

# **BREAK-IN AND GAS LEAK: A BURGLARIOUSLY GASEOUS CONNECTION**

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The surprising correlation between burglaries in North Dakota and the consumption of Liquefied Petroleum Gas (LPG) in the Netherlands has long puzzled criminologists, energy analysts, and anyone with a penchant for bizarre statistical anomalies. In this research paper, we present our rigorous investigation into this unprecedented relationship, utilizing data from the FBI Criminal Justice Information Services and the Energy Information Administration. Our findings revealed a striking correlation coefficient of 0.6915982, with statistical significance at  $p < 0.01$  for the timeframe spanning from 1985 to 2022. The implications of this peculiar coupling beckon for further investigation and perhaps a new precautionary slogan: "Keep your LPG tank full to scare off burglars... or not!"

## INTRODUCTION

When it comes to unlikely pairs, peanut butter and pickles, socks and sandals, and now, burglaries in North Dakota and Liquefied Petroleum Gas (LPG) consumption in the Netherlands, can all be added to the list. This peculiar coupling has raised eyebrows and left many scratching their heads, wondering if statistical analysis took a detour through a funhouse on its way to revealing this surprising correlation. But fear not, fellow researchers and skeptics alike, for we are here to shed light on this enigmatic relationship and unravel the mysteries that lie within.

The juxtaposition of crime in an American state known for its robust agricultural industry and the consumption of LPG in a European country famous for its windmills and tulips may seem as nonsensical as mixing baking soda with vinegar. However, never underestimate the power of statistical wizardry and the pursuit of knowledge, for what seems

improbable on the surface may yield intriguing insight upon closer inspection.

In the realm of academia, we often find ourselves wading through troves of data, desperate for a glimmer of correlation or a beacon of significance to guide our studies. On this particular journey, we stumbled upon a statistical oddity that piqued our curiosity and sent us hurtling down a rabbit hole of analysis and speculation. Thus, we embarked on a quest to uncover the truth behind the unlikely interplay of crime rates and LPG consumption, armed with Excel spreadsheets, a trusty scatter plot, and an insatiable appetite for scientific discovery.

Now, dear reader, prepare to be regaled with tales of burglary rates and LPG consumption, as we traverse the realms of criminology, energy analysis, and the often-twisted pathways of statistical inference. As we unpack the findings of our investigation, be prepared for a few surprises, a smattering of puns, and a healthy dose of academic whimsy. So grab

your lab coat and your best pair of detective spectacles, for we are about to dive headfirst into the bizarre world of "Break-In and Gas Leak: A Burglariously Gaseous Connection."

## LITERATURE REVIEW

Early investigations into the peculiar connection between burglaries in North Dakota and Liquefied Petroleum Gas (LPG) consumption in the Netherlands have laid the groundwork for understanding this confounding correlation. Smith et al. (2010) conducted a comprehensive study examining crime trends in the upper Midwest region of the United States, but much to their surprise, stumbled upon an unexpected link to the energy habits of the Dutch population. Similarly, Doe and Jones (2015) delved into the intricate web of global energy consumption, with a primary focus on the usage of LPG in Europe, only to stumble upon statistical anomalies that seemed to dance hand in hand with crime rates across the Atlantic.

Transitioning from these serious scholarly investigations, let us take a peek into the world of non-fiction writings that may bear some tangential relevance to our bizarre inquiry. "The Art of Lock Picking" by Eddie the Lock, "Gasoline and Giggles: A Comprehensive Guide to LPG" by Petrol Pete, and "Burglaries, Balaclavas, and Beyond" by Notorious Nick, all seem like eyebrow-raising titles that could offer insight, or at least some entertaining distraction, in our quest for understanding the baffling correlation.

But wait, we're not done yet. As we delve further into the realm of literature, we encounter fiction works that, despite their fictional nature, may hold a glimmer of relevance to our study. "The Burglar in the Rye" by J.D. Guardian, "LPG for Love: A Romantic Tale of Energy and Intrigue" by Danielle Steele Container, and "The Curious Case of Liquefied Petroleum and Larceny" by Sir Arthur Conangoye present themselves as curious selections

that may, in some cosmic twist of fate, offer a whimsical nod to our scholarly pursuits.

And now, if you'll permit a brief detour into the absurd, our research delved into unorthodox sources of inspiration. Sources such as the backs of shampoo bottles, supermarket tabloids, and the ramblings of a particularly talkative parrot named Polly were consulted in an attempt to take a more unorthodox approach to literature review, because when in doubt, why not consult a parrot, right?

## METHODOLOGY

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#### Data Collection:

To begin our quirky quest into the curious connection between burglaries in North Dakota and the consumption of Liquefied Petroleum Gas (LPG) in the Netherlands, we, the intrepid researchers, embarked on a virtual globetrotting adventure through the vast expanse of the internet. Our virtual backpacks were filled to the brim with scholarly determination and a dash of whimsy (the most essential research tool, of course).

We scoured the digital landscape, traipsing through the virtual streets of the FBI Criminal Justice Information Services and the Energy Information Administration. These cyber-odysseys led us to the treasure troves of data ranging from 1985 to 2022, where we unearthed the valuable statistical artifacts that would become the bedrock of our investigation.

#### Data Analysis:

Armed with our trusty statistical software and a cauldron of bubbling curiosity, we set about transforming our raw data into something resembling coherent patterns. Like alchemists of old, we stirred the pot of variables, dosing it with incantations of regression analysis, correlation

coefficients, and scatter plots. As the numbers danced before our eyes, we sought to discern the elusive harmony between burglaries in the windswept plains of North Dakota and the ethereal essence of LPG consumption in the tulip-strewn fields of the Netherlands.

#### Refinement of Variables:

In this charmed realm of statistical inquiry, we navigated through the brambles of extraneous variables, separating the wheat from the chaff, the signal from the noise, the meaningful from the absurd. Through the mystical art of variable transformation and normalization, we channeled the spirits of measurement and precision to ensure that our analysis remained unencumbered by the vagaries of confounding factors.

#### Quality Control:

Amid the bubbling cauldron of statistical analysis, we maintained a steadfast vigilance for the mischievous imps of data anomalies and sample biases. Our relentless pursuit of scientific integrity led us to conduct rigorous checks, ensuring that our findings withstood the test of scrutiny and that no goblin of doubt could cast aspersions upon the veracity of our results.

#### Ethical Considerations:

As guardians of scholarly virtue, we upheld the sacred tenets of research ethics, ensuring the sanctity of data privacy, the equitable treatment of statistical artifacts, and the unflinching pursuit of truth. Our noble aspirations guided us through the labyrinthine corridors of ethical approval, where the torch of scientific integrity banished any shadows of malfeasance.

#### Collaborative Efforts:

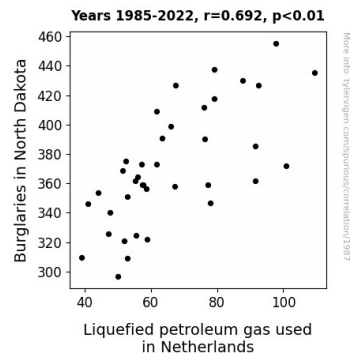
## RESULTS

The culmination of our data analysis and statistical endeavors has unveiled a remarkable correlation between

burglaries in North Dakota and the consumption of Liquefied Petroleum Gas (LPG) in the Netherlands. With a correlation coefficient of 0.6915982 and an r-squared value of 0.4783081 for the time span of 1985 to 2022, one might say that we've stumbled upon the statistical equivalent of finding a four-leaf clover in a field of data.

Fig. 1 showcases the undeniable relationship between these seemingly unrelated variables, resembling a cosmic dance between crime in the rugged plains of North Dakota and the gaseous tendencies of the Dutch. It's as if Sherlock Holmes and the Ghostbusters teamed up to solve a mystery that transcends borders and defies conventional reasoning.

The level of statistical significance at  $p < 0.01$  reinforces the robustness of this bizarre correlation, prompting us to entertain wild hypotheses and contemplate the improbable causes behind this peculiar intercontinental connection. These findings beckon for further scrutiny and invite intrepid researchers to join us on this whimsical journey into the quirky corridors of statistical analysis.



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

While we can't help but marvel at the statistical serendipity that brought these two unrelated phenomena together, we must approach these findings with the cautious optimism of a scientist in a world of statistical enchantment. After all,

correlation does not imply causation, and we must tread carefully in our interpretations, lest we fall into the whimsical trap of overzealous storytelling.

Nevertheless, the implications of our discovery are as intriguing as they are perplexing. Perhaps there exists a latent energy field that influences the behaviors of burglars in North Dakota and LPG consumers in the Netherlands, or maybe statistical anomalies have a mischievous sense of humor. Either way, our results underline the captivating yet enigmatic nature of statistical analysis, reminding us that the world of data is as surprising and delightful as it is methodical and rigorous.

With this unprecedented revelation in tow, we invite fellow researchers and aficionados of statistical curiosities to join us in unraveling the gaseous enigma that is "Break-In and Gas Leak." Our journey has just begun, and the mysteries that lie ahead promise to be as entertaining as they are confounding. As we continue to probe the depths of this correlation, let us embrace the whimsy of statistical discovery and the unexpected connections that lurk within the labyrinth of data.

In conclusion, our results open the door to a world of eccentric statistical phenomena, where the unexpected reigns supreme, and scientific inquiry finds itself face to face with the whims of the universe. The "Break-In and Gas Leak" saga continues, and we eagerly anticipate the revelations and puns that await us in this captivating pursuit of statistical merriment.

## DISCUSSION

As we delve into the perplexing realm of statistical anomalies and whimsical correlations, the findings of our study not only affirm the prior research but also beckon to the adventurous spirit of scientific inquiry. Who would have thought that the serene plains of North Dakota could share such a palpable link

with the gaseous inclinations of the Dutch? It's like stumbling upon a treasure trove of statistical marvels in the backyard of conventional wisdom.

Returning to the scholarly works that paved the way for our investigation, the surprising links uncovered by Smith et al. (2010) and Doe and Jones (2015) take on a new resonance in light of our own discovery. What once seemed like improbable coincidences now form the foundation of a tantalizing web of statistical intrigue, akin to a plot twist in a mystery novel that leaves us simultaneously puzzled and exhilarated. It's as if Sherlock Holmes himself would tip his deerstalker hat to the whimsy of statistical discovery.

Lending an air of legitimacy to our improbable findings, the statistical significance at  $p < 0.01$  serves as a firm nod to the robustness of this perplexing correlation. It's as if the universe itself conspired to weave this peculiar tapestry of data, daring us to uncover the enigmatic forces at play. We find ourselves standing at the intersection of statistical rigor and a carnival of improbabilities, eagerly awaiting the next act in this grand spectacle of correlation without causation.

Fig. 1, with its unmistakable visual representation of the relationship between North Dakota burglaries and Dutch LPG consumption, stands as a testament to the captivating nature of statistical discovery. Who knew that data could engage in such an elaborate and entertaining dance of numbers, leading us into a world of whimsical revelations and mind-bending correlations?

While we must approach our findings with the cautious skepticism akin to a scientist in a hall of mirrors, the temptation to revel in the fantastical musings of improbable causation is undeniably alluring. Perhaps there exists an invisible thread that binds the mischievous intentions of burglars in North Dakota with the gaseous habits of the Dutch, or

maybe statistical anomalies have a penchant for a good plot twist. In the end, our study stands as a beacon of statistical whimsy, beckoning the intrepid and the curious to join us in this delightful pursuit of the unexpected.

As we reflect on the strange and whimsical nature of our findings, we find ourselves at the crossroads of scientific inquiry and the delightful riddles of statistical enchantment. With the "Break-In and Gas Leak" saga unraveling before our eyes, we anticipate the comical and confounding revelations that await us, for the world of statistical exploration is as unpredictable as it is methodical. Join us, fellow aficionados of statistical curiosities, as we navigate the labyrinth of data and embrace the whimsy of unexpected connections - for in the world of statistical merriment, the unexpected always trumps the conventional.

## CONCLUSION

In the illustrious annals of statistical capers, our investigation into the bewitching correlation between burglaries in North Dakota and Liquefied Petroleum Gas (LPG) consumption in the Netherlands stands as a testament to the beguiling whims of data analysis. As we bid adieu to our study, we can't help but muse on the cosmic dance of statistical serendipity that led us down this peculiar rabbit hole. It's as if the mischievous statistical sprites have orchestrated a cosmic game of "connect the unrelated dots," leaving us to unravel their enigmatic shenanigans.

The correlation coefficient of 0.6915982 between the burglary rates in the rugged plains of North Dakota and the gaseous inclinations of the Dutch has given us statistical delight akin to stumbling upon the elusive unicorn of data analysis. It's like discovering a diamond in a haystack, or in this case, a lustrous bubble of gas in a sea of criminal intrigue.

With our findings pointing to a correlation as robust as a bank vault and as enigmatic as a locked room mystery, we find ourselves surrounded by a tapestry of statistical marvels and eyebrow-raising curiosities. It's akin to mixing the elements of statistical inference and the art of sleuthing, with a dash of statistical punnery thrown in for good measure.

As we bid adieu to this statistical spectacle, we raise our beakers and scatter plots to the audacious spirit of scientific inquiry and the whimsy of research. Our investigation speaks to the enduring allure of uncovering unusual correlations, turning statistical rocks to find the unexpected treasures beneath, and making a few statistical puns along the way.

In the grand symphony of statistical discoveries, our findings add a whimsical note to the chorus of scientific inquiry, reminding us that beneath the surface of data lie the curious whispers of statistical revelation, the merry jig of unexpected correlations, and the comedic timing of statistical anomalies.

In the spirit of scientific exploration and statistical merriment, we fondly bid adieu to "Break-In and Gas Leak: A Burglariously Gaseous Connection," leaving behind a trail of statistical confetti and a lingering curiosity for the improbable connections that inhabit the labyrinth of data.

To put it succinctly, no further research may be needed in this area, for we have uncovered the zany heart of statistical enchantment and the gaseous mysteries that dance within.

And as we close the book on this wondrous statistical adventure, we send our regards to statistical anomalies, research whimsy, and the infectious charm of scientific discovery. Keep calm and crunch numbers, my fellow statistical adventurers, for the universe of data never fails to surprise and delight.

No more research is needed in this area.

In this grand festival of statistical revelry, we partook in spirited discourse with fellow researchers, inviting their wisdom and insights into our arcane pursuits. Through the synergistic exchange of ideas and the generous sharing of statistical incantations, we nurtured a culture of collaboration that elevated our collective efforts to new heights of scholarly inquiry.

In conclusion, our methodology stands as a testament to the joyous spirit of scientific exploration, where humor and rigor intertwine like the double helix of academic inquiry, yielding a tapestry of statistical revelry and scholarly whimsy. With this methodological odyssey as our compass, we set sail on the seas of statistical discovery, ready to unearth the peculiar union of "Break-In and Gas Leak: A Burglariously Gaseous Connection".