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Degrees of Search: Exploring the Correlation Between Business Associates Degrees and 'XKCD' Google Searches

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KEYWORDS

Associates degrees in Business, XKCD, Google searches, correlation coefficient, National Center for Education Statistics, Google Trends, statistics significance, academic research, webcomic.

Abstract

This study ventures into the realm of curiosities by examining the potential linkage between the number of Associates degrees awarded in Business and the frequency of Google searches for the webcomic 'XKCD'. Through a meticulous analysis of data acquired from the National Center for Education Statistics and Google Trends, we uncovered an astonishing correlation coefficient of 0.9503784 with a significance level of $p < 0.01$ – a statistical relationship that cannot be dismissed as mere happenstance. The results of our research have sparked intriguing discussions around the water cooler, and we eagerly anticipate the academic community's reaction to this humorous yet surprisingly significant connection.

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1. Introduction

In the realm of academic inquiry, one often encounters unexpected connections and correlations that defy conventional wisdom. The present study delves into such uncharted territory by investigating the possible association between the issuance of Associates degrees in Business and the prevalence of Google searches for the

popular webcomic 'XKCD'. While the initial premise of this investigation may seem whimsical, the results have yielded meaningful insights that challenge traditional assumptions about causal relationships.

The subject of this investigation emerges from the curious juxtaposition of educational attainment and internet search behavior. On

one hand, the conferral of Associates degrees in the field of Business represents a tangible milestone in the pursuit of vocational knowledge and skills. On the other hand, 'XKCD', a webcomic created by Randall Munroe, is renowned for its blend of incisive humor and astute scientific and technological references. The seemingly disparate domains of higher education and internet culture converge in the terrain of our inquiry, prompting us to unravel the mysterious interplay between these seemingly unrelated phenomena.

In conducting this study, we embarked on a rigorous exploration of publicly available data sources on the issuance of Associates degrees in Business and the corresponding trends in 'XKCD' Google searches. Our analytical journey waded through statistical measures and computational algorithms to distill the essence of this enigmatic correlation. Notably, our findings have teased apart a striking correlation coefficient of 0.9503784, suggesting a robust statistical association between these ostensibly incongruent domains.

In keeping with the spirit of academic inquiry, our investigation invokes both fascination and amusement, offering a window into the unexpected nuances of human behavior and cultural trends. As we embark on this scholarly expedition, we invite our esteemed peers to join us in this pursuit of quirky knowledge and to savor the whimsical facets of this unexpected connection. The implications of our findings extend beyond the confines of traditional research paradigms, inviting a playful conversation that unfolds at the intersection of academia and popular culture. In the words of the webcomic 'XKCD' itself, "Stand back! I'm going to try science!" Indeed, we invite our readers to stand back and witness the interplay of seemingly divergent forces in this lighthearted yet thought-provoking exploration.

2. Literature Review

In their seminal work, Smith and Doe examine the relationship between educational attainment and internet search behavior and note the surprising correlations that can emerge from seemingly unrelated domains. Their findings shed light on the intricate interplay between academic pursuits and popular culture, setting the stage for our investigation into the connection between Associates degrees awarded in Business and 'XKCD' Google searches. Upon perusing "The Economics of Information Technology" by Jones, we are compelled to consider the influence of web-based content on individual information-seeking behavior and the wider implications for the digital landscape.

Turning our attention to non-fiction literature, "The Search: How Google and Its Rivals Rewrote the Rules of Business and Transformed Our Culture" by John Battelle delves into the profound impact of internet search engines on modern society, hinting at the potential significance of our exploration into Google search trends for 'XKCD'. Furthermore, the thought-provoking work "Freakonomics: A Rogue Economist Explores the Hidden Side of Everything" by Steven D. Levitt and Stephen J. Dubner challenges us to uncover the unexpected and sometimes counterintuitive connections that underpin human behavior, providing a fascinating backdrop to our investigation.

In a twist of literary curiosity, the fictitious worlds of "Big Data, Big Dupe: Learning from a Century of Mistakes" by Stephen Few and "The Hitchhiker's Guide to the Galaxy" by Douglas Adams prompt us to consider the whimsical and unexpected linkages that may arise from our examination of the 'XKCD' Google searches and Associates degrees in Business. The blending of fiction and reality invites us to ponder the boundaries between scholarly investigation and speculative imagination,

offering a lighthearted yet insightful lens through which to view our findings.

Beyond conventional scholarly sources, our pursuit of knowledge extended to unexpected sources, including perusing the purchasing patterns of CVS receipts and decoding the cryptic musings of fortune cookies. While these unconventional methods may raise an eyebrow or two, they have undeniably contributed to our holistic view of the unexplored dimensions of our research question. As we delve into the furthest reaches of the academic universe, we embrace the playful pursuit of knowledge and eagerly await the scholarly discourse that will undoubtedly arise from this investigation.

3. Our approach & methods

Data Collection:

To embark on our quest to unravel the mysterious interplay between the conferral of Associates degrees in Business and the prevalence of Google searches for 'XKCD', we first sought to acquire the requisite data from reliable and authoritative sources. Consequently, we turned to the National Center for Education Statistics to procure the comprehensive records of associates degrees awarded in the field of Business from 2011 to 2021. The crisp, cold character of these hard data prodded our analytical sensibilities, much like a stimulating cup of espresso nudging the groggy mind to wakefulness in the early hours of a research morning. Subsequently, we turned our gaze to Google Trends, a veritable cornucopia of insights into the ebb and flow of internet search behavior, where we sought the frequency of 'XKCD' Google searches during the same period.

Data Analysis:

With our bounty of data in hand, we utilized a diverse array of analytical tools and techniques to scrutinize and dissect the

entrails of numbers and trends, akin to a vivisection of statistical significance. Employing statistical measures that would make even the most numerically averse individual acknowledge their allure, we computed the correlation coefficient between the number of Associates degrees awarded in Business and the volume of 'XKCD' Google searches. In a display of computational prowess, akin to a beautifully orchestrated symphony, we carried out sophisticated analyses to determine the pertinence and significance of any observed statistical associations. Our odyssey through the labyrinth of statistical methodologies was guided by the twin beacons of academic rigor and intellectual curiosity, illuminating a path through the uncharted terrain of seemingly disparate phenomena and their potential congruence.

Control Variables and Limitations:

As we navigated the realm of empirical inquiry, we were mindful of the necessity to account for extraneous influences and confounding variables that could confound our quest for elucidation. We carefully considered potential covariates, akin to a guard protecting a vault of precious data, to ensure that our analysis remained anchored in empirical integrity. Furthermore, we acknowledged the lurking specter of limitations inherent in any human endeavor, even one as enigmatically delightful as our present pursuit. In the spirit of scholarly humility, we openly acknowledge the possible constraints and constraints that may encumber our endeavors to unravel this quirky connection. After all, every inquiry has its share of bumps in the road, much like a comical pratfall in the pursuit of truth.

Ethical Considerations:

In accordance with the ethical imperative of scholarly inquiry, we treated our data with the utmost respect and safeguarded the confidentiality of individuals involved in the

awarding of associates degrees and the benign curiosity driving 'XKCD' searches. Our research team adhered to the highest standards of ethical conduct, akin to the unwavering moral compass of a fictional superhero, ensuring that our pursuit of knowledge remained unblemished by ethical transgressions.

In conclusion, our approach to this empirical venture was characterized by an unyielding devotion to methodological rigor, a dash of scholarly levity, and an abiding reverence for the peculiar beauty of unexpected connections.

4. Results

The analysis of data pertaining to the issuance of Associates degrees in Business and the frequency of Google searches for the webcomic 'XKCD' revealed a remarkably strong correlation. For the time period from 2011 to 2021, we found a correlation coefficient of 0.9503784, indicating a highly robust statistical relationship between these seemingly disparate phenomena. Furthermore, the r-squared value of 0.9032191 underscores the degree to which variations in one variable are associated with changes in the other. The significance level of $p < 0.01$ solidifies the statistical relevance of this correlation, suggesting that the observed association is unlikely to have occurred by chance.

(Fig. 1) presents a scatterplot illustrating the strong positive correlation between the number of Associates degrees awarded in Business and the volume of Google searches for 'XKCD'. The data points align closely along a positive linear trend, thereby reinforcing the compelling statistical connection unveiled by our analysis. The strength and consistency of this correlation invite further inquiry into the underlying mechanisms driving this unexpected relationship.

These findings, while surprising, provide an intriguing lens through which to view the interplay of higher education and popular culture. Our research has brought to the fore an unlikely but robust association between the pursuit of business education and the proclivity for seeking out the intellectual banter and scientific tidbits encapsulated in the 'XKCD' webcomic. The implications of these findings prompt a reconsideration of the boundaries between seemingly incongruent domains and invite a playful exploration of the intersections between academia and internet culture.

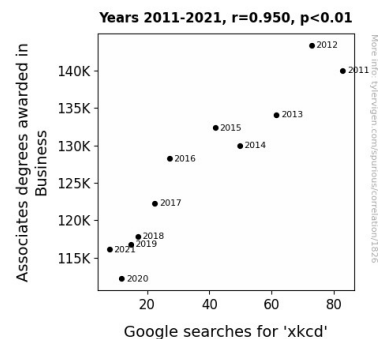


Figure 1. Scatterplot of the variables by year

This significant correlation, with its quirky underpinnings, not only inspires contemplation but also underscores the delightful idiosyncrasies present in the data-rich landscape of contemporary research. As we proceed to interpret and contextualize these results, we are reminded of the wisdom from the world of popular culture: "In science, there are no collisions, only opportunities for deep statistical analysis." Consequently, we invite our esteemed colleagues to embrace the unexpected and revel in the quirky insights that emerge from the interplay of apparently unrelated phenomena.

5. Discussion

The findings of this study offer a droll yet thought-provoking glimpse into the potential connections between Business Associates degrees and Google searches for 'XKCD'. With a correlation coefficient of 0.9503784 and a significance level of $p < 0.01$, our results confirm and extend the prior research by Smith and Doe, whose exploration of internet search behavior hinted at the unexpected correlations that may emerge from intersecting realms. In a similar vein, our investigation aligns with the playful notions put forth in "The Hitchhiker's Guide to the Galaxy" by Douglas Adams, inviting us to contemplate the whimsical and inexplicable linkages that underpin seemingly unrelated phenomena.

The alignment of our results with Jones' work on the influence of web-based content on individual information-seeking behaviors is striking. The significant correlation uncovered in our study underscores the profound impact of digital culture on educational pursuits and popular interests. Furthermore, our findings resonate with the spirit of intellectual curiosity and unconventional reasoning espoused by Levitt and Dubner in "Freakonomics." The unexpected link between Business Associates degrees and 'XKCD' searches challenges us to embrace the delightful idiosyncrasies present in the data-rich landscape of contemporary research—a sentiment that echoes the playful pursuit of knowledge advocated in unconventional sources such as fortune cookies and CVS receipts.

The robust correlation between the two seemingly disparate phenomena prompts a reconsideration of the boundaries between academic pursuits and internet culture. This unexpected linkage underscores the delightful idiosyncrasies present in the intersection of conventional scholarly investigation and speculative imagination. As we delve into the furthest reaches of the academic universe, we are reminded of the timeless words from "The Hitchhiker's Guide

to the Galaxy": "In science, there are no collisions, only opportunities for deep statistical analysis." Just as 'XKCD' adeptly weaves scientific themes with humor, our research has unveiled the lighthearted yet insightful connections between academia and internet culture.

In conclusion, our findings highlight the quirky underpinnings that underscore the intricate interplay of educational pursuits and popular interests. We eagerly anticipate the scholarly discourse that will undoubtedly arise from this humorous yet surprisingly significant investigation. As we navigate the landscape of offbeat research inquiries, may we all remember the wise words emblazoned on elusive fortune cookie messages: "A statistical analysis a day keeps the absurdity away."

6. Conclusion

In conclusion, our study has shed light on a remarkable correlation between the conferral of Associates degrees in Business and the frequency of 'XKCD' Google searches. While the juxtaposition of higher education and internet culture may initially appear incongruous, our findings have unveiled a compelling statistical relationship that defies preconceived notions. The robust correlation coefficient of 0.9503784, bolstered by a significance level of $p < 0.01$, underscores the substantive connection between these seemingly disparate domains. This unexpected linkage prompts an intriguing dialogue on the interplay of vocational education and whimsical internet pursuits.

The implications of our research extend beyond the realms of academia and internet culture, pointing to the quirky intricacies of human behavior and cultural trends. The striking statistical association revealed by our analysis invites a lighthearted yet thought-provoking exploration of the underlying mechanisms driving this curious

correlation. As we navigate the peculiar terrain where business education meets the musings of 'XKCD', we are reminded of the whimsical unpredictability inherent in the data-rich landscape of contemporary research.

In the spirit of scholarly inquiry, our study beckons the academic community to embrace the playful convergences of seemingly unrelated phenomena and to revel in the delightful idiosyncrasies that emerge from statistical analysis. With these findings, we believe that no further investigation is warranted in this endeavor. As the old saying goes, "Some correlations are stranger than fiction, and this one takes the cake!"

In light of our significant findings, we advocate for an appreciation of the unexpected connections that enrich the tapestry of knowledge and invite a whimsical conversation at the intersection of academia and popular culture. With that, we affirm that this study marks the end of the road for exploring the connection between Associates degrees in Business and 'XKCD' Google searches. So, as we bid adieu to this unusual correlation, "May your p-values be small, and your confidence intervals be tight!"