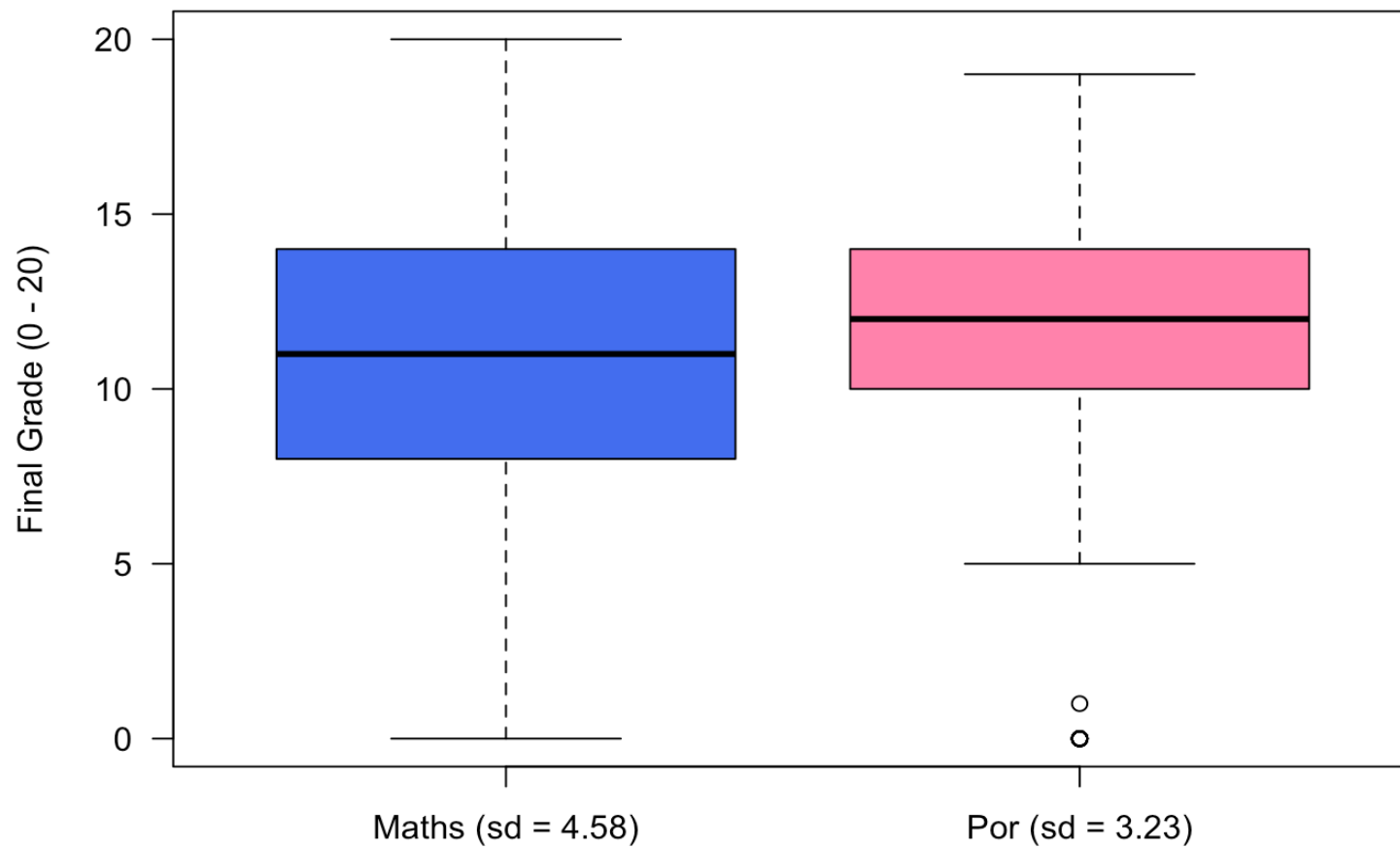# Student Grade Prediction
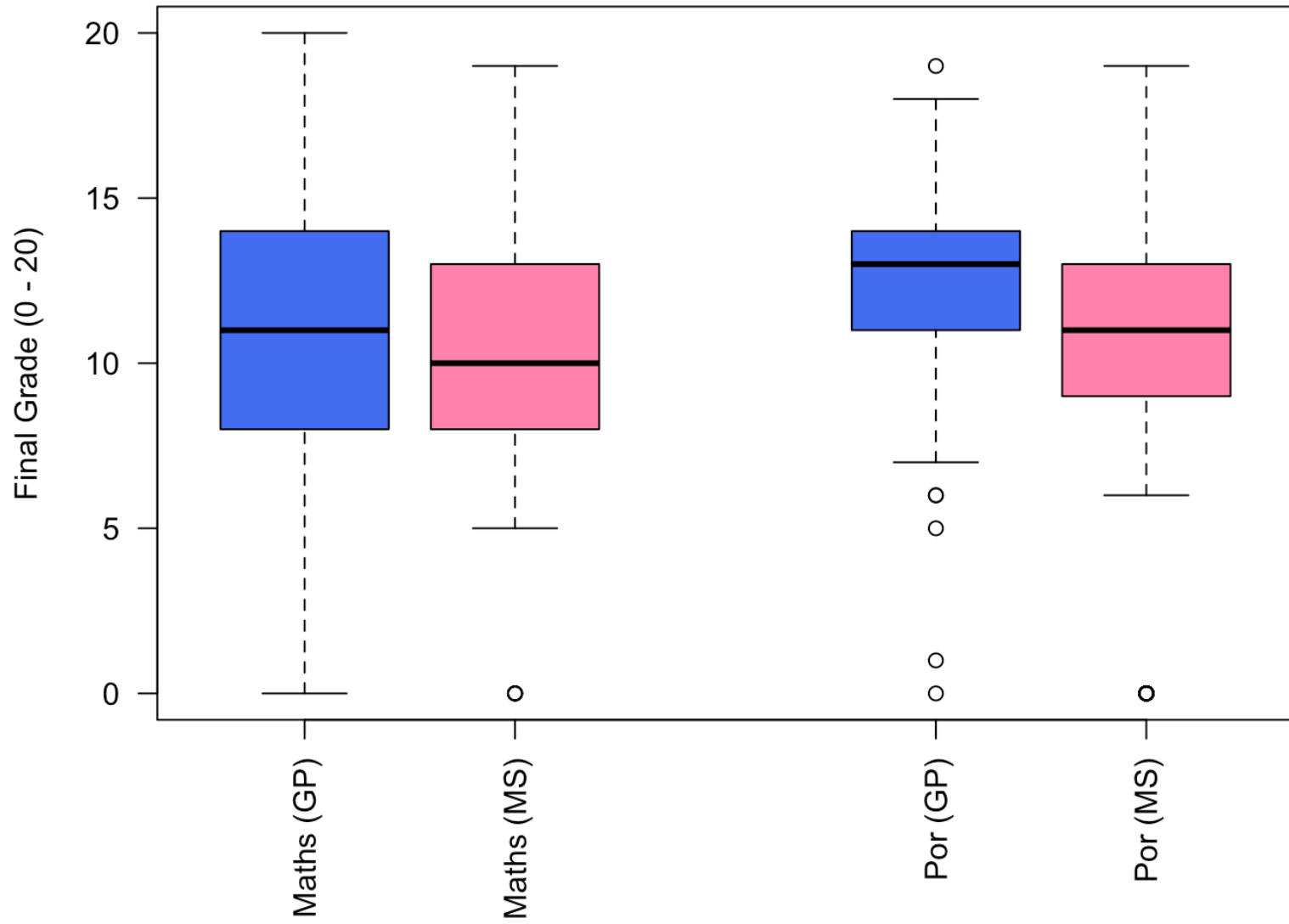
- We have 32 attributes for each student
    - **Home life:** Family size, whether they live in an urban or rural location, their parents education level
    - **Habits:** Daily and weekly alcohol consumption, extra-curricular activities, how often the go out with friends
    - **School life:** Did they attend pre-school, do they want to pursue higher education, do they receive grinds

- Students have three grades associated with them (first period, second period, final grade)
    - Final grade is independent of the first two grades
    - We aim to predict the final grades of each student
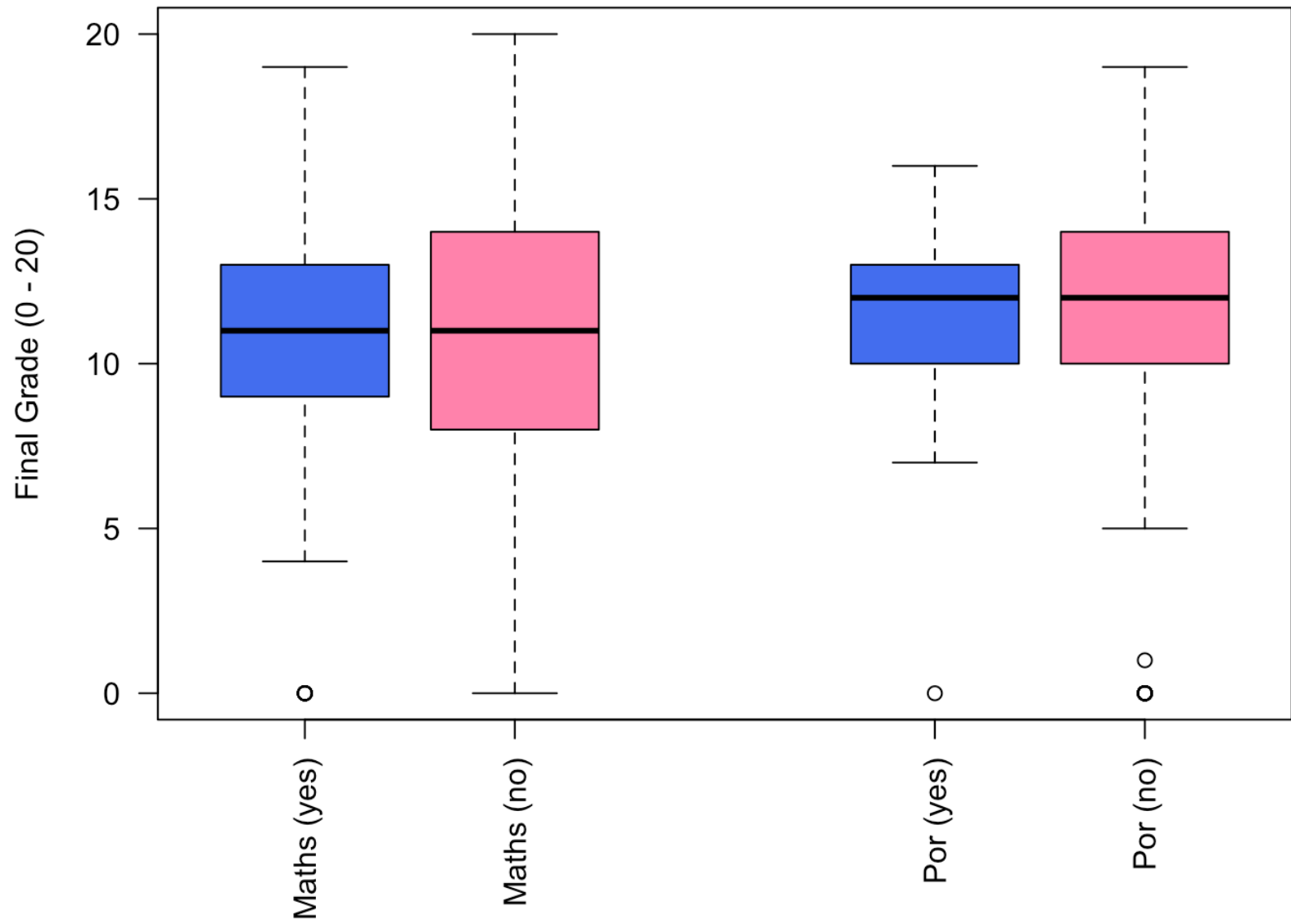   - We do not want to use the other two grades in our prediction algorithm
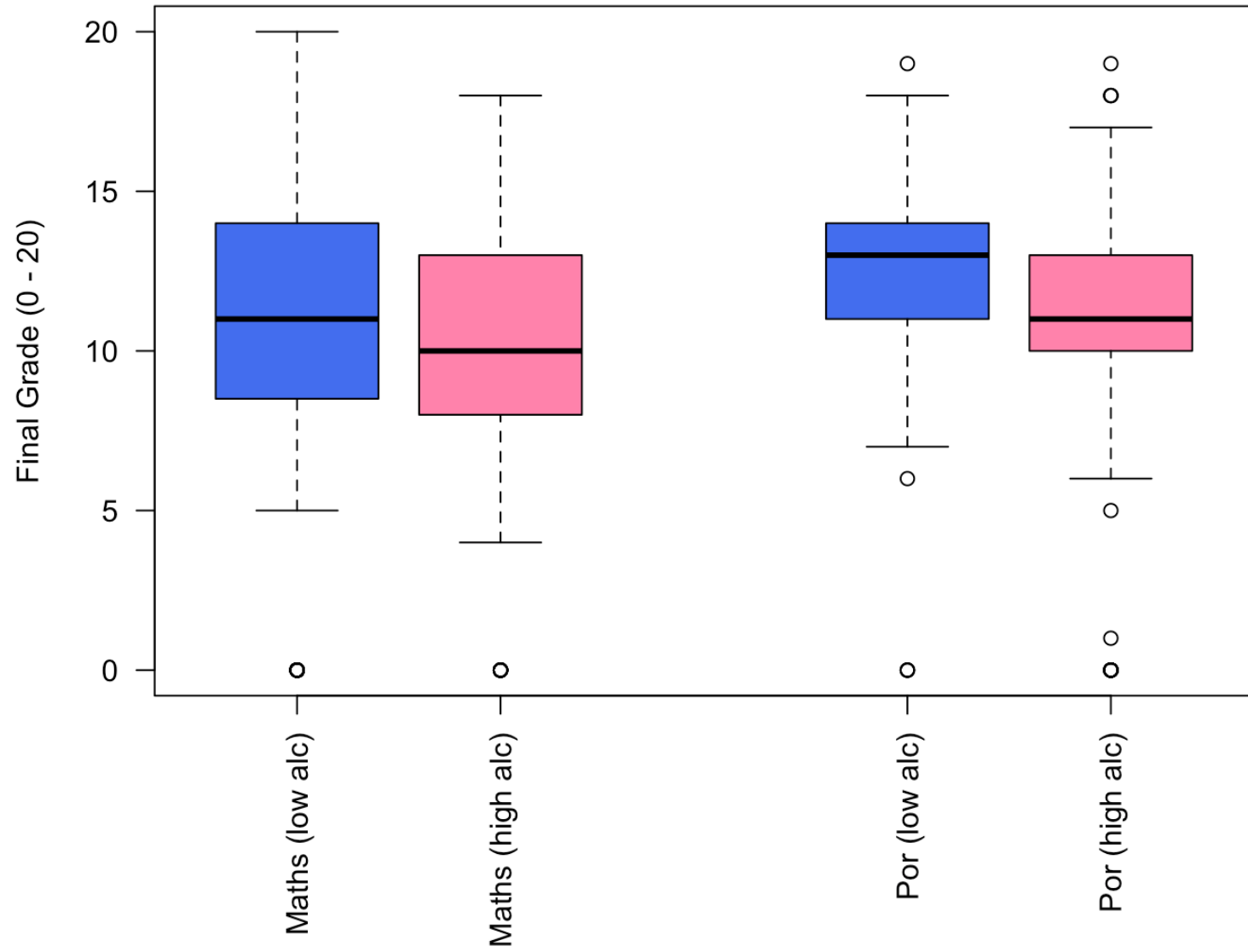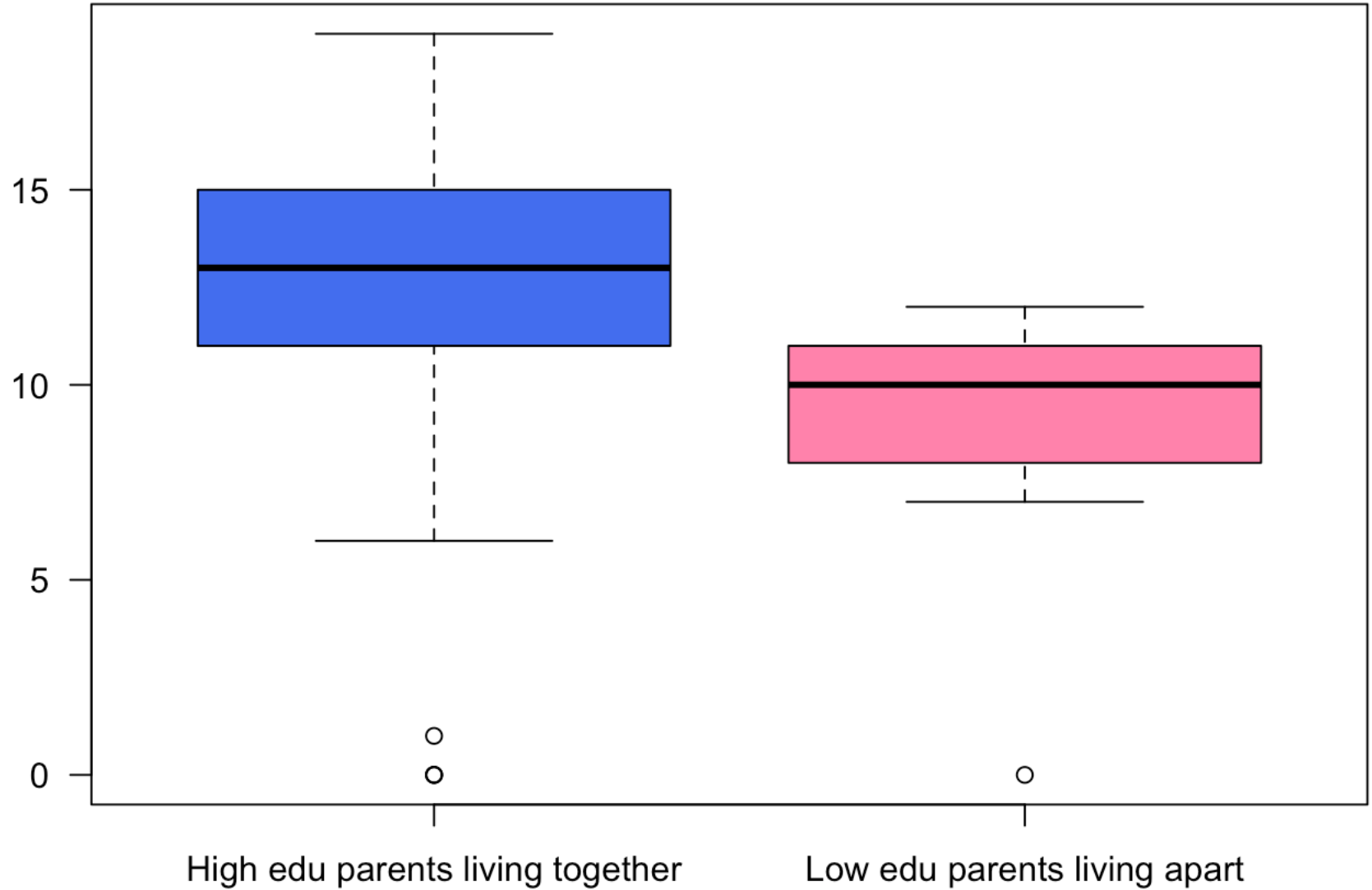
Maths vs Portuguese

School vs Grades

Grinds vs Grades

Alcohol Consumption vs Grades

Parents Relationship & Education vs Grades (Por)

Conclusions

◦ We are aiming to predict the bracket of grades a student will fall into

  ◦ (0 – 2), (3 – 5), (6 – 8), (9 – 11), (12 – 14), (15 – 17), (18 – 20)

◦ It is much easier to predict a student falling into the 4th and 5th brackets as opposed to the 1st and 7th brackets

◦ Based on our analysis of the dispersion of some of these metrics, we have identified some key attributes which will be central to our prediction algorithm