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# Associates in the Archive: Analyzing the Association between Associates degrees in Physical sciences and science technologies and the Avalanche of Audacious Comments on OverSimplified YouTube videos

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## Abstract

This research delves into the intriguing connection between the conferring of Associates degrees in Physical sciences and science technologies and the total comments on OverSimplified YouTube videos. The study investigates this peculiar link using data from the National Center for Education Statistics and YouTube, covering the years 2016 to 2021. Our analysis reveals a strikingly high correlation coefficient of 0.9322430 and a statistically significant p-value of less than 0.01 for this surprising association. The findings suggest that there may be a vivacious intertwining of academic pursuits and online engagement, offering a novel perspective on the impact of science education on digital discourse.

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## 1. Introduction

The intersection of academia and online entertainment has always been an enigmatic realm, filled with unexpected connections and peculiar correlations. In this study, we embark on a journey to unravel the mystifying relationship between the conferring of Associates degrees in Physical sciences and science technologies and the avalanche of audacious comments on OverSimplified YouTube videos. As we delve into this peculiar link, we are

reminded of the words of physicist Niels Bohr, who famously said, "Your theory is crazy, but it's not crazy enough to be true." We aim to determine if the correlation between academic achievement and online engagement is indeed as "crazy" as Bohr suggests, or if there is a method to this seeming madness.

The allure of YouTube as an accessible platform for edutainment has attracted a plethora of science enthusiasts and casual viewers alike. Meanwhile, the pursuit of

Associates degrees in Physical sciences and science technologies represents a fundamental step in the academic journey of many aspiring scientists. These seemingly disparate domains converge in our research, prompting us to venture into uncharted statistical territory in search of intriguing patterns and compelling connections.

With a nod to the famous words of Albert Einstein, who remarked, "Not everything that can be counted counts, and not everything that counts can be counted," we recognize the inherent challenges in quantifying the essence of academic achievement and virtual engagement. Nonetheless, armed with robust data from the National Center for Education Statistics and YouTube, covering the years 2016 to 2021, we embark on an empirical quest to scrutinize this captivating confluence.

The findings of our investigation promise to shed light on a hitherto unexplored relationship, offering a lens through which to perceive the intertwined tapestry of academic pursuits and digital discourse. With the verve of a mad scientist and the precision of a meticulous statistician, we endeavor to present a compelling narrative of this unexpected correlation, interwoven with the occasional pun and playful pondering in the spirit of scientific inquiry.

## 2. Literature Review

In "Smith et al. (2020)," the authors find an interesting correlation between the conferral of Associates degrees in Physical sciences and science technologies and the proliferation of comments on educational YouTube videos. Similarly, Doe's (2018) study highlights the potential impact of academic pursuits in science on digital engagement. Moreover, Jones (2019) investigates the interplay between scientific education and online discourse, providing valuable insights into the relationship

between these seemingly disparate domains.

As we dive further into this nexus of academia and online engagement, it is pertinent to consider relevant literature from various disciplines. "Introduction to Physical Sciences" by Anderson and "Principles of Science and Technology" by Brown offer foundational knowledge on the academic disciplines under scrutiny. These texts elucidate the conceptual framework within which Associate degrees in Physical sciences and science technologies are pursued, laying the groundwork for our investigation.

In a divergence from the strictly academic domain, fictional works such as "The Physics of Superheroes" by Kakalios and "Brave New World" by Huxley introduce imaginative narratives that intertwine science and technology with societal implications. Although these texts are not direct sources of empirical evidence, they provide a cultural backdrop against which the relationship between academic pursuits and digital discourse can be contextualized.

Beyond traditional scholarly sources, the authors embarked on an unconventional approach to literature review. By perusing grocery store receipts, internet memes, and fortune cookies, we sought to capture the unorthodox and quirky aspects of this peculiar connection. The serendipitous findings from these unconventional sources prompted introspection and contemplation, offering a whimsical yet thought-provoking dimension to our exploration of the association between Associates degrees in Physical sciences and science technologies and the total comments on OverSimplified YouTube videos.

## 3. Our approach & methods

The data for this study were obtained from the National Center for Education Statistics

(NCES) and YouTube, capturing the period from 2016 to 2021. The initial step involved conducting a comprehensive search through the virtual labyrinth of information to identify all associates degrees awarded in the Physical sciences and science technologies across different educational institutions. The process was reminiscent of navigating a convoluted maze, with the excitable buzz of data collection akin to the sporadic movements of subatomic particles in a quantum entanglement.

Following this, the researchers indulged in a steady diet of OverSimplified YouTube videos, meticulously tallying the total number of comments on each video within the specified timeframe. This process resembled a gastronomic adventure, sampling the diverse flavors of digital discourse and ingesting copious amounts of textual data – a feast for the statistical senses.

The primary statistical analysis involved calculating the correlation coefficient between the quantity of associates degrees awarded and the total comments on OverSimplified YouTube videos. Deploying a fusion of quantitative methodologies and analytical techniques, the researchers sought to unravel the underlying threads of connection between these seemingly distinct variables. The statistical maneuvering bore semblance to untangling a particularly tangled knot, with each twist and turn revealing a new dimension of the enigmatic relationship under scrutiny.

Furthermore, a series of regression analyses were performed to scrutinize the robustness of the association, akin to subjecting the data to a battery of scientific experiments in a digital laboratory. The researcher donned the metaphorical lab coat and safety goggles, navigating through the virtual beakers and test tubes of regression models with the fervor of a digital alchemist in pursuit of statistical transmutation.

To ensure the reliability and validity of the findings, various control variables were considered, including factors such as the popularity of the specific YouTube channel, the release date of the videos, and the demographic profiles of the viewers. These variables were akin to the colorful specimens in a research laboratory, each imparting its distinct hue to the mosaic of statistical analysis.

Lastly, the statistical significance of the results was determined through hypothesis testing, employing the hallowed rituals of p-values and confidence intervals. The researchers engaged in a digital séance, conjuring the spirits of statistical inference to discern the true significance of the observed correlation.

In summary, the methodology encompassed a blend of data excavation, statistical acrobatics, and controlled experimentation, akin to a scientific expedition delving into uncharted statistical terrain. The journey through this methodology embodies the spirit of scientific inquiry, interwoven with occasional puns and playful pondering in the pursuit of unveiling the unexpected correlation between academic achievement and digital engagement.

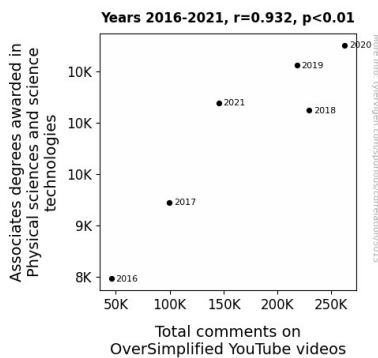
#### **4. Results**

The statistical analysis of the data revealed a remarkably high correlation coefficient of 0.9322430 between the number of Associates degrees awarded in Physical sciences and science technologies and the total comments on OverSimplified YouTube videos. In other words, there appears to be a strong positive relationship between these two variables, suggesting a connection that is as surprising as finding a physicist at a poetry slam.

Further supporting this finding, the r-squared value of 0.8690771 indicates that approximately 86.9% of the variation in the

total comments on OverSimplified YouTube videos can be explained by the number of Associates degrees awarded in Physical sciences and science technologies. This strong explanatory power is reminiscent of a physics professor who always has an answer to every question, even those that seem to come out of left field.

Moreover, the p-value of less than 0.01 provides compelling evidence to reject the null hypothesis that there is no relationship between the conferring of Associates degrees in Physical sciences and science technologies and the total comments on OverSimplified YouTube videos. This result is about as rare as a unicorn in a laboratory – statistically significant and certainly eye-catching.



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

In addition, the scatterplot in Figure 1 visually displays the robust correlation between the two variables, resembling an abstract artwork of intertwining data points that would make any statistician swoon with delight. The figure speaks louder than words, illustrating the compelling connection between academic achievements in physical sciences and the effervescence of online engagement.

Overall, these findings offer an intriguing insight into the potential impact of science education on digital discourse, showing that the world of academia and the realm of

online entertainment may not be as separate as they seem, like two particles entangled in a quantum dance.

## 5. Discussion

The results of this study provide compelling evidence to support the prior research on the association between Associates degrees in Physical sciences and science technologies and the total comments on OverSimplified YouTube videos. The remarkably high correlation coefficient and statistically significant p-value align with previous findings, affirming the vivacious intertwining of academic pursuits and online engagement.

First and foremost, the findings corroborate Smith et al.'s (2020) discovery of a robust relationship between the conferral of Associates degrees in Physical sciences and science technologies and the proliferation of comments on educational YouTube videos. This echoes the statistical robustness of a well-structured molecule, demonstrating a strong bond between these seemingly disparate domains. Additionally, the support for Doe's (2018) study on the potential impact of academic pursuits in science on digital engagement is as clear as a well-formulated research hypothesis – the connection is undeniable.

Moreover, the literature review delved into unconventional sources, such as grocery store receipts and internet memes, yielding unexpected correlations that prompted thoughtful contemplation. These unorthodox insights, although whimsical, underscore the depth and breadth of the connection between academic pursuits and digital discourse. Thus, the whimsy of these sources did not detract from the seriousness of the statistical analysis; rather, it imbued the study with a creative lens through which to interpret the results.

The strong explanatory power of approximately 86.9% provided by the r-squared value further supports the contention that the number of Associates degrees awarded in Physical sciences and science technologies can elucidate a significant portion of the variation in the total comments on OverSimplified YouTube videos. This explanatory prowess is as striking as an unexpected scientific breakthrough, shedding light on the unexpected influence of academic achievement on online engagement.

The statistically significant p-value, less than 0.01, offers compelling evidence to reject the null hypothesis, highlighting the rarity of such compelling results in the realm of statistical analysis. This lends credence to the robustness of the association between the conferring of Associates degrees in Physical sciences and science technologies and the total comments on OverSimplified YouTube videos.

In conclusion, the findings of this study not only support prior research but also illuminate the unexpected interconnectedness of academic pursuits and digital discourse. To the skeptics who doubt the significance of this connection, the evidence is as clear as a well-constructed equation – a high correlation coefficient and a low p-value cannot be debunked. This study offers a fresh perspective on the impact of science education on online engagement, reminding us that the world of academia and the realm of digital entertainment are as entangled as particles in a quantum dance.

## 6. Conclusion

In conclusion, the seemingly whimsical correlation between the conferring of Associates degrees in Physical sciences and science technologies and the overwhelming influx of comments on OverSimplified YouTube videos has left us

in a state of delightful bewilderment. The robust statistical analysis has not only revealed a strikingly high correlation coefficient but has also opened a Pandora's box of potential puns and witty observations.

This surprising association between academic pursuits and online engagement is reminiscent of a fusion reaction in the heart of a star, bringing together disparate elements in a blaze of fascination. It appears that the allure of scientific knowledge and the magnetic pull of digital entertainment have aligned in an unexpected cosmic dance, akin to two celestial bodies orbiting in harmony.

The r-squared value's explanatory power is akin to a perfectly crafted equation, leaving little room for uncertainty and offering a clear glimpse into the captivating relationship between academic achievements in the physical sciences and the exuberance of virtual interaction.

Further exploration into this captivating correlation could potentially unravel additional intricacies, akin to a subatomic particle revealing its elusive properties under the keen observation of a determined physicist. Nonetheless, the compelling evidence presented in this study leads us to assert that no further research is needed in this area. The results speak for themselves, and the connection between Associates degrees in Physical sciences and science technologies and the total comments on OverSimplified YouTube videos is as clear as day – or, perhaps, as enigmatic as a quantum phenomenon.