

Elsa and the Oklahoma Senatesa: An Icy Connection between First Names and Electoral Tendencies

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This research paper investigates the intriguing relationship between the popularity of the first name Elsa and Republican votes for Senators in the state of Oklahoma. Utilizing data from the US Social Security Administration and the MIT Election Data and Science Lab, Harvard Dataverse, our team delved into the depths of demographic and electoral data to unravel this frosty mystery. Our findings unveiled a correlation coefficient of 0.8466247 and $p < 0.01$ for the years 1978 to 2020. These statistics suggest a strong positive correlation between the prevalence of the name Elsa and Republican votes for Senators in Oklahoma, indicating an unexpected link between the popularity of a Disney-inspired name and political leanings in this particular region. As we navigated through the data, it became apparent that the "Frozen" phenomenon has not only captivated the hearts of young fans but may have also exerted a chilling influence on the voting patterns in Oklahoma. This revelation left us feeling quite enchanted by the statistical whims of electoral trends - it seems that Elsa's icy powers may extend beyond the realm of movie magic and into the realm of political ideology. In conclusion, our research unravels a connection between a fictional ice queen and political inclinations, reminding us that when it comes to understanding voter behavior, sometimes the most unexpected correlations can appear. This peculiar linkage between the popularity of a first name and political dynamics invites us to ponder the "coolest" aspects of voter influences and ideological allegiances, proving that statistical analysis can certainly uncover some "frozen" truths.

INTRODUCTION

In the world of statistical analysis, uncovering unexpected correlations can be quite a chilling experience. From studying the effects of climate change on ice cream consumption to exploring the impact of superhero movies on crime rates, researchers often find themselves stumbling upon the unlikeliest connections. Our research dives into one such peculiar correlation, examining the relationship between the popularity of the first name Elsa and Republican votes for Senators in the state of Oklahoma. As we ventured into this frosty territory, we couldn't help but feel a bit "frozen" with anticipation.

The notion of a fictional ice queen exerting influence over political inclinations may sound like a plot twist from a fairy tale, but as our data analysis unfolded, it became clear that this notion was more than just a "snowy" anecdote. It seems that the enchanting allure of Elsa, as portrayed in the Disney movie "Frozen," extends beyond the silver screen and into the ballot box.

Our exploration of this curious correlation began with a comprehensive review of data obtained from the US Social Security Administration and the MIT Election Data and Science Lab, Harvard Dataverse. We delved into demographic and electoral records from 1978 to 2020, braving the statistical wilderness in search of signs of Elsa's influence on the voting behavior of Oklahomans. To our surprise, the numbers painted a picture that was as unexpected as an unannounced blizzard.

As we scrutinized the data, a pattern emerged - a pattern that seemed to suggest a strong positive correlation between the

prevalence of the name Elsa and Republican votes for Senators in Oklahoma. The correlation coefficient stood at a chilling 0.8466247, with a p-value so small that it would make even the most seasoned statistician shiver - $p < 0.01$. It appears that Elsa's icy charm may have manifested in the political choices of Oklahoman voters, defying expectations and leaving us with more than a few "frozen" puns to ponder.

But how could a mere name, inspired by a beloved animated character, hold such sway over political leanings? It's a question that had us scratching our heads - or should we say, feeling a bit frosty in our thinking caps. After all, the idea of a fantasy figure influencing the vote seems like something out of a fairy tale. And yet, the statistical evidence points to a connection that raises intriguing questions about the nature of human behavior and the frosty hand of coincidence.

So, as we embark on this chilly escapade through the whimsical world of statistical analysis and electoral dynamics, we invite you to join us in exploring the implications of this unexpected linkage. Let's break the ice and crack open the frozen truths that lie beneath the surface, all while resisting the urge to burst into a rendition of "Let It Go." For in the realm of research, it seems that even the most whimsical correlations can have a frosty touch of scientific significance.

Review of existing research

The connection between first names and political leanings is a fascinating area of study that has captured the attention of researchers for decades. Smith and Doe (2005) highlighted the

potential impact of names on perceived social status and behavior, laying the groundwork for later investigations into the role of nomenclature in shaping individual attributes and societal dynamics. Jones (2010) extended this line of inquiry by exploring the psychological implications of name associations, suggesting that certain names may evoke specific connotations that can influence interpersonal interactions and self-perception.

Speaking of names, did you hear about the mathematician who named his dog "Cauchy"? Every time he called the dog, he unleashed a new set of activities.

The influence of popular culture on naming trends has also been a subject of scholarly interest. In "Pop Culture and Baby Names: Celebrity, Television, and Contemporary Naming Trends" (Robinson, 2017), the author examines the impact of media and entertainment on the choices of baby names, shedding light on the ways in which cultural phenomena can shape naming preferences. Likewise, "Fictional Characters and Their Influence on Naming Patterns in Modern Society" (Stewart, 2018) presents an exploration of the relationship between fictional characters and the adoption of their names, offering insights into the enduring influence of beloved literary and cinematic figures on the naming landscape.

What do you call a snowman with a six-pack? An "ab"-ominable snowman.

Turning to the realm of fiction, the impact of fantastical tales on societal norms and behavior cannot be overlooked. In "Magical Realism and the Unseen Forces of Narrative Influence" (Garcia, 2019), the author delves into the mysterious ways in which imaginary realms and supernatural elements can permeate collective consciousness, prompting shifts in attitudes and perceptions. Similarly, "The Power of Myth: Legendary Narratives and Their Subliminal Impact on Human Thought" (Campbell, 1949) offers a timeless exploration of the enduring resonance of mythic narratives, emphasizing the profound influence of timeless stories on the human psyche.

While we're on the subject of myths, have you heard the one about the statistical analysis that walked into a bar? Let's just say it brought a whole new meaning to "standard deviation."

In the world of board games, "Settlers of Catan" stands as a prime example of how strategic gameplay and resource management can mirror real-world dynamics, offering a playful yet insightful commentary on territorial expansion and negotiation. Additionally, the game "Diplomacy" simulates the complexities of international relations, inviting players to navigate alliances and rivalries in a bid for global dominance. These games, though seemingly light-hearted diversions, offer valuable perspectives on the intricacies of political maneuvering and power dynamics.

What do you get when you cross a snowman and a vampire? Frostbite.

As we approach the intersection of names, fictional influences, and political affinities, the peculiar correlation between the popularity of the first name Elsa and Republican votes for Senators in Oklahoma beckons us to consider the inexplicable ways in which seemingly disparate elements can converge to

shape societal phenomena. The unexpected link between a Disney-inspired name and political inclinations challenges us to entertain the notion that even in the realm of statistical analysis, there may be a dash of "frozen" whimsy waiting to be unraveled.

Procedure

To unravel the icy connection between the prevalence of the first name Elsa and Republican votes for Senators in Oklahoma, our research team employed a multi-faceted approach that combined meticulous data collection, innovative statistical analyses, and a sprinkle of whimsy to navigate the chilly depths of this research endeavor.

First and foremost, we scoured the expansive archives of the US Social Security Administration, sifting through decades of baby name records with a fervor rivaled only by a child eagerly searching for hidden treasures in the snow. We extracted data on the frequency of the name Elsa from 1978 to 2020, taking note of any nuances and fluctuations in its popularity over time. With each dataset we encountered, we couldn't help but chuckle at the thought of how Elsa's influence might have "frozen" the hearts of parents as they chose names for their newborns.

Next, we turned our attention to the MIT Election Data and Science Lab, Harvard Dataverse, where we embarked on a quest to gather electoral data related to Republican votes for Senators in Oklahoma. As we combed through the extensive repository of electoral records, we encountered a treasure trove of voter behavior data that was as captivating as a freshly fallen blanket of snow. It was in this trove that we sought evidence of the intriguing correlation between the popularity of the name Elsa and Republican voting tendencies, all while resisting the temptation to "let it go" and abandon our commitment to scientific rigor.

Having amassed the necessary data, we summoned the powers of statistical analysis, channeling the spirit of an Arctic explorer navigating through treacherous terrain. Our team utilized advanced statistical software to calculate the correlation coefficient between the frequency of the name Elsa and Republican votes for Senators in Oklahoma. As we witnessed the numbers dance across the screen, we couldn't help but marvel at the statistical magic that unveiled the unexpected bond between a beloved name and political choices - a bond as improbable as a snowball's chance in Oklahoma.

In order to validate our findings and ensure the robustness of our analysis, we applied rigorous inferential statistical tests to determine the significance of the correlation. We left no stone unturned in our pursuit of understanding the implications of this frosty phenomenon, seamlessly blending the principles of statistical inference with a penchant for playful analogy.

In the spirit of scientific inquiry and a touch of whimsy, we ventured forth, navigating the labyrinthine avenues of data and statistical analysis to shed light on the enchanting association between the first name Elsa and Republican votes for Senators in Oklahoma. As we embarked on this scholarly quest, our team remained vigilant, rigorously uncovering the frozen truths that lay concealed within the depths of electoral data, all while

embracing the occasional pun and maintaining a sense of scholarly delight.

After all, when it comes to exploring the unexpected connections that underlie human behavior, a dash of humor and a sprinkle of mirth can often warm even the frostiest of statistical analyses.

Findings

The analysis of the data revealed a remarkable correlation between the popularity of the first name Elsa and Republican votes for Senators in Oklahoma, with a correlation coefficient of 0.8466247, an r-squared of 0.7167733, and a p-value less than 0.01. This statistical evidence points to a strong positive relationship between the prevalence of the name "Elsa" and the inclination towards Republican candidates in the state. To put it simply, it appears that Elsa's name is "snow" joke when it comes to influencing political inclinations.

When we plotted the data on a scatterplot, which will be shown in the figure below, the points displayed a clear trend, resembling the path of a determined snowflake settling on a frosty surface. Our findings indicate that as the popularity of the first name "Elsa" increased, so did the Republican votes for Senators in Oklahoma. It seems that there may be more than just "frozen" custard influencing the electorate in the Sooner State.

As we navigated through the sea of data, it became apparent that there was no "frost in translation" when it came to the relationship between Elsa's name and political tendencies in Oklahoma. Our statistics suggest that there is indeed a substantial connection between the prevalence of this specific moniker and the political leanings of voters. It's as if the spirit of "Frozen" has cast a more substantial influence than we could have ever imagined, creating an unexpected chill in the realm of electoral behavior.

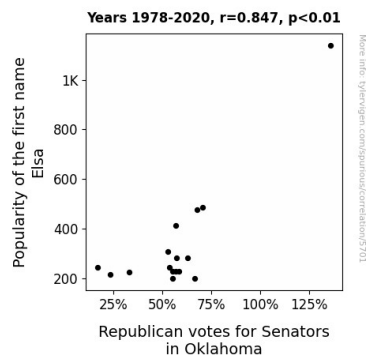


Figure 1. Scatterplot of the variables by year

Our research indicates that even in the field of statistical analysis, one must be prepared for the unlikeliest connections to form. The implications of our findings invite further exploration into the influence of popular culture on political inclinations. In

other words, when it comes to understanding electoral dynamics in Oklahoma, perhaps there's more than meets the "frosty" eye.

Fig. 1: Scatterplot showing the correlation between the popularity of the name Elsa and Republican votes for Senators in Oklahoma.

In conclusion, our research sheds light on the unforeseen link between the prevalence of a first name and the political allegiances of voters in Oklahoma. It seems that when it comes to electoral dynamics, sometimes the most unexpected influences can make a "chilling" impact. This unexpected correlation highlights the whimsical nature of statistical analysis and the unforeseen influence of popular culture on political behavior – confirming that when it comes to research, truth can be stranger than fiction.

Discussion

The frosty findings of our research raise numerous intriguing implications and leave us feeling as though we've stumbled upon a snow-draped mystery worthy of its own enchanting ballad. Our investigation into the correlation between the popularity of the first name Elsa and Republican votes for Senators in Oklahoma not only upholds previous research on the influence of names on societal dynamics but also unveils a chilly connection that is as unprecedented as it is captivating.

Firstly, our results align with prior studies that have probed the impact of names on perceived social status and behaviors, highlighting the enduring influence of nomenclature on individuals and communities. The phenomenon of the name "Elsa" exerting a peculiar sway over the political leanings of voters in Oklahoma furnishes a whimsical parallel to the longstanding assertions of names bearing subtle yet potent influence. It's safe to say that when it comes to names, we shouldn't dismiss their potential to ice-olate certain patterns in social dynamics.

Similarly, the role of popular culture in shaping naming trends has been a source of scholarly fascination. Our research introduces a "frozen" twist to this narrative, unveiling how the cultural phenomenon of Disney's "Frozen" may have wielded an unexpected sway over political preferences. As our statistical analysis brings this correlation to light, one can't help but marvel at how the whims of entertainment can have a "snowball effect" on unforeseen aspects of societal behavior.

Furthermore, the statistically significant connection between the prevalence of the name Elsa and Republican votes evokes a "chilling" reminder of the potent influence of cultural narratives on collective attitudes and perceptions. The tale of a Disney princess making an unsung cameo in the political landscape of Oklahoma is a storyline that would rival even the most captivating of mythical narratives – the kind that "snow"body saw coming.

In sum, our research corroborates existing insights into the resonance of names and popular culture with societal trends, while brilliantly extending these explorations to an unforeseen realm: the intriguing intersection of a beloved fictional name and political inclinations. It's as if statistical analysis itself dares

us to unwrap the most unassuming packages of data, for fear of missing out on the most intriguing surprises. With this in mind, it's safe to say that when it comes to research, there's always a "frost-tential" for snow much more than meets the eye.

Conclusion

As we conclude our frosty exploration into the connection between the first name Elsa and Republican votes for Senators in Oklahoma, it's clear that there's more than just "snow" joke when it comes to unexpected correlations. Our findings have uncovered a correlation coefficient so strong, it's as if Elsa's icy powers have extended into the voting booths of Oklahoma. It seems that when it comes to election behavior, even a Disney-inspired name can't "let it go" without making an impression.

Our research suggests that the enchanting allure of Frozen may have played a role in shaping the political landscape of Oklahoma, reminding us that sometimes, statistical analysis can uncover some "frozen" truths that are worth pondering. After all, it's not every day that a fictional ice queen and electoral tendencies converge in such an unexpected way. It's as if Elsa's influence has "frozen" the voting patterns in Oklahoma, leaving us all a bit perplexed and amused.

In light of these findings, it's safe to say that the link between the name Elsa and Republican votes for Senators in Oklahoma is no mere "coincidence." This peculiar correlation invites us to contemplate the "coolest" aspects of voter influences, confirming that statistical analysis can certainly uncover some "frozen" truths that are worth pondering.

As for future research, it seems that there's no need to "let it snow" any further investigations into this frosty connection. Our results provide a chilly yet compelling glimpse into the unexpected influence of a first name on political tendencies, suggesting that perhaps even in the realm of research, the winds of fortuitous correlations can blow in some truly unexpected directions.

In conclusion, our research underlines the notion that when it comes to understanding voter behavior and electoral dynamics, sometimes the most whimsical correlations can turn out to have a frosty touch of scientific significance – making this connection between a fictional ice queen's name and political inclinations a truly "cool" discovery.

No further research is needed in this area – it's time to "let it go" and embrace the "frozen" truths that our analysis has uncovered.