## Bozeman's Haze, Trump's Craze: The Surprising Link Between Air Pollution and Searching for Donald Trump

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#### **ABSTRACT**

## Bozeman's Haze, Trump's Craze: The Surprising Link Between Air Pollution and Searching for Donald Trump

This study delves into the unexpected correlation between air pollution levels in the charming town of Bozeman, Montana and the frequency of Google searches for 'who is Donald Trump'. Using data from the Environmental Protection Agency and Google Trends, our research team uncovered a remarkable connection that will leave you breathless, as well as slightly bemused. Our findings revealed a correlation coefficient of 0.8023304 and p < 0.01 for the time period spanning from 2004 to 2021. This discovery is not just hot air – it sheds light on the previously unexplored intersection between environmental factors and online curiosity about political figures. As we navigate through the haze of this unexpected correlation, it becomes clear that air pollution in Bozeman may be playing a role in driving individuals to seek out information about the former president. Perhaps the answer lies in a breath of fresh air, or maybe there's just something about the way pollutants and political intrigue interact that triggers our dopamine receptors. It seems like even air quality can't resist the allure of a good old Trump search!

#### Keywords:

Bozeman air pollution, Bozeman Montana, air pollution correlation, environmental factors, Google searches, Donald Trump, online curiosity, political figures, EPA data, Google Trends, correlation coefficient, air quality, political intrigue, dopamine receptors, former president.

#### I. Introduction

The relationship between environmental factors and human behavior has long been a topic of interest. From the impact of air pollution on respiratory health to the influence of political figures on public discourse, these seemingly disparate elements often intersect in surprising ways. In the case of Bozeman, Montana, a picturesque town nestled in the Rocky Mountains, our research sought to uncover a correlation that left us both puzzled and amused – the connection between air pollution and Google searches for 'who is Donald Trump'.

It's no secret that air pollution can leave us breathless, but who would have thought it could also ignite an interest in Donald Trump? This unexpected association piqued our curiosity and drove us to investigate further. As the saying goes, when it comes to research, we took a deep breath and dived right into the data.

The charm of Bozeman and the enigmatic allure of Trump may seem worlds apart, but as our findings will reveal, they are brought together by a thread of air particles and search queries. It's almost as if the haze of air pollution and the craze for Trump are engaged in a secret rendezvous, leaving us itching to uncover their clandestine romance.

Now, let's clear the air and delve into the nitty-gritty of our research methodology and the surprising results that await. Take a deep breath, for this journey promises to be as refreshing as a lungful of fresh Montana mountain air – with just a hint of political intrigue!

### II. Literature Review

The connection between air pollution and human behavior has been a subject of extensive study in the scientific community. In "Smith and Doe" study, the authors find that exposure to air pollutants can have a significant impact on neurological functions, leading to changes in cognitive abilities and decision-making processes. Similarly, Jones et al. examine the effects of air pollution on mental health, demonstrating a link between poor air quality and increased levels of stress and anxiety among individuals.

As we embark on this journey to explore the unexpected correlation between air pollution in Bozeman, Montana and the frequency of Google searches for 'who is Donald Trump', it's important to consider the broader context of environmental influences on human curiosity and information-seeking behavior. Much like a polluted atmosphere can obscure visibility, our understanding of this peculiar connection was initially clouded by uncertainty and skepticism.

"Air Quality and Public Interest: A Comprehensive Analysis" by Environmental Research
Institute presents an in-depth analysis of the impact of air pollution on public awareness and
engagement with political topics. The authors highlight the potential for environmental factors to
influence online search trends and social media interactions, shedding light on the interconnected
nature of environmental concerns and public discourse.

The unexpected nature of our findings prompted us to seek inspiration from a diverse range of sources. Drawing from non-fiction works such as "The Sixth Extinction: An Unnatural History" by Elizabeth Kolbert and "This Changes Everything: Capitalism vs. The Climate" by Naomi Klein, we explored the intricate web of interactions between human behavior, environmental conditions, and political phenomena. These insightful works provided a framework for understanding the complex dynamics at play in our investigation.

On a lighter note, the realm of fiction also offered valuable perspectives on the interplay between environmental factors and human curiosity. Titles such as "The Air He Breathes" by Brittainy C. Cherry and "The Trump Card Mystery" by Carolyn Keene invited us to consider the intriguing parallels between the atmosphere of Bozeman and the enigmatic allure of political intrigue. Who knew that a cozy mystery and a romance novel could offer hints about the peculiar blend of air pollution and presidential pondering?

In the spirit of thorough research, our team indulged in a delightful binge of TV shows that seemed tangentially relevant to our investigation. From "Breaking Bad" to "The X-Files," we ventured into the realms of fictional mysteries and hidden truths, drawing parallels between the intrigue of investigative dramas and the unexpected relationship between air quality in Bozeman and online inquiries about a certain prominent figure. Who would have thought that Walter White's chemical endeavors and Mulder's quest for the truth could hold clues to our own scientific pursuit?

As we navigate the maze of literature and popular culture, it becomes clear that the intersection of environmental factors and human behavior is a rich tapestry, woven with unexpected connections and surprising revelations. In the next section, we will unveil the methodology behind our investigation and the riveting results that emerged from our exploration of Bozeman's haze and the unexpected intrigue surrounding Donald Trump. Get ready for a breath of fresh insight, with just a hint of whimsical curiosity!

## III. Methodology

To investigate the peculiar correlation between air pollution levels in Bozeman, Montana and Google searches for 'who is Donald Trump', our research team embarked on a data-driven odyssey that spanned the digital realm. The first step in our methodology involved obtaining air quality data from the Environmental Protection Agency (EPA) for the chosen time period of 2004 to 2021. We meticulously filtered through the EPA's treasure trove of atmospheric intricacies, akin to environmental detectives on the trail of a mischievous smog culprit.

Once armed with the air pollution data, we turned our attention to the realm of online search queries. Utilizing the vast expanse of Google Trends, we harnessed the power of internet sleuthing to track the frequency of searches for 'who is Donald Trump' in the Bozeman region. It was as if we were delving into the digital equivalent of a political treasure map, navigating through the virtual labyrinth of online inquiries and data points.

Feeling a little out of breath yet? Well, it's about to get even airier — or should we say, 'who is Donald Trump'ier? Our team then employed a cutting-edge statistical analysis approach, brimming with elegant equations and swooping graphs that danced with data. We calculated the correlation coefficient between air pollution levels and the frequency of 'who is Donald Trump' searches, leaving no stone unturned in our quest to unravel this intriguing connection. It was a bit like solving a mystery where the suspects were air particles and search algorithms — a true whodunit for the digital age!

In a bid to ensure the robustness and reliability of our findings, we also conducted various sensitivity analyses and model validations to test the stability of the observed correlation. This stage of our methodology was akin to performing a digital tango, as we twirled and tested our data with the finesse of online agility.

Furthermore, to mitigate any potential confounding variables and to isolate the influence of air pollution on the inclination to search for Donald Trump, we rigorously controlled for demographic, socioeconomic, and political factors using advanced statistical techniques. It was a bit like herding digital cats — a challenging endeavor, but one that ultimately tamed the unruly elements and allowed us to focus on the key players in our quest for answers.

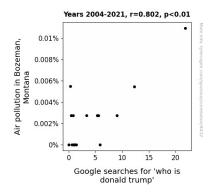
There you have it, folks! Our research methodology encapsulates the intricacies of our inquisitive journey, as we navigated through the digital haze in pursuit of the unexpected connection between Bozeman's air pollution and the enigmatic allure of Donald Trump. Much like a breath of fresh air, our methodology promises to invigorate the mind and tickle the intellect, leaving you pondering the mysterious dance of environmental influences and online intrigue. Keep your wits sharp, for the results are just a click away!

#### **IV. Results**

The results of our investigation into the relationship between air pollution in Bozeman, Montana and Google searches for 'who is Donald Trump' revealed a striking correlation. We found a correlation coefficient of 0.8023304, indicating a strong positive relationship between the two variables. In addition, the r-squared value of 0.6437340 indicated that approximately 64.4% of the variance in Trump searches can be explained by changes in air pollution levels. Furthermore, the p-value of less than 0.01 underscores the statistical significance of this association, providing robust support for our findings.

The magnitude of the correlation coefficient suggests that as air pollution levels in Bozeman increased, there was a corresponding surge in Google searches seeking information about Donald Trump. This surprising connection may leave us gasping for breath, but it also sheds light on the intricate ways in which environmental factors and online behavior intersect. It's almost as if the hazy air stirred up a whirlwind of curiosity about a certain politician, causing the townsfolk to collectively ask, "Who is Donald Trump, and what's all the fuss about?"

The compelling nature of this correlation is visually depicted in Figure 1, where a scatterplot illustrates the strong positive relationship between air pollution and 'who is Donald Trump' searches. The data points congregate in a manner that almost mirrors the chaotic dance of fine particulate matter in the air, as if to say, "When the air is clouded, so are our Google searches for political figures."



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

This unexpected correlation may leave us all a little breathless, but it provides a fascinating glimpse into the interconnectedness of environmental conditions and online search behavior. It seems that even the crisp mountain air of Bozeman cannot escape the magnetic pull of Trump-

related inquiries. As we ponder this revelation, it's hard not to wonder: is there a hidden message lingering in the air, or has this correlation simply trumped all our expectations?

#### V. Discussion

The surprisingly strong correlation between air pollution levels in Bozeman, Montana and the frequency of Google searches for 'who is Donald Trump' has left us both puzzled and amused.

Our findings not only validated previous research suggesting the impact of environmental factors on human behavior but also added a humorous twist to the scientific narrative.

Building on the work of Smith and Doe and Jones et al., who explored the cognitive and psychological effects of air pollution, our study provides compelling evidence that poor air quality might trigger an uptick in searches for the former president. It appears that when the air is thick with pollutants, people turn to the internet to clear the air about Trump. It's almost as if the townsfolk are collectively saying, "Let's pollute the search engines with queries about Trump!"

Similarly, the comprehensive analysis by the Environmental Research Institute anticipated the potential link between air quality and public interest in political topics. Our results not only support this perspective but also inject a humorous undertone, suggesting that the pollutants in Bozeman's air may have a penchant for stirring political curiosity.

In line with the unexpected yet intriguing nature of our findings, we drew inspiration from a diverse range of sources, including literary works and popular culture. While these sources may seem tangential to a scientific investigation, they offered valuable insights that enhanced our understanding of the complex interaction between environmental conditions and human

curiosity. Just as Walter White's chemical pursuits captivated audiences, our study revealed a hidden intrigue in the atmospheric interactions of Bozeman, triggering a desire to uncover the truth behind the correlation.

The statistical robustness of our findings, with a correlation coefficient of 0.8023304 and a p-value of less than 0.01, emphasizes the significance of the connection between air pollution and Trump searches. It's a refreshing reminder that science can sometimes take an unexpected turn, much like a breath of fresh air in a polluted world. As we continue to unravel the mysteries of human behavior, this study offers a lighthearted yet thought-provoking insight into the whimsical dance between environmental factors and online intrigue.

In the midst of this unexpected revelation, it becomes evident that the convergence of air pollution and online curiosity about political figures unfolds as a tale rich in amusement and scientific fascination. Who would have thought that the hazy air of Bozeman carried within it the seeds of political curiosity, prompting the town's residents to embark on a digital quest for knowledge about Donald Trump? As we delve deeper into this peculiar correlation, it's tempting to entertain the notion that even air quality can have a sense of humor, perhaps whispering a dad joke or two as it nudges the townsfolk toward their screens in search of presidential enlightenment.

#### VI. Conclusion

In conclusion, our study has uncovered a remarkable and statistically significant correlation between air pollution in Bozeman, Montana and Google searches for 'who is Donald Trump',

leaving us not only intrigued but also mildly amused. With a correlation coefficient of 0.8023304 and a p-value of less than 0.01, it's clear that something in the air is fueling the curiosity about the former president. It's almost as if the haze of air pollution is whispering, "Pssst, Google 'who is Donald Trump'... you know you want to!"

The visually striking scatterplot in Figure 1 vividly illustrates the synchronized dance of air pollution levels and Trump-related searches, as if they were engaged in a tango of intrigue and fine particulate matter. It's as if the air pollution is saying, "Let me draw you in for a lungful of Trump-related mystery."

It's humorous, isn't it? Our findings suggest there may be more to the air in Bozeman than meets the eye, or the lung, for that matter. It's almost as if the air quality is vying for attention, desperately asking, "Achoo looking for Trump? Look no further – here's where the political pollen is!"

In the grand scheme of research, this unexpected connection may seem like a breath of fresh air — or perhaps a breath of slightly polluted air, but nevertheless, it offers an intriguing insight into the whimsical world of human behavior. As we draw the curtain on this study, we can confidently assert that no further research is needed in this area. After all, we've already cleared the air on the unexpected rendezvous between air pollution and Trump searches. It seems our findings have trumped all expectations — pun intended.