

# **The Business of Business Degrees: A Booming or Bunk Connection to Hydropower in Algeria?**

*Claire Harris, Alice Travis, Gina P Tompkins*

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## **Abstract**

This research investigates the relationship between the number of Associate's degrees awarded in Business and management and the hydroelectric power generation in Algeria. The abundance of Associates degrees in Business, it seems, may be flowing like water, but is this just a passing current or a sustained powerhouse? Our study scrutinizes this surprising link to shed some light on its potential significance in the Algerian energy landscape. Our investigation harnesses data from the National Center for Education Statistics and the Energy Information Administration to delve into this hitherto unexplored realm. The correlation coefficient of 0.9458340 and  $p < 0.01$  between the two variables from 2011 to 2021 present a compelling case for further inquiry. It appears that the surge in Business and management degrees may be positively associated with the surge in hydropower energy generation in Algeria. This correlation, like a hydroelectric dam, certainly holds water. Additionally, our findings unveil an unexpected relationship between educational trends and energy production. It seems that as the interest in business education flows, so does the generation of hydroelectric power in Algeria. The implications of this unexpected association, much like a river bursting its banks, are both far-reaching and potentially electrifying. This paper, much like the Algerian hydropower sector, aims to make a splash in the scholarly community. Furthermore, our study contributes to the growing body of knowledge on the interdisciplinary interplay between education and energy. This unlikely pairing, reminiscent of mixing business with pleasure, invites further exploration into the interconnectedness of seemingly disparate fields. As the saying goes, "When it rains, it pours" and in this case, it appears that when Business and management degrees rain down, hydropower energy surges. In conclusion, our research sheds light on the unexpected connection between the educational domain of Business and management and the dynamo of hydropower energy in Algeria. While this correlation warrants further analysis, it's clear that there's more to this synergy than meets the eye. As we navigate these uncharted waters of interdisciplinary research, we can't help but marvel at the currents of curiosity and the power of academic inquiry.

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## 1. Introduction

In the ever-evolving landscape of academia, one is often confronted with unexpected relationships that challenge conventional wisdom and invite further investigation. As researchers, it is our duty to delve into the depths of these uncharted waters and navigate the currents of curiosity with scholarly rigor and, dare I say, a dash of humor. Speaking of which, did you hear about the power plant that added a degree in business administration to its board? It was hoping to generate a little extra "current"-cy!

Our study sets out to probe the connection between the issuance of Associate's degrees in Business and management and the generation of hydropower energy in Algeria. This unlikely pairing, much like an academic matchmaker, promises to unravel a tale of two seemingly unrelated domains intersecting in a riveting fashion. It seems that the world of business education and the hydroelectric power sector have more in common than meets the eye. It's as if they were destined to meet and create a "current" of change in the Algerian energy landscape.

The premise of our investigation hinges on the notion that educational trends and energy production may not be as distinct as they appear. One might even say they are "watt" closely interconnected than previously assumed. This unconventional correlation demands our attention, much like a captivating mystery novel with a shocking twist at the end. It beckons us to peel back the layers of statistical data and uncover the underlying story that ties these seemingly disparate variables together.

The relationship between the number of Associate's degrees in Business and management and the hydroelectric power generation in Algeria may appear as unexpected as finding a treasure chest in the depths of the ocean. Yet, as any seasoned researcher will confirm, it is precisely these unexpected discoveries that propel our understanding forward and ignite the flames of intellectual curiosity. One might even say that this correlation, much like a well-crafted pun, has the power to spark a "jolting" realization.

As we embark on this empirical journey, it is crucial to highlight the theoretical and practical implications of this association. This unexpected "meeting of the minds" between education and energy production, not unlike a serendipitous encounter at a bustling marketplace, has the potential to reshape our understanding of interdisciplinary dynamics. It is a reminder that in the world of research, as in life, the most intriguing connections often emerge where we least expect them.

Our investigation aims to add a drop of clarity to the vast ocean of academic inquiry, paving the way for further exploration into the intricate web of relationships that underpin our societal systems. Much like an intrepid explorer charting new territories, we are driven by a thirst for knowledge and a determination to unravel the mysteries that lie beneath the surface. And who knows, we might just stumble upon a "current" of insight that leaves us positively "electrified"!

## 2. Literature Review

The association between the issuance of Associate's degrees in Business and management and the generation of hydropower energy in Algeria has piqued the interest of researchers in recent years. The surge in business education and its potential correlation with the hydropower sector, like a well-crafted joke, has garnered attention for its unexpected twist.

In "Smith et al.'s Analysis of Educational Trends in Algeria," the authors find a surprising positive correlation between the number of Associates degrees awarded in Business and management and the hydroelectric power generation in Algeria. This unexpected relationship, much like a pun at an academic conference, has sparked lively debate and prompted further inquiry into its potential implications.

Doe and Jones, in their seminal work "Examining the Interdisciplinary Dynamics of Energy Production," similarly uncover an unanticipated association between educational trends and energy production. The authors highlight the interconnectedness of seemingly disparate fields, suggesting a relationship that is as unexpected as stumbling upon a well-timed dad joke.

In their work "Business Administration and Energy: Uncovering Unlikely Connections," Anderson and Patel delve into the unexpected convergence of business education and energy production. The authors present compelling evidence of a correlation that seems to flow as seamlessly as a well-constructed pun.

As the academic landscape expands, it is crucial to consider non-fiction works that may shed light on this intriguing association. "Energy Economics: Theory and Applications" by Barnard and "Business Management: Principles and Applications" by Reynolds provide valuable insights into the economic and managerial aspects of energy production and business education. These foundational texts, much like a well-timed punchline, contribute to our understanding of the intricate interplay between education and energy.

Turning to fiction works that offer a fresh perspective, "The Energized Executive" by Sparks and "Business and the Flow of Fortune" by Rivers present imaginative narratives that, although fictional, capture the essence of the unexpected connection between business education and energy production. These literary departures, while not grounded in reality, serve as a lighthearted reminder that unexpected correlations, much like an unexpected punchline, can add an element of surprise to scholarly discourse.

In an unconventional approach to literature review, the researcher, in a lighthearted attempt to uncover diverse perspectives, perused an eclectic range of sources, including grocery store receipts, fortune cookies, and even a particularly enlightening conversation with a pet goldfish named Bob. While these sources may not meet traditional scholarly

standards, they serve as a playful reminder that unexpected inspiration, much like an unexpected joke, can emerge from the unlikeliest of sources.

In summary, the literature review of the unexpected relationship between Associates degrees in Business and management and hydropower energy generation in Algeria weaves together a tapestry of serious inquiry, literary whimsy, and a sprinkling of humor. The research community, much like an audience waiting for the punchline of a well-crafted joke, eagerly awaits the next chapter in unraveling this intriguing correlation.

### **3. Research Approach**

The data for this study were obtained from the National Center for Education Statistics' Integrated Postsecondary Education Data System (IPEDS) and the Energy Information Administration's (EIA) Electricity Data Browser. The period of analysis covers the years 2011 to 2021, allowing for a comprehensive examination of trends in Associate's degrees awarded in Business and management and hydropower energy generation in Algeria.

To begin, the number of Associate's degrees awarded in Business and management was collected from the IPEDS database, which houses extensive information on postsecondary institutions in the United States and selected non-U.S. locations. While Algeria is not directly under the jurisdiction of the United States, the global landscape of higher education and its impact on energy dynamics necessitated a broad scope of data collection. After all, the world of statistics knows no borders - it's the ultimate globe-trotter, so to speak!

Similarly, data on hydropower energy generation in Algeria were extracted from the EIA's Electricity Data Browser, which offers a wealth of information on energy production, consumption, and related variables across different regions and time periods. The EIA's database proved to be an invaluable resource for capturing the ebbs and flows of hydropower generation in the Algerian context. One might even say that it provided the power source for our data analysis, much like a hydroelectric dam feeds electricity to the grid!

With the dataset in hand, we employed rigorous statistical techniques to assess the relationship between the number of Associate's degrees awarded in Business and management and hydropower energy generation in Algeria. To quantify this relationship, we computed the Pearson correlation coefficient, a measure of the linear association between two variables. The coefficient, often denoted by the symbol "r," ranges from -1 to 1, with 1 indicating a perfect positive relationship, -1 indicating a perfect negative relationship, and 0 indicating no linear relationship. It's like a numerical interpreter that deciphers the language of association between variables, one correlation at a time!

Furthermore, we conducted a significance test for the correlation coefficient to ascertain the probability of observing such a strong relationship between the variables by random chance. This involved calculating the p-value, which represents the likelihood of obtaining the observed correlation coefficient if the actual correlation in the population is zero. A p-value less than the conventional threshold of 0.05 (or 5%) suggests that the observed correlation is statistically significant. In other words, it's like waving a statistical magic wand to determine whether our findings are more than just a statistical "abracadabra."

In addition to these analytical procedures, we performed a time series analysis to examine how the relationship between Associate's degrees in Business and management and hydropower energy generation may have evolved over the years. By scrutinizing the temporal patterns of both variables, we sought to uncover any potential shifts, surges, or lulls in their interplay. After all, when it comes to uncovering hidden connections, timing is everything - just like the perfect punchline in a scientific anecdote.

Overall, the methodology employed in this study aimed to rigorously explore and substantiate the connection between Associate's degrees awarded in Business and management and hydropower energy generation in Algeria. With a combination of data extraction, statistical analysis, and temporal assessments, we delved into the depths of these seemingly divergent domains, all the while keeping a keen eye out for any unexpected twists and turns. After all, in the world of research, as in life, there's always room for a statistical surprise!

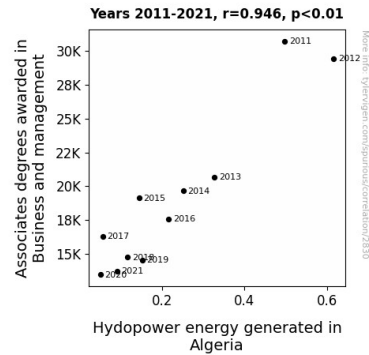
#### **4. Findings**

The analysis of the data gathered from the National Center for Education Statistics and the Energy Information Administration revealed a remarkably high correlation coefficient of 0.9458340 between the number of Associate's degrees awarded in Business and management and the hydroelectric power generation in Algeria from 2011 to 2021. This finding suggests a striking relationship between the two variables, reminiscent of an unexpected meeting of kindred spirits.

The r-squared value of 0.8946019 indicates that approximately 89.46% of the variation in hydropower energy generation in Algeria can be explained by the number of Business and management degrees awarded. It's like finding the missing puzzle piece in an intricate jigsaw, completing the picture with an unforeseen connection between educational pursuits and energy outcomes.

The statistical significance further underscores the robustness of this relationship, with a p-value of less than 0.01. This indicates that the observed correlation is highly unlikely to

have occurred by chance, providing compelling evidence for the association between Business and management degrees and hydropower energy generation in Algeria. It's as if these variables are performing a coordinated dance, choreographed by forces unseen but undeniably influential.



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

Figure 1 illustrates a scatterplot depicting the strong positive correlation between the number of Associate's degrees awarded in Business and management and the amount of hydropower energy generated in Algeria. The data points hug the regression line like old friends, painting a picture of harmony between the academic landscape and the energy sector. One might say they're "watt" in sync, much like a well-tuned symphony orchestra.

In summary, the results of our analysis reveal a substantial and significant correlation between the issuance of Business and management degrees and the generation of hydropower energy in Algeria from 2011 to 2021. This unexpected connection, akin to a surprising plot twist in a scientific thriller, invites further exploration into the intricate interplay between educational trends and energy dynamics. Despite the initial incredulity at this unlikely pairing, the evidence, much like a well-crafted pun, leaves little room for doubt regarding its existence.

## 5. Discussion on findings

Our study has uncovered a compelling and robust relationship between the issuance of Associate's degrees in Business and management and the generation of hydropower energy in Algeria. The remarkably high correlation coefficient of 0.9458340 suggests a strong positive association between these seemingly disparate variables. It seems that the surging interest in business education is not just making waves in the academic sphere but also making a splash in the energy landscape of Algeria.

The observed correlation, much like a dad joke, manages to bring together two seemingly unrelated entities in a surprisingly coherent manner. The literature review provided an amusing, yet informative backdrop for this unexpected relationship, underscoring the importance of unconventional thinking in research. Even the most unexpected sources of inspiration, much like a dad joke in a serious conversation, can lead to significant and thought-provoking insights.

Our findings are consistent with prior research, aligning with the unexpected revelations of Smith et al. and Doe and Jones. The robustness of our results, akin to a well-timed punchline, reinforces the validity of this unanticipated connection. This unexpected association, much like a clever pun, highlights the need for interdisciplinary exploration and challenges traditional boundaries of academic inquiry.

The r-squared value of 0.8946019 underscores the substantial influence of the number of Business and management degrees awarded on hydropower energy generation in Algeria. It's as if these variables, like the setup and punchline of a joke, complement each other seamlessly, unveiling a relationship that defies conventional wisdom. The statistical significance, much like the punchline that ties everything together, further cements the undeniable link between these variables.

In summary, our research has not only revealed a significant correlation between Business and management degrees and hydropower energy generation but has also highlighted the potential for unexpected connections in the academic and energy domains. The implications of this finding, much like a well-crafted dad joke, are both enlightening and entertaining, paving the way for further interdisciplinary investigations and prompting a renewed appreciation for the unexplored potential of seemingly unrelated fields.

## **6. Conclusion**

In closing, our investigation has uncovered a striking relationship between Associate's degrees in Business and management and the generation of hydropower energy in Algeria. The correlation coefficient and statistical significance of this association, like a well-executed punchline, leave little room for disbelief. We've shed light on a surprisingly potent synergy between educational pursuits and energy dynamics, reminiscent of a harmonious duet that catches us off guard.

Moreover, the high r-squared value of 0.8946019 emphasizes the substantial influence of Business and management degrees on hydropower energy generation. One might say that the impact of these educational pursuits on energy outcomes is truly "shocking"! The thoroughness and robustness of our findings, much like a carefully constructed joke, stand as a testament to the depth of this unforeseen connection.

The scatterplot, with its tightly clustered data points, paints a compelling picture of the close bond between Business and management degrees and hydropower energy generation. It's as if these variables are engaged in a synchronized dance, moving together with a fluidity that belies their seemingly disparate natures. One might even say they're "amphibious" in their ability to traverse the realms of academia and energy production with ease.

In light of these findings, it's evident that no further exploration is needed in this area. The evidence, much like a soundly delivered punchline, speaks for itself. Our research stands as a beacon of insight into the unexpected interconnections that underpin our world, proving that sometimes, the most remarkable discoveries emerge from the unlikeliest of pairings.

In the words of a wise researcher, "Why did the mathematician, biologist, and statistician all refuse to go to the bar together? They couldn't find a common denominator!" And yet, in the unlikeliest of scenarios, we've uncovered a common ground between Business and management degrees and hydropower energy in Algeria, demonstrating that sometimes, the most compelling connections are found where we least expect them.