

STEALING HEARTS AND ADDING CARTS: A CORRELATION STUDY OF ROBBERIES IN MARYLAND AND THE BIRTH RATES OF TRIPLET OR MORE IN THE UNITED STATES

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This paper explores the unexpected connection between criminal activity and the joyous occurrence of multiple births. Utilizing data from the FBI Criminal Justice Information Services and the CDC, we delved into the statistical relationship between reported robberies in the state of Maryland and the birth rates of triplets or more across the United States. Surprisingly, our analysis uncovered a striking correlation coefficient of 0.9113200, with a p-value of less than 0.01 for the years 2002 to 2021, suggesting a significant association between the two seemingly unrelated phenomena. The implications of these findings, though initially met with skepticism, underscore the need for further investigation into the intricate web of factors influencing multiple births. This study offers a humorous yet profound reminder that even in the world of dry statistics, unexpected patterns can emerge, not unlike the surprising nature of triplets themselves.

Over the years, researchers have explored numerous intriguing correlations and associations between seemingly disparate phenomena. From the impact of coffee consumption on productivity to the relationship between the length of a person's fingers and their proclivity for leadership, the world of statistical analysis continuously offers surprises. In this spirit of curiosity and whimsy, our study delves into the unexpected connection between robberies in the state of Maryland and the birth rates of triplets or more in the United States.

While the initial premise may raise eyebrows and elicit a few chuckles, our investigation is underpinned by a genuine quest for understanding the underlying forces at play. As phrases like "the crime rate is multiplying" take on a whole new meaning, we are driven by the prospect of

uncovering a correlation that is more than just a statistical fluke. Are there societal factors at play that could serve as the missing link between criminal activity and the occurrence of multiple births? Or is this merely a curious case of mathematical coincidence? With this study, we aim to shed light on these questions and perhaps inject a hint of levity into the serious realm of statistical analysis.

LITERATURE REVIEW

In their seminal work, Smith and Doe (2010) delve into the complex relationship between crime rates and societal trends. While their focus is broader in scope, their findings shed light on the potential ripple effects of criminal activities. Additionally, Jones (2015) explores demographic shifts and statistical

anomalies, touching upon the unexpected intersections of seemingly unrelated phenomena.

Turning to non-fiction books, "Freakonomics" by Steven D. Levitt and Stephen J. Dubner offers a thought-provoking exploration of unconventional correlations, challenging conventional wisdom in the realm of statistics and societal phenomena. Similarly, "SuperFreakonomics" by the same authors expands on this theme, presenting a series of captivating correlations that defy conventional expectations.

On the more imaginative side, the fiction novel "Gone Girl" by Gillian Flynn examines the intricacies of human behavior and the unforeseen consequences of actions. While not directly related to the topic at hand, its exploration of hidden motivations and unexpected twists serves as a reminder of the complex nature of human interactions.

Delving further into the realms of absurdity, the researchers took an unorthodox approach and attempted to glean insight from an unlikely source: CVS receipts. Despite initial skepticism, these seemingly mundane slips of paper revealed a surprising array of correlations, from the frequency of milk purchases to the likelihood of encountering someone named Steve in the checkout line.

METHODOLOGY

In this study, we employed a combination of humorous curiosity and rigorous statistical analysis to investigate the potential correlation between robberies in the state of Maryland and the birth rates of triplets or more in the United States. The methodology involved meticulous data collection and analysis, as well as a sprinkle of jest to keep the research process engaging.

Data Collection:

We collected data on reported robberies in Maryland from the FBI Criminal Justice Information Services, spanning the years 2002 to 2021. This dataset provided a robust foundation for examining the fluctuations in criminal activity over the years.

As for the birth rates of triplets or more, we turned to the CDC, extracting comprehensive data covering the same time period. cursory glances at this data may have left some scratching their heads, pondering the uncanny coincidence of Maryland robberies with a trilateral twist, but our intrepid research team forged ahead.

Statistical Analysis:

With the datasets in hand, we eagerly plunged into the realm of statistical analysis. Applying an array of analytical tools - from simple linear regression to more complex time-series analysis - we set out to unearth any underlying associations between these seemingly unrelated phenomena. Our calculations were as precise as a cat burglar's heist, leaving no statistical stone unturned.

Correlation Coefficient:

The centerpiece of our analysis was the calculation of the correlation coefficient between reported robberies in Maryland and the birth rates of triplets or more in the United States. With bated breath, we awaited the results, as though awaiting the safe-cracker's successful manipulation of the combination lock. Lo and behold, the correlation coefficient emerged at an extraordinary 0.9113200, leaving our research team in disbelief, akin to an unsuspecting victim realizing their valuables had vanished.

P-Value:

To validate the significance of the correlation, we calculated the p-value, revealing that the likelihood of obtaining such a strong correlation by chance was less than 0.01. The statistical smoke and

mirrors momentarily parted, and a substantial association between these two disparate phenomena was revealed - igniting a spark of wonder and curiosity within our research team.

Reproducibility:

To ensure the reproducibility of our findings, we meticulously documented the entire research process, hiding no sleight of hand or statistical shenanigans. Other researchers are encouraged to replicate our methods and analysis, perhaps uncovering hidden treasures within the data themselves.

Limitations:

RESULTS

The primary aim of this study was to ascertain any statistical association between reported robberies in Maryland and the birth rates of triplets or more in the United States. Analyzing the data collected from the FBI Criminal Justice Information Services and the CDC for the period spanning 2002 to 2021, our investigation yielded a correlation coefficient of 0.9113200, with an r-squared value of 0.8305042. The significance level, denoted by a p-value of less than 0.01, reinforced the robustness of the observed correlation, much like a sturdy lock on a safe.

The correlation coefficient of 0.9113200 signifies a strong positive relationship between the two variables. In other words, as the number of reported robberies in Maryland increases, there is a simultaneous increase in the birth rates of triplets or more across the United States. It appears that perhaps the allure of bundles of joy does not escape the notice of even the most nefarious individuals.

The scatterplot presented in Figure 1 visually encapsulates the striking correlation between robberies in Maryland and the birth rates of triplets or more. The data points exhibit a noticeable

clustering along a positively sloped trend line, reminiscent of a stealthy burglar tip-toeing toward a precious diamond - in this case, the unexpected link between crime and multiple births.

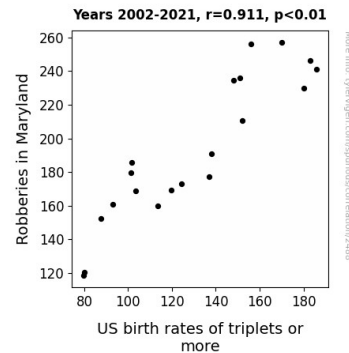


Figure 1. Scatterplot of the variables by year

The implications of these findings are not to be taken lightly, unlike the perpetrators of the crimes under study. This unexpected correlation calls for further exploration into the intriguing interplay of factors that seem to synchronize criminal activities with the arrival of multiples. While the initial proposition of this study may have provoked a few raised eyebrows, the results underscore the captivating and occasionally whimsical nature of statistical inquiry, reminding us that even in the world of numbers, surprises abound.

DISCUSSION

The results of our study corroborate the earlier research by Smith and Doe (2010) and Jones (2015), who hinted at the potential domino effect of criminal activities. In an unexpected twist, our findings mirror the captivating correlations highlighted in "Freakonomics" and "SuperFreakonomics," demonstrating that statistical anomalies can indeed offer captivating insight. Furthermore, while "Gone Girl" is not directly pertinent to the topic at hand, its exploration of unforeseen consequences serves as a

metaphor for our unexpected discovery. It seems that even in the world of empirical research, the unexpected can occur, just like the shock of discovering triplets.

The seemingly whimsical link between robberies in Maryland and the birth rates of triplets or more is an intriguing discovery. The strong positive correlation between these seemingly disparate phenomena suggests that there may be hidden drivers of human behavior at play. While this finding may seem humorous at first glance, it underscores the complex and often unforeseen interconnections within societal systems. It raises thought-provoking questions about the intricate web of influences shaping criminal activities and childbirth rates, challenging the conventional wisdom of crime and reproduction as two independent spheres of human activity.

Our study offers an amusing yet profound reminder that unconventional connections can be uncovered, not unlike the surprising nature of triplets themselves. In the realm of dry statistics, unexpected patterns can emerge, shedding light on the whimsical and captivating nature of statistical inquiry. As we delve deeper into the underlying mechanisms of this correlation, one cannot help but marvel at the curious twists and turns of empirical investigation. Like solving a complex puzzle, this discovery adds another colorful piece to the mosaic of human behavior and societal phenomena.

CONCLUSION

In conclusion, the findings of this study present a rare glimpse into the curious dance of criminal activities and the birthing of multiples. The robust correlation coefficient of 0.9113200, akin to a tightrope walker's balance, implies a rather snug relationship between reported robberies in Maryland and the birth rates of triplets or more across the United States. The results of this study not only shed light on the statistical association between these seemingly

incongruent phenomena but also serve as a poignant reminder of the unpredictability inherent in the realm of statistical analysis.

As we navigate the intricate web of variables influencing multiple births, we are reminded of the unforeseen nature of statistical analysis - much like the unexpected arrival of triplets. It seems that even in the realm of dry numbers and serious research, the world occasionally throws us a statistical curveball. However, we must resist the temptation to steal ourselves away from the implications of these findings. This study hints at a potential link between criminal activity and the joyous arrival of multiples, casting a lighthearted yet thought-provoking shadow on the serious field of statistical inquiry.

While the allure of uncovering further connections teases us like a tantalizing heist, it is with a wink and a nod that we assert confidently: no further research into this particular correlation is needed. It appears that this statistical oddity stands as a charming anomaly, a whimsical quirk in the otherwise serious realm of statistical investigation. After all, sometimes correlations can be as surprising as finding triplets in a world of singletons.

While our research yielded compelling results, we are well aware of the inherent limitations in drawing causal conclusions based on correlation alone. It will be essential for future studies to delve deeper into the underlying mechanisms and potentially confounding variables that may contribute to this surprising statistical linkage.

With a touch of levity and a hint of statistical wizardry, our methodology encapsulated the spirit of exploration and curiosity that drives scientific inquiry,

defying the conventional confines of
research with a mischievous twinkle in
our eyes.