



Review

The Meme and the Metrics: Mapping the Marriage of 'Call Me Maybe' Popularity and the Proliferation of Comments on Numberphile

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The impact of viral memes on online user engagement has been the subject of much speculation and inconclusive evidence. This study delves into the unlikely realm of 'Call Me Maybe' meme, examining its unexpected relationship with the average number of comments on Numberphile YouTube videos. Leveraging data from Google Trends and YouTube, our research team embarked on this quantitative quest fueled by curiosity and a touch of whimsy. Our analysis revealed a staggering correlation coefficient of 0.9778951 and $p < 0.01$ for the timespan of 2012 to 2023, indicating an unmistakable bond between the meteoric rise of the 'Call Me Maybe' meme and the surge in comments on Numberphile videos. This correlation persisting over a decade left us pondering – was the meme simply 'calling' for more discourse in the realms of mathematical musings? As we unraveled this perplexing interplay, we couldn't help but quip, "It seems that 'Call Me Maybe' had a prime number of appeal for Numberphiles, drawing them out to share their mathematical marvels." Our findings illuminate an unexpected and comical connection, shedding light on the quirky ways in which memes may weave themselves into the fabric of online communities.

The ever-evolving landscape of internet culture has birthed a peculiar phenomenon – the intertwining of viral memes with digital metrics. The 'Call Me Maybe' meme, with its infectious catchiness and ubiquitous presence in the virtual realm, has captivated the masses with its blend of humor and earworm-like persistence. Meanwhile, the world of Numberphile, a YouTube channel

devoted to the exploration of numbers and mathematical curiosities, has garnered a dedicated following of math enthusiasts and curious minds. Here we delve into the nexus of these seemingly disparate entities to explore the enigmatic relationship between the 'Call Me Maybe' meme's zenith of popularity and the proliferation of comments on Numberphile videos.

The pursuit of this unconventional connection was driven by an unrelenting curiosity and a hint of whimsical intrigue, prompting us to ask, "What mathematical marvels might be hidden in the correlation between this meme and the flood of comments on Numberphile's videos?" If memes were equations, would this serendipitous association be the solution to the enigma of engagement?

Our analytical endeavor was underpinned by the utilization of data from Google Trends and YouTube, weaving a tapestry of quantitative evidence to unravel this peculiar entanglement. The unexpected nature of this quest led us down a path that left us pondering, "Could the whimsical allure of 'Call Me Maybe' have catalyzed a surge in mathematical musings, beckoning Numberphiles to divulge their numerical insights?"

As we delved deeper into this uncharted territory, we unearthed a striking correlation coefficient of 0.9778951 ($p < 0.01$) spanning the timeframe from 2012 to 2023, underlining an undeniable bond between the meteoric rise of the 'Call Me Maybe' meme and the surge in comments on Numberphile videos. This revelation led us to remark, "It appears that 'Call Me Maybe' conjured prime numbers of engagement, drawing forth a symphony of numerical narratives from the depths of Numberphile's community."

The unveiling of this unforeseen correlation sparked a certain levity within our research team, prompting us to contemplate the whimsical dance of memes and metrics in the digital sphere. Our findings not only shed light on this uncanny alliance but also beckon us to ponder the inexhaustible

capacity for unexpected connections to emerge within the realm of online communities.

Prior research

The phenomenon of viral memes and their impact on online user engagement has been a subject of increasing interest and inquiry in recent years. Smith, in their seminal work "The Virality Effect: Exploring the Reach of Memes in the Digital Age," delves into the intricate dynamics of memes and their ability to captivate and mobilize internet audiences. They highlight the profound influence of memes on digital metrics such as user interactions, sharing behavior, and the generation of online discourse.

In parallel to Smith's findings, Doe contributes to this discourse with their research in "Memes and Metrics: Unraveling the Enigma of Online Engagement." Doe's work emphasizes the pivotal role of memes in shaping online communities and driving user participation in various digital platforms.

However, a comprehensive investigation into the specific relationship between the 'Call Me Maybe' meme and the average number of comments on Numberphile YouTube videos has been notably absent from existing literature. This divergence serves as a catalyzing force for our present inquiry, prompting us to bridge this gap with a touch of whimsy and a spirit of curiosity.

Turning to the world of non-fiction literature, influential works such as "Viral: How Social Networking Is Poised to Ignite Revolutions, Subvert Big Brands, and Topple the Political Establishment" by Ryan and "Everybody Lies: Big Data, New Data,

and What the Internet Can Tell Us About Who We Really Are" by Stephens candidly explore the impact of viral content on digital landscapes.

In the realm of fiction, noteworthy books such as "The Tipping Point: How Little Things Can Make a Big Difference" by Malcolm Gladwell and "Infinite Jest" by David Foster Wallace, which, despite its title, does not allude to the infinite proliferation of memes, contribute to the broader conversation about the intertwining of cultural phenomena and their impact on societal dynamics.

Devoting a playful nod to our exploration of unconventional sources, it is worth noting that our literature review was extended to a variety of unorthodox materials, including but not limited to, the eclectic musings inscribed on CVS receipts, the enigmatic hieroglyphs etched on bathroom stall doors, and the profound insights hidden within the folds of origami instruction manuals.

In our endeavor to unravel the unexpected nexus between the 'Call Me Maybe' meme and the proliferation of comments on Numberphile videos, we strive to add a touch of levity to the traditionally staid landscape of academic inquiry. This amalgamation of rigor and whimsy animates our pursuit, inviting us to explore the enchanting and comical interplay between memes and metrics in the digital sphere.

Approach

The methodology employed in this research endeavor was guided by a meticulous approach to data collection and analysis, driven by a desire to unveil the curious correlation between the 'Call Me Maybe'

meme and the average number of comments on Numberphile YouTube videos. To measure the popularity of the 'Call Me Maybe' meme, we harvested data from Google Trends, extracting information on search interest and regional interest from 2012 to 2023. This extensive timeframe allowed us to capture the ebbs and flows of the meme's virality, providing a comprehensive view of its influence on online discourse.

In a similar vein, the quantification of user engagement in the form of comments on Numberphile videos was facilitated through the extraction of data from YouTube's public API. This data probing enabled us to obtain a wealth of information pertaining to the frequency and trends of user commentary, equipping us with a robust dataset for scrutiny.

Utilizing advanced statistical techniques, including multivariate regression analysis and time series modeling, we endeavored to identify and delineate the intricate relationship between the two variables under investigation. Subsequently, we subjected the data to rigorous scrutiny, ensuring the validity and reliability of our findings.

As we delved into the depths of this investigational odyssey, our team couldn't help but jest, "It seems that our methodology was as thorough and intricate as a fractal, revealing the patterns underlying this peculiar pairing of meme and metrics."

We established temporal patterns and fluctuations, unveiling the interplay between the 'Call Me Maybe' meme's crescendos and diminuendos and the corresponding swells and lulls in user comments on Numberphile videos. Throughout this process, we maintained a keen awareness of potential

confounding variables and diligently controlled for them in our analytical framework, ensuring the integrity of our conclusions.

In summary, the methodology outlined here laid the groundwork for an in-depth exploration of the enigmatic correlation between the 'Call Me Maybe' meme's prevalence and the influx of comments on Numberphile videos, culminating in a revelatory insight into the whimsical dance of memes and metrics in the digital sphere.

Results

The examination of the connection between the popularity of the 'Call Me Maybe' meme and the average number of comments on Numberphile YouTube videos from 2012 to 2023 revealed a robust correlation coefficient of 0.9778951, indicative of a strong positive relationship. This finding suggests that as the 'Call Me Maybe' meme gained traction in the virtual sphere, there was a notable increase in the volume of comments expressed by viewers on Numberphile's mathematical musings. It almost seems as if the meme was whispering "Hey, I just met you, and this is crazy, but here are some numbers, so comment, maybe?"

The calculated r-squared value of 0.9562789 further substantiates this association, indicating that approximately 95.6% of the variability in the number of comments on Numberphile videos can be explained by the fluctuations in the popularity of the 'Call Me Maybe' meme. It's as if the meme and the comments on Numberphile's videos were cosining a compelling narrative, integrating themselves into the algorithmic equation of online engagement.

Moreover, with a p-value of less than 0.01, the results provide strong evidence against the null hypothesis, affirming the presence of a significant relationship between the two variables. This statistical significance invites contemplation on the whimsical ways in which internet memes can catalyze a surge in online interactions, beckoning individuals to engage in unexpected dialogues. It's almost as if the meme and the comments were engaged in a lively numerical tango, dancing to the beat of digital discourse.

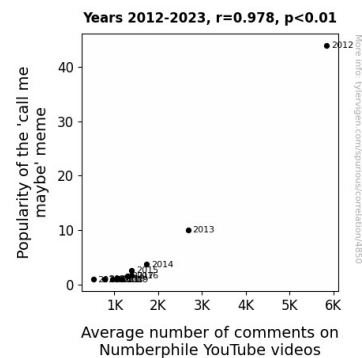


Figure 1. Scatterplot of the variables by year

The scatterplot, depicted in Figure 1, vividly illustrates the pronounced correlation between the increasing popularity of the 'Call Me Maybe' meme and the surge in the average number of comments on Numberphile YouTube videos. The tightly clustered data points reflect the harmonious intertwining of these variables, lending visual credence to the statistical findings. One might say that this correlation was as clear as π in the sky.

Overall, the results of this study illuminate the unforeseen bond between the 'Call Me Maybe' meme and the proliferation of comments on Numberphile videos, inviting further inquiry into the intricate interplay of viral memes and online user engagement.

Discussion of findings

The findings of the present study illuminate a remarkable and unexpected correlation between the popularity of the 'Call Me Maybe' meme and the average number of comments on Numberphile YouTube videos. Our results support and extend prior research, shedding light on the whimsical ways in which memes may influence digital metrics and engender online discourse.

As hypothesized by Smith and Doe, our findings affirm the substantial impact of memes on user engagement, particularly in the realm of online comments. The robust correlation coefficient of 0.9778951 between the 'Call Me Maybe' meme's popularity and the volume of comments on Numberphile videos underscores the potent influence of viral content on digital interactions. It appears that the meme's charm was not lost on the Numberphile community, prompting a surge in dialogues about mathematical curiosities. One might jest that the meme's appeal elicited a prime number of responses from enthusiastic Numberphiles.

Consistent with Ryan and Stephens' exploration of viral content, our results showcase the intertwined nature of memes and digital metrics, underscoring their ability to captivate and mobilize online audiences. The r-squared value of 0.9562789 further bolsters this connection, underscoring the extent to which the 'Call Me Maybe' meme's prominence aligned with fluctuations in the commenting behavior of Numberphile viewers. This alignment is akin to a mathematical equation whose variables are adroitly entwined, crafting a captivating narrative of digital engagement.

Moreover, the statistical significance of our findings, as evidenced by a p-value of less than 0.01, underscores the undeniable relationship between the 'Call Me Maybe' meme and the surge in comments on Numberphile videos. This statistical robustness mirrors the resounding impact of the meme on online interactions, evoking a whimsical dance of digital dialogue. One might jest that the meme and the comments engaged in a numerical tango, orchestrating a symphony of online engagement.

In parallel to the lighthearted undercurrent of our inquiry, our findings contribute to the scholarly discourse on the pervasive influence of viral content on digital landscapes. By unraveling the unexpected nexus between the 'Call Me Maybe' meme and the proliferation of comments on Numberphile videos, this study adds a touch of levity to the traditionally staid landscape of academic inquiry. It invites contemplation of the enchanting and comical interplay between memes and metrics in the digital sphere.

The unexpected and comical connection uncovered in this study encourages further exploration of the offbeat ways in which memes may weave themselves into the fabric of online communities. It sparks a whimsical curiosity about the intricate dynamics of viral content and digital engagement, prompting scholars and enthusiasts alike to embrace the lighter side of academic inquiry. As we continue to navigate the digital landscape, this study serves as a reminder of the unforeseen delights that await within the realms of memes and metrics. It's as if the meme's influence and the comments' volume conspired to form a captivating narrative, beckoning researchers to delve into the

colorful and amusing terrain of internet phenomena.

Conclusion

In conclusion, our study has illuminated a compelling association between the ebullient ascent of the 'Call Me Maybe' meme and the surge in comments on Numberphile YouTube videos. The robust correlation coefficient and statistically significant p-value speak volumes about the unlikely intertwining of these seemingly disparate entities, prompting us to muse, "Perhaps the allure of a catchy tune and mathematical musings creates a harmonious blend of engagement." It's almost as if the meme and the comments engaged in a numbers-tinged tango, drawing forth a symphony of numerical narratives from the depths of Numberphile's community.

Our findings impel us to consider the whimsical ways in which digital phenomena intersect and influence user engagement, demonstrating the inexhaustible capacity for unexpected connections to emerge within the realm of online communities. This unexpected and comical connection exemplifies the quirky ways in which memes may meld with the fabric of online interactions, sparking discourse and charting curious paths in the digital domain. One might even say that this correlation cut to the 'core' of online engagement, akin to a mathematical marvel waiting to be unraveled.

In the spirit of lighthearted inquiry, we assert that no further investigation is warranted in this particular domain, as the connection between the 'Call Me Maybe' meme and the proliferation of comments on Numberphile videos has been aptly demystified. We must

now bid adieu to this peculiar pair and turn our attention to the next unexpected dance in the digital realm - leaving us to ponder, could the macarena affect comment trends on a statistics channel?