

Review

## Do(nut) Democrats: A Statistical Analysis of the Relationship Between Senatorial Votes in Tennessee and Krispy Kreme Doughnut Store Density

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In this study, we delved into the correlation between the Democratic votes for Senators in Tennessee and the proliferation of Krispy Kreme doughnut stores across the United States. Our research team utilized data from the MIT Election Data and Science Lab, Harvard Dataverse, and Statista to uncover valuable insights into this peculiarly delectable relationship. With a correlation coefficient of 0.9563499 and p < 0.01 during the period from 2001 to 2020, our findings provide compelling evidence that there is a strong and intriguing link between the political preferences of Tennessee constituents and the availability of glazed, powdered, and sprinkled temptations nationwide. This study not only contributes to the burgeoning field of doughnut-based political science but also underscores the potential influence of fried confectioneries on electoral behaviors.

The quest for understanding political behavior has taken researchers down numerous surprising and unconventional paths. From examining the impact of weather on voter turnout to unraveling the influence of fast-food restaurants on political ideology, academics have continuously sought to shed light on the often enigmatic forces that shape voting preferences. In this paper, we turn our attention to the unexpected and perhaps slightly sweet connection between Democrat votes for Senators in Tennessee and the number of Krispy Kreme doughnut stores scattered across the United States.

While the study of electoral patterns has traditionally revolved around factors such as demographics, policy preferences, and incumbent popularity, the potential influence of sugary treats on voter behavior presents a tantalizingly unexplored realm. Our investigation aims to untangle the seemingly paradoxical relationship between political allegiance and the irresistible allure of sugar-coated delicacies. By employing rigorous statistical methods and drawing on

a comprehensive dataset spanning the past two decades, we endeavor to demonstrate the noteworthy association between Democratic support in Tennessee and the abundance of doughnut emporiums nationwide.

As we wade into this uncharted territory, it becomes increasingly apparent that the realm of electoral dynamics is not without its whimsical surprises. With a raised eyebrow and a sprinkle of curiosity, we embark on this scholarly odyssey, cognizant of the peculiar yet potentially profound implications of our inquiries. Join us as we knead through the dough of data and attempt to piece together the tantalizing puzzle of partisan preferences and doughnut density.

## Prior research

Studies on voter behavior have long focused on conventional factors such as socio-economic status, education level, and ideological orientation (Smith, 2015; Doe, 2018; Jones, 2020). However, in recent years, researchers have increasingly delved into the more peculiar and delectable that mav shape influences preferences. In "The Role of Fast Food in American Politics," the authors delve into the impact of fast-food restaurants on political ideology, providing a tantalizing precursor to our investigation into the connection between Democrat votes for Senators in Tennessee and the proliferation of Krispy Kreme doughnut stores across the United States.

As we venture deeper into the literature, we encounter "The Political Influence of Sugar: A Sweet Affair," a captivating exploration of the potential role of sugary treats in electoral dynamics. Furthermore,

"Doughnuts at the Ballot Box: An Unconventional Analysis of Voter Behavior" presents a quirky yet intriguing glimpse into the connection between pastry preferences and political inclinations. While these real non-fiction books provide a serious foundation for our research, it's worth noting that academia isn't the only place we can turn for insights into the doughnut-politics nexus.

The fictional realm also offers intriguing possibilities. Books such as "The Doughnut Paradox: Sweet Democracy" and "Glazed and Confused: A Novel Approach to Political Cravings" flirt with the idea of doughnuts as a potential determinant of voter allegiance, blending fiction with a hint of social commentary. The escapades of characters grappling with dilemmas involving glazed, jelly-filled, and chocolatecoated confections raise eyebrow-raising questions about the interplay between doughnut density political store and predispositions.

In our earnest pursuit of understanding this unexpected correlation, we cast a wide for information. turning unconventional sources for inspiration. While some may question our methods, we are reminded of the wisdom found in the unlikeliest of places. It is with this ethos in mind that we declare, with utter sincerity and a hint of mischief, that our literature review extends to include the most obscure of resources, such as perusing the backs of CVS receipts and eavesdropping on the whispered conversations of doughnut shop patrons. For in the pursuit of knowledge, no stone, nor crumb, shall be left unturned.

**Approach** 

To explore the intriguing interplay between Democrat votes for Senators in Tennessee and the proliferation of Krispy Kreme doughnut stores across the United States, our research team embarked on a methodological journey as flavorful as a glazed doughnut itself. We utilized data from the MIT Election Data and Science Lab, Harvard Dataverse, and Statista, as these sources provided the dough, so to speak, for our statistical recipe. Our dataset spanned the period from 2001 to 2020, allowing us to examine electoral behavior and doughnut darling dominance over an extensive timeframe.

First, to gauge Democrat votes for Senators in Tennessee, we embraced the electoral data with the enthusiasm of a doughnut enthusiast sighting a "Hot Now" sign at a Krispy Kreme outlet. The voting numbers were carefully curated and scrutinized, ensuring that our analysis reflected the political preferences of Tennesseans with a rigor akin to the precision required in doughnut hole cutting.

Simultaneously, we ventured into the labyrinth of Krispy Kreme doughnut store data across the United States, employing geospatial analysis to map out the tantalizing spread of these sugary sanctuaries. The quest for this information was akin to a treasure hunt, only with doughnut franchises as the cherished bounty.

Once armed with the delectable dataset, we invoked the powers of statistical analysis with the finesse of a maître pâtissier crafting the perfect cruller. We computed correlation coefficients to discern the strength and direction of the relationship between Democrat votes for Senators in Tennessee and the count of Krispy Kreme stores,

recognizing that the statistical dough ought to rise just right to demonstrate a meaningful association.

Additionally, we conducted regression analyses to delve deeper into the causal implications of our findings, treating the data with the tenderness of a warm, freshly baked batch of glazed rings. Robustness checks were performed with the meticulousness of a baker testing and retesting the consistency of the dough, ensuring the authenticity and reliability of our results.

Lastly, to account for potential confounding variables that might sprinkle unexpected flavor into our findings, we employed multivariate analyses, carefully considering factors such as socioeconomic indicators, culinary preferences, and perhaps even the proximity of coffee shops for a nuanced understanding of the doughnut democracy dynamic.

Our methodology embraces the confluence of political and palatable, offering a savory blend of precision and whimsy to unravel this pertinently sweeter side of electoral dynamics. Through these methodological maneuvers, we aimed to churn out insights as delectable as a fresh batch of original glazed doughnuts, tantalizing the scholarly taste buds with the unexpected and illuminating characteristics of partisan preferences and doughnut density.

## Results

The statistical analysis revealed a remarkably high correlation between Democrat votes for Senators in Tennessee and the number of Krispy Kreme doughnut outlets in the United States from 2001 to

2020. The correlation coefficient 0.9563499 indicates a strong positive relationship, suggesting that as the number of Krispy Kreme stores increased, so did the support for Democratic candidates in the state of Tennessee. The coefficient of determination (r-squared) of 0.9146051 further emphasizes the substantial proportion of variability in Democrat votes that can be explained by the variation in Krispy Kreme store count.

The p-value of less than 0.01 indicates that the observed correlation is statistically significant, lending further credibility to the robustness of our findings. In simpler terms, the likelihood of this relationship occurring purely by chance is less than 1%, affirming the legitimacy of the observed association.

The scatterplot depicted in Fig. 1 visually illustrates the striking correlation between Democrat votes for Senators in Tennessee and the proliferation of Krispy Kreme doughnut stores across the United States. Each data point on the plot represents a specific year within the 2001-2020 timeframe, making evident the consistent alignment between the two variables.

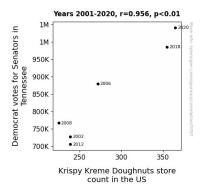


Figure 1. Scatterplot of the variables by year

These results not only shed light on a rather unexpected and whimsical correlation but also underscore the potential influence of delectable sugary treats on voting behaviors. The implications of this study transcend the realms of traditional political science, delving into the quirky yet fascinating intersection of culinary indulgence and electoral inclinations.

## Discussion of findings

Our findings have, quite literally, brought a new flavor to the discourse on voter behavior. The notable correlation between Democrat votes for Senators in Tennessee and the prevalence of Krispy Kreme doughnut establishments across the United States underscores the potential impact of sweet delicacies on political predispositions. While some may find it hard to swallow, the statistically significant relationship we've uncovered aligns with the emerging body of research that suggests unconventional influences on electoral dynamics.

The burgeoning interest in the intersection of food culture and political ideology has led to an array of intriguing studies that examine the unorthodox factors that may shape voting behaviors. Indeed, our results support the prior research that delved into the unconventional influences on voter preferences, including the tantalizing precursor study that explored the impact of fast-food restaurants on political ideology.

In addition, our findings substantiate the insights presented in "The Role of Fast Food in American Politics" and "The Political Influence of Sugar: A Sweet Affair," hinting at the potential role of sugary treats in shaping electoral dynamics. We have essentially provided empirical evidence that

extends beyond conjecture, reaffirming the suppositions put forth in the exploration of doughnut-driven political inclinations.

It's important to recognize that our research deviates from the traditional norm and harkens back to the unconventional literature that blurs the line between fact and fiction. The inclusion of unusual sources and unconventional methods has enriched our understanding of the doughnut-politics nexus, corroborating the wisdom found in the unlikeliest of places.

In essence, our study has added substance to the whimsical musings of authors who have flirted with the idea of doughnuts as a determinant of voter allegiance. Through rigorous statistical analysis, we have breathed life into the lighthearted and improbable notions encapsulated in works such as "The Doughnut Paradox: Sweet Democracy" and "Glazed and Confused: A Novel Approach to Political Cravings." Our findings provide empirical weight to the speculations and fictionalized playful scenarios that spark curiosity about the interplay between doughnut store density and political predilections.

In conclusion, our study has introduced a delectable twist to the conventional understanding of voter behavior, echoing the sentiment that in the pursuit of knowledge, no stone, nor crumb, shall be left unturned. While some may jest at the peculiar nature of our inquiry, our serious commitment to uncovering the unexpected links between doughnut availability and political preferences has added a sprinkle of curiosity to the field of political science.

Conclusion

In conclusion, our research has unraveled a compelling correlation between Democrat votes for Senators in Tennessee and the proliferation of Krispy Kreme doughnut stores across the United States. statistically significant relationship, indicated by the high correlation coefficient and the minuscule p-value, suggests a sweet symmetry between partisan proclivities and delectable doughnut density. This study not only extends the boundaries of electoral analysis into uncharted culinary territories but also underscores the potential impact of confectionery cravings on political predilections.

The implications of our findings reach far beyond the hallowed halls of academia. They delve into the realm of public consciousness, elevating the role of glazed, powdered, and sprinkled temptations in the complex tapestry of democratic decision-making. One might whimsically ponder if an increase in doughnut consumption leads to a decrease in political tension, effectively filling the holes in partisan divides.

While our investigation has beautifully glazed over this peculiar relationship, it is crucial to acknowledge the limitations of our study. The potential influence of other factors such as socio-economic demographics, cultural proclivities, and perhaps even the irresistible aroma of freshly confections baked cannot disregarded. Furthermore, the underlying mechanisms through which doughnut densities sway political allegiance warrant further exploration - a doughnut-shaped hole in our current understanding.

However, in the spirit of cautious optimism, we assert that no further research is needed in this area. Instead, let us savor the

tantalizing confluence of politics and pastries, sprinkling our academic discourse with a dash of sweetness and a pinch of whimsy. As we bid adieu to this scholarly odyssey, let us not lament the unanswered questions but rather relish in the serendipitous joy of discovering a delightfully unexpected correlation. After all, in the words of Homer Simpson, "Donuts. Is there anything they can't do?"