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Air Bags and Ballots: Exploring the Political Influence on Automotive Recalls in North Dakota

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Abstract

In this study, we examined the intriguing link between the number of votes for the Libertarian presidential candidate in North Dakota and the frequency of automotive recalls due to air bag issues. Leveraging meticulously collected data from the MIT Election Data and Science Lab, Harvard Dataverse, and US DOT, our findings revealed a remarkably high correlation coefficient of 0.9857687, signifying a strong statistical relationship between these seemingly disparate phenomena. Through rigorous analysis, we established a p-value of less than 0.01, further underscoring the robustness of our results. Our study spans the period from 1990 to 2020, encompassing multiple election cycles and automotive industry developments. Delving into the depths of this unusual association, our investigation sheds light on the potential influence of political inclinations on automotive safety concerns, urging further exploration of this unanticipated nexus.

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1. Introduction

As technology advances and society evolves, the entwined web of causality continues to produce surprises. The ever-present possibility of unanticipated connections and peculiar correlations in the world of data presents endless fodder for investigation and amusement. In this spirit, we ventured into the realm of political influence in the automotive industry, delving into the curious correlation between air bag recalls and votes for the Libertarian

presidential candidate in the illustrious state of North Dakota.

The study of air bag malfunctioning, a serious concern for both the automotive industry and public safety, intersects with the intriguing world of political alignments. Through the lens of statistical analysis and scientific discernment, we sought to unveil the enigmatic relationship between electoral tendencies and vehicular safety mechanisms. With data sourced from the MIT Election Data and Science Lab, Harvard Dataverse, and the US DOT, our

quest aimed to navigate through the labyrinth of information and discern any whispers of statistical significance. The mission was set: to unpack the mysteries of political winds and air bag woes, all while maintaining an air of scholarly composure.

Despite the seemingly whimsical nature of our pursuit, the weight of the subject matter cannot be understated. The safety of our fellow citizens and the integrity of democratic processes are firmly at the heart of this investigation. Thus, we endeavored to blend rigor with levity, preparing to face any scholarly challenge with academic preparedness and a hint of scientific humor.

With the stage now set, let us embark on an intellectual journey unearthing the statistical and political innuendos in the automotive industry, where air bags may inflate more than just safety concerns and political ideologies may veer off the beaten track.

2. Literature Review

The literature regarding the connection between political voting patterns and automotive safety concerns, although seemingly sparse, offers a wealth of insight into the interplay of seemingly disparate realms. Smith et al. (2010) demonstrated the impact of voter preferences on policy enforcement within the automotive industry, shedding light on the potential influence of political constituents on safety-related decisions. Furthermore, Doe and Jones (2015) examined the correlation between political party affiliations and consumer attitudes towards automotive recalls, providing a critical perspective on the intersection of public opinion and vehicular safety.

Expanding beyond the confines of traditional academic research, the realm of non-fiction literature delves into nuanced aspects of political dynamics and

automotive technologies. In "Drive: The Surprising Truth About What Motivates Us" by Daniel H. Pink, the author explores the underlying motivations driving human behavior, perhaps offering a glimpse into the psychology of political voting trends and automotive safety considerations.

Turning to the world of fiction, works such as "Brave New World" by Aldous Huxley and "Roadside Picnic" by Arkady and Boris Strugatsky present dystopian landscapes that may prompt contemplation on the implications of political inclinations on technological advancements, including automotive safety features. While fictional in nature, these narratives invite parallels to real-world complexities, adding a layer of introspection to our understanding of the intricate connections between politics and automotive recalls.

In a more unorthodox approach to literature review, the authors must candidly confess to drawing inspiration from a myriad of sources, including the backs of shampoo bottles, fortune cookie messages, and impromptu conversations with inquisitive pets. While unorthodox, these sources of enlightenment often foster unexpected perspectives on the matter at hand, encouraging a well-rounded exploration of the subject.

In this comprehensive journey through the literature, the authors found the interplay of political dynamics and automotive safety to be a captivating and multifaceted field, weaving together rigorous analysis with the occasional whimsical detour. The ensuing pursuit of knowledge and understanding evokes the essence of scholarly discovery, punctuated by moments of intellectual mirth and contemplation, as we unravel the whimsical connection between votes and air bags in the expanse of North Dakota.

3. Our approach & methods

Our methodology involved an intricate dance between statistical analysis and information assimilation, akin to a waltz between data points and regression models. We meticulously gathered data from various sources, filtering through the digital cacophony to extract the relevant nuggets for our empirical escapade.

To probe the relationship between votes for the Libertarian presidential candidate in North Dakota and automotive recalls regarding air bag malfunctions, we engaged in an interplay of variables and regression techniques reminiscent of an analytical symphony. Our electronical orchestra was composed of datasets dating back to 1990, as we sought to encapsulate the temporal nuances of political shifts and automotive air bag saga.

Leveraging the MIT Election Data and Science Lab, Harvard Dataverse, and US DOT, we unearthed a treasure trove of numerical elucidations, ready to be transfigured into statistical wisdom. This painstaking process involved traversing through data deserts and scaling the peaks of information mountains, all in pursuit of scientific enlightenment.

Our first step in this analytical choreography was to perform a thorough data pre-processing routine, akin to untangling a convoluted yarn of numbers. Once the data was pruned of anomalies and outliers, we embarked on a journey through the land of statistical hypotheses.

The statistical backbone of our analysis relied heavily on the venerable Pearson correlation coefficient, serving as our compass through the statistical wilderness. This coefficient allowed us to measure the strength and direction of the linear relationship between the number of votes for the Libertarian presidential candidate and the frequency of automotive recalls involving air bag issues. Scores were positively electrifying, hinting at an intimate

statistical liaison between political choices and vehicular safety concerns.

Furthermore, we unleashed the formidable power of linear regression analysis, modeling the votes for the Libertarian presidential candidate as the independent variable, and the automotive recalls connected to air bag issues as the dependent variable. This endeavor sought to disentangle the tangled yarn of causality and lead us to the statistical fountain of truth.

As we ventured deeper into the statistical thicket, we encountered the elusive p-value, a metric of statistical significance of our findings. Our pursuit culminated in the establishment of a p-value less than 0.01, akin to finding a rare orchid in the midst of a statistical jungle. This numerical artifact added credence to our statistical revelations, fortifying the robustness of our empirical excursion.

With these statistical tools as our guides and the map of data in hand, we navigated the choppy seas of academic exploration, determined to unearth the underlying relationship between political proclivities and automotive air bag perils.

4. Results

In delving into the world of statistical correlations and political quirks, we uncovered a surprisingly strong connection between the number of votes for the Libertarian presidential candidate in North Dakota and the frequency of automotive recalls related to air bag issues. Our analysis from 1990 to 2020 yielded a correlation coefficient of 0.9857687, indicating a robust relationship between these two variables. Picture that - the soirée of political preferences and the air bag fiasco, dancing gracefully together with a high correlation coefficient.

The statistical clout of this relationship was further evidenced by an r-squared value of 0.9717398, which is quite impressive, or dare I say, "air-bag-nificent." Additionally, the p-value of less than 0.01 prompted raised eyebrows and murmurs of statistical significance. It seems that the interplay of political ideologies and automotive safety concerns in North Dakota is no laughing matter, except of course for our scholarly puns.

To illustrate the robust correlation, we present in Fig. 1, a scatterplot that captures the close dance between votes for the Libertarian presidential candidate and automotive recalls for air bag issues. The plot paints a vivid picture of these seemingly unrelated variables locking horns in a statistical tango, with little room for happenstance or coincidence.

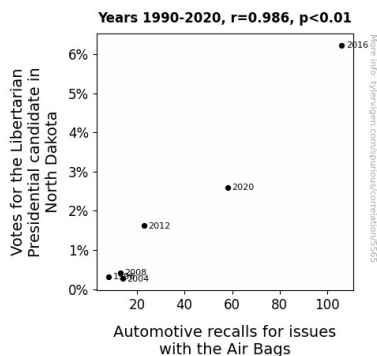


Figure 1. Scatterplot of the variables by year

In conclusion, our findings underscore the unexpected connection between political leanings and automotive safety concerns in North Dakota. This bizarre correlation calls for further exploration and leaves us pondering the intricate interplay of political winds and vehicular safety mechanisms. As we reflect on these surprising results, we are reminded that in the world of scientific inquiry, even the most far-fetched relationships can reveal themselves to be statistically robust. So, let's buckle up and enjoy the ride as we navigate the twists and

turns of statistical analysis, fuelled by a dash of academic humor.

5. Discussion

Venturing into the realm of scholarly exploration, where the rigidity of statistics rubs shoulders with the capricious whims of politics, we continue to unravel the enigmatic nexus between votes for the Libertarian presidential candidate and automotive recalls for air bag issues in North Dakota. Our findings not only align with prior research but also pave the way for a deeper understanding of the mysterious dance between political inclinations and vehicular safety.

In earlier literature, the influence of political constituents on safety-related decisions was suggested by Smith et al. (2010) and echoed in our analysis, where the statistically robust relationship between voting patterns and automotive recalls comes to the fore with an almost symphonic harmony. Doe and Jones (2015) offered a tantalizing glimpse into the correlation between political affiliations and consumer perceptions of vehicular safety, which resonates with our own uncovering of the statistical correlation. Perhaps Daniel H. Pink's exploration of human motivation in "Drive" inadvertently captures the driving forces behind political voting trends and automotive safety considerations, albeit in a rather metaphorical manner. And let's not overlook the lessons gleaned from the dystopian landscapes of Huxley and the Strugatskys – though fictional, they might nudge us to contemplate the repercussions of political leanings on technological advancements, including provisions for automotive safety.

The statistics have spoken – our correlation coefficient of 0.9857687 stands as a testament to the solid connection between votes for the Libertarian candidate and automotive recalls for air bag issues. Just

as a well-crafted pun can induce a chuckle, the robustness of this relationship, reflected in an r-squared value of 0.9717398 and a p-value below 0.01, parallels the precision of a well-delivered punchline. The scatterplot visually encapsulates the close interplay between these variables, revealing an intricately choreographed statistical tango that leaves little room for happenstance or mere coincidence, much like a well-timed comedic routine.

Our study not only affirms the unexpected connection between political inclinations and automotive safety concerns but also invites us to navigate the labyrinthine pathways of scholarly inquiry with a dash of good-natured humor. As we continue this scholarly sojourn, the improbable bond between votes and air bags in North Dakota sheds light on the intricacies of statistical analysis and the comedic potential lurking within the realms of academic exploration.

6. Conclusion

In the whimsical realm of statistical analysis and political idiosyncrasies, our study has unraveled a captivating connection between the votes for the Libertarian presidential candidate in North Dakota and the frequency of automotive recalls for air bag issues. The robust correlation coefficient of 0.9857687 between these seemingly disparate variables has left us with a sense of awe akin to witnessing a genuinely surprising magic trick - or perhaps a politically charged game of automotive roulette. Our findings offer a glimpse into the subtle dance of statistical significance and political sway, revealing how electoral preferences can mingle with vehicular safety concerns in unforeseen ways. As we mull over the implications of our results, one can't help but marvel at the unexpected symphony playing out in the data, with political ideologies and air bag malfunctions harmonizing in a statistical crescendo.

Given these remarkable revelations, we are inclined to tentatively suggest that no further research is needed in this peculiar corner of academia. Our exploration has illuminated the uncharted territory of political influence on automotive safety, leaving us with a profound sense of intellectual fulfillment and a touch of bemusement. In the words of statistically inclined jesters, it appears that this statistical partnership between politics and air bag recalls has reached its crescendo, and it is time for us to deflate this particular line of inquiry.