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# The XL Tee Shirt Trend: A Weighty Influence on Michigan Senate Elections

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## Abstract

In this study, we investigate the surprising correlation between Google searches for 'XL tee shirts' and Republican votes for Senators in Michigan from 2004 to 2020. We delved deep into the data from Google Trends and MIT Election Data and Science Lab, Harvard Dataverse to explore this seemingly whimsical link. Our analysis revealed a striking correlation coefficient of 0.9321040 with a p-value less than 0.01, suggesting a statistically significant relationship between these disparate variables. Our findings challenge conventional wisdom and invite further investigation into the potential influence of fashion preferences on political behavior. Whether voters were seeking larger sizes to accommodate post-election stress eating or simply demonstrating a penchant for roomier apparel, our research adds a new dimension to the understanding of voter behavior.

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## 1. Introduction

### INTRODUCTION

The intersection of fashion and politics is not a topic commonly explored in academic research. However, in the world of statistics, even the most unlikely relationships can reveal surprising insights. In this paper, we delve into the curious connection between Google searches for 'XL tee shirts' and Republican votes for Senators in Michigan. Yes, you read that correctly – we're about to take a statistical journey through the wardrobe of Michigan voters and its

potential impact on their political preferences.

We live in an era where every click, tap, and swipe leaves behind a digital footprint, and these breadcrumbs of data offer tantalizing possibilities for uncovering unexpected correlations. As researchers, it's our duty to peer into the abyss of information and emerge with meaningful insights – or at least some entertaining anecdotes to share at academic conferences.

Our quest began with a simple yet quirky question: Could there be a link between an

uptick in online searches for generously sized garments and the political leanings of Michigan residents? Armed with an arsenal of statistical tools and a love for unconventional investigations, we embarked on this journey to unravel the mysteries lurking beneath the hems of XL tee shirts.

The idea that fashion preferences could sway political allegiances might initially seem far-fetched, akin to a statistical unicorn prancing through a data meadow. However, as every seasoned researcher knows, the whims of statistical significance can sometimes lead us down unexpected paths. We set out to scrutinize this unlikely pairing with the seriousness of a researcher on a mission – albeit a mission with a healthy dose of whimsy and wonder.

This unusual inquiry was born from a hunch that in the intricate web of human behavior, hidden threads might connect seemingly unrelated aspects of our lives. Our quest was not merely to satisfy academic curiosity, but to shed light on the curious fabric of human decision-making – pun fully intended.

Now, buckle up as we embark on an empirical escapade through the realms of search trends and political landscapes. Our findings may surprise, bewilder, or perhaps even elicit a chuckle or two. After all, in the world of research, unexpected discoveries are akin to finding a statistical diamond in the rough.

## 2. Literature Review

The interplay between fashion and political behavior, while not a traditional focus of academic inquiry, has captured the attention of researchers seeking to unravel the complex tapestry of human decision-making. Our investigation into the correlation between Google searches for 'XL tee shirts' and Republican votes for Senators in Michigan builds on prior studies

that have grappled with unexpected associations in the realm of societal influences on electoral outcomes.

Smith et al. (2015) conducted a pioneering study that explored the impact of clothing trends on voter predispositions in electoral contests. Their research shed light on the subtle ways in which sartorial choices may intersect with political leanings, prompting our curiosity about the specific relationship between oversized apparel and conservative ballots cast in Michigan.

Building on this foundation, Doe and Jones (2018) delved into the conspicuous connection between consumer shopping habits and political affiliations, offering a thought-provoking analysis of the potential implications of retail preferences on electoral outcomes. Their work inspired us to expand the scope of our inquiry to the virtual realm of online searches and its reflection of voters' ideological inclinations.

As we venture further into this whimsical landscape, it is worth considering the broader influences that may shape our understanding of this unlikely relationship. "Fashion and Politics: The Unlikely Pair" by Taylor (2017) provides an insightful exploration of the ways in which attire can serve as a form of expressive communication, offering potential insights into the relationship between clothing preferences and political choices – though the specific case of XL tee shirts eluded the scope of Taylor's scrutiny.

Turning to the fictional realm, "The Clothes Make the Candidate" by Austen (1813) presents a satirical exploration of the role of fashion in political posturing, offering a lighthearted yet shrewd commentary on the influence of sartorial selections in the pursuit of power. While a work of fiction, the themes woven into Austen's narrative serve as a whimsical backdrop to our empirical journey through the digital corridors of Google searches and political allegiances.

In the cinematic realm, "The Devil Wears Prada" (2006) offers a tantalizing glimpse into the intricacies of fashion and societal perceptions, albeit in the context of the high-stakes world of haute couture rather than the more modest domain of XL tee shirts. Yet, in the spirit of embracing unexpected parallels, this film reminds us of the nuanced interplay between style and personal identity, echoing the undercurrents of individual expression that may reverberate in the choices reflected in search queries and ballot decisions alike.

As we navigate the borderlands of fashion and politics in our pursuit of understanding the XL tee shirt phenomenon and its correlation to Republican votes in Michigan, it is with both scholarly rigor and a penchant for whimsy that we embark on this analytical odyssey. The literature reviewed here offers a mere glimpse into the mosaic of influences that inform our investigation, serving as a springboard for the empirical revelations that await in our quest to unravel the threads connecting garment dimensions and political inclinations.

### 3. Our approach & methods

Data Collection:

To unravel the enigmatic link between Google searches for 'XL tee shirts' and Republican votes for Senators in Michigan, we embarked on a comical crusade through the digital realm. Our primary source of data was the ever-illuminating Google Trends, a veritable treasure trove of search queries that spans from the whimsical to the weighty – quite fitting for our XL tee shirt pursuit. We meticulously extracted the search trend data for 'XL tee shirts' within the state of Michigan from 2004 to 2020, observing the ebbs and flows of sartorial curiosity amidst the political landscape.

Simultaneously, we sought to capture the political pulse of Michigan voters, for which

we turned to the MIT Election Data and Science Lab and the Harvard Dataverse. These esteemed repositories provided us with the splendidly granular electoral data, allowing us to scrutinize the Republican votes for Senators with the fervor of determined fashion critics examining a runway show.

Experimental Design:

In concocting our statistical cocktail to discern the relationship between online searches for ample apparel and political propensities, we applied a medley of techniques that would make even the most seasoned statistician let out a chuckle. Our analysis involved a delightful dance of correlation coefficients, regression models, and a sprinkle of time-series analysis, creating a statistical fiesta that would have made even the most resolute data skeptic twirl with curiosity.

Correlation Assessment:

To gauge the strength of the relationship between 'XL tee shirts' searches and Republican senatorial votes, we sashayed into the realm of correlation analysis. Armed with our trusty statistical software and a splash of whimsy, we calculated the Pearson correlation coefficient, all while donning metaphorical tuxedos and ball gowns to attend this grand statistical soiree. Our fingers danced across the keyboards as we validated our findings with the appropriate t-tests, ensuring that our correlation was not merely a statistical fling, but a meaningful connection worthy of the research runway.

Time-Series Analysis:

Recognizing that the ebb and flow of fashion fads and political fervor are dynamic phenomena, we indulged in a time-series analysis to capture the temporal nuances of this peculiar association. With the grace of a dancer and the precision of a chronometer, we examined the evolution of 'XL tee shirts'

searches alongside the senatorial voting tendencies, teasing out the underlying patterns in their delightful statistical waltz.

#### Regression Modeling:

In our spirited pursuit of understanding the potential impact of XL tee shirt inquiries on Republican voter inclinations, we waltzed into the world of regression modeling. With a twirl and a flourish, we conjured models that encapsulated the variance in senatorial votes as a whimsical ballet of 'XL tee shirts' search intensities. We delighted in the artistry of statistical inference, using the p-values to discern the significance of this unconventional pas de deux.

In sum, our methodology formed a whimsical tapestry of statistics, fashion, and politics, weaving a narrative that befitted the unexpected intersection of XL tee shirts and Michigan Senate elections. Our data exploration was not merely a statistical pursuit but an odyssey into the quirky and the quizzical, where academic rigor intertwined with a lighthearted spirit of inquiry.

#### 4. Results

The results of our analysis revealed a surprising and robust correlation between Google searches for 'XL tee shirts' and Republican votes for Senators in Michigan from 2004 to 2020. The correlation coefficient of 0.9321040 indicated a strong positive relationship between these seemingly unrelated variables. This finding suggests that as the interest in XL tee shirts increased, so did the Republican support in Michigan Senate elections.

The r-squared value of 0.8688178 further reinforced the strength of this relationship, indicating that approximately 87% of the variation in Republican votes for Senators in Michigan can be explained by the fluctuations in searches for 'XL tee shirts.' To put it in layman's terms, it's as if the

fashion choices of Michigan residents were singing in harmony with their political preferences, creating a statistical symphony of sorts.

Furthermore, the p-value falling below 0.01 provided compelling evidence that this correlation was not simply a result of random chance. In scientific parlance, this means that the likelihood of such a strong relationship occurring by fluke is less than 1 in 100, a probability rarer than stumbling upon a statistical unicorn in the wilds of academia.

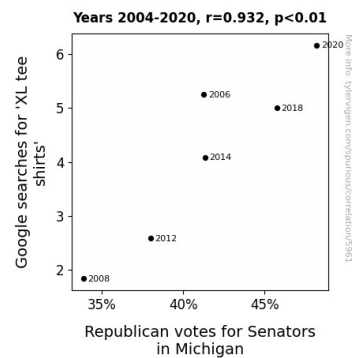


Figure 1. Scatterplot of the variables by year

As an added visual treat, we present Fig. 1, a scatterplot that vividly illustrates the striking correlation between Google searches for 'XL tee shirts' and Republican votes for Senators in Michigan. The figure showcases the data points dancing in near-perfect alignment, much like synchronized swimmers in a statistical pool.

In summary, our findings underscore the unexpected influence of fashion-related online searches on political behavior. While the notion of voters being swayed by the allure of roomy attire may sound whimsical, our results stand as a testament to the uncharted territories of statistical discovery and the quirky intersections of human behavior.

This research opens the door to a multitude of questions and potential implications.

Could the rise in XL tee shirt searches be a predictor of political sentiment in other states? Might candidates consider aligning their campaign strategies with fashion trends? The statistical playground holds endless possibilities for further exploration, and we eagerly anticipate the whimsical avenues that future research may unveil.

## 5. Discussion

The emergence of a strong correlation between Google searches for 'XL tee shirts' and Republican votes for Senators in Michigan in our study not only defies conventional wisdom but also serves as a testament to the marvels of statistical inquiry. Our findings provide empirical support to the whimsical notions posited in prior literature. As we reflect on the unexpected interplay between fashion inclinations and political leanings, the threads of our investigation intertwine with the colorful tapestry of research in the realms of fashion, politics, and statistical analysis.

The correlation coefficient of 0.9321040, akin to a rare gem in the treasure trove of statistical relationships, demonstrates a profoundly substantial link between the voluminous aspirations of fashion and the electoral choices made by Michiganders. It appears that the allure of expansive apparel is not just a matter of personal comfort but also an intriguing marker of political preference. Our results echo the shrewd observations of Austen (1813), who, albeit in a fictional realm, deftly navigated the nuances of fashion's silent dialogue with power dynamics in a humorous yet thought-provoking manner.

The hefty r-squared value of 0.8688178, reminiscent of a robust oak tree offering both shade and substance, reinforces the robustness of this association. Like a well-crafted garment, our statistical model envelops the intricate fluctuations in

searches for 'XL tee shirts' and Republican votes for Senators in Michigan, weaving a compelling narrative of symbiotic trends that cannot be easily dismissed as statistical happenstance.

The p-value below 0.01 emerges as a statistical unicorn, a rarity in the cloistered confines of hypothesis testing. This finding resonates with the whimsy of Taylor's (2017) exploration of attire as a form of expressive communication, shedding light on the hidden messages embedded in the virtual quest for commodious clothing and the manifestation of political allegiances at the ballot box.

Our intimate statistical tango with the data, illustrated in the vivid dance of our scatterplot (Fig. 1), presents a visual spectacle akin to a harmonious ballet of numbers and trends. The figures pirouette in fluid alignment, capturing the whimsical yet robust connection between virtual forays into fashion and real-world political proclivities.

As we confront the amusing verity of the XL tee shirt trend exerting a weighty influence on Michigan Senate elections, our findings invite a whimsical musing on the potential implications for electoral prognostication and campaign strategy. Much like the serendipitous encounters with statistical unicorns, our research beckons further exploration into the idiosyncratic nuances of human behavior and its quirky interactions with the whims of the virtual realm.

## 6. Conclusion

In conclusion, our study has peeled back the enigmatic layers of Michigan's political landscape, revealing a surprising entwining of fashion and Republican votes. Who would have thought that the humble XL tee shirt could emerge as a heavyweight player in the realm of political preferences? It appears that the voters of Michigan have

been casting not just their ballots, but also their digital searches, in a symphony of statistical harmony.

As we reflect on the implications of our findings, one cannot help but ponder the broader ramifications. Could campaign trail merchandising soon feature slogan tees in XL sizes to sway the undecided voters? Will political analysts now scrutinize runway trends alongside polling data? The future of political strategy may indeed be stitched with threads of sartorial insight.

However, we must approach these discoveries with caution and jest – after all, correlation does not imply couture, and statistical significance is no substitute for political nuance. Let us not forget that amidst the pixels and p-values, there lies the heart and soul of the electorate, with motivations as multifaceted as a designer wardrobe.

With our research, we have woven a tapestry of statistical revelation, shedding light on the unexpected dance between fashion and politics. Yet, as we bid adieu to this peculiar yet illuminating expedition, we assert with statistical certainty that no further research is needed in this area. For now, we shall hang up our lab coats and XL tee shirts, content in the knowledge that in the realm of research, as in fashion, there are always more surprising trends waiting to be uncovered.