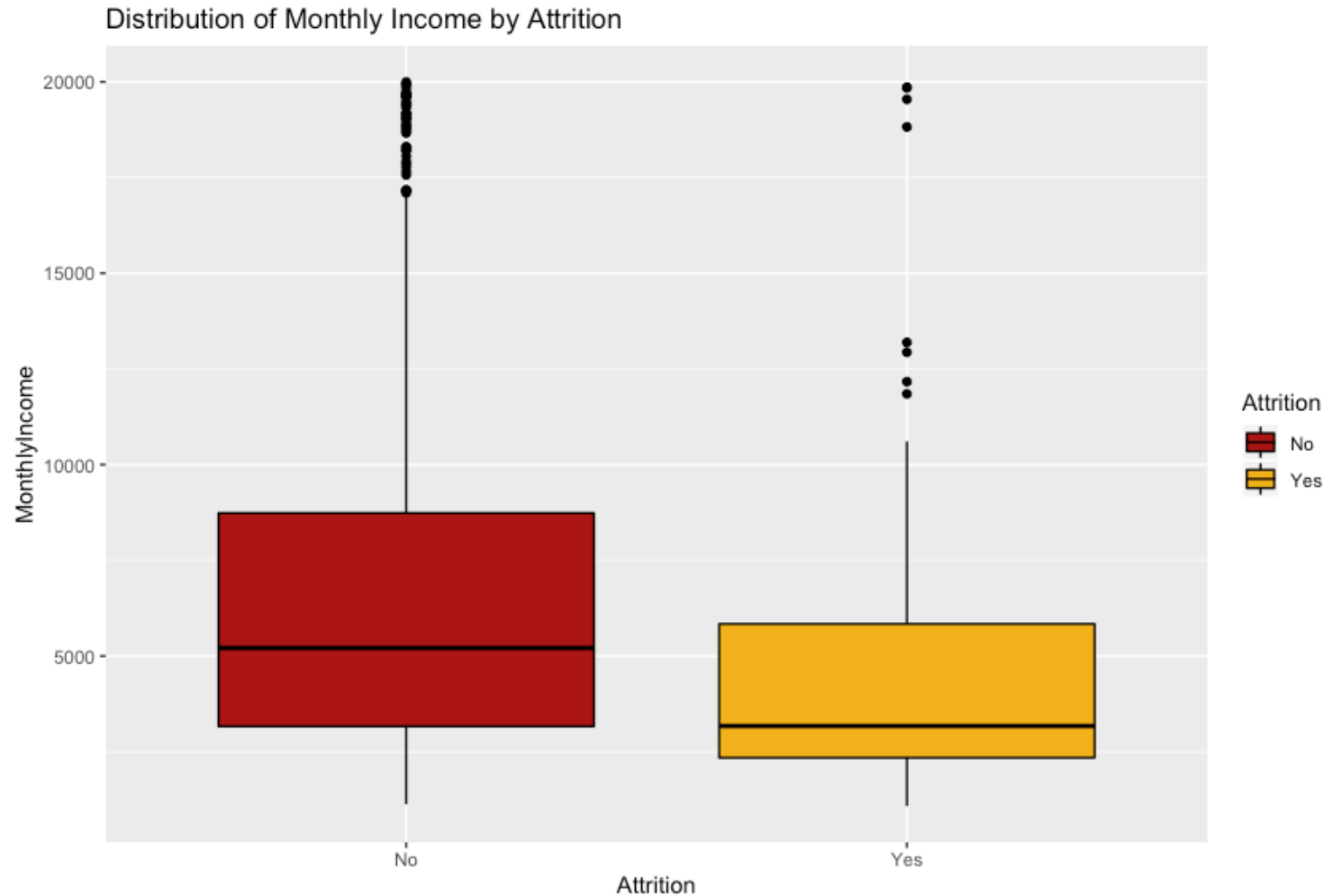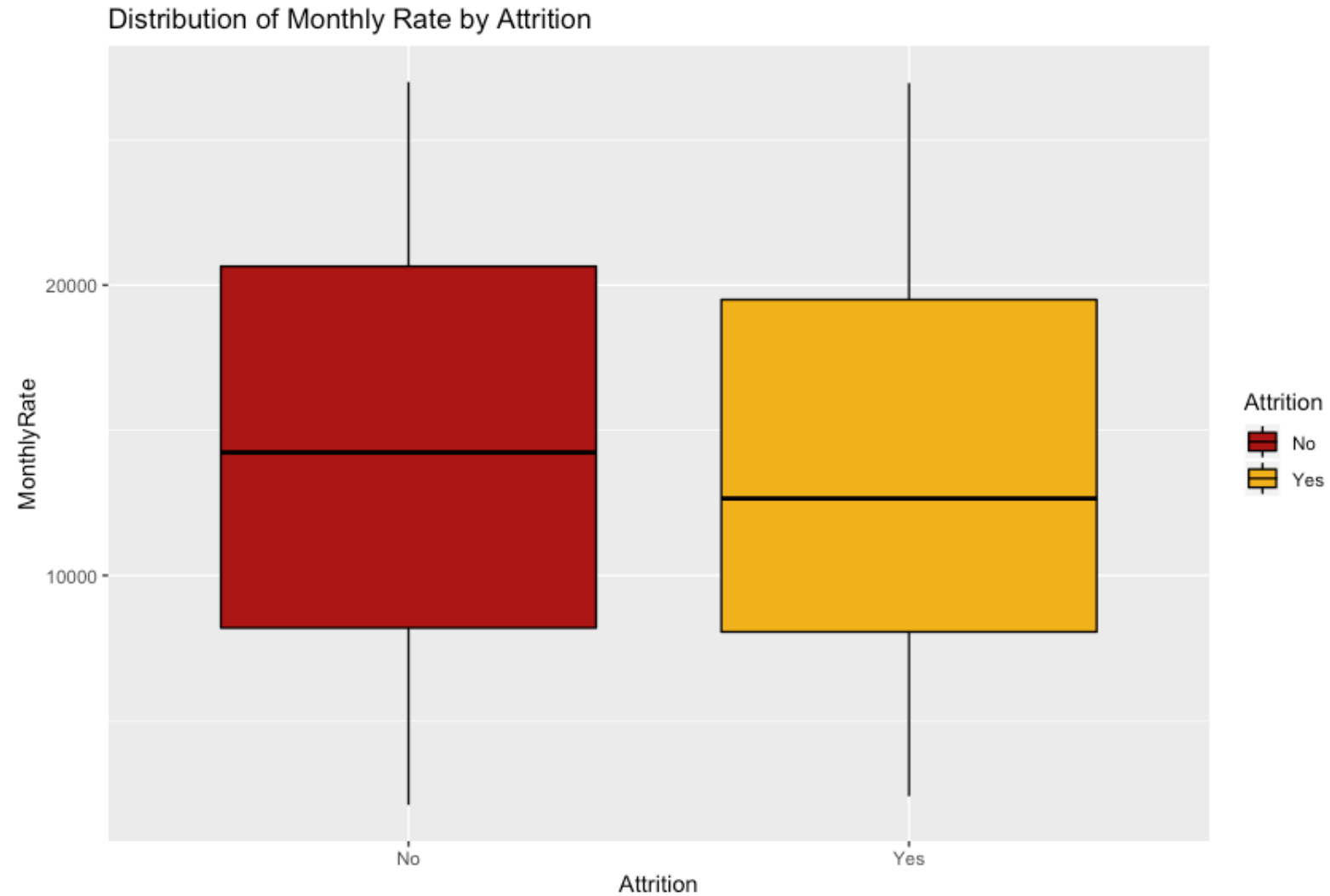
Hourly Rate
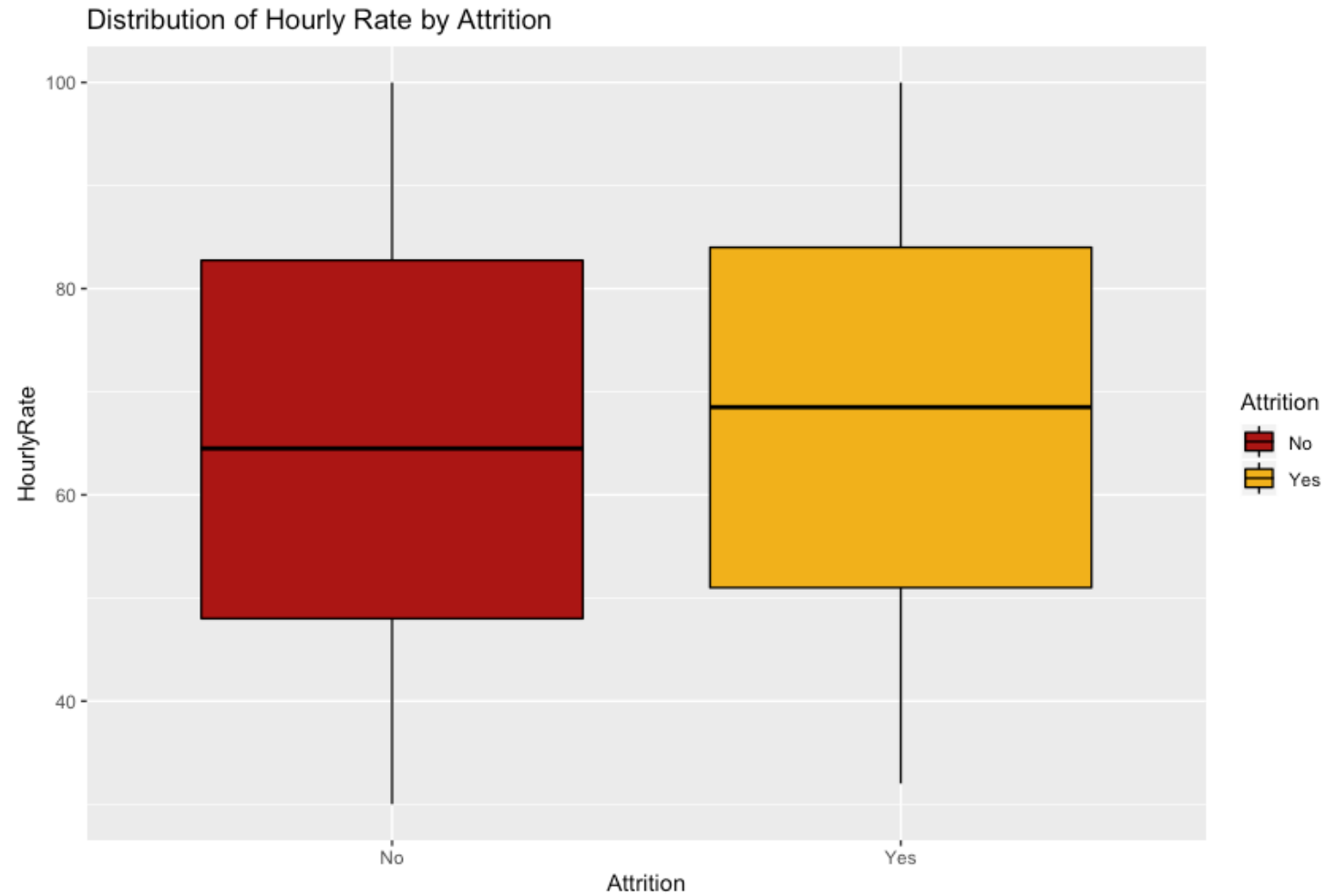
Engagement

Training Sessions

Distribution of Number of Training Times Grouped by Attrition

Job Involvement

Percentage of Attrition by Environment Satisfaction
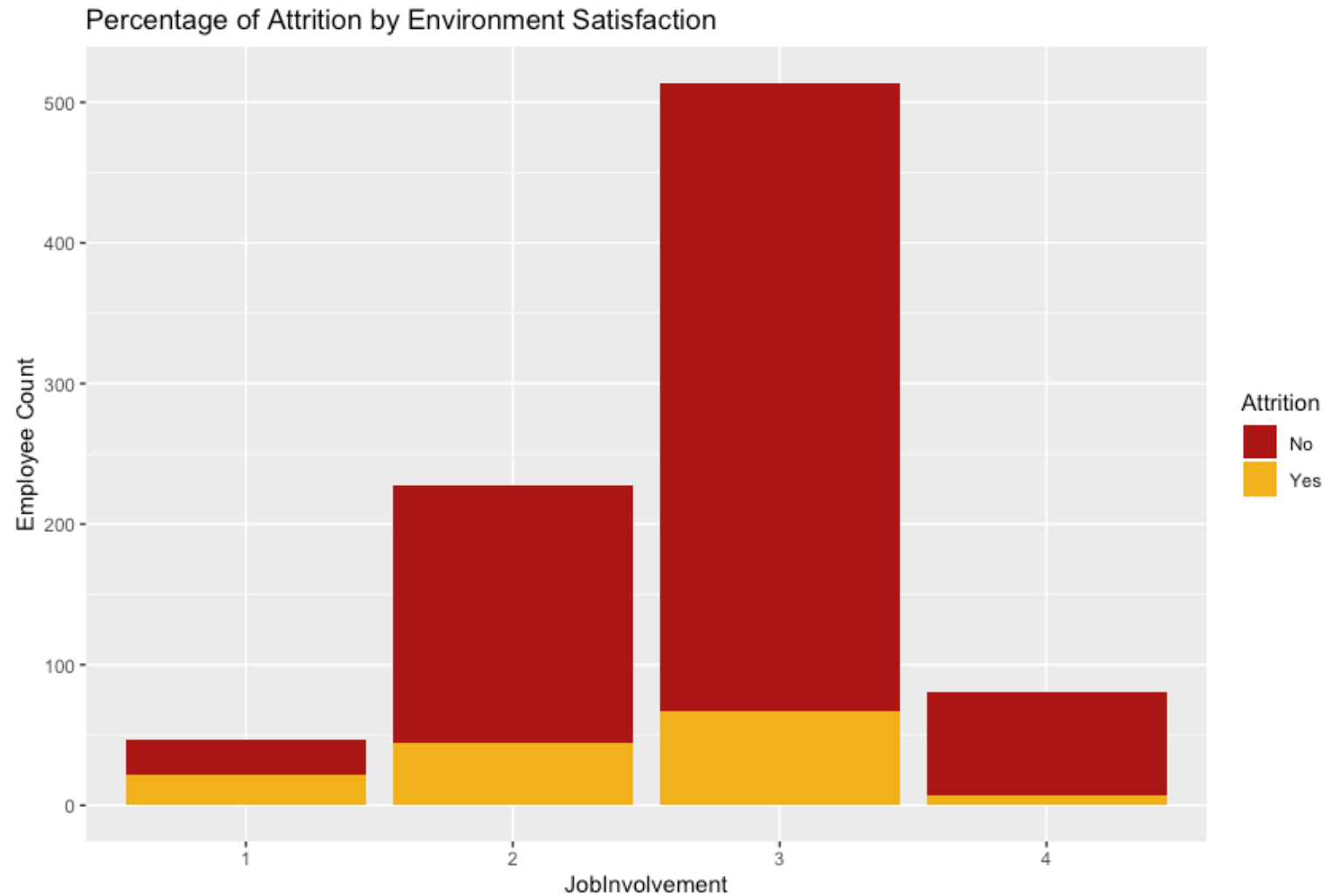
Stock Option Level

Percentage of Attrition by Stock Option
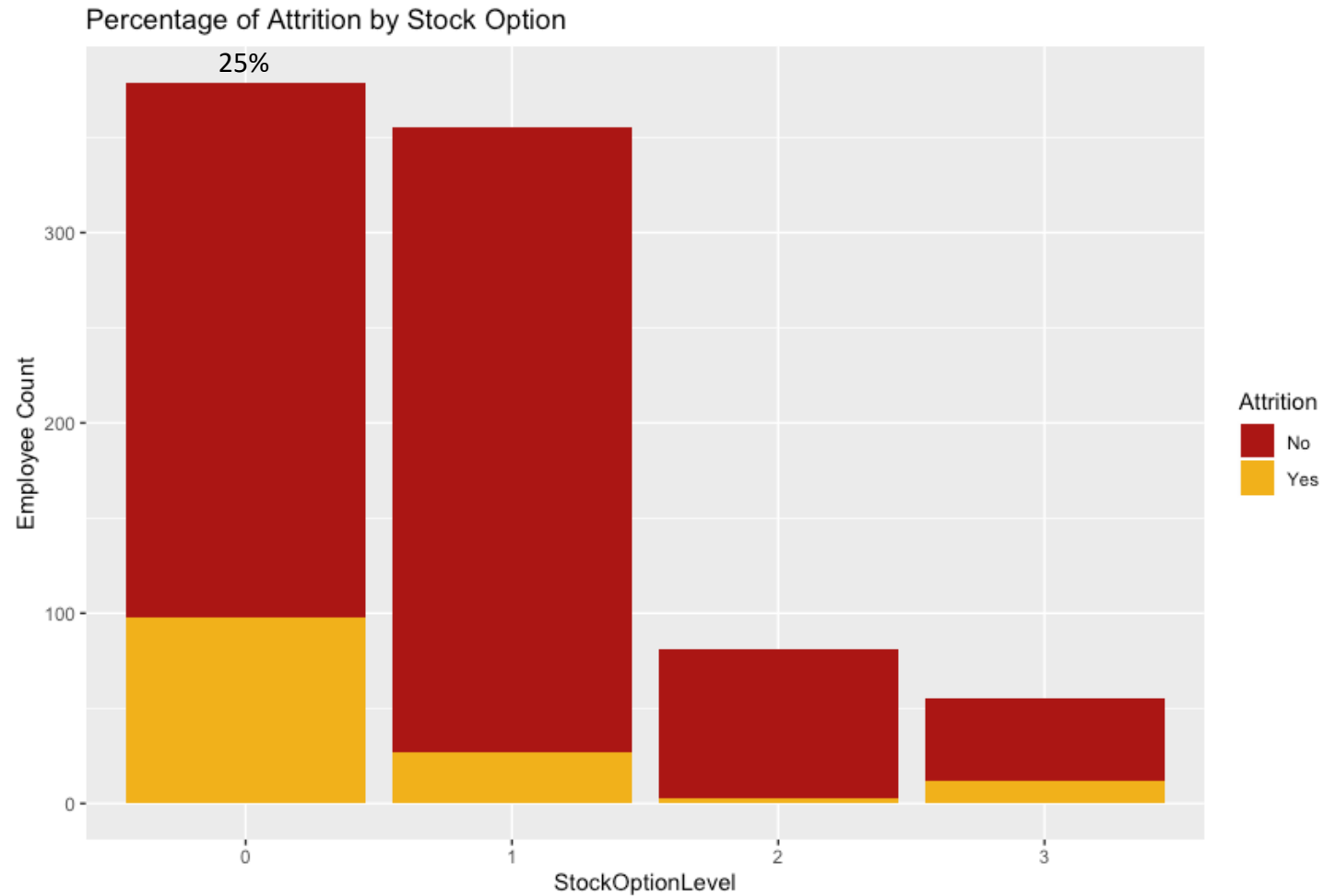
Predicting Attrition

Naïve-Bayes

Confusion Matrix

pred   No Yes

   No 634 46

   Yes 96 94

Accuracy: 83.68%

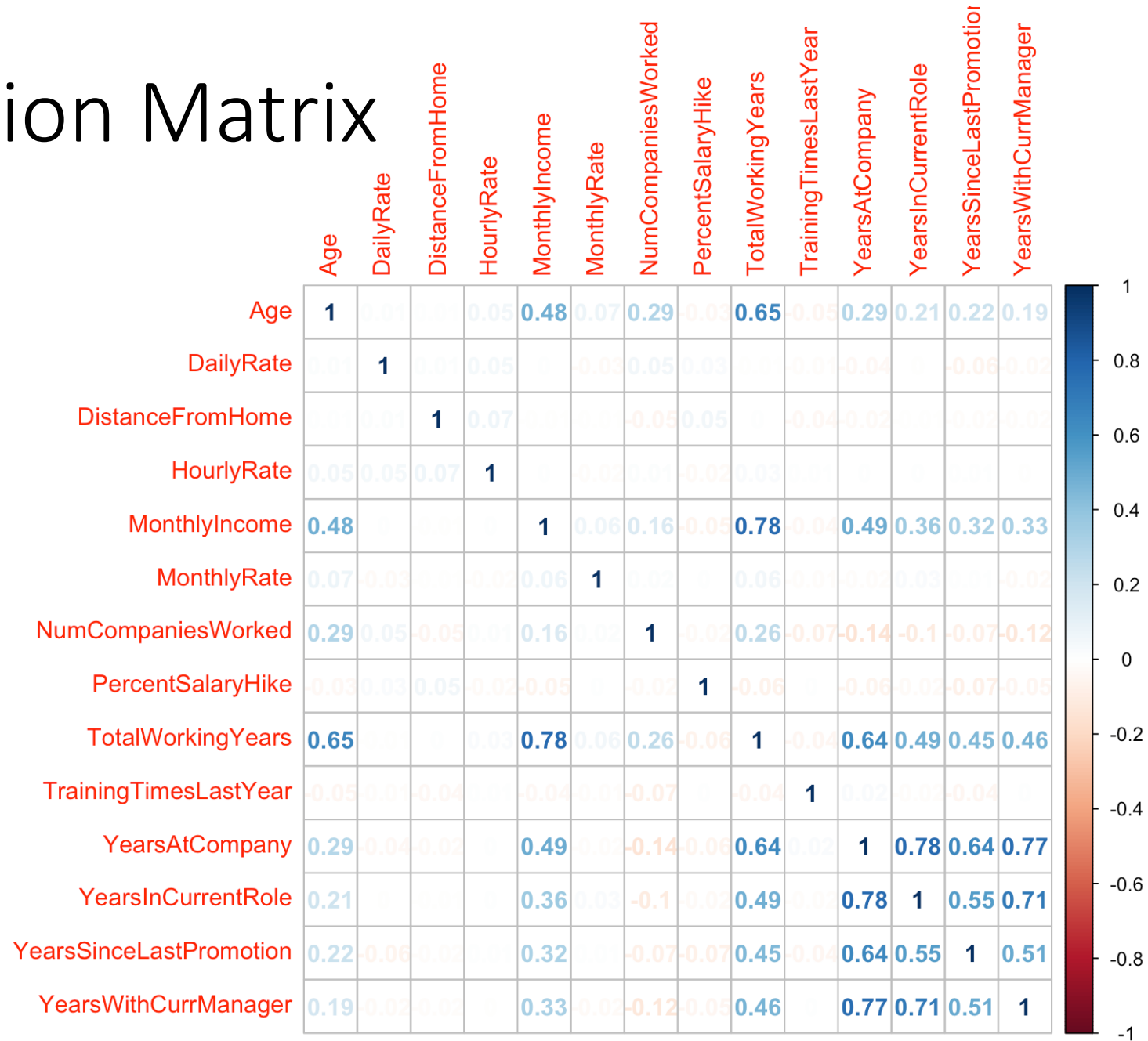**Confidence Interval:** (0.8105, 0.8607)

Sensitivity : 0.8685

Specificity : 0.6714

Predicting Monthly Income

Correlation Matrix

Linear Regression – Monthly Income Prediction

MonthlyIncome ~

Department + JobLevel + JobRole + PerformanceRating + TotalWorkingYears

Adjusted R-squared: 0.9521

p-value: < 2.2e-16