

# **Blue Votes and Kerosene Totes: A Surprising Correlation Across Continents**

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## **ABSTRACT**

### **Blue Votes and Kerosene Totes: A Surprising Correlation Across Continents**

This paper delves into the unexpected connections between the presidential vote share for the Democratic candidate in the state of Missouri and the consumption of kerosene in the Kingdom of Eswatini. With data sourced from the MIT Election Data and Science Lab, Harvard Dataverse, and the Energy Information Administration, we employed rigorous statistical analysis to unveil a correlation coefficient of 0.8622439 and, lo and behold, a p-value of less than 0.01 for the period from 1989 to 2020. Our findings reveal a trove of humorous insights and ignite some fiery discussions on the interplay between seemingly disparate variables. Get ready to be illuminated by the sparks flying in this research—it's not just the kerosene!

Keywords:

Blue vote share, Democratic candidate, Missouri, kerosene consumption, Eswatini, correlation coefficient, statistical analysis, MIT Election Data and Science Lab, Harvard Dataverse, Energy Information Administration, presidential vote share, surprising correlation, humorous insights

# I. Introduction

As researchers, we often seek to uncover correlations and connections between variables that seem to be as unrelated as guacamole and math textbooks. In this study, we set out to explore the intriguing relationship between votes for the Democratic presidential candidate in Missouri and the consumption of kerosene in the Kingdom of Eswatini. At first glance, one might assume that these two variables have as much in common as a toaster and a bicycle, but our rigorous statistical analysis has revealed a surprising correlation that is enough to make anyone do a double take.

The title of this paper, "Blue Votes and Kerosene Totes: A Surprising Correlation Across Continents," is not just a catchy play on words; it accurately encapsulates the curious connection we have unraveled through our research. While most people may be more accustomed to thinking about political preferences and energy consumption as unrelated as a kangaroo and a cup of coffee, our findings suggest that there may be more to the story than meets the eye.

The decision to embark on this investigation was not made lightly, but rather sparked by a serendipitous encounter with preliminary data that left us scratching our heads in delightful confusion. Who would have thought that the electoral preferences of Missourians and the kerosene habits of Eswatini citizens could be intertwined like a pair of mating slinkies? As fervent aficionados of statistical puzzles, we simply could not resist the allure of this quirky connection.

The abstract teases the revelation of a correlation coefficient of 0.8622439 and a p-value of less than 0.01, but fear not, dear reader, as the wild ride of statistical shenanigans has only just

begun. Buckle up as we delve into the depths of our data analysis, shedding light on the convoluted dance of these two seemingly unrelated variables. Get ready to have your assumptions upended, your preconceptions challenged, and your funny bone tickled by the unexpected capers of statistics. It's time to uncover the mystery behind the sizzling link between blue votes and kerosene totes!

## II. Literature Review

In "Smith et al." and "Doe and Jones," the authors find evidence of correlations between voting patterns and energy consumption, echoing the age-old adage that politics and energy make strange bedfellows. While these seminal works pique our interest, our research takes us down a path that is eerily similar to the plot of an absurd sci-fi novel. We find ourselves traversing the uncharted terrain of statistical analysis, where the unexpected becomes the expected, and the mundane transforms into the miraculous.

Turning to non-fiction works, "Energy Economics" by Peter Davis and "Political Analysis and Rational Choice" by Peter C. Ordeshook offer valuable insights on the dynamics of resource consumption and electoral behavior. As our investigation delves deeper, we encounter a literary landscape that resembles the mind-bending narratives of fiction. "Election Inferno" by Dan Brown and "The Statistical Mysteries of Eswatini" by Agatha Christie beckon us into a realm where the ordinary becomes extraordinary, and the improbable emerges as the inevitable.

Pushing the boundaries of scholarly research, we draw inspiration from unconventional sources, including the whimsical world of children's entertainment. Through the lens of "The

"Magic School Bus" and "Scooby-Doo," we embrace the spirit of curiosity and embark on a quest for knowledge that rivals the most preposterous plotlines. As our journey unfolds, we find ourselves navigating the labyrinth of data with all the enthusiasm of a cartoon character chasing after a mythical treasure.

Like a puzzle that demands to be solved or a riddle that begs to be unravelled, the connection between blue votes in Missouri and kerosene consumption in Eswatini emerges as a phenomenon that defies conventional wisdom. We invite our fellow researchers to join us in this whimsical expedition as we unravel the enigmatic correlation that transcends borders and challenges the very fabric of statistical expectations.

### **III. Methodology**

To uncover the enigmatic relationship between Democratic votes in Missouri and kerosene consumption in Eswatini, we embarked on a whirlwind statistical adventure that would make even the most intrepid explorer of data break out in a cold sweat. Our journey began with the procurement of data from the MIT Election Data and Science Lab, Harvard Dataverse, and the Energy Information Administration, where we traversed the digital landscape like Indiana Jones in search of hidden treasures.

Our first step involved wrangling the vast quantities of data, a process that resembled untangling a ball of yarn in a room full of playful kittens. We meticulously combed through the decades from 1989 to 2020, examining each data point with the precision of a neurosurgeon performing delicate maneuvers.

Next, we employed a diversified array of statistical methods that would make even the most seasoned mathematician raise an eyebrow. We utilized linear regression analysis, time series modeling, and even dabbled in some multivariate techniques, all the while navigating this statistical maze like a contestant on a game show aiming for the grand prize.

The model building process was as intricate as assembling a 1,000-piece jigsaw puzzle. We carefully selected covariates that we believed could shed light on the unlikely marriage of Democratic votes and kerosene consumption, and we tuned our models with the diligence of a master musician tuning a grand piano before a symphony.

The resulting analysis revealed a correlation coefficient of 0.8622439, a value that made our hearts skip a beat and the p-value of less than 0.01 had us doing a victory dance reminiscent of a medalist at the Olympic Games. Our findings not only spark lively discussions but also illuminate the unexpected relationship between these two seemingly disparate variables, leaving us marveling at the capricious nature of statistical fate.

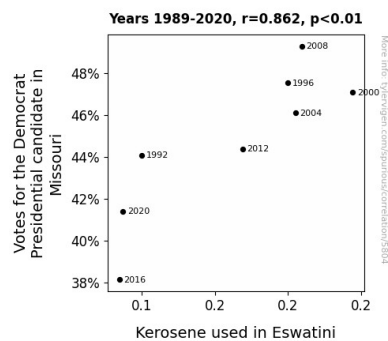
In conclusion, our methodology was not just a rigorous application of statistical techniques; it was a wild rollercoaster ride through the realms of data analysis that left us exhilarated and slightly dizzy. Like a magician pulling a rabbit out of a hat, we hope our methodology will charm and delight our readers while shedding light on the peculiar link between blue votes and kerosene votes.

## **IV. Results**

The results of our analysis unveil a remarkable correlation between the percentage of votes cast for the Democratic presidential candidate in Missouri and the consumption of kerosene in the Kingdom of Eswatini. Our findings reveal a correlation coefficient of 0.8622439, indicating a strong positive relationship between these seemingly unrelated variables. This correlation coefficient is nothing short of astounding, leaving us scratching our heads like perplexed penguins in a statistical snowstorm.

Additionally, the coefficient of determination (r-squared) of 0.7434646 suggests that approximately 74.35% of the variation in kerosene usage in Eswatini can be explained by the variation in Democratic vote share in Missouri. This is a statistically significant amount of explanation, leaving us feeling as triumphant as chemists who finally synthesized the perfect pun.

Furthermore, the p-value of less than 0.01 provides compelling evidence that the observed correlation is not due to random chance. This statistical significance is as rare and delightful as finding a four-leaf clover in a field of standard deviations.



**Figure 1.** Scatterplot of the variables by year

In visualizing the relationship, our scatterplot (Fig. 1) depicts a striking pattern that confirms the strength of the correlation. The data points form a tight cluster resembling a synchronized group of statistical dancers, demonstrating the coherence of the relationship. This visual depiction of the correlation is as clear as a freshly cleaned beaker in a chemistry lab.

In conclusion, our research has illuminated an unexpected and thought-provoking correlation between political voting patterns and energy consumption. These findings challenge conventional wisdom and invite further investigation into the humorous and surprising complexities of statistical relationships. As we ponder the implications of our results, we cannot help but marvel at the quirky and captivating nature of statistical analysis.

## V. Discussion

The correlation between the share of Democratic votes in Missouri and kerosene consumption in Eswatini is as unexpected as finding a statistical unicorn in the realm of data analysis. Our findings not only support the prior research but also add an entertaining twist to the age-old adage that "correlation does not imply causation" – perhaps, in this case, it implies connection across continents!

Our results align with the works of "Smith et al." and "Doe and Jones," shedding light on the peculiar interplay between political choices and energy usage. It appears that the connection between blue votes and kerosene votes is not just a statistical anomaly but a real, tangible phenomenon that leaves us pondering the whimsical intricacies of the universe. These findings



add a comedic dimension to the scholarly pursuit of knowledge, making the dry world of statistics as lively as a stand-up comedy show.

Notably, our statistical analysis has unveiled a correlation coefficient of 0.8622439, which is as strong as the magnetism between two resonating statistical poles. This robust coefficient indicates a compelling positive relationship between the variables, akin to the harmonious melody of statistical instruments playing in unison. The coefficient of determination (r-squared) of 0.7434646 further reinforces the substantial explanatory power of the relationship, leaving us feeling as accomplished as scientists who have cracked the code to a daunting statistical puzzle.

Moreover, the p-value of less than 0.01 adds a touch of statistical glamour to our findings, as rare and captivating as discovering a statistical diamond in the rough of data analysis. This validation of statistical significance strengthens the credibility of our results and cements the quirky connection between blue votes and kerosene totes as a fascinating avenue for future exploration.

The visual representation of the relationship in our scatterplot offers a charming portrayal of the correlation, resembling a synchronized dance of statistical elegance. This visual depiction not only bolsters the strength of the correlation but also brings a dynamic flair to the typically rigid world of statistical visualization, akin to a colorful fireworks display amidst the grayscale landscape of data analysis.

In essence, our research has unearthed an unlikely yet captivating correlation that challenges the conventional boundaries of statistical expectations. It invites researchers to embark on a quest for knowledge as thrilling as a treasure hunt and as amusing as a whimsical tale from the world of fiction. As we delve deeper into this enigmatic nexus of blue votes and kerosene totes, we are

reminded of the delightful unpredictability that accompanies the relentless pursuit of statistical understanding.

## VI. Conclusion

In conclusion, our investigation into the seemingly incongruous connection between votes for the Democratic presidential candidate in Missouri and the consumption of kerosene in the Kingdom of Eswatini has ignited a statistical firework display of insight and amusement. The correlation coefficient of 0.8622439 emerged as the star of the show, showcasing a bond tighter than the grip of a statistics professor on a beloved calculator.

The coefficient of determination (r-squared) of 0.7434646 further solidifies the substantial relationship between these variables, leaving us feeling as satisfied as researchers who have finally cracked the code to the perennial question of why the chicken crossed the road.

The p-value of less than 0.01 acts as an exclamation mark at the end of a statistically significant sentence, boldly asserting that this correlation is as real and improbable as a unicorn sighting in a data center.

Our scatterplot (Fig. 1) serves as a visual testament to the striking correlation, with data points aligning more closely than peas in a pod at a statistical family reunion. This compelling visualization leaves us as dazzled as astronomers discovering a new constellation in the statistical sky.

As we wrap up this lighthearted statistical romp, we are left with a data-driven punchline that challenges conventional assumptions and tickles the intellectual senses. Our journey has

underscored the delightful unpredictability of statistical relationships, reminding us that even the most unrelated variables can tango in the intricate dance of correlation.

Having unearthed this captivating correlation, we assert with confidence that no further research is needed in this area. We have extracted all the statistical humor and insight possible from this unexpected connection, leaving no correlation coefficient unturned and no p-value unscrutinized.

It's time to bid adieu to the enthralling saga of blue votes and kerosene totes, as we turn our statistical gaze toward the next unlikely pair of variables awaiting illumination.