The Highwaymen: Exploring the Hold-Up between Robberies in New Mexico and Car Crashes in the US

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Abstract

This study delves into the intriguing yet understudied connection between robberies in New Mexico and car crashes across the United States. Utilizing data from the FBI Criminal Justice Information Services and Statista, we analyzed the temporal dynamics from 1991 to 2014 to uncover a surprising correlation. Our findings reveal a robust correlation coefficient of 0.8346049 with a statistically significant p-value of less than 0.01, indicating a strong association between the two seemingly disparate phenomena. The implications of this relationship extend beyond mere coincidence, inviting further investigation into the intertwined nature of criminal activities and road safety. This research sheds light on the intricate interplay between law enforcement and transportation, offering a fresh perspective that is both thought-provoking and, dare we say, highway robbery in its own right.

1. Introduction

The intersection of criminal behavior and traffic safety has long been a topic of interest, yet the specific linkage between robberies in New Mexico and car crashes in the broader United States has been a less traversed terrain in academic research. While the disparate nature of these occurrences might seem as incongruous as a tumbleweed rolling through rush-hour traffic, our investigation sets out to unravel the peculiar relationship between the two.

As researchers, we are accustomed to turning over every stone in our pursuit of understanding, but even we were caught off guard by the unexpected alignment of these seemingly unrelated events. Our findings have unveiled a correlation so striking, it's as if Bonnie and Clyde themselves were steering the wheel of statistical destiny. Pardon our penchant for dramatization, but the strength of the association we've uncovered between highway robberies in the Land of Enchantment and vehicular mishaps nationwide is nothing short of a statistical hold-up.

With furrowed brows and a mounting sense of curiosity, we embarked on this expedition into uncharted statistical territory. The data we sought lay buried in the annals of FBI Criminal Justice Information Services and Statista, waiting to be unearthed like buried treasure from a treasure map made of Excel spreadsheets.

2. Literature Review

Smith (2010) deduced that the prevalence of robberies in New Mexico exhibits fluctuations over time, with certain periods resembling a rollercoaster ride of criminal activity. This rollercoaster, much like the emotional journey of watching a telenovela, takes unsuspecting viewers through the twists and turns of criminal behavior. We must acknowledge, however, that car crashes in the U.S. have been a topic of much interest in their own right, with Doe (2015) illustrating the myriad factors that contribute to these vehicular mishaps, much like a complicated recipe for disaster.

In "Highway Economics" by Anderson (2018), a thorough inquiry into the economic implications of highway transportation reveals that the cost of road accidents extends far beyond the physical damage, much like the aftermath of a bank heist. Conversely, in "Car Trouble" by Brown (2013), an exploration of the various mechanical failures contributing to car crashes paints a picture of vehicular turmoil reminiscent of a particularly chaotic action movie car chase scene.

Turning to the realm of fiction, "The Great Gatsby" by Fitzgerald (1925) may at first seem unrelated to our topic, but consider the wild parties, extravagant lifestyles, and sense of recklessness evoked in the novel - it's not hard to draw a tenuous parallel with the goings-on of highway robberies and car crashes. Additionally, the aptly titled "Wheels of Fortune" by Speedster (1999) immerses readers in a world of high-speed chases and daring escapes, mirroring the adrenaline-fueled nature of both criminal activities and traffic incidents.

Further regarding our methodology, in "Family Dollar: A Comprehensive Study of Instore Receipts and Random Ramblings" by Anonymous (2017), we uncovered crucial insights by meticulously scouring plunging paper rolls for any stray correlation, whether it involved potato chips and soda or an unexpected connection between robberies and car crashes. While we don't recommend this approach for academic pursuits, the results proved to be surprisingly enlightening.

3. Research Approach

Our research methodology employed a multi-faceted approach that aimed to lasso together the disparate datasets and corral them into a coherent analysis. We began by harnessing data from the FBI Criminal Justice Information Services and Statista, which served as the watering holes from which we quenched our thirst for statistical insight. The periods between 1991 and 2014 were our chosen trail to follow, as we sought to apprehend the temporal nuances of these elusive phenomena and, if you'll excuse the pun, drive through the winding roads of correlation.

To map the string of robberies in New Mexico, our research posse used the FBI Crime Data Explorer, carefully navigating through the thorny underbrush of criminal data to pinpoint the instances of highway banditry. As for the car crash data, we rode shotgun with the National Highway Traffic Safety Administration (NHTSA), corralling information from their Fatality Analysis Reporting System (FARS) and General Estimates System (GES). With the finesse of a rodeo cowboy, we tamed the unwieldy datasets into submission, ready to saddle up for our statistical journey.

Next, we deployed the trusty lasso of statistical analysis to capture the fleeting patterns of association. We employed Pearson correlation coefficients, leveraging its seasoned expertise in wrangling quantitative relationships. This stalwart statistical steed allowed us to quantify the degree of connection between the incursions of highway bandits and the calamities on the open road, while avoiding the statistical tumbleweeds that often impede rigorous research.

With the data wrangled, corralled, and accounted for, we subjected our findings to rigorous scrutiny, mindful not to let any wild outliers bolt through our analytical fences. The statistical hounds were released to sniff out any lurking confounders, lest they seek refuge in the dusty corners of our data saloon. Our methodology aimed to leave no stone unturned, keeping an eagle-eyed lookout for any potential statistical rustlers trying to hoodwink our findings.

In summary, our methodology combined the unyielding precision of statistical analysis with the frontier spirit of exploratory research, ultimately rounding up a bounty of evidence that sheds light on the unexpected connection between robberies in New Mexico and car crashes across the United States.

4. Findings

The analysis revealed a notable correlation coefficient of 0.8346049 between robberies in New Mexico and car crashes in the United States, indicating a strong positive relationship between these seemingly unrelated phenomena. The r-squared value of 0.6965654

suggests that approximately 70% of the variation in car crashes can be explained by the variation in robberies in New Mexico.

The p-value of less than 0.01 indicates that the correlation is statistically significant, affirming that this connection is not just a chance encounter. This finding suggests that as the number of robberies in New Mexico increases, there is a corresponding increase in car crashes across the United States. One might say this correlation is as clear as the painted lines on a freshly paved road.

In Figure 1, the scatterplot visually encapsulates the compelling association between these two variables, resembling a cross-country road trip with stops at every crime scene and crash site along the way. The strength of this relationship is striking, much like stumbling upon a desert oasis after a long and arduous statistical journey.



Figure 1. Scatterplot of the variables by year

This unsuspected convergence of criminal activity and vehicular mayhem prompts reflection on the broader implications of these findings. The interplay between law enforcement and transportation safety, it seems, is not just a matter of policing the streets but also safeguarding the nation's highways and byways. This research valiantly ventures into uncharted statistical terrains, shedding light on a connection that, much like a coyote in the night, has long lurked in the shadows of data analysis.

This unexpected correlation between robberies in New Mexico and car crashes in the US invites further inquiry and contemplation, encapsulating the essence of a statistically wild ride down the interstate of academic investigation.

5. Discussion on findings

The results of our analysis uncover a striking relationship between robberies in New Mexico and car crashes in the United States, providing empirical support for the curious

linkage hinted at in earlier literature. The notable correlation coefficient of 0.8346049 aligns with the findings of Smith (2010), who described the rollercoaster-like fluctuations in robbery prevalence. Just as riding a rollercoaster elicits a mix of fear and exhilaration, our findings evoke a similar blend of amazement and intrigue at the intertwined nature of criminal activities and road safety.

In this statistical rollercoaster, the p-value of less than 0.01 serves as the exhilarating loop-de-loop, confirming the robustness of the relationship. Much like a specially designed recipe, the findings provide substantial evidence that as the occurrences of robberies in New Mexico fluctuate, there is a corresponding oscillation in car crashes across the nation. This robust statistical recipe, with its strong p-value flavor, leaves little room for doubt and hints at a novel way to play with crime and crash data.

Our results also align with the multifaceted analysis presented by Anderson (2018), showcasing the intricate economic implications of highway transportation. The variation in car crashes explained by the variation in robberies could be likened to the costs of road accidents extending beyond just the physical damage – the ripple effects of criminal activities, much like a highway hold-up, reach far and wide. This undeniable correlation has now become the unexpected, yet intriguing centerpiece of the highway economics tableau, demonstrating that there may indeed be some "high stakes" involved in the interconnected dynamics of crime and crashes.

Building on the unexpected connections drawn from fiction, our findings reflect the pulsating energy and risky maneuvers commonly associated with high-speed chases and daring escapades, mirroring the adrenaline-fueled nature of both criminal activities and traffic incidents. The visualization of the scatterplot, depicting the compelling association between robberies in New Mexico and car crashes across the U.S., brings to mind an enthralling cross-country road trip with stops at each crime scene and crash site. This vivid imagery serves as a testament to the robustness and strength of this connection, akin to encountering a desert oasis after embarking on a statistical journey through uncharted terrains.

In summary, our results offer compelling evidence of the unexpected and compelling link between robberies in New Mexico and car crashes in the U.S., defying conventional expectations and urging further exploration. These findings beckon us to delve deeper into the statistical wilderness, where intriguing patterns may well emerge from the shadows of data analysis, much like a coyote emerging from the darkness of the night.

6. Conclusion

In conclusion, our study has unveiled a compelling correlation between robberies in the enchanting state of New Mexico and car crashes across the sprawling expanse of the United States. The strength and statistical significance of this association suggest a deeper

entanglement between criminal activities and road safety, akin to a tumbleweed having a secret rendezvous with a roadrunner. Our findings not only raise eyebrows but also hint at a potential avenue for further exploration, much like stumbling upon a mysterious detour during a road trip.

The robust correlation coefficient and visually captivating scatterplot paint a clear picture of the interconnectedness of these seemingly disparate phenomena, much like finding hidden treasures on a convoluted statistical treasure map. The implications of this unexpected convergence extend beyond the realm of academic curiosity, offering a fresh perspective that is as illuminating as a beacon on a dark desert highway.

However, as much as we relish the thrill of unraveling statistical mysteries, we must acknowledge that every statistical road has its end. In the spirit of closure, we assert that no more research is needed in this area, for we have confidently navigated the statistical expanse and arrived at a noteworthy destination, much like voyagers who have triumphantly reached the end of a particularly intriguing road trip.