

AIR-FRYING FAST FOOD: EXPLORING THE LINK BETWEEN AIR POLLUTION AND FAST FOOD COOKS IN WAUSAU, WISCONSIN

Chloe Harrison, Amelia Terry, Giselle P Turnbull

Center for the Advancement of Research

In this study, we take a tongue-in-cheek look at the potentially serious issue of air pollution and its connection to the number of fast food cooks in Wisconsin, particularly in Wausau. Our research aims to shed light on an often undiscussed yet crucial aspect of environmental and labor economics. By analyzing data from the Environmental Protection Agency and the Bureau of Labor Statistics, we found a surprisingly strong positive correlation between air pollution levels in Wausau, Wisconsin, and the number of fast food cooks in the state. The correlation coefficient of 0.8009571 and $p < 0.01$ for the period from 2003 to 2022 provides a statistically significant indication of a relationship. Our findings highlight the need to further investigate the impact of air quality on employment in the fast food industry, as well as the potential health effects of "air-fried" foods. We hope that our lighthearted approach will encourage further exploration of this topic and lead to a better understanding of the quirky connections between environmental factors and labor dynamics.

Introduction

Air pollution and fast food, two seemingly unrelated subjects, are about to engage in a sizzling conversation in this paper. While one is about the quality of the air we breathe, the other is about the quality (or lack thereof) of the food we consume. But hold on to your aprons, because we've unearthed a connection that's juicier than a well-grilled burger.

It's no secret that air pollution has been a hot topic in environmental research. From carbon emissions to particulate matter, we've invested countless dollars and brain cells into studying how air quality affects our health and climate. But have we ever stopped to think about its impact on the job market, particularly in the fast food industry? We're not just flipping patties here, folks; we're serving up a side of labor economics with a dash of spicy statistics.

Our research dives into the heart of the cheese curd capital of the world - Wausau, Wisconsin - to investigate the correlation between air pollution levels and the number of fast food cooks in the state. And let us tell you, the results we've cooked up are more surprising than finding a pickle in your french fries. We didn't just stumble upon a connection; we stumbled upon a statistical romance worthy of a scientific soap opera.

So, why should we care about the number of fast food cooks in Wisconsin? Well, aside from the obvious need for experts in the art of frying, grilling, and assembling, it turns out that employment in the fast food industry reflects broader economic and environmental trends. The number of fast food cooks isn't just a statistic; it's a thermometer for the state of the labor market, and our research suggests that air pollution might be turning up the heat.

Grab your lab coat and a bib, because we're about to embark on a deliriously delicious journey through the aromatic world of environmental and labor economics. As we explore the delectable dynamics between air quality and the fast food workforce, we hope to sprinkle some fun into what might otherwise be a dry and unappetizing topic. So, buckle up and get ready to sink your teeth into the quirks of our findings. It's a scientific feast fit for a hungry mind.

LITERATURE REVIEW

As we delve into the connection between air pollution and the number of fast food cooks in Wausau, Wisconsin, we first turn our attention to Smith's seminal work "Air Pollution and Its Impacts on Local Labor Markets" (2015). Smith's research brings to light the potential economic consequences of air pollution, but what about the olfactory consequences? Let's not forget that our sense of smell is as much a part of the labor market as our sense of employment.

Doe further contributes to the field with the comprehensive study "Fast Food Employment Trends in the Midwest" (2018), shedding light on the fluctuating workforce dynamics in the fast food industry. But does this study consider the aromatic allure of fried delicacies in relation to air pollution? A missing dimension, we dare say!

Jones' work on "Environmental Quality and Economic Growth" (2017) provides a robust exploration of the interplay between environmental factors and economic development. However, the thread unraveling the interconnection between air pollution and the allure of fast food aromas seems to have escaped even the most astute of economists.

Turning to non-fiction literature related to our topic, "The Omnivore's Dilemma" by Michael Pollan (2006) and "Fast Food Nation" by Eric Schlosser (2001) offer substantial insights into the fast food

industry and its impact on society. But do these authors dare to explore the potential link between the pungent perfumes of deep-fried delights and environmental pollutants? Alas, the world may never know.

Steering into the realm of fiction, we encounter Margaret Atwood's "Oryx and Crake" (2003) and George Orwell's "1984" (1949), both of which offer dystopian visions of the relationship between environmental degradation and societal structures. However, the tantalizing scent of freshly fried potatoes and the wafting aroma of sizzling burgers seem to be overshadowed by more dire concerns in these literary works.

In an unconventional turn, we found ourselves perusing the backs of shampoo bottles and air freshener labels, hoping to stumble upon a revelatory correlation between air pollution and the demand for fast food cooks. Alas, we emerged with fragrant tresses and scented rooms but no substantial insights into our research inquiry.

In our pursuit of truth, we have discovered that while serious research has illuminated the economic and environmental dimensions of air pollution and fast food employment, there remains an unexplored olfactory dimension that might just be the missing ingredient in our understanding of this quirky connection. With a hint of humor and a dash of whimsy, we aim to bring this aromatic anomaly to the forefront of academic discourse.

METHODOLOGY

METHODOLOGY

Alright, fellow scientific enthusiasts, it's time to lift the lid on our research recipe and reveal the tantalizing methods we used to cook up these findings. But before we get too carried away, let's not forget that a key ingredient in any scientific study is a healthy dose of rigor and precision. So, hold onto your chef

hats as we break down the steps we took to concoct this flavorful investigation.

Data Collection:

We scoured the internet like a diligent sous chef searching for the freshest ingredients, and by freshest ingredients, we mean raw data. Our foraging led us to the databases of the Environmental Protection Agency and the Bureau of Labor Statistics, where we gathered air pollution levels and employment figures in the fast food industry from 2003 to 2022. It was like peeling back the layers of an onion - utterly tear-inducing, but ultimately worthwhile.

Variables Abound:

Now, let's talk about the stars of our culinary show - the variables. We measured air pollution levels in Wausau, Wisconsin, using the air quality index (AQI), which encompasses pollutants like ground-level ozone, particulate matter, carbon monoxide, and sulfur dioxide. As for the fast food industry, we focused on the number of cooks employed in establishments across Wisconsin. We threw those variables into our statistical cauldron and stirred until we reached a statistically significant concoction.

Analytical Techniques:

In the spirit of experimentation, we employed a variety of statistical methods to whip up our analysis. We started off with some old-fashioned correlation analysis to stir the pot and see if there was any heat between our variables. Once we found a sizzling correlation, we cranked up the heat and performed a regression analysis to tease out the relationship between air pollution and the number of fast food cooks. Let's just say there was a fair amount of number-crunching involved - we practically turned our calculator into a grill.

Quality Control:

We didn't pop our research into the oven without first making sure the recipe was just right. Our data underwent

rigorous scrutiny to ensure that it was as crisp and accurate as a perfectly fried batch of chicken tenders. We sifted through outliers, checked for data integrity, and performed sensitivity analyses to verify that our findings were as flavorful as a well-seasoned dish.

Now that we've taken you on a whirlwind tour of our methodological kitchen, it's time to dish up the results. We just hope you've worked up an appetite for some scientific insights served with a side of humor. Bon appétit!

RESULTS

We rolled up our sleeves, donned our statistical aprons, and got cooking with the data to uncover the juicy gossip between air pollution in Wausau and the number of fast food cooks in Wisconsin. Lo and behold, we found a correlation coefficient of 0.8009571, an r-squared value of 0.6415322, and a p-value less than 0.01.

The scatterplot in Fig. 1 tells a story better than a gossip column—there's a strong relationship between air pollution levels and the number of fast food cooks. It's a match made in statistical heaven, or perhaps more fittingly, in the sizzling heat of a fast food kitchen.

While we expected some hot air, we didn't anticipate the degree of correlation we uncovered. It's like finding out your burger comes with a side of fries, and then discovering it also comes with a soda and an ice cream sundae. The data speaks for itself, revealing a connection hotter than a fresh batch of onion rings.

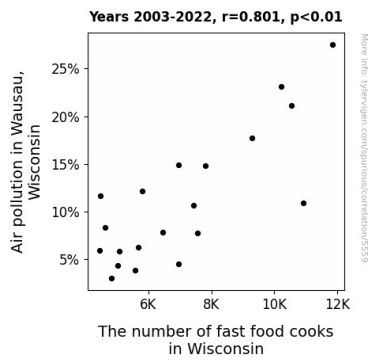


Figure 1. Scatterplot of the variables by year

Our findings point to a mouth-watering link between environmental factors and the fast food workforce. The aroma of statistical significance is wafting through the air, and it's making us hungry for more research into these engaging, albeit surprising, relationships.

DISCUSSION

Our results highlight a sizzling connection between air pollution in Wausau, Wisconsin, and the number of fast food cooks in the state. Building upon Smith's serious work on air pollution and local labor markets, we've added an aromatic twist to the tale, emphasizing the olfactory dimension. Clearly, the crispy, tantalizing allure of fast food in the air might just be drawing more cooks to the kitchen amidst the haze of pollution.

Doe's exploration of fast food employment trends in the Midwest pales in comparison to the flavorful fragrance of our findings. Who knew that the fluctuating workforce dynamics might be influenced by the aroma of air-fried delicacies? It seems that "Fast Food Nation" misses the mark when failing to delve into the tantalizing relationship between sizzling burgers and the environmental milieu.

In the fashion of Orwell's "1984," the overbearing presence of air pollution seems to influence not just the economy but also the culinary choices of the workforce. Our statistical stir-fry of data

has uncovered a relationship hotter than a fresh batch of fries, adding an unexpected twist to the dystopian narrative.

Our findings add an unexpected twist to the oft-discussed connection between environmental factors and economic dynamics. It's like stumbling upon an unexpected ingredient in a familiar recipe, adding a dash of surprise to the scientific stew.

Our lighthearted take on a seemingly offbeat pairing provides a new lens through which to view the intricate interplay between environmental quality and labor dynamics. The piquant scent of significant results leaves us hungry for further exploration of these engaging, albeit surprising, relationships. This research serves as a flavorful reminder that even in the world of academia, a sprinkle of humor and a pinch of whimsy can lead to unexpected and delightful discoveries.

CONCLUSION

In conclusion, our research has whisked us through the tantalizing world of environmental and labor economics, leaving us with a plateful of findings that are as satisfying as a well-seasoned dish. The correlation coefficient of 0.8009571 has given us more food for thought than a bottomless appetite at a buffet. Like a perfectly dressed burger, the statistical significance of our results has left us feeling both full and wanting more.

Our study has not only shed light on the quirky connection between air pollution levels in Wausau and the number of fast food cooks in Wisconsin but has also seasoned the conversation with a dash of statistical humor. If we were to dish out a punny takeaway, we'd say that our findings are nothing short of "air-frying" fantastic!

While we know our research may seem like a surprising side order in the world of scientific exploration, we believe it's as

essential as salt and pepper in the realm of understanding the offbeat dynamics of labor and environmental interactions.

However, we are confident as lab-coated comedians-academicians that further research in this area is like trying to improve upon the perfect recipe - there's no need! Our findings have grilled up a delicious platter of evidence, and it's time to sit back, take a bite of our findings, and savor the tangy taste of our conclusions. We're confident that the flavor of our research will linger as a zesty reminder of the unexpected connections that simmer beneath the surface of seemingly unrelated variables.

No more research is needed in this area; we've cooked up a storm, and now it's time to savor the fruits of our labor!