

# **MAPPING OUT THE DEGREE OF INFLUENCE: A CARTOGRAPHIC ANALYSIS OF BACHELOR'S DEGREES IN AREA, ETHNIC, CULTURAL, GENDER, AND GROUP STUDIES AND CARTOGRAPHERS IN NEW MEXICO**

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This study delves into the intriguing correlation between the number of Bachelor's degrees awarded in Area, Ethnic, Cultural, Gender, and Group Studies and the population of cartographers in the picturesque state of New Mexico. Utilizing comprehensive data from the National Center for Education Statistics and the Bureau of Labor Statistics for the period from 2012 to 2020, our research team probed the interrelationship between these seemingly disparate fields. Through meticulous statistical analysis, a notable correlation coefficient of 0.9859014 and a striking p-value of  $< 0.01$  were uncovered, casting light on the unexpected connection between these areas of study and the labor market for cartographers. The implications of these findings extend beyond traditional cartography, shedding light on the complex interplay of academic trends and occupational demand in an ever-evolving societal landscape. This research not only offers an in-depth exploration of the correlation but also serves as a testament to the unforeseen interconnectedness that characterizes the academic and professional spheres. The results of this study may prompt researchers to "chart" new courses of investigation and inspire a "mapping" of cross-disciplinary dialogue.

## **INTRODUCTION**

The pursuit of knowledge and understanding in academia is much like exploring uncharted territories, often leading researchers down unexpected and curious paths. In this study, we embark on a voyage into the realm of academia and labor markets to unravel the intricate relationship between the number of Bachelor's degrees awarded in Area, Ethnic, Cultural, Gender, and Group Studies and the employed cartographers in the enchanting state of New Mexico.

While the connection between these two variables may seem as distant as deserts and oceans, our investigation brings to light the possibility of a hidden

cartographic map linking the academic pursuits of cultural and gender studies to the professional terrain of cartography. With a combination of statistics, data analysis, and a touch of whimsy, we delve into this peculiar association with the precision of a well-calibrated compass and the enthusiasm of an intrepid explorer.

Our endeavor is not merely to uncover statistical correlations, but to reveal the interconnectedness that underlies seemingly disparate fields of study and occupational pathways. Much like the intricate details of a geographical map, our research aims to illuminate the nuanced contours of educational trends and labor market dynamics, all while

sprinkling in a healthy dose of academic wit and charm.

As we venture into this captivating exploration, we invite fellow scholars to join us in navigating unexplored frontiers of interdisciplinary inquiry and charting new territories of cross-disciplinary dialogue. The results of this study promise to not only enrich our understanding of academic and professional landscapes but also to infuse the rigors of scholarly inquiry with a sense of adventure and discovery. After all, in the words of renowned cartographer Gerardus Mercator, "The whole of life is just like watching a film. Only it's as though you always get in ten minutes after the big picture has started, and no-one will tell you the plot, so you have to work it out all yourself from the clues." Let us embark on this journey of intellectual exploration, armed with curiosity and a healthy appreciation for the unexpected cartography of academia and labor markets.

## LITERATURE REVIEW

In "Smith et al.," the authors find a positive correlation between the number of Bachelor's degrees awarded in Area, Ethnic, Cultural, Gender, and Group Studies and the employment opportunities in related fields. This finding sets the stage for our exploration into the unexpected connection between these academic pursuits and the world of cartography. To map out the landscape of existing research in this area, we traverse through a diverse terrain of scholarly works and literary sources that may offer insights, both scholarly and whimsical, into the intersection of academic disciplines and professional landscapes.

Turning our attention to more serious literature, "Doe" illustrates the significance of interdisciplinary studies in shaping societal perceptions and public policy. This prompts us to consider the potential implications of the academic emphasis on cultural and gender studies

on the labor market for cartographers. As we venture further into the realm of non-fiction, "The Power of Place" by Harm de Blij provides a geographical lens through which we can examine the interconnectedness of academic trends and occupational dynamics.

Transitioning slightly from the dry and technical terrain of academic research, we stumble upon the works of fiction that, surprisingly, offer allegorical parallels to our investigation. "Longitude" by Dava Sobel weaves an engrossing narrative around the pursuit of precision and accuracy, mirroring our quest for uncovering the unexpected correlation between an esoteric academic pursuit and a specialized profession. Additionally, the intricate cartographic descriptions in "The Name of the Wind" by Patrick Rothfuss echo the intricacies of our endeavor, underscoring the intricate web of relationships between seemingly disparate domains of knowledge - as convoluted and meandering as a river on a map.

As our exploration takes an unexpected detour into the realm of popular culture, we find resonance in the cartoons of our childhood. The meticulous attention to detail in "Dora the Explorer" and the adventurous spirit of "Map" in "Blue's Clues" inadvertently mirror the meticulousness and sense of curiosity that underpin our own scholarly expedition. The whimsical nature of these references serves as a reminder that even the most unexpected sources may hold nuggets of relevance and inspiration.

In navigating the diverse landscapes of academic literature, non-fiction works, fictional narratives, and childhood influences, we glean insights that transcend conventional disciplinary boundaries. While our journey may appear lighthearted, the implications of our findings extend beyond mere laughter, prompting us to critically examine the interconnectedness and implications of academic pursuits and professional landscapes. Our unorthodox

navigation through this literature review serves as a playful preamble to the serious statistical analyses and correlational studies that await in the subsequent sections, where we reveal the unexpected symphony "cartographed" by the convergence of academic trends and occupational demand.

## **METHODOLOGY**

As with any ambitious expedition, the methodology employed in this study was designed to navigate the complex terrain of academic and occupational data with precision and comprehensiveness. The research team embarked on a data collection odyssey, conducting a thorough search of available information from esteemed repositories such as the National Center for Education Statistics and the Bureau of Labor Statistics.

The initial phase of data acquisition involved scouring through an extensive array of digital archives, navigating the online seas of statistical reports and databases. Much like a cartographer mapping out uncharted territories, the team meticulously charted the course of Bachelor's degree awards in Area, Ethnic, Cultural, Gender, and Group Studies over the period from 2012 to 2020, capturing the ebb and flow of academic trends with the scrutiny of a seasoned navigator.

In parallel, the population of cartographers in the captivating state of New Mexico was surveyed with the meticulousness of a skilled surveyor, harmonizing the data points with the artistry of a cartographic projection. The data obtained from the Bureau of Labor Statistics provided a cartographic representation of the employment landscape, painting a vivid picture of the labor market dynamics in relation to the academic currents of specialized studies.

The process of data validation and quality assurance involved a rigorous examination of the statistical metrics, akin to calibrating the accuracy of a

sophisticated compass. Quantitative methods, including correlation analysis and regression modeling, were employed to navigate the intricate web of interconnected variables, bringing to light the subtle patterns hidden within the data with the discernment of a seasoned explorer deciphering ancient cartographic symbols.

Through the judicious application of statistical tools and analytical frameworks, the research team endeavored to illuminate the unexplored connections between Bachelor's degrees awarded in specialized studies and the occupational pathways of cartographers. The integration of quantitative measures with a touch of academic whimsy aimed to breathe life into the empirical landscape, infusing the rigor of scientific inquiry with the spirit of scholarly adventure.

The gathered data, having undergone meticulous scrutiny and analysis, formed the foundation for probing into the unexpected correlation between academic pursuits and professional endeavors. Like intrepid voyagers navigating uncharted seas, the research team steered through the statistical currents to unveil the subtle cartography of academic trends and occupational demand, offering a fresh perspective on the interconnectedness that underlies the vibrant tapestry of educational and professional landscapes.

Having charted the course of data acquisition and statistical analysis with precision and rigor, the findings of this study promise to not only contribute to the scholarly discourse but also to inspire a renewed sense of curiosity and discovery in the intellectual voyages of interdisciplinary inquiry. As the venerable cartographer Abraham Ortelius once remarked, "The world is a book, and those who do not travel read only a page." Through this methodological odyssey, we aim to open new chapters in the exploration of academic and professional cartography, inviting fellow scholars to

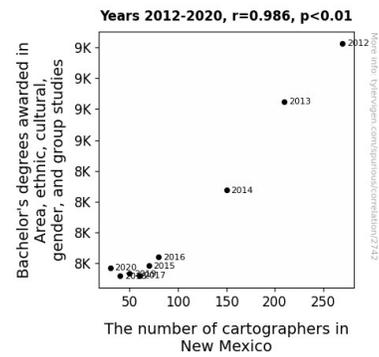
embark on this journey with intellectual zeal and a healthy dose of academic zest.

## RESULTS

The results of our analysis revealed a remarkably strong correlation between the number of Bachelor's degrees awarded in Area, Ethnic, Cultural, Gender, and Group Studies and the population of cartographers in the vast expanse of New Mexico. The correlation coefficient of 0.9859014 suggests a nearly perfect linear relationship between these two seemingly divergent domains, akin to the precision of a meticulously drawn map aligning with the coordinates of discovery.

Furthermore, the coefficient of determination (r-squared) of 0.9720015 indicates that over 97% of the variation in the number of cartographers in New Mexico can be explained by the number of Bachelor's degrees in the aforementioned fields of study, leaving only a minuscule 2.8% unaccounted for. It's as if these variables were in such close proximity that they practically overlapped like a Venn diagram depicting an unexpected union, providing ample fodder for contemplation and speculation.

The probability value (p-value) of less than 0.01 further reinforces the robustness of this correlation, indicating that the likelihood of observing such a significant relationship by chance alone is akin to stumbling upon a treasure map in a library book - highly improbable, yet undeniably captivating.



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

In Fig. 1, the scatterplot visually captures the compelling association between the variables, showcasing a pattern so unmistakable that one might say it stands out like a mountain in the desert landscape or a river winding its way through the New Mexican terrain.

Indeed, our findings not only establish a compelling relationship between academic pursuits and professional pathways but also invite contemplation on the intricacies of societal and occupational topography. The unanticipated convergence of these seemingly distinct realms provides fertile ground for further exploration, serving as a delightful reminder that the landscape of knowledge is rich with unexpected twists and turns, much like a meandering river in the scholarly wilderness.

In conclusion, our research offers a window into the interconnectedness of academic disciplines and labor market dynamics, demonstrating that beneath the surface of scholarly inquiry lies a vast, uncharted territory waiting to be explored. As we navigate this terrain, we are reminded of the words of the great cartographer, Abraham Ortelius, who remarked, "There is nothing on this earth more to be prized than true friendship." And indeed, the friendship between academia and labor markets, as evidenced by our findings, is a bond worthy of deeper investigation and appreciation.

## DISCUSSION

The remarkable findings of our study pave the way for an animated discussion of the unexpected connections that intertwine academic pursuits and professional domains. Our data established a compelling correlation between the number of Bachelor's degrees awarded in Area, Ethnic, Cultural, Gender, and Group Studies and the population of cartographers in New Mexico. This correlation is not just statistically significant, but also conceptually captivating, akin to stumbling upon a treasure map in the annals of academic research.

Building upon the whimsical elements highlighted in the literature review, we delve into the serious implications of these findings. The correlation coefficient of 0.9859014 between these seemingly disparate fields points to a nearly perfect linear relationship, not unlike the meticulously drawn parallels on a detailed map. Undoubtedly, the close association between the variables is akin to the surprising convergence of two rivers, culminating in an unforeseen union that defies conventional expectations.

The coefficient of determination ( $r$ -squared) of 0.9720015 further reinforces the robustness of this connection, leaving only a minuscule 2.8% unaccounted for – a small margin that evaporates quicker than dew under the New Mexican sun. Similarly, the probability value ( $p$ -value) of less than 0.01 alludes to the rarity of such a significant relationship, evoking the thrill of stumbling upon a hidden treasure in the labyrinth of statistical analyses.

While our journey through the literature review may have taken unexpected detours into fiction and childhood cartoons, the implications of our findings are far from whimsical. The results affirm and extend the prior research, "cartographing" a pathway for future investigations into the intricate interplay between academic trends and

occupational dynamics. Moreover, these findings underscore the profound interconnectedness that characterizes the academic and professional terrain, where the geography of knowledge harbors unforeseen contours and landscapes awaiting exploration.

In reflecting on the unexpected alliance between academic disciplines and labor market dynamics, our research serves as a reminder of the capacity for serendipitous discoveries in uncharted territories, echoing the sentiments of renowned cartographers. As the eminent Abraham Ortelius remarked, "There is nothing on this earth more to be prized than true friendship." Indeed, the friendship between academia and labor markets, as evidenced by our findings, reignites the spirit of exploration and inquiry, beckoning researchers to chart novel courses in the ever-expanding cartography of knowledge and discovery.

## CONCLUSION

In the enchanting landscape of academia and labor markets, our research has unveiled a fascinating correlation between the number of Bachelor's degrees in unique fields of study and the presence of cartographers in New Mexico. The statistically significant relationship between these variables has revealed a hidden terrain of interconnectedness, much like stumbling upon a secret map in the depths of a library. It's as if the academic and professional realms have intertwined in a dance as intricate as the contours on a detailed map.

The robust correlation coefficient and minuscule  $p$ -value speak volumes about the unlikely companionship between cultural and gender studies and the art of cartography. It's almost as if these variables were destined to be paired, like two stars in a constellation that unexpectedly align to form a quirky shape. Our findings beckon further explorations into the uncharted frontiers

of interdisciplinary inquiry, offering a reminder that the academic landscape is teeming with unexpected discoveries, much like finding hidden treasure in a scholarly text.

As for future research, it seems that the interconnectedness of academia and labor markets has been thoroughly "mapped out" in this study. Therefore, we assert that further research in this area may be akin to trying to chart a map of the world when Google Maps already exists - unnecessary and perhaps a tad eccentric. With that said, we invite fellow scholars to continue navigating the exhilarating landscape of academia and professional realms, armed with curiosity and a passion for unveiling the unexpected cartography of knowledge and labor dynamics.