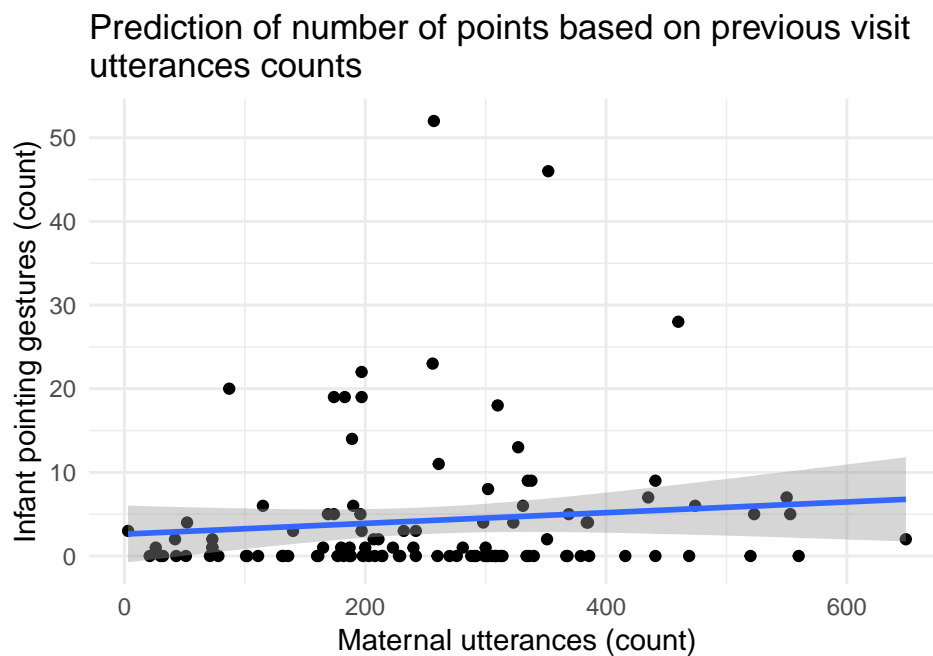


Predicting pointing gestures from HGs, contingent talks, and utterances

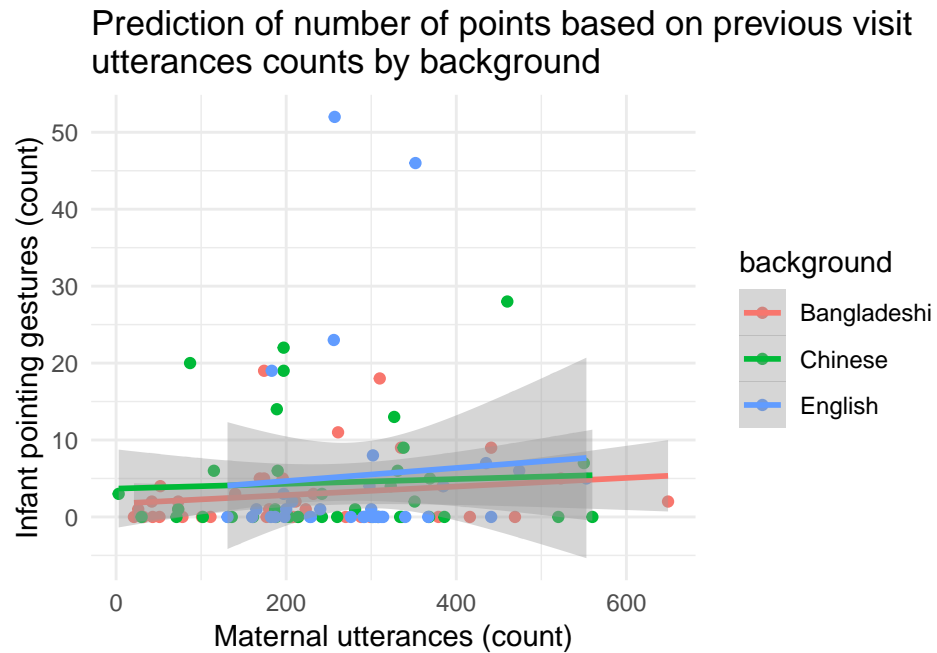
21/08/2018

1 Maternal utterances and infant pointing

There is a very small correlation between number of maternal utterances and the number of point gestures in the following visit.

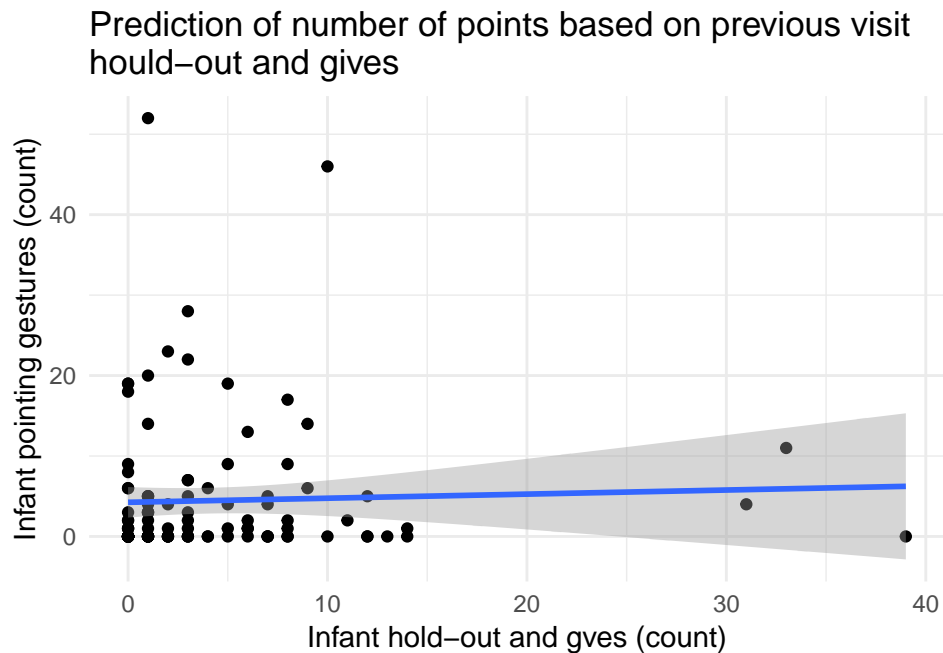


There seems to be no major difference between backgrounds.

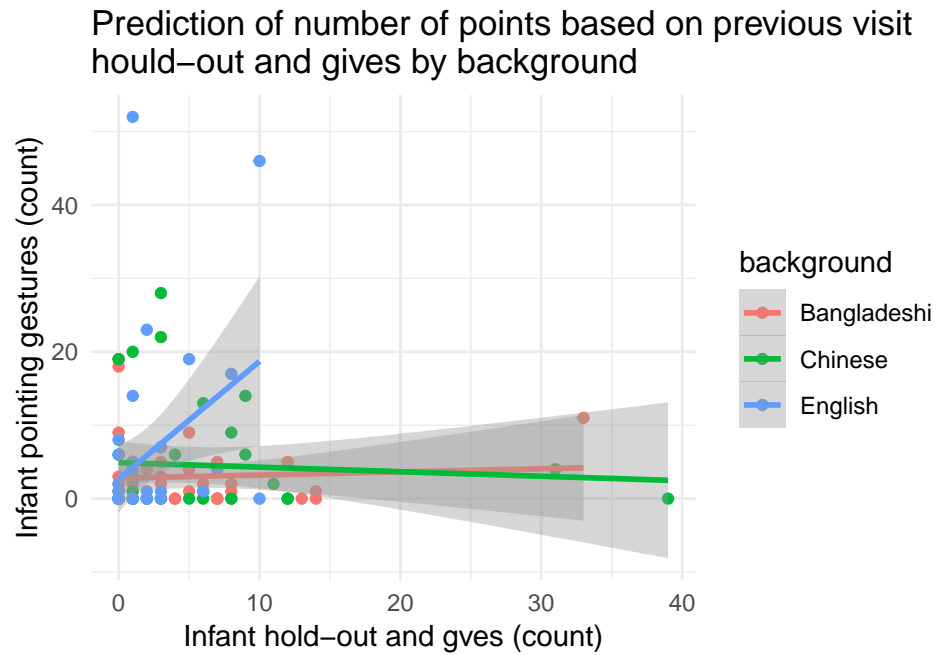


2 Hold-out and gives and pointing

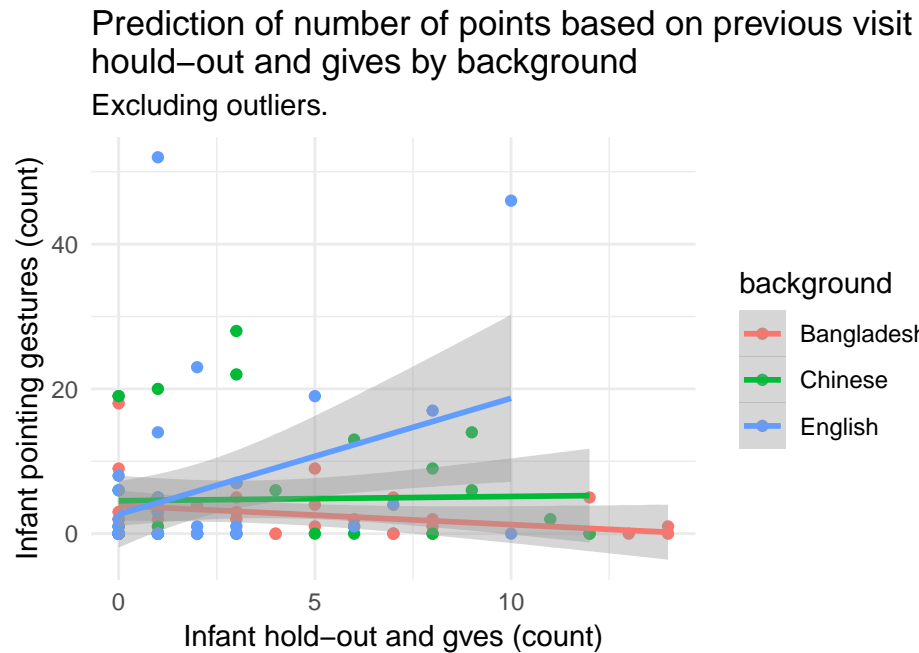
Hold-out and gives and pointing at next visit do not seem to be correlated, but there are three significant outliers.



Possibly, there is a correlation in the English data.



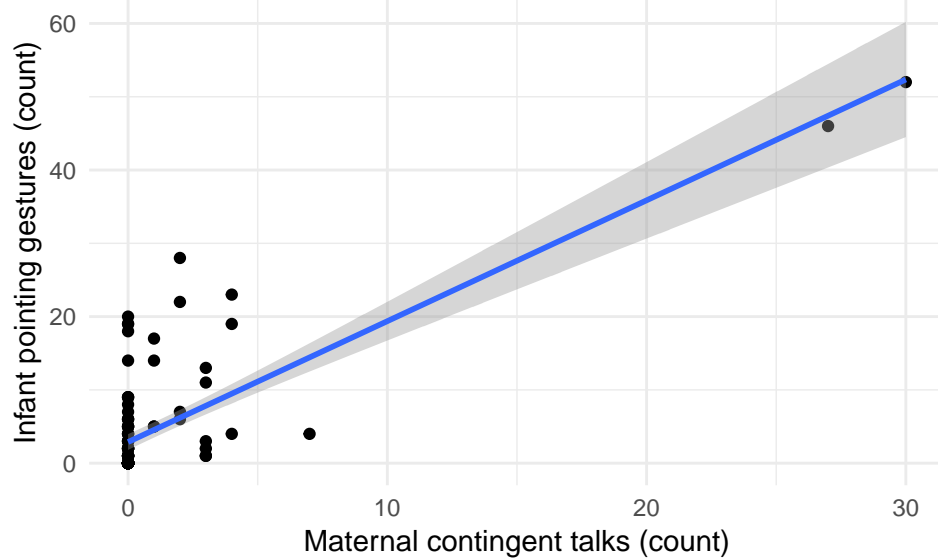
Even when removing outliers, Chinese and Bangladeshi do not show a correlation.



3 Maternal contingent talks and infant pointing

There might be a correlation between pointing gestures and maternal contingent talks of the previous visit.

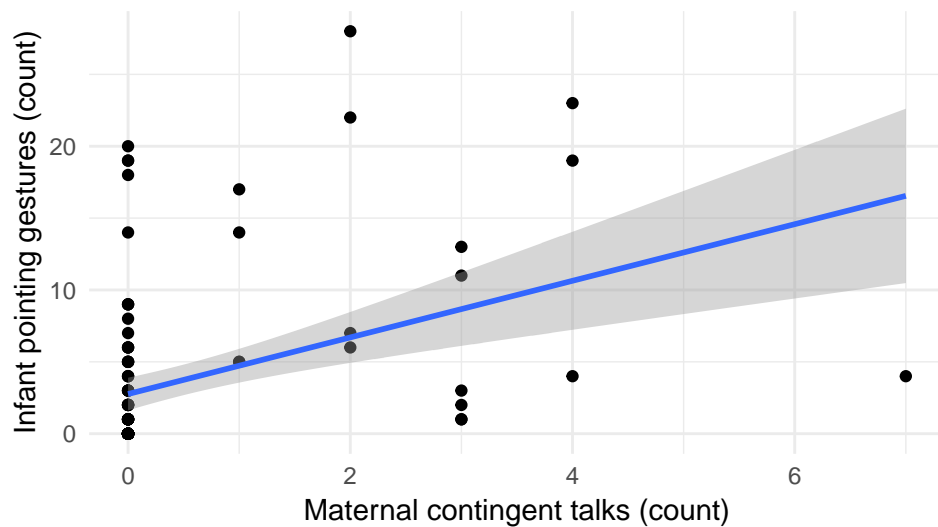
Prediction of number of points based on previous visit
maternal contingent talks



Even when removing outliers, the correlation stays.

Prediction of number of points based on previous visit
maternal contingent talks

Excluding outliers.



All backgrounds seem to show the correlation (but the Bangladeshi data is quite scant at higher CT counts).

Figure 1 is a scatter plot with regression lines and shaded confidence intervals, showing the relationship between Maternal contingent talks (count) on the x-axis and Infant pointing gestures (count) on the y-axis. The data is categorized by cultural background: Bangladeshi (red), Chinese (green), and English (blue). The Chinese group shows a strong positive relationship, with a regression line that rises steeply. The English group shows a moderate positive relationship. The Bangladeshi group shows a very weak, non-significant relationship, with a nearly flat regression line. The shaded areas represent the confidence intervals for each regression line.

4 General observations

For the cases that show a correlation, it must be noted that the confidence intervals are in general quite wide, meaning that we are not very sure about the presence of said correlations.

Another issue is that there are a lot of counts = 0, then a few data points with counts between 1 and 7.