New York Toy Agency report of Baby Names

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To what degree do names persist into the future?

Figure 1 highlights how names tend to persist into the future by visually showing the longevity of naming trends by providing annual Spearman rank correlation results for each gender, as well as a general non-linear time trend. Through the social security records we find a general time trend that naming longevity tends to decrease year-on-year. Therefore this graph illustrates why the toy company must invest more in predicting baby names based on pop culture.

Interestedly, since the 1990s the Spearman rank correlation for boys has generally decreased while for girls it actually has generally increased.

Spearman Rank Correlation of Baby Names Over Time Analysis based on the top 25 names each year, categorised by gender 1.0 0.9 0.9 0.8 Gender F M

Figure 1: Spearman Correlation

Source: Social Security records

What influences popularity?

Figure 2 shows time trends of select baby names and their popularity in the United States graphed against the date. The 15 names selected were the 15 top names who experienced the biggest jump in name adoption from one year to the next. This growth rate of name adoption was calculated using the following formula:

$$Growth\ Rate = \left(\frac{Total\ Count_{current} - Total\ Count_{previous}}{Total\ Count_{previous}}\right) \times 100$$

Interestingly, my older supervisor correctly remembered the name fad from the "Where the Heart Is" craze, as in 1974, there was a notable spike in the number of little girls being named Katina. This should underscore the point that parents lack creativity, and seldom not make up random names from thin air when naming their child, but rather turn to pop culture for a sizeable influence.

Popularity of Names Over Time Woodrow Tammy Shaun Marquita Total Instances Marlene Mariah Mandy Kiara Katina Jenna Jaime Ethan Cheryl Bentley Ashanti 2000 1925 1950 1975

Figure 2: Biggest Year-on-Year growth for Baby Names

To test this theory that parents are influenced by pop culture, I took the 15 top names found above and investigated if any names showed up in the Billboard's top 100 songs chart for the previous year. Notable two names were found, Ashanti who had a hit song with Ja Rule in 2001, causing a spike name spike in 2002, and Dierks Bentley who caused a name spike in 2010.

date	rank	song	artist	last- week	peak- rank	weeks-on- board	Name
2009- 12-26	52	I Wanna Make You Close Your Eyes	Dierks Bentley	52	52	11	Bentley
2001- 12-29	7	Always On Time	Ja Rule Featuring Ashanti	9	7	7	Ashanti