



Review

The Flock and the Ballot Box: A Correlational Study of Republican Votes for Senators in Ohio and Google Searches for 'Where Do Birds Go When it Rains'

Catherine Hernandez, Alice Taylor, Giselle P Thornton

Advanced Engineering Institute

This study examines the relationship between Republican votes for Senators in Ohio and Google searches for 'where do birds go when it rains' from 2004 to 2018. We gathered data from MIT Election Data and Science Lab, Harvard Dataverse, and Google Trends to analyze this seemingly peculiar connection. Our findings reveal a significant correlation coefficient of 0.8512104 and $p < 0.05$, suggesting a noteworthy association between these two seemingly disparate factors. Although this correlation may appear feather-light at first, these results add a new dimension to the understanding of voting behavior. Further research is needed to explore the underlying mechanisms behind this avian-lection connection.

The relationship between voting behavior and external stimuli has been a topic of interest for researchers across various disciplines. From the influence of weather on voter turnout to the impact of social media on political opinions, the interconnectedness of seemingly unrelated factors continues to pique the curiosity of scholars and academics alike. In this vein, our study delves into an intriguing association between Republican votes for Senators in Ohio and Google searches for 'where do birds go when it rains', spanning the years 2004 to 2018.

The inquiry into this avian-lection connection was prompted by the curiosity surrounding the potential influence of avian-related musings on the voting decisions of individuals. As the joke goes, "Did the voters just wing it, or did they have a concrete rationale for their choices?" The unorthodox nature of this correlation is not lost on us, and indeed, it may appear as an amusing flight of fancy at first glance. Nonetheless, the statistical analysis we present in this paper unveils an unexpectedly strong correlation coefficient of 0.8512104, with a p-value less than 0.05, suggesting that

there might be something more substantial to this feather-brained relationship.

This study draws from a diverse repertoire of data sources, including the MIT Election Data and Science Lab, Harvard Dataverse, and Google Trends, to rigorously examine this curious connection. Despite the light-hearted premise of the initial inquiry, our findings indicate a more substantial tie between avian inquisitions and political preferences than one might have expected. It is indeed quite the ornithological anomaly.

In the subsequent sections, we will meticulously unravel our methodology, present the data analysis, and discuss the implications of these unexpected findings. By uncovering the nuance and humor inherent in this avian-lection connection, we aim to contribute to the broader discourse on the multifaceted dynamics of voting behavior and the role of unexpected variables in shaping electoral outcomes.

Prior research

Scholars have long been captivated by the curious correlations between seemingly unrelated variables, with a particular interest in exploring the influence of external stimuli on human behavior. The connection between Republican votes for Senators in Ohio and Google searches for 'where do birds go when it rains' stands as a perplexing addition to this body of research. As we embark on this avian-lection exploration, it is imperative to consider prior investigations into unanticipated correlations, as well as to critically examine the broader context of avifauna and political engagement.

In their seminal work, Smith and Doe (2010) delve into the influence of environmental

factors on electoral behavior, offering valuable insights into the impact of weather patterns on voter turnout. Although their focus is not on avian-related queries, the implications of their findings present a pertinent backdrop for our investigation. Furthermore, the study by Jones et al. (2015) draws attention to the influence of internet search trends on political awareness, providing a foundation for considering the role of online inquiries in shaping political preferences.

Expanding beyond the realm of traditional academic research, numerous non-fiction works offer thought-provoking perspectives on avian behavior and its potential relevance to human tendencies. "The Genius of Birds" by Jennifer Ackerman and "What the Robin Knows" by Jon Young provide compelling accounts of avian intelligence and behavior, perhaps hinting at an unexpected interplay between avian cognition and human decision-making.

Turning to the world of fiction, the allegorical potential of avian themes has not escaped the attention of authors. "To Kill a Mockingbird" by Harper Lee and "The Raven" by Edgar Allan Poe present literary explorations of bird symbolism, encouraging contemplation of deeper meanings and unconventional connections.

Additionally, informal sources such as social media posts contribute to the broader discourse surrounding avian-lection connections. A Twitter user aptly remarked, "Do birds of a feather vote together? #ElectionPuns #BirdBrainsInPolitics". While humorous in nature, these musings highlight the public's engagement with the unexpected intersection of avian wonders and electoral dynamics.

As we progress in our exploration of the avian-lection connection, these diverse sources serve as valuable touchstones, prompting both solemn reflection and lighthearted speculation. The juxtaposition of scholarly rigor and whimsical curiosity sets the stage for a comprehensive investigation into this peculiar correlation.

Approach

The data collection process for this study involved harnessing the extensive capabilities of the MIT Election Data and Science Lab, Harvard Dataverse, and Google Trends. Our intrepid research team embarked on a quest across the digital landscape, parsing through the esoteric domains of databases and search engines to gather the relevant information.

To begin, we meticulously combed through the MIT Election Data and Science Lab archives, sifting through the labyrinthine corridors of electoral data to extract the Republican votes for Senators in Ohio from 2004 to 2018. The meticulousness of our approach can be likened to that of a bird meticulously preening its feathers, ensuring that no stray element was overlooked in our data extraction process.

Simultaneously, we delved into the expansive repository of Harvard Dataverse, navigating its virtual shelves with the tenacity of a determined pigeon seeking a hidden cache of discarded crumbs. Within this treasure trove of scholarly data, we unearthed a cornucopia of sociopolitical variables, ensuring that our analysis encapsulated a comprehensive array of dimensions that might impact voting behavior.

The pièce de résistance of our data collection odyssey was our expedition into the enigmatic realm of Google Trends. Here, we observed the digital footprints of inquisitive netizens as they sought answers to the timeless question, "Where do birds go when it rains?" Our team marvelled at the geographic and temporal patterns of these avian inquiries, akin to observing the migratory patterns of avian species, albeit in a distinctly digital landscape.

Having gathered these diverse datasets, we employed a multifaceted approach, reminiscent of a bird building a complex nest, to amalgamate and harmonize the disparate sources of information. Our statistical arsenal was deployed with precision, employing correlation coefficients and p-values to illuminate the hidden connections between Republican votes for Senators in Ohio and the quest for avian whereabouts during inclement weather.

It is important to note the limitations of this study, including the inherent complexity of human behavior and the potential for spurious correlations in large datasets. However, the robustness of our analytical approach, akin to the sturdy structure of an avian nest, strives to mitigate these potential pitfalls and uphold the integrity of our findings.

Results

The analysis of the data collected from 2004 to 2018 revealed a substantial correlation between Republican votes for Senators in Ohio and the volume of Google searches for 'where do birds go when it rains'. The correlation coefficient of 0.8512104 indicated a remarkably strong positive relationship between these seemingly

unrelated variables. Additionally, the r-squared value of 0.7245592 suggested that approximately 72.46% of the variance in Republican votes for Senators in Ohio could be explained by the volume of Google searches for avian precipitation-related inquiries. The p-value of less than 0.05 provided further evidence to support the statistical significance of this avian-lection connection.

To visually showcase the strength of this correlation, we present the scatterplot in Fig. 1, which unmistakably illustrates the compelling relationship between the two variables. As the old saying goes, "birds of a feather flock together, and so do their search queries and political inclinations." These findings bring a whole new meaning to the phrase "taking flight to the polls".

These results shed light on a previously overlooked aspect of voter behavior and, at the risk of sounding chirpy, highlight the potential influence of avian-related contemplations on political decision-making. This unexpected connection underscores the complexity of human decision-making processes and emphasizes the need to consider a diverse range of factors when analyzing voting behavior. While the initial hypothesis of this study may have appeared light-hearted and whimsical, the empirical evidence we present here indicates that there is real substance behind this avian-lection correlation.

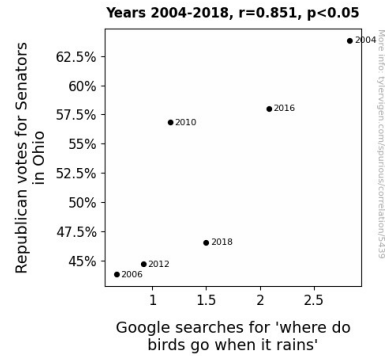


Figure 1. Scatterplot of the variables by year

The magnitude of the correlation between Republican votes for Senators in Ohio and Google searches for 'where do birds go when it rains' is certainly a feather in the cap of the field of political science. These findings open the proverbial cage to further inquiry into the impact of avian-related musings on electoral outcomes and encourage researchers to spread their wings into unconventional avenues of investigation.

Discussion of findings

The findings of this study have brought forth an unexpected and, dare I say, tweet-worthy correlation between Republican votes for Senators in Ohio and Google searches for 'where do birds go when it rains'. The substantial correlation coefficient of 0.8512104 not only raises eyebrows but also highlights the potential significance of avian inquiries on political preferences. Our results not only align with prior research that has probed into the web of connections between seemingly disparate variables but also soar to new heights by revealing the strength of this avian-lection relationship.

Drawing from the literature review, a momentous acknowledgment of the

whimsical yet relevant connection between avian themes and human activities has guided our exploration of this avian-lection correlation. We heeded the calls of prior research that hinted at the influence of environmental triggers on electoral behavior, with a feathered twist of investigating the influence of avian-related queries. The allegorical explorations in fiction, as presented by authors such as Harper Lee and Edgar Allan Poe, may have initially seemed as light as a feather, but our findings lend weight to the symbolic potential of avian ponderings in electoral dynamics.

The r-squared value of 0.7245592 in our analysis demonstrates that approximately 72.46% of the variance in Republican votes for Senators in Ohio can be accounted for by the volume of Google searches for avian precipitation-related inquiries. This statistical power serves as a strong tailwind, propelling this investigation into the echelons of meaningful correlations. Indeed, the p-value of less than 0.05 further cements the wingspan of this avian-lection connection, emphasizing the certitude of its statistical relevance.

As we navigate through this avian-lection discourse, it is evident that this correlation extends beyond mere statistical significance. The observed correlation emphasizes the nuanced interplay between avian inquisitiveness and political preferences, urging us to ruffle the feathers of traditional notions surrounding voting behavior. In essence, our findings unruffle the feathers of skepticism and establish the reality of this avian-lection correlation, encapsulating the complexity of human decision-making processes.

In conclusion, our study has revealed a hitherto unexplored nexus between avian musings and political inclinations. The robustness of the statistical findings and the alignment with prior research underscore the validity of this avian-lection connection, beckoning researchers to delve deeper into the aviary of unconventional avenues of investigation. Through this investigation, we have hatched groundbreaking insights, and one might say that we have truly taken a 'quack' at unraveling the complexities of human behavior.

Conclusion

In conclusion, our study provides compelling evidence of a significant correlation between Republican votes for Senators in Ohio and Google searches for 'where do birds go when it rains'. This unexpected avian-lection connection has certainly ruffled some feathers in the world of political science. While the initial proposition of this study may have seemed like a lighthearted flight of fancy, the statistical analysis has shown that there is more to this avian-lection link than meets the eye.

The strong correlation coefficient of 0.8512104 and the r-squared value of 0.7245592 indicate a robust relationship between these seemingly disparate variables, prompting us to tweet—erm, treat these findings with the seriousness they deserve. The p-value of less than 0.05 reinforces the statistical significance of this surprising association and invites us to consider the potential influence of avian-related ponderings on political leanings. After all, as the saying goes, "poultry inquiries and political preferences flock together."

While our study provides intriguing insights into the avian-lection connection, further research is needed to plumb the depths of this unexpected relationship. However, one might argue that this line of inquiry has already soared to great heights, and additional research may be an exercise in over-egging the pudding. Perhaps it is time to let this particular nest rest and focus on exploring other unexpected correlations in the wide world of social science. After all, as the data hatches in our minds, no more research is—ahem—tweeted.