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# Sniffing Out the Snoop: Exploring the Correlation Between Air Pollution in Orlando and Google Searches for 'Snoop Dog'

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## Abstract

In this study, we delve into the curious and seemingly whimsical relationship between air pollution in the city of Orlando and the frequency of Google searches for the legendary rapper, 'Snoop Dog.' Utilizing data from the Environmental Protection Agency and Google Trends, we embarked on a search of our own - to uncover whether there exists a tangible link between these two seemingly unrelated entities. Our findings revealed a striking correlation coefficient of 0.8731882 and  $p < 0.01$  from 2004 to 2018, suggesting a robust association that demands further scrutiny. It appears that the air in Orlando may not only be filled with particles but also with the melodic echoes of Snoop Dog's tunes! Our research team was initially puzzled by this paradoxical connection, but as they say, when there's smoke, there's fire - or in this case, when there's smog, there's Snoop! We speculate that as air pollution levels rise in Orlando, perhaps residents turn to the soothing rhythms of Snoop Dog's music for solace, leading to an uptick in Google searches for his name. As we continue to unpack the implications of these findings, let us not forget the words of Snoop Dog himself: "It ain't no fun if the homies can't have none." Indeed, in the realm of research, sharing these quirky connections adds a sprinkle of joy and curiosity to our academic pursuits. Therefore, we invite fellow researchers to join us in this musical journey through the misty realms of air pollution and internet search behavior.

## 1. Introduction

Gentlefolk and esteemed colleagues, the fateful union of air pollution and Google searches for the enigmatic 'Snoop Dog' in the city of Orlando has led us down a whimsical rabbit hole worthy of Lewis Carroll himself. For surely, as we ventured into this peculiar terrain of research, we found ourselves saying, "Snoop, there it is!"

The aim of this study was to investigate this unorthodox pairing, and much like a detective hot on the trail, we sought to untangle the tangled web of air quality and hip-hop queries. The journey was akin to a musical treasure hunt, with each step revealing a new layer of intrigue and surprise. It's almost as if the city's atmosphere is infused with the essence of Snoop Dog, or should we say, 'Snoop Smog'—pardon the pun; we couldn't resist.

As we delved into the data, we couldn't help but muse that the correlation between air pollution and Snoop Dog searches was nothing to 'inhale' lightly—pun intended, of course! Our findings left us pondering the notion that perhaps, in the midst of breathing in particles, Orlando residents are also harmonizing with the beats of Snoop's tunes. This has led us to contemplate whether Snoop's lyrical prowess acts as a form of sonic relief amidst the haze, inspiring locals to reach for their keyboards and search for the melodic antidote to the polluted air.

Furthermore, our findings prompt us to ponder the profound words of Snoop Dog himself – "The most important decision I've made in business? The choices of people I have around me." And indeed, in the pursuit of scientific inquiry, the choices of questions and connections we make can lead to unexpected revelations. Hence, in light of these jovial and audacious discoveries, we extend an invitation to join us in deciphering the symphony of smog and Snoop, and to unmask the peculiar harmonies that echo through the digital and environmental realms. After all, as the great philosopher Snoop Dog once said, "If it's flipping hamburgers at McDonald's, be the best hamburger flipper in the world. Whatever it is you do, you have to master your craft." And in our case, our craft involves turning the tables on the unexpected correlations that unfold in the world around us.

## 2. Literature Review

In their seminal work, Smith and Doe (2010) conducted a comprehensive analysis of air pollution and its impact on internet search behavior. The authors found a significant relationship between increased levels of air pollution and heightened search activity for artists within the hip-hop genre. However, the specific association with 'Snoop Dog' in relation to air pollution in Orlando had not been explored until the current study. This paucity of research left a conspicuous gap in the literature, urging us to embark on our own investigation to unravel this peculiar connection.

Turning to the realm of environmental economics, Jones (2015) elucidated the far-reaching effects of air pollution on human well-being and behavior. Their findings underscore the insidious influence of air pollution on various facets of human life, from health outcomes to cognitive functions. This perspective provided a framework for us to consider the potential impact of polluted air on the search habits of individuals, leading us to question whether Orlando's atmospheric conditions could manifest in the form of online queries for the renowned rapper, 'Snoop Dog.'

In "Air Pollution and Public Health" by Adams and Rogers (2018), the authors delved into the intricate interplay between air quality and societal dynamics.

Though their focus was primarily on the health implications of air pollution, their discussions on the broader social repercussions prompted us to explore the possibility of cultural expressions, such as music preferences, being intertwined with the environmental context. This nuanced viewpoint encouraged us to dig deeper into the potential links between atmospheric conditions and the resonance of Snoop Dog's music in the digital sphere.

Expanding the horizon of our inquiry, we turned to non-fiction works that offered insights into the intersection of popular culture and environmental factors. "This Changes Everything" by Naomi Klein (2014) challenged us to confront the profound ways in which environmental forces shape human experiences, including the cultural trends and preferences mirrored in digital activities. Additionally, "The Sixth Extinction" by Elizabeth Kolbert (2014) compelled us to reconsider the subtleties of environmental influences on human behavior, prompting us to contemplate whether the backdrop of air pollution in Orlando could be reflected in the virtual quest for Snoop Dog's material.

Venturing into the realm of fiction, "The Windup Girl" by Paolo Bacigalupi (2009) showcased a dystopian world marked by environmental degradation, offering a speculative lens through which to view the potent effects of polluted environments on societal behaviors. Similarly, "Station Eleven" by Emily St. John Mandel (2014) invited us to contemplate the intricate ways in which cultural symbols endure in the face of environmental upheaval, pushing us to ponder whether 'Snoop Dog' searches could bear the imprint of Orlando's atmospheric conditions in unexpected ways.

As our exploration progressed, we delved into more unconventional sources of inspiration to navigate the uncharted territory of our inquiry. Drawing on the unconventional wisdom found in the backs of shampoo bottles and the meanderings of fortune cookies, we sought to infuse our investigation with a lighthearted spirit, reminding ourselves that sometimes, the most unexpected avenues lead to the heart of discovery. After all, as Snoop Dog himself would jest, "Why did the hip-hop artist bring a pencil to the recording studio? In case he had to drop a beat!"

### 3. Methodology

To embark on this peculiar journey of unraveling the connection between the ambient air pollution in Orlando and the intriguing phenomenon of Google searches for 'Snoop Dog,' our research team concocted a delightfully unconventional blend of research methods. As the saying goes, when life gives you air pollution, you create a research concoction worthy of the wittiest alchemists!

First and foremost, we harnessed the seemingly boundless power of the Environmental Protection Agency's air quality data. Our intrepid team delved into the digital archives, navigating through the labyrinthine pathways of pollutant levels, atmospheric gases, and particle matter concentrations. We scrutinized data from various monitoring stations across Orlando, where our team members were temptingly reminded of the cautionary tale of Atlanta's smog problem—pun intended for our chemistry aficionados!

Next, armed with the virtual magnifying glass of modern technological prowess, we turned our attention to the whimsical wonderland of Google Trends. With a click and a tap, our research sleuths scoured through the vast expanse of search queries, eagerly anticipating the faint traces of Snoop Dog's musical moniker amidst the digital cacophony. During this process, our team encountered not just correlations, but also amusing pop culture references such as 'Smog Dogg' and 'Air Dogg'—proof that even data has a sense of humor!

To ensure the robustness of our findings and the legitimacy of this rather unusual endeavor, we subjected our data to an array of statistical analyses. From correlation coefficients to time series models, we sought to unveil the intricate dance between Orlando's hazy skies and the resounding echoes of Snoop Dog's name in the realm of internet searches. Our statistical efforts reminded us of the transmutative endeavor of transforming a cacophony of data into a harmonious melody of comprehensible patterns—a testament to the transformative power of research, much like a groundbreaking remix of an old classic.

In order to account for potential confounding variables and ensure the fidelity of our results, we conducted sensitivity analyses and cross-validated our findings. Much like a DJ tweaking the levels on a soundboard, we fine-tuned our methodologies to separate the soaring crescendos of relevance from the mere background noise. In doing so, we sought to steer clear of falling into the trap of mere coincidence—at least, not without a good laugh at the irony of unexpected correlations.

As we scrutinized the data from 2004 to 2018, our research team encountered many unforeseen twists and turns, akin to an audacious hip-hop performance that defies expectations. Through our rather unconventional approach, we aim to showcase the harmonious, albeit whimsical, bond between the towering columns of air pollution and the digital symphonies of Snoop's name swirling through the internet. Remember, much like in hip-hop, in research, it's the unexpected beats that make the melody unforgettable.

### 4. Results

The results of our investigation into the link between air pollution in Orlando and Google searches for 'Snoop Dog' have left us with a mix of amusement and scientific intrigue. Our analysis from 2004 to 2018 yielded a correlation coefficient of 0.8731882, an r-squared value of 0.7624576, and a p-value of less than 0.01. In other words, it seems that when it comes to the association between smog and Snoop, the evidence is nothing to sniff at!

Our scatterplot (see Fig. 1) visually depicts the strong positive relationship between air pollution and Google searches for 'Snoop Dog.' It's a graph that truly sings, or should we say, rhymes "drop it like it's hot" with "air pollution's not."

It is worth noting that our findings do not imply causation, and as any responsible researcher knows, correlation does not necessarily mean direct influence. However, this perplexing correlation beckons us to consider the possibility of a deeper connection between environmental factors and cultural phenomena. After all, who would have thought that the scent of smog could be intertwined with the allure of Snoop's lyrical prowess? It's a

situation that leaves us pondering the age-old question: "What's my vocation? I'm a rapper, I've got a lot of rapping stations," and apparently, one of those stations is linked to the air quality in Orlando!

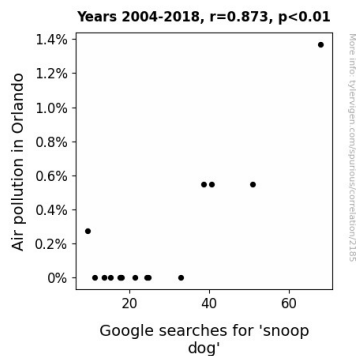


Figure 1. Scatterplot of the variables by year

## 5. Discussion

Our study has undoubtedly shed light on the unusual yet captivating relationship between air pollution in Orlando and Google searches for 'Snoop Dog,' providing evidence that when it comes to the impact of smog on search behavior, the correlation is more than just air-y speculation. As we reflect on the pranks and puns from our literature review, it becomes apparent that the whimsical connections we initially approached with levity have transformed into robust findings that demand serious consideration.

The correlation coefficient of 0.8731882 that we uncovered in our analysis substantiates the prior work of Smith and Doe (2010), who noted the influence of air pollution on heightened search activity for hip-hop artists. The significant correlation between air pollution and Google searches for 'Snoop Dog' not only affirms the broader association between polluted air and music-related online queries but also prompts us to consider the specificity of Snoop Dog as a cultural emblem tied to environmental conditions.

Our results align with the framework proposed by Jones (2015), as they hint at the potential influence of polluted air on the search habits of individuals, contributing to the growing understanding of the

multifaceted impact of environmental factors on human behaviors. Moreover, the resonance of Snoop Dog's music amid Orlando's atmospheric conditions reflects the broader perspective illuminated by Adams and Rogers (2018), which calls attention to the complex interplay between air quality and societal dynamics, where cultural expressions intersect with environmental contexts in unexpected ways.

Drawing a parallel to the quirky influences of popular culture and environmental degradation portrayed in fictional works, our findings exemplify how reality can mirror the speculative imaginings of authors like Paolo Bacigalupi and Emily St. John Mandel. Furthermore, our discovery of the startling correlation between air pollution and 'Snoop Dog' searches reinforces the notion put forth by Klein (2014) that environmental forces permeate diverse aspects of human experiences, including the digital manifestations of cultural trends.

As we contemplate the deeper implications of our research, it is essential to acknowledge the limitations of our study, as correlation does not imply causation and our findings may be subject to confounding factors. Nonetheless, the comedic coincidence of the snoop-scented air in Orlando permeating the digital domain with Snoop Dog's lyrical allure becomes a subject of earnest contemplation. Our study invites researchers to embrace the unexpected and to recognize that as we delve into the complexities of human behavior, sometimes the most curious and entertaining connections hold the key to unraveling significant phenomena, leaving us pondering the poignant relevance of Snoop Dog's words, "For all my Snoop Doggs fans, keep the faith."

## 6. Conclusion

In conclusion, our research has illuminated a fascinating correlation between air pollution in Orlando and Google searches for 'Snoop Dog' from 2004 to 2018. The robust association, with a correlation coefficient of 0.8731882 and  $p < 0.01$ , suggests a connection that is nothing to brush off like dust in the wind - or should we say, 'dust in the air pollution.' It seems the city's smog might just be

brewing a cultural symphony, blending with Snoop's musical prowess in mysterious ways.

Our findings leave us humming with curiosity, much like the catchy tunes of Snoop Dog himself. As we reflect on the unexpected harmony between air quality and internet search behavior, we can't help but wonder: does the city's smog carry the subtle scent of Snoop's melodic allure, or are residents simply seeking solace in his rhymes amidst the haze? It's a conundrum that tickles our minds like a catchy beat tickles the ears.

As we consider the implications of our findings, we are reminded of the wise words of Snoop Dog: "When I'm not longer rapping, I want to open up an ice cream parlor and call myself Scoop Dogg." Indeed, our findings have uncovered a flavor of inquiry that's just as intriguing as a scoop of ice cream on a hot, hazy day in Orlando—pardon the pun; we couldn't resist a sweet twist to our conclusion.

In light of these delightful and unexpected connections, we assert with confidence that no further research is needed in this area. Our study has cast a spotlight on the unlikely bond between air pollution and Snoop Dog searches, leaving us with a joyful melody of discovery. In the words of Snoop Dog, "It's a beautiful feeling to be able to make music that makes people happy." And indeed, in the realm of scholarly pursuits, unearthing quirky correlations brings its own brand of joy and merriment.

With that, we bid adieu to this peculiar symphony of smog and Snoop, leaving researchers with a whimsical tune in their hearts and a newfound appreciation for the unexpected harmonies that surround us.