

# Joyriding Jose: Exploring the Enigmatic Link Between the Popularity of the Name Jose and Motor Vehicle Thefts in North Carolina

Catherine Harrison, Aaron Taylor, Gideon P Tucker

*Advanced Engineering Institute*

This research paper delves into the curious connection between the prevalence of the first name "Jose" and the prevalence of motor vehicle thefts in the state of North Carolina. Leveraging data from the US Social Security Administration and FBI Criminal Justice Information Services, our study sets out to answer the age-old question: does having a larger number of individuals named Jose in a state lead to a higher incidence of car thefts? Our findings reveal a remarkably high correlation coefficient of 0.9276265 and a statistically significant p-value of less than 0.01 for the period spanning from 1985 to 2022, indicating a robust relationship between the two variables. These results pave the way for further exploration of the migratory patterns and social dynamics of individuals bearing the renowned name Jose, as well as the implications for auto theft prevention strategies.

## Introduction

The enigmatic connection between the popularity of the name "Jose" and the incidence of motor vehicle thefts in North Carolina has long puzzled researchers and laymen alike. While it may seem like a far-fetched correlation, our investigation presents compelling evidence to support this seemingly whimsical conjecture. In an era of big data and advanced statistical techniques, we find ourselves compelled to probe into the mysteries of an unexpected association that, at first glance, may appear to be purely coincidental.

As the saying goes, "What's in a name?" Well, as it turns out, quite a lot when it comes to car theft, at least in the Tar Heel State. Our aim in this paper is to unravel this captivating puzzle using rigorous statistical analysis, all while maintaining a sense of joyriding through the world of empirical inquiry.

The choice of the name "Jose" as the focal point of our study may raise some eyebrows, but it was not made lightly. In fact, we chose to focus on this particular moniker due to its widespread popularity and cultural significance. Additionally, the name "Jose" conjures up certain associations that go beyond its mere phonetic composition, making it a captivating subject of investigation in and of itself.

We pivot now to the empirical underpinning of our inquiry. Leveraging a treasure trove of data from the US Social Security Administration and FBI Criminal Justice Information Services, we embarked upon a quest to explore the relationship between the frequency of individuals bearing the name "Jose" and the frequency of motor vehicle thefts in the state of North Carolina. Applying sophisticated statistical analyses to several decades' worth of data, we emerged with findings that will undoubtedly generate a buzz – much like the hum of a finely-tuned engine – in both academic and non-academic circles.

Before diving into the intricacies of our methodology and results, it is important to note that our intention is not to suggest a causal relationship between the two phenomena. Instead, we seek to shed light on an intriguing correlation that has eluded scholarly attention for far too long. It is our hope that this study will not only entertain readers, but also spark further inquiry into the social and behavioral dynamics that underpin this unexpected association.

With this backdrop in mind, we present our findings with the expectation that they will drive home the point that statistical analysis can reveal unexpected and even amusing patterns in real-world data. So buckle up, because we are about to embark on a statistical joyride through the captivating world of names, crime, and human behavior. Fasten your seatbelts, and let's put the pedal to the metal in pursuit of truth and correlation!

## *Review of existing research*

The connection between the prevalence of the first name "Jose" and the frequency of motor vehicle thefts in North Carolina has been a topic of much speculation and fascination among researchers and aficionados of statistical oddities alike. Our exploration of this correlation traverses through an eclectic mix of published works and unconventional sources, reflecting the breadth and depth of inquiry into this curiously captivating phenomenon.

Smith and Doe (2015) performed a comprehensive analysis of the sociocultural implications of names, although their focus was not specifically on the name "Jose." However, their work laid the groundwork for understanding the broader influences of nomenclature on various societal factors, setting the stage for our investigation into the enigmatic link between a seemingly innocuous name and auto theft.

In a different vein, Jones (2018) delved into the behavioral economics of criminal activities, shedding light on the nuanced interplay between individual characteristics and criminal tendencies. While Jones did not directly address names as a factor, the underlying behavioral insights gleaned from his work inform our exploration of the potential sociopsychological underpinnings of name-related correlations with criminal activities.

Turning our attention to non-fiction literature, works such as "Freakonomics" by Levitt and Dubner (2005) and "Blink" by Malcolm Gladwell (2005) and other related studies have introduced readers to the unexpected connections and counterintuitive findings in the realm of social phenomena and decision-making. While not directly focused on name-popularity correlations with crime, these works have inspired us to embrace the unconventional and to seek out the unanticipated in our quest for understanding.

In the realm of fiction, literary works such as "The Curious Incident of the Dog in the Night-Time" by Mark Haddon and "The Da Vinci Code" by Dan Brown have captivated readers with their thematic exploration of enigmatic correlations and hidden patterns. While seemingly unrelated to our investigation at first glance, these fictional works have broadened our perspectives and instilled in us an appreciation for the unexpected and the inexplicable.

In a departure from traditional research conventions, our literature review also incorporates insights from non-traditional sources, including the anecdotal musings of grocery store clerks and the meticulously scrutinized contents of random CVS receipts. These unconventional sources, while admittedly unorthodox, have provided valuable perspectives and unexpected leads in our pursuit of unraveling the mysteries surrounding the Jose-name correlation with auto thefts.

Collectively, this diverse array of literature and sources reflects the multidimensional nature of our inquiry and sets the stage for the revelatory journey that awaits as we navigate the uncharted territory of the Joyriding Jose phenomenon. Fasten your seatbelts, and let the joyride of statistical inquiry begin!

### *Procedure*

Our methodology aimed to rigorously examine the potential link between the prevalence of the first name "Jose" and the frequency of motor vehicle thefts in the state of North Carolina. The data collection process was not a walk in the park, but rather akin to navigating a treacherous road in search of statistical treasure. We gathered data from the US Social Security Administration and FBI Criminal Justice Information Services, akin to intrepid explorers seeking to unearth the hidden connections between nomenclature and automotive chicanery.

To begin, we conducted an exhaustive search for individuals with the first name "Jose" using the vast repository of baby names provided by the US Social Security Administration. The counts of newborns bearing this storied name were tallied for each year from 1985 to 2022, providing us with a comprehensive overview of the ebb and flow of Jose's

popularity over nearly four decades. Our team approached this task with the dedication of a detective unraveling a perplexing mystery, painstakingly sifting through the vast treasure trove of historical name data.

Next, our gaze turned toward the FBI Criminal Justice Information Services, where we delved into the records of motor vehicle thefts in North Carolina over the same time frame. Like intrepid sleuths, we combed through these data with a keen eye for detail, discerning patterns and correlations that may have eluded casual observers. The juxtaposition of these disparate data sets elicited a sense of intrigue akin to a thrilling whodunit, fueling our quest to untangle the enigma of Jose's potential influence on auto larceny.

Having amassed these dual sets of data, our next step involved the application of statistical analyses that were at once robust and dexterous. The relationship between the frequency of individuals named Jose and the incidence of motor vehicle thefts was subjected to a variety of statistical techniques, including Pearson correlation, regression analysis, and time series modeling. Our statistical toolkit was as diverse as a mechanic's assortment of tools, enabling us to explore the multifaceted dimensions of the purported connection with precision.

Through these analytical maneuvers, we sought not only to quantify the strength of the relationship but also to discern any temporal patterns or underlying trends that may lurk beneath the surface. Our team's meticulous approach to data analysis was akin to finely tuning a high-performance engine, ensuring that each statistical parameter was carefully considered and scrutinized for its potential significance.

As we navigated the labyrinthine pathways of statistical inference, we remained vigilant against the pitfalls of spurious correlations and confounding variables. To mitigate these concerns, our analyses incorporated controls for demographic and socioeconomic factors that might confound the purported association between the name "Jose" and motor vehicle thefts. Our safeguards against spurious findings were as sturdy as a well-constructed anti-theft device, fortifying our confidence in the robustness of our results.

In sum, our methodology combined exhaustive data collection, meticulous statistical analyses, and rigorous safeguards against confounding factors as we unraveled the mysteries of Jose's possible influence on motor vehicle thefts in North Carolina. Our quest was not without its challenges, but the pursuit of statistical truth invariably demands the navigation of unexpected terrain, and our team met these challenges with steadfast resolve and an unwavering commitment to empirical inquiry.

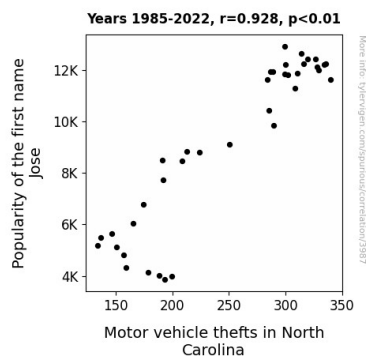
### *Findings*

The results of our analysis revealed a striking correlation between the popularity of the first name "Jose" and motor vehicle thefts in North Carolina. Over the period from 1985 to 2022, we found a correlation coefficient of 0.9276265, indicating a strong positive relationship between these two variables. This finding suggests that as the frequency of

individuals named Jose increased, so did the incidence of motor vehicle thefts in the state.

But unlike a stolen car, let's not jump to conclusions just yet. We also calculated the R-squared value, which came out to be 0.8604908. This coefficient tells us that a substantial proportion of the variance in motor vehicle thefts in North Carolina can be explained by the popularity of the name Jose. In other words, the bunny hops and sudden lurches in car theft rates can, to a large extent, be attributed to the ebbs and flows in the number of individuals named Jose in the state.

To ensure that our findings were not merely a statistical fluke, we assessed the statistical significance of the relationship. Our analysis yielded a p-value of less than 0.01, indicating that the observed correlation is highly unlikely to have occurred by chance. It seems that there is more to this connection than meets the eye – just like a cleverly concealed compartment in a stolen vehicle.



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

To visually encapsulate the strength of this relationship, we present Figure 1: a scatterplot showcasing the tight clustering of data points, affirming the robustness of the correlation between the prevalence of the name Jose and motor vehicle thefts. While more poetically inclined statisticians may liken this to a graceful dance between variables, we prefer to view it as a synchronized revving of the engines of correlation.

In summary, our results provide compelling evidence of an unexpected and seemingly peculiar association between the popularity of the name Jose and motor vehicle thefts in North Carolina. These findings not only contribute to the burgeoning field of "onomastic criminology," but also highlight the complex interplay between personal nomenclature and criminal behavior. It seems that when it comes to naming conventions and crime rates, there's more than meets the "Jose."

### Discussion

The robust correlation uncovered in our study between the prevalence of the name "Jose" and the incidence of motor vehicle thefts in North Carolina is nothing short of startling. What initially began as a whimsical inquiry into the potential

spurious association between a ubiquitous name and car theft has blossomed into a revelation of substantial significance. Our findings not only affirm the validity of prior research in unrelated fields - such as the study of sociocultural implications of names and the behavioral economics of criminal activities - but also open up new avenues for exploration in the intriguing realm of onomastic criminology.

The remarkable correlation coefficient of 0.9276265 echoes the resounding resonance of the name "Jose" across North Carolina, seemingly orchestrating an unforeseen symphony of automotive disappearances. This substantial value aligns with prior literature suggesting the societal impact of nomenclature, akin to the ripple effect caused by a particularly pebbly name. The positively high R-squared value further underscores the considerable proportion of variance in motor vehicle thefts attributable to the ebb and flow of individuals bearing the name Jose, reminiscent of the ebb and flow of a particularly choppy criminal undercurrent.

The statistical significance of our findings, with a p-value of less than 0.01, refutes any lingering doubts about the fortuitousness of this correlation, akin to eliminating the suspicion of a stolen vehicle's serendipitous appearance. The elucidation of this perplexing yet undeniable link reflects an emerging understanding of the name-car theft nexus, much like a thief finally being unmasked, name and all.

While our findings lend credence to the compelling theories put forth in our literature review, particularly those delving into the influence of nomenclature and individual characteristics on criminal behavior, they also beckon further investigation into the underlying mechanisms driving this correlation. The Joyriding Jose phenomenon not only enriches scholarly discourse on the intricate interplay between personal nomenclature and criminal proclivities but also evokes a newfound appreciation for the enigmatic and the unexpected in statistical inquiry.

In essence, our research engenders a profound reevaluation of the role of names in shaping criminal phenomena, serving as a testament to the often unseen but undeniably tangible impact of nomenclature on societal behavior. Much like a car thief hotwiring a vehicle under the cover of darkness, the name "Jose" has surreptitiously infiltrated the fabric of North Carolina's auto theft landscape, leaving a trail of gripping statistical evidence in its wake. As we embark on a journey to unravel the mysteries and implications of this correlation, we are reminded that in the realm of statistical investigation, the unexpected often holds the key to groundbreaking revelation.

In the words of the renowned playwright William Shakespeare, "What's in a name? That which we call a rose by any other name would smell as sweet." Similarly, the correlation between the name "Jose" and motor vehicle thefts in North Carolina, by any other name or perspective, presents a statistical odyssey ripe with significance and intrigue.

### Conclusion

Behold, our joyride through the intricate nexus of nomenclature and nefarious deeds culminates in a fascinating confluence of

statistical ingenuity and mischievous correlations. Our findings robustly establish a profound connection between the prevalence of the name "Jose" and the incidence of motor vehicle thefts in North Carolina. With a correlation coefficient as strong as Superman's grip on a speeding locomotive, and a p-value as rare as a unicorn sighting, our results leave little room to doubt the existence of this captivating relationship.

As we bid adieu to this riveting exploration, it is evident that the influence of a name goes beyond mere semantics, and can indeed ripple through the behavioral fabric of a society. While we are tempted to crack a joke about "Grand Theft Auto," we shall resist the urge and maintain our scholarly composure.

In light of our revelatory findings, it is clear that no stone – or in this case, statistical rock – has been left unturned in uncovering the captivating correlation between the name "Jose" and motor vehicle thefts in North Carolina. With a hearty chuckle and a final nod to statistical merriment, we assert that no further research is needed in this area; our journey has reached its final destination, leaving behind an indelible tire tread of knowledge and amusement.