

Figure 1.

Radar Charts of Pokémon Stats by Generation

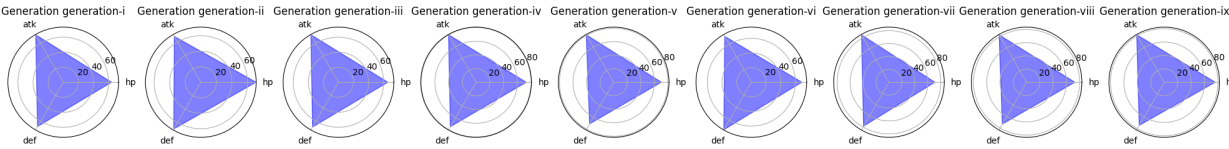


Figure 2.

Scatter Plot of Generation vs. Mean Attack

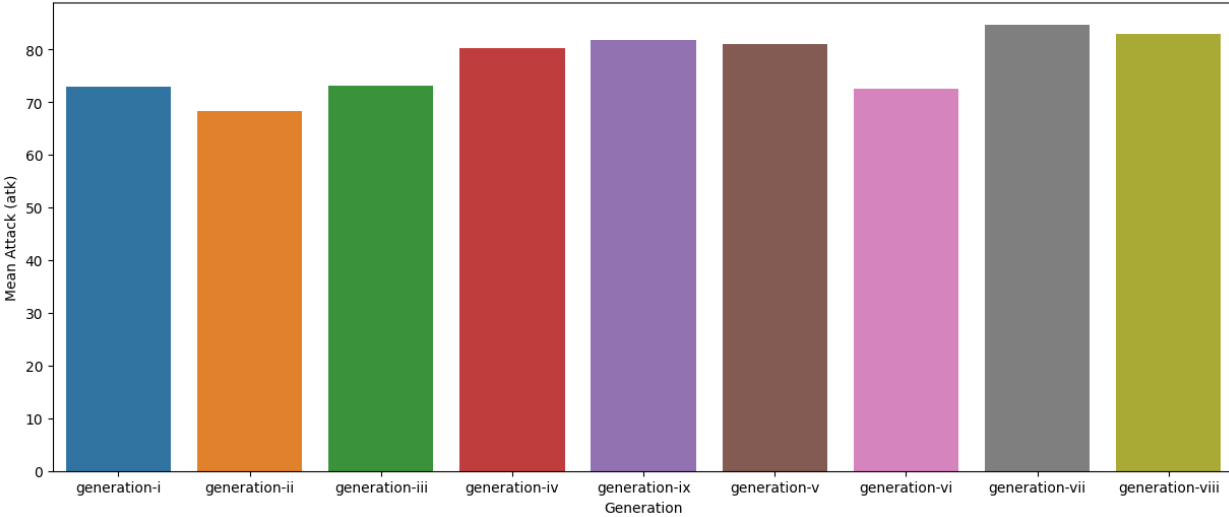


Figure 3.

Scatter Plot of Generation vs. Mean Health

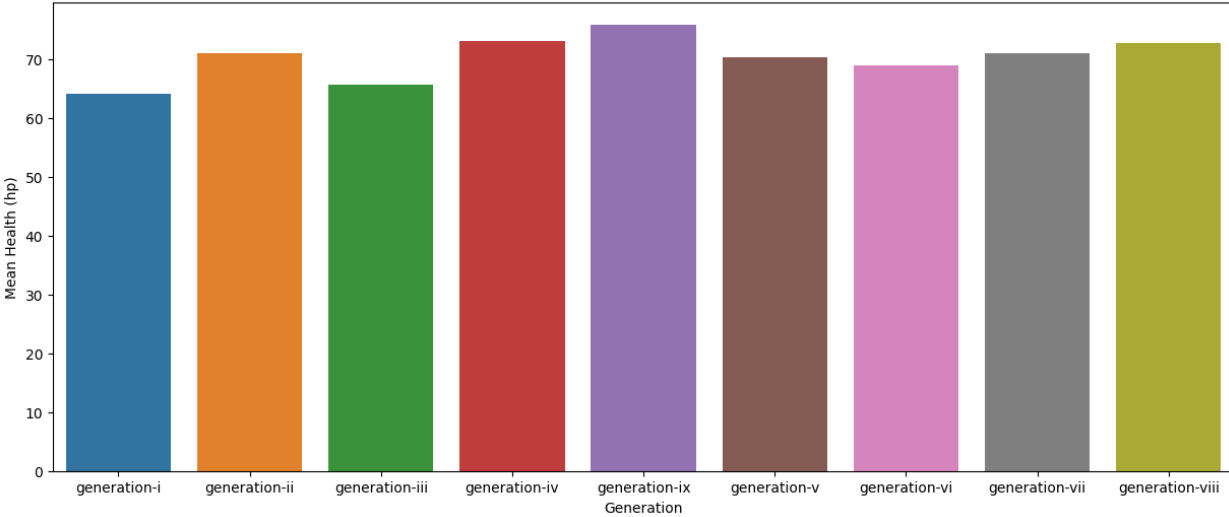


Figure 4.

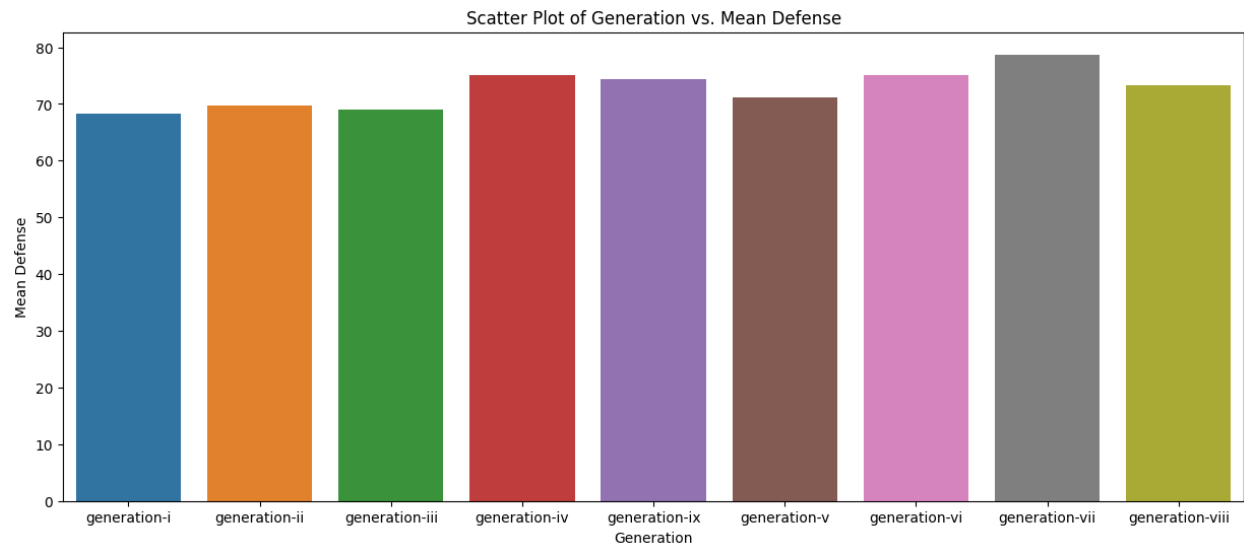


Figure 5.

Radar Charts of Pokémon Stats by Generation

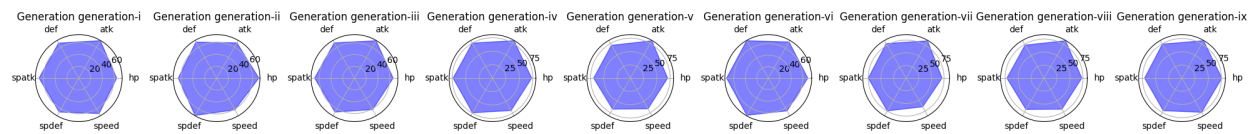


Figure 6.

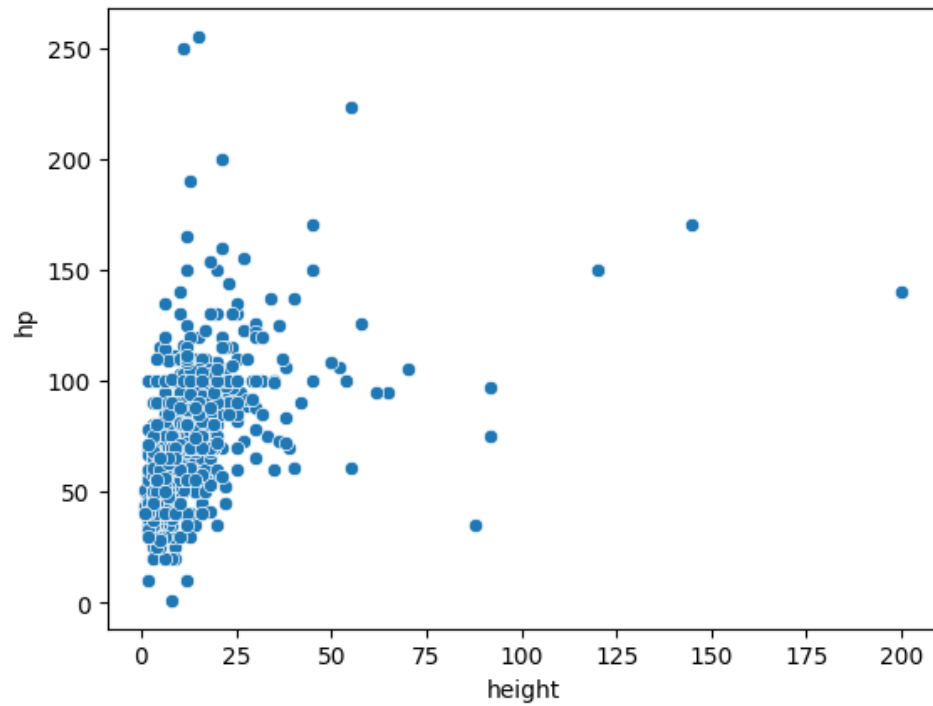


Figure 7.

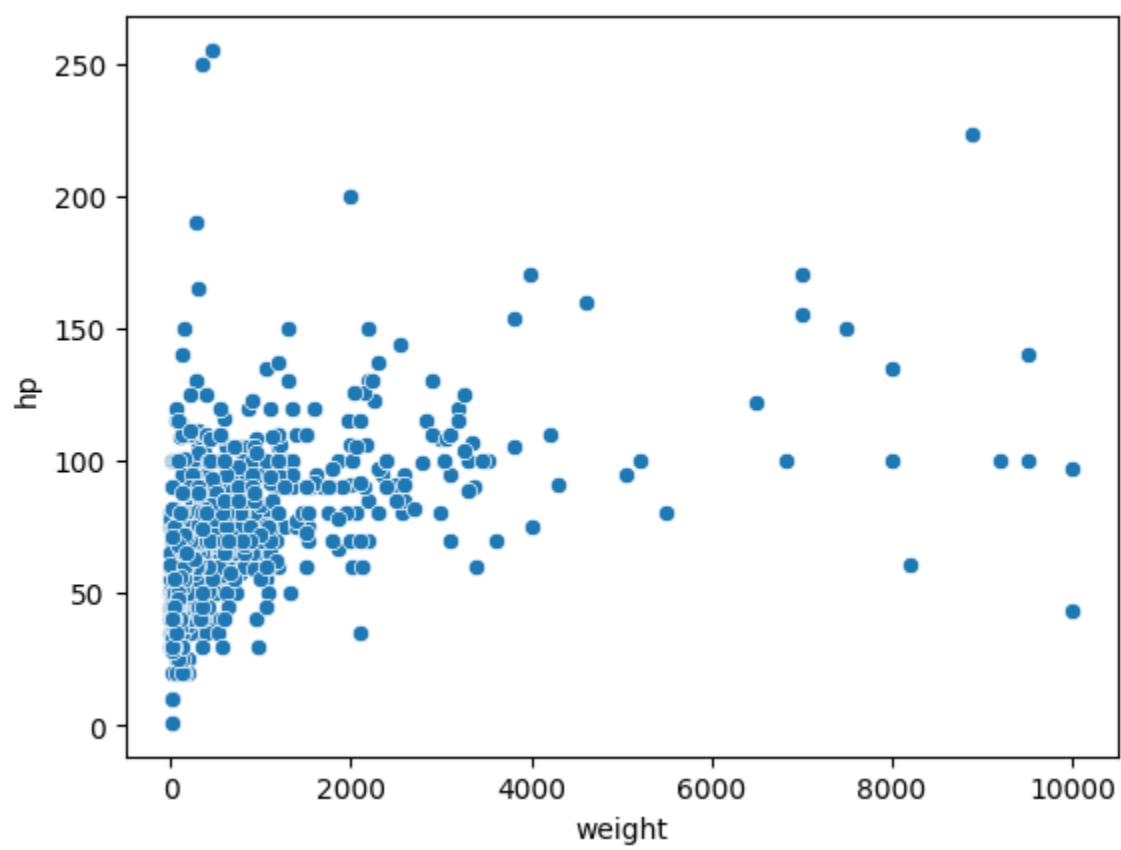


Figure 8.

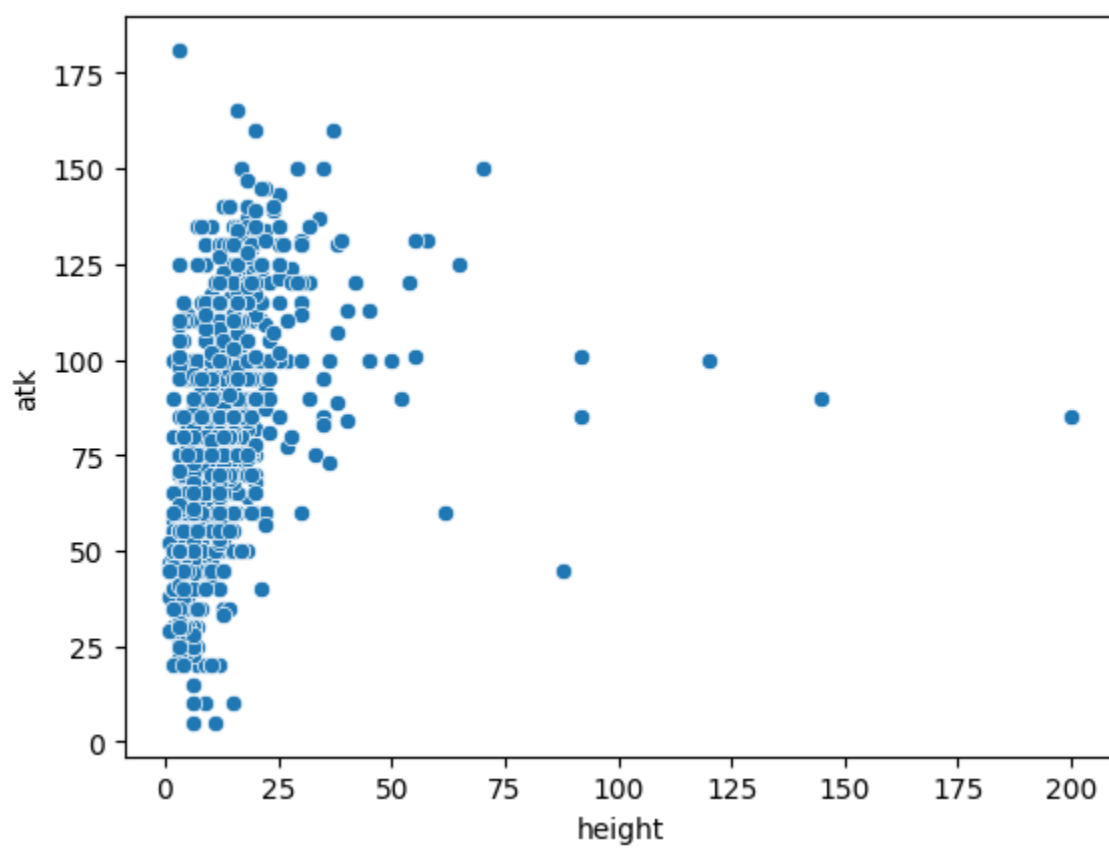


Figure 9.

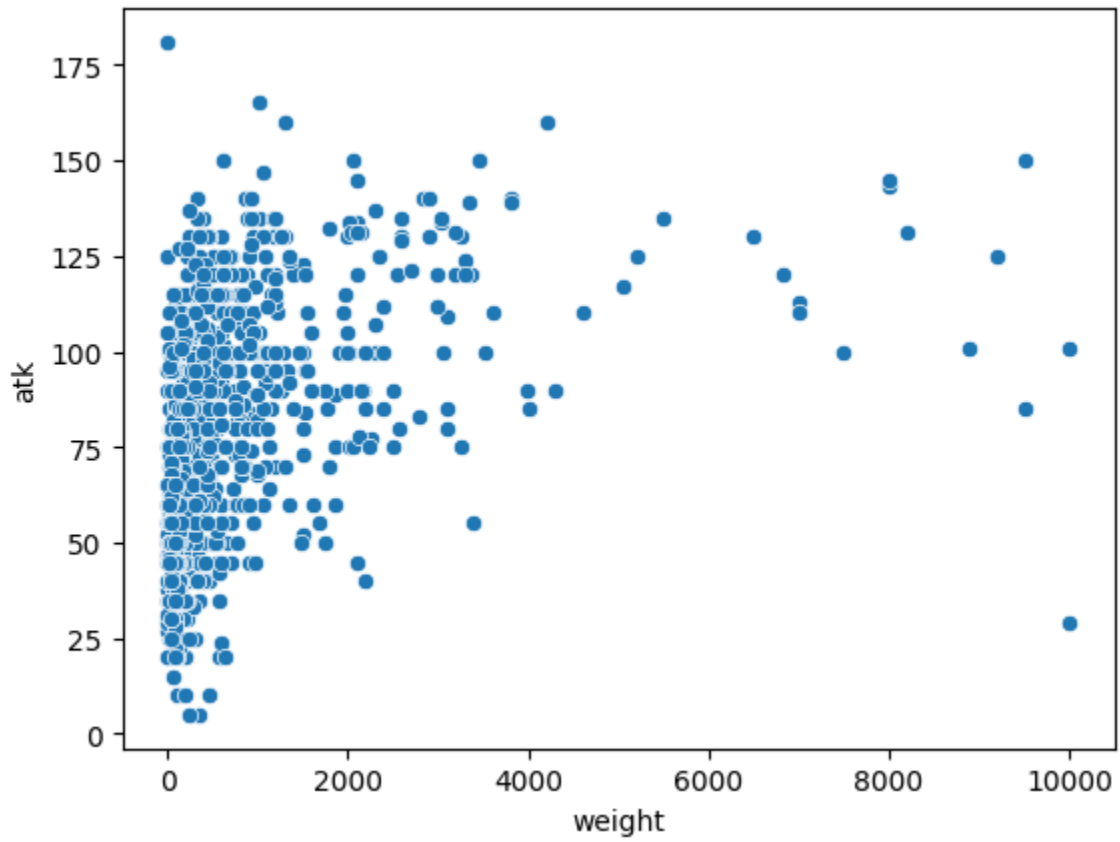


Figure 10.

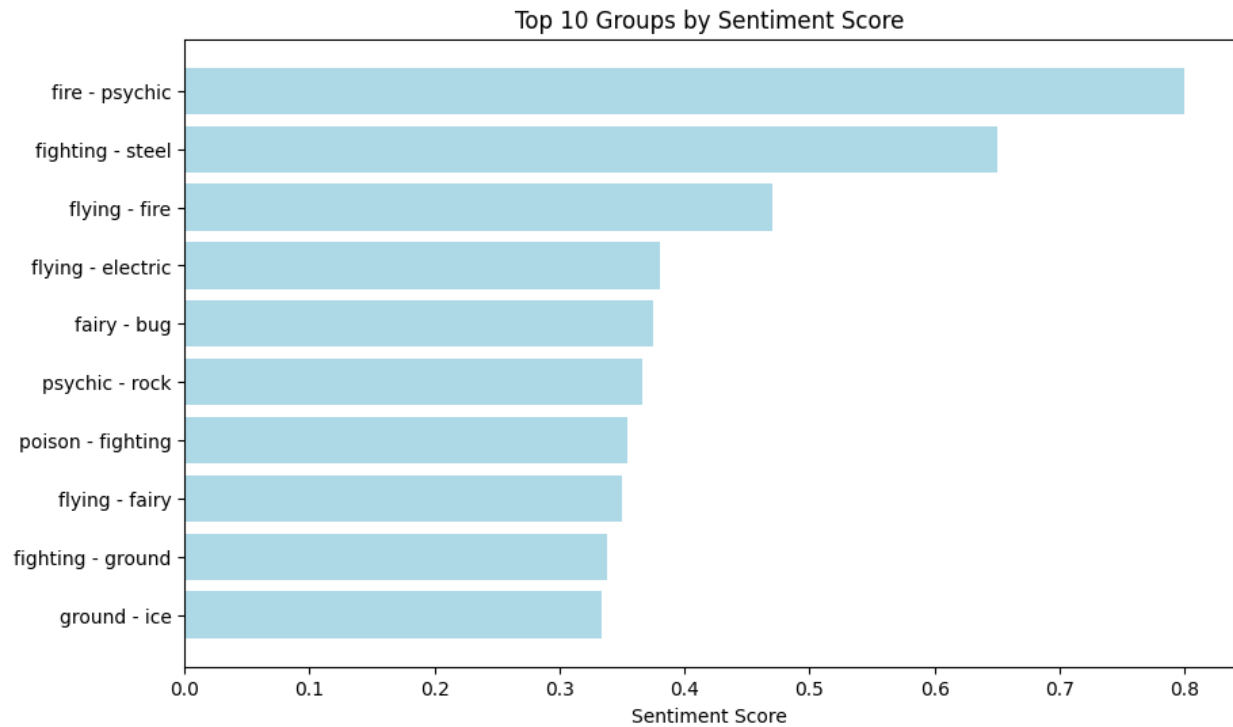


Figure 11.

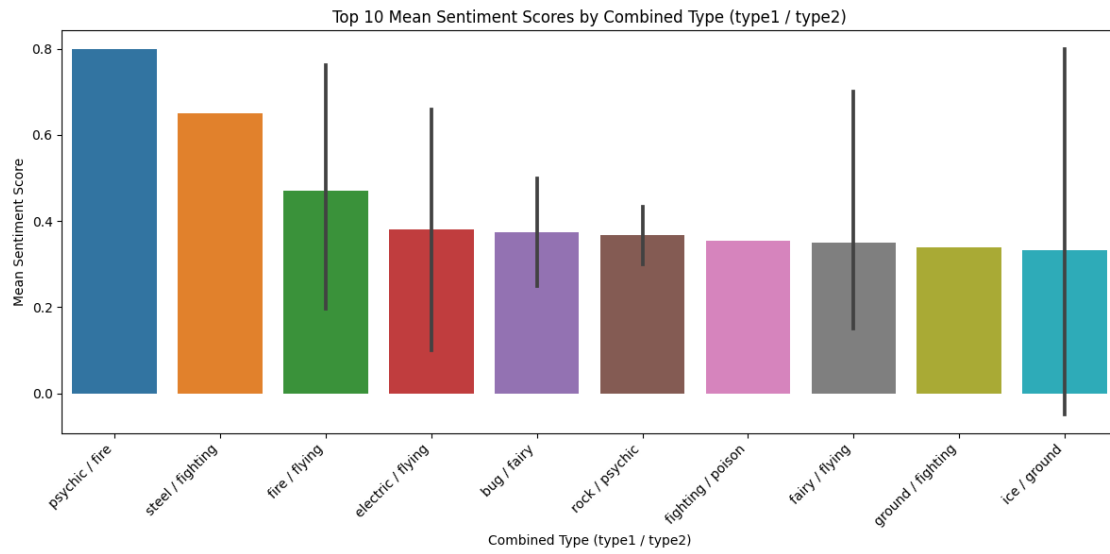
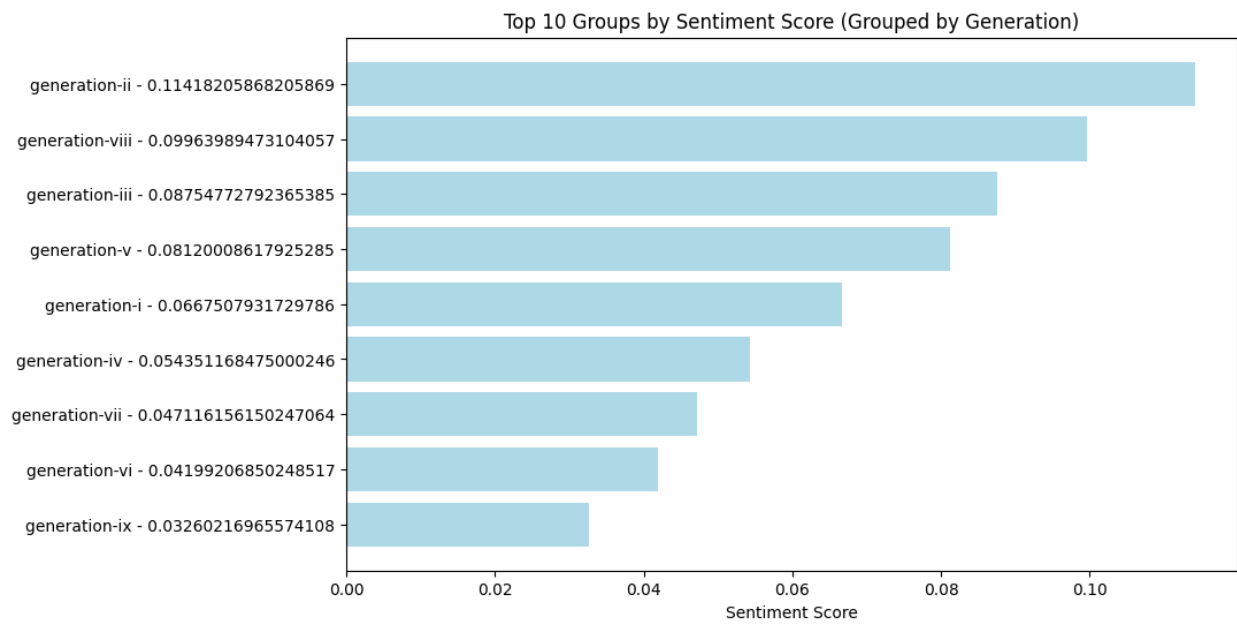


Figure 12.



Analysis:

Throughout this exploration, I was curious about Pokemon statistics over the iterations of generations and the general sentiment regarding these pokemon. When looking at Figure 1. to understand the trend over the primary statistics (attack, hp, and defense), there is no clear formula over the generations. In order to have a better quantitative understanding of this trait, I created Figure 2. In this visualization, we can see the general ups and downs over the average attack of the pokemon per generation. When formatting these visualizations, there appeared to be a syntactical error with generation-ix being out of order. Regardless of these sorting errors, generation-vii has the highest average attack stat for pokemon.

Exploring the other two base stats, Figure 3. isolates the average health stat per generation. Already recognizing the syntax error in the x-axis, generation-ix has the highest average for health. Figure 4. also isolates the mean defense per generation. In this realm of base stats, generation-vii has the highest mean defense statistic. Figure 5. compiles all six categories for pokemon and sorts them across generations. When analyzing these radar charts for the statistics, it is necessary to keep in mind the radius noted per hexagon. As the radius increases to 75, we can graphically assume the later generations (7-9) have a higher average statistic per pokemon.

Figure 6-9. attempt to convey any linear or logarithmic trends between these statistics. From a physiological standpoint, I was curious about any correlations between health and height and weight. Between these two figures, it is not clear whether there exists any significant trend between health and either height or weight. This inconsistency persists with the attack statistic. While across the four figures there is no clear correlation, the data clusters toward the x-origin.

After analyzing the trends between attack and hp with regard to physiological measures, I wanted to explore the sentiment feature in Python.

Looking at the various types of combinations with Pokemon, I want to examine the most favorably regarded Pokemon. In Figure 10., one can see a vast difference between the sentiment score for fire-psychic and ground-ice Pokemon. I was curious what the data said within these categories, so I also created Figure 11. In this visualization, I was able to add the range of scores for some combined types. We can see ice-ground Pokemon have the widest range of sentiment scores. These numbers are crucial to the marketing of these creatures and it begs the question if Pokemon are viewed more favorably over the years. Figure 12. pinpoints the specific numeric average per generation for the sentiment score. It is interesting to note that the second generation has the highest sentiment score whereas the most recent generation (9) has the lowest. This lays the foundation for further sociological analysis where people may feel more nostalgic and prefer the earlier released Pokemon.