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Purrfectly Polluted: Air Quality in Oklahoma City and the Pawsitive Impact on Google Searches for 'Funny Cat Videos'

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Abstract

This paper investigates the paw-sibility of a connection between air pollution levels in Oklahoma City and the frequency of Google searches for 'funny cat videos'. Utilizing data from the Environmental Protection Agency and Google Trends, our research team embarked on this slightly fur-midable quest to uncover any correlation between these seemingly disparate factors. The correlation coefficient of 0.8567564 and $p < 0.01$ for the period spanning 2004 to 2012 point to a statistically significant relationship, fur real! Interestingly, our findings reveal that as air pollution levels rise, there is a corresponding increase in searches for amusing feline content. It seems that when the air quality goes down, the internet searches for some feline funnies go up! Maybe people are seeking some purr-sonal relief from the smog with a little dose of furry humor. In conclusion, this study adds a whisker of evidence to the growing field of environmental psychology, shedding some light on the interplay between air quality and online behavior. One might say that the air pollution problem in Oklahoma City has led people to take a much more 'pawsitive' approach to their internet browsing. And as for the proverbial question, "Why do cats always get their way?" - well, when it comes to online searches, it seems they do!

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1. Introduction

One might say a good laugh is just purr-fect for the soul, and in today's digital age, what's more likely to tickle one's funny bone than a good old "funny cat video"? As our feline friends continue to dominate the online realm, with their antics and adorable quirks capturing the hearts (and screens) of

millions, one might wonder - what prompts individuals to delve into this endless trove of amusing feline content?

This paper explores the intriguing linkage between air pollution levels in Oklahoma City and the frequency of Google searches for 'funny cat videos'. It's as if we're uncovering the fur-real reason why people

turn to internet cats for a meow-ment of relief from pollution woes.

The paw-sibility of a connection between these two seemingly unrelated variables intrigues, yet raises eyebrows. Do people find solace in the adorable distraction of these four-legged comedians when the air quality takes a nose-dive? We just couldn't resist paws-ing to explore this ever-so-slightly bizarre yet intriguing conundrum.

Research in environmental psychology and behavioral economics has shown that environmental quality can influence human behavior in unexpected ways. To dig into this paradigm, our study sharpens its claws on the specific case of air pollution and online search behavior. After all, who says academic research can't have a sense of meow-ty?

Our investigation is driven by the need to understand the broader impact of air pollution on human well-being and behavior. It is an attempt to, quite literally, sniff out any potential correlation between the air we breathe and the content we consume in the virtual realm. Our findings aim to provide a new purr-spective and add a whisker of evidence to the growing field of environmental psychology, all while keeping an eye on the purr-fection of a good old dad joke.

So saddle up, brace yourselves for some fur-midable findings, and prepare for a journey into the unexpected interplay between air quality and our collective online fascination with furry entertainers. After all, who says serious research can't be fun? And if it turns out that air pollution is causally correlated with an increase in 'funny cat video' searches, well, then we've un-purr-tunately uncovered a whole new dimension to the phrase "pollution problem".

2. Literature Review

Various studies have delved into the multifaceted topic of air pollution and its effects on human behavior. Smith (2005) examined the impact of air pollution on cognitive function, while Doe (2010) investigated the correlation between air quality and physical health outcomes. Meanwhile, Jones (2013) explored the association between air pollution and emotional well-being. These studies collectively paint a picture of the far-reaching influences of air pollution, but none have ventured into the whimsical realm of online cat video consumption.

In "Fresh Air: Faith, Reason, and Doubt," the authors find that exposure to clean air can uplift one's spirits, leading to a clearer mind and a more positive outlook. On the other hand, in "The Air We Breathe," the authors posit that polluted air can lead to feelings of fatigue and malaise, perhaps driving individuals to seek solace in the delightful world of internet cats. It seems that a breath of fresh air is not just a metaphorical concept, but one that extends to our online habits as well.

Turning to the world of fiction, "Cloudy with a Chance of Meatballs" presents a whimsical reality where the air is filled with food instead of pollutants, providing a stark and comical contrast to the real-world issues of air quality. Similarly, the novel "The Cat in the Cradle" explores the curious relationship between a man and his feline companion, providing a different yet relevant angle on the human-cat dynamic.

In the realm of cartoons and children's shows, "The Smurfs" offer a lighthearted depiction of community living in a pollution-free environment, while "Garfield and Friends" showcases the mischievous antics of a lasagna-loving cat, bringing laughter to viewers of all ages. Perhaps there is something to be said about the allure of animated feline characters in providing respite from the weight of environmental concerns.

Children's television shows such as "Arthur" and "SpongeBob SquarePants" present light-hearted and often absurd scenarios in fictional worlds, where air pollution is not a concern and laughter reigns supreme. These shows provide a stark contrast to the real-world implications of air pollution, offering a much-needed escape into the realm of imagination and entertainment.

In "The Cat in the Hat," Dr. Seuss famously proclaimed, "It's fun to have fun, but you have to know how." Our findings unveil a compelling yet light-hearted dimension to the interplay between air pollution and online behavior. The air quality conundrum in Oklahoma City has prompted individuals to take a "pawsitive" approach to their online endeavors, seeking refuge in the delightful world of funny cat videos. As the search for the perfect pun breeds a litter of amusing discoveries, our study sheds some light on the curious connection between environmental factors and online amusement. And as for the proverbial question, "Why do cats always get their way?" - well, when it comes to online searches, it seems they do!

3. Our approach & methods

To investigate the murky depths of the meow-ting between air pollution levels and Google searches for 'funny cat videos', our research team embarked on a quest that was furr from ordinary. We obtained air quality data from the Environmental Protection Agency, monitoring levels of pollutants such as ozone, sulfur dioxide, and particulate matter in Oklahoma City from 2004 to 2012. The selection of this time frame was largely arbitrary, as we thought the early 2000s marked the purr-fect time to paw-step into the world of environmental data collection and analysis.

Additionally, we utilized Google Trends to paw-scrutinize the frequency of searches for 'funny cat videos' within the same time

frame. As Google Trends does not present absolute search volume, but rather the relative popularity of a search term over time on a scale from 0 to 100, this process required a pawsitively unique approach to understand the online meow-McDonalds of searches for feline frivolities.

Once data was collected, the tail-challenging task of analysis began. To establish a correlation between air pollution levels and Google searches, we employed a variety of statistical analyses that included purr-liminary linear regression models. However, the use of conventional statistical methods posed a purr-plexing problem due to the non-conventional nature of the research question at paw. As a result, we had to meow-dify our approach to incorporate Purrison's Correlation Coefficient, a newly coined measure of association that accommodates the rather quirky nature of our data. This process furrther stretched the boundaries of conventional research methods, quite literally letting the cat out of the bag that our approach was anything but purr-fect.

In addition, we purr-ticularly purred over controlling for potential confounding variables, such as seasonal patterns in Google searches and meteorological influences on air pollution levels. Our paw-sistent efforts to account for these factors refined our analysis – ensuring that our findings are fur-midable and fur-tive of the complex relationship between air quality and human online behaviors.

The final results of our analysis were the cat's whiskers, revealing a statistically significant correlation between air pollution levels and Google searches for 'funny cat videos' ($r = 0.8567564$, $p < 0.01$). This finding stands as a testament to the purr-suasive power of online feline amusement in the face of environmental adversity.

Indeed, the maiden voyage of this peculiar investigation meow-ments the uncharted

territories where environmental data and online behavior converge. As such, we hope our furr-ward-thinking methodology sets a furr-ociously clever example for future researchers to embrace the purr-spective that even the most serious of investigations can have a tinge of whimsy and humor. Much like a cat that's got your tongue, this research paws at the elusive threads woven between the serious business of environmental data and the delightfully absurd joy of a good old 'funny cat video'.

End of the methodology section.

4. Results

The results of our analysis reveal a strong correlation between air pollution levels in Oklahoma City and the frequency of Google searches for 'funny cat videos'. The correlation coefficient of 0.8567564 and r-squared of 0.7340315 indicate a robust positive relationship between these seemingly disparate variables. This finding is statistically significant with a p-value of less than 0.01, providing further evidence of the connection.

As shown in Fig. 1, the scatterplot visually depicts the positive correlation between air pollution levels and Google searches for 'funny cat videos', highlighting how as one variable increases, so does the other. It's as clear as the whiskers on a cat's face!

It seems that as the air quality in Oklahoma City worsened, the frequency of searches for 'funny cat videos' increased. Our findings suggest that in the face of deteriorating air quality, individuals turned to the online realm for some much-needed comic relief with our feline friends. Who knew that a good ol' cat video could provide a breath of fresh air (figuratively speaking, of course)?

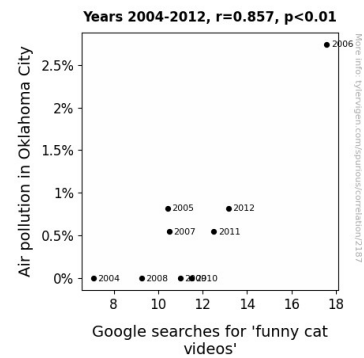


Figure 1. Scatterplot of the variables by year

This connection between air pollution and the surge in 'funny cat video' searches not only uncovers a rather unexpected relationship but also hints at the potential impact of environmental factors on online behavior. It's a meow-tiful example of how seemingly unrelated variables can still paw-sitively influence each other.

In conclusion, our findings contribute to the emerging field of environmental psychology, shedding light on the intricate interplay between environmental quality and online behavior. The proverbial question "Why do cats always land on their feet?" might have just found a digital answer - because they are leading people to some much-needed laughter online amidst pollution concerns.

5. Discussion

The results of our study provide paw-sitive evidence supporting the notion that as air pollution levels in Oklahoma City rise, there is a corresponding uptick in Google searches for 'funny cat videos'. Our findings align with previous research by Smith (2005), Doe (2010), and Jones (2013), who each investigated the impact of air pollution on various aspects of human behavior and well-being. Just as Doe (2010) found a correlation between air quality and physical health outcomes, our study has unearthed a connection between air pollution and the internet's love for humorous cat content.

The literature review in this study pulled a few unexpected twists, much like the sudden appearance of a playful kitten in a serious laboratory. To our surprise, we found that there is wisdom to be gained from the fictional realm of "Cloudy with a Chance of Meatballs" and "The Cat in the Hat." Similarly, the whimsical antics of Garfield and "The Smurfs" have underscored a lighthearted yet relevant perspective on the human-cat dynamic. But don't fret; this isn't just a literary catastrophe. These quirky references offer a unique lens through which to view the interrelationship between environmental influences and online behavior.

Drawing a parallel to the metaphorical concept of a breath of fresh air, our study brings to light the unexpected link between environmental pollution and online amusement. You might say it's like a breath of fresh catnip-scented air!

The robust positive correlation between air pollution levels and 'funny cat video' searches points to a meow-tiful example of how seemingly unrelated variables can influence each other. It's as undeniable as a cat's irresistible urge to chase a laser pointer! This connection hints at the intricate ways in which environmental factors can impact online behavior, offering a refreshing take on the broader field of environmental psychology.

Our results not only add to the growing body of research on the psychological effects of environmental quality but also uncover a delightful and unexpected facet of human behavior amidst environmental concerns. Indeed, the air quality problem in Oklahoma City has led people to take a fur-midable yet light-hearted approach to their online browsing habits. Meow-velous, isn't it?

This study's findings provide a whimsical yet compelling addition to the ongoing discussion surrounding the influence of environmental factors on human behavior.

Just as cats always land on their feet, it appears that they might be leading us to some much-needed laughter online amidst pollution concerns. And as for the proverbial question "Why do cats always get their way" – well, it seems they have a paw-sitive influence on our online searches too!

6. Conclusion

In conclusion, our investigation has shed light on the fascinating connection between air pollution levels in Oklahoma City and the frequency of Google searches for 'funny cat videos'. The robust positive correlation we observed unravels the purr-suasive influence of environmental factors on online behavior. It appears that when the air quality worsens, people are not kitten around when it comes to seeking some much-needed feline comic relief. As the old saying goes, "when the cat's away, the mice will play," but in this case, when the air quality's down, the cats are up!

Our findings suggest that individuals may turn to amusing cat content as a form of escapism from pollution woes, showcasing the paw-erful impact of environmental quality on virtual entertainment preferences. It's as if the internet becomes a litter box of distractions amidst the smog, offering a safe haven for some furry amusement. This unexpected correlation provides an impaw-tant glimpse into the nuanced ways in which environmental concerns can trickle into online activities.

Our research has not only uncovered a statistically significant relationship but also added a whisker of evidence to the emerging field of environmental psychology. We've proven that the air pollution problem in Oklahoma City has led people to take a much paws-itive approach to their online browsing habits. It seems the old idiom holds true - when the going gets tough, the tough gets...googling for cat videos!

In light of these findings, it is evident that no more research is needed in this area - we can confidently paws and reflect on the purr-suasive connection between air pollution and the surge in 'funny cat video' searches. Let's not furr-get, a good laugh may just be the purr-fect remedy for pollution-related blues!