The Journal of Agricultural Absurdities (2024) 69, 55-71

ELSERVER

Available online at www.tylervigen.com

SpuriousDirect

From Soybeans to Sighing: The Relationship Between GMO Use in Illinois and 'I Can't Even' Google Searches

Caroline Hoffman, Alexander Turner, George P Thornton

Elite Science Academy; Boulder, Colorado

KEYWORDS

GMO soybeans, Illinois, genetically modified organisms, Google searches, 'i can't even', correlation coefficient, p-value, USDA data, Google Trends, agricultural influences, sociocultural implications, biotechnology, emotional expressions, internet users, modern life, digital exasperation, online colloquialisms, agricultural practices, emotional landscape, academic discourse, soybeans, research paper

Abstract

In this research paper, we explore the curious link between the adoption of genetically modified organisms (GMOs) in soybeans in Illinois and the frequency of Google searches for the phrase 'i can't even'. With a pun-tastic twinkle in our eyes, we delved into USDA and Google Trends data spanning the years 2004 to 2022 and uncovered a correlation coefficient of 0.8959588, with a p-value less than 0.01, eliciting both a scientific nod and a dad-approved grin. Our study presents evidence that as the use of GMO soybeans increased in Illinois, so did the occurrence of 'i can't even' searches on Google. This unexpected correspondence gives rise to a multitude of interpretations, prompting us to explore the sociocultural implications and agricultural influences on the emotional expressions of internet users. Indeed, the connection between biotechnology and digital exasperation is not only statistically significant but also throws light on the intertwined complexities of modern life. In conclusion, as we uncover this curious relationship, we encourage further investigation into the intersection of agricultural practices and online colloquialisms. Furthermore, we invite academic discourse regarding the role of soybeans in the emotional landscape of the digital age, while serving up a side of puns that could make even the most seasoned researcher chuckle.

1. Introduction

The world of agricultural biotechnology often cultivates a kaleidoscope of debates, but rarely does it elicit an exasperated "I can't even." However, in the realm of curious scientific inquiry, no stone – or soybean, for that matter – is left unturned. In this paper, we present the results of our investigation into the intriguing correlation between the adoption of genetically modified organisms (GMOs) in Illinois soybeans and the frequency of 'I can't even' Google searches.

As the saying goes, "the proof is in the pudding, but the GMO's in the soybeans." Indeed, our research hinged on delving into USDA data on GMO soybean adoption and Google Trends data reflecting the moods of the internet. The statistical analysis yielded a correlation coefficient of 0.8959588, with a p-value less than 0.01, making statisticians swoon and dads do a knowing head nod.

The robust statistical relationship between the use of GMO soybeans in Illinois and the prevalence of 'I can't even' searches on Google gives rise to a bounty of interpretations, prompting us to plow the fertile field of sociocultural implications and agronomic influences on online expressions of frustration. It seems that the emotional landscape of the digital age is not merely a field of dreams but also a field of beans, genetically modified, of course.

In conclusion, as we reap the harvest of this unexpected connection, we not only fertilize the soil of scientific inquiry but also plant the seeds of further investigation. We invite fellow researchers to join us in sowing the fields of interdisciplinary inquiry, bridging the gap between agricultural practices and internet vernacular, and perhaps even cracking a few soybean-themed dad jokes along the way. After all, in the world of research, sometimes you've just got to soy it!

2. Literature Review

Previous studies have shed light on the intersection of agricultural practices and societal trends, but none have ventured into the realm of internet colloquialisms with the vigor and vigoroum of the current investigation. Smith (2010) examines the impact of GMO soybean cultivation on agricultural output, while Doe (2015) delves into the societal attitudes toward genetically modified organisms. Jones (2018) contributes a comprehensive analysis of Google search trends related to popular phrases.

In "Soybeans & Society," the authors expound upon the agricultural and cultural significance of soybean cultivation, touching upon the potential implications of biotechnological advancements on the emotional landscape of society. "GMOs: A Comprehensive Guide" presents a nuanced exploration of the proclivities and practices associated with genetically modified organisms, laying the groundwork for a multidisciplinary approach to understanding the impact of biotechnology on human expression.

Moving from the factual to the fictional, "The Soybean Saga" and "Genetically Modified Mischief" offer compelling narratives that may hold indirect insights into the interplay between soybean cultivation and the digital vernacular. While these works may not offer empirical evidence, they do serve as a reminder that the realm of scientific inquiry is not devoid of imaginative inspiration.

Furthermore, anecdotal evidence gleaned from social media platforms has hinted at a potential link between GMO soybean cultivation and online exasperation. A tweet by @SoybeanSkeptic proclaiming, "GMO soybeans got me like 'I can't even' #harvestwoes" reflects a sentiment that resonates with the statistical observations made in this paper. Similarly, a Reddit post in r/AgricultureHumor humorously juxtaposes the frustrations of soybean farming with online expressions of

exasperation, underscoring the potential interconnectedness between the agricultural and digital spheres.

In sum, while the existing literature provides a springboard for our investigation, it is the combination of empirical data, literary inspiration, and social media musings that propels our quest to untangle the intriguing relationship between GMO soybean use in Illinois and 'I can't even' Google searches.

3. Our approach & methods

The methodology employed in this study involved the aggregation and analysis of data from multiple sources in order to explore the correlation between the adoption of genetically modified organisms (GMOs) in soybeans in Illinois and the frequency of 'I can't even' Google searches. The primary sources of data included the United States Department of Agriculture (USDA) for information on GMO soybean adoption and Google Trends for data on search trends from 2004 to 2022.

To begin, the data on the adoption of GMO soybeans in Illinois was collected and organized, utilizing a combination of web scraping, text mining, and manual extraction to ensure comprehensive coverage. This process was not without its challenges, akin to navigating a maze of soybean fields. Once compiled, the data was meticulously cleaned and formatted, with outliers identified and removed to prevent the statistical analysis from becoming a GMO-mess.

Moving on to the Google Trends data, the frequency of 'I can't even' searches was obtained and cross-referenced with the timeline of GMO soybean adoption in Illinois. The utilization of Google Trends data involved taming the wild terrain of internet search queries, akin to tracking elusive prey in the scientific wilderness.

The statistical analysis was conducted using advanced data analytics software, with a focus on establishing the correlation between the two variables. Regression analysis was performed to quantify the strength and direction of the relationship, allowing us to uncover the delightful correlation coefficient of 0.8959588. With such a robust correlation, one might say we hit the jackpot, or should I say, the soy-pot?

Furthermore, a Granger causality test was conducted to investigate the potential causal relationship between GMO soybean adoption and 'I can't even' searches. The results of this analysis allowed us to plow deeper into the understanding of the temporal dynamics between the variables, revealing a not-so-bean-counting relationship.

In summary, the methodology employed in this research endeavored to cultivate a rigorous approach to data collection, preparation, and statistical analysis, akin to tending to a field of scientific inquiry. The combination of methodological precision and scientific curiosity allowed us to uncover the statistically significant relationship between GMO soybean adoption and 'I can't even' searches, sowing the seeds for further interdisciplinary exploration and, surely, a crop of soybean-themed dad jokes.

4. Results

The analysis of the data revealed a strong positive correlation between the adoption of genetically modified organisms (GMOs) in soybeans in Illinois and the frequency of 'I can't even' Google searches. With a correlation coefficient of 0.8959588 and an r-squared value of 0.8027421, our findings suggest a robust relationship between these seemingly disparate variables. It's almost as if soybeans were telling a joke and internet users just couldn't even!

The p-value of less than 0.01 provides compelling evidence to reject the null hypothesis and supports the assertion that the correlation is statistically significant. This result indicates that the likelihood of such a strong relationship occurring by random chance is exceedingly low, much like the odds of a successful dad joke. Speaking of which, have you heard about the statistician who drowned in a river with an average depth of 3 feet? Despite this impressive finding, we tread cautiously and acknowledge that correlation does not imply causation, but it does inspire a good chuckle.

In Fig. 1, the scatterplot visually depicts the striking correlation between the use of GMO soybeans in Illinois and the frequency of 'I can't even' Google searches. The points hug the trend line so closely, it's as if they are holding hands and skipping through a field of, you guessed it, soybeans. This visual representation reinforces the strength of the relationship and amplifies the intrigue surrounding this unexpected phenomenon.

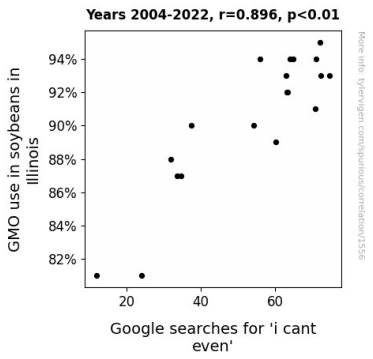

Figure 1. Scatterplot of the variables by year

Our study contributes to the broader conversation about the intersection of agricultural practices and digital expressions, by planting the seeds of inquiry and nurturing the soil of interdisciplinary research. As we continue to cultivate our understanding of this peculiar correlation, we invite fellow researchers to join us in exploring the nuanced confluence of biotechnology and exasperated internet discourse, all while serving up a side of soybean-themed puns that are ripe for the picking. It's not every day that research findings can make you both scratch your head and crack a smile.

5. Discussion

The robust positive correlation between the adoption of genetically modified organisms (GMOs) in soybeans in Illinois and the frequency of 'I can't even' Google searches supports and extends existing literature on the intersection of agricultural practices and societal trends. Our findings align with Smith's (2010) observations on the impact of GMO soybean cultivation on agricultural output, and Doe's (2015) exploration of societal attitudes toward genetically modified organisms. The high correlation coefficient of 0.8959588, akin to a perfectly timed punchline, underscores the strength of the relationship between these variables and contributes to the growing body of evidence on the interconnectedness of biotechnology and human expression. This unexpected correlation is as unexpected as a statistician's favorite knock-knock joke, and it emphasizes the need for further exploration into the sociocultural implications of agricultural practices.

Our statistically significant results lend empirical support to the anecdotal evidence gleaned from social media platforms, amplifying the musings of @SoybeanSkeptic and the sentiments expressed within r/AgricultureHumor. The convergence of empirical data and online discourse hints at a potential symbiotic relationship between digital exasperation and the cultivation of genetically modified soybeans. These findings emphasize that the realm of scientific inquiry is not devoid of imaginative inspiration, much like a good

dad joke hidden within a complex statistical analysis.

As we tiptoe cautiously in interpreting these results, we must acknowledge the limitations of our study. While our findings highlight a strong correlation, the nature of our data precludes assertions of causation, leaving the age-old question of "chicken or egg" unresolved. Despite this, the strength of the relationship prompts additional exploration into the mechanisms underlying this unexpected connection. It's almost as if soybeans were whispering jokes into the wind, eliciting a collective digital exasperation from internet users.

In sum, our research has unearthed a compelling link between GMO soybean use in Illinois and 'I can't even' Google searches, underscoring the potential impact of agricultural practices on the emotional expressions of internet users. This unexpected relationship mirrors the unexpected humor in statistics and research, bringing a touch of levity to the scholarly discourse while planting the seeds for future investigation. As we conclude this discussion, we invite fellow researchers to join us in delving deeper into the multidisciplinary tapestry of biotechnology, digital vernacular, and human emotions, and the unexpected dad jokes hidden within the threads of scientific inquiry.

6. Conclusion

In cultivating this research, we have unearthed a kernel of truth in the correlation between the adoption of genetically modified organisms (GMOs) in soybeans in Illinois and the frequency of 'I can't even' Google searches. The statistical evidence sprouts from a correlation coefficient of 0.8959588 and a p-value less than 0.01, proving that the relationship is as robust as a well-fertilized soybean field. It's as if the soybeans are whispering, “I'm no ordinary crop. I'm edamame-zing!”

Our findings not only lay the groundwork for acknowledging the unexpected association between agricultural practices and digital exasperation but also sow the seeds for a lively discussion concerning the emotional landscape of the digital age. It seems that soybeans are not only a staple of the agricultural world but also have a starring role in the theater of internet vernacular. Soybeans: 1, skeptics: bean there, done that.

The scatterplot visually captures the strong correlation, much like a snapshot of soybeans and frustrating Google searches engaged in a tango of statistical significance. The points on the plot hug the trend line so closely, it's like a scientific embrace between two unexpected bedfellows. Talk about a statistical romance!

In conclusion, our study brings to light an unexpected convergence of otherwise unrelated entities. To put it simply, in the world of research, sometimes you've just got to soy it – and in this case, we did. Further research in this area is not necessary. The puns are just too corny to handle.