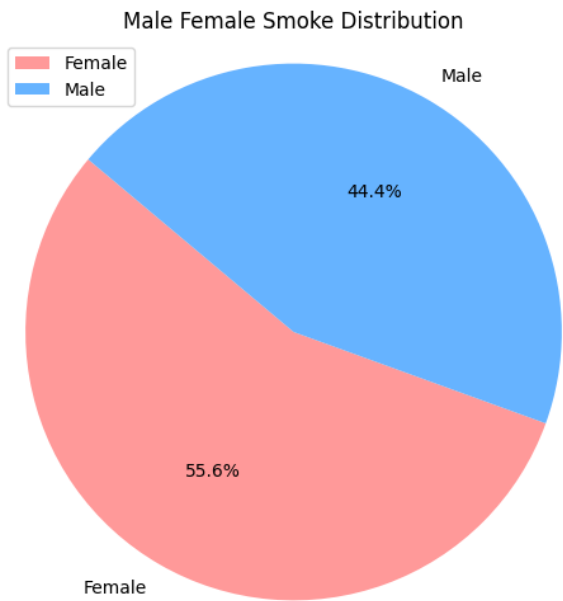


Dataset Overview

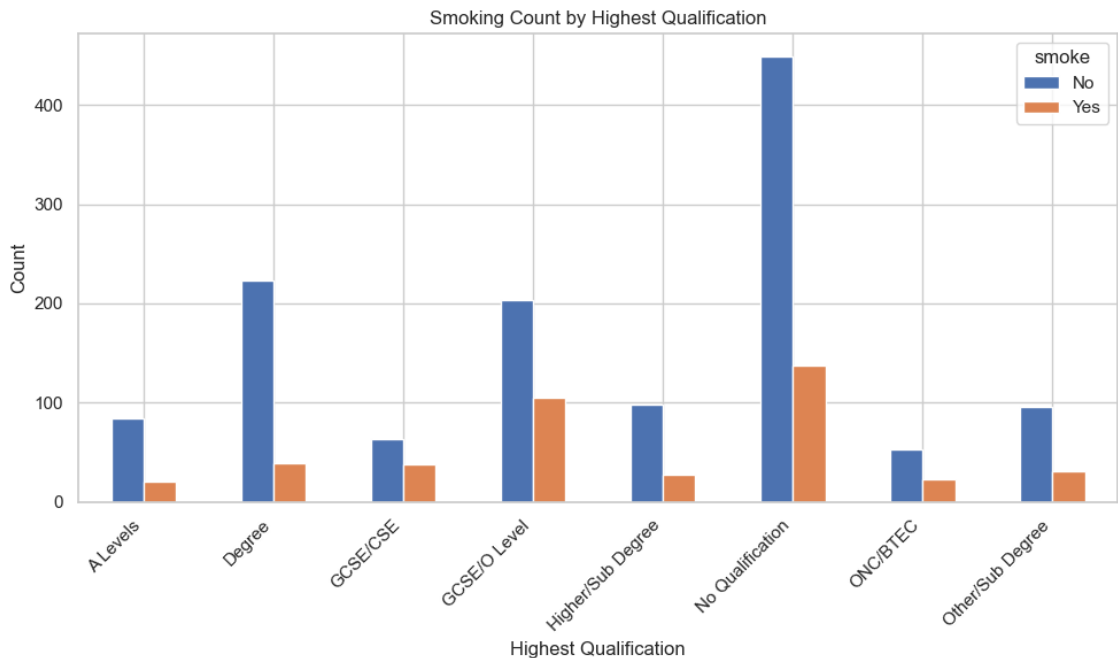
The dataset focuses on smoking habits from the United Kingdom. During the analysis, we will explore various demographics of the data, such as age, gender, income, and marital status, that may contribute to smoking behaviour, as well as examine the relationships between these factors.

Visualisation and Analysis

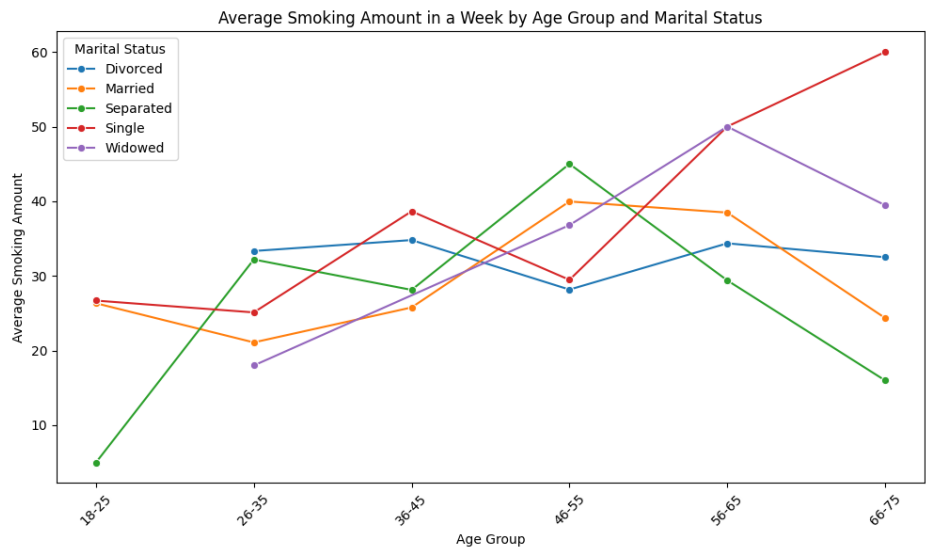
1. Gender Distribution: This pie chart shows the distribution of smokers by gender: 234 females (55.4%) and 187 males (44.6%). The larger female segment indicates a higher ratio of smoking among women in the dataset, highlighting important trends for public health initiatives.



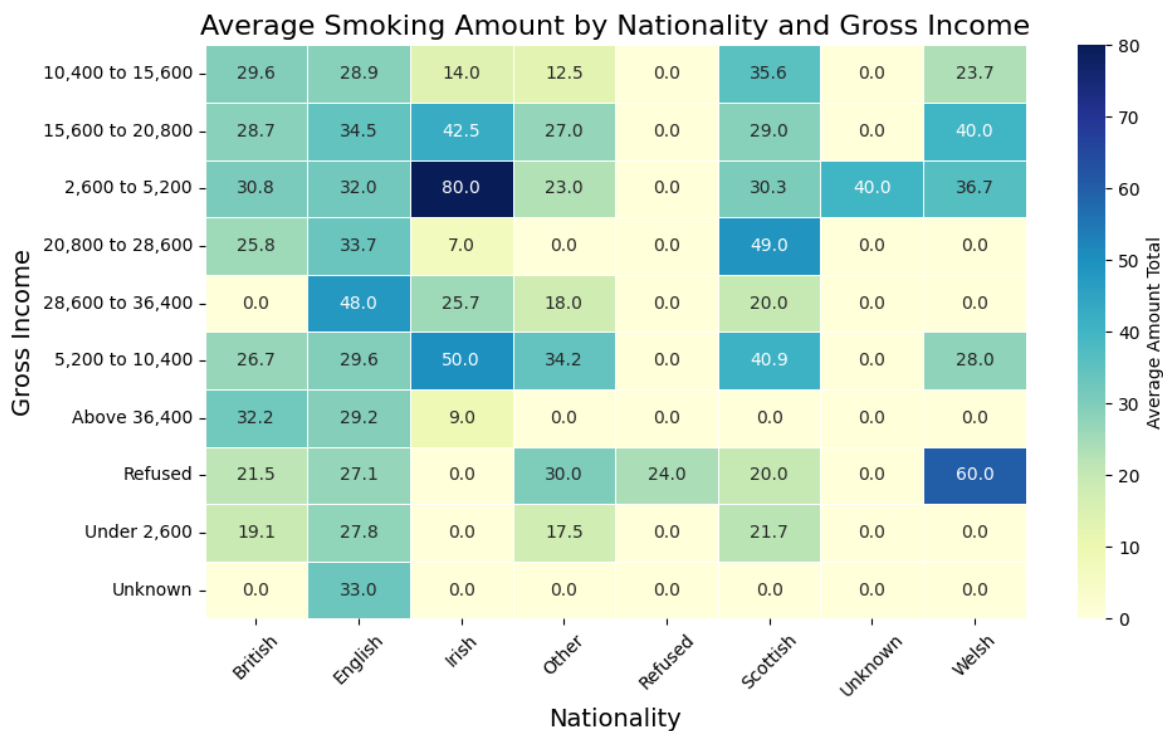
2. Educational Impact: The bar plot illustrates the relationship between smoking habits and educational qualifications. The highest number of smokers, 586, have no qualifications, while 308 have GCSE/O Levels, and 262 hold degrees. As education increases, the number of smokers decreases, suggesting that higher education may correlate with lower smoking rates.



3. Age and Marital Status Trends: This line chart illustrates the average smoking habits across different age groups and marital statuses. Peaks in smoking averages appear notably among singles and divorced individuals in the 26-35 age range, suggesting a link between smoking behaviour, age, and relationship status.



4. Income and Nationality Insights: This heatmap provides a quick look at weekly smoking habits based on nationality and gross income. It highlights that Irish individuals earning £2,600 to £5,200 tend to smoke significantly more, suggesting a link between lower income and higher smoking rates. This insight points to the importance of targeted public health initiatives to tackle smoking behaviours in these demographics.



Conclusion: This analysis reveals significant insights into smoking habits across the UK. The data indicates that females smoke more than males and that lower educational qualifications correlate with higher smoking rates. The age group of 26-35, particularly among singles and divorced individuals, shows the highest smoking averages. Furthermore, Irish individuals earning between £2,600 to £5,200 demonstrate notably higher smoking rates, highlighting the need for targeted public health interventions. These findings underscore the importance of addressing smoking behaviours in specific demographics to enhance public health strategies.