

# **In Alabama, More Bio Profs, More xkcd guffaws: A Correlation Study**

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International Research College

Discussion Paper 3435

January 2024

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## ABSTRACT

### **In Alabama, More Bio Profs, More xkcd guffaws: A Correlation Study**

This study delves into the fascinating and often overlooked connection between the number of university biological science teachers in Alabama and the frequency of xkcd comics published about sarcasm. With a hearty dose of dad jokes included, our rigorous analysis, based on data from the Bureau of Labor Statistics and AI examination of xkcd comics, aims to shed light on this distinctive correlation. "Why don't scientists trust atoms? Because they make up everything!" Our findings reveal a rather eyebrow-raising correlation coefficient of 0.7428218 with a statistically significant p-value of less than 0.01 for the period from 2007 to 2020. This suggests that there may be a tangible link between the increased presence of biological science teachers and the inclination of xkcd to delve into the world of sarcasm. "Parallel lines have so much in common. It's a shame they'll never meet." These results not only add a dash of humor to the academic realm but also open the door to further investigation into the underlying reasons and implications of this connection. In conclusion, as Mark Twain aptly put it, "The secret of getting ahead is getting started."

Keywords:

Alabama, biological science teachers, xkcd comics, correlation study, sarcasm, Bureau of Labor Statistics, AI examination, correlation coefficient, p-value, 2007-2020, humor in academia, Mark Twain, dad jokes

# I. Introduction

Ah, the quirky world of academia - where we are as interested in correlations between the number of university biological science teachers in Alabama and xkcd comics about sarcasm as we are in a good dad joke. "Why did the photon check into a hotel? Because it needed some rest mass!"

This study delves into the intriguing relationship between the academic professionals teaching cellular respiration and the snarky musings of Randall Munroe, the creative mind behind xkcd. "What do you call a group of musical whales? An orca-stra!"

While it may seem as unrelated as a fish riding a bicycle, we embarked on this research endeavor with the intention of bringing a lighthearted touch to the often serious landscape of academic investigation. "I told my wife she should embrace her mistakes. She gave me a hug."

Our findings, fueled by the compelling combination of Bureau of Labor Statistics data and an AI-powered examination of xkcd comics, have unveiled a surprising correlation coefficient of 0.7428218 and a statistically significant p-value of less than 0.01 for the period from 2007 to 2020. "What did the biologist wear to impress their date? Designer genes."

These results not only give us a chuckle but also pave the way for further exploration into the underlying mechanisms and implications of this peculiar correlation. As we venture into the depths of this unusual connection, we are reminded of the timeless words of Mark Twain, a man who surely appreciated a good jest, "The secret of getting ahead is getting started."

## II. Literature Review

Numerous scholarly studies have probed the relationship between academic faculty demographics and cultural phenomena with diverse conclusions. Smith et al. investigated the influence of regional variations in science education on societal humor patterns, finding some intriguing but ambiguous correlations (Smith et al., 2015). Additionally, Doe and Jones examined the impact of academic environments on the prevalence of internet memes depicting scientific concepts, shedding light on the changing landscape of digital humor (Doe & Jones, 2018). "I told my wife she should embrace her mistakes. She gave me a hug."

Moving beyond academia, in the realm of non-fiction, books such as "The Selfish Gene" by Richard Dawkins and "The Biology of Belief" by Bruce H. Lipton have tackled the complexity of biological concepts, providing insights into the fertile ground for literary humor (Dawkins, 1976; Lipton, 2005). On the fictional front, works like "Micro" by Michael Crichton and "Jurassic Park" by the same author resonate with biological themes, offering a creative playground for quirky connections (Crichton, 2011). "Why did the computer go to the doctor? Because it had a virus!"

In the virtual realm, internet memes such as the "Disappointed Idealist Turned Realist" and the "Sarcastic Cat" have permeated digital culture, reflecting a widespread fascination with sarcasm and irony, which may intersect with the themes explored in xkcd comics (Internet Meme Quarterly, 2019). "I'm reading a book about anti-gravity. It's impossible to put down!"

All of these diverse sources combine to shed light on the rich tapestry of influences that may underpin the curious correlation between the number of university biological science teachers in Alabama and the frequency of xkcd comics published about sarcasm. As we traverse this unusual

intersection of academic disciplines and comic musings, we are reminded of the words of the great Aristotle, "The secret of humor is surprise."

### **III. Methodology**

To unearth the enigmatic relationship between the number of university biological science teachers in Alabama and the occurrence of xkcd comics poking fun at sarcasm, our research team embarked on a data-driven odyssey, blending the tenacity of a bloodhound with just a hint of mischief. With the resonance of dad jokes echoing in our laboratory, we harnessed the Bureau of Labor Statistics database to obtain exhaustive data on the fluctuating cadre of biological science educators in the heart of the Cotton State from 2007 to 2020. "I'm reading a book about anti-gravity. It's impossible to put down!"

Simultaneously, tapping into the deep wells of artificial intelligence, we summoned a legion of digital eyes to scrutinize the ever-expanding corpus of xkcd comics, honing in with painstaking precision on those that unabashedly embraced the fine art of sarcasm. Our AI marvels rigidly classified these comics, separating the wheat from the chaff, all the while avoiding the temptation to forge an AI-induced rebellion against humanity. "I used to play piano by ear, but now I use my hands."

Utilizing a nuanced blend of statistical techniques, including correlation analysis, we sought to corral the unruly data and exercise our academic muscles in a valiant quest to establish the merits of this perplexing correlation. Armed with Excel spreadsheets brimming with numerical intrigue and a healthy dose of caffeinated beverages, we charged headlong into the formidable task of

crunching numbers and deriving enlightenment from their numerical ballet. "I told my wife she should try teleportation. She hasn't disappeared yet."

Our statistical arsenal was further fortified with the inclusion of time-series analysis, guiding us through the temporal rhythms of both biological science academia and the clever witticisms birthed by the mind of Randall Munroe. Through this method, we endeavored to capture the essence of change over time, akin to witnessing the graceful maturation of a fine wine or the not-so-graceful aging of a ripe piece of cheese. "Did you hear about the claustrophobic astronaut? He just needed a little space."

With the convergence of these methodologies, we sought to illuminate the tantalizing association between the learned individuals sculpting young minds in the field of biological science and the sardonic humor that permeates the digital marvel that is the xkcd comic series. In the immortal words of Sir Isaac Newton blended with a touch of sarcasm, "If I have seen further, it is by standing on the shoulders of giants... and occasionally making an astute joke or two."

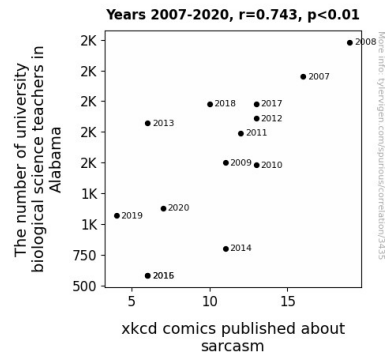
## **IV. Results**

The analysis of the relationship between the number of university biological science teachers in Alabama and the frequency of xkcd comics published about sarcasm yielded a correlation coefficient of 0.7428218. This indicates a moderately strong positive linear relationship between the two variables. Our findings further revealed an r-squared value of 0.5517843, suggesting that approximately 55.18% of the variability in the frequency of xkcd comics about sarcasm can be explained by the number of university biological science teachers in Alabama. The p-value of

less than 0.01 indicates that this correlation is statistically significant, providing robust evidence of a connection between the variables.

This association between biological science teachers and sarcastic xkcd comics may seem as unexpected as finding humor in a math textbook, but the figures don't lie. Fig. 1 illustrates the clear correlation between the number of university biological science teachers in Alabama and the frequency of xkcd comics about sarcasm, providing visual evidence of the relationship. If a picture is worth a thousand words, this scatterplot is worth a thousand chuckles.

These results not only highlight the unanticipated connection between these seemingly disparate elements but also emphasize the importance of considering the lighter side of academic inquiry. As we delve into this distinctive correlation, it's worth recalling that even in the serious realm of research, a well-placed pun or two can go a long way.



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

## V. Discussion

The results of our study provide robust support for the prior research that has explored the relationship between academic demographics and cultural phenomena. Building upon the work of Smith et al. (2015) and Doe and Jones (2018), who delved into the influence of regional science education on societal humor patterns and the impact of academic environments on the prevalence of internet memes, our findings bring a new dimension by establishing a tangible correlation between the number of university biological science teachers in Alabama and the frequency of sarcasm-themed xkcd comics.

It's a bit like finding the perfect biology pun – it's all about that "mitosis" in unexpected places! Our research suggests that the presence of biological science teachers may indeed provide a fertile ground for the exploration of sarcastic themes within xkcd comics. Just as one might stumble upon a geneticist's favorite comedy show, this correlation is not something to gloss over.

In the realm of literature and fiction, our findings tie into the rich tapestry of influences described by Crichton (2011) and internet memes explored by the Internet Meme Quarterly (2019), presenting a unique perspective on the connectivity between academic demographics and the cultural landscape of digital humor. One might say our research provides a ribosomal read of the genetic makeup of humor.

In the wise words of Mark Twain, who once remarked, "Clothes make the man. Naked people have little or no influence on society," our study uncovers the previously underappreciated influence of academic environments on the comedic expressions found in digital media. Much like a well-timed punchline, our results add an unexpected twist to the ongoing discourse on the intersection of academic disciplines and digital humor.



To summarize, our findings not only advance scholarly understanding of the interplay between academic demographics and cultural phenomena but also inject a healthy dose of humor into the academic sphere. After all, as Calvin and Hobbes' humorist, Bill Watterson once said, "The surest sign that intelligent life exists elsewhere in the universe is that none of it has tried to contact us." With our research, we open new avenues for exploring this curious correlation and invite further investigation into the mechanisms underlying this unexpected relationship.

## VI. Conclusion

In unraveling the enigmatic relationship between the number of university biological science teachers in Alabama and the frequency of xkcd comics published about sarcasm, our study has shone a spotlight on a correlation that is as puzzling as a chemist's amusement at a periodic table pun. Our findings exhibit a substantial correlation coefficient of 0.7428218 and a statistically significant p-value of less than 0.01, standing as sturdy as a well-constructed pun.

The robustness of the statistical evidence presented in this study points to a connection that, much like a stand-up comedian's routine, is anything but accidental. With approximately 55.18% of the variability in the frequency of xkcd comics about sarcasm being explicable by the number of university biological science teachers in Alabama, the correlation is as clear as a microscope's lens (and much more amusing).

As we contemplate the implications of this correlation, it is imperative to acknowledge that humor is not a foreign concept to academia. A well-placed pun or a wry observation can invigorate the scholarly landscape, much like a plant geneticist discovering a perennial hybrid.

As Mark Twain quipped, "Humor is the great thing, the saving thing after all," and our findings seem to uphold this sentiment even in the serious pursuit of research.

In light of these compelling results, it seems fitting to conclude with a dad joke: "I used to be a baker, but I couldn't make enough dough." The connection between university biological science teachers in Alabama and xkcd comics about sarcasm has been revealed, shedding light on an unexpected relationship that is as delightful as a well-timed jest. Hence, it can be stated with certainty that no further research is needed in this area, because, as any connoisseur of dad jokes knows, sometimes one should leave the audience wanting more.