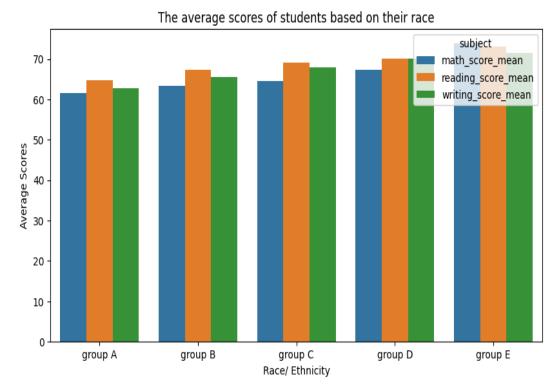
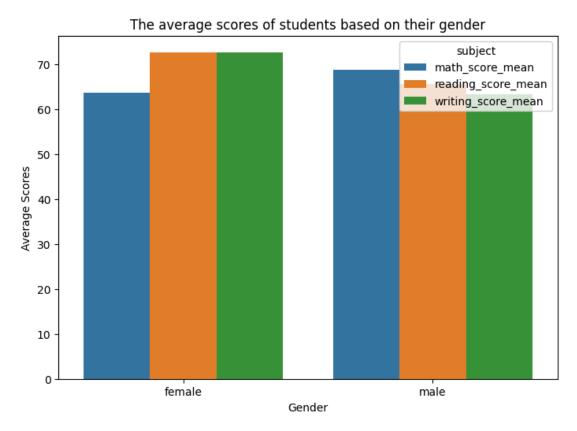
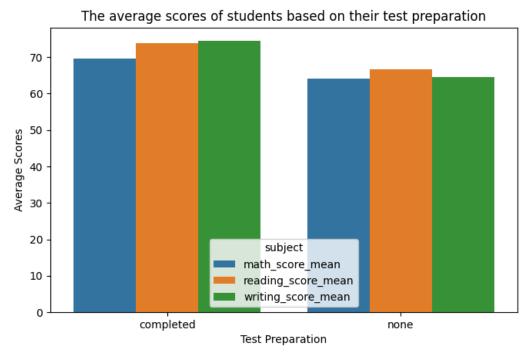
Visualisations & Outcomes



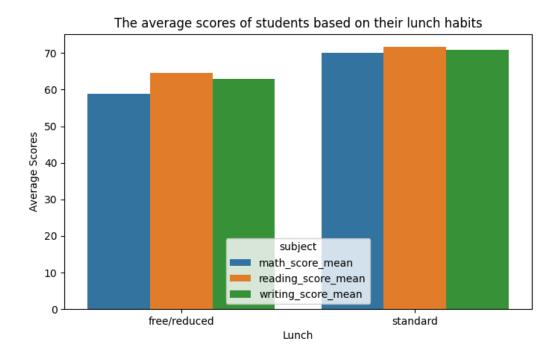
According to the analysis presented in the bar graph above, students in group E consistently exhibit the highest average scores in all subjects compared to students from other racial or ethnic groups. This data suggests that ethnicity may play a role in shaping one's educational experience, as parents from certain ethnic backgrounds tend to emphasise academic performance and motivate their children to strive for success in school. Ultimately, this can lead to a successful career with a competitive salary in the workforce.



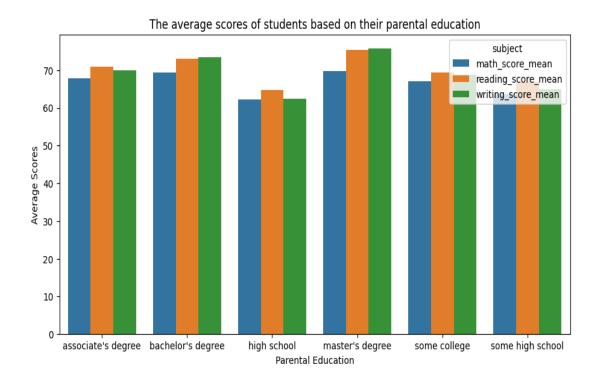
Based on gender, female participants demonstrated higher average scores in reading and writing, while male participants displayed higher average scores in mathematics. It is evident from the dashboard that there is a relatively small gap between female and male students in terms of their score outcomes (a 5.09 point difference in average maths scores, a 7.13 point difference in average reading scores, and a 9.15 point difference in average writing scores). The results suggest a trend where male students tend to excel in mathematics while female students excel in literacy, aligning with common stereotypes.



The visual representation above demonstrates that students who adequately prepared achieved higher scores in all subjects compared to those who did not prepare prior to the test. This indicates the significance of effective time management for exam preparation. Earning higher scores can result in a more favourable overall academic performance and may enhance opportunities for admission to a higher-ranked university, ultimately leading to improved prospects in their future career.



According to the analysis of students' lunch preferences, individuals who chose the standard lunch option generally demonstrated higher academic achievement in all subjects in comparison to students who received free or reduced-price meals. This highlights the correlation between healthy eating habits and improved academic performance. It is important to note that proper nutrition contributes to overall well-being and success in school. A lack of proper nourishment can hinder a student's ability to concentrate and perform at their best during exams.



Finally, research indicates that students' academic performance may be influenced by the education level of their parents. The bar graph above shows that students with parents holding bachelor's and master's degrees tended to achieve higher scores. Parents with a strong educational background are more likely to prioritise their children's education and encourage them to excel academically, believing that good grades can lead to better opportunities in the future.

Future research could explore additional factors, such as participants' daily habits (involvement in sports, support from friends, etc.), that may contribute to academic success. Additionally, examining participants' career outcomes could help shed light on the importance of academic performance and its potential impact on future success.