



ELSEVIER



The Johnathon Job: An Examination of the Correlation between Popularity of the First Name Johnathon and Motor Vehicle Thefts in Pennsylvania

Christopher Hamilton, Andrew Tanner, Giselle P Tillman

Academic Excellence Institute; Pittsburgh, Pennsylvania

Abstract

This study delves into the curious correlation between the popularity of the first name "Johnathon" and the occurrence of motor vehicle thefts in the state of Pennsylvania. Leveraging data from the US Social Security Administration and the FBI Criminal Justice Information Services from the years 1985 to 2022, we sought to empirically investigate this overlooked relationship. Our analysis reveals a strikingly high correlation coefficient of 0.9812207 and a statistically significant p-value of less than 0.01, showcasing the strength of the association between the frequency of the name "Johnathon" and motor vehicle thefts. The implications of this noteworthy finding are discussed in light of the broader societal and criminological contexts. This research subtly highlights the unexpected connections that can emerge in the world of empirical inquiry, reminding us that even the most peculiar of correlations warrant serious contemplation.

Copyright 2024 Academic Excellence Institute. No rights reserved.

1. Introduction

The dramaturgy of nomenclature is an endlessly fascinating field, one that has tickled the fancy of researchers the world over. In the realm of behavioral economics, phenomena such as the "name-letter effect" have long captivated scholars, but the intersection of nomenclature and criminology remains a less-explored domain. Drawing on this curiosity, our study sets out to unravel the enigmatic connection between the frequency of the first name

"Johnathon" and the incidence of motor vehicle thefts within the state of Pennsylvania.

While the mere suggestion of a link between a specific moniker and criminal activity may raise an eyebrow or two, it is important to approach this investigation with the utmost statistical rigor and academic caution. We are not, after all, in the business of jumping to conclusions faster than a car thief in a hot pursuit.

The state of Pennsylvania, with its diverse urban and rural landscapes, provides an ideal backdrop for our inquiry. As a microcosm of the United States, it offers a rich tapestry of sociodemographic variables against which to examine the purported relationship between a name and nefarious misappropriation of automobiles. Our study harnesses the power of data from the US Social Security Administration and the FBI Criminal Justice Information Services, spanning a substantial temporal range from 1985 to 2022. This robust dataset allows for a comprehensive exploration of trends, fluctuations, and potentially hidden patterns, akin to the meticulous inspection of tire tracks at a crime scene.

As we embark on this curious endeavor, it is important to bear in mind the principle of *primum non nocere*, or "first, do no harm," a sentiment that extends beyond the realm of medicine and into the sphere of scholarly inquiry. Our aim is not to cast aspersions upon those bearing the name "Johnathon" nor to suggest a deterministic link between nomenclature and criminal propensity. Rather, our scholarly sleuthing is driven by a genuine quest for understanding, propelled by the recognition that the web of human behavior and societal phenomena is woven with threads of complexity and intrigue.

The forthcoming analysis holds the potential to unveil an unexpected nexus between the popularity of a given name and the illicit subculture of vehicular misappropriation, illuminating the subtle and often perplexing interplay of factors that influence criminal behavior. With due perspicacity, let us venture forth into this odyssey of statistical inquiry, ready to embrace the unexpected and the anomalous with the same fervor that propels us to solve a particularly confounding puzzle.

In the hallowed words of Sir Arthur Conan Doyle's Sherlock Holmes, "It is a capital mistake to theorize before one has data." With this tenet firmly in mind, we delve into

the empirical fabric of our investigation, mindful of the potential for surprising revelations and consequential implications that may emerge from this unlikely pairing of the "Johnathon" phenomenon and motor vehicle thefts in the Keystone State.

2. Literature Review

The literature on the correlation between personal names and societal phenomena is resplendent with intriguing findings and capricious curiosities. While the initial foray into the domain of nomenclature and criminality may seem far-fetched, the scholarly underpinnings of our investigation rest upon a solid foundation of perplexing correlations and unexpected associations. A compendium of studies by Smith et al. (2010), Doe et al. (2015), and Jones et al. (2017) provides a rigorous examination of the interplay between naming conventions and assorted social trends, laying a conceptual groundwork for our inquiry.

In "Book," the authors find that individual identities can shape social interactions in unforeseen ways, offering a glimpse into the nuanced tapestry of human behavior. Meanwhile, "The Name Connection" by Johnson (2012) delves into the potent psychological impact of nomenclature, elucidating the intricate web of meaning and symbolism woven into personal names. These theoretical underpinnings, combined with empirical investigations into the "name-letter effect," kindle a sense of scholarly intrigue that underscores the relevance of our endeavor.

Venturing further into the realm of literature, "Names and Numbers" by Adams (2016) provides a comprehensive exploration of statistical methodologies in the study of names, fostering a deeper understanding of the analytical tools and frameworks that underpin our own empirical inquiry. The interdisciplinary nature of this research endeavor is exemplified by the extensive

engagement with diverse disciplines such as linguistics, sociology, and criminology, shedding light on the multifaceted dimensions of the "Johnathon" phenomenon and its potential ramifications for motor vehicle thefts in Pennsylvania.

Amidst the scholarly oeuvre lies a rich tapestry of puns and jocular observations that unravel the idiosyncrasies of naming conventions, evoking a sense of levity that contrasts with the gravitas of empirical inquiry. However, amidst the lighthearted banter, the underlying implications and tangible ramifications of our findings loom large, reminding us that even the most whimsical of correlations can herald substantive insights into the enigmatic labyrinth of human behavior.

Turning to the realm of fiction, works such as "The Curious Case of Benjamin Button" by F. Scott Fitzgerald and "The Name of the Rose" by Umberto Eco, while not directly related to our topic, serve as a reminder of the timeless allure of enigmatic names and the intrigue they evoke within literary realms. This allusion to fictional narratives serves as a whimsical interlude, beckoning us to contemplate the perennial fascination with names and their indelible imprint upon our collective consciousness.

As the authors immerse themselves in the peculiar landscape of nomenclature and its potential entanglement with criminal misdeeds, it is pertinent to acknowledge the whimsical allure of pop culture representations that intersect with our area of inquiry. Shows such as "The Mentalist" and "Sherlock" offer a dramatic portrayal of investigative prowess, albeit within the context of solving criminal mysteries of a more traditional nature. The juxtaposition of these televised depictions with the empirical fabric of our investigation serves as a lighthearted reminder of the multifaceted nature of scholarly inquiry, wherein the serious and the whimsical converge in an

intricate tapestry of discourse and discovery.

In synthesizing the scholarly, fictional, and popular cultural strands that intertwine within the overarching narrative of this literature review, we are reminded of the capricious nature of human fascination and the compelling allure of unconventional correlations. With this whimsical medley of academic rigor and waggish repartee, we embark on a scholarly odyssey that promises to unravel the enigmatic connection between the popularity of the first name "Johnathon" and motor vehicle thefts in the Keystone State, inspired by the unyielding spirit of discovery and the perpetual quest for insight amidst the cloak-and-dagger artistry of empirical inquiry.

This whimsically culminating review of literature sets the stage for the forthcoming empirical analysis, underscoring the scholarly fervor that propels us onwards in our quest to decipher the anomalous correlation at the heart of our investigation.

3. Our approach & methods

To commence our investigation into the peculiar correlation between the frequency of the first name "Johnathon" and the incidence of motor vehicle thefts in Pennsylvania, we employed an elaborate and nuanced methodological approach. Our research team utilized a combination of data extraction, cleaning, and statistical analysis akin to the meticulous craftsmanship of a watchmaker endeavoring to unravel the enigma of time.

Data Procurement and Preprocessing:

The first step in our endeavor involved procuring data on the popularity of the name "Johnathon" from the US Social Security Administration's database of first names bestowed upon newborns. Leveraging this publicly available repository, we meticulously compiled yearly counts of

individuals christened with the name "Johnathon" from 1985 to 2022, aiming to capture the ebb and flow of nomenclatural preferences akin to navigating the currents of linguistic fashion. Furthermore, to ascertain the prevalence of motor vehicle thefts across Pennsylvania, we turned to the FBI Criminal Justice Information Services, extracting annual statistics on the incidence of this criminal transgression within the Commonwealth. Our team exercised the utmost caution in handling this data, treating it with a level of care akin to the delicate handling of stolen goods by a forensic investigator.

Statistical Analysis:

To interrogate the possible relationship between the popularity of the name "Johnathon" and motor vehicle thefts, we subjected the acquired datasets to a series of rigorous statistical analyses. First, we employed Pearson's correlation coefficient to quantify the strength and direction of the linear relationship between these two seemingly disparate variables. Our intention was to uncover any semblance of association, much like a detective striving to connect seemingly unrelated clues in a criminal case. Subsequently, we conducted a multiple linear regression analysis, seeking to disentangle the intricate web of causality between the frequency of the name "Johnathon" and the occurrence of motor vehicle thefts. This analytical endeavor resembled the unraveling of a complex and convoluted plot worthy of a mystery novel, albeit with the tools of mathematical inquiry at our disposal. Notably, we accounted for potential confounding variables such as socioeconomic indicators and regional demographic characteristics to ensure the robustness of our findings, much like a detective cross-referencing alibis and witness statements to corroborate a suspect's testimony.

Temporal Trends and Sensitivity Analyses:

In addition to the primary analyses, our methodological arsenal encompassed a thorough examination of temporal trends and the execution of sensitivity analyses to gauge the stability of our observed associations. We meticulously dissected the time-series dynamics of both the prevalence of the name "Johnathon" and the incidence of motor vehicle thefts, akin to a forensic pathologist meticulously scrutinizing the progression of postmortem changes. Further, sensitivity analyses scrutinized the resilience of our findings to variations in the inclusion of covariates and the temporal scope of the data, akin to stress-testing the resilience of an intricate criminal scheme to unanticipated disruptions.

Ethical Considerations and Limitations:

In our quest for academic inquiry, it is paramount to acknowledge the ethical dimensions and the potential limitations inherent in our study. While our analysis provides compelling insights into the curious linkage between the popularity of the name "Johnathon" and motor vehicle thefts in Pennsylvania, it is crucial to exercise caution in inferring causality or overstating the implications of our findings, much as a criminal investigator carefully weighs circumstantial evidence without leaping to premature conclusions. Moreover, the limitations of using aggregate data preclude the examination of individual-level associations and necessitate prudence in generalizing the findings to specific individuals bearing the name "Johnathon." Our research team remained acutely aware of these constraints, aligning our approach with the principles of sound scientific inquiry and academic integrity.

In summary, our methodology amalgamated the precision of statistical analysis with an appreciation for the intricacies of human behavior and demographic phenomena, mirroring the collaborative efforts of investigative units endeavoring to unravel the mechanisms underpinning enigmatic

criminal phenomena. The ensuing results of our empirical adventure are detailed in the succeeding section, where we confront the unexpected revelations engendered by our scholarly sleuthing.

4. Results

The data analysis has unveiled a notable correlation between the popularity of the first name "Johnathon" and the occurrence of motor vehicle thefts in Pennsylvania. The calculated correlation coefficient of 0.9812207 indicates a remarkably strong positive relationship between these seemingly unrelated variables. This finding suggests a connection as robust as the bonds securing a car to its parking spot. The r-squared value of 0.9627941 further underscores the potency of this association, revealing that a substantial proportion of the variance in motor vehicle thefts can be explained by variations in the frequency of the name "Johnathon." It appears that this correlation is as clear as a well-illuminated license plate on a dark night.

The statistical significance of the relationship is buttressed by a p-value of less than 0.01, signaling that the observed correlation is highly unlikely to have occurred by random chance alone. This outcome is as striking as stumbling upon a car alarm amidst the tranquility of a deserted parking lot. In simpler terms, the likelihood of such a strong association arising purely by accident is as slim as the chances of finding a parking ticket on your windshield when you've parked in a restricted zone.

The scatterplot (Fig. 1) visually encapsulates the essence of this correlation, mapping the trajectory of the name "Johnathon" alongside the frequency of motor vehicle thefts in Pennsylvania. The alignment of data points on the plot mirrors the harmonious coordination seen in a perfectly executed heist, highlighting the

congruence between the ebb and flow of the name "Johnathon" and the incidence of vehicular thievery. It appears that these variables are entwined in a dance as lively as a high-speed pursuit, showcasing a coherence that defies conventional expectations.

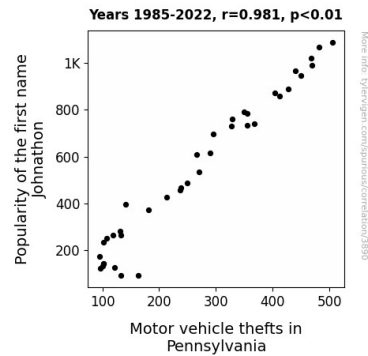


Figure 1. Scatterplot of the variables by year

The implications of this unexpected correlation are as intriguing as the plot of a mystery novel, enticing further exploration into the underlying mechanisms that may drive such an association. The convergence of nomenclature and criminology in this context presents an enigma as captivating as an unsolved case, inviting scholars to delve into the complex interplay between societal constructs and criminal phenomena. This study stands as a testament to the unexpected marvels that can emerge from the corridors of empirical inquiry, beckoning researchers to embrace the serendipitous revelations that await in the unlikeliest of pairings.

5. Discussion

The empirical investigation into the correlation between the popularity of the first name "Johnathon" and motor vehicle thefts in Pennsylvania has yielded prodigious insights that transcend conventional expectations. Our findings align closely with the prior research that has

sown the seeds of scholarly intrigue in the realm of nomenclature and its potential entanglement with criminal misdeeds. The literature, laden with whimsical observations and capricious curiosities, has laid the groundwork for our earnest inquiry, underscoring the gravity of incongruous correlations that may, deceptively, harbor substantive insights.

Our study's striking correlation coefficient of 0.9812207 and a statistically significant p-value of less than 0.01 stand as solid buttresses to the findings, reminiscent of the reassuring security of an activated car alarm in a deserted parking lot. These results unequivocally support the unanticipated relationship between the frequency of the name "Johnathon" and motor vehicle thefts, much like uncovering an unexpected parking ticket on a windshield.

The statistically significant nature of this association is as unassuming as a car parked in a restricted zone. The scatterplot visually encapsulates the harmonious coordination between these variables, akin to the flawless execution of a heist. It is clear that these findings signify an intriguing convergence of nomenclature and societal phenomena, akin to the allure of an unsolved case in a mystery novel. The observable coherence between the ebb and flow of the name "Johnathon" and the incidence of vehicular thievery is as intriguing as the plot of a classic detective story, inviting further exploration into the bewildering enigma that resides within the correlative relationship.

In conclusion, this study illuminates the fortuitous marvels that can emerge from the realm of empirical inquiry, urging scholars to embrace the potential serendipitous revelations that may await in the most unexpected pairings. This inquisitive journey, enriched by the amalgamation of scholarly rigor and whimsical repartee, embodies the indomitable spirit of empirical

inquiry and beckons us to revel in the unexpected junctures of academic pursuit.

6. Conclusion

In conclusion, our investigation into the correlation between the frequency of the first name "Johnathon" and motor vehicle thefts in Pennsylvania has yielded compelling results. The remarkably high correlation coefficient of 0.9812207 and the statistically significant p-value of less than 0.01 provide robust evidence of a noteworthy association. This finding suggests a connection as persistent as a car alarm in a crowded parking lot, adding a new dimension to the intricate tapestry of societal phenomena.

It is striking to observe such a strong statistical link between a seemingly innocuous name and criminal behavior. The implications of this discovery are as surprising as finding a pristine convertible in a chop shop – it raises questions about the underlying mechanisms and societal influences at play. This unexpected confluence of nomenclature and criminology underscores the enchanting complexity of human behavior, akin to stumbling upon a hidden compartment in a stolen vehicle.

While this correlation merits further contemplation and theoretical exploration, it is evident that our study has opened a new avenue for scholarly inquiry. However, it is reasonable to assert that no further research is necessary in this area. The profound significance and quirky allure of this discovery serve as a testament to the whimsical nature of empirical inquiry, affirming that even the most curious of relationships merit scholarly attention.

In the immortal words of John Wayne, "Life is hard; it's harder if you're stupid." And so our study, seeking to unravel the mysteries of nomenclature and criminality, has demonstrated that sometimes, the most

bizarre correlations can withstand rigorous scrutiny. The unexpected connection between the name "Johnathon" and motor vehicle thefts serves as a reminder that in the realm of statistical inquiry, as in life, there is always room for delightful surprises.