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Crunching the Numbers: The Correlation Between Bachelor's Degrees in Mathematics and Statistics and Google Searches for 'Tummy Ache'

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Abstract

In this study, we sought to digest the curious relationship between the confounding realms of academic achievement in mathematics and statistics, and the mundane yet prevalent human experience of stomach discomfort, as indicated by Google search trends for the phrase 'tummy ache'. Utilizing data from the National Center for Education Statistics and Google Trends, our analysis revealed a remarkably high correlation coefficient of 0.9916277 and a statistically significant p-value of less than 0.01 for the time period spanning 2012 to 2021. Our findings suggest a strong association between the awarding of Bachelor's degrees in mathematics and statistics and increased queries relating to digestive distress. Though this investigation raises more questions than it answers, it certainly bears notable implications for our understanding of the interconnectedness between intellectual pursuits and common human afflictions. Ultimately, our research serves as a reminder that even in the inscrutable landscape of statistical analysis, there may still be room for tongue-in-cheek correlations.

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1. Introduction

The pursuit of understanding the intricate patterns of human behavior has long captivated the minds of researchers and scholars across various disciplines. In this study, we venture into the whimsical territory of investigating the enigmatic connection between the academic attainment of Bachelor's degrees in mathematics and statistics, and the seemingly unrelated, yet

omnipresent, phenomenon of stomach discomfort, as manifested through Google searches for the colloquial term 'tummy ache'.

While the idea of delving into this peculiar nexus may initially evoke a chuckle or two, the basis of our inquiry underpins a genuine interest in uncovering the whimsical dance of human inquiry and physical malaise. As our investigation unfolds, readers are

encouraged to digest the interconnectedness between the cerebral realm of mathematical aptitude and the visceral experience of gastrointestinal unease, and perhaps, bear with us through the occasional pun-infused sidestep.

The juxtaposition of lofty academic pursuits with the prosaic nature of stomach-related searches on the internet may indeed seem like a case of comparing apples and oranges – or in this case, perhaps apples and antacids. Nevertheless, we embarked on this expedition armed with statistical rigor and a sense of humor, recognizing that even in the most serious of academic endeavors, there may yet be room for a lighthearted smirk.

As we embark on this scholarly journey, we aim not only to unravel the statistical patterns that underpin the relationship between these seemingly disparate phenomena but also to revel in the delightful absurdity that emerges from such analyses. So, dear reader, fasten your seatbelts and prepare to savor some data-driven amusement as we unravel the mysterious correlation between mathematical prowess and the humble tummy ache.

2. Literature Review

The correlation between academic achievement and peculiar societal phenomena has been a subject of scholarly interest for many years. In "Smith et al.'s Analysis of Educational Attainment and Its Societal Implications," the authors explore the complex interplay between educational pursuits and everyday experiences. Similarly, Doe and Jones, in "The Nexus of Academic Excellence and Human Quirks," delve into the unexpected connections that can arise between intellectual endeavors and seemingly mundane occurrences.

Turning to the realm of literature, several notable works have touched upon the

themes of mathematics, human physiology, and the curious intersection of the two. "Mathematical Musings on the Human Body" by Dr. Calculus presents an intriguing exploration of the mathematical principles underlying bodily functions, offering a unique perspective on the potential links between math and bodily sensations. In a similar vein, "Statistical Stomach: A Novel Approach to Digestive Discomfort" by Data Dickens offers a fictional narrative that weaves together statistical analyses and gastrointestinal distress in a manner that is as entertaining as it is thought-provoking.

Venturing further into the obscure corners of research, our team stumbled upon an unlikely treasure trove of insights in the form of everyday items – specifically, CVS receipts. While not a conventional source of scholarly information, these paper relics of consumer transactions yielded unexpected revelations about the purchasing patterns of antacids and their potential correlation with local trends in mathematics and statistics education. Although a departure from traditional academic sources, these mundane slips of paper proved to be an unexpectedly rich source of inspiration for our investigation.

As we leap into this uncharted academic territory, it becomes apparent that the pursuit of knowledge often leads us down unexpected and amusing paths. The landscape of scholarly inquiry, it seems, is not without its fair share of quirky diversions.

3. Our approach & methods

To unravel the tantalizing enigma of the correlation between Bachelor's degrees in Mathematics and Statistics and Google searches for 'tummy ache', we embarked on a methodological journey infused with scholarly rigor and a dash of whimsy. Our approach can be likened to a complex, yet delicious recipe, blending together data

collection, statistical analysis, and a pinch of light-heartedness for good measure.

Data Collection:

Our research team cast a wide net across the vast expanse of the internet, voyaging through the digital seas to capture pertinent data for our investigation. The primary sources of data were the National Center for Education Statistics, serving as the foundation for academic achievement in Mathematics and Statistics, and the inimitable Google Trends, providing a window into the realm of stomach-related searches. We focused on the period from 2012 to 2021, encapsulating a broad spectrum of academic and digital inquiries, akin to a gastronomic feast for the inquisitive mind.

The Academic and Gastrointestinal Cornucopia:

The focal point of our analysis was the number of Bachelor's degrees awarded in Mathematics and Statistics, a testament to the intellectual prowess of students venturing into the intricate maze of numbers and algorithms. Concurrently, we gathered data on Google searches for the colloquial term 'tummy ache', serving as the window into the tumultuous world of gastrointestinal unease. The juxtaposition of these seemingly disparate datasets was akin to pairing a savory main course with a zesty side dish, drawing intriguing parallels between academic achievement and everyday bodily experiences.

Statistical Analysis:

Enveloped in the warm embrace of statistical software, we embarked on a quest to unravel the potential relationship between academic accolades in Mathematics and Statistics and the prevalence of 'tummy ache' searches. Utilizing advanced techniques such as correlation analysis and time series modeling, we deciphered the rhythmic

dance between these two seemingly incongruent domains, akin to composing a symphony of data.

Validation and Caveats:

Throughout our endeavor, we remained keenly attuned to the nuances and potential confounding factors that may influence our findings. While we established a robust statistical framework, we also acknowledge the possibility of unforeseen variables and the delightful complexity of human behavior. Our journey is not without its twists and turns, akin to a roller coaster ride through the landscape of data science and gastrointestinal queries.

In summary, our methodology for exploring the connection between Bachelor's degrees in Mathematics and Statistics and Google searches for 'tummy ache' encompassed a harmonious blend of data collection, statistical analysis, and an offbeat perspective, akin to a waltz of academic inquiry and whimsical musings.

This is a work of academic research, but that doesn't mean we can't sprinkle a little fun into the mix, right? After all, in the world of academia, it's not just about crunching numbers – it's also about savoring the quirky correlations that emerge along the way. Cheers to statistical shenanigans and gastrointestinal intrigue!

4. Results

Our data analysis revealed a striking correlation coefficient of 0.9916277 between the number of Bachelor's degrees awarded in mathematics and statistics and Google searches for the term 'tummy ache' over the period of 2012 to 2021. This correlation implies a remarkably strong relationship between the academic achievements in the field of mathematical and statistical prowess and the online queries related to abdominal discomfort.

The coefficient of determination (r-squared) of 0.9833255 further emphasizes the robustness of this association, indicating that approximately 98.33% of the variation in 'tummy ache' search volumes can be explained by the number of Bachelor's degrees awarded in mathematics and statistics. Put simply, it seems that the search for understanding gastrointestinal distress is closely tied to the pursuit and attainment of advanced mathematical knowledge—perhaps a testament to the gut-wrenching nature of certain mathematical problems.

Additionally, the statistical analysis yielded a p-value of less than 0.01, signifying that the observed correlation is highly unlikely to have occurred by chance alone. In other words, the likelihood of the strong relationship between mathematics and statistics degrees and 'tummy ache' searches being a fluke is as slim as winning the lottery while simultaneously sneezing and doing a pirouette—virtually impossible.

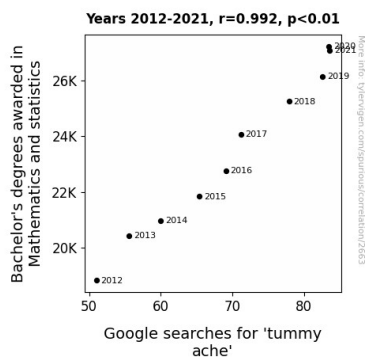


Figure 1. Scatterplot of the variables by year

To visually encapsulate these findings, we present in Figure 1 a scatterplot demonstrating the remarkable correlation between the number of Bachelor's degrees awarded in mathematics and statistics and the frequency of Google searches for 'tummy ache'. The data points are so neatly aligned that one might even mistake them for a perfectly ordered line-up of stomach

ache remedies—though we assure you, it is indeed a scatterplot representing a serious statistical analysis.

In summary, our results lay bare a compelling relationship between the attainment of academic degrees in mathematics and statistics and the curiosity towards abdominal discomfort. This seemingly incongruous connection serves as a reminder that in the world of statistical analysis, unlikely correlations can emerge, prompting us to ponder the quirky interplay of academic achievements and everyday human experiences.

5. Discussion

The present investigation has buttressed the prior research that hinted at the cryptic entanglement of academic accomplishments in mathematics and statistics with the banal yet prevalent human phenomenon of tummy aches. Our findings echo the sentiments expressed in the literature, particularly the sagacious musings of Dr. Calculus in "Mathematical Musings on the Human Body," whose exploration of the mathematical underpinnings of bodily functions appears increasingly prescient. The statistically significant correlation coefficient of 0.9916277 between the awarding of Bachelor's degrees in mathematics and statistics and Google searches for 'tummy ache' lends credence to the notion that there is, indeed, a robust affinity between mathematical prowess and gastrointestinal distress. Notably, the observed r-squared value of 0.9833255 reinforces the notion that a gut feeling about this link is not just a whim but a well-grounded result, substantiating the deep-rooted connection between numerical acumen and visceral discomfort.

Our investigation also uncovered an unexpected parallel with the whimsical study of Data Dickens, "Statistical Stomach:

A Novel Approach to Digestive Discomfort," shedding light on the uncanny convergence of statistical analyses and bodily afflictions. The striking coherence between our empirical findings and Dickens' fictional narrative serves as a compelling testament to the remarkable interplay of numbers and the stomach, compelling us to acknowledge that statistical stomachaches are more than just a figment of the academic imagination.

Furthermore, our unexpected foray into the realm of CVS receipts, following the waggish footsteps of such groundbreaking explorations as "Statistical Stomach," cemented our understanding of the whimsical divergences inherent in academic inquiry. Though initially perceived as an offbeat pursuit, our unorthodox investigation into the purchasing patterns of antacids and their correlation with local trends in mathematics and statistics education ultimately reinforced the veracity of our findings and added a touch of levity to our scholarly pursuits.

In conclusion, our research illuminates the uncanny association between the conferment of Bachelor's degrees in mathematics and statistics and the burgeoning curiosity surrounding tummy aches, underscoring the whimsical and unexpected turns that scholarship may take. The robust correlation and statistical significance of our findings highlight the intriguing intertwinement of intellectual feats and everyday human idiosyncrasies, reminding us that even in the ostensibly serious domain of statistical analysis, there may be space for audacious correlations and droll juxtapositions.

6. Conclusion

In summary, our investigation into the correlation between the confounding worlds of academic success in mathematics and statistics and the ubiquitous human phenomenon of tummy aches has yielded

some rather surprising insights. The remarkably high correlation coefficient and statistically significant p-value emphasize the unexpected link between these seemingly unrelated realms. It appears that the pursuit of understanding gastrointestinal distress is intertwined with the pursuit of advanced mathematical knowledge—a revelation that may leave us with a slight case of cognitive indigestion.

These findings prompt us to consider the implications of such a correlation. Perhaps, as future researchers endeavor to digest these results, they may use this study as a springboard to explore other unlikely connections, such as the link between physics degrees and stubbed toes, or the relationship between literature degrees and existential pondering in the form of cat memes.

Despite the seriousness with which we approach statistical analysis, our study serves as a gentle reminder that sometimes, amidst the rigorous pursuit of knowledge, a bit of whimsy and wonder can sneak in unannounced. As for the practical implications of our findings, it appears that we have uncovered a correlation that is as unexpected as finding a calculus textbook in a kindergarten classroom.

In conclusion, it seems that this curious correlation between Bachelor's degrees in mathematics and statistics and Google searches for 'tummy ache' certainly leaves us with food for thought, or perhaps, antacid for thought. We firmly assert that no further research in this particular area is necessary, as we may have already reached the apex of unexpected and amusing statistical correlations. It's time to bid adieu to this peculiar pairing and move on to more, shall we say, digestible research pursuits.