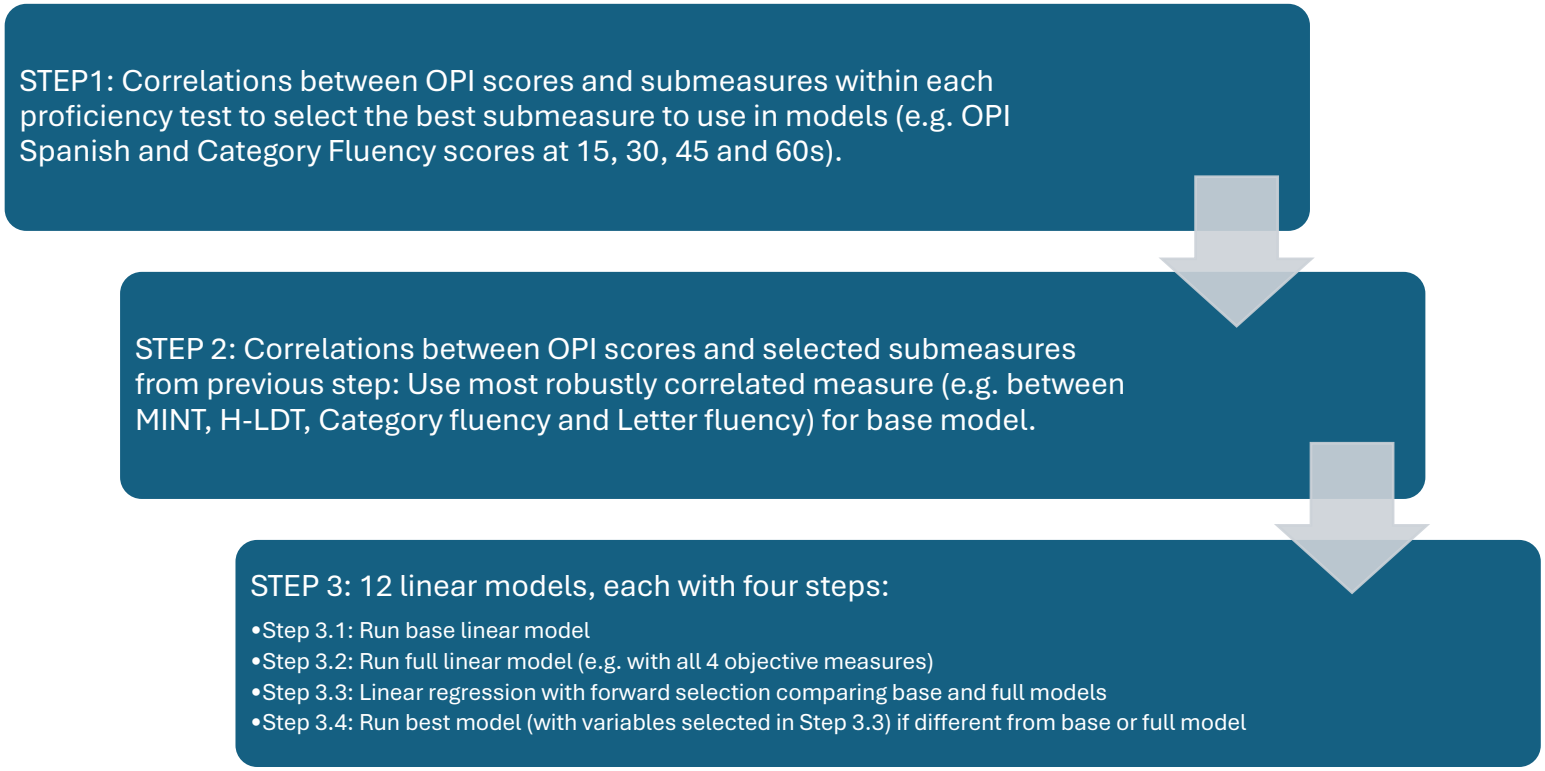
A. Summary visual of analyses



B. CORRELATION PLOTS BETWEEN MOST ROBUSTLY CORRELATED ANALOGOUS VARIABLES PER OPI SCORE.

Figure 1.1 Correlation plot between most robustly correlated analogous variables and the OPI dominance score.

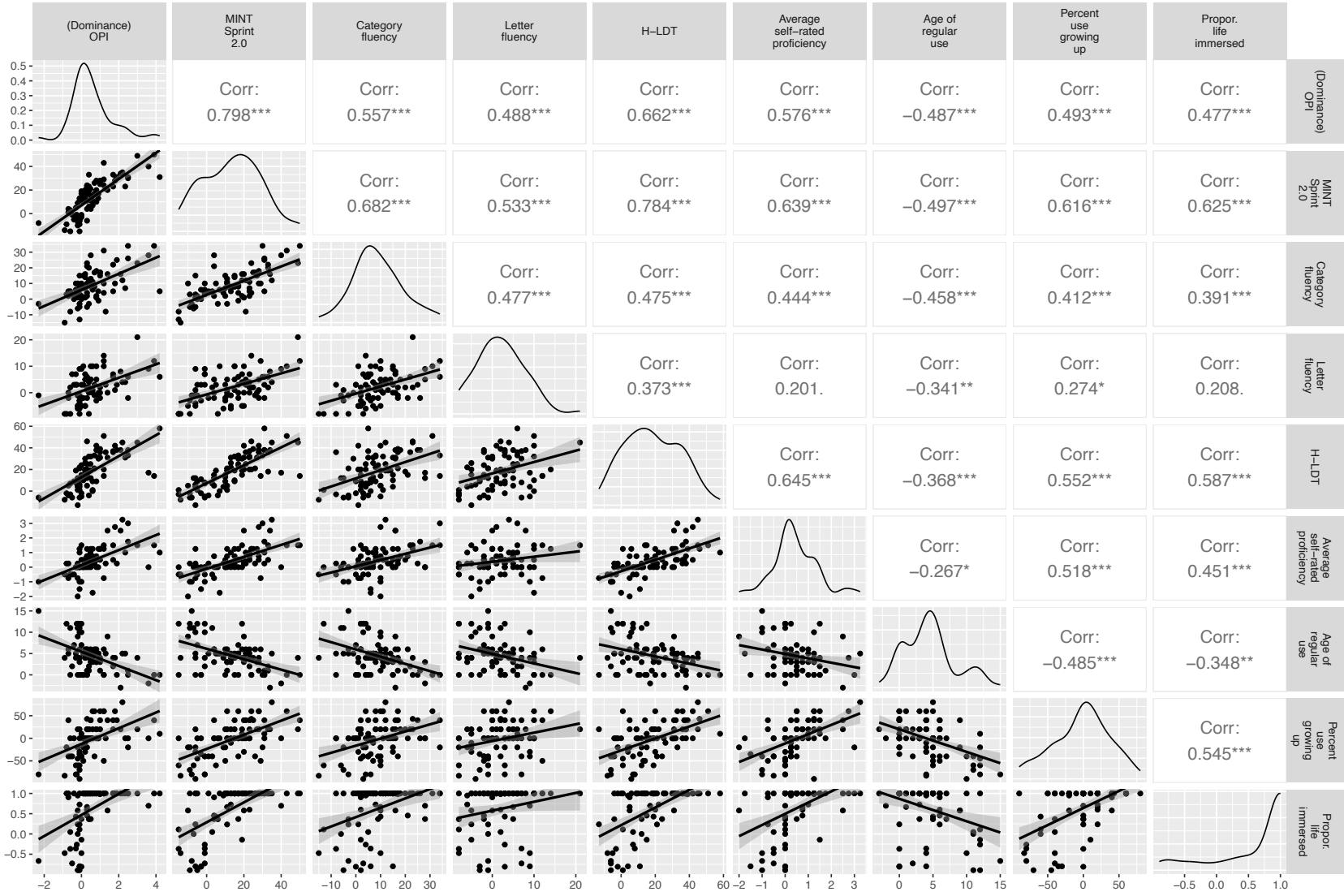


Figure 1.2 Correlation plot between most robustly correlated analogous variables and the OPI balance score.

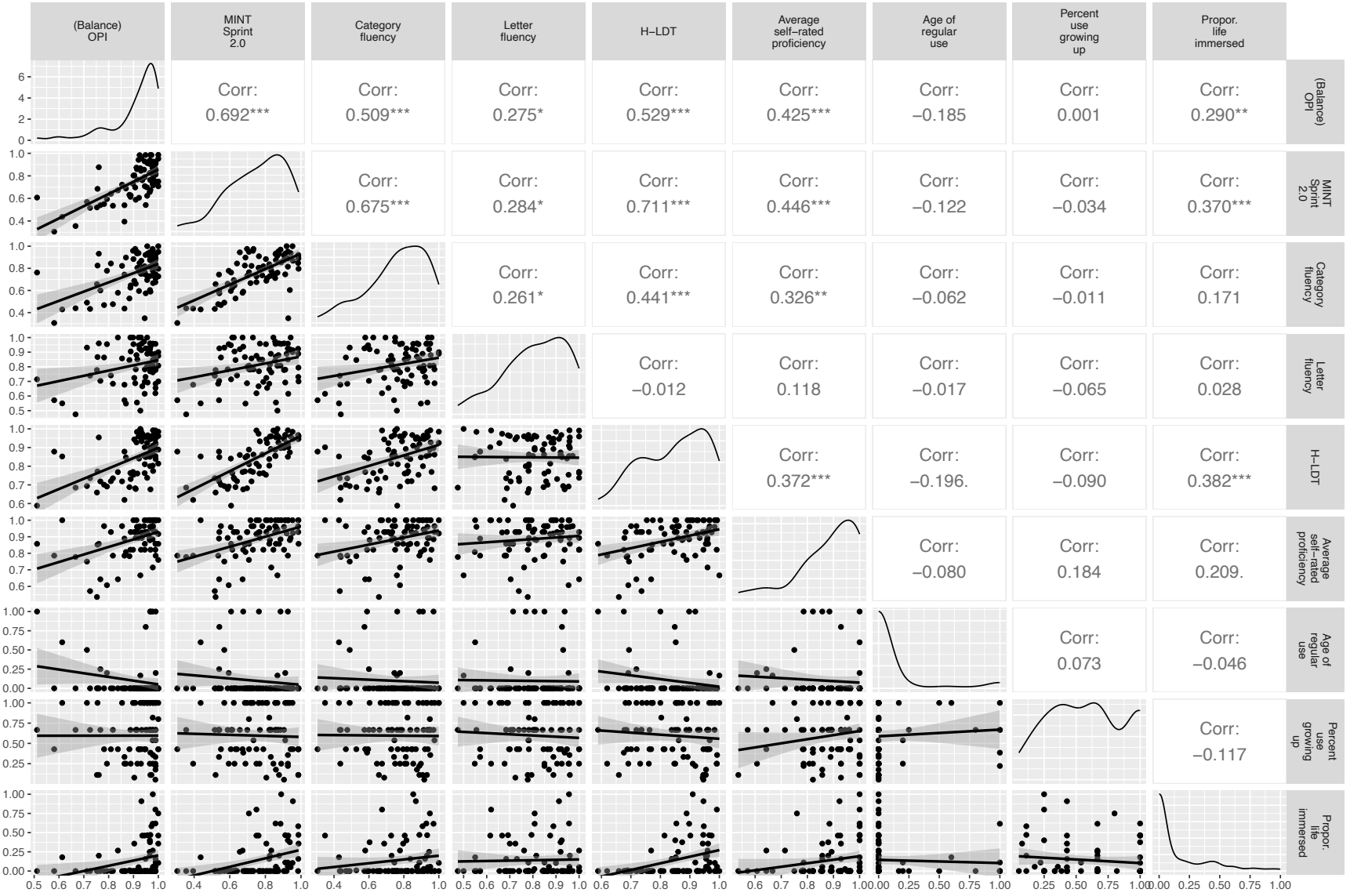


Figure 1.3 Correlation plot between most robustly correlated analogous variables and the OPI Spanish score.

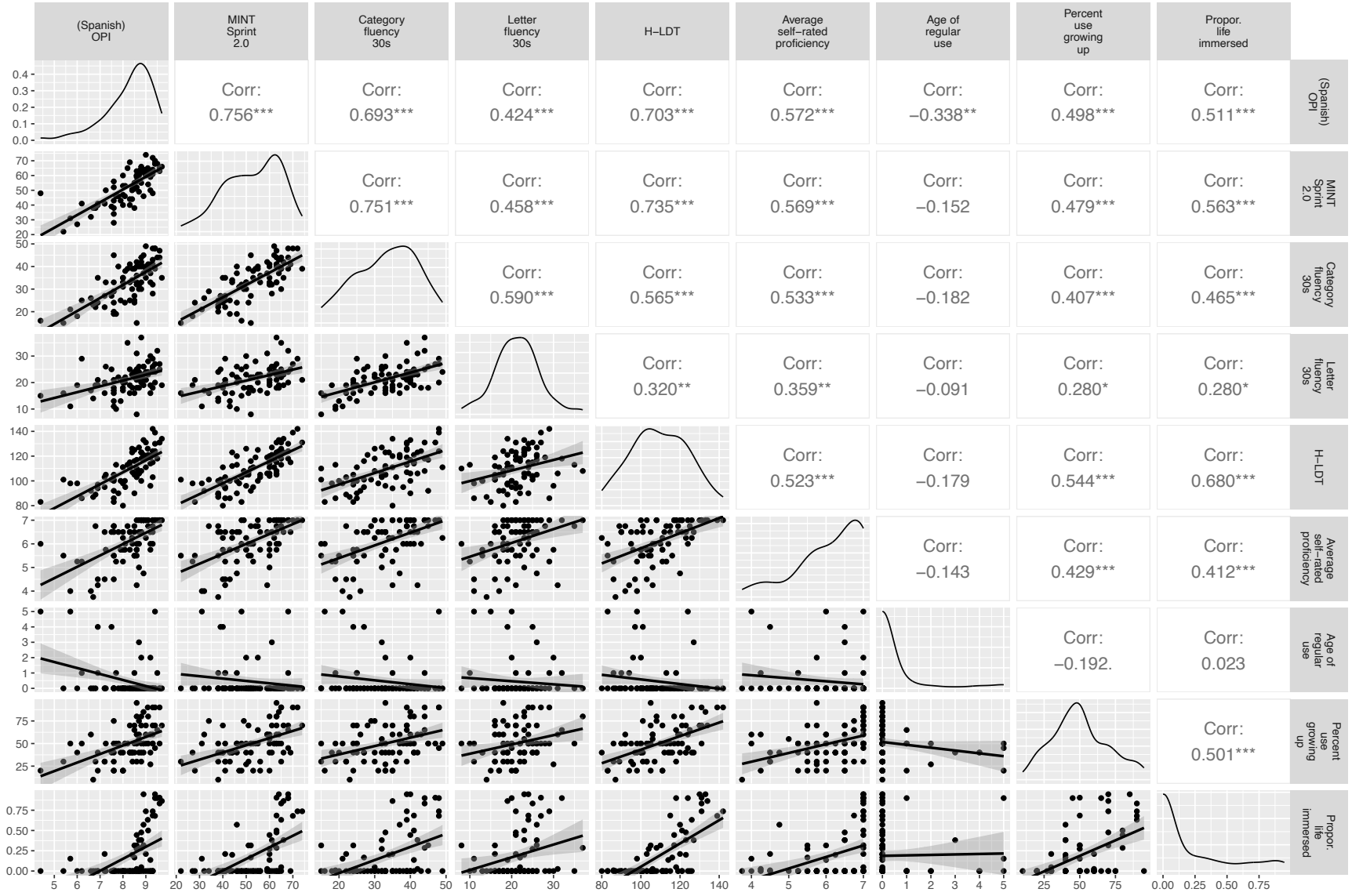
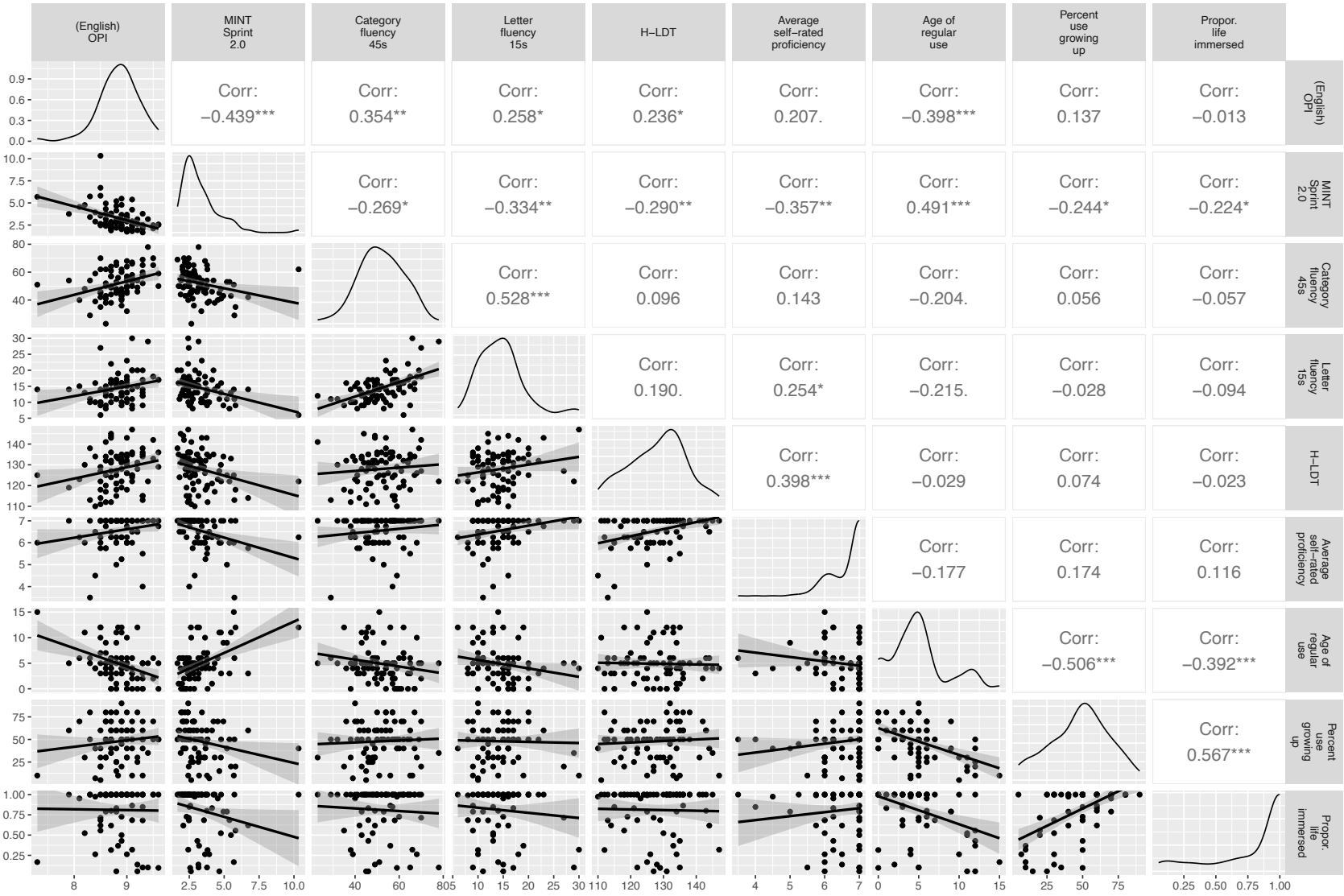


Figure 1.4 Correlation plot between most robustly correlated analogous variables and the OPI English score. The MINT Sprint 2.0 measure here was the efficiency score (not the Total Correct score).



C. SELECTION OF SUBMEASURES WITHIN OBJECTIVE MEASURES OF PROFICIENCY AND THE OPI

1. Selection of best correlated MINT sub measure with analogous OPI measure.

Figure 1.1 Correlations between OPI and MINT sub-measures dominance scores.

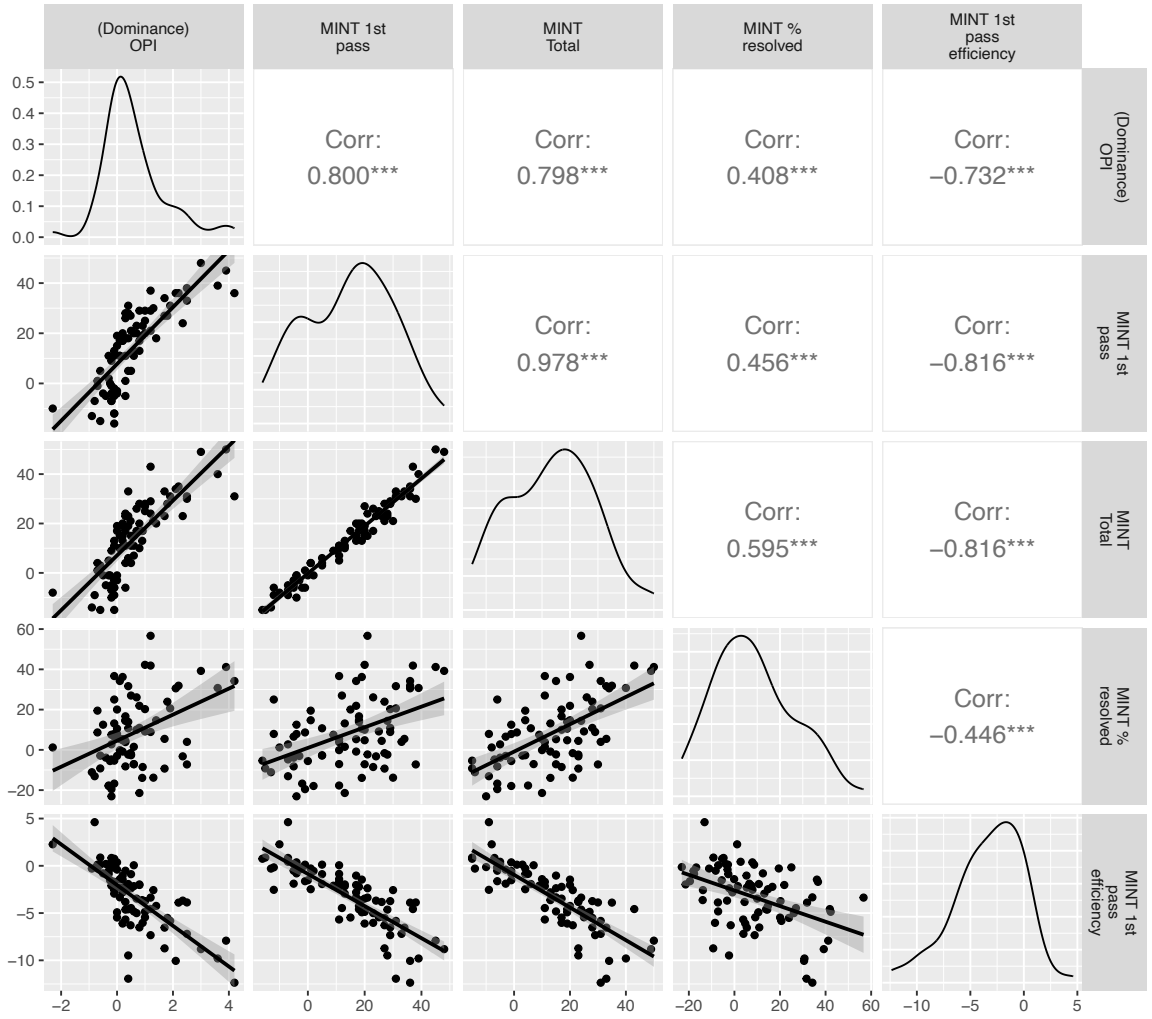


Figure 1.2 Correlations between OPI and MINT sub-measures balance scores.

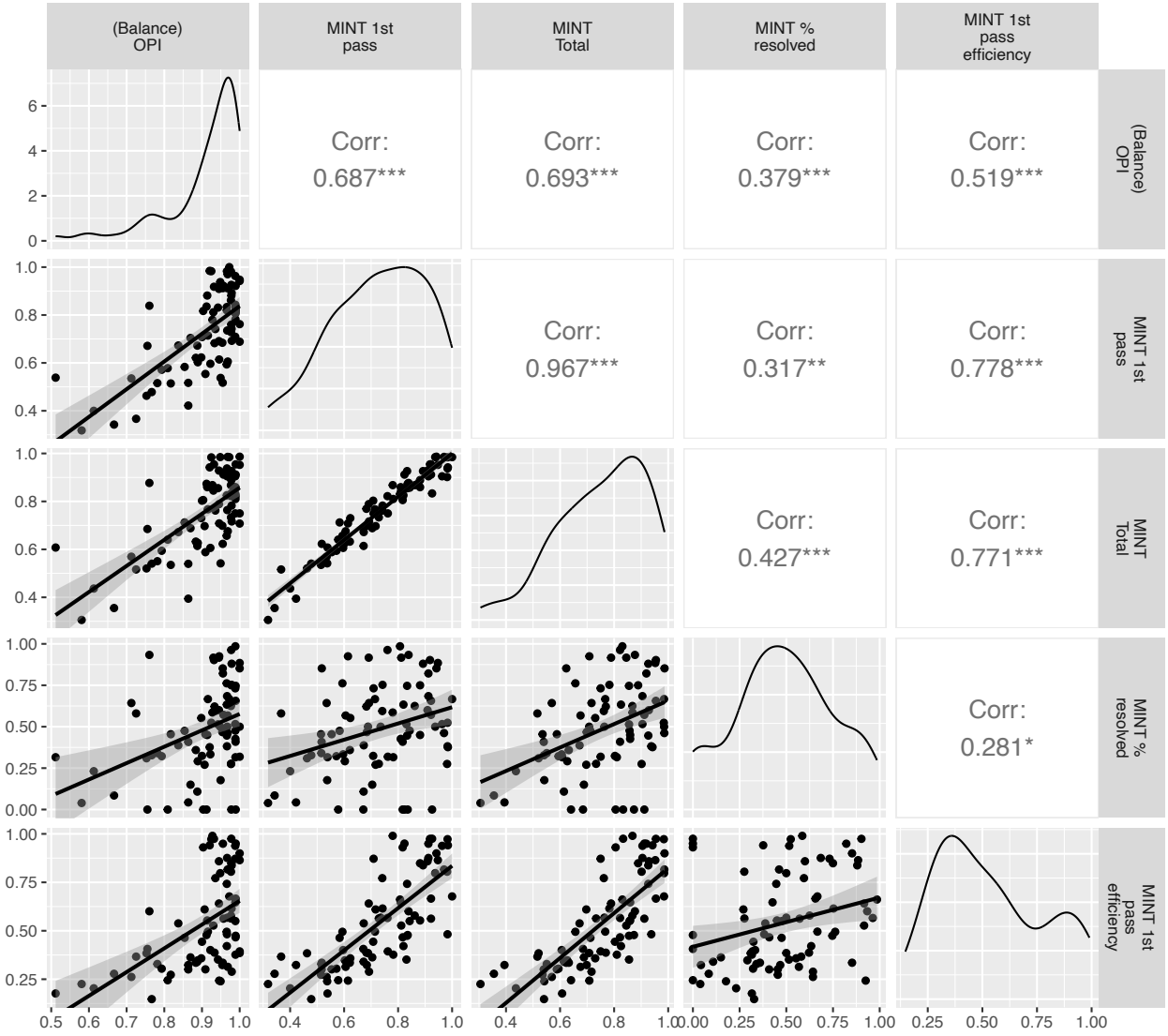


Figure 1.3 Correlations between OPI and MINT sub-measures Spanish scores.

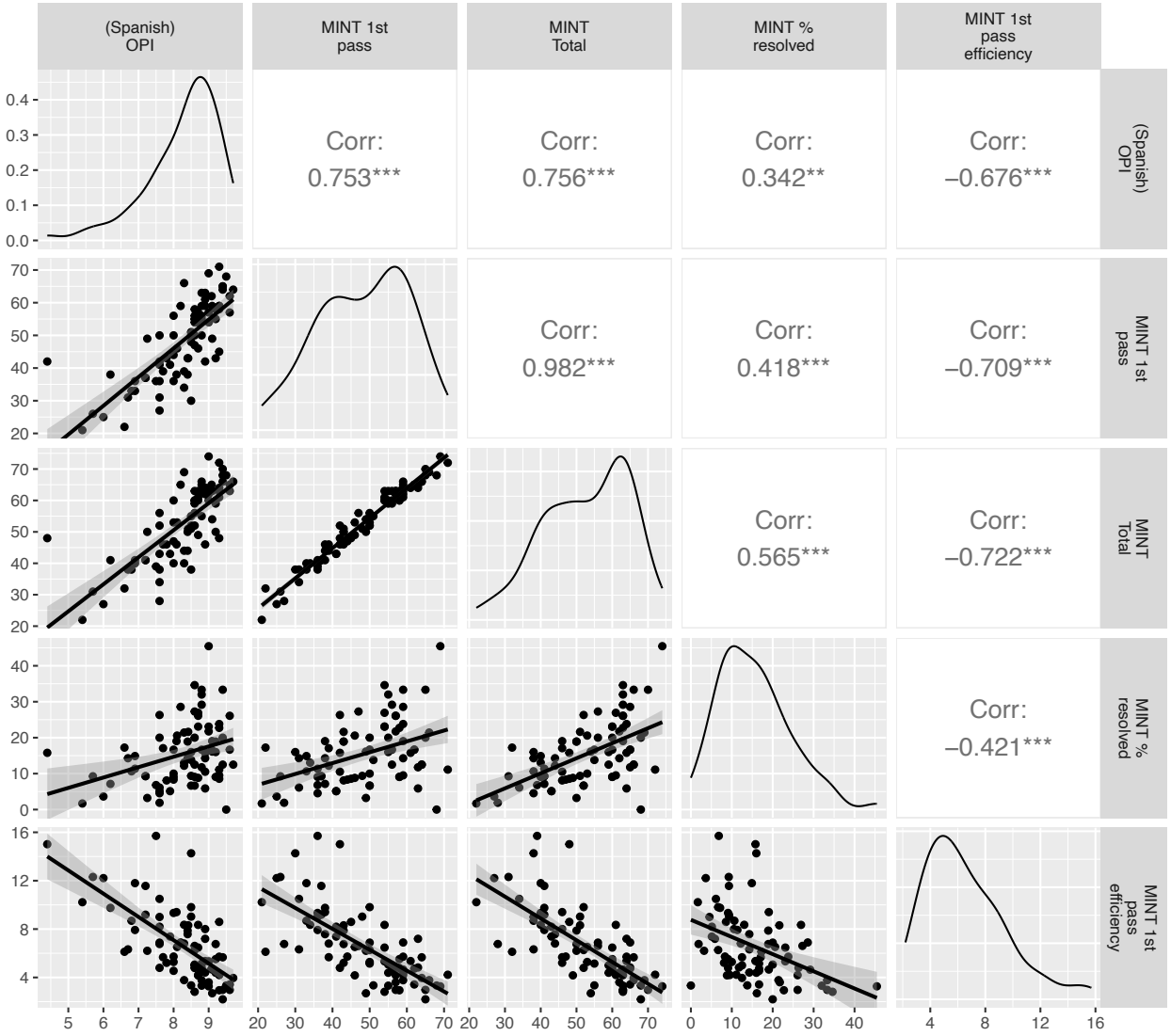
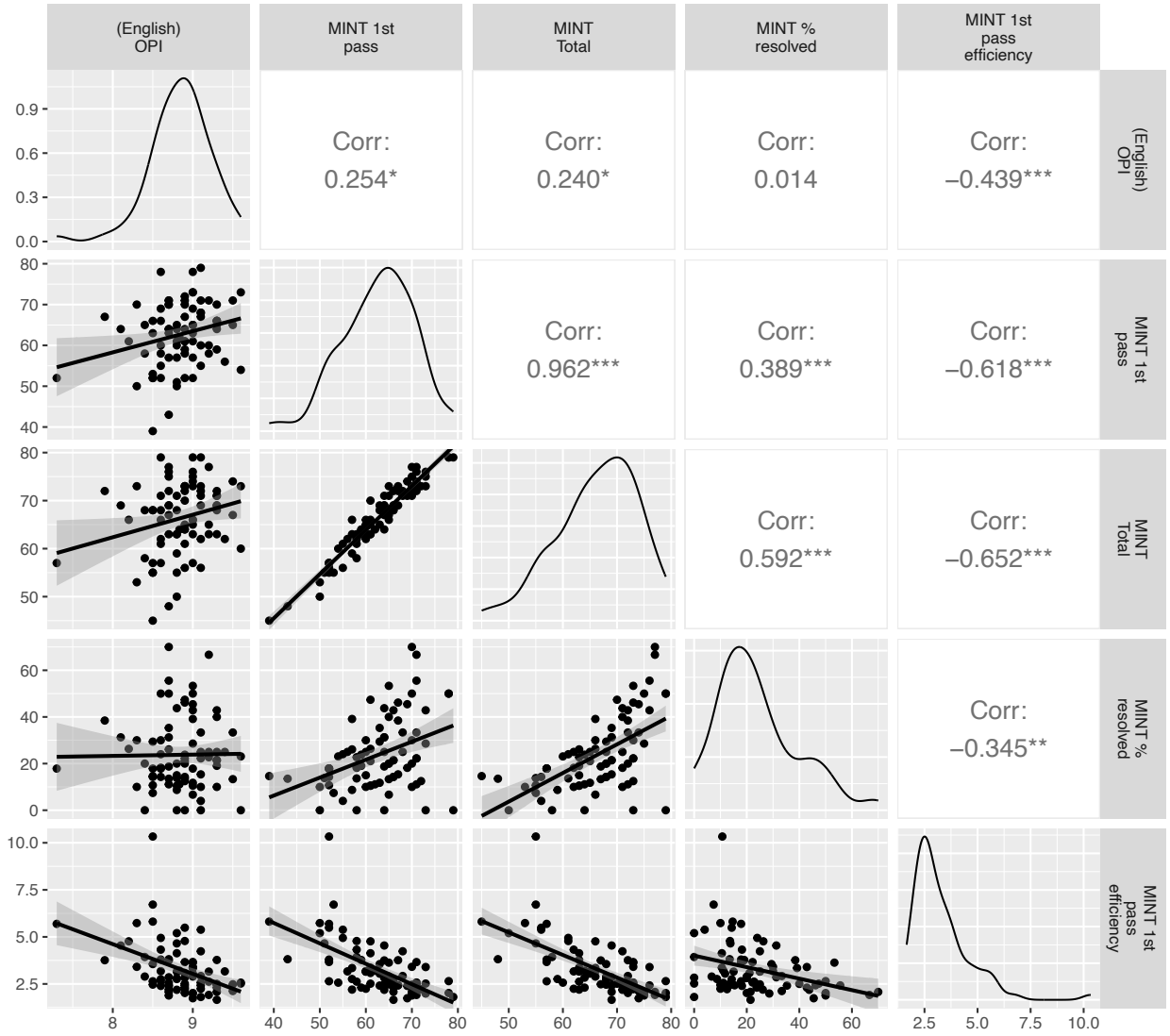


Figure 1.4 Correlations between OPI and MINT sub-measures English scores.



2. Selection of best correlated category fluency sub measure with analogous OPI measure.

Figure 2.1 Correlations between OPI and category fluency sub-measures dominance scores.

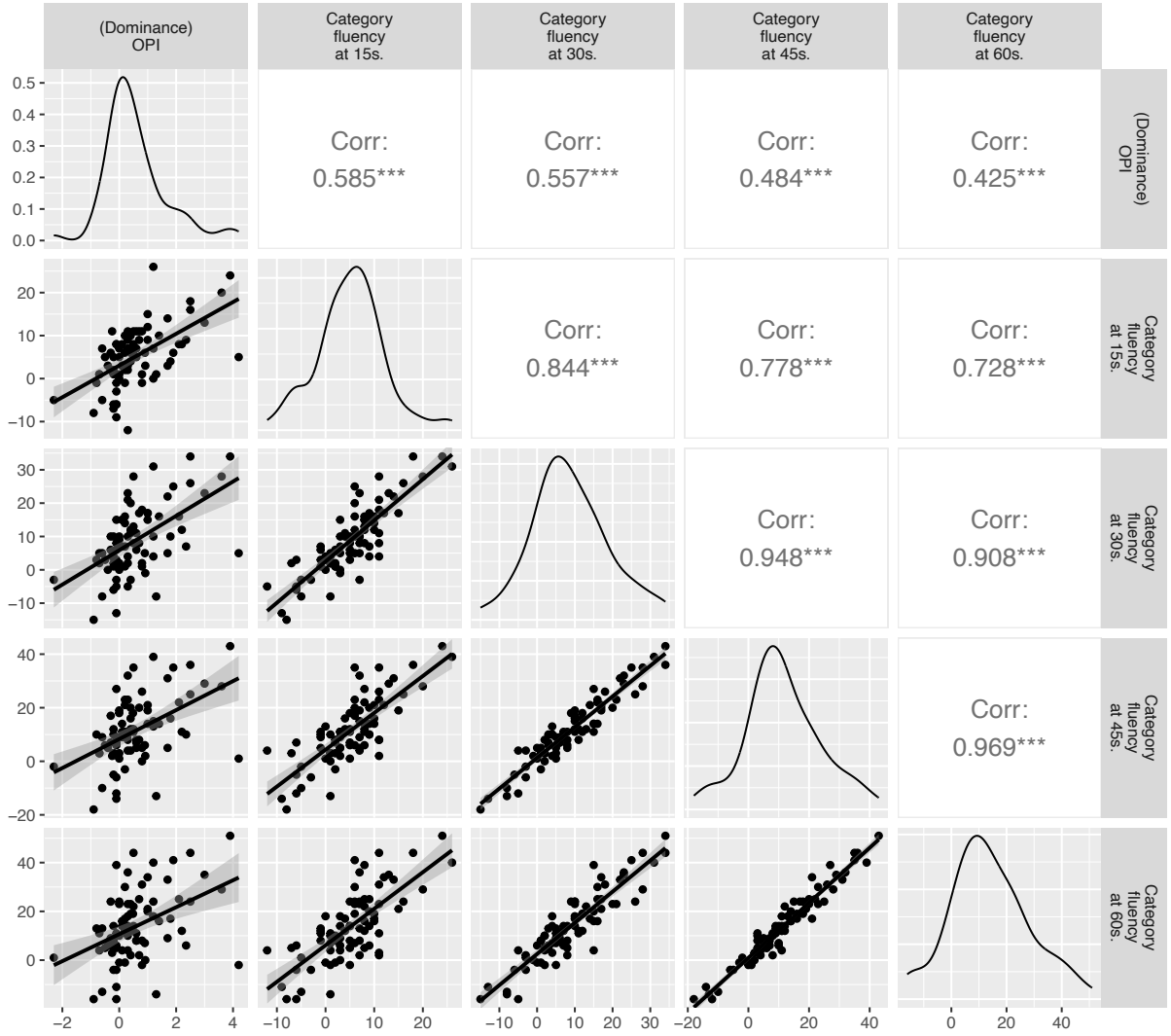


Figure 2.2 Correlations between OPI and category fluency sub-measures balance scores.

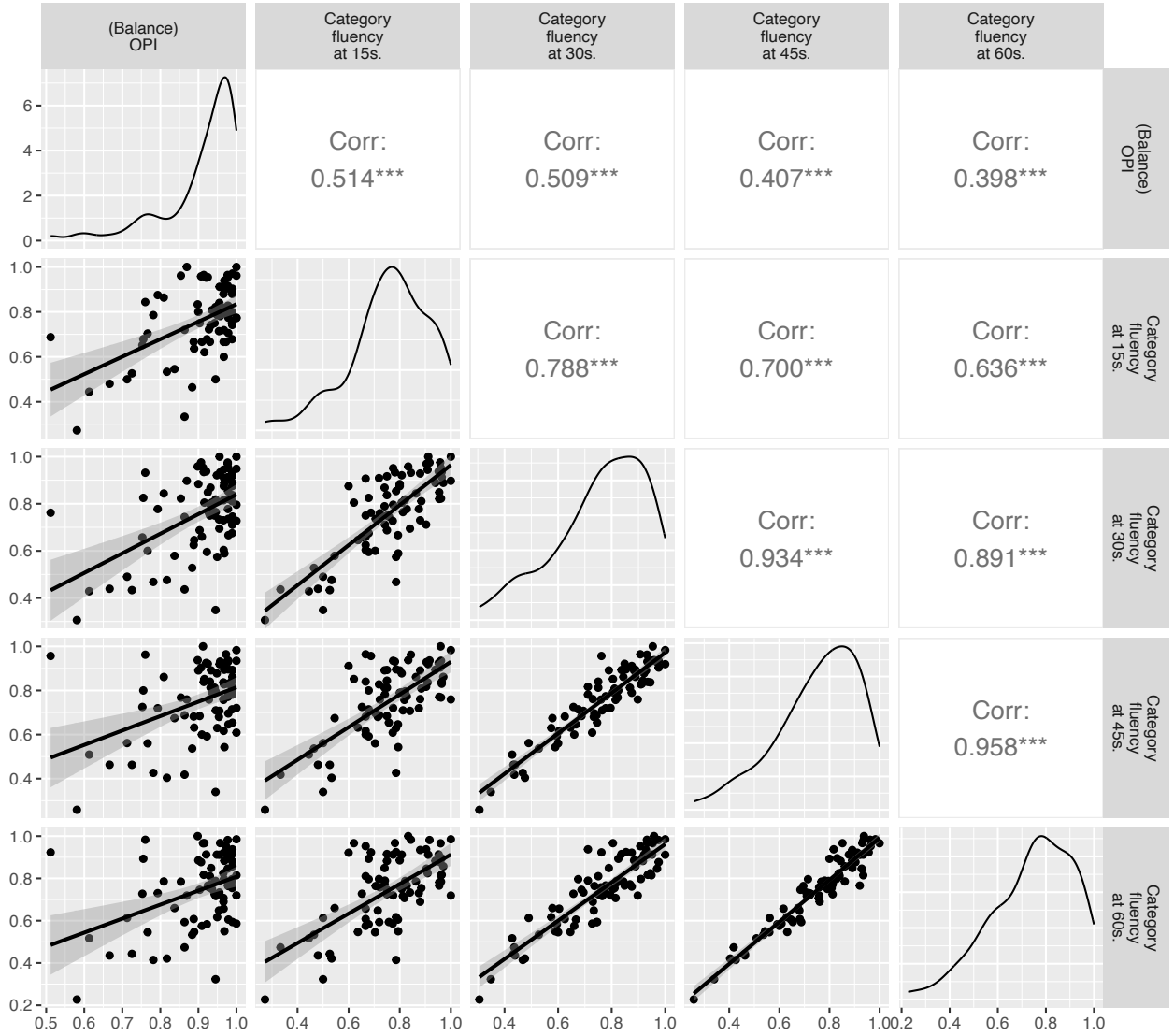


Figure 2.3 Correlations between OPI and category fluency sub-measures Spanish scores.

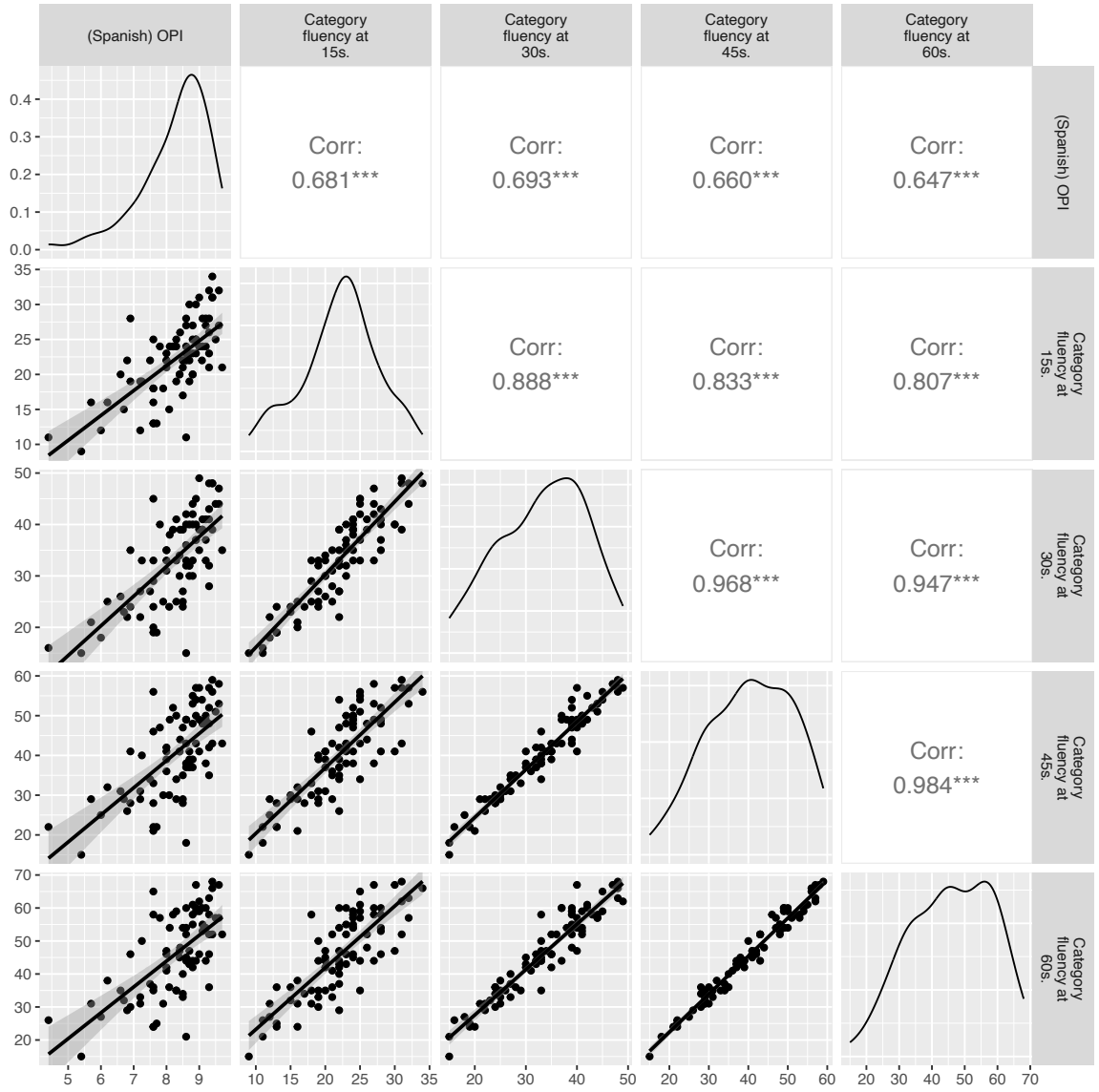
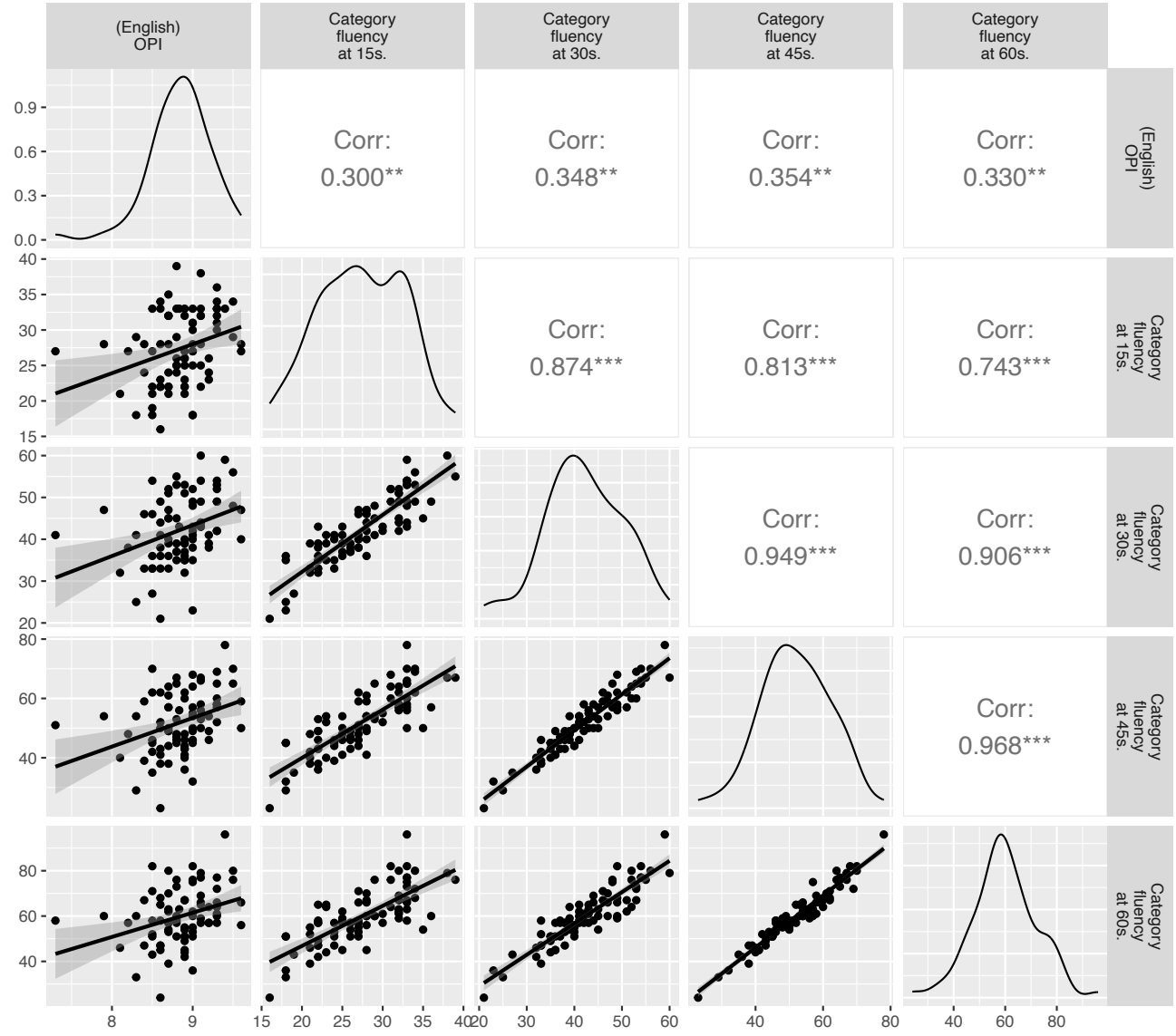


Figure 2.4 Correlations between OPI and category fluency sub-measures English scores.



3. Selection of best correlated letter fluency sub measure with analogous OPI measure.

Figure 3.1 Correlations between OPI and letter fluency sub-measures dominance scores.

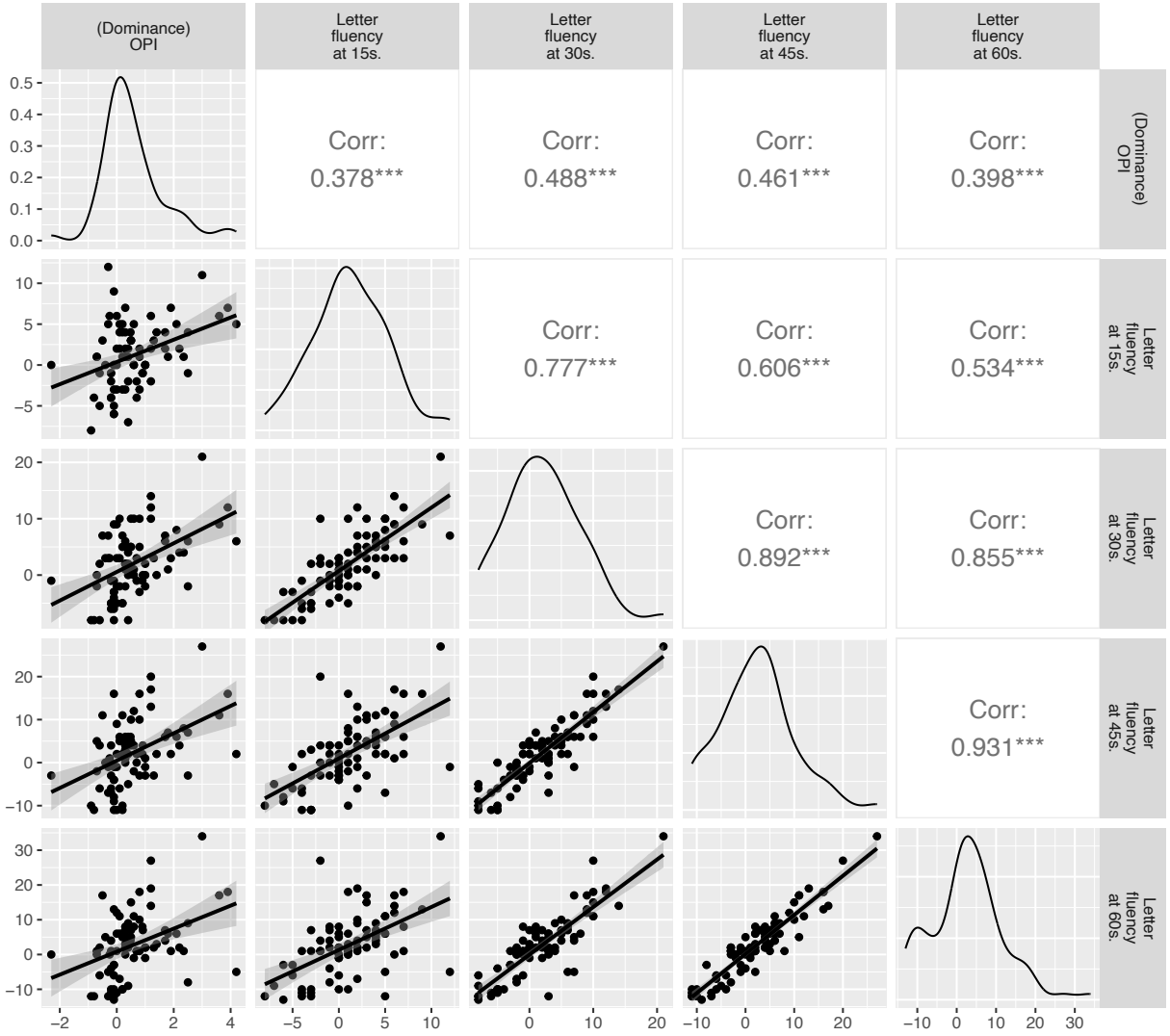


Figure 3.2 Correlations between OPI and letter fluency sub-measures balance scores.

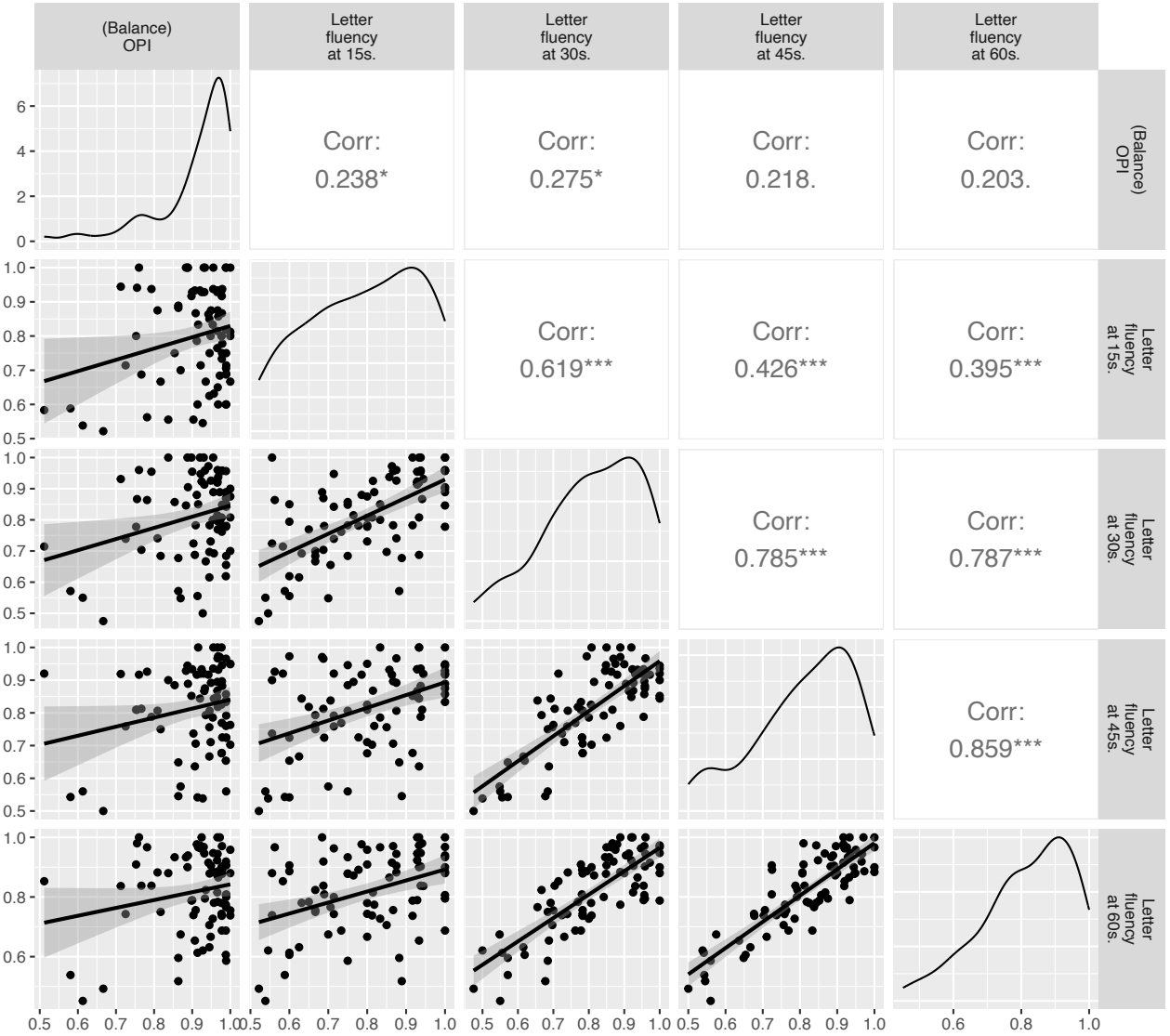


Figure 3.3 Correlations between OPI and letter fluency sub-measures Spanish scores.

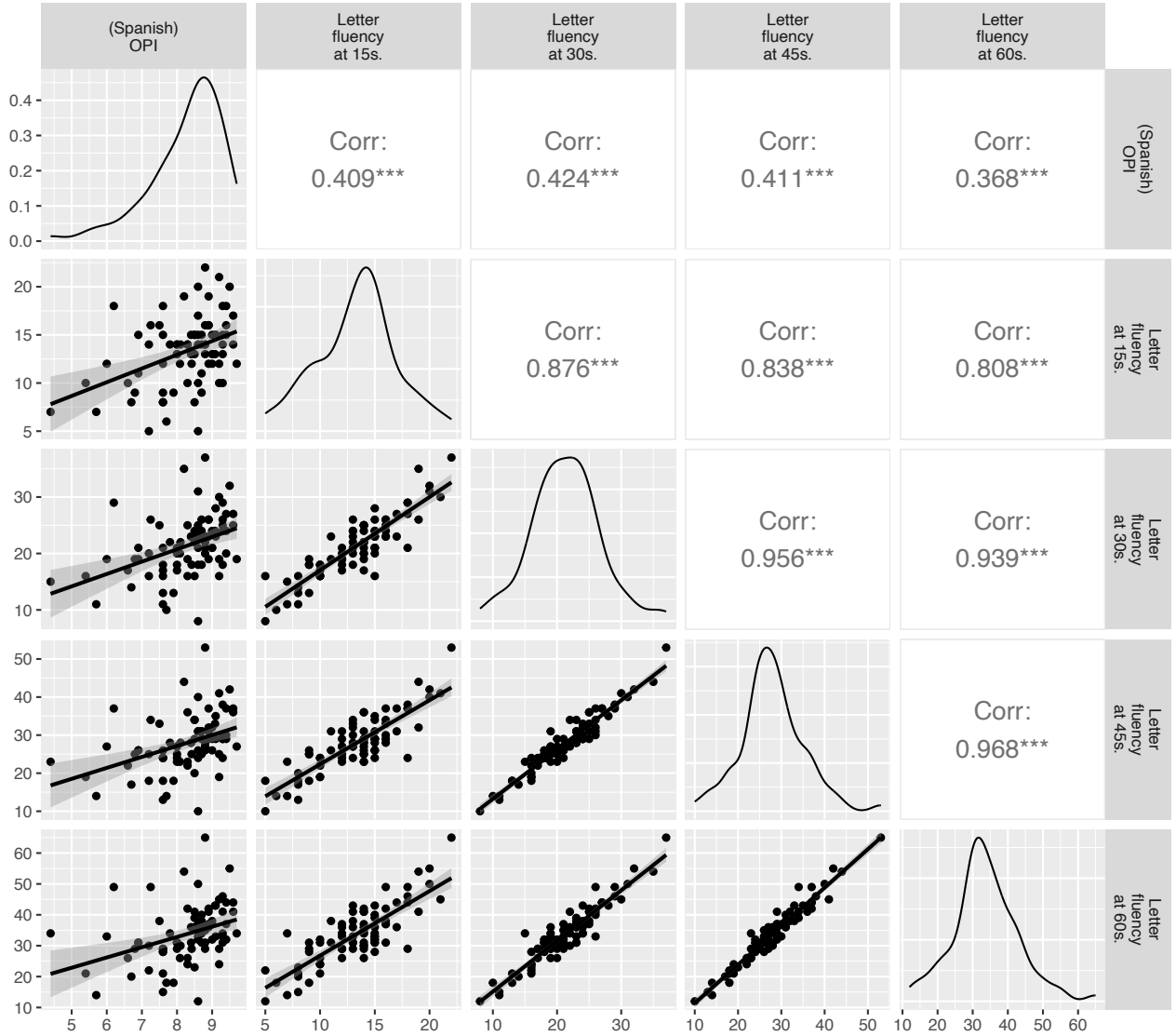
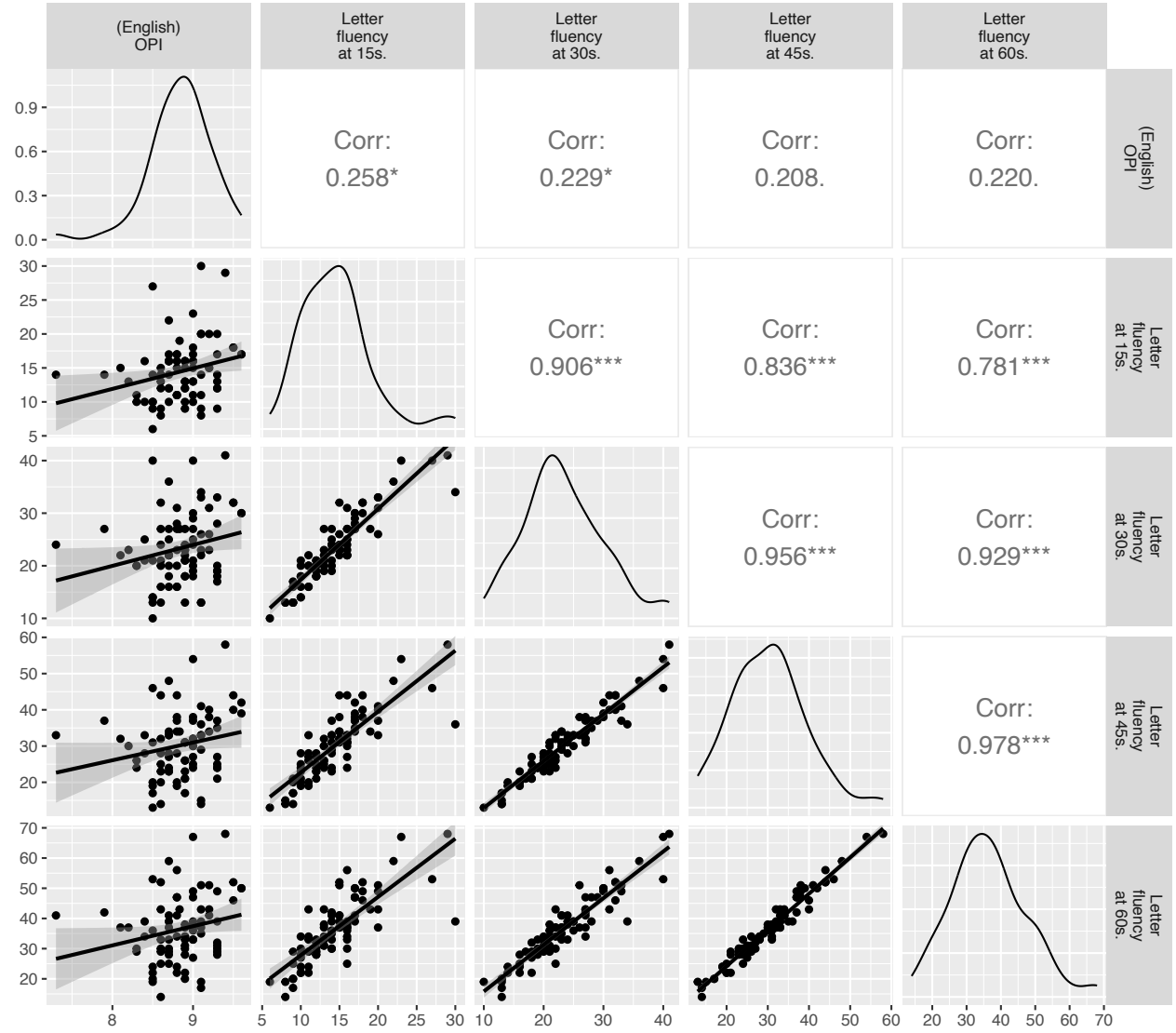
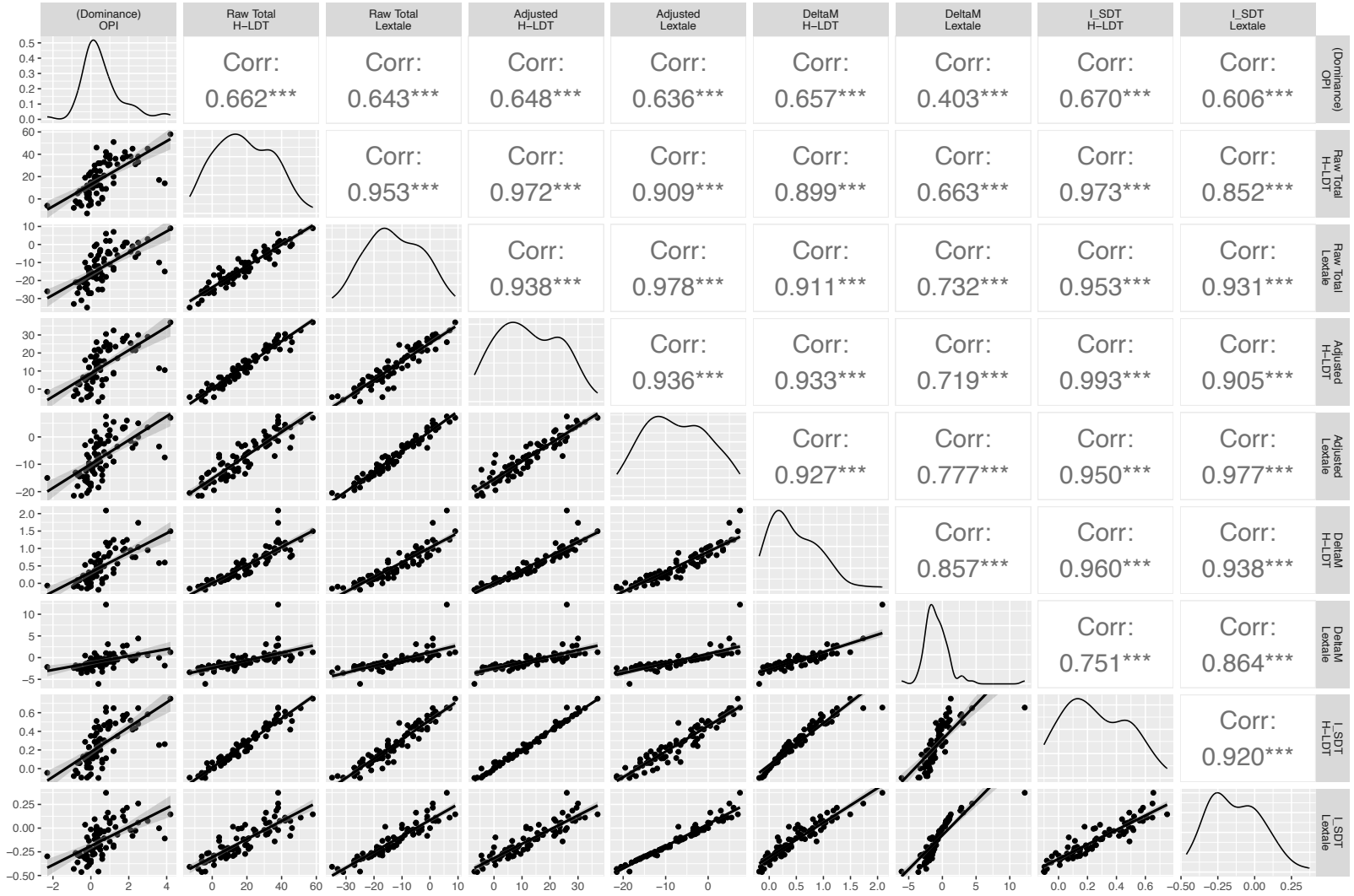


Figure 3.4 Correlations between OPI and letter fluency sub-measures English scores.



4. Selection of Hoversten Lexical decision task (H-LDT) versus original Lextale measures, and selection of best H-LDT sub measure with analogous OPI score.

Figure 4.1 Correlations of original and H-LDT dominance measures and H-LDT and OPI dominance scores.



Notes. H-LDT scores correspond to scores obtained on the new extended version of the original English (Lemhöfer & Broersma, 2012) and Spanish (Izura et al., 2014) versions of the Lextale. Original scores are labelled as "Lextale".
Raw Total scores correspond to the addition of raw accuracy scores on real words and nonwords.
Adjusted scores correspond to a weighted sore, correcting for the unequal proportion of words and nonwords, derived as follows: ([number of words correct/100*100] + [number of nonwords correct/50*100]) / 2.
The Delta M score was proposed by Meara (1992) to correct for guessing by adding a penalty for false alarms (saying a nonword is a real word). The formula is as follows, where *h* is the hit rate (correct answer) and *f* is the false alarm rate (wrong answer):

$$\Delta m = \frac{(h - f)}{(1 - f)} - \frac{f}{h}$$

The I_{SDT} score was derived to correct for issues with the Delta M score (Huibregtse et al., 2002); it corrects for both guessing and response bias. The formula is as follows (Huibregtse et al., 2002; note there is an error in the reproduced formula in Lemhöfer and Broersma [2012], where the minus sign following the initial 1 is missing):

$$I_{SDT} = 1 - \frac{4h(1 - f) - 2(h - f)\ (1 + h - f)}{4h(1 - f) - (h - f)\ (1 + h - f)}$$

Figure 4.2 Correlations of original and H-LDT balance measures and H-LDT and OPI balance scores.

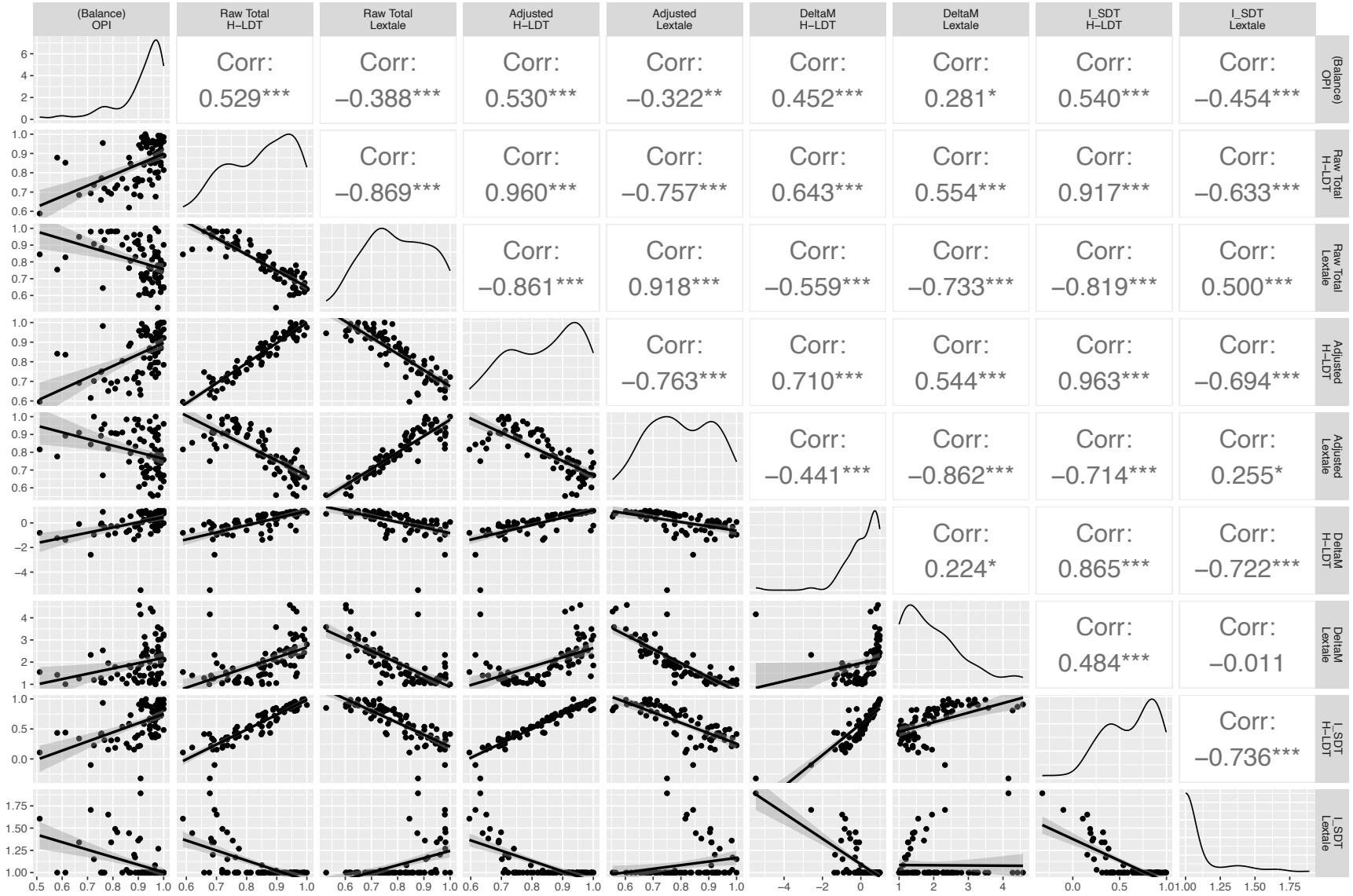


Figure 4.3 Correlations of original and H-LDT Spanish measures and H-LDT and OPI Spanish scores.

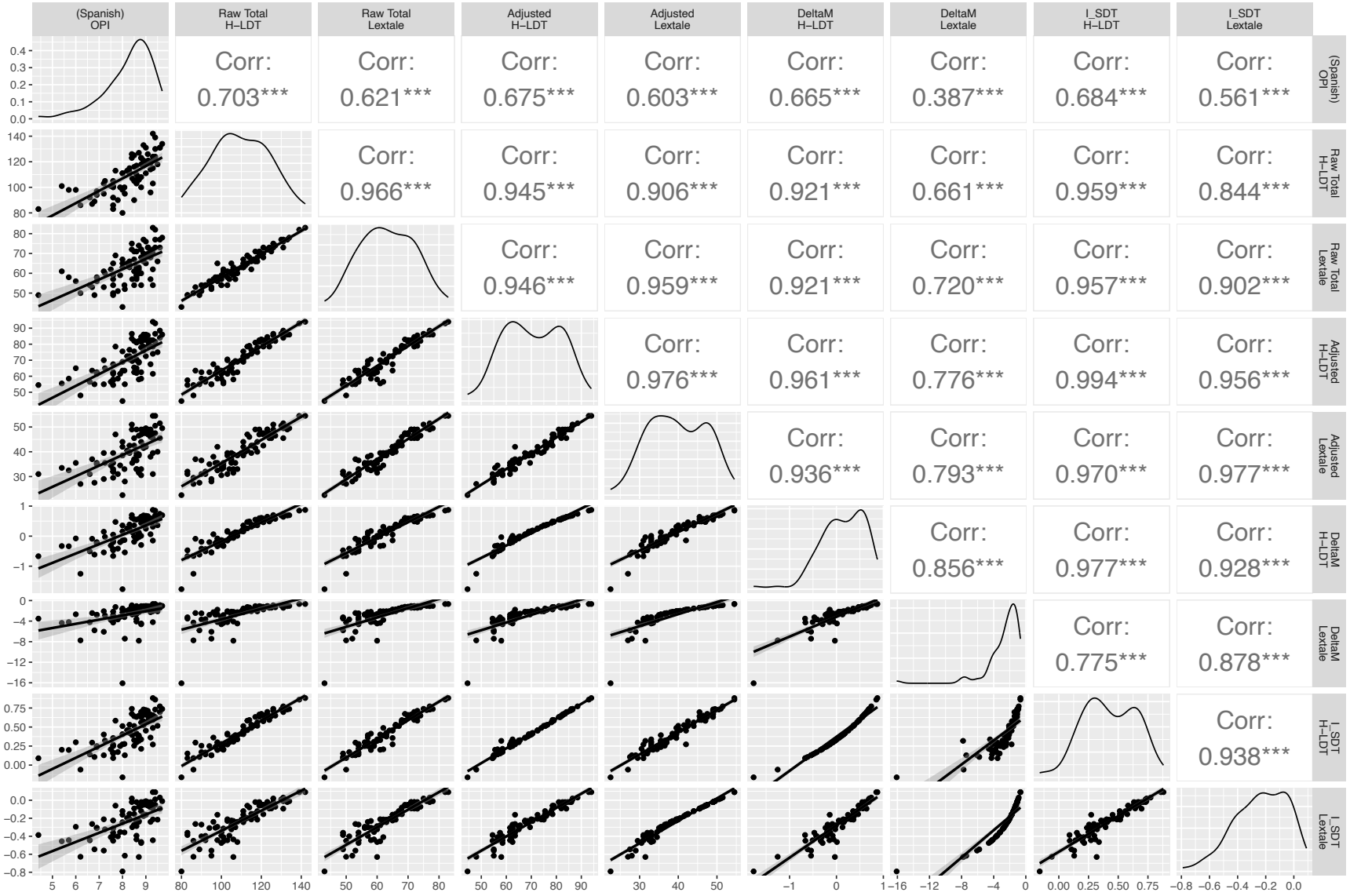
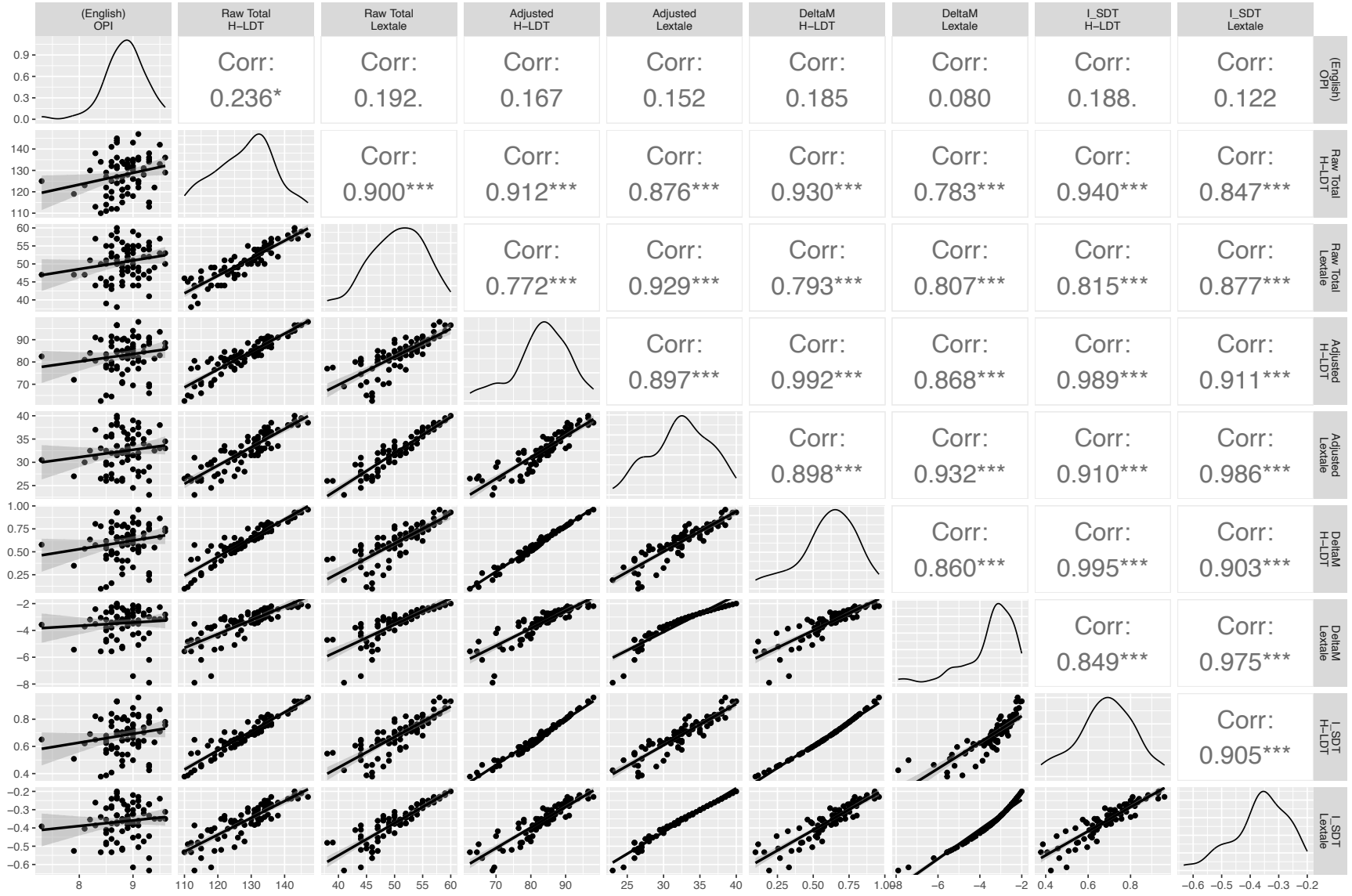


Figure 4.4 Correlations of original and H-LDT English measures and H-LDT and OPI English scores.



D. SELECTION OF SUBMEASURES WITHIN SELF-REPORT MEASURES OF PROFICIENCY AND THE OPI

Figure 1.1 Correlations of dominance scores for self-report measures of language proficiency and OPI dominance scores.

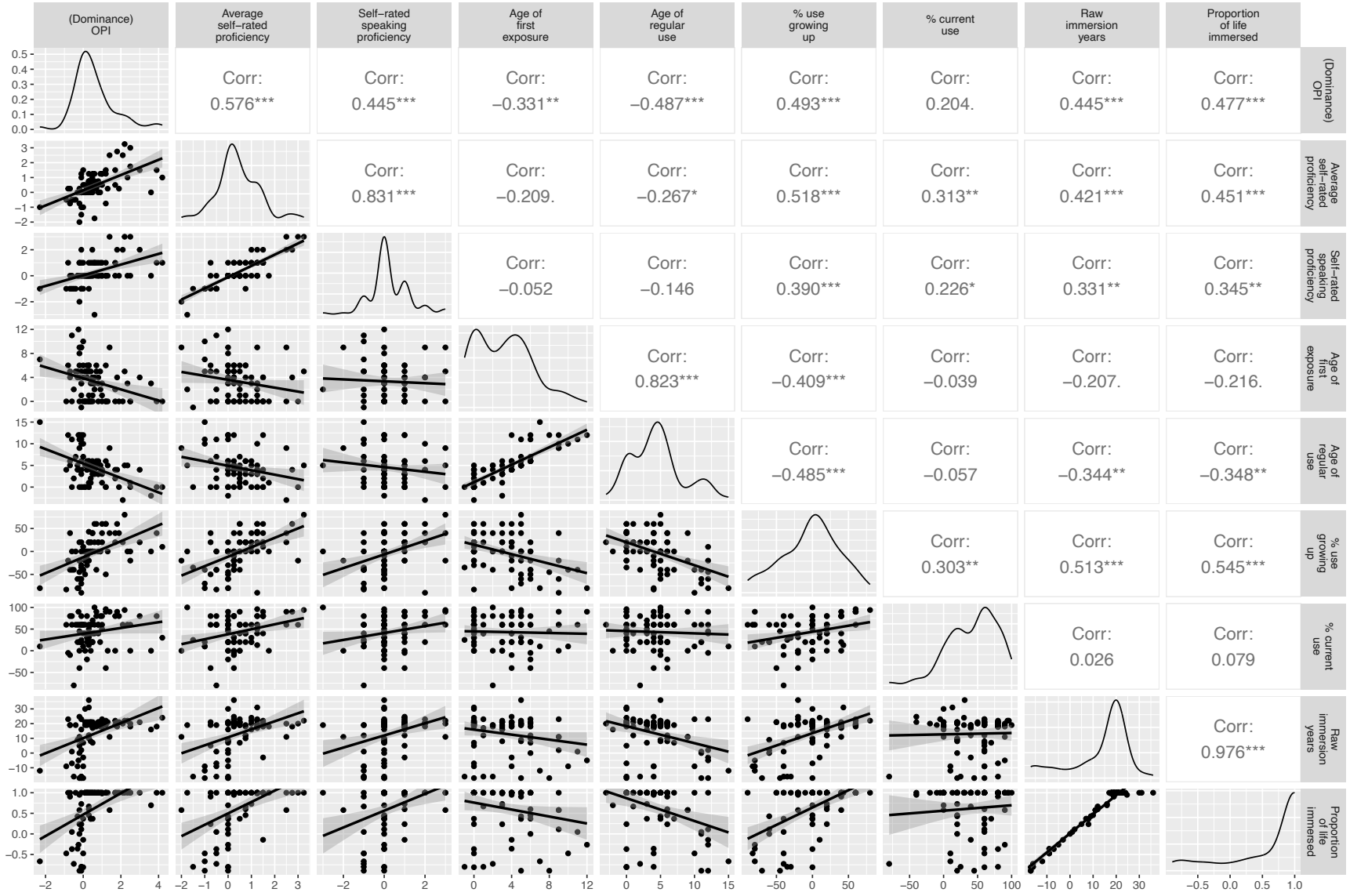


Figure 1.2 Correlations of balance scores for self-report measures of language proficiency and OPI balance scores.

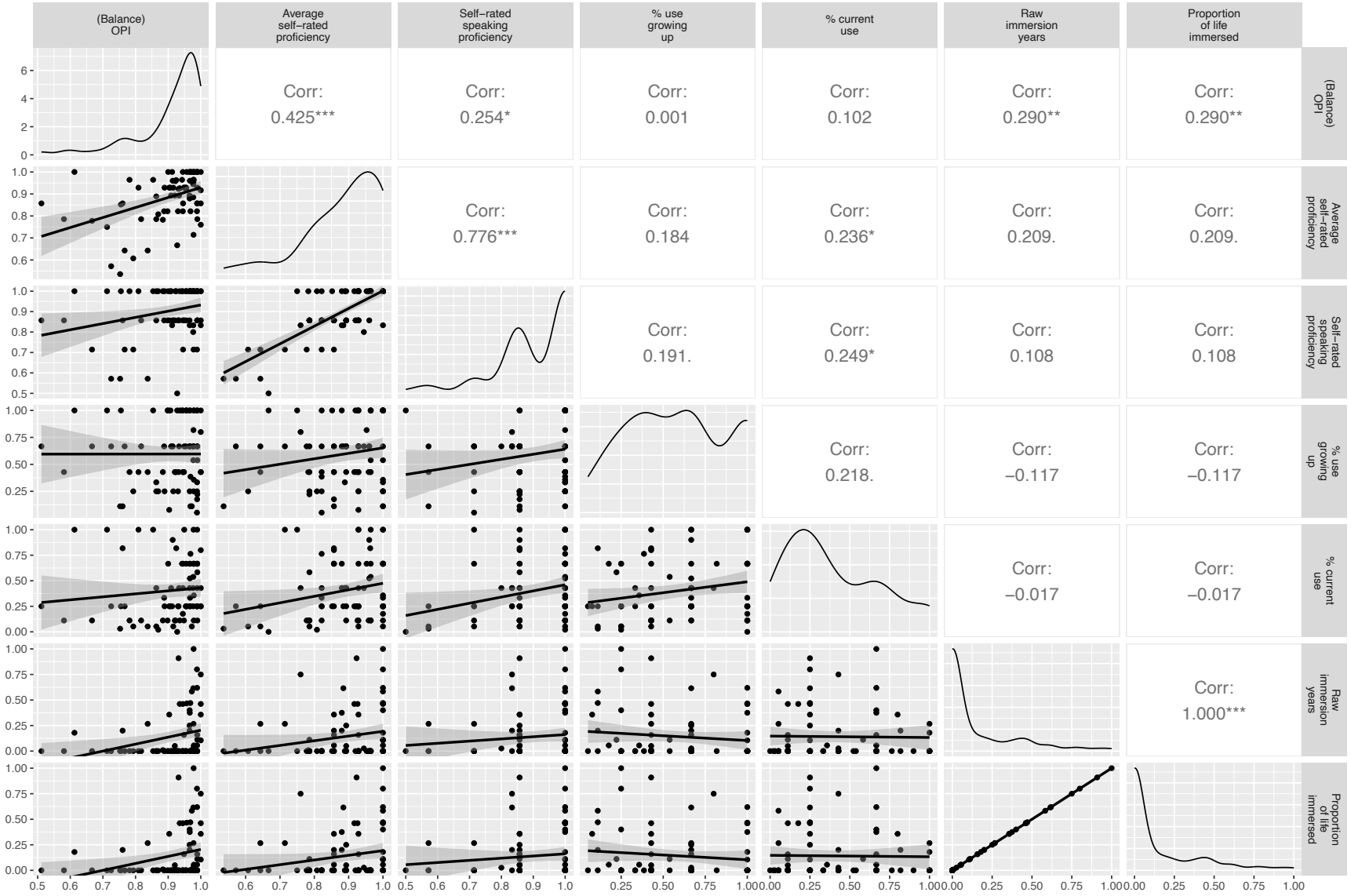


Figure 1.3 Correlations of Spanish scores for subjective measures of language proficiency and OPI Spanish scores.

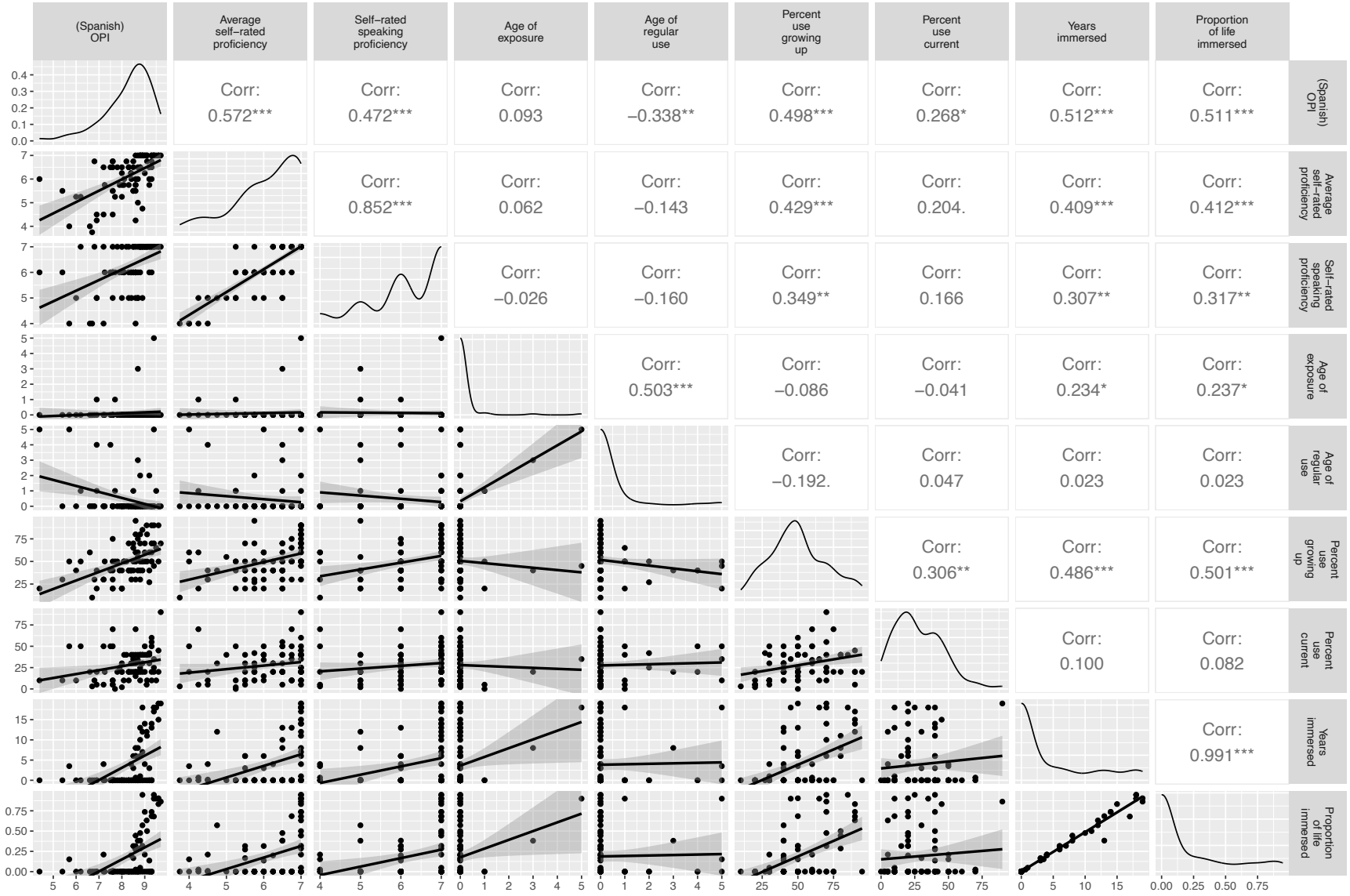


Figure 1.4 Correlations of English scores for subjective measures of language proficiency and OPI English scores.