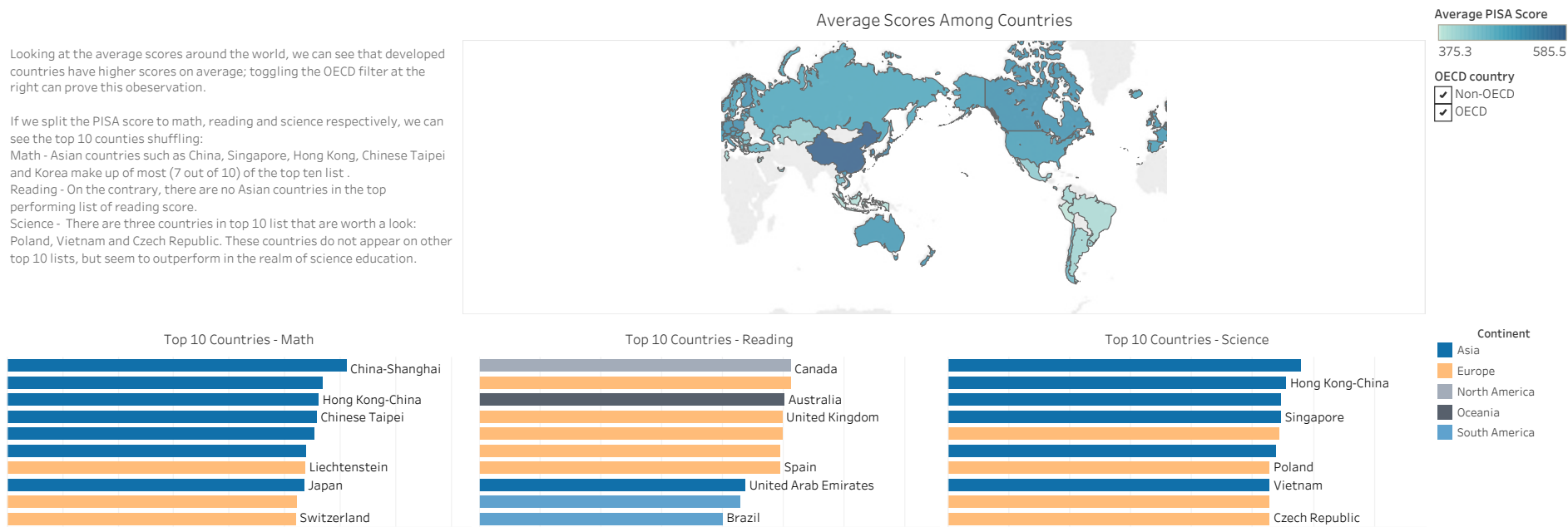


# PISA Score Analysis

- Average scores across countries
- Average scores between continents
- What makes the difference?

Looking at the average scores around the world, we can see that developed countries have higher scores on average; toggling the OECD filter at the right can prove this observation.

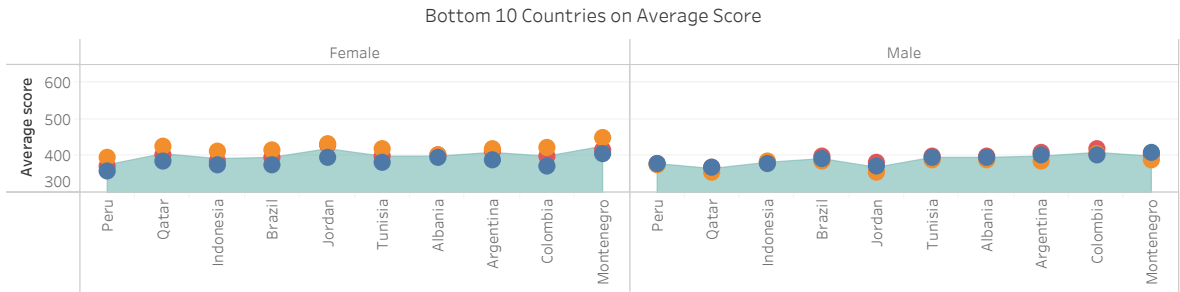
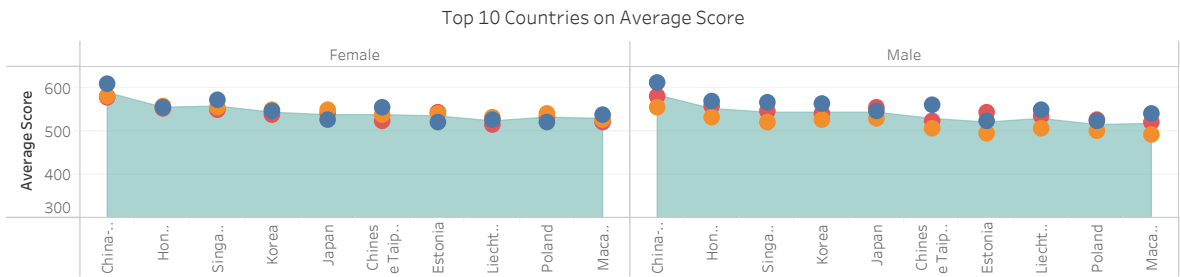
If we split the PISA score to math, reading and science respectively, we can see the top 10 countries shuffling:  
Math - Asian countries such as China, Singapore, Hong Kong, Chinese Taipei and Korea make up of most (7 out of 10) of the top ten list.  
Reading - On the contrary, there are no Asian countries in the top performing list of reading score.  
Science - There are three countries in top 10 list that are worth a look: Poland, Vietnam and Czech Republic. These countries do not appear on other top 10 lists, but seem to outperform in the realm of science education.



PISA Score Analysis

- Average scores across...
- Average scores betw...
- What makes the diffe...

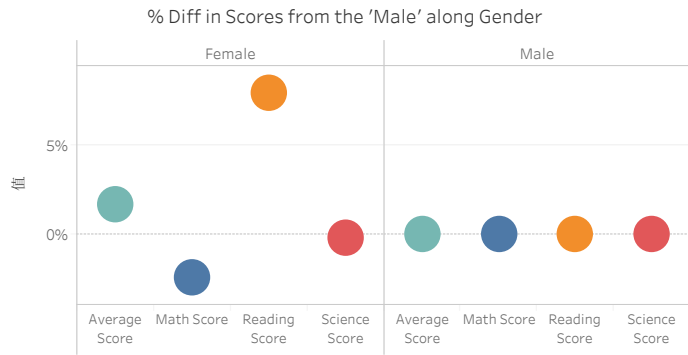
Score Math Reading Science Average



[Plot below] Comparing the percentage of difference between scores of males and females (using male as base), it is found that there is not much difference in the average and science score of two genders. However for reading scores, female students outperform their male comparisons by 8%, which is not a small difference. On the other hand, for math scores male students perform slightly (around 2%) better than girl students.

[Plot at the left] The fact that male students do better on math rather than other subjects can also be seen here. Looking at the distribution of three scores, we can see blue dots (math score) are usually higher than other two dots.

Another interesting observation is that for male students in top 10 countries and female students in bottom 10 countries, the delta among three subjects tend to be bigger (the space between three spots are bigger). Males of top 10s are better at doing math (blue dots are usually at the top), while females in bottom 10s do better in reading (orange dots are usually at the top).



# PISA Score Analysis

Average scores across...	Average scores between...	What makes the difference...
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Let's look at whether the social factors like education level of parents and family wealth affect student's PISA scores.

Generally speaking, higher-educated parents tend to have positive impact on students' PISA score - this can be observed in the upward-going median of average scores across different parent education levels.

Looking at the relationship between wealth and average PISA score, we can see there's a tendency that the wealthier the student is, the more score he/she will get. However there are some interesting discoveries:

- 1. Qatar is relatively richer than other countries, but their students do not perform as good as other wealthier countries.
- 2. Vietnam students are not as rich as students from other countries, but they do well on the PISA test.
- 3. China-Shanghai students are below the average wealthy line, but they outperform other students in PISA test.

