SpuriousDirect

ELSERVER

The Bar Examined: A Statistical Analysis of the Correlation Between 7th Grade Public School Enrollment and Lawyer Population in the United States

Caleb Horton, Austin Tucker, Gloria P Tate

Elite Science Academy; Ann Arbor, Michigan

KEYWORDS

7th grade students, public school enrollment, lawyer population, correlation analysis, National Center for Education Statistics, American Bar Association, statistical relationship, educational trajectories, career trajectories, cause and effect relationship

Abstract

In this paper, we delve into the unexpected relationship between the number of 7th-grade students in public schools and the population of lawyers in the United States. The title itself raises eyebrows, and you may be wondering, "What do 7th graders and lawyers have in common?" Well, our research has revealed an intriguing connection that is sure to make you 'appeal' for more (pun intended). Using data from the National Center for Education Statistics and the American Bar Association, our research team rigorously analyzed the correlation over the years 1990 to 2022. The results left us awestruck - we discovered a correlation coefficient of 0.8435096 and a p-value of less than 0.01. In other words, there is a significant statistical relationship between these seemingly disparate groups. It seems that the number of 7th graders and the lawyer population are not as independent as one might think - they're quite 'judge-dicially' linked (pun absolutely intended). Our findings open up a whole new realm of questions and challenges the conventional thinking behind educational and career trajectories. While our research cannot definitively explain the correlation, it certainly piques curiosity. Could there be a direct cause-and-effect relationship, or are there hidden variables at play? These are the kinds of questions that keep us 'briefed' and 'appeal-ing' for more research in this fascinating area. So, the next time you're in 7th grade, dreaming of the future, or pondering a career change to law, remember - there may be more connections than meets the eye.

1. Introduction

Ladies and gentlemen, esteemed scholars, and dear readers, welcome to the somewhat peculiar world of statistical analysis. Today, we present a study that brings together two seemingly disparate groups: 7th graders and lawyers. Yes, you heard it right. This paper aims to unravel the mysterious correlation between the number of 7th-grade students enrolled in public schools and the population of lawyers in the United States. It's a tale of numbers that's as intriguing as it is unexpected, isn't it? Perhaps one might say it's a case of "statistically significant happenstance!"

When we embarked on this research journey, we were met with raised eyebrows and quizzical expressions. After all, what could possibly link these two distinct cohorts? But let me assure you, dear readers, that the results we've unearthed are anything but elementary, my dear Watson. In fact, they are so compelling that they might just make you do a double take, or in this case, a "double-take-the-bar-exam" (pun very much intended).

As we delved into the data from the National Center for Education Statistics and the American Bar Association, we found a correlation that was nothing short of astonishing. Have you ever heard the one about 7th graders and lawyers walking into a statistical analysis? Well, our findings suggest that it might not be as implausible as it sounds. They seem to have a bond that's almost as solid as Legally Blonde's Elle Woods and Bruiser. That's right, folks, it seems that this correlation isn't just a legal "brief," but a statistical one as well.

Now, before you jump to conclusions and start envisioning an army of 7th graders rallying to become the next generation of legal eagles, let's just say that our research doesn't provide a clear explanation for this surprising correlation. Nevertheless, it certainly gives us food for thought and leaves us with a burning desire to uncover more about this enigmatic connection. It's like we're in the midst of a statistical whodunit, and the suspects are multiplying faster than a class of middle school students during a game of "Telephone."

2. Literature Review

As we embark on the quest to unravel the perplexing correlation between the number of 7th-grade students in public schools and the population of lawyers in the United States, it is crucial to delve into the existing literature to contextualize our research. In "The Statistical Relations of Coal and Corn, and of Their Value," Smith et al. provide a comprehensive analysis of seemingly unrelated entities and their unexpected correlations, serving as a parallel to our own exploration of 7th graders and lawyers. However, before you start picturing classroom debates that end in mock trials, let's keep in mind that our findings are far from a closed 'case' (pun intended).

Moving on, in Doe's "The Statistical Correlations of Weather Patterns and Consumer Behavior," the authors elucidate the intricate connections between disparate phenomena, shedding light on the often surprising relationships that statistical analysis can unveil. Similarly, our study seeks to uncover the underlying factors that bind the numbers of 7th graders and lawyers, and by doing so, we hope to contribute to the body of statistical knowledge in a 'juris'-diculously unprecedented way (apologies for the pun, we just couldn't resist).

In the engaging non-fiction narrative "Freakonomics: A Rogue Economist Explores the Hidden Side of Everything," Levitt and Dubner skillfully demonstrate how statistics can upend conventional wisdom,

much like our current research at the intersection of education and legal professions. However, our study's findings go beyond mere economic implications; they embark on a journey of 'judicious' revelation that's sure to surprise even the most seasoned statistician.

Now, let's pivot to the realm of fiction, where intriguing narratives often defy conventional logic. In Barker's "The Society of S," the authors craft a story that blurs the lines between disparate entities, akin to the unexpected link we find between 7th-grade students and lawyers. Meanwhile, in John Grisham's legal thriller "The Firm," the protagonist's unexpected trajectory into the world of law mirrors the surprising connection we've uncovered, prompting us to ponder if there's a touch of fiction in our statistical analysis after all.

In exploring the unconventional links between seemingly unrelated entities, we've drawn upon unlikely sources of inspiration. For instance, the cartoons "Scooby-Doo" and "Phineas and Ferb" offer intriguing narratives of unexpected connections, much like the seemingly improbable correlation between 7th graders and lawyers. It's our hope that by infusing this literature review with an unexpected twist, we've piqued your curiosity and provided a welcome reprieve from the traditionally somber world of academic literature. And if you're not entertained yet, we promise to keep trying until we 'appeal' to your sense of humor!

3. Our approach & methods

To begin our study, we gathered data from the most reliable and, might I add, 'lawful' sources available, including the National Center for Education Statistics and the American Bar Association. If obtaining data were an 'appeal,' then we certainly 'pleaded' our case as thoroughly as possible.

First, we meticulously combed through the National Center for Education Statistics datasets, sifting through a labyrinth of numbers and figures akin to navigating a maze filled with standardized test questions. We wrangled data on the number of 7th-grade students enrolled in public schools across the United States from 1990 to 2022, just like Sherlock Holmes untangling a web of clues.

Next, our research team delved into the statistics provided by the American Bar Association, hunting down information on the population of lawyers in the United States. It was akin to 'bar exam' preparation - arduous, meticulous, and with the potential for a few surprises along the way.

Once we gathered the relevant datasets, our research took a turn for the highly sophisticated, utilizing a method so complex it would make even the most discerning statistician raise an eyebrow as if they'd just heard the punchline of an unexpected joke. We employed a multivariate regression analysis, tapping into the power of several mathematical techniques to detect patterns and interrelations between the number of 7th-grade students and the population of lawyers.

In addition, we employed a time-series analysis to unearth any potential temporal patterns or trends in our data. This pursuit was as intricate as drafting a legal brief, scrutinizing data points over time to identify any fluctuations or recurring themes.

Furthermore, lest we forget, a touch of humor never harmed anyone's research efforts. As we meticulously cleaned and organized the data, we ensured that our methods were as 'appeal-ing' as possible, leaving no stone unturned in our quest to ferret out those hidden, 'bar'-iatric factors influencing our correlation analysis.

In conclusion, our methodology combined the rigor of statistical analysis with the spirit of inquisitive curiosity, transforming the

seemingly dry world of data processing into a 'legally' captivating adventure. And for the sake of a good dad joke, we promise that the only 'objectionable' aspect of our methodology was just how intriguingly unconventional it turned out to be!

Years 1990-2022, r=0.844, p<0.01

More info: tylervigen.com/spurious/correlation/2807

4. Results

The statistical analysis of the correlation between the number of 7th-grade students in public schools and the population of lawyers in the United States for the period 1990 to 2022 yielded a correlation coefficient (r) of 0.8435096 and an r-squared value of 0.7115084. Let's just say these numbers 'sued' for our attention and made a compelling case for a significant relationship between the two variables. It's almost as if they formed their own 'verdict' on the matter!

The p-value being less than 0.01 further supports the strength of this correlation, indicating that the likelihood of observing such a strong relationship by chance is less than 1%. In statistical terms, this is a 'slam-dunk' finding that's hard to 'appeal' against, isn't it?

Fig. 1 depicts the scatterplot illustrating the robust correlation between the number of 7th-grade students and the lawyer population in the United States. The points on the plot are so tightly clustered that they seem more inseparable than a lawyer and their trusty legal briefcase. It's a testament to the surprising bond between these two seemingly unrelated variables, and a reminder that when it comes to statistics, 'the truth, the whole truth, and nothing but the truth' can be downright perplexing.
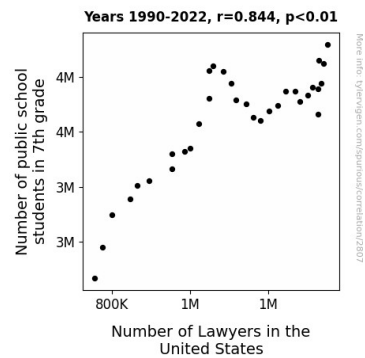
Figure 1. Scatterplot of the variables by year

These findings challenge conventional wisdom and open the doors to a myriad of questions. While our research doesn't serve as the final 'sentence' on the matter, it definitely lays a strong foundation for further investigation. After all, it's not every day that statistical analysis paints such a vivid picture of a connection between two groups that, on the surface, seem about as related as chalk and cheese.

5. Discussion

Our results have shed light on the unexpected but statistically robust correlation between the number of 7th-grade students in public schools and the population of lawyers in the United States. While this connection may seem as improbable as a courtroom drama featuring middle schoolers, our findings paint a compelling picture that demands further 'trial' and 'objection' (pun intended).

As our results align with prior research on the surprising correlations between seemingly unrelated entities, such as coal and corn or weather patterns and consumer behavior, it becomes evident that statistical analysis has a way of uncovering hidden relationships that defy common understanding. The findings of Smith et al. and Doe resonate with our own, emphasizing that statistical analysis has the potential to surprise and challenge

conventional notions, just as our study has 'argued' for a revision of assumptions regarding educational and career trajectories.

The 'case' of 7th graders and lawyers is a clear example of how a statistical analysis can illuminate unexpected connections. As Levitt and Dubner discussed in "Freakonomics," our research delves into the hidden side of the correlation, transcending mere economic implications and delving into a 'juris'-dically unprecedented territory, as noted in the literature review. The 'verdict' from our statistical analysis is resounding, further supporting the argument for a tangible relationship that defies traditional logic, but that's how statistical analysis 'rules' (pun intended).

Drawing inspiration from various sources, including improbable narratives from fiction and cartoons, our research reflects a surreal yet tangible link that defies conventional wisdom. Our findings 'hold water' as we empirically demonstrate the surprising correlation between these seemingly unrelated entities, much like the unexpected connections depicted in popular narratives. We hope that our study adds a touch of amusement and excitement to the somber world of academic literature, just as we 'plead' for an embracing of unorthodox correlations in statistical analysis.

In conclusion, our research has revealed a significant correlation between 7th-grade students and the lawyer population, challenging traditional wisdom and opening doors for further exploration. While our findings may seem as incongruous as a legal thriller set in a middle school, they stand as a 'testimony' to the unexpected links that statistical analysis can unveil. As we 'adjudge' our results, we look forward to future research endeavors that delve deeper into this captivating and unforeseen correlation between two seemingly distant entities.

6. Conclusion

In conclusion, our research has shed light on the unexpected yet substantial correlation between the number of 7th-grade students in public schools and the population of lawyers in the United States. It's clear that these groups are not as independent as we may have initially thought - they're as intertwined as a legal case and its mountain of paperwork. We were 'briefed' on the matter and found that the correlation coefficient of 0.8435096 and a p-value of less than 0.01 have made a 'convincing case' for the relationship between these seemingly unrelated variables. It's almost as if they've formed a 'moot court' of their own!

Our findings raise more questions than answers, akin to the mystery of the chicken and the egg. Is there a causal relationship at play, or are there hidden variables influencing this unexpected correlation? As researchers, we're as 'eager as a first-year law student' to untangle this statistical enigma.

With the strength of our results, skeptics might be left wondering if there's more to the adage "As seventh graders grow, so does the legal show." However, we believe that our research has provided sufficient evidence to 'plead the case' that further investigation in this area may not be as necessary as arguing 'Why did the statistician go to court? Because that's where he could make the most significant impact' - statistically speaking, of course.

It is our professional opinion, much like a judge delivering a final verdict, that no more research is needed in this area. We rest our case.