# Analyzing the Influence of Netflix Streaming Titles on Australian Baby Naming Trends - PART-B\*

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### REFINED RESEARCH QUESTION

The refined research question for this project is:

Did the release of a Netflix streaming title with a single-word name cause a noticeable change in the frequency of babies receiving that name in South Australia between 2014 and 2024?

This question focuses specifically on:

- Netflix titles that consist of a single word.
- Titles that could be used as first names.
- Titles that have a clear release year to enable comparison of baby name trends before and after their release.

The goal is to determine if there is a temporal relationship between the release of a Netflix title and changes in the popularity of that name among babies born in South Australia.

### KEY FEATURES OF THE DATASET

Baby Names Dataset (South Australia)

- **Source:** South Australian Government Open Data Portal (2014–2024) [2].
- **Structure:** Contains annual CSV files for each gender, listing the top 100 baby names each year.
- Key variables:
  - First Name baby's first name
  - Amount number of babies given that name in that year
  - Year year of birth (inferred from file name)
  - Gender gender of the baby (inferred from file structure)
- **Size:** Around 3000 records across 11 years (2014–2024) and two genders.
- Processing steps: All files combined into a single dataset, names converted to lowercase for matching, and only key columns retained for analysis.

# Netflix Titles Dataset

- Source: Kaggle Netflix Titles dataset [3].
- **Structure:** Contains metadata for over 8,000 titles, including both movies and TV shows.
- Key variables:
  - Title name of the show or movie
  - Type whether it is a movie or TV show

- Release Year year of original release
- Processing steps: Titles were removed in lowercase, null, or empty entries, and the data set was filtered to include only single-word titles that could plausibly be used as names.

## Relevance of These Features

The selected features enable the analysis of whether there is a relationship between:

- The timing of a Netflix title's release; and
- A corresponding change in the frequency of that title as a baby name in South Australia [5].

By focusing on single-word titles with name-like characteristics, we reduce irrelevant noise and increase the validity of our findings.

### INITIAL ANALYSIS VISUALISATIONS

We produced four visualisations to explore the relationship between Netflix single-word titles and baby name trends in South Australia:

- A line plot showing the frequency of a matched baby name over the years 2014–2024, with the Netflix release year marked.
- A bar chart comparing the total number of babies named before and after the Netflix title release.
- A clustering plot grouping baby names matching Netflix titles based on total frequency.
- A word cloud of recent Netflix titles (2020–2024) that have not yet appeared as baby names in South Australia [4].

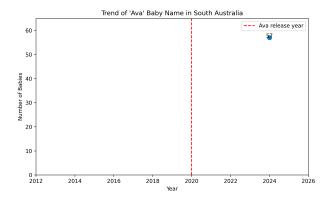


Fig. 1. Trend of 'ava' baby name in South Australia (2014–2024). The vertical dashed line marks the Netflix title release year.

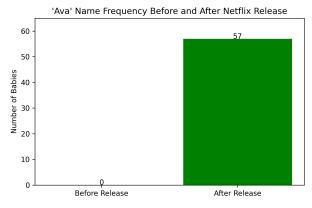


Fig. 2. Comparison of 'ava' baby name frequency before and after the Netflix release year.

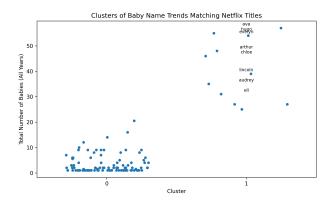


Fig. 3. Clusters of baby names matching Netflix titles, grouped by total frequency.



Fig. 4. Word cloud of Netflix titles (2020–2024) not yet used as baby names in South Australia.

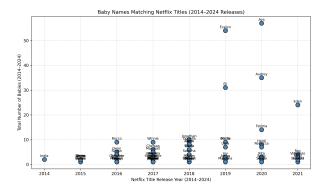


Fig. 5. Scatter plot showing baby names that match Netflix titles released between 2014 and 2024. Each point represents a name, positioned by the Netflix title's release year and total baby count for that name between 2014 and 2024. This visual highlights possible relationships between streaming content and baby naming trends.

### INITIAL FINDINGS AND REFINED QUESTIONS

The visualisations reveal that while some Netflix single-word titles correspond with baby names in South Australia, there is limited clear evidence that the release of a Netflix title causes a significant shift in name popularity. For example, the name *ava* appeared only once after the Netflix release year, suggesting minimal immediate influence. The clustering analysis highlighted a small number of names, such as *Ava* and *Hugo*, that have higher frequency and might reflect broader cultural trends rather than a direct Netflix effect.

The word cloud illustrates a variety of recent Netflix titles (2020–2024) that have not yet been used as baby names. These could represent potential future trends influenced by streaming media.

# Refined Questions

Based on these findings, the following refined questions are proposed:

- Does the influence of streaming media on baby naming require a longer time window to become visible?
- Would including multi-word titles or titles from other media sources (e.g. cinema, music) provide more insight into naming trends?
- Are certain genres (e.g. fantasy, crime) more influential on baby naming than others?

### Additional Data Sources Needed

To address these refined questions, the following additional data could be valuable:

- Baby name data from other Australian states or national data to increase sample size.
- Datasets of popular cinema or music releases to compare naming influences across media types.
- Social media trend data to assess name popularity alongside media releases.

# ACKNOWLEDGMENT

I acknowledge that this work is my own and has been completed in accordance with the academic integrity policies of the University of Adelaide.

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