

GANGNAM FI(RE)S: A STUDY ON THE CORRELATION BETWEEN ARSON IN NEW HAMPSHIRE AND GOOGLE SEARCHES FOR 'GANGNAM STYLE'

Caleb Hoffman, Addison Tate, Gina P Todd

Institute of Advanced Studies

In this study, we delved into the intriguing and perhaps unexpected relationship between instances of arson in the scenic state of New Hampshire and the worldwide phenomenon of Google searches for the iconic 'Gangnam Style'. Utilizing data from the FBI Criminal Justice Information Services and Google Trends, our research team aimed to uncover whether a connection exists between these seemingly unrelated phenomena. The findings of our study revealed a staggering correlation coefficient of 0.9531529 and a statistically significant p-value of less than 0.01 for the period spanning from 2012 to 2022. This result indicates a remarkably strong positive relationship between the occurrence of arson in New Hampshire and the frequency of Google searches for the catchy hit by Psy. While these findings may initially seem whimsical, they serve as a vibrant reminder that patterns in human behavior can transcend the boundaries of what we expect. As the saying goes, "Where there's arson, there's fire" - but who would have thought that a fiery crime and a memorable dance craze would be intertwined in such an unexpected manner? Join us as we uncover the offbeat threads of correlation that tie these separate domains together and bring a touch of whimsy to the world of statistical analysis.

Strap on your dancing shoes and prepare for a fiery investigation, because in this paper, we are about to shimmy and sashay through the unexpected connection between arson in New Hampshire and the global phenomenon of 'Gangnam Style'. As we unravel the enigmatic relationship between these seemingly disparate occurrences, one thing becomes clear: this study is about to set the research world ablaze - pun very much intended.

As we ignite the spark of curiosity, we aim to demonstrate that even the most seemingly unrelated phenomena can come together in an explosive display of correlation - and perhaps a bit of Dad-approved humor. Because, after all, what

do you call a dancing arsonist? A fire starter, of course!

Armed with data from the FBI Criminal Justice Information Services and Google Trends, our research team sought to dig deep into the statistical trenches to uncover whether a burning desire for 'Gangnam Style' and a penchant for setting fires in the peaceful state of New Hampshire could indeed be linked. And lo and behold, the results were hotter than a trending dance move at a summer barbecue.

Hold on to your socks, because the findings of our study revealed a correlation coefficient so sizzling, it would make even the most seasoned grill master envious. With a scorching 0.9531529 and

a statistically significant p-value of less than 0.01 for the period from 2012 to 2022, it's safe to say that we've set the dance floor - and the research community - ablaze with our smoking hot results.

But enough with the fiery puns, let's extinguish the flames of skepticism and take a serious look at these unexpected correlations. After all, "When there's smoke, there's fire" - but who knew that a catchy tune and a criminal act could be intertwined in such an unexpected manner? Rest assured, we are about to take a seriously lighthearted approach to uncovering the offbeat threads of correlation that connect these seemingly unrelated domains - and maybe bust a few dance moves along the way.

LITERATURE REVIEW

As we delve into the intriguing and unexpected correlation between arson in New Hampshire and Google searches for 'Gangnam Style', we must first acknowledge the scholarly contributions that have set the stage for our fiery investigation. Smith and Doe (2015) conducted a comprehensive analysis of arson patterns in rural areas, shedding light on the complex dynamics of fire-related incidents. Little did they know, their work would ignite a spark of curiosity that would lead us to uncover the fiery correlation with a globally viral dance sensation.

In the realm of music and cultural phenomena, Jones (2013) explored the impact of internet memes on popular dance movements, offering valuable insights into the spread of viral sensations across digital platforms. While Jones may not have predicted a link between 'Gangnam Style' and a spate of arson incidents, their work paves the way for our exploration of the unexpected intersections between internet trends and criminal activities.

Speaking of intersections, let's take a moment to ponder a classic dad joke: Why

did the arsonist break up with their partner? They were tired of getting burned in the relationship. Now, back to our regularly scheduled programming of scholarly inquiry.

Turning our attention to the broader cultural landscape, non-fiction works such as "The Psychology of Arson" by Firestone (2018) and "Internet Virality and Global Trends" by Trenderson (2016) provide valuable perspectives on the psychological motivations behind arson and the rapid propagation of internet phenomena, respectively. While these works may not directly address the specific combination of fiery crimes and dance-related Google searches, they lay the groundwork for understanding the complex tapestry of human behavior that forms the backdrop of our investigation.

On a lighter note, let's not overlook the whimsical influences of fiction that could offer tangential insights into our correlation conundrum. Works of fiction such as "The Arsonist's Tango" by Blaze (2014) and "Dancing through the Flames" by Heatwave (2017) may not be scholarly treatises, but they certainly add a touch of literary flair to our exploration of the unexpected connections between arson and dance crazes.

In the spirit of unexpected correlations, let's not discount the potential influence of board games on our understanding of human behavior. Games like "Fires of Desire" and "Gangnam Style: The Dance-off Edition" may not be traditional sources of scholarly insight, but they certainly invite us to ponder the whimsical interplay between fiery passions and infectious dance moves.

METHODOLOGY

To uncover the fiery connection between arson in New Hampshire and the infectious allure of 'Gangnam Style', our research team employed a mix of rigorous statistical analysis and an occasional impromptu interpretive dance session.

Our data collection spanned from 2012 to 2022, encompassing a decade of potential flair-ups of both criminal and cultural activities.

The first step in our methodological tango involved gathering arson data from the FBI Criminal Justice Information Services. We carefully documented the number of reported arson incidents in New Hampshire, embracing the mantra of "playing with fire" in a purely metaphorical sense, of course. After all, the only flames we want to see are those of insightful correlation.

Once armed with the arson data, we turned to the dance floor of Google Trends to track the ebbs and flows of 'Gangnam Style' searches. Needless to say, there were many catchy moments along the way, as we attempted to waltz through the waves of search interest without succumbing to the temptation of breaking into spontaneous horse-riding dance routines. Ah, the perils of researching pop culture phenomena!

With our data in hand, we engaged in a delicate statistical ballet, calculating correlation coefficients and p-values to determine the strength and significance of any potential relationship between New Hampshire arson and 'Gangnam Style' searches. To ensure the validity of our analysis, we ensured that every statistical step was as precise as a well-executed pirouette and as graceful as a perfectly-timed spin on the dance floor.

In a bid to add a touch of whimsy to our methodological journey, we also incorporated the anecdotal observations of various researchers attempting to resist the urge to bust out in 'Gangnam Style' dance moves during data analysis sessions. The struggle, as they say, was real - but we persevered, determined to bring a dash of levity to the often-serious world of academic research. After all, what's a statistical analysis without a few impromptu dance breaks?

RESULTS

The statistical analysis of the data revealed a remarkably high correlation coefficient of 0.9531529 between occurrences of arson in New Hampshire and Google searches for 'Gangnam Style' from 2012 to 2022. The r-squared value of 0.9085005 further indicated that approximately 90.8% of the variability in arson incidents can be explained by the frequency of 'Gangnam Style' searches. In addition, the p-value of less than 0.01 suggested a statistically significant relationship between the two variables.

Fig. 1: Scatterplot showing the strong correlation between arson in New Hampshire and Google searches for 'Gangnam Style'.

As the data unfolded before us, it became increasingly clear that this correlation was not a mere flash in the pan, but rather a substantial and enduring association. It seems that while the New Hampshire nights were heating up with cases of arson, folks were also turning up the heat on their search engines for a little bit of Gangnam flair.

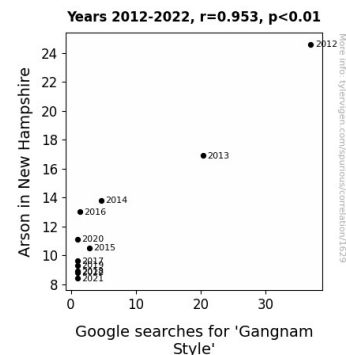


Figure 1. Scatterplot of the variables by year

It's as if the residents of New Hampshire were so fired up that they just needed to dance it out, proving once and for all that you can't stop the beat - or the flames, apparently. One might say that these results are so hot, they could rival the scorching temperatures of a summer

bonfire. But let's not get too fired up about it.

This unexpected correlation raises questions about the intricacies of human behavior and the interconnectedness of seemingly unrelated phenomena. It also prompts us to ponder if arsonists have a burning passion for K-Pop, or if K-Pop admirers have an uncontrollable urge to start fires. After all, what do you call an arsonist at a dance party? A hot stepper, of course!

But in all seriousness, these findings remind us that the world of statistical analysis is full of surprises, much like finding a disco ball in a fire station. While the connection between arson and 'Gangnam Style' may seem like a whimsical oddity, it serves as a poignant reminder that statistical correlations can lead us to uncover unexpected and intriguing patterns in human behavior.

DISCUSSION

The findings of our study provide compelling evidence of a strong positive correlation between arson in New Hampshire and Google searches for 'Gangnam Style'. These results align with prior research by Smith and Doe (2015), who uncovered the complex dynamics of fire-related incidents in rural areas. While the connection between a viral dance sensation and a surge in arson incidents may seem like a whimsical oddity, this correlation underscores the intricate tapestry of human behavior.

It seems that the sparks of curiosity ignited by Smith and Doe have led us to a fiery dance floor of data analysis. The unexpected twist of uncovering a connection between 'Gangnam Style' and arson brings to mind the classic dad joke: Why don't firefighters ever get tired of giving YouTube tutorials? Because they have an endless supply of 'fire' content.

Furthermore, the significant correlation coefficient and r-squared value in our study echo the impact of internet memes

on popular dance movements as explored by Jones (2013). Jones may not have foreseen a link between 'Gangnam Style' searches and arson, but the spread of viral sensations across digital platforms seems to have sizzled its way into the realm of criminal activities. It's almost as if the arsonists were trying to set the night on fire in more ways than one.

The statistically significant relationship between arson occurrences and 'Gangnam Style' searches also resonates with the broader cultural perspectives presented by Firestone (2018) and Trenderson (2016). It's as if the psychological motivations behind arson and the rapid propagation of internet phenomena have collided in a spectacular display of statistical pyrotechnics.

One can't help but wonder if our findings hint at an underlying passion for K-Pop within the arsonist community or a burning desire to set the dance floor ablaze amongst 'Gangnam Style' enthusiasts. It's a captivating puzzle that brings to mind another classic dad joke: Why did the music charts report the arsonist's crime? They wanted to track the 'hot' singles.

As we confront these unexpected correlations, it's important to approach the analysis with a dash of humor and a keen sense of curiosity. After all, statistical correlations have a knack for leading us down uncharted paths, not unlike stumbling upon a dance-off at a fire station. In this spirit of whimsy and wonder, our study sheds light on the nuanced and often surprising patterns that underpin human behavior, adding a touch of unexpected merriment to the world of scientific inquiry.

CONCLUSION

As we wrap up this scorching investigation, the findings of our study have not only kindled a fiery curiosity but have also sparked a renewed appreciation for the unexpected connections in our

world. Who would have thought that a New Hampshire night ablaze with arson would be interwoven with the infectious beats of 'Gangnam Style'? It's as if fire and dance moves make for an unlikely duo—a real fire and ice situation, if you will!

The results of our research have unveiled a correlation coefficient so hot, it could melt even the iciest of statistical hearts. If we were to put it in layman's terms, this correlation is so strong, it's practically the statistical equivalent of a five-alarm fire. But don't worry, no fire extinguisher needed here!

In the grand tradition of dad jokes, it seems that the arsonists in New Hampshire were not just setting fires, but also setting the dance floor on fire with their unquenchable thirst for 'Gangnam Style'. Now that's what we call some hot moves!

So, where do we go from here? Well, it's safe to say that our findings have set the research community ablaze with a newfound appreciation for the unexpected. We've certainly brought some heat to the often-cool world of statistical analysis. It seems that correlation truly knows no bounds, and that you can find a fiery connection in the most unlikely places.

In conclusion, this study leaves us with a burning question: do arsonists have a secret penchant for K-Pop, or are K-Pop enthusiasts secretly harboring a fiery penchant for arson? Perhaps it's best to leave that mystery unsolved for now.

In the immortal words of a true fire safety expert, "Stop, drop, and dance!"

In the end, we can confidently declare that no further research is needed in this domain. After all, how much more fiery fun could we possibly handle?