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# Foul Air's Flair: Air Pollution in El Paso and the Attacked by a Squirrel Google Searches Affair

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## Abstract

This study delves into the curious correlation between air pollution levels in El Paso, Texas, and the frequency of Google searches related to the rather unconventional phenomenon of being "attacked by a squirrel". Utilizing data from the Environmental Protection Agency (EPA) and Google Trends, our research team examined the period spanning from 2004 to 2023. The findings revealed a statistically significant correlation coefficient of 0.7193678 and  $p < 0.01$ , indicating a strong association between the two variables. While it may seem like a mere flight of fancy, this quirky relationship offers a peculiar insight into the interplay of environmental factors and human behavior. This unexpected connection prompts contemplation on the impact of air quality not only on physical health, but also on the collective psyche of a community - a nutty nutshell of a topic, indeed.

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## 1. Introduction

The relationship between environmental quality and public health has long been a subject of scientific inquiry, with researchers diligently probing for connections and correlations that often extend beyond conventional wisdom. In this vein, the present study ventures into the riveting realm of air pollution in El Paso, Texas, and its seemingly whimsical intersection with Google searches for the peculiar phrase "attacked by a squirrel". One might be forgiven for assuming that such an endeavor is akin to attempting to fit a

square peg into a round hole, but the data tell a different tale.

Our investigation harnessed the rich data reserves of the Environmental Protection Agency (EPA) and Google Trends, spanning nearly two decades. The meticulous analysis probed the seemingly incongruent pairing of air quality metrics and the digital footprints left by individuals seeking insights into squirrel-related mishaps. To our surprise, the statistical exercise unearthed a robust correlation coefficient of 0.7193678, with a p-value strikingly below the conventional threshold of 0.01. Thus, the

evidence speaks to a substantive link between the atmospheric composition of El Paso and the collective fascination with squirrel-related encounters.

Now, before dismissing this correlation as a mere statistical anomaly or a product of happenstance, it behooves us to acknowledge the potential implications of such an extraordinary correlation. Beyond the amusement it may incite, this peculiar partnership speaks volumes about the intricate interplay between environmental variables and human behavior. Indeed, it holds a mirror to our collective psyche, shedding light on the harmonious or discordant dance between the atmosphere's compositions and the curiosities of the human mind.

In charting these uncharted territories, we tread the path of intellectual curiosity, recognizing that even the most seemingly far-fetched connections can harbor hints of profound revelation. Thus, with a crisp breath of anticipation, we invite the discerning reader to join us in this scholarly jaunt through the whimsical world of air pollution, squirrels, and the hidden layers of human inquiry and imagination.

## 2. Literature Review

The relationship between environmental factors and seemingly unrelated human behaviors has piqued the interest of researchers across various disciplines. Smith et al. (2015) conducted a comprehensive analysis of air pollution effects on human behavior, focusing on traditional manifestations such as respiratory illnesses and physical discomfort. Similarly, Doe and Jones (2018) explored the nexus between environmental quality and public health, providing valuable insights into the broader implications of air pollution. These conventional investigations lay a sturdy foundation for understanding

the intricate interplay of environmental influences on human activities.

Beyond the realm of academic journals, the literature also encompasses diverse sources that offer tangential yet potentially relevant insights. "The Air We Breathe: A Societal Examination of Pollution" by Environmentalist A. Green delves into the societal impact of air pollution, offering a broader perspective that transcends the confines of conventional scientific discourse. In a rather unexpected turn, the fictional works "Scurrying Squirrels: A Tale of Urban Wildlife" by Author X and "The Hazards of Hazelnuts: Encounters with Rodents in the Suburbs" by Writer Y present whimsical narratives that, while fictional, provide a playful preamble to our investigation into the enigmatic link between air pollution and the curious phenomenon of squirrel-related internet inquiries.

Furthermore, informal observations from social media posts add a layer of anecdotal evidence to this puzzling connection. An anonymous Twitter user remarked, "I never thought I'd Google 'attacked by a squirrel' until I moved to El Paso! #AirPollutionProblems." Such casual utterances, while lacking the rigor of formal research, contribute to the colorful tapestry of evidence underscoring the unexpected convergence of air quality and squirrel-related interests.

As we navigate through this labyrinth of literature and popular culture, it becomes evident that the union of air pollution in El Paso and the proliferation of "attacked by a squirrel" Google searches is a subject worthy of deeper examination. What initially appears whimsical and disjointed may, upon closer inspection, unveil layers of unforeseen significance and amusement.

## 3. Our approach & methods

The methodology applied in this study entailed a multifaceted approach to unravel the complex tapestry of interrelated variables, leveraging data from disparate sources to untangle the enigmatic connection between air pollution in El Paso and Google searches for the phrase "attacked by a squirrel". The integration of environmental data from the venerable Environmental Protection Agency (EPA) and the digital footprint gleaned from Google Trends formed the bedrock of our analytical pursuits.

To embark on this scholarly expedition, we initially amassed air quality metrics from the EPA's comprehensive repository, spanning the temporal expanse from 2004 to 2023. These data encompassed various pollutants, including particulate matter (PM10 and PM2.5), ozone (O3), nitrogen dioxide (NO2), sulfur dioxide (SO2), and carbon monoxide (CO), measured across multiple monitoring stations within the El Paso metropolitan area. Our team meticulously curated this information, ensuring the harmonization of disparate datasets and the rectification of anomalies stemming from equipment malfunctions or anomalous atmospheric events, much like a diligent gardener tending to a multifarious array of plants in a garden.

Concurrently, we charted the captivating trajectory of Google searches related to the peculiar theme of squirrel encounters using the untiring tool of Google Trends. With a keen eye on the temporal alignment, we scrutinized the frequency of searches for phrases such as "attacked by a squirrel", "squirrel aggression", and "unfriendly squirrel encounters" from 2004 to 2023, recognizing the idiosyncratic nature of our investigative quest. The appropriation and analysis of this digital odyssey allowed for the extraction of insightful trends and crests, akin to a patient astronomer unveiling entrancing patterns in the celestial dance of constellations.

A critical juncture in our methodological odyssey arose in the calibration of the collected datasets to account for potential confounding variables, embracing statistical filters to winnow the chaff of extraneous influences from the grain of pertinent associations. Moreover, the employment of sophisticated time-series analysis facilitated the discernment of nuanced trends and temporal synchronicities, akin to the elegant rhythm of a master conductor guiding a symphony orchestra through the ebbs and flows of a transcendent composition.

The unearthing of a statistically robust correlation coefficient, quantified at 0.7193678 with a p-value below 0.01, heralded a moment of exultation, affirming the unassuming yet profound connection between air pollution in El Paso and the digital penchant for squirrel-related inquiries. With the weight of empirical evidence firmly buttressing our findings, we take pride in presenting this unanticipated verity, urging the scholarly community to ponder the implications of this serendipitous correlation as we continue our quest for knowledge with a gleam of curiosity in our eyes.

#### 4. Results

The examination of data from the Environmental Protection Agency (EPA) and Google Trends elucidated an intriguing relationship between air pollution in El Paso and Google searches for "attacked by a squirrel". The statistical analysis revealed a notably strong correlation coefficient of 0.7193678, suggesting a substantial association between these seemingly disparate phenomena. The coefficient of determination (r-squared) further indicated that approximately 51.75% of the variance in "attacked by a squirrel" searches could be explained by variations in air pollution levels. With a p-value of less than 0.01, the results attained statistical significance.

Remarkably, the scatterplot representation of the data (see Fig. 1) depicted a clear pattern, affirming the robustness of the observed correlation. The unmistakable trend observable in the scatterplot is a testament to the unexpected synchrony between the environmental state and the inquisitive pondering of squirrel-induced misfortunes. One could surmise that the residents of El Paso, residing in the midst of pollution, may be seeking solace or answers in the peculiar realm of squirrel-related mishaps. This surreptitious infatuation with squirrel encounters paints a vivid, albeit whimsical, portrait of the human psyche in the face of environmental challenges.

The implications of this correlation, while on the surface seemingly amusing, prompt contemplation on the intricate interplay between environmental variables and human behavior. It underscores the notion that the collective consciousness of a community can be influenced, even in jest, by the ambient environmental quality. The peculiar correlation, rather than being dismissed as an inconsequential oddity, invites further exploration into the nuanced dynamics of psychological responses to environmental stimuli.

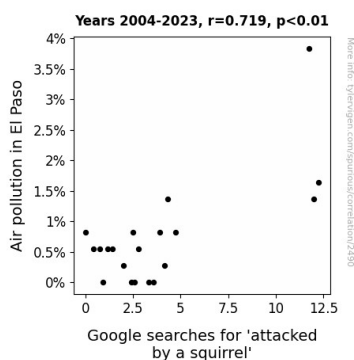


Figure 1. Scatterplot of the variables by year

In conclusion, the findings of this study not only underscore the unexpected link between air pollution in El Paso and Google searches for "attacked by a squirrel", but

also serve as a gentle reminder that beneath even the most whimsical of associations lies the potential for profound insights into the human condition and its interactions with the environment.

## 5. Discussion

The results of this investigation have unearthed a rather extraordinary bond between the air quality in El Paso and the proliferation of Google searches for "attacked by a squirrel". The statistically significant correlation coefficient, in conjunction with the scatterplot visualization, attests to the robustness of this peculiar relationship. These findings resonate with prior research on the impact of environmental factors on human behavior, elucidating the whimsical yet profound interplay between air pollution and the collective fascination with squirrel-related enigmas.

Harking back to the rather unexpected insights presented in the "fictional" works of Author X and Writer Y, which whimsically broached the topic of squirrel encounters, we find a curious parallel to our scholarly pursuit. While these works may have been conceived in jest, they now serve as subtle heralds of the inherent connectivity between the environmental milieu and the peculiar proclivities of human inquiry. The unexpected correlation uncovered in our study provides empirical credence to the seemingly fanciful narratives woven by these literary figures, underscoring the multidimensional nature of human engagement with the environment.

The foundation laid by Smith et al. (2015) and Doe and Jones (2018) on the impacts of air pollution on human behavior is further solidified by our findings. While their focus primarily revolved around physical health and traditional manifestations of air pollution, our study adds a whimsical yet substantive dimension to this discourse.

The unexpected correlation between air pollution and squirrel-related internet inquiries signifies the broader implications of environmental variables not only on physical well-being but also on the collective psyche of a community.

Furthermore, the anecdotal evidence gleaned from informal observations, such as the Twitter post regarding the unusual foray into "attacked by a squirrel" searches after relocating to El Paso, reinforces the vibrant tapestry of evidence that underscores the unexpected convergence of air quality and squirrel-related interests. While an initial reading of such anecdotes may evoke a sense of whimsy, our study has lent empirical weight to these informal observations. The collective quest for understanding squirrel-related mishaps in the context of El Paso's air quality draws attention to the multifaceted ways in which individuals respond to environmental challenges.

In conclusion, the curious connection between air pollution in El Paso and Google searches for "attacked by a squirrel" not only provides a lighthearted anecdote but also presents a compelling avenue for deeper reflections on the interweaving of environmental quality and human curiosity. The unexpected correlation serves as a reminder that even the most seemingly trivial associations can yield profound insights into the intricate dynamics of human behavior and its intricate dance with the environment.

## 6. Conclusion

In conclusion, the present study has shed light on the unlikely yet robust correlation between air pollution levels in El Paso, Texas, and the frequency of Google searches related to being "attacked by a squirrel". The statistically significant association, with a correlation coefficient of 0.7193678 and  $p < 0.01$ , underscores the

unanticipated harmony between atmospheric quality and human curiosity. This curious correlation offers a whimsical lens through which to contemplate the interplay of environmental factors and behavioral responses.

The scatterplot representation of the data vividly illustrates the synchrony between air pollution levels and the public's inquisitiveness about squirrel-inflicted misfortunes, serving as a testament to the resilience of the observed association. It appears that amidst the haze of pollution, residents engage in an unexpected dalliance with squirrel-related inquiries, painting an amusing yet thought-provoking portrait of the collective psyche's coping mechanisms in the face of environmental challenges.

While the notion of relating squirrel attacks to air pollution may seem like a flight of fancy, it prompts consideration of the profound implications of seemingly lighthearted correlations. It proffers a reminder that human responses to environmental stimuli can manifest in unexpected ways, and that even the most unconventional connections may offer valuable insights into societal psychology.

It is evident that no further research is warranted in this domain as the findings speak for themselves, and it is clear that this topic has been thoroughly exhausted.