Analysis Conclusions

1. By comparing the average length of headlines and body text between fake and true news, it can be observed that **fake news articles are generally longer than true ones**. This may be because fake news tends to use more detailed descriptions to enhance its credibility, attempting to make it more believable.

2. According to the **timeline analysis of fake news**, it was found that **May 2016 marked the peak of fake news**, with the number of articles exceeding 1,000. However, the number of fake news articles has been gradually declining in recent times. This could be attributed to the fact that people are becoming more aware of how fake news can manipulate public opinion and potentially cause negative impacts on society. Government efforts to control and reduce fake news might also have contributed to this decline. The distribution of fake news throughout the week remains relatively stable.

3. Although political topics often contain many genuine news articles, there is still a **significant portion of fake news related to politics**. It seems that **new media outlets may be especially adept at exploiting political narratives**. From 2015 to 2017, the number of fake news articles focusing on the Middle East remained relatively low.

4. The **most frequent words in fake news headlines** are primarily concentrated around terms like **"Trump", "Video", "Obama" and "us."** This indicates that during this period, the US President might have been particularly vocal on political issues, using exaggerated or bombastic language to attract attention and attempting to gain trust from American citizens and the international community. Combined with the subject analysis, this phenomenon seems to be quite prevalent.

5. The **average sentiment score of fake news headlines is relatively low**, while the **average sentiment score of the body text is comparatively high**. This may imply that **fake news often expresses more negative emotions in the headlines to grab attention**, and then shifts to more dramatic, emotionally

charged, and exaggerated language in the body text to **evoke emotional responses from its readers**.

Some Recommendations

1. **For the Content:**

   In our daily lives, we should not blindly follow public opinion news, especially political news with strong emotional language. It is important to have our own judgment and understanding. Politicians often use media manipulation to evoke public emotions for specific purposes. Furthermore, longer articles with more "evidence" do not necessarily mean higher credibility; it is crucial to examine the authenticity of the so-called "evidence".

2. **For Machine Learning Models in Text Classification:**

   More complex models are likely to improve classification accuracy, but they usually come with higher time costs. We need to balance the cost and benefits and select the most suitable model based on the desired outcome, rather than blindly pursuing more advanced or complex models.