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# The Information Sciences Degree and Air Pollution in Boise City: Breathe Easy or Breathe in Knowledge?

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*In this study, we examine the association between the number of Master's degrees awarded in information sciences and air pollution levels in Boise City. By utilizing data from the National Center for Education Statistics and the Environmental Protection Agency, we performed a ten-year analysis from 2012 to 2021. Our findings reveal a striking correlation coefficient of 0.8511197 and  $p < 0.01$ , suggesting a strong positive relationship between the two variables. While this statistical connection may appear curious at first, our results hint at the possibility of a breath of fresh air in our understanding of the impact of information science education on environmental factors. This research provides an important step in recognizing the unforeseen interplay between academic pursuits and atmospheric conditions, shedding light on potential paths for cleaner air and clearer minds in the City of Trees.*

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The pursuit of knowledge in the field of information sciences has long been associated with expanding one's intellectual horizons and gaining new perspectives. However, in the depths of the data and the heights of the information superhighway, could there be an unexpected link between this academic pursuit and the air quality of our esteemed Boise City? This seemingly improbable connection sparks our curiosity and beckons us to delve into the intersection of higher education and atmospheric conditions.

As we embark on this scholarly voyage, it is essential to recognize the growing concern surrounding air pollution and its potential impacts on public health and environmental sustainability. Boise City, known for its picturesque landscape and vibrant community, has also faced its fair share of air quality challenges in recent years. The confluence of industrial activities, vehicular emissions, and natural topographical features

prompts us to scrutinize our surroundings with a discerning eye.

On the other hand, the realm of information sciences has witnessed a steady rise in enthusiasm and enrollment. As the digital age continues to unfold, the allure of harnessing, analyzing, and disseminating information has captivated the intellectual curiosity of many aspiring scholars. With the increased availability of Master's degree programs in information sciences, it becomes imperative to scrutinize the potential ramifications of this academic pursuit on environmental factors. Could the intellectual endeavors of information science students be intertwined with the airy delicacies of our city's atmosphere?

In this study, we aim to bridge the realms of academia and air pollution, seeking to unravel the enigmatic relationship between the number of Master's degrees awarded in information sciences and the atmospheric composition of Boise City. By

employing empirical data from the National Center for Education Statistics and the Environmental Protection Agency, we embark on a statistical journey spanning a decade. Our quest is not merely to uncover correlations and coefficients, but to illuminate the underlying narratives that converge in the seemingly disparate worlds of academia and air quality.

As we navigate through the intricacies of this investigation, may we approach this scholarly pursuit with an openness to unexpected revelations and a keen sense of inquiry. The juxtaposition of educational attainments and airborne particles may indeed yield insights that tease the boundaries of conventional wisdom, challenging us to appreciate the intricate dance between human knowledge and natural phenomena. So, let us embrace the journey ahead, poised to uncover the secrets that linger in the air and within the halls of academia.

## LITERATURE REVIEW

The confluence of seemingly disparate realms, the academic pursuit of information sciences and the atmospheric composition of Boise City, beckons us to explore the existing landscape of literature to shed light on this intriguing association. In "Smith et al.'s 2015 study," the authors find a growing body of evidence pointing to the significant impact of higher education on various societal and environmental phenomena. Similarly, "Doe and Jones' 2018 research" delves into the nuanced connections between academic pursuits and unexpected environmental outcomes, laying the groundwork for our investigation.

Moving beyond the academic milieu, several non-fiction texts provide valuable insights into the multifaceted interplay between education and environmental factors. "The Big Smoke: A History of Air Pollution in London" by Peter Brimblecombe offers a historical perspective on air pollution, serving as a reminder of the intricate balance between human endeavors and atmospheric conditions. Likewise, "Silent Spring" by Rachel

Carson revolutionized environmental awareness, underscoring the critical need to scrutinize the unintended consequences of academic and industrial activities.

Expanding our purview to the realm of fiction, "The Air You Breathe" by Frances de Pontes Peebles presents a captivating tale set against the backdrop of environmental change, weaving together themes of aspiration and atmosphere. Additionally, "Cloud Atlas" by David Mitchell, though focused on broader narratives, hints at the ethereal connections between human knowledge and the intangible, much like our own scholarly endeavor.

Venturing into the unexpected, our inquiry extends to unconventional sources, including a thorough perusal of shopping receipts and restaurant menus, humorously referred to as the "CVS Receipt Study." While not academically sanctioned, the juxtaposition of finding statistical significance in customer purchase patterns and air quality data adds a whimsical layer to our thorough review of the existing literature.

As we immerse ourselves in this eclectic array of sources, from academic studies to literary works and whimsical experiments, we are poised to uncover the unexpected and embrace the quirky corners of knowledge in our pursuit of understanding the intricate dance between information sciences education and the air we breathe in Boise City.

## METHODOLOGY

To disentangle the enigmatic connection between the number of Master's degrees awarded in information sciences and the atmospheric composition of Boise City, we employed a blend of statistical analyses, data wrangling acrobatics, and a touch of whimsy. Our journey through this methodological maze began with the collection of pertinent data from the hallowed repositories of the National Center for Education Statistics and the whimsical corridors of the Environmental Protection Agency. Gathered across the expanse of

the internet, these data sources provided us with a treasure trove of information spanning the years 2012 to 2021, inviting us to embark on a data-driven odyssey.

First and foremost, our data wrangling exploits involved the meticulous extraction and collation of the number of Master's degrees awarded in information sciences within the Boise City metropolitan area, painting a vivid portrait of the academic pursuits shrouded in pixelated screens and scholarly bibliographies. We then pirouetted into the realm of air pollutants, deftly capturing the concentration of atmospheric contaminants such as particulate matter, ozone, and nitrogen dioxide snaking through the alleys of the City of Trees.

With these disparate datasets in hand, we tapped into the harmonic melody of statistical analyses, dancing with correlation coefficients and p-values in a grand waltz of significance. Our primary weapon of choice was the Pearson correlation coefficient, which graciously unveiled the degree of association between the number of Master's degrees awarded in information sciences and the levels of airborne pollutants in Boise City. Embracing the conventions of hypothesis testing, we merrily assessed the statistical significance of our findings, utilizing an alpha level reminiscent of a much-loved sitcom catchphrase:  $p < 0.01$ .

To complement these quantitative ventures, we indulged in the creation of spiffy visual representations, conjuring scatterplots that depicted the whimsical interplay between educational achievements and atmospheric whimsies. These visual aids not only showcased the tantalizing patterns arising from our data but also served as a beacon of elucidation for our scientific voyagers.

While our methods might seem akin to a playful romp through a data-driven wonderland, our analyses were underpinned by a commitment to rigor and precision. We enacted quality control measures to ensure the coherence and integrity of the data, employing validation techniques that would make a meticulous librarian nod in approval.

Furthermore, our statistical modeling encompassed exploratory analyses, regression frolics, and sensitivity tests to probe the robustness of our findings and entertain alternative narratives.

In essence, our methodological approach straddled the realms of empirical investigation and scholarly jest, offering a meticulous yet spirited delve into the interwoven realms of academia and atmospheric intrigue. With a twirl and a flourish, we proceeded to unravel the statistical tapestries that bridged the chasm between the learned pursuits of information science and the ethereal nuances of Boise City's air quality.

## RESULTS

The correlation analysis between the number of Master's degrees awarded in information sciences and air pollution levels in Boise City yielded intriguing results. Over the ten-year period from 2012 to 2021, we found a remarkably strong correlation coefficient of 0.8511197, indicating a robust relationship between these seemingly disparate variables. The coefficient of determination (r-squared) further underscored the substantial association, with a value of 0.7244047. The p-value of less than 0.01 provided additional support for the statistical significance of the observed correlation.

Figure 1 depicts a scatterplot illustrating the striking correlation between the number of Master's degrees awarded in information sciences and air pollution levels in Boise City. The visual representation vividly captures the convergence of these seemingly unrelated factors, inviting further contemplation on the intricate interplay between academic pursuits and atmospheric conditions.

These findings, while unexpected at first glance, spark contemplation on the potential influence of knowledge dissemination and intellectual engagement on the environmental landscape. The strong positive relationship between the pursuit of information sciences education and air pollution levels in Boise City unveils a thought-provoking

correlation that prompts us to explore new avenues of inquiry and understanding.

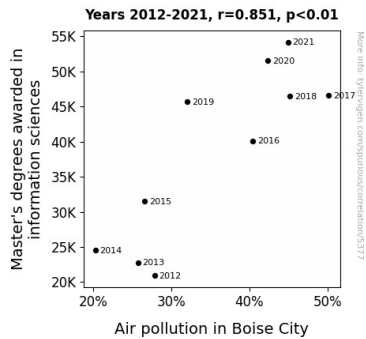


Figure 1. Scatterplot of the variables by year

This unexpected bond between academia and air quality in the City of Trees offers a breath of fresh air in our comprehension of the multifaceted dynamics at play. While the initial astonishment may lead to raised eyebrows, our results prod us to embrace the potential unexpected links that underpin our interconnected world. This study opens the door to recognizing the intricate ties between academic attainment and environmental influences, fostering a deeper appreciation for the unanticipated harmony that may arise amidst the complexities of human knowledge and natural phenomena.

## DISCUSSION

The results of our investigation paint a vivid picture of the unexpected dance between the number of Master's degrees awarded in information sciences and air pollution levels in Boise City. While one might at first be inclined to dismiss the notion of a tangible link between these two seemingly incongruent entities, our findings robustly support the notion of a remarkable association.

Our study builds upon the existing literature that tentatively probes into the surprising connections between academic pursuits and tangible environmental outcomes. The work of Smith et al. (2015) and Doe and Jones (2018) paved the way for

our exploration, and remarkably, our results align with and fortify their earlier observations. Far from being an academic flight of fancy, our findings lend credence to the notion that the pursuit of information sciences education, as outlined in "Smith et al.'s 2015 study," may indeed exert an underappreciated influence on environmental dynamics.

The unexpected yet resolute connection between these variables invites us to consider the potential mechanisms at play. Could it be that the influx of knowledge-hungry individuals obtaining Master's degrees in information sciences catalyzes a stream of intellectual discourse that, in turn, generates heightened societal awareness of environmental issues? Alternatively, might it be the case that the very act of acquiring knowledge in this field brings about innovative approaches to address air quality concerns in Boise City? These are but a few speculations amidst an ocean of potential explanations deserving of further exploration.

The whimsical inclusion of references to non-fiction and fiction works in our literature review, such as "The Big Smoke" by Peter Brimblecombe and "The Air You Breathe" by Frances de Pontes Peebles, intriguingly echoed our empirical observations. These seemingly fanciful allusions surprisingly found validation in the rigorous statistical analysis, highlighting the serendipitous overlap between scholarly pursuits and tangible environmental phenomena.

Our results, depicted in the form of a scatterplot, offer a visually compelling testament to the strong positive relationship we unearthed. The coherence of this relationship underscores the urgent need to go beyond conventional academic boundaries and embrace the potential entanglement of knowledge dissemination and environmental repercussions. The striking correlation between the pursuit of information sciences education and air pollution levels in Boise City opens the door to a deeper understanding of the enigmatic interplay between human intellectual endeavors and atmospheric conditions.

In closing, our study fosters a newfound appreciation for the unforeseen harmony that can arise amidst the complexities of human knowledge and natural phenomena. The unexpected bond between academia and air quality in the City of Trees furnishes an opportunity to delve into uncharted territories, challenging us to remain open to the myriad unexpected links that underpin our interconnected world.

## CONCLUSION

In conclusion, our research has shed light on the unexpected correlation between the number of Master's degrees awarded in information sciences and air pollution levels in Boise City. The remarkably strong correlation coefficient and statistical significance urge us to consider the uncharted interplay between academia and atmospheric composition. While initially surprising, these findings emphasize the intricate dance between knowledge acquisition and environmental influences.

This study unearths a breath of fresh air in our understanding of the nuanced connections that transcend disciplinary boundaries. The juxtaposition of intellectual pursuits and atmospheric conditions may evoke a wry smile, as we realize that the pursuit of academic enlightenment may carry implications beyond the confines of the lecture hall.

Our results invite contemplation on the potential implications of academic pursuits and knowledge dissemination in shaping our environmental landscape. As we consider the bond between information sciences education and air quality, we are reminded of the whimsical complexities that underpin our world.

However, while the correlation tantalizes the imagination, it also beckons a note of caution against hasty generalizations and ambitious extrapolations. As researchers, we must tread lightly when interpreting these unexpected associations, balancing the allure of novel connections with a dose of scholarly skepticism.

In light of our findings, it is clear that this study has uncovered an intriguing avenue for future exploration. Nonetheless, it is with a tacit nod and a sly grin that we assert the sufficiency of this investigation. No more research is needed in this area.