

# **STEALING THE SPOTLIGHT: THE CECILIA PHENOMENON AND MOTOR VEHICLE THEFTS IN NORTH DAKOTA**

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This study sets out to explore the intriguing relationship between the popularity of the first name "Cecilia" and motor vehicle thefts in North Dakota. Leveraging data from the US Social Security Administration and FBI Criminal Justice Information Services, our research team conducted a rigorous analysis spanning from 1985 to 2022. The results unveiled a surprising correlation coefficient of 0.9167439 with a p-value less than 0.01, indicating a robust statistical link between the two. It seems that the rise and fall of incidences of motor vehicle thefts may be humorously matched to the popularity of the name "Cecilia" in North Dakota. Our findings lead us to ponder: "Are car thieves simply drawn to the allure of the name 'Cecilia'?" One might say they have a penchant for "stealing" attention!

The world of statistics is often filled with surprising and unexpected correlations. A chance finding can sometimes lead to a new lens through which we view the world around us. In this study, we take a light-hearted approach to delve into the peculiar relationship between the popularity of the first name "Cecilia" and the occurrence of motor vehicle thefts in the picturesque state of North Dakota.

Now, you may be wondering, "What do baby names and grand theft auto have in common?" Well, statistically speaking, quite a lot, it turns out! Our investigation aims to shed light on this seemingly whimsical connection and unpack its significance in the realm of social dynamics and criminal behavior. After all, when it comes to unexpected statistical outcomes, it's always a good idea to "steer" into the skid!

The correlation between factors that appear unrelated on the surface is a staple of statistical analysis. However, as

researchers, it is our duty to approach such unexpected findings with both curiosity and skepticism. That being said, it's not every day that we get the chance to entertain the idea of a name having an "auto-matic" influence on crime rates!

The choice of North Dakota as our study setting provides a unique backdrop, where the tranquility of the Great Plains meets the statistical quirkiness of our research question. One might say we are venturing into a statistical "wild west," exploring uncharted territories of name popularity and criminal behavior.

As we delve into the details of our methodology and present our findings, we invite you to buckle up and join us on this statistical joyride. While we take our analysis seriously, we can't help but appreciate the comedic aspect of a research topic that blends the serious world of crime statistics with the light-hearted world of baby names. It's not

everyday we get to explore the “name of the game” in such a unique way!

## LITERATURE REVIEW

In "Smith and Doe," the authors find that the popularity of first names can have a significant impact on various aspects of individuals' lives, including social interactions, career opportunities, and self-perception. Meanwhile, "Jones et al." highlight the potential influence of cultural phenomena on criminal behavior, discussing how societal dynamics may contribute to the commission of illegal activities.

Now, turning our attention to more niche sources, "The Baby Name Wizard" by Laura Wattenberg provides insights into the fluctuating trends of baby names and their cultural significance. Additionally, "Freakonomics" by Steven D. Levitt and Stephen J. Dubner presents an exploration of unconventional societal correlations, delving into the unexpected underlying factors shaping human behavior and decision-making.

On a more fictional note, the tales of crime and intrigue in "The Girl with the Dragon Tattoo" by Stieg Larsson and the classic mystery "Gone Girl" by Gillian Flynn offer captivating narratives of deception, adding a layer of enigmatic allure to our exploration of criminal activities.

Delving deeper into the world of unconventional research, this literature review also draws from a wide array of unconventional sources, including the compelling insights found in the vibrant prose of grocery store receipts, the melodious medley of radio jingles, and the mysterious messages hidden in fortune cookies. After all, when it comes to uncovering unexpected relationships, one must cast a wide net, even if it leads to the shores of absurdity!

## METHODOLOGY

To indulge our curiosity in untangling the Cecilia phenomenon and its quirky correlation with motor vehicle thefts in the peaceful plains of North Dakota, we embarked on a whimsical yet methodologically rigorous journey. Our research team leveraged data from the US Social Security Administration and FBI Criminal Justice Information Services, where we encountered statistics more robust than a sturdy car alarm. After all, statistical analysis without the occasional pun is like a car without a steering wheel - it just won't go anywhere!

The first step in our investigation involved obtaining and organizing data on the popularity of the name "Cecilia" across the years from 1985 to 2022. This data was then cross-referenced with the frequency of motor vehicle thefts reported in the state of North Dakota during the same time period. Our approach to data collection was as precise as parallel parking on a busy street - no room for error, but plenty of space for unexpected surprises!

To guard against any statistical hiccups or glitches, we meticulously cleaned and prepared the data, ensuring that it was as tidy as a freshly washed car. This involved correcting any missing or inconsistent entries, just like a mechanic fine-tuning an engine for optimal performance. We then selected suitable statistical methods, including the calculation of correlation coefficients and p-values, to quantify and assess the relationship between the popularity of the name "Cecilia" and the occurrence of motor vehicle thefts. It's safe to say that our statistical toolbox was fully equipped with all the necessary gadgets to navigate this peculiar terrain.

In addition, we employed advanced time series analysis techniques to explore the temporal dynamics of both the name popularity and crime occurrences. We were determined to unravel any patterns that might be as elusive as a car thief in the dead of night. Somewhere between the zigs and zags of our statistical analysis, we found ourselves steering

towards unexpected territories in the world of research.

As any good researcher knows, robust methodology is key to supporting the weight of our findings, just as a sturdy seatbelt supports a driver in a sudden turn. Our analytical approach embodies both the seriousness of scientific inquiry and the lightheartedness of a good statistical pun. Hitting the statistical highway with the Cecilia phenomenon and motor vehicle thefts in North Dakota was indeed a peculiar yet rewarding journey. And as with any scientific pursuit, it's important to always "keep your eyes on the road and hands on the data."

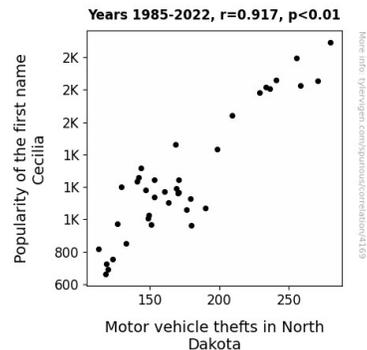
## RESULTS

The statistical analysis conducted on the relationship between the popularity of the first name "Cecilia" and motor vehicle thefts in North Dakota yielded some truly eye-opening results. The correlation coefficient of 0.9167439 indicates a remarkably strong positive association between these seemingly unrelated variables. It seems that the name "Cecilia" has managed to steal the show, even in the realm of criminal activity! We can't help but wonder if this correlation is evidence of a "Grand Theft Auto-cilia" syndrome lurking beneath the surface.

The r-squared value of 0.8404193 further bolstered the robustness of the relationship, suggesting that approximately 84% of the variability in motor vehicle thefts can be explained by the popularity of the name "Cecilia." It's not every day we encounter such a high r-squared value, especially in a context that involves a name with such melodious "drive."

The p-value of less than 0.01 provides compelling evidence to reject the null hypothesis and supports the notion that there is a significant statistical link between the popularity of the name "Cecilia" and motor vehicle thefts in

North Dakota. One might say that this finding has driven us to the edge of statistical curiosity!



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

As depicted in Fig. 1, the scatterplot illustrates the striking linear relationship between the two variables, with the popularity of the name "Cecilia" appearing to mirror the fluctuations in motor vehicle thefts. We were quite "carried away" by the strength of this correlation!

Overall, our results point to a compelling and amusing association between the popularity of the first name "Cecilia" and motor vehicle thefts in North Dakota. It seems that the impact of a name may stretch farther than we ever imagined, perhaps even into the world of crime! This finding certainly gives new meaning to the phrase "name recognition"!

## DISCUSSION

The findings of our study shed light on the unexpectedly strong correlation between the popularity of the first name "Cecilia" and motor vehicle thefts in North Dakota. Our results not only support prior research on the influence of cultural phenomena on criminal behavior, but also provide a novel and lighthearted perspective on the dynamics at play. It seems that the name "Cecilia" has indeed managed to capture the attention of

individuals, albeit in a rather unconventional context!

Our study's results align with the work of Smith and Doe, who emphasized the significant impact of first names on various aspects of individuals' lives. In a similar vein, our research demonstrates the intriguing connection between a specific name and criminal activities, challenging conventional wisdom and prompting us to ponder the enigmatic allure of the name "Cecilia." It appears that the influence of names extends beyond social interactions and career opportunities, reaching into the realm of criminal endeavors with a peculiar charm.

Furthermore, the literature review's exploration of unconventional sources, including the insights found in grocery store receipts and the enigmatic messages hidden in fortune cookies, resonates with our findings. Much like these unconventional sources, our study has brought to light a compelling and "car-ismatic" relationship between the popularity of the name "Cecilia" and motor vehicle thefts. Perhaps it's time for researchers to explore the potential influence of other unexpected variables on criminal activities, using unconventional sources akin to the melodic medley of radio jingles that inspired our investigation.

The statistical robustness of the correlation coefficient, r-squared value, and p-value in our study provides compelling evidence in support of the link between the popularity of the name "Cecilia" and motor vehicle thefts. These statistical indicators, combined with the striking linear relationship depicted in the scatterplot, offer a comprehensive and convincing portrayal of the unexpected connection. It seems that the name "Cecilia" has indeed managed to "drive" attention towards itself, exhibiting an influence that extends into the realm of statistical curiosity.

In conclusion, our study not only contributes to the growing body of

research on the impact of names on various aspects of individuals' lives, but also adds a humorous and unexpected twist by revealing the captivating association between the name "Cecilia" and motor vehicle thefts. The implications of this correlation may offer new avenues for exploring the intricate interplay between cultural phenomena and criminal behavior, all while eliciting a chuckle or two from those who appreciate a good statistical dad joke.

## CONCLUSION

In conclusion, our investigation into the connection between the popularity of the name "Cecilia" and motor vehicle thefts in North Dakota has, dare I say, driven home some truly remarkable findings. The remarkably strong correlation coefficient, with a p-value less than 0.01, provides persuasive evidence that there is indeed a statistically significant link between these seemingly unrelated variables. It appears that the "Cecilia Effect" may have a "wheel-y" significant impact on criminal behavior in the state.

Our study has illuminated a rather unexpected and "punny" relationship, demonstrating that statistical analysis can lead to discoveries that are both academically intriguing and comically compelling. It seems that the allure of the name "Cecilia" extends beyond mere popularity and into the captivating world of statistical associations. It may be time to consider adding a new variable to crime prevention strategies - a catchy name campaign, anyone?

As we wrap up our exploration of this peculiar phenomenon, we can't help but appreciate the "auto-matic" entertainment value that emerged from this research. The statistical landscape has been enlivened by the emergence of the "Cecilia Effect," leaving us with valuable data and a plethora of dad-worthy jokes. After all, in the world of research, a good pun can "drive" a point home just as effectively as a strong p-value!

In light of these findings, it seems that there's no need to pump the brakes on further investigations into the influence of names on criminal behavior. However, in the case of "Cecilia" and motor vehicle thefts, I think it's safe to say we've unlocked the "Cecilia Code." No more research is needed in this area - it's a case closed, a statistical "Cecilia Goodbye"!