This report presents an analysis of baby naming trends in the US.

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Abstract

TThis report analyses the evolution of baby naming trends in the US from 1910 to 2014 using Spearman rank correlation. Analysing annual rankings of the 25 most popular boys' and girls' names against subsequent years, we investigate the persistence of naming trends over decades. The findings suggest shifts in naming preferences since the 1990s, revealing insights into the dynamics of cultural influences on baby naming practices.

1. Introduction

Since the 1900s, baby names in the United States have changed a lot due to culture, society, and the media. Some names stay popular for a long time, while others are trendy for a short period because of celebrities, movies, or music. This report explores more than 100 years of naming trends using strong math to find out which names stick around and which ones fade away among America's favorite baby names.

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2. Spearman Rank Correlation of Baby Names: Before and After 1990

The spearman rank correlation rank, displayed below, illustrates the correlation between baby names before and after 1990. The correlation for boys was generally higher, ranging from 0.1 to 0.5 over the years, while the correlation for girl names was generally lower. However, it spiked a bit just before the 1950s and reverted to the trend again. After the 1990s, the correlation was very high for both boy and girl names, indicating that the names gained popularity as the years advanced. The correlation for girl names was still generally lower until the years close to 2000.
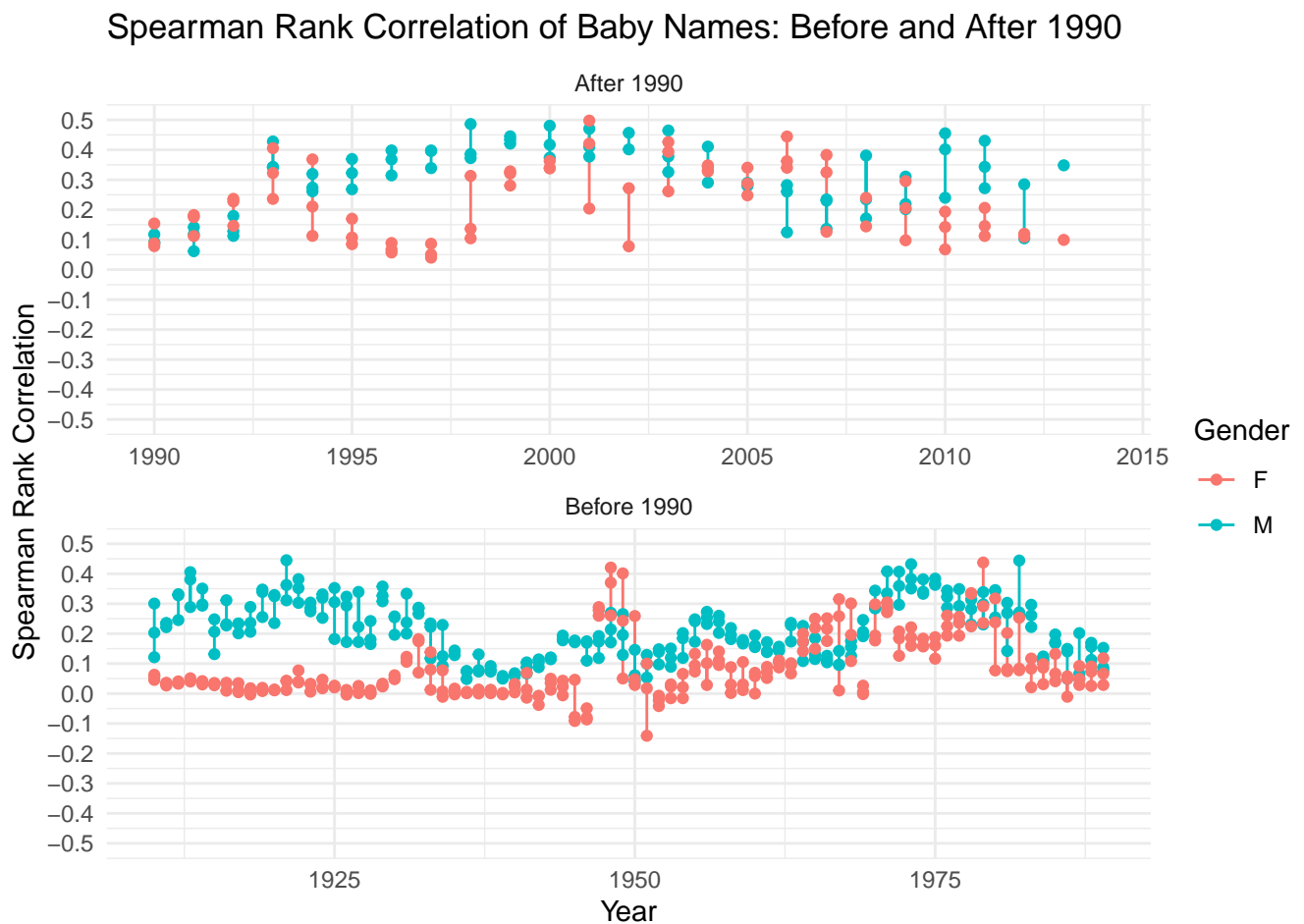

Figure 2.1: Spearman Rank Correlation of Baby Names: Before and After 1990.

#Top10 Artist and Baby names Charts

The charts below show the top 10 most popular artists, as well as baby names by count. The baby name bubble plot shows that Robert was most popular between the 1925 and 1950's, followed by Michael between the 1950's and 2000. David was most popular between 1950 and 1975. From the graph of popular artists, there seems to be no correlation between popular artist names and baby names.
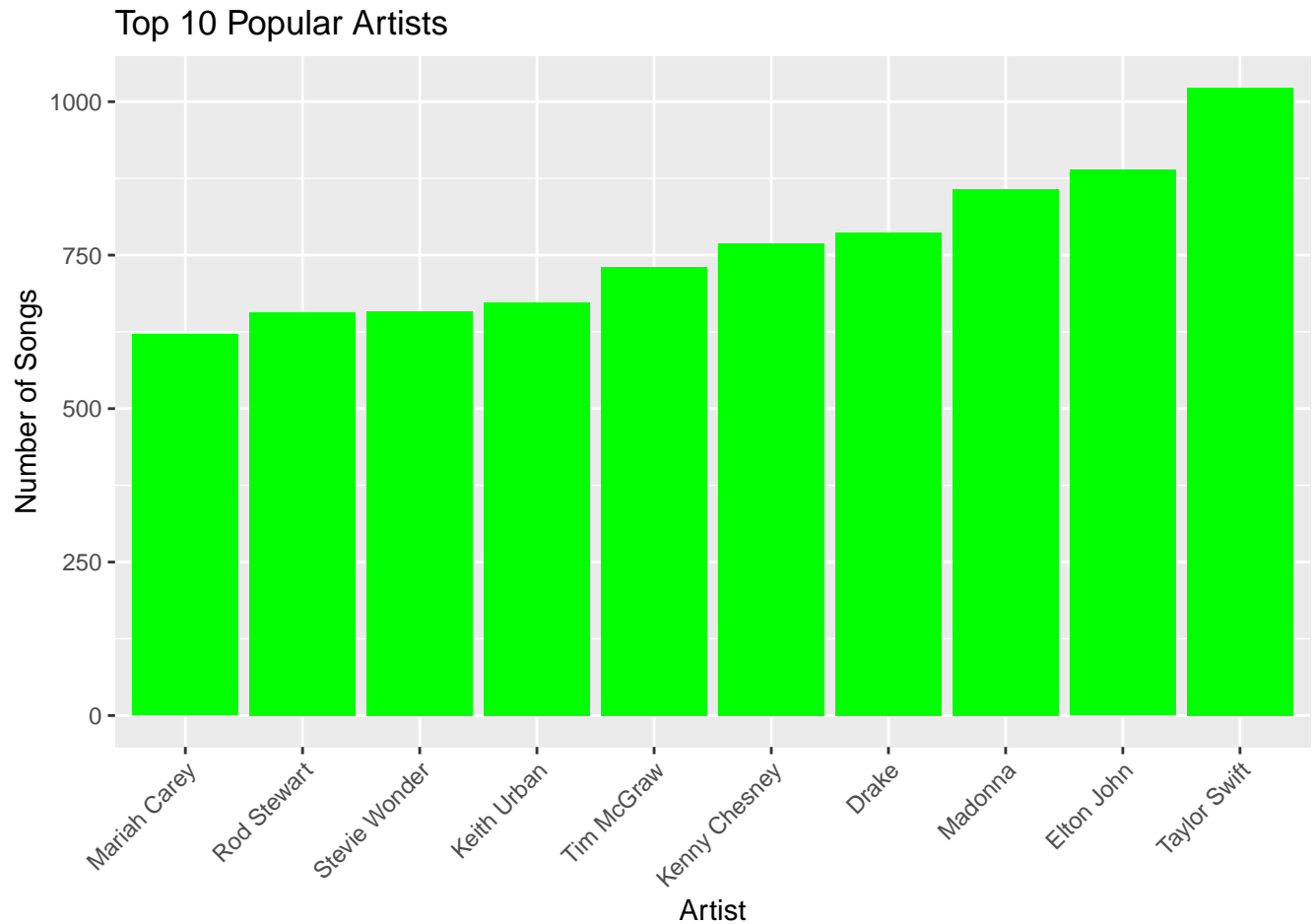

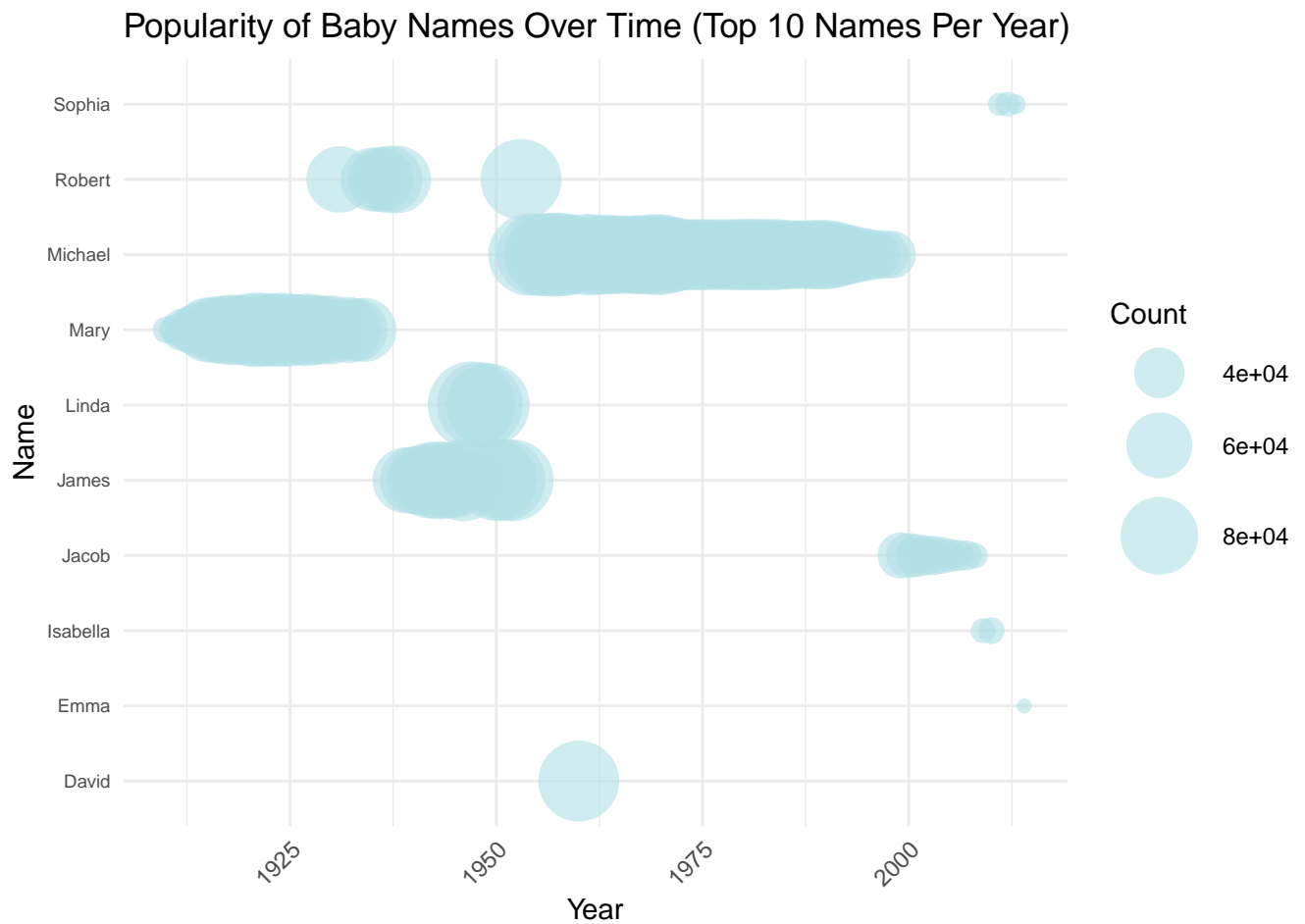Figure 2.2: Top10 Artist and Baby names Charts.

Popularity of Baby Names Over Time (Top 10 Names Per Year)

Figure 2.3: Top10 Artist and Baby names Charts.

3. Conclusion

The analysis of baby naming trends reveals distinct patterns in name popularity over time. Boys' names generally showed higher consistency, with correlations ranging from 0.1 to 0.5, while girls' names exhibited lower and more variable correlations, except for a brief spike before the 1950s. Post-1990s, both boys' and girls' names showed higher correlations, indicating increased persistence in name popularity. The bubble plot highlighted names like Robert, Michael, and David as dominant in different eras. However, the data suggests no significant correlation between popular artist names and baby naming trends.