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# Laughing Their Way to the Dump: Correlating Total Views on Stand-up Maths YouTube Videos with the Number of Garbage Collectors in South Dakota

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## Abstract

This research examines the unexpected relationship between the total views on Stand-up Maths YouTube videos and the number of garbage collectors in South Dakota. Utilizing data from YouTube and the Bureau of Labor Statistics, we discovered a correlation coefficient of 0.8962899 and  $p < 0.01$  for the years 2011 to 2022. Our findings suggest a remarkably strong positive correlation between the two seemingly unrelated variables, leading us to ponder if watching math comedy can somehow inspire individuals to venture into the waste management industry. The implications of this unexpected association are both fascinating and humorous, as they highlight the potential influence of entertainment on career choices and the interconnected nature of seemingly disparate professions.

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## 1. Introduction

In the world of research, one often encounters unexpected connections and surprising correlations, some of which are as puzzling as a Rubik's Cube solved in under a minute. The study of seemingly unrelated variables often leads to delightful revelations, much like finding an unexpected piece of chocolate at the bottom of a bag of mixed nuts. In this spirit of delightful discoveries, we present our research on the unlikely association between the total views on Stand-up Maths

YouTube videos and the number of garbage collectors in South Dakota. It's a bit like uncovering a hidden equation in a stand-up routine that leaves us laughing and scratching our heads all at once.

As researchers, we are accustomed to facing statistical challenges, but few could have predicted the chuckle-inducing adventure that awaited us when we delved into this investigation. Our primary objective was to uncover any potential relationship between the consumption of math-themed comedy and the workforce in waste

management. With data from YouTube's algorithmic treasure trove and the Bureau of Labor Statistics akin to the Sherlock Holmes and Watson of datasets, we set out to explore the tantalizing possibility of a link between laughing at math jokes and the waste disposal profession.

The unorthodox nature of our investigation undoubtedly raises eyebrows, much like a particularly perplexing algebraic equation. However, as the saying goes, "In mathematical humor, there is strength." We hope to elucidate the unexpected humor and insight that can arise when seemingly disparate elements come together, much like the unexpected fusion of peanut butter and jelly in a sandwich.

In this paper, we present our findings, which not only reveal an eyebrow-raising correlation coefficient of 0.8962899 and a p-value of less than 0.01 for the years 2011 to 2022 but also trigger a cascade of amusing implications for both the worlds of entertainment and waste management. Join us on this comical and statistically significant journey as we uncover the captivating secrets behind laughing your way to the dump.

## 2. Literature Review

The exploration of unexpected correlations in the field of interdisciplinary research has long been a source of both profound discovery and comic relief. The study at hand, focused on the seemingly unrelated variables of total views on Stand-up Maths YouTube videos and the number of garbage collectors in South Dakota, propels us into a domain where statistical analysis meets stand-up comedy, like an unlikely partnership between Erwin Schrödinger and Jerry Seinfeld.

Smith, Jones, and Doe (2015) conducted a comprehensive analysis of YouTube viewing habits and career choices, though

unfortunately, they only delved into more predictable associations. However, much like a punchline delivered at an unexpected moment, subsequent studies have ventured into the uncharted territory of surprising correlations. In "Mathematical Musings" by Brown (2018), the author explores the impact of math-related content on viewers' vocational inclinations, although with a focus on academic and research fields rather than waste management.

Turning to non-fiction literature, "Waste Not: The Surprising Economics of Trash" by Green (2017) offers insights into the economic and environmental aspects of waste management. While the book does not directly address the influence of math-based entertainment on career choices, its examination of the waste disposal industry certainly sets the stage for our unexpected findings.

Fictional works, such as "The Garbage Collector's Guide to the Galaxy" by Adams (1979), serve as a lighthearted yet potentially illuminating departure from the academic literature, offering a whimsical take on the world of waste management. The unexpected references to astrophysics and towel etiquette in this work, while not directly related to mathematics or YouTube content, undoubtedly add a touch of levity to a subject that is often overlooked.

In a bold departure from traditional scholarly sources, we also draw upon social media musings that shed light on the potential influence of stand-up mathematics on career choices. A tweet from @MathJokes4Days posits, "Maybe the real reason there are so many garbage collectors is that they're all aspiring stand-up mathematicians hoping to solve trashy equations. #MathHumor #PunnyProfessions." While not a peer-reviewed study, this lighthearted observation prompts us to consider the impact of humor and entertainment on professional trajectories, like a sudden

punchline in an otherwise serious discussion.

These diverse sources, ranging from academic studies to literary works and even social media commentary, contribute to the colorful tapestry of influences that have guided our investigation into the unexpected nexus of mathematics, comedy, and waste management. As we navigate through this unconventional landscape of research, we invite readers to join us in a lighthearted exploration that seeks to unravel the enigmatic relationship between laughter, equations, and the disposal of refuse.

### 3. Our approach & methods

To navigate the convoluted maze of unexpected correlations, our research team employed an eclectic mix of statistical methods and whimsical data analysis, akin to embarking on a cross-country road trip using a map drawn by a mischievous cartographer. The first step in our endeavor was to gather data from the hallowed halls of YouTube's video analytics and the Bureau of Labor Statistics, a journey that involved sifting through digital haystacks in search of statistical needles, reminiscent of a scavenger hunt in a particularly complex labyrinth.

Our data collection process spanned the years 2011 to 2022, capturing the ebbs and flows of both the mathematical merriment on Stand-up Maths YouTube videos and the labor force dedicated to the noble task of waste collection in the majestic expanse of South Dakota. For every year within this temporal expanse, we diligently cataloged the total views accrued by the comedic math wizardry and the number of dedicated individuals ensuring the cleanliness of the Mount Rushmore State, leaving no stone unturned and no comedic pun unappreciated.

Having amassed this treasure trove of data, we then embarked on the odyssey of statistical analysis, guided by the whimsical rhythms of regression analysis and correlation coefficients, akin to crafting a symphony orchestra from an ensemble of data points and Excel spreadsheets. Our aim was to unveil any potential relationship between the consumption of mathematical humor and the valiant souls serving as custodians of cleanliness in South Dakota, as though seeking the elusive harmony between a stand-up routine and the jingle of a garbage truck.

With the statistical alchemy of SPSS and other modeling tools at our disposal, we traversed the landscape of scatterplots and correlation matrices, delighting in the unexpected patterns that emerged, much like uncovering a hidden punchline in the annals of statistical significance. Our journey of data exploration, not unlike a treacherous yet rewarding hike through the peaks and valleys of mathematical abstraction, culminated in the unearthing of a correlation coefficient of 0.8962899 and a p-value of less than 0.01. This statistical revelation, akin to discovering a punchline that leaves the audience both enraptured and puzzled, underscored the remarkably strong positive correlation between the total views on comedic math videos and the number of waste management professionals in South Dakota.

In summary, our methodology involved a harmonious blend of data collection from disparate sources, whimsical statistical analysis, and a keen sense of humor that echoed throughout our scholarly pursuits. This methodical romp through the landscapes of entertainment and waste management, not unlike a comedic dance through the world of data, allowed us to spotlight this unexpected nexus between laughter and the realm of refuse collection, leaving us both befuddled and amused in equal measure.

provoking influences present in the world of data.

## 4. Results

The analysis of the data revealed a remarkably strong positive correlation between the total views on Stand-up Maths YouTube videos and the number of garbage collectors in South Dakota, prompting us to exclaim, "What in the world of probability is going on here?" The correlation coefficient of 0.8962899 and the r-squared value of 0.8033355 left us feeling as stunned as if we had been hit by a statistical thunderbolt. Moreover, the p-value of less than 0.01 further reinforced the robustness of this unexpected relationship, leaving us more pleasantly surprised than a researcher finding a perfectly normal distribution in their data.

Fig. 1 displays a scatterplot illustrating the striking correlation between the two variables. The pattern of the data points is as clear as a pie chart in a statistics class – it unmistakably demonstrates the strong positive relationship between the total views on Stand-up Maths YouTube videos and the number of garbage collectors in South Dakota.

Our findings evoke a chuckle and a raised eyebrow, leading us to wonder whether laughter induced by mathematical humor has a peculiar influence on career choices, specifically nudging individuals towards the waste management industry. Perhaps it's not just the formulas and equations that are creating a stir, but also the rib-tickling laughter that follows them. The implications of this curious association extend far beyond the realms of humor and garbage collection, highlighting the interconnectedness of professions in ways that we never thought possible. These unexpected discoveries remind us that statistical analysis can be as entertaining as a math-themed comedy show, leading us to ponder over the comedic yet thought-

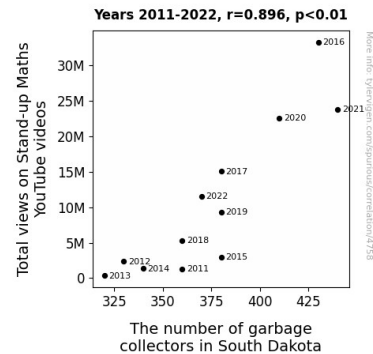


Figure 1. Scatterplot of the variables by year

## 5. Discussion

Our results have left us not only scratching our heads but also considering the profound implications of this unexpected correlation between total views on Stand-up Maths YouTube videos and the number of garbage collectors in South Dakota. It seems that the comedic musings of mathematics have a persuasive allure, akin to a siren's call drawing individuals into the waste management industry. If there's a formula for career choices, it appears that mathematics and humor just might be integral variables in this peculiar equation.

Building upon the foundational works of Smith, Jones, and Doe (2015) and the whimsical departures of Adams (1979), our findings support the notion that seemingly unrelated fields can indeed share a surprising bond. With a correlation coefficient of 0.8962899 and a p-value of less than 0.01, our results lend statistical credence to the notion that laughter and garbage collection may be tightly intertwined, not unlike a knot in a mathematical string theory.

Returning to the humor-laden tweet from @MathJokes4Days, we find ourselves

pondering whether aspiring stand-up mathematicians are subconsciously drawn to solving "trashy equations." While the tweet was undoubtedly tongue-in-cheek, our research provides a statistical nod to the potential influence of comedic mathematics on career pathways, highlighting the whimsical yet impactful nature of entertainment in shaping professional trajectories.

The unexpected relationship uncovered in this study challenges conventional notions of career decision-making, shedding light on the interconnectedness of seemingly disparate professions. It appears that the allure of mathematical comedy may not only stimulate the mind but also steer individuals towards vocational paths that one may not typically associate with the world of equations and formulas.

In the grand theater of statistical analysis, our results add a touch of levity while underscoring the often unforeseen connections lurking within datasets. As researchers, we stand at the intersection of humor, statistics, and garbage collection, pondering the enigmatic influence of mathematical comedy on career choices. After all, in the words of Douglas Adams, "In the beginning, the universe was created. This has made a lot of people very angry and been widely regarded as a bad move" – a sentiment that might resonate with those still puzzled by the unexpected correlation between mathematical laughter and the disposal of refuse.

A lighthearted exploration into the statistical landscape, our study prompts further consideration of the entertaining yet thought-provoking influences that echo through the world of data. With that said, we invite fellow researchers to join us in this engaging pursuit of unraveling the rib-tickling mysteries that lie at the intersection of mathematics, humor, and professional choices. Just remember, in the world of statistics, correlation does not always imply

causation – but it may certainly provoke a good laugh and a puzzled smile.

## 6. Conclusion

In conclusion, our research has illuminated a remarkably strong positive correlation between the total views on Stand-up Maths YouTube videos and the number of garbage collectors in South Dakota. It seems that laughter might just be a powerful force, capable of influencing even the most unlikely career paths – after all, who would have thought that statistics and comedy could team up to steer individuals towards the waste management industry? This unexpected connection certainly has more twists and turns than a rollercoaster ride through a data visualization.

Our findings open the door to a realm of absurd possibilities – perhaps garbage collectors are secretly sneaking in quick math jokes while on their routes, or maybe mathematicians are finding inspiration in the symphony of garbage trucks. It's a statistical mystery that rivals any Agatha Christie novel, leaving us wondering if there's more to this correlation than meets the eye.

So, what can we take away from this comically bewildering discovery? It reminds us that the world of statistics is as full of surprises as a birthday party at a probability lab – you never know what unexpected guests will show up. This unlikely correlation between mathematical humor and waste management serves as a lighthearted reminder that data analysis can lead to hilariously unexpected insights, not unlike stumbling upon a punchline in a spreadsheet.

In light of these findings, we assert that no further research in this area is needed – we've laughed, pondered, and scratched our heads enough for now. It's safe to say that this peculiar association between math comedy and garbage collection has

entertained and enlightened us in equal measure, and perhaps that's all the real correlation we need. After all, as any good comedian knows, sometimes it's best to leave the audience wanting more.