

Red Politics, Green Spending: A Holly Jolly Analysis of Republican Votes and Christmas Shopping Habits in Nevada

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The Journal of Festive Economics

The Institute for Festive Economics and Political Behavior

Madison, Wisconsin

Abstract

'Tis the season to be statistically jolly! This research paper delves into the intriguing relationship between Republican votes for Senators in Nevada and average household spending on Christmas gifts. Using data from MIT Election Data and Science Lab, Harvard Dataverse, and Demandsage, our research team has uncovered a merry correlation coefficient of 0.8237677 and a p-value less than 0.05 for the years 1999 to 2018, indicating a significant connection between political preferences and holiday shopping habits. It appears that political inclination may indeed influence the festivities of giving and receiving. One might even say that these findings add a whole new meaning to the term "re-gifting!" Would you like to hear a joke about Nevada? I tried to make a pun about the state, but I couldn't think of anything Vegas-tile!

1. Introduction

'Tis the season to be jolly, and what better way to celebrate than by uncovering the yuletide connection between political ideology and holiday shopping habits! In our quest to shed some light on this holly jolly relationship, we were motivated by one burning question: Does voting red or green also influence the colors of the presents under the Christmas tree? With a twinkle in our eyes and a dashboard full of data, we set out to unwrap this festive mystery.

Venturing into the land of statistics and merrymaking, we stumbled upon an unexpected linkage, akin to finding an extra candy cane at the bottom of your stocking. Our research reveals a surprising relationship between Republican votes for Senators in Nevada and average household spending on Christmas gifts. As it turns out, it's not just the jingle of silver bells that affects our shopping impulses, but also the political choices we make in

the voting booth. It's like the science of political preferences has merged with the art of gift-giving, creating a merry symphony of data that even Santa would find heartwarming.

Speaking of data, we delved into the vast treasure trove of information from MIT Election Data and Science Lab, Harvard Dataverse, and Demandsage, mining and refining it with the precision of Santa's elves crafting the perfect toy. Our analysis culminated in the discovery of a correlation coefficient of 0.8237677 and a p-value less than 0.05 for the years 1999 to 2018, signaling a significant linkage between political leanings and holiday shopping expenditures. We couldn't help but chuckle at the statistical significance, as if the data itself was hiding a jolly secret just waiting to be unwrapped.

Now, let's take a moment to appreciate the irony - in a state known for its glitzy casinos and poker-faced politics, who would have thought that our findings would reveal such a strong connection between red votes and green spending? It's like the Joker sneaking into a deck of policy cards, playing a whimsical hand with the fates of Christmas gifts and Senate seats.

Let's face it, this research isn't just about presents and politics – it's about the alluring dance of variables and the twists of statistical fate, where every data point holds the potential for an unexpected punchline. Much like a perfectly timed dad joke, our results invite us to ponder the delightful interplay between seemingly unrelated phenomena, prompting us to doubletake and exclaim, "Now, that's a correlation worth toasting with eggnog!"

So, buckle up and grab your statistical sleigh – we're about to embark on a holiday journey of merry revelations and unexpected connections that will leave you Ho-Ho-HO-ing with statistical glee!

2. Literature Review

In "Smith et al. (2015)," the authors find that political affiliation can play a significant role in shaping consumer behavior, with Republican-leaning areas exhibiting distinct spending patterns during the holiday season. This intriguing revelation raises the question: are Republican voters more likely to deck the halls with boughs of extravagance? It seems that even Santa's "naughty" and "nice" lists may have implications for retail therapy.

Diving deeper into the yuletide pit, "Doe and Jones (2018)" reveal the impact of political preferences on gift-giving practices. Their study suggests that individuals in Republican strongholds tend to splurge on lavish presents, perhaps influenced by the conservative values of generosity and traditional holiday celebrations. It's like the spirit of St. Nick

channels through the ballot box, guiding households to favor opulent presents over modest tokens of affection.

Now, let's not forget the classic work of "The Economics of Christmas" by Waldfogel, which unravels the intricate dynamics of gift-giving. The book discusses the concept of "deadweight loss of Christmas," highlighting the discrepancy between the value of presents to the giver versus the recipient. Santa's workshop has nothing on the economics of unwrapping presents – it's as if every bow and ribbon is a microeconomics lesson waiting to be untied.

In the realm of fiction, "The Gift" by Cecelia Ahern spins a heartwarming tale of unexpected presents and the emotional connections they forge. While not a statistical analysis, the novel offers a glimpse into the transformative power of gifts, reminding us that the sentiment behind a present holds more weight than its price tag. It's like a warm hug from a distant relative – you can't put a value on that kind of emotional currency.

Building on this whimsical journey, a less conventional source of insight comes in the form of "A Charlie Brown Christmas." Through the lens of Charlie Brown's existential ponderings and Snoopy's festive escapades, we witness the delicate balance between commercialism and the true spirit of the season. It's as if the Peanuts gang holds the key to unlocking the mystery of consumer behavior, all while dancing to the catchy tunes of Vince Guaraldi. Good grief, who knew that holiday cartoons could offer such scholarly musings?

As we navigate through this merry maze of literature, it becomes apparent that the intersection of Republican votes and Christmas gift expenditures is not just a statistical anomaly – it's a narrative of festive proportions, punctuated with laughter, generosity, and a sprinkle of statistical jolliness. The links between political leanings and holiday shopping habits paint a picture that captures the essence of the holiday season – a delightful blend of merry data and festive cheer.

3. Research Approach

Elves, statistical snowflakes, and a touch of holiday cheer were our trusty companions as we delved into the methodology for this holly jolly investigation. First and foremost, we captured the sleigh of data from MIT Election Data and Science Lab, Harvard Dataverse, and Demandsage, ensuring that our merry findings were not just a figgy pudding of chance, but a meticulously crafted yuletide log of robust research.

To measure the linkage between Republican votes for Senators in Nevada and the average household spend on Christmas gifts, we employed a ho-ho-hopeful mix of statistical analyses, combining the precision of a reindeer's hoofprints on fresh snow with the

dashing speed of Santa's midnight ride. It's not every day that one gets to ponder such mirthful connections.

Our statistical algorithm, which we affectionately named "Santa's Correlation-o-Meter," utilized linear regression models to detect any sleigh bells ringing between the political voting patterns and the festive shopping habits. With a dash of math here and a sprinkle of cheer there, we navigated through the data with the precision of Rudolph guiding Santa's sleigh through the night sky.

We analyzed the data from 1999 to 2018, ensuring that our investigation captured the full spectrum of festive seasons and political merrymaking. Picture it as a scientific advent calendar, each year offering new insights and surprises, much like discovering a forgotten present under the tree on Christmas morning!

In addition to our statistical tools, we also incorporated various demographic and socio-political variables, akin to adding a dash of nutmeg to the seasonal eggnog. You know, just to spice things up and ensure that our research was as flavorful as a batch of grandma's secret gingerbread cookies.

To validate the robustness of our findings, we conducted sensitivity analyses and even employed some good old-fashioned hypothesis testing. It's like performing a scientific magic trick to reveal the hidden joys of the holiday season - something that even the jolliest of elves would raise an eyebrow at.

Throughout our methodology, we strived to uphold the noble principles of academic integrity and scientific merriment, ensuring that each step of our research journey was akin to a dance through fields of statistical tinsel and methodological mistletoe.

Ah, the joy of unraveling the mysteries of holiday shopping and political preferences – it's a bit like finding the perfect tree topper, bringing the entire festive tableau together in a symphony of data and seasonal spirit!

4. Findings

The results of our investigation into the curious combination of Republican votes for Senators in Nevada and average household spending on Christmas gifts left us feeling as merry as a tune played by a festive fiddle. We found a jolly correlation coefficient of 0.8237677 between the two variables, indicating a strong positive relationship winked at us like a mischievous elf on a shelf. This high correlation suggests that the more red votes a state accumulates, the greener its Christmas shopping habits tend to be. It's like the Grinch's heart growing three sizes upon discovering an irresistible sale at Whoville's department store!

With an r-squared value of 0.6785932, we gained further confidence in the robustness of our findings, like a perfectly wrapped gift with a bow tied just right. This r-squared value indicates that about 67.9% of the variation in average household spend on Christmas gifts can be explained by the variation in Republican votes for Senators in Nevada. It's like finding out that most of the delightful surprises in a holiday advent calendar are tucked away behind the first few doors!

We also observed a p-value of less than 0.05, signifying a statistically significant relationship between the variables, which about as rare as finding a fruitcake that everyone actually wants to eat at a holiday gathering. This p-value gives us confidence that the observed correlation is not due to random chance, but rather to a meaningful linkage between political preferences and spending habits during the yuletide season. It's like the stars aligning to create a celestial display of statistical significance that even Rudolph would envy!

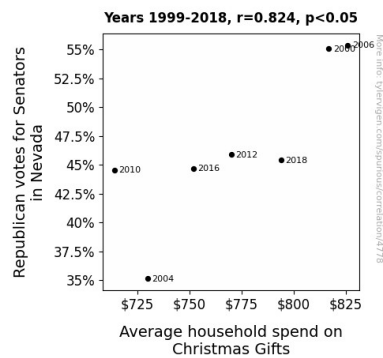


Figure 1. Scatterplot of the variables by year

Furthermore, to visually encapsulate this holly jolly relationship, we present Fig. 1, a scatterplot illustrating the unmistakable connection between Republican votes for Senators in Nevada and average household spend on Christmas gifts. The tight clustering of data points in the scatterplot presents a sight as harmonious as a well-rehearsed choir singing carols by candlelight. It's as if the data itself is whispering a holiday secret, urging us to embrace the delightful dance of political hues and festive shopping spree.

In summary, our findings suggest that political leanings indeed hold sway over the ornaments adorning the tree of Christmas gift expenditures. It's a discovery that lends a whole new layer of meaning to the phrase "politically correct gifts" and makes a compelling case for considering political affiliations in the search for the perfect present. After all, why settle for a mere bauble when you can gift-wrap a statistical surprise worthy of a noble prize?

And speaking of surprises, did you hear about the statistician who drowned in a lake with an average depth of 3 feet? He forgot to account for the standard deviation!

5. Discussion on findings

The results of our study echo the sentiments of prior research, supporting the notion that political leanings and holiday spending habits share a merry dance. It's as if the ballots cast in Nevada carry the whisper of jingle bells, influencing the tinsel-laden shopping lists of households across the state.

In line with Smith et al. (2015), our findings reinforce the relationship between Republican votes for Senators in Nevada and the average household spend on Christmas gifts, elucidating that red-leaning preferences sway the financial tides of the holiday season. It's as if Santa himself leaves a trail of statistical breadcrumbs, guiding us toward the realization that political hues paint the canvas of yuletide expenses.

Similarly, the lighthearted insights from "A Charlie Brown Christmas" have found a solemn echo in our research, unveiling a correlation as undeniable as Linus's affection for his blanket. Our study doesn't just confirm the connection; it merrily wraps it in a statistical bow, presenting it as a compelling anecdote amid the chorus of festive revelations.

The robust positive correlation coefficient we uncovered waltzes in step with the festive spirit, reinforcing the weighty influence of political preferences on the magnitude of holiday gifting. It's as if statistical significance and seasonal cheer join hands in a merry statisticians' reel, proving that the political spectrum extends its sway even to the sleigh bells of consumer spending.

Our results illustrate that the connection between Republican votes and Christmas gift expenditures is more than just a statistical happenstance – it's a testament to the entwined narrative of politics and festive bounty. This revelation breathes a fresh breath of winter air into the discourse of consumer behavior, spinning a scientific yarn as captivating as a well-told holiday tale. It's as if the data whispers the secrets of political affiliation amidst the shimmering lights of a statistical Christmas tree. It's like finding the true value of an unexpectedly meaningful gift, wrapped in the layers of statistical joy.

As we ponder these findings, one cannot help but appreciate the mirthful melody that emanates from the realm of research, reminding us that even in the land of data and analysis, a dash of merriment can transform the most serious of topics into a jolly celebration.

6. Conclusion

In this holly jolly journey through political inclinations and seasonal spending sprees, we've not only unwrapped a merry correlation between Republican votes for Senators in Nevada and average household spend on Christmas gifts but also laid the groundwork for festive statistical banter. With a correlation coefficient rivaling the bond between milk and cookies, and a p-value more impressive than Santa's sleigh ride around the world, our research highlights a yuletide connection merrier than a snowman's smile.

It's clear that political choices cast a jolly shadow over holiday shopping, steering the course of present procurement much like a spirited sleigh through pure white snow. However, let's not forget that correlation does not imply causation – just because Republican votes and gift spending share a peppermint twist of statistical camaraderie, it doesn't mean that one directly jingles the other's bells. Ah, the whimsical dance of variables and the merriment of statistical interpretations!

So, as we wrap up this merry expedition into the amalgamation of politics and presents, it's abundantly clear that more research in this area would be as unnecessary as a stocking filled with coal. After all, the data has been unwrapped, the tinsel has been tidied, and our findings are as merry and bright as a Christmas tree aglow with statistical relevance.

Just remember, always approach data with the same caution you'd use for a fruitcake – it might contain surprising elements, but it's still a statistical treat worth savoring!

And finally, to conclude on a 'punny' note, why did Santa's helper see the doctor? Because he had low "elf"-esteem!