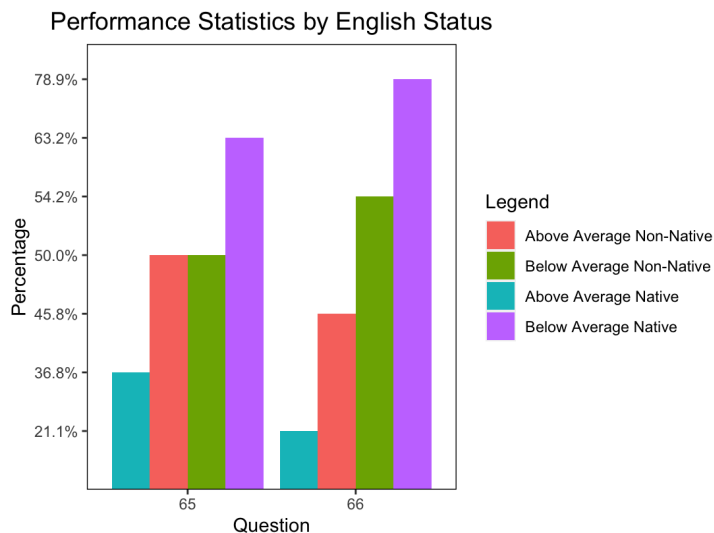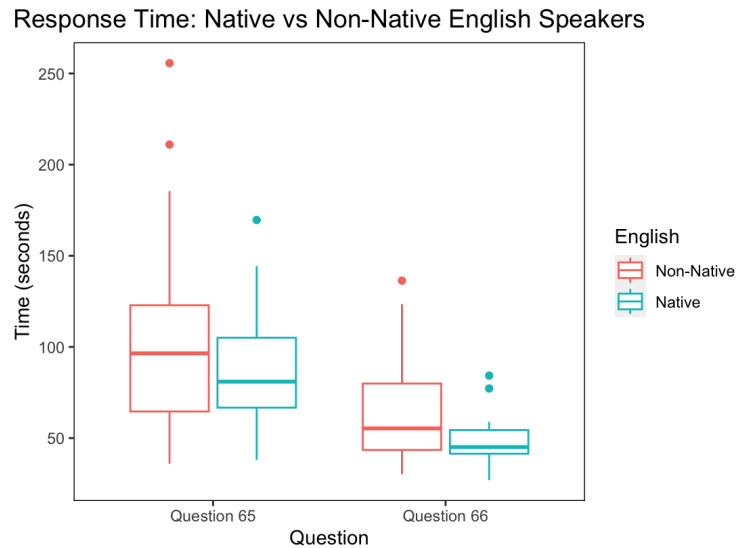# Implicit Bias Test Analysis Continued

Research Assistant: Delaney Thau

This report analyzes the same data from my previous investigation on implicit bias, but considers how a student's English level affects the results. The box plot below displays the five number summary for each question of the test, depending on English status. The distributions of the non-native English speakers are more spread than native speakers. Regardless of the student's first language, all finished question 66 quicker than 65. The words are the same for both questions; once you know what to expect, it takes less time to process the words than in the first round. For both questions, more than half of native students finished faster than the median of non-native students.

Response Time: Native vs Non-Native English Speakers

Performance Statistics by English Status

However, as displayed in the graph to the left, the percentage of students who finished above the average time for both questions is dominated by non-native speakers. The native speakers represent the extremes: the majority being below average and few being above average. The graphs display opposite results. The bar graph contradicts the boxplot by indicating that all students took more time on question 66 than 65. The boxplot is also misleading in showing non-native speakers performing slower than native speakers. Yet in reality, 63.2% and 78.9% of native speakers are below average for questions 65 and 66, respectively. An explanation for this may be that in learning English, non-native speakers developed word identification skills in vocabulary testing where native speakers may lack vocabulary for unusual words in everyday life.