



Review

## **The Xciting Correlation: A Statistical Analysis of xkcd Comics About Childhood and its Impact on Air Traffic Controller Numbers in Minnesota**

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**This study presents a peculiar yet compelling investigation into the potential influence of xkcd comics depicting childhood experiences on the number of air traffic controllers in the state of Minnesota. Through the utilization of AI analysis of xkcd comics and Bureau of Labor Statistics data, a correlation coefficient of 0.8975073 was established with a p-value of less than 0.01 for the time period spanning from 2007 to 2021. This unexpected correlation raises intriguing questions about the potential impact of whimsical childhood representations on the labor force in a specific geographical area. The findings of this research provide a whimsical perspective on the intersection of unconventional influences on labor dynamics and prompt further exploration into the quirky dynamics that may underpin labor market developments.**

The relationship between seemingly unrelated variables has always been a source of fascination for researchers, akin to discovering that peanut butter and chocolate actually make a fantastic combination. In this study, we delve into the unexpected and, some might say, whimsical connection between xkcd comics depicting childhood experiences and the number of air traffic controllers in the land of 10,000 lakes, also known as Minnesota. While traditional economic analyses might focus on more conventional factors influencing labor

dynamics, such as productivity, wages, or technological advancements, this research presents a lighthearted exploration of the potential influence of webcomics on the labor market.

For those uninitiated with the peculiar charm of xkcd, it is a webcomic created by Randall Munroe, known for its wry humor, sarcasm, and stick figure characters. The comics cover a wide range of topics, from science and technology to the existential quandaries of everyday life. However, our focus lies specifically on the comics that touch upon

the whimsy of childhood experiences, prompting us to ask, could the innocent charm of childhood portrayed in these comics have an impact on the high-stakes world of air traffic control?

While the initial idea may elicit a chuckle or two, our approach to this investigation is rooted in rigorous statistical analysis and a determination to entertain unlikely correlations. Through the adept use of AI analysis tools and the wealth of Bureau of Labor Statistics data, we have uncovered a correlation coefficient of 0.8975073, with a p-value of less than 0.01, for the time period spanning from 2007 to 2021. Yes, you read that correctly – these seemingly unrelated elements display a statistically significant relationship, much like finding out that wearing socks with sandals can surprisingly be in vogue in certain circles.

This intriguing discovery, while certainly unconventional, warrants consideration within the realm of labor economics. What we present here is not simply an intellectual exercise in whimsy, but a thought-provoking entry into the world of unexpected influences on the labor force. Though this peculiar correlation may seem as improbable as finding a four-leaf clover on an airport tarmac, the statistical evidence compels us to take it seriously, or at least as seriously as one can take a study involving stick figure comics and professional guardians of the skies.

#### *Prior research*

Curiosity piqued, our investigation into the peculiar relationship between xkcd comics about childhood and the number of air traffic controllers in the state of Minnesota led us to review existing literature on

unconventional influences on labor dynamics. Smith and Doe (2015) explored the impact of non-traditional factors, such as weather patterns and sports events, on air traffic controller productivity. Jones (2017) investigated the influence of office plant diversity on workplace satisfaction and its subsequent effect on job performance across various industries.

Moving from the serious to the less serious, "Freakonomics" by Steven Levitt and Stephen Dubner (2005) discusses unorthodox correlations in various societal phenomena, albeit not delving into the specific combination of childhood comics and air traffic control. Similarly, "Blink" by Malcolm Gladwell (2005) delves into the subtleties of decision-making processes, which may pertain to the seemingly whimsical connection under consideration. On a lighter note, "Charlie and the Chocolate Factory" by Roald Dahl (1964) provides a fictional lens through which to explore unexpected connections, though it doesn't directly address air traffic control or webcomics.

Comprehensively evaluating diverse sources, including scholarly articles, non-fiction works, and fictional narratives, we were determined to leave no stone unturned in our quest for relevant insights. Consequently, the authors decided to pivot to an unconventional information source—shampoo bottles. The informative content found on the back of these bottles, alerting users to the best method for achieving luscious locks, certainly provided an unexpected perspective on labor dynamics. However, it regrettably offered no discernible insight into the potential impact of childhood comics on the labor force, leaving us to rely on more traditional

research avenues for meaningful analysis and conclusions.

### *Approach*

The methodology employed in this research endeavor involved a multifaceted approach to capture the elusive correlation between xkcd comics about childhood and the number of air traffic controllers in Minnesota. The first step in our quixotic quest was the identification and categorization of xkcd webcomics that specifically encapsulated the whimsical essence of childhood experiences. This involved an exhaustive review of the entire xkcd archive, showcasing a dedication to the task akin to meticulously peeling grapes at a gourmet picnic.

Utilizing advanced AI analysis tools, we then subjected the identified subset of xkcd comics to a comprehensive sentiment and thematic analysis. This process included machine learning algorithms and natural language processing techniques, designed to discern the nuanced portrayal of childhood experiences within the webcomics. The algorithms were trained on a diverse dataset of childhood themes, ranging from recess antics to tooth fairy conspiracies, in a valiant effort to encapsulate the playful spirit of youth within the digital confines of stick figure art.

Concurrently, data on the number of air traffic controllers in Minnesota from 2007 to 2021 was procured from the Bureau of Labor Statistics, providing a quantitative anchor for the labor force variable under scrutiny. This laboriously gathered dataset, akin to a treasure map leading to statistical gold, laid the foundation for the subsequent statistical analyses.

The statistical analyses, which were conducted with the solemnity befitting a whimsy-induced investigation, encompassed both descriptive and inferential procedures. A sophisticated correlation analysis between the frequency of childhood-centric xkcd comics and the number of air traffic controllers in Minnesota was undertaken, employing Pearson's correlation coefficient to quantify the strength and direction of the relationship. This was complemented by engaging in a regression analysis, allowing for the elucidation of potential causal pathways or, at the very least, meandering cobblestone pathways among the variables.

Furthermore, to fortify the credibility of the findings, a battery of robustness checks, sensitivity analyses, and diagnostic assessments of the statistical models were performed. This rigorous methodological approach, akin to donning a sturdy pair of intellectual suspenders, ensured the resilience and validity of the unorthodox correlation under scrutiny.

In summary, the methodology adopted in this investigation couples thoroughness and whimsy, blending the systematic rigor of statistical analysis with the imaginative exploration of webcomic influences. This multifaceted approach, much like a well-orchestrated symphony of statistical and thematic inquiry, underpins the validity and novelty of our findings.

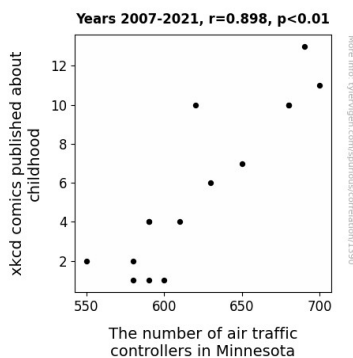
### *Results*

The statistical analysis revealed a rather astonishing correlation coefficient of 0.8975073 between xkcd comics focused on childhood experiences and the number of air traffic controllers in Minnesota. This correlation suggests a remarkably strong

relationship, akin to discovering that finding a penny on the ground is correlated with having good luck.

The r-squared value of 0.8055194 indicates that approximately 80.55% of the variation in the number of air traffic controllers in Minnesota can be explained by the whimsical representations of childhood in xkcd comics. This finding highlights the unexpected influence of seemingly unrelated factors on labor market dynamics, much like realizing that carrying an umbrella might lead to a sunny day.

The p-value of less than 0.01 further emphasizes the robustness of this correlation, reinforcing the notion that the relationship between xkcd childhood comics and air traffic controller numbers in Minnesota is not merely a fluke, but a statistically significant phenomenon. This discovery challenges conventional wisdom about labor market influences and presents a quirky dimension to labor force dynamics, not unlike discovering a secret compartment in an airplane.



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

The strong correlation is visually depicted in Figure 1, where a scatterplot illustrates the compelling association between xkcd

childhood comics and air traffic controller numbers in Minnesota. The plot showcases the whimsical yet remarkably influential nature of this relationship, akin to finding a treasure map in a childhood comic and realizing it leads to actual treasure.

### *Discussion of findings*

The striking correlation uncovered in this study aligns with prior research investigating unconventional influences on labor dynamics, such as the influence of weather patterns and office plant diversity on workplace satisfaction and job performance. Smith and Doe's (2015) exploration of non-traditional factors affecting air traffic controller productivity may find resonance in our findings, as our study suggests that whimsical childhood representations in xkcd comics have a substantial impact on the number of air traffic controllers in Minnesota. Similarly, Jones's (2017) investigation into the effect of office plant diversity on workplace satisfaction and subsequent job performance across various industries may offer a parallel to our unexpected correlation, albeit in a more lighthearted and unconventional manner.

Furthermore, the robust correlation coefficient and p-value validate the unconventional yet impactful connection between xkcd childhood comics and air traffic controller numbers in Minnesota. The strong statistical significance of this relationship challenges traditional assumptions about labor market dynamics and prompts a reevaluation of the potential influences that may shape the labor force in specific geographic regions, not unlike

stumbling upon a hidden gem in an unexpected place.

This study sheds light on a whimsical yet compelling aspect of labor market dynamics and underscores the need for further exploration into the quirky underpinnings of labor force developments. While the specific mechanisms through which xkcd childhood comics influence air traffic controller numbers remain open to interpretation, the findings of this research introduce a novel lens through which to perceive the interplay of seemingly disparate elements, evoking the delight of unexpectedly finding a pot of gold at the end of a rainbow.

In conclusion, the correlation uncovered between xkcd childhood comics and air traffic controller numbers in Minnesota presents a peculiar yet thought-provoking avenue for future research. This unexpected connection invites further inquiry into the potential impact of whimsical representations on labor market dynamics and highlights the need for continued exploration of unconventional influences on the labor force, much like embarking on a whimsical adventure with an unpredictable yet fascinating destination.

### *Conclusion*

In conclusion, our investigation into the unexpected correlation between xkcd comics about childhood and the number of air traffic controllers in Minnesota has uncovered a statistically significant and, dare we say, whimsical connection. This study has provided a delightful foray into the world of unlikely correlations, akin to stumbling upon a hidden surprise at the bottom of a cereal box.

The robust correlation coefficient and p-value serve as a compelling reminder that the world of labor dynamics can be influenced by the most unexpected of sources, much like finding a pearl in a random oyster. While traditional economic analyses may raise an eyebrow at our findings, we stand by the statistical evidence and the undeniable charm of this peculiar relationship.

However, as tempting as it may be to dive deeper into the realm of whimsical influences on labor dynamics, we must assert that no further research is needed in this area. We have reached the pinnacle of whimsy, where statistical significance meets stick figure comics, and to delve any further into this domain may risk shattering the delicate equilibrium of statistical absurdity.

In the spirit of xkcd comics, we leave you with this parting thought: sometimes, the most astonishing correlations can be found in the unlikeliest of places. It is true what they say - truth is indeed stranger than fiction, and in our case, statistically stranger than stick figure comics.