OUR STA199 COFFEE ANALYSIS

Lachlan Black
Jonathan Hardnett
Jessica Salinas
Victoria Wang

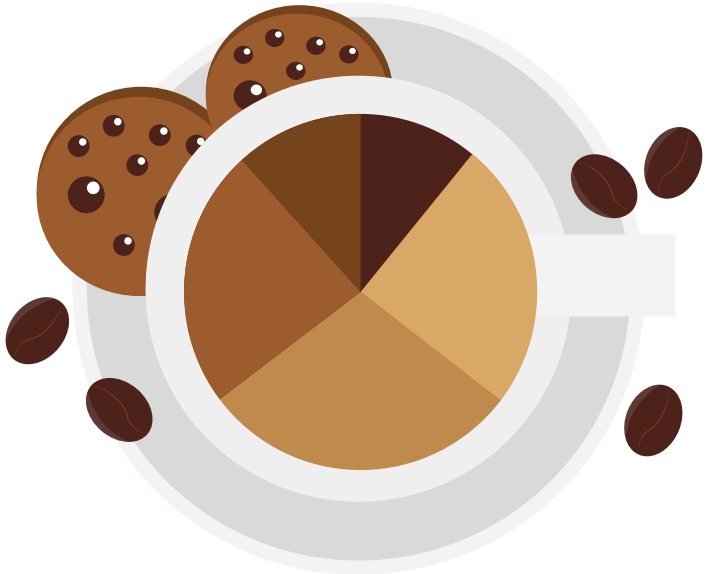
- Roughly two-thirds of American adults enjoy a cup of coffee each day
- Personal enjoyment
- Ethical/Fair Trade coffee

How are altitude, coffee species, and processing methods associated with overall coffee quality score? And does one have more correlation than others?

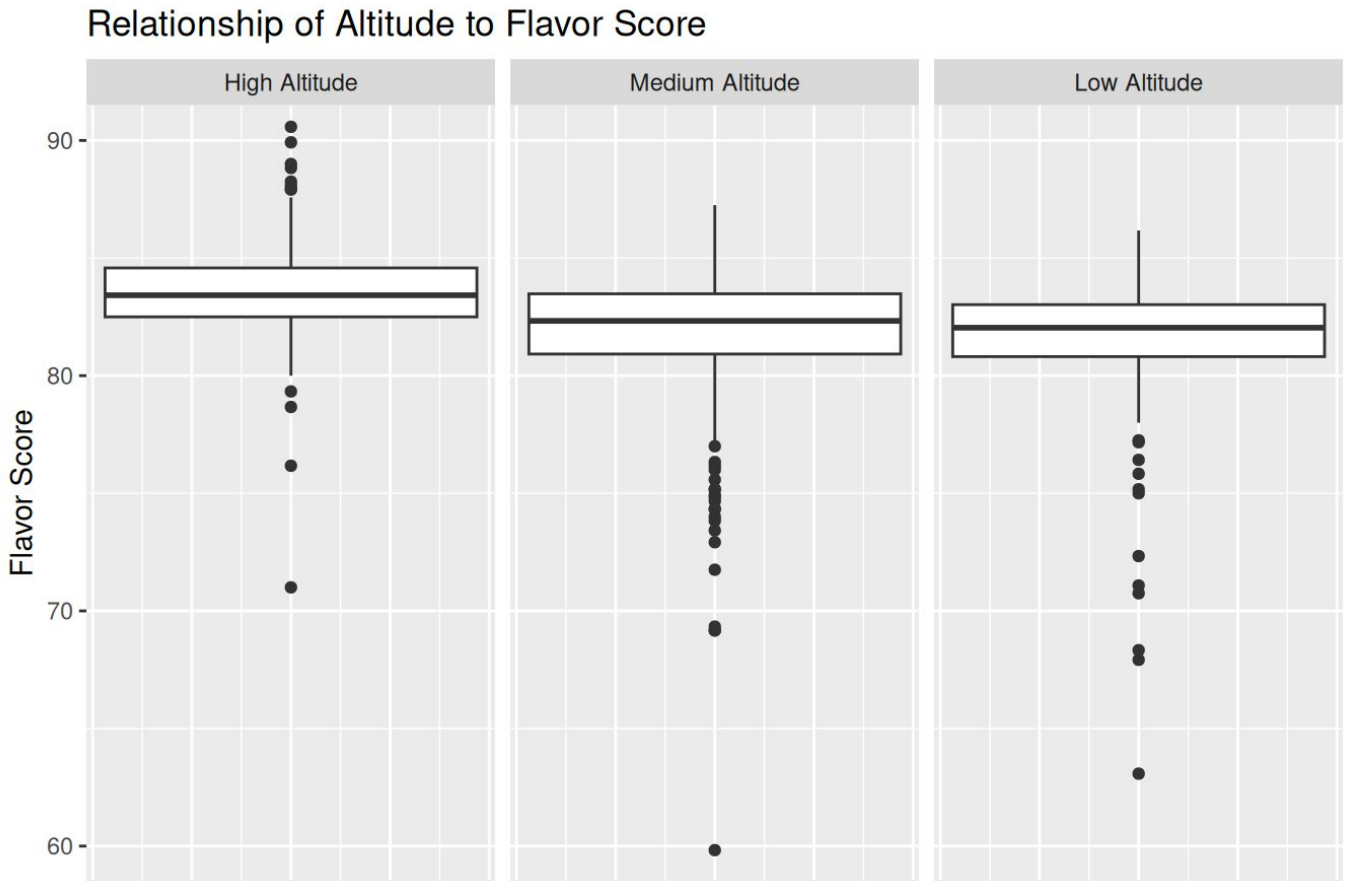
Higher growing altitude is the most positively associated with higher overall coffee quality scores.

Data Collected

- 2018 from the Coffee Quality Institute's Review Pages
- 32 different countries
- 2 coffee species: Robusta and Arabica
- Scores range from 0-100



- Our initial hypothesis was correct!
- The data suggests that higher coffee scores seemed to be correlated with higher altitudes.

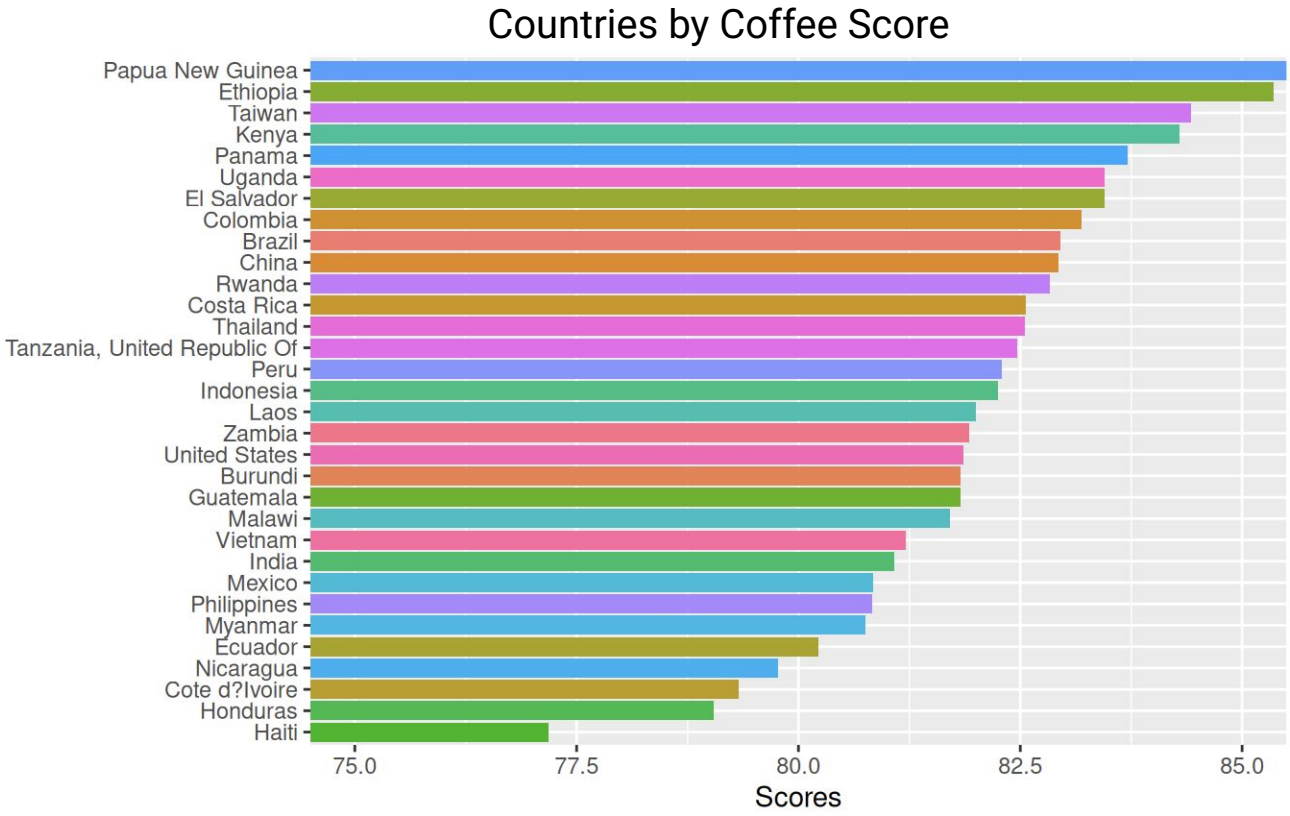


1	High Altitude	83.5
2	Medium Altitude	81.7
3	Low Altitude	81.4

Countries with higher altitude averages produced higher scoring coffee samples

Example Countries

- Papua New Guinea
- Haiti



DISCUSSION

ALTITUDE

A positive correlation exists between elevation and quality;

High Altitude (>1700m) consistently yields the highest flavor profiles due to slower bean maturation.

PROCESSING

Washed/Wet processing provides the most consistent quality, while **Natural/Dry** methods show the highest volatility (widest range of scores).

SCORES

PNG had the highest overall score of over 85, attributed to its ideal high-altitude, tropical climate. This supports our hypothesis. Haiti had the lowest total score, under 77, most notably due to high environmental degradation and deforestation.

However, the low sample size n=1 means this could be a best case scenario, rather than the national average.

LIMITATIONS

A primary limitation of this study is the significant disparity in sample sizes (n) across different countries. While certain nations, such as **Papua New Guinea (PNG),** achieved the highest overall scores (over 85), these results are derived from a singular entry (n=1).

Our data suggests that the "perfect cup" is based on science with high altitude, Arabica beans, and precise washed processing.

While metrics help us predict quality, the true value of coffee lies in the ethical sourcing and personal enjoyment that fuels our daily lives.

Understanding these variables doesn't just make us better analysts, it makes us more informed consumers who can better appreciate the complex journey from farm to mug.